UPPER CAVE CREEK/APACHE WASH

Watercourse Master Plan

Attachment 4:Hydraulics and Sediment Report

Book 2 of 2

Flood Control District of Maricopa County

April 2001

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UPPER CAVE CREEK
&
APACHE WASH
WATERCOURSE MASTER PLAN

Attachment 4

Book 2 of 2

Hydraulics and Sediment Report

Prepared By:

STANTEC CONSULTING INC.
8211 South 48th Street
Phoenix, Arizona 85044
(602) 438-2200

Project Number 28000077

19 March 2001

Registered Professional Engineer (Civil)
CERTIFICATE NO. 17928
GEORGE V. SABOL
Date Signed 19 March
ARIZONA, U.S.A.

APPENDIX H.5

Apache Wash Main Channel Model, 100-year Flood, Existing Condition

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T1      Cave Creek and Apache WMP
T2      by Stantec:  Proj. No. 82000077                    File: AW-E100C.DAT
T3      for Flood Control District of Maricopa County      Date: 07-28-99   srg

NC 0.055   0.055    0.03     0.1     0.3
X1   0.2      12 9967.74 10039.4
GR  1660 9288.16    1658 9525.13    1658 9606.89    1656 9642.09    1656 9827.21
GR  1654 9904.07    1650 9967.74    1646  9981.5    1646 10015.7    1656 10039.4
GR  165610160.82    166010191.81
HD   0.2    10.0

QT

X1  0.33      16 9945.78   10090     350     700     650
GR  1663 9631.93    1662    9645    1660    9722    1660    9820    1661    9900
GR  1658 9945.78  1652.2    9980  1652.2   10020    1658   10090    1658   10135
GR1652.6   10150    1656   10170    1658   10220    1660   10250    1662   10305
GR  1664   10375
HD  0.33    10.0

X1  0.43      17    9940   10050     505     440     500
GR  1666    9730    1664    9900    1662    9940    1655    9985    1655   10015
GR1661.8   10050  1661.8   10120    1660   10190    1658   10240    1660   10270
GR  1662   10290    1662   10350    1660   10405    1660   10430    1662   10500
GR  1664   10535    1666   10620
HD  0.43    10.0

X1  0.54      17    996510027.02     800     400     640
GR  1670    9600    1668    9840    1664    9875    1664    9965    1660 9975.73
GR  166010018.71    166410027.02    166410027.05    166410027.06    166610068.43
GR  166610068.89    166610360.71    166410418.56    166410470.56    166610510.35
GR  166810530.78    167010614.05
HD  0.54    10.0

X1  0.63      23 9967.2710044.06     300     600     500
GR  1673 9246.69    1672    9300    1672 9467.58    1672 9467.59    1670 9524.47
GR  1670 9524.59    1670 9661.89    1670 9662.28    1668 9798.92    1668 9967.22
GR  1668 9967.27    1666 9971.89    1666 9971.91    1664 9976.44    1664 9976.56
GR  166410025.48    166610033.05    166610033.09    166810044.06    166810044.68
GR  166810151.63    1672   10188 1673.0410227.11
HD  0.63    10.0

X1  0.71      29 9973.9410029.59     370     440     400
GR  1676 9410.74    1674 9517.84    1672 9806.35    1672 9806.66    1670 9929.72
GR  1670 9930.71    1668 9973.93    1668 9973.94    1666 9979.82    1666  9979.9
GR  1664 9985.76    1664  9985.8    166410015.71    1664 10015.9    166610024.34
GR  166610024.46    166810029.59    166810030.23    166810045.83    166810045.97
GR  166610052.42    166610052.62    166610063.21    1666 10063.3    166810070.56
GR  166810070.63    1670 10092.7    167610201.55    167610201.61
HD  0.71    10.0

X1  0.75      32 9943.8210027.72     180     210     200
GR  1676 9452.11    1674 9623.97    1674 9849.05    1674 9850.71    1672 9883.74
GR  1672 9884.15    1670 9943.61    1670 9943.82    1668 9967.12    1668 9967.18
GR  1666 9978.88    166610014.77    167010027.72    167010080.45    167010080.56
GR  167210093.84    1672   10094    167210119.59    167210119.71    167010128.45
GR  1670 10128.5    1670 10145.7    167010145.78    1672 10173.1    167210173.36
GR  167410214.32    1674 10214.6    167410391.18    167410391.21    167610479.43
GR  167610479.48    167610512.05
HD  0.75    10.0

NC 0.055   0.055    0.03     0.3     0.5

X1  0.84      17    9975   10030     420     430     440
GR  1679 9854.82    1676    9910    1672    9975    1670 9980.41    167010019.82
GR  1672   10030  1673.8   10080    1672   10110    1670   10125    1674   10150
GR  1674   10230    1678   10290    1678   10320    1676   10380    1676   10400
GR  1678   10460    1680   10590
HD  0.84    10.0

X1  0.99      18 9969.6610026.04     890     550     900
GR  1686 9925.53    1682 9950.02    1680 9969.66    1678 9977.26    167810017.26
GR  168010026.04    168210147.08    1682 10189.7    168010277.01    167810326.93
GR  167810418.53    168010542.32    168210764.47    168210913.43    168210917.62
GR  1684   11420    1684   11790 1685.9911823.04
HD  0.99    10.0

NC 0.055   0.055    0.03     0.1     0.3

X1  1.09      18    9968   10034     500     460     500
GR  1690    9920    1688    9926    1686    9932    1684    9938    1682    9968
GR  1680    9974    1680   10026    1682   10034    1682   10098    1684   10120
GR  1686   10185    1684   10335    1684   10362    1686   10582    1685   10770
GR  1686   10920    1688   11621    1690   11652
HD  1.09    10.0

NC 0.055   0.055    0.03     0.3     0.5

X1  1.18      21 9937.4210028.94     500     350     500
GR  1694    9840    1692    9875    1690    9902    1688    9920    1686    9936
GR  1684    9947    1682    9957    1680   10015    1680   10020    1682   10025
GR  1684   10030    1686   10061    1688   10102    1690   10180    1690   10270
GR  1689   10390  1689.9   10460  1688.2   10600    1690   10670    1692   10863
GR1693.5   10903
HD  1.18    10.0
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X1  1.27      16    9917   10020     450     500     460
GR  1698    9673    1696    9745    1694    9795    1692    9817    1690    9842
GR  1688    9917    1686    9925    1684    9950    1684    9975    1686   10020
GR  1688   10077    1690   10163    1692   10260    1694   10395    1696   10505
GR  1698   10800
HD  1.27    10.0

NC 0.055   0.055    0.03     0.1     0.3

X1  1.37      10 9932.08 10030.2     400     440     500
GR  1698 9493.05    1696 9549.07    1694 9580.08    1692 9932.08    1690 9963.31
GR  1688 9978.48    1688 10013.4    169010022.33    1692 10030.2    169810053.61
HD  1.37    10.0

X1  1.47      12 9964.3710032.41     490     520     500
GR  1702 9462.33    1700 9530.85    1698 9560.22    1698 9800.63    1696 9911.62
GR  1694 9964.37    1690 9980.91    169010017.61    169410032.41    169810056.56
GR  170010067.04    170210103.76
HD  1.47    10.0

X1  1.56      13 9951.3710028.61     400     540     500
GR  1706 9426.84    1704 9453.43    1702 9496.71    1700 9564.46    1700 9690.11
GR  1698 9951.37    1696 9973.37    1692 9983.09    169210014.85    169810028.61
GR  170210039.18    170410058.37    170610091.18
HD  1.56    10.0

X1   1.6      13 9959.7310016.94     190     180     180
GR  1706 9416.18    1704 9448.11    1702 9518.79    1700 9799.12    1698 9907.12
GR  1696 9959.73    1694 9980.66    1692  9995.9    1692 10008.9    169410012.95
GR  169610016.94    170410031.18    170610062.39
HD   1.6    10.0

X1  1.66      14 9952.11   10034     300     240     250
GR  1708 9744.33    1704 9829.76    1702 9931.63    1700 9952.11    1698 9967.65
GR  1696 9993.88    169610014.03    169810029.43    1700   10034 1700.0110204.97
GR  170210212.95    170410237.12    170610277.66    170810306.08
HD  1.66    10.0

X1  1.75      12 9970.0510072.31     480     520     500
GR  1710 9951.17    1704 9965.64    1702 9970.05    1700 9974.47    1698 9978.76
GR  169810016.76    170010034.19    170210072.31    170410151.35    170610320.71
GR  170810429.93    171010503.73
HD  1.75    10.0

X1  1.81      14 9971.05   10031     300     240     300
GR  1712 9944.51    1704 9965.71    1702 9971.05    1700 9975.82    170010012.24
GR  1702   10031    170410060.69    170610188.05    170610206.68    170410298.14
GR  170410327.71    170610350.59    170810431.76    171210486.49
HD  1.81    10.0

X1  1.85      16 9954.9910041.54     210     150     190
GR  1712 9819.07    1710 9828.06    1708 9836.36    1706 9915.83    1704 9954.99
GR  170010002.05    170010011.48    170410041.54    170610064.87    170810129.94
GR  170810187.04    170610294.81    170610368.04    170810414.01    171010424.61
GR  171210451.94
HD  1.85    10.0

X1  1.88      16    9950   10040     190     230     200
GR  1713 9767.17    1708    9790    1708    9890    1706    9950    1704    9975
GR1702.1    9990  1702.1   10010    1706   10040    1710   10085    1710   10210
GR  1708   10300    1706   10340    1706   10370    1708   10390    1710   10455
GR1713.110479.52
HD  1.88    10.0

X1     2      14    9980   10115     550     230     490
GR1715.9 9964.46    1710    9980  1708.5    9985  1708.5   10020    1710   10115
GR  1712   10150  1713.8   10360    1712   10535    1710   10590  1708.5   10610
GR1708.5   10675    1710   10700    1714   10805    1716   10830
HD     2    10.0

X1  2.08      16 9971.0310080.47     440     270     440
GR  1718 9967.02    1716 9971.03    1710 9983.46    171010015.75    1714 10034.4
GR  171610080.47    171710200.63    1716   10300    1714   10360    1712   10450
GR  1710   10490    1710   10510    1712   10545    1714   10580    1716   10700
GR  1718   10745
HD  2.08    10.0

X1  2.17      12 9948.1610055.88     500     350     520
GR  1722 9809.96    1720 9833.72    1716 9889.63    1716 9892.16    1716 9948.16
GR  1714 9962.44    171410027.88    171610055.88    1716 10199.6    171810234.24
GR  172010416.55    172210468.74
HD  2.17    10.0

X1  2.24      10 9939.5710055.42     380     390     380
GR  1726 9781.96    1724 9796.25    1720 9855.35    1718 9939.57    1714 9973.56
GR  171410001.06    171810055.42    172010148.55    172410188.25    172610215.72
HD  2.24    10.0

X1  2.33      10    9945   10030     450     450     450
GR  1730    9778    1724    9840    1722    9870    1720    9890    1720    9945
GR  1718    9960    1717   10000    1718   10028    1720   10030    1730   10045
HD  2.33    10.0

X1   2.4       8    9940 10024.1     300     370     360
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GR  1732    9795    1730    9800    1724    9840    1720    9940    1718    9980
GR  1718   10020 1719.97 10024.1 1732.0310048.34
HD   2.4    10.0

NC 0.055   0.055    0.03     0.3     0.5

X1  2.47      12 9962.2610027.81     340     450     400
GR  1734 9920.54    1732 9942.57    1724 9962.26    1720  9972.1    1720 9990.76
GR  172210013.06    172410027.81    1726 10090.1    172610200.41    172810300.68
GR  1730   10340    1734   10360
HD  2.47    10.0

NC 0.055   0.055    0.03     0.1     0.3

X1  2.52      14 9957.5910028.76     270     250     260
GR  1736 9805.03    1734 9840.17    1732 9866.23    1728 9886.43    1726 9957.59
GR  1722 9970.16    172110021.48    172610028.76    172810120.86    172810316.87
GR  173010363.84    173210395.26    173410419.34    173610459.58
HD  2.52    10.0

X1   2.6      11    994510028.92     390     450     430
GR  1736    9750    1732    9820    1732    9935    1730    9945    1724    9960
GR  1724    9965    1726   10020  1729.510028.92    1732   10265    173210415.66
GR1736.110462.65
HD  2.52    10.0

NC 0.055   0.055    0.03     0.3     0.5

QT

X1  2.73      10 9971.8710036.42     250     900     640
GR  1740 9756.45    1738 9787.82    1736 9811.88    1732 9971.87    1728 9986.23
GR  172810019.94    173210036.42    173410071.17    173810101.17 1740.0510127.41
HD  2.73    10.0

NC 0.055   0.055   0.043     0.3     0.5

X1  2.82      26    9978   10294     250     470     430
GR  1744    9654    1742    9680    1740    9705    1738    9724    1736    9764
GR1735.5    9884    1736    9934    1736    9978    1734    9982    1731    9994
GR  1731   10006    1734   10024    1736   10034    1736   10140    1736   10210
GR  1734   10248    1732   10254    1730   10260    1730   10282    1732   10288
GR  1734   10294    1736   10324    1738   10340    1740   10355    1742   10370
GR  1744   10387
HD  2.82    10.0

NC 0.055   0.055   0.036     0.1     0.3

X1  2.87      28    9979   10485     240     250     260
GR  1746    9679    1744    9706    1742    9737    1740    9771    1738    9979
GR  1736    9983    1734    9987    1734   10013    1736   10019    1738   10031
GR1738.5   10099    1738   10191    1736   10259    1734   10269    1732   10277
GR  1732   10314    1734   10320    1736   10327    1736   10387    1734   10417
GR  1732   10427    1732   10439    1734   10452    1736   10485    1738   10560
GR  1740   10627    1742   10666    1744   10698
HD  2.87    10.0

NC 0.055   0.055   0.037     0.1     0.3

X1   2.9      32    9978   10469     140     300     200
GR  1746    9726    1744    9756    1742    9794    1740    9826    1738    9978
GR  1736    9984    1734    9990    1734   10010    1736   10016    1738   10022
GR  1740   10100  1740.5   10141    1740   10186    1738   10301    1736   10307
GR  1734   10313    1734   10341    1736   10351    1738   10469    1740   10481
GR  1742   10494    1744   10502    1746   10513    1746   10530    1744   10536
GR  1742   10544    1740   10558    1738   10571    1738   10871    1740   10961
GR  1742   11016    1744   11076
HD   2.9    10.0

NC 0.055   0.055   0.048     0.1     0.3

X1  2.92      30    9970   10660     155     145     155
GR  1748    9820    1746    9845    1744    9870    1742    9910    1740    9970
GR  1738    9980    1735    9990    1735   10010    1738   10014    1740   10022
GR1741.5   10157    1740   10412    1738   10537    1736   10543    1734   10549
GR  1734   10565    1736   10585    1738   10596    1738   10660    1740   10671
GR  1742   10686    1742   10707    1740   10713    1738   10717    1738   10751
GR  1740   11007    1742   11187    1742   11377    1744   11482    1746   11602
HD  2.92    10.0

NC 0.055   0.055   0.049     0.1     0.3

QT

X1  2.97      27    9980   11098     270     280     270
GR  1748    9934    1746    9959    1744    9974    1742    9980    1740    9984
GR  1738    9988    1738   10012    1740   10020    1742   10052    1742   10134
GR1743.5   10314    1742   10552    1740   10718  1738.5   10764    1740   10822
GR  1738   10826    1736   10830    1736   10860    1738   10864    1740   10870
GR  1740   10927    1739   10974    1740   11044    1740   11098    1742   11354
GR  1744   11484    1746   11602
HD  2.97    10.0

NC 0.055   0.055    0.03     0.3     0.5
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X1  3.07      11 9979.9510028.11     570     500     550
GR  1750    9625    1748    9640    1746    9665    1746 9912.66    1744 9979.95
GR  1742 9989.15    174110019.02    174410028.11    174610080.68    174810180.41
GR  175010180.42
HD  3.07    10.0

NC 0.055   0.055    0.03     0.1     0.3

X1  3.13      10 9978.4110027.88     200     300     280
GR  1752 9442.64    1748 9512.79    1748 9870.47    1746 9978.41    1742 9996.99
GR  174210009.71    174810027.88    175010067.68  1750.2   10100    1752 10100.1
HD  3.13    10.0

X1  3.21      14    996510029.09     250     350     310
GR  1754    9595    1752    9630    1750    9660    1749    9680    1750    9710
GR  1751    9900    1750    9965    1746 9990.25    174610009.88 1749.9810029.09
GR  1750   10130    1752   10315  1752.1   10390    1754 10390.1
HD  3.21    10.0

X1  3.32      16 9955.2210020.21     520     520     520
GR  1758 9599.26    1758 9599.45    1756 9630.94    1756 9632.14    1754 9725.16
GR  1754 9955.22    1752 9974.26    1750 9981.64    175010008.82    175410020.21
GR  175410242.15  1756.7   10490  1756.2   10560  1756.2   10725  1756.5   10790
GR  175810929.84
HD  3.32    10.0

X1   3.4      14    9984   10031     480     440     470
GR  1762    9462    1760    9493    1758    9714    1758    9869    1756    9914
GR  1756    9979    1754    9984    1752   10000    1754   10016    1756   10031
GR  1758   10057    1758   10212    1760   10464    1761   10809
HD   3.4    10.0

X1  3.48      11 9985.3910018.81     400     400     400
GR  1764 9620.29    1762  9671.6    1762 9965.97    1760 9985.39    1758  9988.6
GR  1756 9993.36    175510009.59    175810018.81    1760 10110.6    176210298.95
GR  1764   10615
HD  3.48    10.0

X1  3.52      14 9981.9610017.06     200     200     200
GR  1766 9669.22    1764 9704.26    1764 9883.69    1762 9945.91    1762 9977.47
GR  1762 9977.93    1760 9981.96    1758 9986.06    175610002.04    175610006.86
GR  176010017.06    176210100.32    176410273.56    176610646.59
HD  3.52    10.0

X1   3.6       9 9979.8510013.99     400     450     420
GR  1770 9378.25    1768 9475.66    1766 9891.47    1764 9979.85    1760 9990.66
GR  176010010.55    176210013.99    176810247.91    177010365.75
HD   3.6    10.0

X1  3.65       9    9970   10015     250     260     280
GR1771.6 9358.43    1766    9470    1770    9580    1770    9830    1764    9970
GR  1762 9990.15    176210009.75    1764   10015    1770   10370
HD  3.65    10.0

X1  3.75      14 9982.65   10020     500     500     500
GR  1776    9590    1774    9655    1772    9710    1772    9725    1774    9780
GR  1774    9945    1772    9975    1768 9982.65    1764 9991.06    1764   10010
GR  1768   10020    1772   10310    1772   10840    1776   10885
HD  3.75    10.0

NC 0.055   0.055    0.03     0.3     0.5

X1  3.78      17  9978.410060.68     170     170     170
GR  1776 9660.11  1774.1    9740    1774  9978.4    1770 9983.58    1766 9992.92
GR  1766 9993.96    177010036.94    177210060.68    177210120.11    177010142.25
GR  176810151.27    176810155.15    177010163.26    177210225.58    177410348.04
GR  177410545.54    177510650.82
HD  3.78    10.0

NC 0.055   0.055    0.03     0.1     0.3

QT

X1  3.86      15 9980.73 10048.5     360     490     400
GR  1780 9728.15    1778 9811.03    1776 9980.73    1770 9992.41    177010006.32
GR  177210015.17    1774 10048.5    1774 10108.2    177610125.25    1778 10163.1
GR  177810205.78    177410274.92    177410300.77    177810373.74    1780 10496.8
HD  3.86    10.0

X1  3.96      16 9882.8510057.49     490     460     520
GR  1784 9852.78    1782 9882.85    1780 9912.96    1778 9952.91    1776 9978.94
GR  1774 9989.34    177410006.21    178010028.53    178210057.49    178210179.95
GR  178010409.79    177810418.05    1778 10422.6    178010433.36    178210548.23
GR  178410801.62
HD  3.96    10.0

NC 0.055   0.055    0.03     0.3     0.5

X1  4.05       9 9981.93   10025     400     285     500
GR  1788    9960    1782 9981.93    1780    9990    1779   10000    1780   10015
GR  1782   10025    1782   10200    1786   10270  1786.8   10320
HD  4.05    10.0

NC 0.055   0.055    0.03     0.1     0.3
```

```
X1  4.11      11 9978.48 10107.8     240     300     250
GR  1792 9954.62    1790 9972.66    1786 9978.48    1784 9982.42    1782 9988.23
GR  178210014.08    1784 10019.7    1786 10107.8    1788 10273.4    179010355.58
GR  179010489.42
HD  4.11    10.0

X1  4.22      13    9975   10030     280     260     280
GR  1796    9435    1794    9530    1792    9595    1790    9650    1788    9780
GR  1788    9885    1790    9975    1786    9990  1785.5 9999.81    1786   10010
GR  1790   10030    1792   10085  1792.4   10135
HD  4.22    10.0

X1  4.23      13 9980.1610030.19     140     150     150
GR  1796 9520.61    1794 9614.39    1790 9762.38    1788 9933.91    1790 9961.17
GR  1790 9980.16    1788 9985.61    1786 9991.04    178610007.85    178810015.65
GR  179010030.19    179210081.29    179410132.36
HD  4.23    10.0

X1  4.31      12 9980.5410019.75     410     410     420
GR  1798 9706.51    1796  9770.7    1794 9896.31    1792 9980.54    1790  9986.9
GR  178810005.88    178810009.89    179010014.81    179210019.75    179410055.21
GR  179610110.95  1796.510150.57
HD  4.31    10.0

X1   4.4      14    9990   10030     475     490     510
GR  1802    9925    1800    9940    1798    9970    1796    9990    1794    9995
GR1792.3   10005    1794   10020    1796   10030    1796   10080  1794.3   10090
GR  1796   10110    1798   10175    1800   10210    1801   10270
HD   4.4    10.0

X1  4.49      12  9954.910053.62     490     450     450
GR  1806 9821.99    1804 9901.91    1802 9916.74    1800  9954.9    1798 9973.89
GR  1796 9983.53    1796 10011.1    179810018.97    180010053.62    180210105.02
GR  180410240.68  1804.5   10340
HD  4.49    10.0

X1  4.56       9    9975   10115     365     350     365
GR  1810    9730    1808    9915    1806    9945    1802    9975    1799   10000
GR  1802   10115    1804   10150    1806   10215    1808   10240
HD  4.56    10.0

NC 0.055   0.055    0.03     0.3     0.5

X1  4.57       9  9980.5 10011.5     110     100     110
X3     0                    9980    1808   10011    1808
GR  1810    9540    1808    9760    1806    9950    1806  9980.5    1800  9980.5
GR  1800 10011.5    1806 10011.5    1806   10220    1806   10500
HD  4.57    10.0

NC 0.055   0.055    0.03     0.1     0.3

X1  4.58      10    9982   10013     105     105     105
X3                    9982    1807   10013    1807
GR  1810    9685    1808    9790    1806    9945    1804    9982  1801.3    9982
GR1801.3   10013    1804   10013    1804   10250    1806   10320    1808   10500
HD  4.58    10.0

XI   4.6      18  9971.410015.98      83      83      83
GR  1812    9675    1810 9812.65    1810 9836.34    1808 9875.78    1808 9883.17
GR  1806 9966.89    1806  9971.4    1802  9987.4    1802 9998.69    1802 9998.98
GR  180610015.98    180610022.46    1806   10123    180410130.11    180410281.42
GR  180610322.77    180610440.24    180810500.19
HD   4.6    10.0

X1  4.65      14 9982.4710093.98     260     260     280
GR1815.5    9400    1814    9600    1810 9830.73    1808 9982.47    1806 9997.03
GR  180610002.86    180810014.29    180810049.57    180610059.42    180610060.51
GR  180810093.98    180810250.89    1810   10270    1810   10360
HD  4.65    10.0

X1  4.74      22 9960.2910029.03     400     500     500
GR  1818 9500.14    1816 9960.29    1814 9979.29    1812 9986.69    1810    9994
GR  1810 9994.01    1810 9999.53    1810 9999.55    181210010.02    181410029.03
GR  181410029.36    181410136.55    1813   10140    1814   10160    1814   10380
GR  1811   10400    1814   10425    1814   10440    1813   10485    1814   10530
GR  1815   10590    1815   10700
HD  4.74    10.0

X1  4.78      17 9964.8710021.41     300     100     200
X3                    9964.87    181810211.72    1816
GR  1820 9743.69    1818 9905.26    1818 9905.48    1818 9964.87    1818 9964.88
GR  1816 9983.35    1813 9995.72    181310010.03    181610021.41    181610211.72
GR  181610230.89    181410317.17    181310376.07    1814 10488.8    1814 10508.5
GR  1816   10540    1818   10640
HD  4.78    10.0

X1  4.82      28    997510009.43     480     480     480
X3    10
GR  1826    9480    1824 9740.85    1822 9830.85    1820 9875.16    1818 9888.17
GR  1818 9903.71    1820 9930.33    1820 9930.34    1820 9974.99    1820    9975
GR  1818 9990.22    181810005.12    182010009.43    1822 10013.6    182210024.29
GR  182010070.59    1818   10100    182010126.15    182010181.41    181810189.94
GR1817.1   10200    181810207.92    182010217.21    182010264.85    1818   10280
GR  1820   10315    1822   10435    1824   10565
HD  4.82    10.0
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X1   4.9      14    9940   10018     220     160     200
X3                        9940    1824   10018    1824
GR  1826    9730    1824    9825    1824    9940    1822  9961.4    182210007.63
GR  1824   10018    1824   10030    1822   10155    1822   10290    1822   10310
GR  1822   10330    1824   10405    1826   10560    1828   10750
HD   4.9    10.0

X1  4.96      17 9974.1910011.03     400     200     320
X3                                        10156.63    1826
GR  1828 9716.18    1828 9717.02    1826 9800.79    1826 9974.19    1822 9995.82
GR  182210000.05    182610011.03    182610011.04    182610156.72    182610156.73
GR  1824   10310    182410344.97    182610425.12    182710592.76    182710594.98
GR  1828   10670    1830   10790
HD  4.96    10.0

X1  5.03      13 9975.1210012.26     345     340     365
X3                                        10133.33    1830
GR  1833    9515    1832 9590.59    1830 9640.88    1830 9975.12    1826 9992.06
GR  182610001.75    183010012.26    1830 10053.1    183010133.33    182810188.37
GR  182810281.59    1832   10620  1832.5   10750
HD  5.03    10.0

X1  5.09      14    9970   10025     300     310     300
X3                                        10075    1834
GR  1835    9480    1834    9515    1832    9550    1832    9970    1830    9985
GR  1831   10000    1832   10025    1834   10075    1830   10120    1832   10145
GR  1832   10255    1834   10320    1834   10435    1836   10780
HD  5.09    10.0

X1  5.15      14    9978   10025     350     355     352
X3                                        10170    1836
GR  1839    9870    1838    9945    1836    9978    1834    9988    1830   10000
GR  1830   10010    1834   10025    1834   10130    1836   10170    1836   10200
GR  1835   10320    1836   10495    1838   10522    1840   10780
HD  5.15    10.0

X1  5.21      21    9970   10030     330     300     310
X3                                        10135    1840
GR  1842    9685    1840    9780    1838    9860    1836    9885    1836    9890
GR  1838    9915    1838    9970    1836    9985    1834   10000    1836   10015
GR  1838   10030    1838   10085    1837   10110    1838   10120    1840   10135
GR  1840   10150    1838   10245    1838   10310    1840   10355    1840   10400
GR  1842   10525
HD  5.21    10.0

NC 0.055   0.055    0.03     0.3     0.5

X1  5.31      19 9988.2310044.49     500     480     500
GR  1847    9325    1846 9444.34    1844 9557.15    1844 9887.76    1840 9911.33
GR  1840 9919.33    1840 9919.34    1842 9933.33    1842 9933.43    1842 9988.23
GR  1842 9988.24    1838 9997.67    183810005.97    1842 10024.7    184410044.49
GR  1844 10044.5    184410061.08    184410218.05    1846   10565
HD  5.31    10.0

X1  5.38      11    9985   10015     350     425     375
GR  1850    9815    1848    9880    1846    9900    1844    9910    1844    9985
GR  1841   10000    1844   10015    1846   10030    1846   10110    1848   10255
GR  1850   10460
HD  5.38    10.0

NC 0.055   0.055    0.03     0.1     0.3

X1  5.48      15 9978.4110044.06     530     500     500
GR  1855    9300    1854    9440    1854    9750    1852    9790    1852    9895
GR  1850 9929.89    1850 9978.41    184610000.42    1846 10004.4    185010044.06
GR  185210141.09    185210147.22    185210418.73    185410547.75    185610626.53
HD  5.48    10.0

X1  5.57      16    9977   10035     400     450     450
GR  1859    9400    1858    9520    1856    9700    1858    9731    1858    9800
GR  1856    9812    1854    9824    1854    9977    1852    9985    1850    9993
GR  1850   10005    1852   10014    1854   10024    1856   10035    1858   10170
GR  1860   10299
HD  5.57    10.0

X1  5.64       9    9955   10170     370     320     345
GR  1862    9650    1860    9775    1858    9870    1856    9955    185510037.94
GR  1856   10170    1858   10275    1860   10365  1862.5   10575
HD  5.64    10.0

X1  5.66      23 9980.02   10030     460     320     440
GR  1864 9504.86    1864 9505.03    1862  9622.9    1862 9622.94    1862 9802.24
GR  1862 9802.28    1862 9805.57    1862 9805.58    1860 9814.49    1858 9838.73
GR  1858 9838.74    1858 9839.05    1860 9857.77    1860 9980.02    1854 9995.33
GR  1854 10003.7    185810014.57    1859   10030    1860 10136.3    186010136.31
GR  186210169.16  1862.5   10210    1863   10615
HD  5.66    10.0

X1  5.76      15 9968.5810043.06     470     570     540
GR  1870    9640    1868 9674.85    1866 9704.99    1864 9712.43    1866 9741.92
GR  1866    9835    1866    9865    1864 9968.58    1862 9985.72    186210014.25
GR  186410043.06    186610096.64    1868 10124.8    187010142.86    187010144.93
HD  5.76    10.0
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X1  5.83      16    9960   10030     375     380     380
GR  1874    9500    1872    9550    1872    9650   1872    9710    1870    9735
GR  1870    9890    1868    9960    1866    9990  1865.5   10000    1866   10005
GR  1868   10030    1868   10105    1870   10120    1872   10140    1874   10155
GR  1875   10250
HD  5.83    10.0

X1  5.92      19 9948.3410024.34     375     375     400
GR  1877    9720    1876 9854.04    1874 9948.34    1872 9975.43  1870.2   10000
GR  187210006.77    187410015.55    187610024.34    187610034.96    187410094.25
GR  187210130.93    1870 10149.3    187010150.59    187210177.58    187410238.14
GR  187410251.91    187410318.15    187610335.66    187810350.37
HD  5.92    10.0

X1  6.01      17    9920   10035     485     510     490
GR  1883    9750    1882    9870    1880    9920    1878    9955    1876    9980
GR1875.5   10000    1876   10010    1878   10020    1880   10035    1880   10075
GR  1878   10160    1877   10175    1878   10190    1880   10260    1882   10280
GR  1884   10400    1886   10580
HD  6.01    10.0

X1  6.09      10    9935   10070     470     435     445
GR  1886    9815    1884    9890    1882    9935    1880    9970  1879.5   10010
GR  1880   10050    1882   10070    1884   10345    1886   10380    1888   10520
HD  6.09    10.0

QT

X1  6.16      20 9977.6510050.58     270     450     360
GR1892.5    9875    1892 9961.21    1890  9972.1    1888 9977.65    1886  9983.3
GR  1884 9989.16    1883 9996.77    1883 9997.18    188410022.78    188610039.58
GR  188810050.58    188810110.58    188610208.91    188610225.08    188810318.94
GR  189010345.72    1892 10414.9    189210424.02    189210428.81 1893.0810468.67
HD  6.16    10.0

X1  6.25      14 9961.8410045.42     490     430     460
GR  1898 9911.34    1896 9931.58    1894 9947.24    1892 9961.84    1890 9976.08
GR  1888    9990    1888   10015    1890 10030.1    189210045.42    189210069.44
GR  189210268.14    189410454.21    189610476.27    189810569.33
HD  6.25    10.0

X1  6.32      14 9970.9910020.18     410     350     390
GR  1900 9951.16    1898  9957.9    1896 9964.52    1894 9970.99    1892 9977.55
GR  1890 9984.06    189010006.52    189210013.72    189410020.18    189610100.18
GR  189810266.52    189810293.42    189810347.28    190010412.02
HD  6.32    10.0

X1  6.43      13    9925   10030     475     360     450
GR  1906    9655    1904    9665    1902    9680    1900    9690    1900    9925
GR  1898    9970  1896.5    9990  1896.5   10010    1898   10020    1900   10030
GR  1902   10040    1904   10120    1906   10285
HD  6.43    10.0

X1   6.5      16 9947.4510071.54     310     355     345
GR  1910 9636.39    1908 9702.53    1906 9718.78    1904 9747.02    1904  9794.4
GR  1904 9947.45    1902 9967.32    1900 9987.47    1899    9995    1899   10010
GR  190010019.82    190210042.69    190410071.54    190610099.13    1908 10152.4
GR  1910   10187
HD   6.5    10.0

X1  6.58      12  9965.110022.84     430     430     430
GR  1912 9897.27    1910 9926.14    1908 9950.13    1906  9965.1    1904 9980.22
GR  1902 9998.11    190210006.79    190410014.85    190610022.84    190810088.23
GR  191010249.56    191210282.55
HD  6.58    10.0

X1  6.63      14 9985.9110021.82     300     290     290
GR  1916 9976.91    1914 9982.13    1912 9983.41    1910 9984.66    1908 9985.91
GR  1906 9987.08    1905    9995    1905   10005    190610015.13    190810021.82
GR  191010050.15    191210131.79    191410273.67    191610318.49
HD  6.63    10.0

X1  6.71      10 9981.63   10025     425     350     390
GR  1918    9970 1914.04 9977.71 1912.03 9981.63    1908    9990  1907.5   10000
GR  1908   10010    1912   10025    1914   10045    1916   10090    1918   10225
HD  6.71    10.0

X1   6.8      23 9976.6310016.52     500     400     495
GR  1924    9660    1920    9705    1919    9725    1920    9755    1920    9800
GR  1920 9880.75    1920 9901.03    1918 9976.63    1918 9976.81    1916 9982.58
GR  1916 9982.91    1914  9988.6    1914 9988.73    191410004.27    191410004.41
GR  191610010.43    191610010.46    1918 10016.4    191810016.52    192010022.44
GR  192010022.57    192210028.44  1923.7   10040
HD   6.8    10.0

X1   6.9      16 9954.1710017.39     490     560     529
GR  1930 9598.79    1926    9625    1926    9705    1928    9770    1928    9800
GR  1928 9822.48    1926 9857.37    1924 9954.17    1922 9987.42    192010000.76
GR  192010011.02    192210014.22    192410017.39    192610020.56    192810023.72
GR  193010026.89
HD   6.9    10.0

NC 0.055   0.055    0.03     0.3     0.5

X1  6.98      14 9975.9710031.62     400     470     437
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GR  1934 9723.34    1932    9740    1932    9900    1932    9935    1930 9944.17
GR  1928 9975.97    1926  9985.4    1924 9994.24    192410004.06    192610020.09
GR  192810031.62    193010071.11    193210085.11    193410100.97
HD  6.98    10.0

NC 0.055   0.055    0.03     0.1     0.3

X1  7.08      13 9953.0710021.87     485     500     500
GR  1940 9917.61    1938 9925.72    1936 9934.65    1934 9943.58    1932 9953.07
GR  1930 9965.94    1929    9987    193010007.17    193210021.87    193410036.31
GR  1936 10051.7    1938 10067.1    1940 10082.5
HD  7.08    10.0

X1  7.17      13 9978.7610024.18     500     520     500
GR  1944 9950.59    1942 9955.33    1940 9960.08    1938 9967.15    1936 9978.76
GR  1934  9991.7  1934.3   10000    193410014.37    193610024.18    1938   10034
GR  194010043.85    194210082.22    194410098.58
HD  7.17    10.0

NC 0.055   0.055    0.03     0.3     0.5

X1  7.28      14 9988.7110010.16     475     410     554
GR  1950    9710    1944    9760    1942    9800    1942 9836.63  1941.8 9849.74
GR1941.8 9874.17    1942 9924.41    1942 9988.71  1940.8    9998    194210010.16
GR  194410021.65    194610030.54    1948 10038.9    1950 10047.2
HD  7.28    10.0

NC 0.055   0.055    0.03     0.1     0.3

X1  7.36      12 9949.3210023.48     420     470     446
GR  1954    9725    1952    9740    1950    9800    1950 9835.52    1948 9949.32
GR  1946 9977.98  1944.5    9998    194610011.65    194810023.48    195010033.89
GR  195210040.39    195410046.86
HD  7.36    10.0

X1  7.46      13 9969.4710051.31     490     510     500
GR  1960 9830.45    1958 9861.07    1956 9923.22    1954 9969.47    1952 9976.86
GR1951.5    9990    1952 10000.7    195210032.17    195310051.31    195410081.59
GR  1956 10119.3    195810130.99    1960 10142.8
HD  7.46    10.0

X1  7.55      14 9970.0710028.16     510     480     500
GR  1968 9877.72    1966 9895.81    1964 9913.89    1962 9929.39    1960 9970.07
GR  1958 9981.49  1956.7   10000    195810024.51    196010028.16    196010145.16
GR  196210158.57    196410173.58    1966 10182.6    196810293.44
HD  7.55

X1  7.65      13 9977.3710022.56     520     470     500
GR  1970    9797    1966    9805  1965.5    9882    1964    9917    1964 9977.37
GR  1962 9986.15  1961.8   10000    196210010.39    196410016.47    196610022.56
GR  196810109.69    197010128.52    1971   10165
HD  7.65

X1  7.74      22 9983.7410035.24     425     475     500
GR  1978    9733    1976    9744    1974    9754    1972    9765    1972    9800
GR1972.3    9836    1972    9888    1972    9915  1972.4    9968    1972    9981
GR1970.9 9983.74    1970    9987  1969.1   10000    1970   10010    197110035.24
GR  1972   10062  1972.3   10086    1972   10097    1972   10123    1974   10127
GR  1976   10133    1978   10138
HD  7.74

X1  7.84      16    9984   10025     575     425     500
GR  1984    9793    1982    9828    1980    9841    1978    9908    1976    9916
GR  1976    9918    1976    9941    1976    9975    1976    9984  1974.4   10000
GR  1976   10025    1978   10036    1978   10073    1980   10206    1982   10222
GR  1983   10267
HD  7.84    10.0

X1  7.89      18    9983   10054     300     220     300
GR  1986    9756    1984    9764    1984    9845    1984    9878    1982    9978
GR  1982    9983    1980    9987    1978    9992    1977   10000    1978   10020
GR  1980   10054    1980   10082  1981.8   10149    1982   10170    1982   10189
GR  1982   10219    1984   10224  1985.5   10256
HD  7.89    10.0

X1  7.98      20    9975   10039     280     520     465
GR  1992    9500    1990    9570    1988    9630    1986    9740    1986    9773
GR  1986    9859  1986.4    9898    1986    9927    1986    9950    1986    9975
GR  1984    9982    1982    9991  1981.8   10000    1982   10005    1984   10017
GR  1986   10039    1988   10075  1988.2   10097    1990   10116    1992   10127
HD  7.98    10.0

X1  8.02      16    9977   10037     215     245     235
GR  1996    9610    1992    9700  1991.9    9765    1990    9862    1988    9894
GR  1988    9897  1989.2    9951    1988    9977    1986    9989  1985.1   10000
GR  1986   10020    1988   10037    1990   10077    1992   10109    1994   10116
GR  1996   10125
HD  8.02    10.0
EJ

T4  Project: Upper Cave Creek Watercourse Master Plan Studies
T5  Client : Flood Control District of Maricopa County (FCDMC)
T6  Date:    August 3, 1999
T7  Firm:    Stantec Consulting, Inc.
T8  ******************************************************
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I1            10
I4  SAND      10       1      14       0       0       0       0       0
I5           0.5     0.5    0.25     0.5    0.25       0     1.0
LQ     Q       1    2500    5000    7500
LT    QS     0.1    8916   11552   15559
LF   VFS 0.01512 0.01512 0.01902 0.02003
LF    FS 0.03115 0.03115 0.03238 0.03321
LF    MS 0.06244 0.06244 0.06561 0.06750
LF    CS 0.06509 0.06509 0.06832 0.07001
LF   VCS 0.07187 0.07187 0.07556 0.07736
LF   VFG 0.09965 0.09965 0.10454 0.10682
LF    FG 0.14704 0.14704 0.15381 0.15628
LF    MG 0.21408 0.21408 0.22359 0.22410
LF    CG 0.26298 0.26298 0.20829 0.20071
LF   VCG 0.02175 0.02175 0.03432 0.02736
LF    SC 0.00870 0.00870 0.01298 0.01582
LF    LC 0.00014 0.00014 0.00158 0.00079
LF    SB       0       0       0       0
LF    MB       0       0       0       0
PF           0.2     1.0     372     186    95.4    88.6    88.7    47.1    79.6
PFC 23.7    66.6    11.8    51.2     6.1    42.6     3.0    31.6    1.19    20.5
PFC 0.59    7.75    0.42    4.25     0.3     2.5   0.149     1.5   0.074     1.1

$LOCAL
        Trib at RS 0.33
LQL    Q      0.1    1000
LTL   QS     0.10    0.10
LFL  VFS     0.10    0.10
LFL   FS     0.10    0.10
LFL   MS     0.10    0.10
LFL   CS     0.10    0.10
LFL  VCS     0.10    0.10
LFL  VFG     0.10    0.10
LFL   FG     0.10    0.10
LFL   MG     0.10    0.10
LFL   CG     0.05    0.05
LFL  VCG     0.05    0.05
LFL   SC     0.05    0.05
LFL   LC     0.05    0.05
LFL   SB     0.00    0.00
LFL   MB     0.00    0.00

        Paradise Wash
LQL    Q      0.1    1000    3000    5000
LTL   Qs      0.1   13715   37712   41663
LFL  VFS 0.01058 0.00636 0.00545 0.00631
LFL   FS 0.04436 0.02544 0.02006 0.02526
LFL   MS 0.26267 0.14852 0.12892 0.13132
LFL   CS 0.14797 0.08564 0.07565 0.07554
LFL  VCS 0.06598 0.03986 0.03591 0.03581
LFL  VFG 0.07781 0.05010 0.04729 0.04696
LFL   FG 0.14900 0.10060 0.10449 0.10211
LFL   MG 0.22444 0.16710 0.20635 0.19292
LFL   CG 0.01718 0.21839 0.20780 0.19199
LFL  VCG       0 0.15798 0.12954 0.13980
LFL   SB       0       0 0.03853 0.05196
LFL   LC       0       0       0       0
LFL   SB       0       0       0       0
LFL   MB       0       0       0       0

        Desert Hills Wash
LQL    Q      0.1      11    3300    6600    9900
LTL   Qs      0.1      26    5970    9596   12935
LFL  VFS 0.01254 0.01254 0.00409 0.00354 0.00330
LFL   FS 0.07372 0.07372 0.02292 0.02018 0.01885
LFL   MS 0.30241 0.30241 0.09481 0.07205 0.07283
LFL   CS 0.26028 0.26028 0.08805 0.06434 0.06378
LFL  VCS 0.15271 0.15271 0.05881 0.04312 0.04280
LFL  VFG 0.09027 0.09027 0.04724 0.03485 0.03475
LFL   FG 0.09428 0.09428 0.12007 0.08687 0.08962
LFL   MG 0.01379 0.01379 0.20332 0.14036 0.15311
LFL   CG 0.00000 0.00000 0.23981 0.34597 0.30204
LFL  VCG 0.00000 0.00000 0.12088 0.18871 0.21605
LFL   SB 0.00000 0.00000 0.00000 0.00000 0.00286
LFL   LC 0.00000 0.00000 0.00000 0.00000 0.00000
LFL   SB       0       0       0       0       0
LFL   MB       0       0       0       0       0

        Trib near RS 3.86
LQL    Q      0.1    1000
LTL   QS     0.10    0.10
LFL  VFS     0.10    0.10
LFL   FS     0.10    0.10
LFL   MS     0.10    0.10
LFL   CS     0.10    0.10
LFL  VCS     0.10    0.10
LFL  VFG     0.10    0.10
LFL   FG     0.10    0.10
LFL   MG     0.10    0.10
LFL   CG     0.05    0.05
LFL  VCG     0.05    0.05
LFL   SC     0.05    0.05
LFL   LC     0.05    0.05
LFL   SB     0.00    0.00
LFL   MB     0.00    0.00
```

```
        Trib near RS 6.09
LQL     Q      0.1     1000
LTL    QS     0.10     0.10
LFL   VFS     0.10     0.10
LFL    FS     0.10     0.10
LFL    MS     0.10     0.10
LFL    CS     0.10     0.10
LFL   VCS     0.10     0.10
LFL   VFG     0.10     0.10
LFL    FG     0.10     0.10
LFL    MG     0.10     0.10
LFL    CG     0.05     0.05
LFL   VCG     0.05     0.05
LFL    SC     0.05     0.05
LFL    LC     0.05     0.05
LFL    SB     0.00     0.00
LFL    MB     0.00     0.00

$HYD
$RATING
RC            11    2000       0       0 1646.00 1650.85 1652.85 1654.34 1655.54
RC       1657.39 1657.73 1658.43 1658.93 1659.31 1659.78
*    A  Level output at time step 1 (0.2500 day)
Q    184     165       0       1       0       0
T     68      68      68      68      68      68
X           0.05  0.2500
*    A  Level output at time step 2 (0.0139 day)
Q   4750    3682       1       3      12       0
W 0.0139
*    A  Level output at time step 3 (0.0208 day)
Q   3088    1977       1       4     330      13
W 0.0208
*    A  Level output at time step 4 (0.0208 day)
Q   7002     167      60      19     446     409
W 0.0208
*    A  Level output at time step 5 (0.0139 day)
Q  18128    1356     558     920     367     666
W 0.0139
*    A  Level output at time step 6 (0.0139 day)
Q  16959    1024    1044    4632       0    2216
W 0.0139
*    A  Level output at time step 7 (0.0208 day)
Q  16565     720    4205    9270     143    2075
W 0.0208
*    A  Level output at time step 8 (0.0208 day)
Q  14910     490    4804    8753     413     447
W 0.0208
*    A  Level output at time step 9 (0.0278 day)
Q   8784     340    2529    5004     470     440
W 0.0278
*    A  Level output at time step 10 (0.0278 day)
Q   4709     263    1230    2535     347     333
W 0.0278
*    A  Level output at time step 11 (0.0278 day)
Q   3090     205     705    1469     243     236
W 0.0278
*    A  Level output at time step 12 (0.0347 day)
Q   2243     172     454     943     159     175
W 0.0347
*    A  Level output at time step 13 (0.0764 day)
Q   1602     147     304     636      89     120
W 0.0764
*    A  Level output at time step 14 (0.0764 day)
Q   1429     268     233     482      66      88
W 0.0764
*    A  Level output at time step 15 (0.1458 day)
Q   1706     123     354     745      52     137
W 0.1458
*    A  Level output at time step 16 (0.2083 day)
Q    513      15      87     156      51      41
X         0.02083  0.2083
$VOL  A
$$END
```

APPENDIX G

BED MATERIAL SIZE DISTRIBUTION

Table G-1

Grain Size Classification of Boulder Count Data for Cave Creek Channel Model

Class Name	Size Range (mm)	Average (mm)	Number in Size Range	Percentage	Percent Finer
Medium Boulders	1024-512	653.1	7	1.0	100
Small Boulders	512-256	351.9	30	4.5	96
Large Cobbles	256-128	192.0	51	7.6	88
Small Cobbles	128-64	104.6	44	6.5	81
Very Course Gravel	64-32	48.7	67	10.0	71
Coarse Gravel	32-16	24.1	49	7.3	64
Medium Gravel	16-8	12.7	52	7.7	56
Fine Gravel	8-4	6.3	52	7.7	49
Very Fine Gravel	4-2	3.2	52	7.7	41
Fines	<2	--	268	39.9	1

Table G-2

Grain Size Classification of Boulder Count Data for Apache Wash Channel Model

Class Name	Size Range (mm)	Average (mm)	Number in Size Range	Percentage	Percent Finer
Small Boulders	512-256	372.11	13	1.7	100.0
Large Cobbles	256-128	186.01	36	4.6	95.4
Small Cobbles	128-64	88.63	52	6.7	88.7
Very Course Gravel	64-32	47.14	71	9.1	79.6
Coarse Gravel	32-16	23.73	102	13.1	66.6
Medium Gravel	16-8	11.81	120	15.4	51.2
Fine Gravel	8-4	6.10	67	8.6	42.6
Very Fine Gravel	4-2	3.05	86	11.0	31.6
Fines	<2	--	234	29.8	1

Table G-3

Grain Size Classification of Boulder Count Data for Paradise Wash Channel Model

Class Name	Size Range (mm)	Average (mm)	Number in Size Range	Percentage	Percent Finer
Small Boulders	512-256	294.6	3	1.0	100
Large Cobbles	256-128	174.9	21	7.1	92.9
Small Cobbles	128-64	87.4	30	10.2	82.7
Very Course Gravel	64-32	46.6	34	11.6	71.1
Coarse Gravel	32-16	23.8	57	19.4	51.7
Medium Gravel	16-8	11.9	60	20.4	31.3
Fine Gravel	8-4	6.1	29	9.9	21.4
Very Fine Gravel	4-2	3.0	11	3.7	17.7
Fines	<2	--	49	16.7	1

Table G-4

Grain Size Classification of Boulder Count Data for Desert Hills Wash Channel Model

Class Name	Size Range (mm)	Average (mm)	Number in Size Range	Percentage	Percent Finer
Large Cobbles	256-128	176.4	1	0.9	100.0
Small Cobbles	128-64	84.4	10	9.4	90.6
Very Course Gravel	64-32	48.1	14	13.2	77.4
Coarse Gravel	32-16	22.9	20	18.9	58.5
Medium Gravel	16-8	10.9	18	17.0	41.5
Fine Gravel	8-4	5.9	16	15.1	26.4
Very Fine Gravel	4-2	2.9	3	2.8	23.6
Fines	<2	--	24	22.7	1

Figure G-1
Cave Creek Wash Sieve Analysis

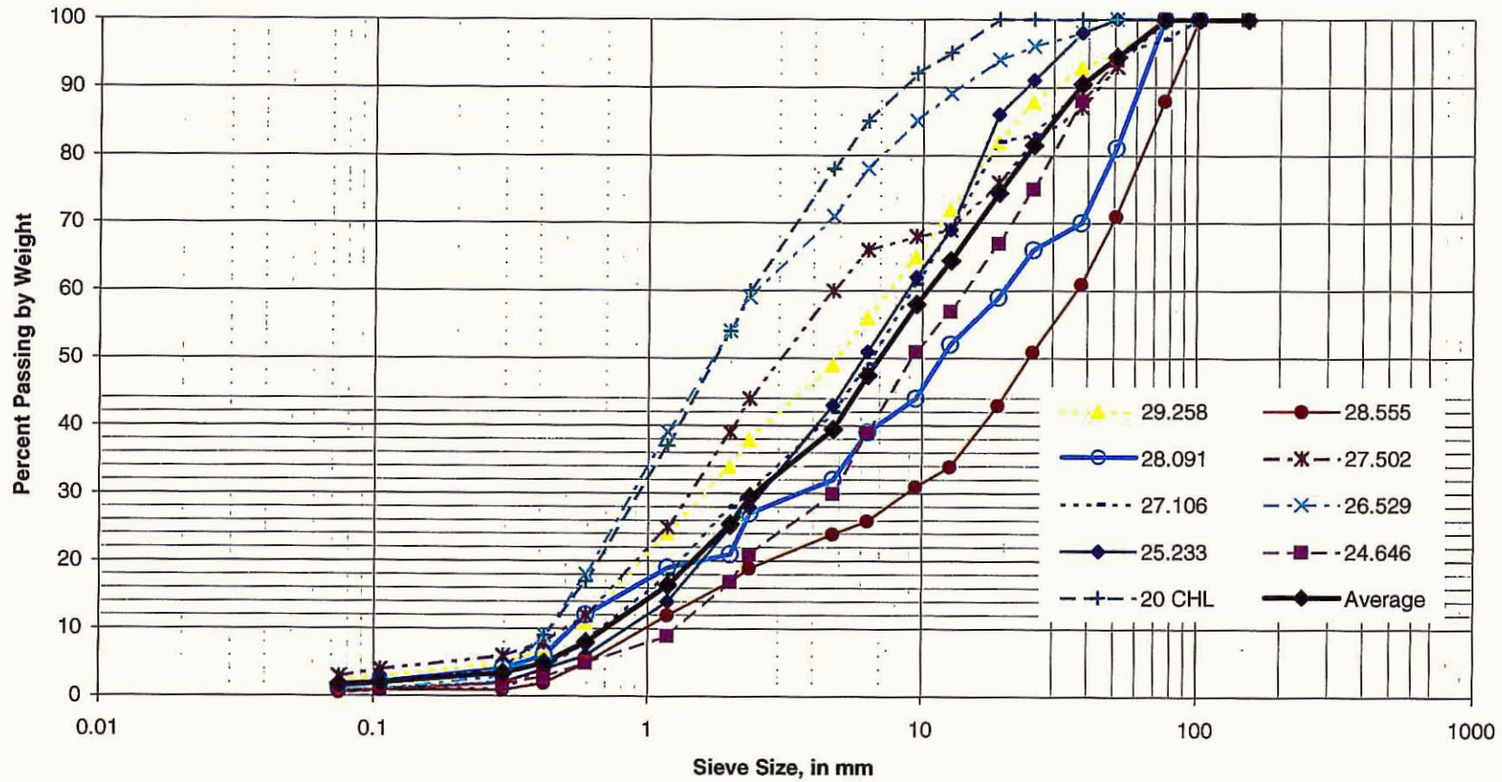


Figure G-2
Sieve-Analyzed Data for Apache Wash

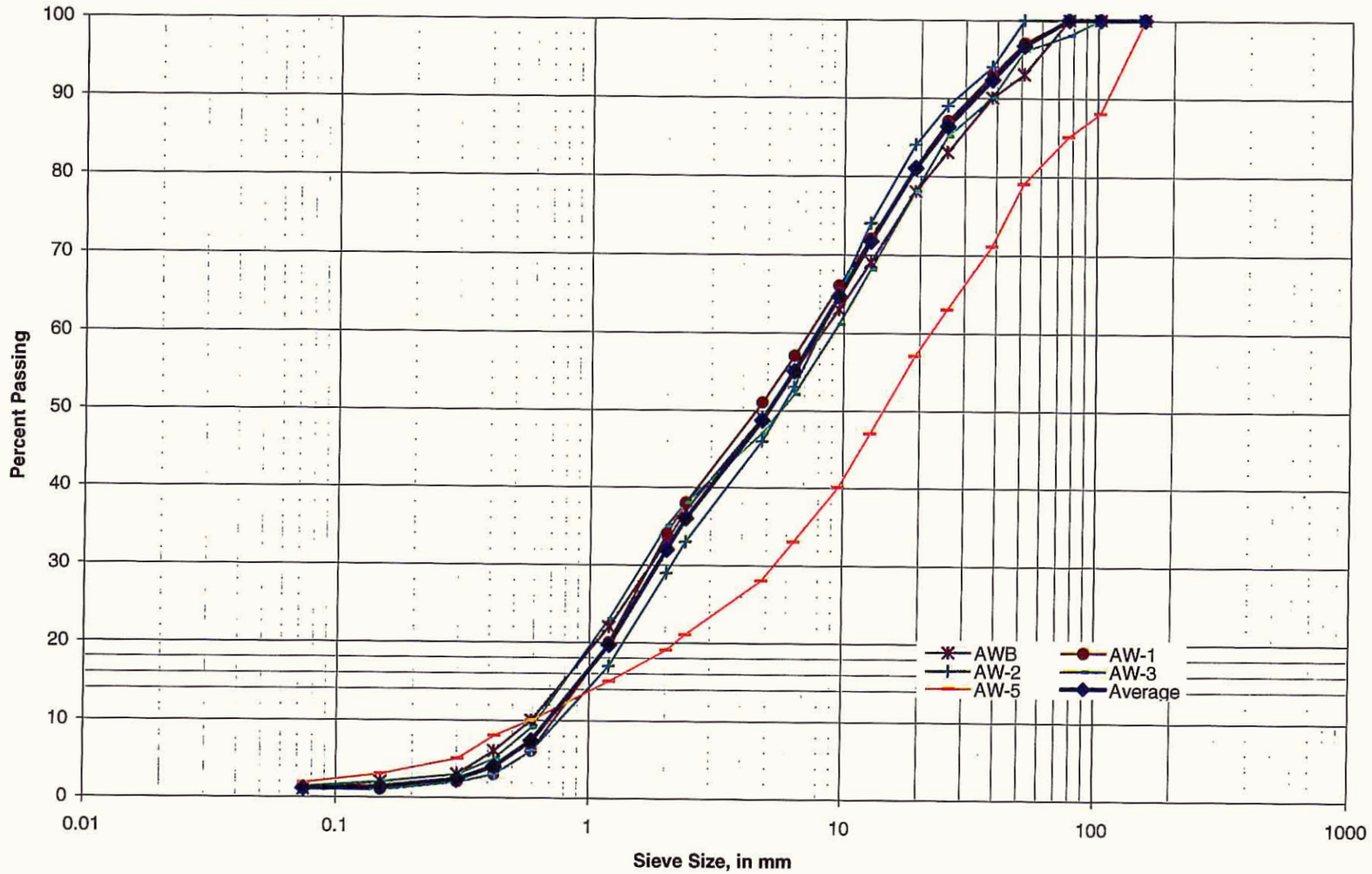


Figure G-3
Sieve-Analyzed Data for Paradise Wash

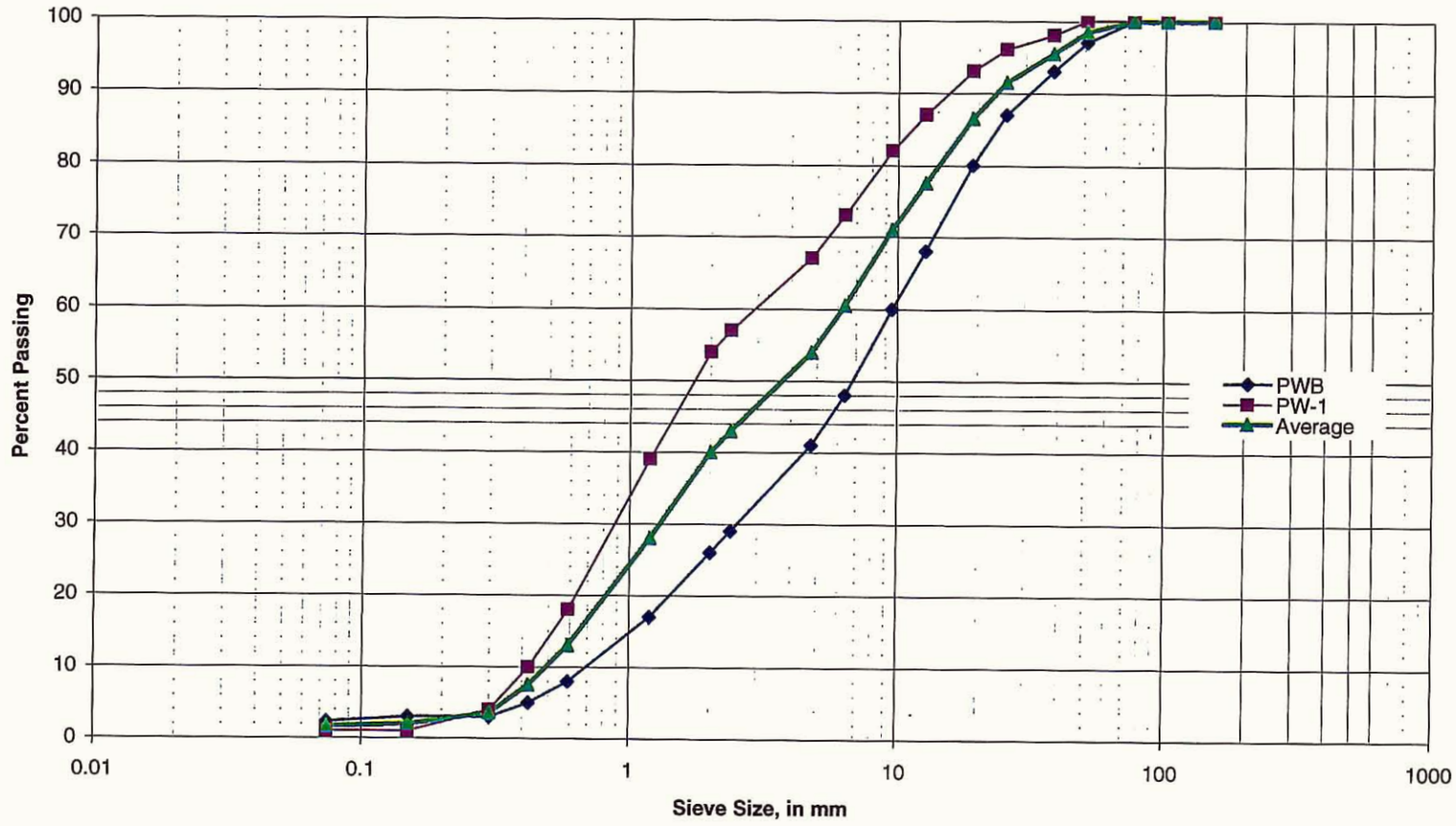
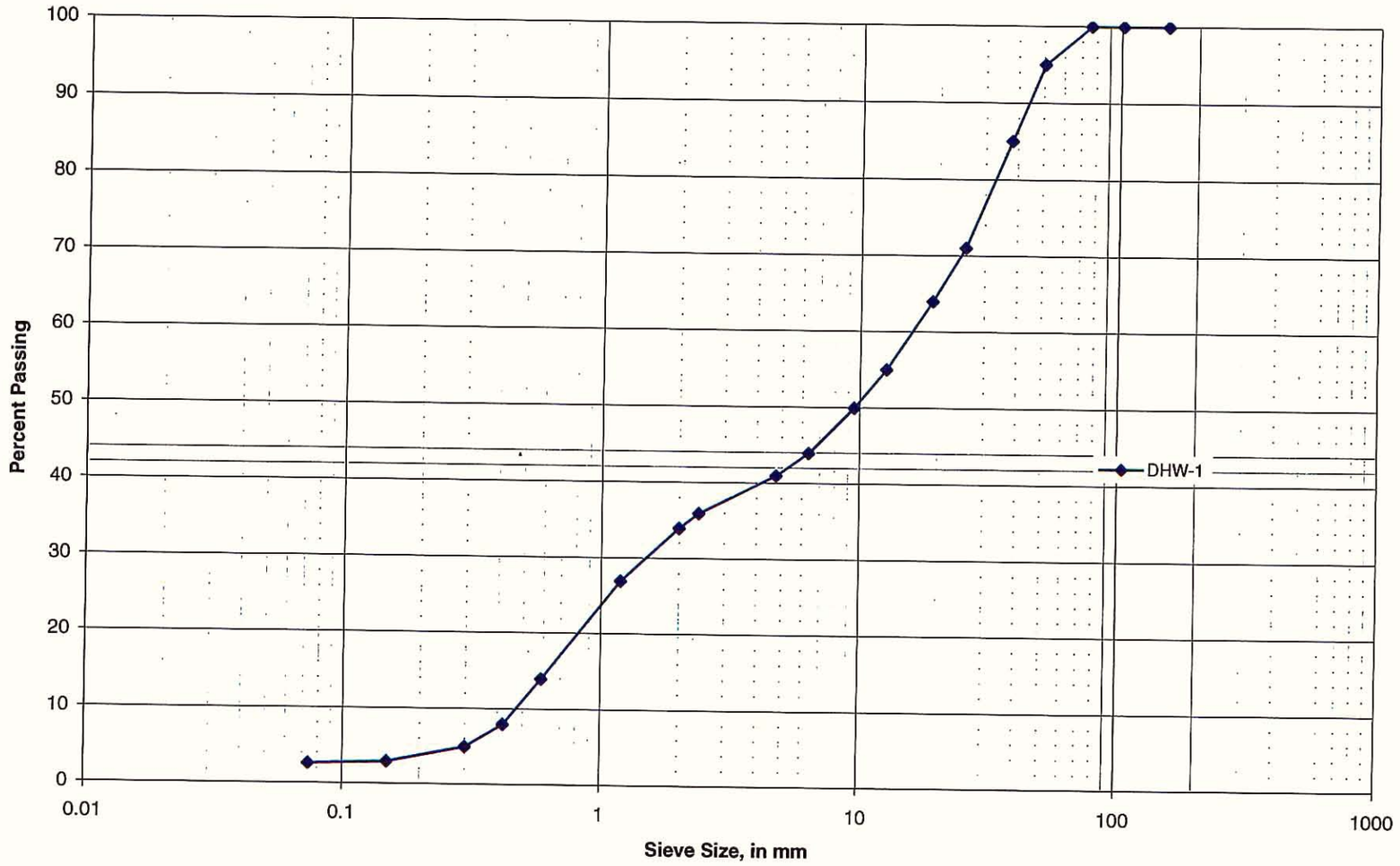


Figure G-4
Sieve-Analyzed Data for Desert Hills Wash



APPENDIX H

FINAL HEC-6 BASE MODEL INPUT AND OUTPUT

APPENDIX H.1

Cave Creek Main Channel Model, 100-year Flood, Existing Condition

```
T1       Cave Creek and Apache Wash WMP
T2       by Stantec:  Proj. No. 82000077                    File: CC-F100C.DAT
T3       for Flood Control District of Maricopa County      Date: 07-26-99 srg

NC  0.07     0.06    0.044      0.1      0.3
X124.525       48   9860.5  10093.3
X3                                9865   1628.1    10009   1628.1
GR  1640     8760     1630     8900     1626     8980     1624     9090   1623.9     9091
GR1624.8     9300     1626     9740     1628     9750   1629.5     9810   1629.3   9860.5
GR  1625   9875.7     1624   9888.6   1624.6   9950.3   1623.9    10000   1628.1    10009
GR1629.5  10093.3   1629.5  10189.4   1628.4  10203.4   1627.7    10276     1627  10289.6
GR1626.2  10343.7   1626.5  10386.8     1626  10487.2   1624.3  10496.5   1626.2    10571
GR  1626  10584.3   1625.6  10629.9   1626.5  10638.3   1626.8    10653   1626.7  10702.1
GR  1627  10722.5   1626.5    10773   1630.2  10821.2   1630.2  10962.7   1630.8  11060.9
GR1630.5  11152.9   1631.1  11227.9   1632.2  11276.1   1632.1  11287.4   1631.8  11327.4
GR1631.3  11358.7     1632  11397.3   1632.9  11424.4   1633.4  11439.7   1634.4  11448.3
GR1636.7    11484     1638  11605.1   1639.6  11693.3
HD24.525     10.0

X124.646       52     9580   9745.6      760      620      640
X3                                9430     1640    11000     1640
GR  1636     8810     1635     8850   1634.5     8900     1632     8960     1630     9160
GR  1630     9330     1631     9430     1630     9535   1630.5     9580     1630     9620
GR  1627     9630     1626     9690     1630     9700   1630.5   9745.6   1629.1   9767.3
GR1629.8   9787.4   1633.2   9795.5   1634.6   9817.1   1632.7   9845.8   1631.3   9859.1
GR1631.4   9876.2   1633.8   9889.7   1632.8   9930.1   1632.6   9963.4   1628.2    10000
GR1627.2  10034.8   1628.3  10043.8   1629.3  10084.6   1630.5  10091.3     1634  10154.9
GR1634.2  10243.2   1634.5    10271   1633.7    10357   1634.1  10370.5   1634.1  10385.2
GR1633.5  10413.3   1631.8  10425.9   1631.7  10453.6     1634  10467.1   1634.7  10488.2
GR1634.6  10534.6   1634.9  10602.2   1634.8  10665.2   1633.7  10680.4   1634.8  10734.7
GR1635.4  10757.4   1634.9  10836.8   1634.6  10852.8   1634.1  10871.6   1635.1  10916.3
GR1636.1  10970.3   1636.5  11010.9
HD24.646     10.0

X124.752       80   8835.7     8997      850      430      560
GR1642.2     8690     1641     8727.7   1632.4   8789.8   1638.2   8835.7   1637.5   8868.3
GR1632.4   8884.2   1629.8     8921   1629.3   8925.4   1629.2   8941.5   1632.4     8967
GR1638.3     8997   1637.9   9047.9   1633.4   9064.6   1633.2   9070.6   1634.2   9099.4
GR1636.1   9110.6   1632.5     9205   1633.1   9223.2   1633.6   9233.2   1638.1   9246.8
GR1638.6   9253.7   1638.4   9282.6   1637.9   9358.8   1634.7   9374.5   1634.3   9385.2
GR1633.5   9393.9   1633.4   9402.7   1637.7   9420.2   1638.2   9431.3   1638.4   9450.7
GR1638.3     9459   1638.1   9464.9   1635.5   9480.8   1636.3   9493.4   1637.7   9503.5
GR1638.8   9518.2   1637.9   9531.6   1635.9   9543.1   1635.4   9566.7   1634.8   9589.5
GR1634.9     9594   1636.7   9600.3   1637.5   9625.9   1636.3   9646.3   1637.7   9667.4
GR1634.1   9686.1   1633.1   9690.2   1633.3   9707.1   1633.6   9738.1   1638.5     9747
GR1639.4   9764.4   1639.6   9774.5   1639.6   9783.1   1639.1   9797.1   1637.1   9807.5
GR1635.1   9813.6   1637.9   9913.6   1638.8   9930.4   1638.4   9944.8   1637.5   9953.9
GR1635.1     9962   1633.7   9981.5   1633.5     9990   1633.5    10000   1634.2  10010.2
GR1635.9    10019   1638.7  10029.9   1639.8  10039.1     1640    10045   1640.2  10062.5
GR1640.2  10071.4   1639.3  10090.9   1639.2  10098.7   1638.1  10103.6     1638  10127.7
GR1635.2  10134.5   1636.6  10148.5     1638  10163.8   1638.4  10181.1   1642.1    10192
HD24.752     10.0

X124.845       49   8674.4   8792.8      560      490      490
GR1648.4   8242.8   1644.3   8353.1   1646.2   8493.6   1644.1   8556.4   1646.7   8674.4
GR1638.4   8697.6     1636   8702.9   1635.6   8721.1   1635.3   8773.9   1641.9   8792.8
GR1641.6   8826.7   1640.6     8873   1639.9   8878.1   1639.9   8893.9   1640.4   8914.9
GR1642.3   8921.4   1642.2   8981.3   1642.9   9007.5   1638.5   9040.8   1638.6   9043.4
GR1640.6   9066.8   1638.3   9103.1   1641.8     9129   1641.6   9191.6   1641.7   9245.9
GR1641.4   9249.8   1638.6   9272.1   1638.6   9279.6   1640.6   9296.3   1641.7   9345.5
GR1641.5   9386.9   1637.5   9406.6   1641.8   9448.5   1641.7   9507.2   1642.4   9526.6
GR1641.8   9556.3   1642.5   9630.9   1641.4   9667.2   1641.3   9689.7     1640   9710.8
GR1637.8   9730.6   1637.9   9749.6   1641.2   9781.1   1641.6   9840.6   1643.2   9961.4
GR1642.9   9967.8   1639.5   9988.1   1640.3  10038.9   1647.4    10067
HD24.845     10.0

X124.919       48   8494.5   8709.6      460      350      390
GR1652.8   8046.2   1649.7   8068.4   1646.8   8168.9   1647.1   8195.5     1648   8249.6
GR  1649   8266.1     1648   8326.9   1648.4   8422.4   1649.3   8461.9   1650.4   8494.5
GR1646.5   8588.8   1635.3     8604   1634.9   8637.8   1637.6   8647.2   1638.6   8695.7
GR1643.6   8709.6   1643.3   8729.6   1642.7   8768.3   1639.8   8785.3   1639.4   8813.8
GR1639.8   8836.9   1642.9   8858.9   1643.3   9045.7   1643.4   9126.5   1641.2   9133.6
GR1640.2   9152.9   1640.4   9184.9   1643.3   9199.9     1644   9243.9   1644.2   9302.9
GR1643.1   9335.8   1641.3   9351.3   1644.1   9379.6   1644.6   9538.9   1643.5   9559.5
GR1641.9   9583.1   1641.4   9599.3   1643.2   9611.3   1644.5   9654.2   1643.9   9688.9
GR1644.7   9795.8   1643.8   9882.5   1644.5   9927.7   1642.2   9936.8   1639.5   9971.5
GR1639.5    10000   1651.2  10008.5   1653.6  10153.9
HD24.919     10.0

X1 25.01       42   8823.5   9248.1      410      550      480
GR1653.4   8397.8   1653.2   8557.9   1650.2     8664   1645.5   8678.1   1645.1   8694.6
GR1643.6   8698.5   1642.1   8743.7   1643.4   8747.6   1644.1     8759     1645   8766.4
GR  1646   8823.5   1643.6   8878.3   1641.3   8880.6   1640.2   8929.6   1641.7   9059.1
GR  1641   9087.8   1641.2   9124.3   1642.7   9143.5   1642.5   9180.8   1647.3   9248.1
GR1646.9   9294.1   1646.9   9355.3     1644   9364.6   1644.4   9372.7   1646.5   9382.7
GR1647.4   9445.1   1648.3   9476.2   1649.3   9555.9   1650.4   9687.1   1647.5   9734.1
GR1647.4   9776.5   1646.5   9818.2     1644   9823.9   1645.2   9848.6     1648     9869
GR1646.9   9935.5   1644.5     9975   1643.9    10000   1642.5  10006.6   1642.7  10019.8
GR1652.2  10037.7   1654.3  10149.5
HD 25.01     10.0

X125.099       65   9327.5   9490.1      430      530      470
GR  1658   8593.8     1655     8775     1655     8880   1654.8     8914   1648.2   8923.1
GR1647.6   8947.9   1649.3     8959   1650.6     8988   1651.2     9029   1650.7   9064.3
GR1651.2   9091.8   1651.5   9112.7   1650.7   9150.2     1649   9209.7     1649   9215.4
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GR1651.3  9234.1  1652.4  9259.9  1652.5  9283.7  1652.5  9327.5    1652    9346
GR1646.9  9367.6  1646.2  9387.8    1646  9395.9    1646  9409.8  1649.2    9416
GR1650.8  9430.5    1652  9458.6  1652.6  9490.1  1651.6  9515.2    1650  9558.3
GR1648.1  9571.1  1648.2  9578.8  1650.6  9591.2  1652.3    9608  1653.1  9662.4
GR1652.4  9735.4  1650.6  9742.7  1650.3  9748.7  1650.4  9757.9  1653.2  9838.9
GR1652.5  9868.9  1651.7  9904.9  1651.4  9919.5  1651.3  9941.9  1648.4  9951.4
GR1648.9  9960.9  1649.4  9982.9  1648.2   10000  1648.9 10015.4  1651.3 10024.3
GR  1653   10032  1653.9 10048.6  1654.4 10063.9    1654 10087.5  1653.5 10094.2
GR1650.9 10100.6  1651.2   10104  1652.8 10111.3  1654.1 10146.3  1654.9   10167
GR  1655 10211.1  1655.4 10254.6  1653.4 10292.9  1654.8 10301.5  1659.9 10341.2
HD25.099    10.0

X1 25.18      56  9213.5  9413.7     500     430     430
GR1660.4  8859.3  1660.5  8905.9  1658.4  8986.1    1658    9017    1652  9047.1
GR  1652  9057.1  1653.4  9065.1  1654.4  9144.5  1652.9  9161.8    1652  9200.6
GR1654.5  9213.5  1654.1  9262.6  1651.1  9306.6  1647.8  9319.4  1647.7  9353.2
GR1653.4  9371.6  1653.8    9387  1655.1  9413.7  1656.2  9490.2  1654.9  9515.2
GR1655.5  9544.3  1655.7  9581.6  1654.1    9597  1655.9  9633.5  1654.6  9660.4
GR1655.1  9698.9  1651.5  9707.3  1651.7  9717.8  1654.4  9725.7  1653.5  9749.7
GR  1653  9785.9  1652.1  9814.3  1655.3  9830.6  1655.4  9894.7  1654.3  9911.5
GR1656.2  9924.2  1656.1  9944.4  1654.3  9955.6  1654.3  9969.6    1656  9978.6
GR1654.8  9986.8  1650.4   10000  1650.8 10046.2  1649.6 10072.4  1649.9 10076.1
GR1651.1 10097.1  1654.4   10114  1654.6 10135.8  1658.1 10157.7    1658 10214.9
GR1656.9 10240.1  1658.1   10265  1657.3 10356.6  1656.5 10390.4  1657.3 10430.2
GR1661.8 10537.3
HD 25.18    10.0

X125.233      60  9274.5  9383.8     390     180     280
GR1664.2  8536.3  1663.9  8595.2  1660.9  8692.2  1658.6  8798.9  1658.1  8854.9
GR1656.2  8987.4  1658.8  9021.1  1659.7  9057.1  1660.4  9131.9  1658.7  9192.7
GR1659.6  9228.6  1659.1  9274.5    1653  9289.5  1647.3  9290.8  1647.3  9296.1
GR1648.9  9301.1  1650.3  9327.4  1655.3  9341.1    1656  9383.8  1656.1  9418.4
GR1655.7  9471.9  1657.3  9484.7    1657    9548  1657.7    9570  1657.2  9608.2
GR1656.2  9622.6  1656.4  9634.3  1658.2  9647.4  1657.4  9707.8  1654.8  9728.7
GR1655.8  9748.3  1656.7  9778.2  1657.5  9803.8  1657.4    9881  1657.1  9908.4
GR1654.4  9924.8  1656.1  9935.3  1656.7  9956.8  1653.9  9994.4    1652   10000
GR  1652 10034.7  1657.4 10047.9  1656.8 10061.7  1655.4   10070  1656.6 10089.5
GR  1654 10118.4    1657 10139.2  1656.5 10155.7  1652.5 10163.6  1652.6 10169.9
GR1656.7 10179.7  1657.4 10221.7  1653.7 10235.2  1655.4 10247.3  1655.8 10283.7
GR1658.2 10303.2  1656.6 10429.1  1659.1 10448.8  1661.5 10459.3  1663.9 10475.2
HD25.233    10.0

X125.326      41  9335.1  9497.8     490     480     510
GR1666.5  9070.8  1665.5  9175.1  1661.1  9242.1  1661.4  9294.1  1661.5  9335.1
GR1657.2  9365.7  1653.2  9380.4    1653  9390.5  1657.2  9416.8    1657  9450.5
GR  1659  9472.3  1661.1  9497.8  1660.8  9532.7  1660.1  9592.2  1662.9  9612.1
GR1663.6  9698.9  1663.8    9758  1662.5  9788.6  1661.6  9855.4  1662.5  9861.2
GR1662.2  9900.1  1659.7    9912  1658.9  9952.9  1659.2  9988.9  1656.4   10000
GR1656.5 10023.8  1660.3 10032.1    1661 10151.4  1660.9 10178.5  1657.8 10187.9
GR1657.7 10204.3  1661.5 10221.8    1659 10242.5  1658.9 10267.3  1656.4 10281.7
GR1661.5 10296.8  1660.3 10348.3  1658.9 10399.4  1661.2 10407.9  1664.2 10513.8
GR1666.3 10530.4
HD25.326    10.0

X125.388      38  9467.9  9644.5     350     370     360
GR1678.8  9115.7  1668.5  9235.4    1666  9296.8  1665.6  9300.1  1666.4    9409
GR1665.9  9467.9  1661.5    9527  1656.6  9546.6  1660.5  9606.3  1663.8  9625.3
GR  1666  9644.5  1664.6    9663  1665.2    9704  1666.5  9725.8  1666.8    9766
GR1665.9  9777.3  1664.7    9782  1665.4  9857.4  1666.5  9872.6  1666.1  9918.6
GR  1665   10000  1666.3 10037.1  1666.1 10100.7  1664.3 10236.5  1665.2 10260.5
GR1664.2 10295.4  1662.9 10306.6  1664.8 10361.6  1665.9 10366.9  1666.4 10490.2
GR1662.5   10516  1662.2 10564.3  1660.1 10602.9  1660.4 10629.9  1663.8 10644.1
GR1665.5 10675.8  1672.2 10759.6  1674.1 10876.7
HD25.388    10.0

X125.458      27  9916.8 10067.1     390     380     360
X3    10
GR1677.1  9528.9  1672.1  9600.5    1668  9605.5  1667.8  9749.5  1668.1  9780.5
GR1669.2  9825.6  1667.7  9883.2  1668.1  9916.8  1666.8  9934.3  1665.7  9952.8
GR1665.5   10000  1667.2   10018  1669.1 10067.1  1664.9 10140.9    1668   10190
GR1668.1 10558.9  1667.8 10573.8  1665.9 10601.9  1669.5 10794.7  1664.6 10819.1
GR1664.3   10867  1667.1   10899  1667.1 10913.4  1664.1 10937.8  1660.5 10966.1
GR1673.9 10989.1  1677.6   11145
HD25.458    10.0

X125.519      24    9946   10101     450     290     310
X3    10
GR  1678  9567.7    1672    9570  1669.9  9663.3  1670.4  9770.3  1671.4  9836.4
GR1672.1  9915.1  1672.4    9946    1670    9970  1668.3   10000  1670.1 10058.9
GR1672.2   10101  1671.6 10154.1  1671.5 10186.1  1670.6 10394.1  1670.5 10492.4
GR1670.7 10616.3  1671.1 10795.5    1664 10831.1  1669.6 10872.3  1667.9   10940
GR1661.6 10957.3  1661.6 10970.3  1675.6 10993.4  1679.2 11086.4
HD25.519    10.0

X1 25.58      25  9974.4 10121.5     320     290     300
X3    10
GR  1678  9635.1    1677  9637.3  1671.6  9704.7  1671.8  9855.4  1674.1  9974.4
GR1668.9   10000  1670.8   10089  1673.7 10121.5  1673.7 10276.2  1674.3 10346.8
GR1673.5 10453.1  1672.9 10517.8  1672.2   10547  1672.9 10606.7  1673.9 10625.8
GR1675.8 10732.4  1674.2 10818.6  1670.4 10867.2  1669.9 10895.8  1667.3 10935.7
GR1665.9 10962.4  1666.8 10972.5    1670 10985.9  1675.5 11000.5  1680.6 11066.1
HD 25.58    10.0

X125.644      25  9908.8 10061.5     360     280     320
X3    10
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GR  1680  9535.3  1677.2  9767.4  1675.7  9804.1  1676.6  9908.8  1669.8  9926.6
GR1670.1    10000  1670.1 10013.5  1675.2 10030.5  1677.3 10061.5  1676.6 10119.8
GR1678.8 10141.2  1678.6 10246.3  1677.6 10388.7  1677.1 10485.4  1676.7 10586.1
GR1677.8    10633  1676.6 10683.4  1677.8 10719.7  1674.2 10774.8    1672   10825
GR1669.3 10861.2  1676.8 10895.7  1676.5 10968.6  1675.5 11020.2  1682.8 11094.3
HD25.644    10.0

X125.699       22  9886.9   10033     290     290     290
GR1683.7  9578.3  1678.6  9798.1  1677.9  9886.9  1671.6  9909.8    1670  9979.8
GR1669.4    10000  1672.4 10005.6  1673.1 10026.9  1678.4   10033  1681.5 10222.9
GR1681.3 10350.6  1680.2   10532  1679.8   10714  1678.2 10743.5  1672.4 10763.6
GR1671.9 10787.2  1672.1 10826.9  1675.7 10839.4  1678.6 10880.3  1679.2 10970.2
GR1680.4 11082.9  1685.1 11129.5
HD25.699    10.0

X1 25.75       40  9925.3 10085.9     270     280     280
GR1686.2  9574.2  1684.2  9577.4  1677.3  9588.3  1677.2  9602.8  1678.2  9608.9
GR1678.4  9649.3  1680.3    9706  1680.1  9746.5  1679.6  9804.2  1680.3  9864.7
GR  1682  9925.3  1675.5  9973.2  1671.6  9977.4  1672.1   10000    1673   10041
GR1681.9 10061.9  1682.4 10085.9  1680.2   10144  1677.4   10156  1674.9 10176.5
GR1674.5 10219.7  1678.7 10233.2  1680.6 10250.1  1681.5 10292.9  1684.2 10435.2
GR1684.7 10518.7  1682.8 10668.2  1679.8 10824.7  1675.2 10841.6  1675.3 10869.3
GR1678.7 10881.2  1679.6 10923.8  1680.5   10960  1679.4 11003.7    1678 11058.5
GR1681.2 11069.3  1682.8 11178.7  1686.9 11266.2  1687.5 11357.1  1688.7   11434
HD 25.75    10.0

X125.843       56  9891.5 10077.6     540     210     370
GR1698.3  9623.8  1684.2  9666.2  1682.9  9716.1  1685.7  9774.4  1685.9    9842
GR1686.1  9882.4  1685.8  9891.5  1682.4  9923.5  1679.7  9979.1  1676.2  9989.1
GR1673.9    10000  1673.5 10028.2  1674.4 10041.9  1685.5 10077.6  1684.1 10141.7
GR1685.2    10187  1684.6 10219.1  1682.3 10237.3  1678.2   10245  1678.1 10248.3
GR1679.5    10274  1680.1   10301  1676.7 10338.8  1682.8   10356  1684.8 10367.7
GR1684.8 10374.5  1683.7 10398.1  1682.5 10493.1  1679.7 10519.8  1679.8 10522.9
GR1681.2 10526.1  1684.2 10546.5  1685.2   10583  1685.1 10591.3  1683.1 10612.5
GR  1683 10626.2  1684.3 10653.9  1685.9 10669.7  1686.2 10698.5  1683.4 10909.7
GR1684.3 10924.9    1685 10965.7  1681.9 10979.2  1675.8 10989.6  1676.2 11011.8
GR1682.7 11026.3  1683.4 11033.3  1684.2 11109.4  1683.2 11157.4  1682.7 11199.4
GR1678.9 11211.5  1679.2 11219.1  1682.2 11227.6  1683.8 11233.3  1684.9 11290.6
GR1690.6   11365
HD25.843    10.0

X125.919       53  9857.9 10046.9     450     310     400
GR1694.2  9686.7  1690.3  9857.9  1690.2  9864.9  1686.4  9902.3  1684.4  9921.8
GR1680.8  9956.5  1678.9  9980.4  1678.5  9987.9  1678.4   10000  1678.4 10007.5
GR1678.8 10014.7  1679.3 10019.3    1681 10022.9  1687.1   10034  1689.1 10046.9
GR1688.2 10072.2  1688.2 10120.8  1685.3 10136.7  1685.4 10143.4  1686.6 10152.9
GR1687.7 10159.2  1687.3 10226.7  1681.8 10246.9  1680.5 10289.3  1680.4 10293.4
GR1682.5 10298.9  1685.8 10305.9  1686.8 10345.6  1687.7 10366.4  1687.1   10561
GR1685.6   10617  1685.5 10625.2  1683.6 10639.5  1683.3 10644.4  1683.3 10647.4
GR1685.7 10656.5  1686.2 10705.2  1687.4 10756.9  1688.1 10767.4  1688.7 10776.6
GR1689.9 10930.2  1689.9 10953.9  1687.2 11087.9  1687.9 11105.1  1688.5 11142.7
GR1687.9 11175.7    1686 11194.1  1685.3 11221.4  1684.5 11238.4  1683.3 11289.2
GR  1683   11299  1689.7 11338.8    1692   11561
HD25.919    10.0

X126.044       39    9926 10076.8     750     400     650
GR1702.9    9926    1685  9944.8  1684.3   10000  1691.1 10017.5  1691.8 10045.7
GR1694.1 10058.4  1694.2 10076.8  1694.2 10134.3  1693.8   10240  1690.9 10270.3
GR  1686   10332  1689.4 10342.7  1691.3 10378.5  1692.5 10407.2  1692.8 10465.5
GR1692.2 10541.6  1689.6 10574.8  1689.7 10591.8  1691.6 10609.2  1691.8 10748.9
GR1687.8 10824.9  1689.9 10849.3  1693.9 10865.8  1693.1   10957  1693.6 11034.8
GR1691.3 11097.4  1689.8 11180.3    1691 11196.2  1690.3 11249.8  1691.7 11302.9
GR  1691 11374.7  1686.1 11451.8  1687.1 11486.8  1686.7 11555.5  1689.2 11562.9
GR1692.6 11592.4  1693.7   11660    1696   12000    1698   12220
HD26.044    10.0

X126.137       47    9975 10296.6     500     475     495
GR1712.9    9975  1685.7   10000  1686.6 10024.6    1691 10054.7  1695.9 10106.9
GR1697.5 10139.1  1690.1   10162  1686.4 10231.1  1700.2 10296.6  1698.9 10317.4
GR1696.6 10379.3  1695.4 10460.7  1694.2 10518.2  1695.5 10560.3  1695.3 10586.9
GR1692.3 10631.9  1691.9 10643.6  1694.6 10660.5  1696.7 10744.8  1694.7 10795.2
GR1694.3 10833.6  1696.8   10841  1697.5   10938  1695.3 10998.8    1696 11030.5
GR1697.9 11148.8  1694.6 11214.6  1696.9 11262.3  1695.8 11297.9  1694.4 11316.3
GR1694.3 11363.6  1694.4 11379.7  1691.9 11399.4  1691.9 11418.1  1690.6 11474.1
GR1690.6 11490.6  1693.8 11497.1  1696.4   11536  1696.2 11621.4  1694.2 11662.1
GR1693.6 11733.6  1694.9 11770.6  1697.5 11787.8  1698.4 11923.7  1700.1 11940.2
GR1699.7 12055.1    1702   12465
HD26.137    10.0

X126.239       47    9925 10279.3     570     340     420
GR1707.8    9925  1692.8  9936.8  1692.8   10000  1697.2 10010.6    1700 10026.3
GR1700.8 10111.9  1695.5 10121.4  1693.3 10144.7  1693.1 10181.6  1699.5   10202
GR1701.3 10279.3    1702 10346.3  1699.1 10433.6  1698.2 10516.4  1699.5 10562.5
GR  1700 10627.5  1700.4 10668.5  1699.7 10720.3  1695.6 10737.6  1696.1   10755
GR1698.4 10763.3    1700 10838.9  1698.1 10861.7  1698.1 10872.1  1696.1 10895.3
GR  1695 10906.7  1700.5 10935.5  1700.7 11008.5  1699.2   11038  1698.6   11090
GR1699.5 11112.3  1699.1 11155.2  1697.7 11208.1  1693.3 11221.8  1693.6 11232.9
GR1696.2 11238.1  1697.2 11271.8  1697.8 11314.1    1699   11334    1700   11449
GR1699.8 11535.4    1699 11560.8  1696.2 11615.5  1695.6 11751.2  1698.9 11769.2
GR1702.2 11836.2  1704.3 11961.1
HD26.239    10.0

X126.335       39    9635 10333.4     495     520     500
GR1710.7    9635    1700  9645.81699.991    9646  1697.4  9701.2  1696.7  9715.3
GR1696.7  9771.9  1698.6  9794.1  1698.8  9886.3  1696.6  9953.9  1695.6   10000
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GR1698.8 10024.1  1699.7 10103.3  1698.6 10141.9  1698.9 10190.7  1696.9 10245.8
GR1704.2 10271.6  1705.6 10333.4  1705.8 10438.8  1702.6 10464.6  1702.8 10574.7
GR1701.1 10627.4  1704.5 10710.5  1703.5 10816.3  1702.4 10852.4  1700.5 10868.2
GR1699.9 10906.9  1699.2 10938.8    1699 10949.1    1704 10961.4  1705.3 11033.5
GR  1706   11149  1705.5 11213.4  1704.2 11298.3  1702.6 11389.1  1699.2   11435
GR1700.2 11451.6  1705.5 11466.4  1707.8 11486.3  1709.4 11519.8
HD26.335    10.0

X1 26.43      33    9770 10353.7     490     520     495
GR1711.8    9770    1700  9794.4  1700.9  9837.5  1699.8    9885    1700   10000
GR  1701   10044  1702.3   10080  1701.8 10154.1  1700.1   10207  1697.7 10219.1
GR1697.5 10240.1  1706.6 10258.3  1710.5 10297.2  1711.7 10353.7  1710.5   10461
GR1707.7 10590.9  1708.7 10644.9  1706.2 10710.7  1706.6 10734.7    1708 10748.8
GR1709.2 10805.8  1707.7 10914.2  1709.3 10982.6    1706 11021.1  1702.2 11039.4
GR1700.6   11097  1702.7 11102.7  1704.4 11124.2  1704.3 11138.7  1708.1 11249.2
GR1710.9   11352  1712.5 11426.3  1713.3 11525.2
HD 26.43    10.0

X126.529      38  9764.3 10177.6     530     520     520
GR  1720  9731.2  1719.8  9764.3  1709.3    9799  1708.5  9827.8  1708.1  9878.2
GR1704.8  9891.7  1702.9  9916.7  1702.6   10000  1703.6   10004  1703.8 10054.1
GR1705.3 10089.2  1705.2 10126.1  1703.3 10149.1    1714 10177.6  1713.4   10237
GR1712.2 10373.5  1711.5 10397.1  1713.8 10453.4  1713.5 10511.4  1714.4   10550
GR1713.3 10598.1  1712.7 10665.4  1708.3 10683.3  1709.1 10713.3  1710.3 10718.4
GR1710.4 10750.8  1712.3 10766.7  1712.2 10824.3  1712.7   10897  1712.7   10966
GR1710.3 11000.4  1706.5 11013.6    1706 11047.9  1704.8 11071.9  1711.3 11102.6
GR1711.9 11143.7  1713.1 11201.5  1714.4 11315.3
HD26.529    10.0

X126.623      38  9626.5 10128.4     500     530     500
GR1721.7  9626.5  1708.4  9663.1  1703.9  9698.7  1704.6  9722.9  1704.3    9776
GR1707.3  9810.3  1708.9  9851.6  1707.8  9912.1  1705.2  9958.1  1705.1   10000
GR1709.5 10015.2  1709.9 10044.4    1712   10071  1714.1 10078.2  1720.1 10128.4
GR1719.4 10159.4  1720.4 10281.2  1718.6 10327.7  1718.9 10358.4  1720.9   10384
GR1721.8 10424.9  1721.3 10463.5  1718.5 10548.7  1716.8 10606.9  1713.9 10625.6
GR1717.2 10657.9  1718.2 10687.4  1718.1 10785.1    1715 10842.2  1713.5 10865.9
GR1714.1 10902.1  1717.7 10924.6  1714.2 10974.2  1707.5 11001.4  1712.7 11033.6
GR1714.2   11113  1715.9 11183.7  1720.1 11271.7
HD26.623    10.0

X126.695      41  9772.8 10055.4     370     430     380
GR1724.9  9733.8  1723.1  9772.8  1718.4  9783.7  1714.6  9822.6  1714.3  9866.1
GR1721.4  9881.3  1719.6  9912.9  1710.6  9931.4  1709.5  9982.8  1709.5  9991.4
GR1709.9 10033.2    1710 10046.3  1724.6 10055.4  1723.8 10116.6  1721.7 10149.3
GR1723.3 10223.1  1727.2 10280.1  1725.9 10341.2  1713.2 10352.8  1713.1 10406.1
GR1716.9 10441.8  1718.6 10484.8  1720.9   10506  1719.7 10545.1    1715   10566
GR1719.2 10603.7  1724.2 10615.9  1722.9 10732.5  1723.6 10813.3  1722.9 10860.6
GR1721.2 10877.5    1722 10908.7  1722.4 11033.4  1721.5 11077.9  1722.9 11170.1
GR1722.6 11247.1  1721.6 11358.9  1714.6 11436.8  1714.9 11489.8  1725.3 11511.4
GR1727.2 11534.6
HD26.695    10.0

X126.775      39    9914   10229     390     470     420
GR1732.6  9691.5  1727.3  9766.7  1726.6    9914    1717    9920  1716.8    9967
GR1713.4  9980.1  1712.7   10000  1712.9 10018.8  1716.1   10027  1717.7 10072.7
GR1717.2 10107.9  1714.6 10187.6  1725.4 10207.6  1730.6   10229  1731.4 10296.7
GR1729.1 10391.5  1727.5 10446.8  1717.5 10465.7  1717.5 10489.7  1722.6   10502
GR1723.7 10561.3  1724.6 10596.4  1724.8   10685    1724 10729.9  1726.3 10770.1
GR1728.2 10806.5  1726.1 10931.3  1725.8 11003.7  1727.4 11039.1    1727 11121.5
GR1726.9   11192  1727.1 11304.1  1725.7 11425.9  1720.8 11447.1    1720 11492.7
GR1719.4 11554.6  1718.4 11578.7  1730.8 11599.8  1732.2   11618
HD26.775    10.0

X126.845      45  9657.8 10020.1     350     400     370
GR1733.1  9611.4  1731.1  9657.8  1721.2  9688.6  1721.3  9793.2  1718.9  9834.9
GR1718.8    9871    1717  9877.3    1718  9905.1  1717.4   10000    1728 10020.1
GR1727.3 10087.9  1729.9   10102  1729.5 10120.9  1719.2 10143.7  1719.6 10152.7
GR1722.4 10191.5  1730.2 10209.4  1730.2 10236.4  1724.1 10253.5  1725.3 10271.5
GR  1727 10290.8  1728.1 10349.1  1729.1 10437.8  1729.4 10474.8    1728 10537.7
GR1725.9 10556.6  1729.4 10581.4  1729.9 10622.5  1728.9 10684.7  1728.5   10712
GR1731.6 10721.6  1731.1 10793.1  1731.3 10864.9  1729.9 10914.9  1729.9 10946.4
GR1728.4 10982.9  1726.7 11003.8  1726.3 11030.4  1727.3 11042.7  1729.3 11090.1
GR1728.9 11124.8  1726.3 11229.8  1721.4 11246.7    1733 11279.8  1734.5 11346.5
HD26.845    10.0

X126.921      57  9712.1   10149     450     400     430
GR1739.4  9712.1    1725  9736.8  1723.7  9744.2  1723.1  9756.8  1722.1  9796.4
GR1722.1  9799.8  1723.2  9810.1    1722  9832.8  1723.2  9872.7  1723.9    9882
GR  1724    9891  1723.1    9908  1723.2  9939.1  1722.6  9946.3  1720.7  9952.7
GR1721.1  9972.1  1720.2   10000  1720.3 10017.5  1723.1 10027.8  1724.6 10048.1
GR  1725 10059.7  1725.1 10075.5  1724.1 10107.4  1722.7 10132.6  1731.9   10149
GR  1732 10156.7  1732.1 10165.7  1733.5 10186.9  1732.2 10193.6    1732 10237.1
GR1734.4 10263.2  1734.3 10321.7  1735.1 10345.3  1734.7 10409.7  1735.5   10443
GR1734.5 10480.4  1728.1 10545.4  1728.5 10554.4    1732 10577.8  1732.5 10599.1
GR1733.4 10618.4  1734.3 10657.4  1733.4 10682.2  1733.5 10717.8  1733.3 10729.5
GR1728.8 10764.1  1730.5 10771.1  1731.2 10781.6  1731.3 10797.6  1729.2 10812.9
GR1731.1 10828.1  1731.1 10839.5  1729.1   10863  1727.4 10868.7  1728.3 10888.3
GR1732.9 10899.2  1735.9 10906.9
HD26.921    10.0

X127.008      40  9677.5   10164     400     400     400
GR1746.2  9657.3  1745.5  9677.5  1731.7  9702.2  1724.6  9760.8    1724  9803.4
GR1725.9    9811  1725.7  9819.2  1725.2    9836  1727.3  9853.3  1725.7  9898.1
GR1726.6  9902.7  1727.3  9935.3  1726.4  9947.4    1723  9981.1  1723.9   10000
GR  1726 10013.3  1726.6 10033.6  1726.5 10072.1  1725.6 10089.8    1726 10119.1
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GR1724.9 10144.7  1724.9 10154.3  1736.3   10164  1735.8 10243.9  1734.5 10272.1
GR  1734 10293.2  1732.5 10322.9  1737.2 10346.2   1737 10441.5  1734.8 10548.5
GR1733.9 10662.5  1729.8 10671.2  1730.3 10675.8  1733.9 10683.5  1733.5   10724
GR1734.2 10735.7  1733.6 10771.9  1731.6   10788  1739.6 10811.4  1739.9 10846.8
HD27.008    10.0

X127.106      38  9730.7 10275.3     540     500     520
GR1755.7  9730.7  1755.7  9730.8  1731.8    9788  1731.6  9802.8  1733.6  9808.5
GR1734.8  9830.2  1734.7  9869.5  1733.3  9905.8  1734.4  9916.8  1732.4  9979.5
GR1729.1   10000  1728.6 10019.5    1731 10026.5  1731.4 10051.7  1732.4 10066.4
GR1730.6 10109.9  1732.1   10125  1728.9 10150.1  1727.7   10179  1725.7 10190.7
GR1727.8 10205.6  1736.1   10215  1736.8 10259.5  1742.7 10275.3    1742 10408.1
GR1738.5 10443.8    1739 10468.6  1738.6 10494.5  1741.2 10550.7  1737.2 10653.9
GR1739.5 10686.8  1738.8 10728.3  1736.2 10755.3  1736.9 10761.5  1737.4 10798.5
GR  1733 10818.3  1743.8   10877  1745.6 10979.2
HD27.106    10.0

X127.169      28  9850.9   10395     400     310     330
GR1753.5  9850.9  1734.4  9881.6    1736  9933.2  1735.9   10000  1732.1 10145.7
GR1733.2 10155.1  1732.9 10194.3  1738.9   10218  1732.7 10265.5  1733.2 10315.5
GR1733.9 10339.7  1743.4 10379.9  1745.5   10395  1741.7 10481.8  1741.6 10526.6
GR1743.1 10538.6  1744.8 10564.2  1744.7 10687.1  1741.1 10812.4  1739.1 10854.3
GR1740.2 10885.4  1734.5 10910.1  1734.7 10918.1  1738.5 10928.8  1736.7 10948.6
GR1737.7 10976.7  1746.9 11000.2  1747.6 11111.9
HD27.169    10.0

X127.226      35  9928.4   10380     310     300     300
GR  1765  9788.6    1765  9788.7  1744.5  9877.9  1743.7  9928.4  1735.6  9943.3
GR1735.3  9989.5  1737.7   10000    1739   10065  1739.8 10106.8  1737.7 10145.4
GR1736.4 10162.8  1737.7 10188.7  1736.6 10259.4    1735 10269.7  1735.6 10283.3
GR1735.6 10320.4  1734.8 10332.8    1749   10380  1748.3 10432.1  1746.1 10448.1
GR1744.5 10526.8    1745 10562.1  1747.2 10583.3  1745.3 10798.5  1739.5 10855.8
GR1742.4 10881.8  1744.1 10936.1  1741.8 10999.9  1741.2 11013.1  1736.7 11029.8
GR1737.8 11054.5  1739.5 11059.9  1750.7 11099.3  1750.6 11246.8  1753.4 11400.2
HD27.226    10.0

X127.265      46    9900 10164.2     210     220     210
GR1759.4  9689.5  1759.4  9689.6  1759.4  9689.7  1759.3  9703.1  1749.5  9739.2
GR  1751  9795.3  1750.2    9900    1747  9968.4  1735.7  9973.2  1736.3   10000
GR1740.8   10044  1741.2 10063.1  1741.4 10128.7    1749 10164.2  1749.5 10201.7
GR  1750 10298.4  1750.7   10337  1750.2 10382.1  1747.8   10397  1746.6 10460.8
GR1746.6 10469.8  1747.5 10509.2  1748.9 10531.9  1749.3 10575.2  1747.7 10618.4
GR1746.4 10635.3  1746.2 10687.3  1747.1 10707.3  1746.8 10752.2  1743.1 10780.1
GR1743.7 10795.7  1746.2 10810.8  1746.6 10849.5  1747.9 10861.6  1747.8 10861.7
GR  1748 10890.4  1744.6 10939.7  1745.4 10986.2  1746.1 11055.7  1739.9 11101.8
GR1739.5   11124  1738.8 11134.3  1739.7 11149.2  1751.6 11174.7  1753.3 11300.7
GR1755.4 11373.2
HD27.265    10.0

X1 27.32      30  9907.5 10072.3     260     300     275
X3    10
GR1760.8  9673.4  1752.3  9694.4  1752.8  9759.1  1749.8  9907.5    1743  9932.7
GR1742.9  9962.1  1740.3   10000  1740.9   10054  1754.9 10072.3  1751.7 10176.6
GR1750.2 10227.7  1750.3 10307.3  1751.9   10323  1752.2 10364.6  1750.2 10475.2
GR1751.7 10498.6  1752.1   10570  1749.6 10644.3  1751.5   10676  1750.8   10734
GR1751.3 10765.5  1749.9 10844.8  1746.3 10900.2  1746.8 10926.1  1749.3 11000.3
GR1744.4 11051.9  1742.8 11077.2  1743.9 11116.7  1755.9 11147.9  1758.2 11273.1
HD 27.32    10.0

X127.366      39  9737.6 10110.1     230     240     240
GR1769.8  9702.7  1755.9  9737.6  1745.3    9748  1746.2  9771.9  1746.7  9859.2
GR1748.4  9920.5  1745.5  9933.9  1746.9  9976.9  1742.6   10000  1742.3 10086.6
GR1743.4 10102.2  1755.1 10110.1  1755.6 10177.6  1755.3 10242.7  1755.9 10286.6
GR1754.6 10345.9  1754.7 10457.4  1750.9 10521.7  1751.5   10555  1753.4 10569.5
GR1753.3 10608.2  1750.7 10654.5  1753.3 10780.6  1751.3 10821.9  1752.1 10925.4
GR1751.4   10952  1747.6 11021.9    1746 11027.9  1746.4 11040.4  1749.8 11076.4
GR1745.8 11112.3  1756.7 11140.4  1758.8 11165.3  1759.3 11295.8  1757.2 11409.8
GR1757.7 11478.6  1756.1 11533.4    1758   11558  1760.2 11593.2
HD27.366    10.0

X127.417      26  9942.8 10200.8     250     290     270
X3    10
GR1765.1  9848.4  1755.1    9889  1756.8  9942.8  1753.6  9989.2  1746.8   10000
GR1750.1 10057.8  1748.6 10121.9  1745.1 10141.8  1744.8 10177.2  1759.4 10200.8
GR1759.2 10367.6  1758.1 10536.5  1757.1 10689.7  1755.3 10725.2  1754.4 10783.7
GR  1754   10842  1750.8 10860.1  1752.5 10893.3  1755.1 10912.4  1755.1 10941.7
GR1753.4 10962.6  1751.9 11035.1  1748.5   11041  1748.6 11049.8    1762 11095.5
GR1762.9   11211
HD27.417    10.0

NC  0.07    0.07   0.036     0.1     0.3
X127.502      37  9947.5 10150.4     430     510     450
GR1783.8  9853.5  1773.7  9947.5  1748.8  9983.2  1750.6   10000  1750.2 10025.5
GR1752.1 10058.7  1754.1 10086.3  1760.3 10126.6  1762.5 10150.4    1763   10240
GR1759.5 10265.8  1759.9 10275.2    1762 10280.7    1762   10302  1758.3 10312.7
GR1761.1   10330  1762.8 10350.4    1762 10409.1    1763 10489.2  1762.3 10589.5
GR1761.7   10675    1763 10723.2  1763.7 10740.2  1762.6 10779.4  1758.4 10837.3
GR1760.6 10852.6    1761 10887.2  1759.1 10918.1  1762.5 10935.3  1761.8   10969
GR1759.1 10979.4  1764.1   11005  1767.7 11054.2  1769.6 11108.1  1770.5 11175.4
GR1771.3 11287.4    1772   11384
HD27.502    10.0

X127.604      27  9740.2 10014.4     510     700     550
GR1786.6  9740.2  1757.7  9792.1  1757.8  9813.5  1759.2  9823.8  1759.9  9851.8
GR1757.7  9893.9  1754.3  9964.9  1754.2   10000  1765.2 10014.4  1764.4 10038.5
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GR1765.9 10081.8  1766.4 10113.1  1762.9 10150.4  1767.6   10183  1769.9 10240.7
GR1768.9 10369.3  1769.6 10444.5    1769 10528.9  1769.2 10644.4  1767.4 10727.3
GR1767.5   10765  1763.8 10793.9  1764.7 10830.3  1766.9 10867.7  1770.7 10888.5
GR1771.5 11019.7  1774.5 11105.7
HD27.604    10.0

X127.693      29  9961.1 10195.8     490     460     470
GR1791.7  9961.1  1756.3   10000  1757.7 10016.1  1760.3 10060.1  1762.8 10074.5
GR1762.8 10088.7  1770.2 10105.9  1771.7 10195.8    1771 10231.3  1770.9 10351.8
GR1772.3 10459.2  1774.7 10596.6  1775.1 10635.8  1773.7 10744.8  1769.7 10897.1
GR1770.5   10935  1767.3 10957.3  1769.3 10990.2  1773.7 11023.8  1775.9 11078.2
GR  1776   11145  1772.4 11215.7    1773 11230.9  1776.9 11311.4  1778.9 11389.9
GR1779.8 11565.4  1780.3   11724  1781.6 11801.6  1782.9 11816.4
HD27.693    10.0

X127.797      32    9969 10158.3     560     550     550
GR1785.6    9969  1760.6   10000  1761.3 10008.1  1761.4   10040  1765.8 10049.5
GR  1771 10077.1  1771.9 10089.7  1772.3   10120  1771.6 10150.2  1776.1 10158.3
GR1776.8 10265.3  1776.3 10353.5  1774.5 10418.5  1775.7 10519.8  1776.6 10634.1
GR1777.1 10778.4  1777.6   10916  1772.3   10988  1772.4 10992.9  1773.4 11016.9
GR1776.1   11050  1774.9 11106.7    1778 11127.1  1779.4 11190.5  1777.9 11313.3
GR1778.6 11394.9  1780.5   11441  1782.1 11568.4  1782.7 11689.7    1782 11743.2
GR1782.5 11912.3  1785.1 11962.9
HD27.797    10.0

X127.913      25  9944.2 10240.4     620     600     610
GR1800.8  9944.2  1763.1   10000  1767.4 10037.3    1772 10080.7    1776 10111.6
GR1776.8 10166.4  1776.7   10200  1777.9 10215.4  1781.2 10219.9  1782.1 10240.4
GR1781.9 10276.9    1781 10431.4  1780.9 10609.3  1781.9 10668.7  1781.9 10784.1
GR1778.4 10826.3  1777.5 10876.2  1780.8 10916.2  1781.2 10985.8  1782.2 11061.8
GR1783.3 11083.6  1783.4 11122.1  1780.9 11228.2  1782.2 11365.8  1785.1 11411.6
HD27.913    10.0

NC  0.07    0.07   0.044     0.1     0.3
X128.023      47    9770 10077.1     600     580     580
GR1792.6    9770  1775.2  9777.6    1775  9806.4  1774.3    9813  1775.2  9821.4
GR1776.6  9826.9  1779.2  9837.5  1780.7  9842.9  1781.5  9866.6  1782.4  9880.7
GR1782.9  9892.3  1782.1  9937.4    1781  9958.7  1773.7  9970.3  1773.1  9995.9
GR1772.5   10000  1773.7 10006.6  1775.1 10023.8  1777.1 10039.3    1778   10057
GR1778.8   10067    1784 10073.4  1785.2 10077.1  1785.2 10111.8  1786.6 10157.6
GR1787.2 10200.9  1789.7 10258.3  1789.6 10302.2  1787.7 10378.7  1787.3 10426.3
GR1785.5 10545.4  1784.3 10604.2  1783.1 10662.6  1781.9   10699  1781.8 10706.3
GR1780.7 10709.9  1780.7 10712.2  1783.4 10731.9  1782.8 10757.3  1783.1 10778.7
GR1785.4 10811.5  1786.8 10870.5  1786.6   10952  1787.5 11033.3  1787.8 11082.5
GR1786.5   11153    1789 11217.6
HD28.023    10.0

X128.091      33  9641.3 10160.5     330     400     360
X3                        9641.3  1811.7 10160.5  1792.1
GR1811.7  9641.3  1782.1  9676.9  1781.9  9726.3  1786.5  9742.3  1786.6  9856.7
GR1786.5  9900.2  1785.1  9967.4  1782.5  9978.8  1780.8   10000  1780.9 10010.4
GR1782.1 10050.9  1781.7 10108.3  1789.6 10121.5  1792.1 10160.5  1792.6 10223.1
GR1792.9 10307.6  1791.1 10457.3  1789.3 10591.5  1787.6 10748.9  1786.6 10778.3
GR1782.5 10797.4  1782.9 10809.4  1786.5 10850.7  1789.6 10876.8  1792.7 11005.3
GR1793.1 11117.2  1792.3 11229.1  1792.6 11377.9    1792 11520.3  1792.3 11698.5
GR1795.2 11860.8  1796.4 11901.4  1798.4 12045.9
HD28.091    10.0

X128.157      39  9591.2 10055.2     340     370     350
GR  1807  9591.2    1785  9646.4  1784.5  9667.1  1786.5  9689.6  1788.2  9722.3
GR1788.8  9789.6  1790.5  9804.4    1791  9831.6  1791.1  9866.2  1788.7    9893
GR1788.5    9942  1786.6  9970.6  1782.6   10000  1782.8 10043.2    1792 10055.2
GR1792.3   10073  1790.2 10110.2  1790.9 10121.6  1792.5   10139  1793.7 10222.1
GR1795.6   10322  1796.2 10374.2    1794 10485.5  1792.9 10581.9    1792   10712
GR1791.2 10720.5  1790.2 10824.2  1785.6 10837.6  1785.7 10842.6  1787.4 10865.9
GR1792.5 10897.9  1791.3 10939.7  1794.3 11027.4    1796 11060.5  1796.4 11145.9
GR1796.3 11285.8  1796.8 11405.2  1797.9 11552.6    1800 11574.2
HD28.157    10.0

X128.241      36  9639.9 10050.5     400     490     440
GR1808.3  9639.9  1795.4  9692.2  1795.8  9741.5    1795  9757.5  1794.5  9762.7
GR1793.6  9785.6  1793.6  9819.4  1791.7  9830.9  1789.9    9858  1791.1  9876.8
GR1790.7  9926.9    1790   10000  1795.7   10028  1796.6 10050.5  1795.7 10063.2
GR1797.2   10223  1798.6 10301.6  1797.7 10415.7    1797 10531.3  1797.1   10566
GR1794.2 10615.4  1791.9 10624.7  1794.1   10652  1793.8 10662.7  1792.1 10675.3
GR1795.8 10702.3  1797.3 10754.1  1801.3 10794.7  1802.6 10837.5  1802.5 10880.1
GR1801.9 10980.9  1803.2 11104.8  1803.7 11135.2    1805 11251.1  1804.9 11386.2
GR1806.9 11429.3
HD28.241    10.0

NC  0.07    0.07   0.036     0.1     0.3
X128.326      22  9817.5 10050.1     440     470     450
GR1822.4  9689.6  1809.8  9817.5  1794.9  9861.7  1792.4  9937.3  1791.3   10000
GR1801.8 10050.1  1801.9 10195.5  1801.4 10252.1  1802.1 10306.4  1799.1 10388.6
GR1799.1 10476.5  1800.3   10599  1799.1 10683.7  1800.9 10731.3  1800.8 10770.4
GR1803.6 10806.2  1803.5 10872.4  1805.2 10955.7  1806.2 11057.2  1807.9 11208.6
GR1810.2 11340.5  1812.8 11379.7
HD28.326    10.0

X1 28.39      28  9863.1 10063.6     350     340     340
GR1821.5  9819.6  1815.7  9863.1  1793.2  9907.7  1793.4  9924.1  1793.9  9961.5
GR1792.8   10000  1800.1 10013.4  1802.7 10063.6  1802.5 10104.8    1805 10139.1
GR  1804 10177.8    1803 10316.5  1802.6 10382.7    1803 10449.1  1803.8 10520.6
GR  1804   10603    1802 10705.5  1802.4 10716.7  1802.8 10767.7  1807.3 10800.6
GR1809.4 10917.5  1809.5 11054.7  1809.2 11066.1  1809.6 11175.1  1810.8 11281.1
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GR1811.5 11284.7    1812 11364.3  1816.4   11470
HD 28.39    10.0

X128.462      22  9871.7 10061.2     380     380     380
GR1827.9  9871.7  1794.9  9909.8  1794.8   10000  1803.6 10034.2  1805.6 10061.2
GR1805.3   10078  1806.6 10175.8  1805.7   10284  1807.2 10463.4  1808.6 10524.9
GR1807.4 10599.5  1805.3 10682.2  1805.1 10732.4  1808.1 10776.4    1809 10847.3
GR1812.2   10922  1812.7 11030.5  1812.5 11215.6  1812.6 11317.2  1814.1 11404.3
GR  1815 11476.1  1819.3 11558.8
HD28.462    10.0

X128.555      25  9919.4 10111.4     490     500     490
GR1835.9  9869.9  1833.2  9919.4  1817.6  9940.2  1800.2  9961.8  1800.1  9983.5
GR1799.4   10000  1799.4 10032.9    1801 10059.2  1809.1 10096.4    1810 10111.4
GR1809.1 10139.6  1811.3 10223.1  1811.4   10283  1810.6 10355.8  1810.2 10399.9
GR1811.2 10470.4    1812 10526.5  1813.1 10579.7    1813 10607.8  1813.2 10653.4
GR1812.6 10691.4  1813.9 10780.8  1816.4 10824.9  1817.2   10871  1818.1 11005.7
HD28.555    10.0

X128.657      31  9933.6   10197     550     540     540
GR1841.5  9910.1  1839.5  9933.6  1801.7  9961.9  1800.5  9986.1  1800.6   10000
GR1802.1 10009.7    1805 10034.1  1806.9 10053.9  1808.6 10069.1  1813.2 10089.5
GR1812.3   10113  1810.2 10124.3  1809.6   10130  1809.6 10142.8  1812.9   10162
GR1814.9   10179  1816.7   10197  1816.8 10224.3  1815.5 10327.9    1814 10385.1
GR1814.4 10514.2  1814.6 10614.1  1816.7 10650.2    1820 10678.3  1822.3 10877.4
GR1821.4 11067.7  1821.7 11188.8  1823.3   11264  1821.4 11476.7  1822.5 11657.4
GR1826.4   11753
HD28.657    10.0

X1 28.75      33  9866.8   10129     500     470     490
GR1844.3  9866.8  1812.6  9915.2  1812.5  9936.1  1809.4    9952  1808.3  9972.2
GR1808.5   10000  1808.9 10033.3  1809.5 10041.9  1811.1 10053.6  1811.1 10066.5
GR  1814 10101.5    1816 10113.1  1819.7   10129  1821.3 10171.9  1820.2 10292.1
GR1820.4 10343.7  1818.3 10481.8  1817.7 10539.4    1818 10623.4  1817.4 10650.9
GR  1818 10735.6  1818.7 10749.8  1825.1 10820.5    1824 10892.7  1824.3 10991.1
GR1823.6 11079.1  1824.2 11186.1  1825.2 11305.7  1823.8 11432.7  1824.2   11468
GR1825.2 11672.9  1825.5 11735.5  1830.5 11821.7
HD 28.75    10.0

X128.847      37  9881.1 10076.9     520     500     510
GR1848.5  9867.2    1847  9881.1  1814.5  9927.3  1813.5  9952.1  1811.9  9978.2
GR  1812   10000  1812.5 10041.6  1821.4 10076.9  1821.2 10110.6  1820.5 10147.8
GR1818.4 10162.1  1820.8 10179.8  1824.9 10200.5  1825.3 10242.3    1825 10284.1
GR1824.4 10343.6  1824.5 10403.2  1823.5 10447.7  1822.7 10492.8  1821.8 10553.5
GR1821.8 10574.2  1822.3 10617.2  1822.8 10650.1  1822.5 10692.5    1820 10726.3
GR1821.3 10757.2  1821.3 10780.5  1822.3   10814  1826.7 10837.2  1828.2 10862.2
GR1827.1 10897.8  1826.9 10969.2    1827   11071  1827.8 11206.2  1826.8 11575.5
GR1827.3 11637.6  1828.8 11709.7
HD28.847    10.0

X128.934      37  9824.7 10054.9     410     470     460
GR  1853  9795.5  1851.1  9824.7  1824.7  9864.6  1823.9  9894.9  1820.4  9914.2
GR1819.2  9923.4  1819.1  9934.8  1816.6  9940.2  1815.9  9967.7  1815.5   10000
GR1817.3 10007.5  1817.6 10022.2  1819.8 10035.2  1826.8 10054.9    1828 10096.7
GR  1827 10161.6  1825.9 10183.8  1826.4 10214.6  1825.4 10239.3  1824.2 10268.1
GR1823.9 10298.7  1824.1 10324.5  1827.5   10353  1828.5 10391.2  1829.3 10425.6
GR  1829 10455.1  1827.8 10502.7  1827.4 10545.1  1827.6 10578.5  1826.1   10687
GR1827.3 10744.9  1828.1 10818.8    1827 10868.7  1826.9   10873  1829.8 10900.6
GR1831.1 11009.4  1831.8 11166.8
HD28.934    10.0

X129.012      26  9922.8 10091.3     400     420     410
GR1853.7  9889.9    1850  9922.8    1819  9955.5  1818.9  9982.8  1818.7   10000
GR1820.6 10031.4  1822.8 10041.2  1822.6 10066.9  1827.5 10091.3  1828.5 10113.2
GR1828.1 10186.8  1828.8 10220.1  1828.6 10250.7  1827.9 10267.4  1828.5 10303.6
GR1829.6   10341  1830.3 10376.4  1830.2 10413.9    1831   10452  1832.7 10517.5
GR1832.8 10558.9  1831.5 10660.3  1831.6 10714.5  1830.7 10788.3  1831.7   10835
GR1836.8 10861.6
HD29.012    10.00

X1 29.13      31  9960.7 10106.7     590     600     595
GR  1855  9960.7  1824.5  9979.7    1821  9987.1  1821.6   10000  1822.1 10015.3
GR1824.1 10027.6  1826.2 10046.3  1827.7 10055.7  1827.9 10091.4  1829.1 10098.6
GR1831.5 10106.7  1834.5 10331.6  1834.2 10356.3  1834.1   10392    1834 10428.2
GR1833.4 10440.7  1835.9 10483.6  1835.1 10502.3  1834.8 10508.1  1836.2 10530.9
GR1838.1 10559.2  1838.9 10574.2  1839.3 10612.5  1838.3 10733.7  1836.4 10808.3
GR1836.4 10832.6  1837.2 10902.5  1836.9 10928.5  1837.6 10946.7  1839.3 10954.1
GR1842.7 10971.2
HD 29.13    10.0

NC  0.07    0.07   0.044     0.1     0.3
X129.258      23  9781.3 10051.4     710     710     705
GR1852.7  9781.3  1834.5  9805.1  1831.9  9824.7  1828.7  9842.8  1831.8  9857.3
GR1832.7  9870.6  1834.1  9915.5  1833.1  9954.2  1831.2   10000  1832.3 10016.4
GR1832.7 10026.1  1844.5 10051.4  1844.3 10107.4  1844.4 10169.9  1844.3 10230.7
GR1843.9 10274.3  1844.5 10318.2  1843.7 10378.2  1843.3 10417.3  1842.7 10451.7
GR1842.2 10494.3    1843 10508.4  1851.4 10543.7
HD29.258    10.0

NC  0.07    0.07    0.05     0.1     0.3
X129.351      39  9684.3 10296.9     500     490     490
GR  1864  9651.1  1858.9  9668.9  1849.7  9684.3  1836.7  9698.1  1839.1  9722.5
GR1838.9  9741.4  1836.7  9747.3  1836.8  9758.1  1838.3  9768.8  1841.6  9795.9
GR1839.9  9818.1  1839.5    9839  1842.7  9861.3  1845.3  9879.5    1839    9898
GR  1841  9912.1  1841.4  9924.3  1842.3  9957.8  1838.9  9979.9  1835.9   10000
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GR1836.7 10027.2    1838   10064  1841.9 10092.9    1842 10150.2  1840.3 10186.7
GR1842.3   10213  1840.9 10230.5  1841.3   10250  1845.9 10277.5  1847.8 10296.9
GR1848.9   10317  1849.3 10342.3  1849.2 10371.3  1848.8 10418.4  1849.3 10471.2
GR1848.5 10503.3  1847.1 10544.6  1847.7   10566  1854.4 10595.3
HD29.351    10.0

X129.387      39    9481 10107.4     190     200     190
GR1854.2    9481  1841.8  9493.6  1841.9  9511.4  1844.7  9527.3  1844.5  9552.5
GR1839.3  9575.8  1839.1  9627.7  1840.2  9645.2  1844.3  9667.5    1845  9682.9
GR1842.2  9722.4  1839.9    9732  1839.7  9749.9  1840.9  9757.7  1847.4  9778.9
GR1847.6  9822.3  1843.7  9845.5    1845  9863.2  1844.6  9906.2  1842.7  9921.9
GR1839.7  9960.2  1838.8  9986.9  1839.8   10000  1839.3   10037  1838.9 10066.4
GR1843.9   10082  1845.2 10107.4  1844.2 10128.4    1845 10146.8  1843.4 10179.3
GR1845.8 10240.2  1845.8 10277.7  1850.7 10302.4  1850.5 10351.2  1850.5 10398.2
GR1850.2 10434.3  1848.9 10467.4  1849.5 10486.8  1857.7 10517.6
HD29.387    10.0

X129.493      60  9336.2 10047.8     610     520     560
GR1855.3  9184.2  1850.5  9195.2  1850.5  9301.4  1850.3  9318.7  1850.7  9336.2
GR1846.3  9357.2  1843.9  9369.9  1843.4    9386  1843.8  9410.6  1845.6  9421.7
GR1845.7    9428    1848  9442.5  1848.1  9450.2  1847.9  9459.5  1847.4  9471.8
GR1846.6  9486.4  1847.6  9503.9  1847.9  9515.6  1848.2  9534.1  1849.3  9543.7
GR1849.5  9563.8  1850.7  9572.1  1850.8  9582.2  1850.6  9618.4  1847.2  9647.1
GR1846.8  9657.9  1846.1  9679.3  1849.6  9696.8  1848.9  9711.8  1848.6    9717
GR1849.3  9732.5  1848.9  9747.1  1846.3  9758.6  1845.5  9765.8  1845.4    9772
GR  1847    9786  1849.1  9807.2  1849.2  9819.2  1847.5  9831.7  1847.3  9838.8
GR1845.8  9868.6  1844.4  9885.7  1847.2  9905.8  1847.6    9907  1847.9  9915.7
GR1847.8  9951.2  1845.4  9989.8  1845.2   10000  1844.8   10018  1845.6 10024.4
GR1850.7 10038.6  1850.8 10047.8  1850.3 10063.5  1850.7 10071.1  1850.9 10089.3
GR1849.2 10099.8  1848.8 10106.4  1849.1 10109.9  1854.8 10142.8  1855.2 10156.3
HD29.493    10.0

X129.538      36  9400.2 10034.4     270     230     240
GR  1860    9071  1852.7  9096.6  1854.5  9109.2  1856.5  9115.6  1855.8  9129.7
GR  1855  9160.4  1856.2  9182.2  1856.6  9231.6  1856.8  9294.3  1855.1  9331.2
GR1853.7  9372.5  1850.6  9376.2  1854.1  9382.6  1854.4  9400.2  1848.9  9419.1
GR1850.1  9441.4  1851.4  9480.9  1851.9    9528  1851.1    9545  1849.7  9586.2
GR1850.4  9625.5  1850.7    9667  1850.1  9703.9  1852.7  9733.9    1851  9774.5
GR1851.2  9836.1  1850.5  9871.5  1850.9  9915.1  1848.7  9948.9  1848.7  9970.4
GR1847.4  9990.7  1845.5   10000  1848.1 10016.1  1854.1 10034.4  1856.5 10071.6
GR1857.7 10085.4
HD29.538   10.00

NC  0.07    0.07   0.044     0.1     0.3
X129.601      31    9679 10060.2     370     330     330
GR1872.9  9099.7  1868.4  9117.3  1856.1  9156.4    1859  9183.7    1860  9210.1
GR1861.3  9257.3  1861.4  9296.5  1859.7  9337.3  1857.8  9385.8  1857.6  9431.3
GR1856.4  9472.7  1856.9  9515.2  1858.9  9628.9  1859.4    9679  1858.5  9695.4
GR1850.7  9710.3  1849.9  9734.3  1851.2  9784.6  1852.1  9797.7  1854.3  9832.4
GR1854.6  9848.1  1853.5  9885.6  1851.5  9929.9  1851.1  9960.4    1851   10000
GR1852.2   10019  1857.7 10035.2    1859 10046.6  1867.1 10060.2  1867.9 10084.7
GR1868.6   10148
HD29.601   10.00

X129.663      35  9803.9 10194.6     330     330     330
X3                      9615.1  1862.3 10201.4  1889.3
GR1871.6    9166  1872.5  9201.1  1863.4  9233.9  1861.7  9249.5  1863.9  9285.2
GR1862.6  9357.9  1861.5  9384.7  1859.9  9415.8    1862  9468.3  1860.7    9538
GR1861.3  9615.1  1862.6  9670.5  1862.5  9803.9  1851.7  9827.7  1850.9  9840.5
GR1850.9  9860.9    1856  9897.3  1855.5  9915.3    1854  9955.8  1853.7   10000
GR1852.9 10025.2  1857.5 10051.5  1856.8   10159  1869.1 10194.6    1867 10357.1
GR1866.3 10470.9  1864.6 10696.7  1863.6 10792.8  1862.8 10916.7  1862.3 11013.8
GR1860.8 11221.1  1861.8 11281.8  1866.3 11330.4  1870.2 11375.2  1875.3   11430
HD29.663   10.00

NC  0.07    0.07    0.04     0.1     0.3
X1 29.71      15    9715   10064     533      73     233
X3                   9715    1890   10064    1890
GR  1872    9609  1871.2    9715    1862    9754    1860    9764    1858    9772
GR  1856    9788  1854.5    9801  1856.1 9833.16  1856.5 9887.97    1856 9908.97
GR  1854 9972.43  1853.9 9996.70    1855 10021.8 1870.95   10052    1872   10118
HD 29.71   10.00

NC  0.07    0.07   0.036     0.1     0.3
X1 29.72      249593.1919956.504     127     127     127
X3                   9593.191   18809956.504    1880
GR  1881  8869.7  1872.2 9215.52  1872.2 9314.09  1873.7 9421.28  1874.5 9524.46
GR  1876 9593.19  1875.4 9595.54  1871.4 9606.06  1864.2 9623.12  1856.19639.302
GR1858.4 9674.94  1858.6 9701.37  1857.5 9732.78    1855 9846.41  1862.8 9873.43
GR1870.3 9887.95  1875.2 9910.84  1875.9 9928.85  1876.1 9944.50  1870.7 10278.1
GR1869.9 10443.2  1873.4 10954.8    1874 11285.2    1875 11456.7
HD 29.72   10.00

NC  0.07    0.07   0.036     0.3     0.5
X1 29.77      30  9764.6 10051.1      50     550     200
X3                     9754  1890.6 10051.1  1872.7
GR  1874    9195    1872    9222    1866    9240  1865.3  9317.8  1864.3  9364.1
GR1863.8    9408    1863    9449  1862.2  9466.8  1863.7  9505.3    1863  9551.4
GR1862.1  9588.5    1862  9603.5  1861.8  9676.4  1863.6    9720  1864.1  9724.1
GR1867.1  9736.3    1870  9745.8  1870.5  9764.6  1866.9  9772.8  1861.7  9782.5
GR1857.2  9792.9  1858.2  9809.5    1859  9826.1  1859.7  9869.9  1857.3 10011.1
GR1858.4 10024.3  1864.1 10033.6  1869.2 10042.5  1872.7 10051.1  1873.3 10073.5
HD 29.77   10.00

NC  0.07    0.07   0.036     0.1     0.3
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X1 29.85      17  9924.1 10043.7     400     400     400
GR1874.2    9386    1872  9406.8    1870  9413.5    1868  9438.9    1868  9504.5
GR  1870  9609.1  1870.4  9646.3    1868  9735.6    1868  9757.6    1866  9924.1
GR  1864  9938.5    1860  9945.1  1857.7 10015.9    1858 10029.3    1872 10043.7
GR  1878 10081.4    1880 10127.5
HD 29.85   10.00

NC  0.06    0.07   0.036     0.1     0.3
X1  30.1      65  9817.8 10037.9    1100    1325    1304
GR  1891  8723.4  1877.9  8748.2  1875.5  8775.4    1876    8780    1878  8810.6
GR1880.5  8835.2  1878.9    8853  1879.6  8871.3  1878.8  8898.7  1879.2  8919.7
GR1880.2  8960.2  1879.7  9014.6  1878.9  9044.7  1879.9  9052.4  1880.3  9099.2
GR1880.3  9155.3  1880.9  9227.8  1876.8  9243.7  1876.3  9255.3  1874.4  9276.4
GR1874.2  9307.4  1872.2  9329.9  1872.1    9342  1873.5  9355.7  1876.3    9390
GR1873.5  9392.9  1871.8    9404  1873.1  9420.7  1874.2  9425.8  1876.8  9428.7
GR1878.7  9441.3  1877.8  9466.4  1877.8  9482.9  1880.2  9496.3  1881.2  9512.7
GR1880.1  9529.5  1878.9  9533.3    1877  9544.7  1877.4  9559.8  1878.1  9578.4
GR1879.3  9589.9  1877.1  9614.6  1874.7  9633.8  1871.3  9643.6  1872.3  9667.4
GR1871.1  9672.6  1870.2  9693.9  1870.5  9717.8  1872.1  9722.8  1873.4  9730.9
GR1874.4  9755.3  1874.7  9768.6  1880.6  9788.6  1881.3  9817.8  1880.6  9848.5
GR1879.2  9860.4  1875.7  9872.6    1875  9880.1    1874  9891.8    1873  9935.6
GR1868.2  9949.8  1867.4   10000  1869.6 10010.8  1895.1 10037.3  1895.1 10037.9
HD 30.10   10.00

NC  0.06    0.07   0.044     0.1     0.3
X1  30.2      54  9900.1 10132.3     535     545     537
GR1897.8  8955.2  1882.4    8990  1880.4  9026.6    1882  9055.2  1883.7  9073.3
GR  1885  9087.5  1885.1    9107  1884.1  9146.3  1881.8  9170.8  1881.9    9184
GR1882.7    9204    1882  9235.3  1882.4  9246.9  1882.3  9262.4  1883.5  9272.2
GR1884.4  9292.3  1883.6  9312.7  1881.6  9337.9  1881.1  9347.9  1882.5    9366
GR1882.6  9381.9  1886.1  9390.1  1885.7  9418.6  1884.4  9457.3    1883    9490
GR1883.8  9504.1  1883.4  9564.4    1882  9590.9  1883.3  9616.7  1883.5  9641.3
GR1879.3  9663.9  1879.5  9669.6  1882.3  9684.6  1882.8  9695.5  1881.9    9707
GR1879.8  9714.1  1879.9  9731.2  1882.8  9741.7    1883  9753.1  1883.3    9796
GR1884.1  9822.3  1883.7    9859  1882.8  9900.1  1876.5  9927.7  1875.8  9939.7
GR  1877  9976.9  1876.1   10000  1876.4 10000.6  1877.9 10021.2  1878.8 10045.5
GR1878.2 10069.8    1876   10086  1875.2 10093.2  1897.9 10132.3
HD  30.2   10.00

X1 30.28      40  9881.7 10033.5     550     430     421
GR1901.6  9132.4  1889.1  9162.5  1889.5  9181.6  1888.4  9200.7  1889.3  9222.8
GR  1890  9264.4  1890.1  9316.4  1890.2  9351.6  1888.4  9388.9    1887  9396.9
GR1886.6  9406.9    1888  9427.9  1888.6  9442.8  1887.8    9470  1889.3  9491.8
GR1890.2  9550.4  1889.5  9595.4  1889.6  9616.6  1887.7  9631.3    1887    9649
GR1889.5  9679.4  1888.6  9694.4  1886.6  9704.9  1889.5  9717.5  1890.4  9732.1
GR  1890  9751.7  1888.7  9775.3    1888    9814  1885.9  9833.6  1885.2  9881.7
GR1884.3  9895.3  1881.8  9908.6  1880.9  9934.5  1879.7  9947.3  1878.3  9978.3
GR1877.9  9989.9  1877.8   10000  1877.1 10008.3  1877.5 10014.5  1894.3 10033.5
HD 30.28   10.00

X1 30.42      43  9957.5 10487.8     500     650     713
GR1906.6  9501.6  1893.1    9533  1893.6  9568.7  1892.9  9613.1  1892.9  9631.9
GR1892.9  9666.7  1894.3  9714.6  1894.8  9733.5  1894.8  9755.5  1894.6  9800.7
GR1895.2  9854.8  1892.9    9868  1893.9  9893.2  1893.6  9900.4  1890.9  9907.3
GR1890.6  9918.4  1895.4  9931.2  1895.6  9957.5  1890.3  9970.3  1887.8  9999.9
GR1888.1   10000  1889.6 10037.1  1890.3 10052.9  1892.7 10080.7  1892.4 10102.6
GR1891.7 10123.6  1891.1 10145.5  1885.8 10159.9    1889 10186.9  1889.8 10200.7
GR1892.1 10211.4  1890.7 10239.2  1888.3 10258.2    1893 10277.2  1892.4 10320.1
GR1889.9 10362.3  1889.7 10390.2  1891.4 10402.9  1890.9 10438.8  1890.9   10443
GR1893.1 10455.4  1900.1 10487.8  1901.5 10552.6
HD 30.42   10.00

X1 30.52      50  9826.1 10401.4     600     500     560
GR1904.7  9283.8  1900.8    9298  1900.7  9317.2  1900.5    9342  1900.8  9401.2
GR1900.4  9431.3  1900.9    9463  1900.8  9498.9  1900.4  9566.3  1899.9  9630.3
GR  1900  9649.8  1900.1  9696.8  1899.9  9721.3  1899.1  9744.6  1899.3  9757.6
GR1899.2    9771  1899.6  9785.1  1900.4  9811.3  1900.9  9826.1    1900  9851.7
GR1898.1  9872.3  1894.7  9876.3  1894.9  9887.7    1895  9902.1  1897.4    9914
GR1898.2  9933.1  1896.5    9965  1893.6  9983.4  1893.8   10000  1893.5 10049.4
GR  1894 10061.8  1894.9 10068.7  1898.8 10095.2  1898.9 10107.9  1898.9 10132.4
GR1898.1 10161.8    1899 10213.6    1899 10221.1  1898.8 10242.8  1897.4 10260.3
GR1896.9 10275.9  1893.8   10291  1894.4 10300.9  1900.1 10323.3  1899.8 10340.6
GR1898.7 10361.4  1896.7 10366.8  1899.3 10383.8  1903.8 10401.4  1904.8 10420.5
HD 30.52   10.00

X1 30.65      39  9909.4 10027.8     700     650     696
GR  1913  9206.9  1910.7  9224.3  1909.7  9241.6  1908.9  9297.7    1908  9329.1
GR1907.1  9386.1  1907.9  9430.3  1908.6  9448.3  1908.9  9465.2  1908.4    9483
GR1908.7    9506    1908  9526.3  1906.8  9563.6  1906.3  9601.3  1905.9  9627.1
GR1905.5  9654.8  1905.5  9691.5  1905.8  9715.1  1906.1  9732.3  1906.2  9743.9
GR1901.9  9771.6  1900.6  9791.3  1901.6  9799.1  1903.2    9813  1904.1  9833.8
GR  1903    9871  1904.2  9891.8  1904.4  9909.4  1902.4  9919.7  1901.8  9933.9
GR1898.6  9943.8    1899  9971.6  1898.3  9988.4  1897.2  9995.5  1897.3   10000
GR1898.2 10019.6  1910.2 10027.8  1911.2 10041.2  1911.2 10070.7
HD 30.65   10.00

NC  0.07    0.07   0.044     0.1     0.3

X1 30.75      31  9857.1 10184.4     475     450     486
X3    10
GR1918.1  9299.3  1915.8  9316.1  1915.2  9339.6  1914.8  9376.8  1914.4  9417.3
GR1914.4    9491  1913.7  9531.6  1909.8  9560.3  1909.6  9621.7  1908.9  9660.3
GR1909.4  9712.4  1909.2  9755.1  1909.1  9793.8  1909.1  9820.7  1909.7  9857.1
GR1909.4  9869.1  1906.2  9885.3  1907.2  9912.3  1906.7    9935  1904.1  9963.4
GR1902.6  9982.7  1902.5  9993.3  1902.4   10000  1903.8 10050.3    1903 10096.8
```

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GR  1901 10116.3  1903.4 10126.1  1903.2 10142.7  1902.8 10165.8  1915.5 10184.4
GR1916.9 10241.8
HD 30.75   10.00

NC  0.07    0.06   0.044     0.1     0.3
X1 30.85      37  9889.7 10051.3     525     570     569
X3    10
GR1919.8  9554.5  1919.4  9596.5  1918.6  9645.1  1917.4  9696.1  1916.6  9729.2
GR  1916  9804.9  1915.8    9834  1915.8  9835.9  1915.6  9863.9    1915  9889.7
GR1912.1  9901.4  1908.2  9912.4  1909.4  9928.9  1908.5  9950.5  1909.1  9972.9
GR1907.5   10000  1907.9 10018.4  1914.3 10051.3  1914.5 10090.2  1915.2 10129.5
GR1915.3 10148.9  1915.5 10185.9  1914.7 10222.7  1910.5 10246.4  1913.3 10276.3
GR1913.9 10294.3  1914.1 10316.8  1911.5   10327  1910.9   10361  1909.4 10370.8
GR1908.6 10385.6  1910.2 10407.2  1907.9 10436.5  1905.6 10442.7  1905.3 10474.8
GR1907.4 10484.7  1921.7 10503.4
HD 30.85   10.00

X1 30.96      47  9925.5 10145.6     550     570     541
GR  1926  9841.1  1918.3    9870  1918.3  9883.8  1918.1  9925.5  1914.4  9943.8
GR1913.9  9973.8    1913  9986.9  1912.3   10000  1912.5 10026.1  1914.1   10032
GR1913.5 10040.4  1913.3 10048.6  1917.1   10068  1917.3 10108.6  1918.4 10126.3
GR1919.6 10145.6  1919.1 10178.2    1918   10215  1917.6 10251.6  1914.8 10288.4
GR1916.8 10300.7  1917.5 10314.7  1917.7 10337.5  1915.9 10354.8  1913.7 10368.2
GR1915.1   10381    1917 10420.6  1919.4 10463.2  1920.1 10491.4  1920.5 10517.7
GR1920.3 10535.8  1919.1 10566.8  1919.3 10590.8  1917.5 10602.1  1916.8 10612.3
GR1916.6 10626.6    1912 10646.3  1912.4 10653.8  1915.2 10665.1  1916.8 10676.9
GR1917.3 10689.9  1916.6   10727  1916.5 10740.6  1914.6 10749.9  1914.1 10758.8
GR1915.9 10771.1  1924.1 10798.3
HD 30.96   10.00

X1 31.05      49    9886 10109.5     470     460     494
GR  1932  9874.9 1923.33    9886  1918.8  9891.8  1918.9  9913.5  1920.4  9925.9
GR1918.3  9934.2  1917.1  9959.6  1917.8  9981.5  1917.8   10000  1918.1 10017.7
GR1919.2 10031.9  1920.9 10043.6  1920.4 10072.9  1921.7 10087.3  1922.6 10103.6
GR  1923 10109.5  1922.9 10135.9  1921.9 10144.8  1922.2 10184.5  1921.3 10203.3
GR1923.4   10234  1923.4 10256.6  1922.9   10289  1923.9 10317.1  1923.8 10318.2
GR1923.3 10374.4  1922.2 10391.5  1921.5 10427.9  1921.6 10450.6  1924.3 10476.8
GR1924.3 10506.7  1922.6 10573.2  1921.7   10624  1921.8   10643  1920.7 10662.9
GR1920.8 10689.1  1920.3 10706.9  1917.2   10715  1916.9 10722.6  1921.9   10745
GR1921.7 10764.6  1921.3 10790.9    1919 10806.3  1920.1 10836.8    1920 10849.3
GR  1918 10866.4  1917.4 10887.8  1928.6 10913.9  1930.4 10928.2
HD 31.05   10.00

X1 31.14      51  9926.4 10146.3     500     350     467
GR1936.6  9585.1  1932.6  9604.8  1929.8  9617.8    1928  9636.3  1927.7  9669.3
GR1927.8  9692.5  1927.9    9713  1927.5  9756.8  1926.6  9801.2  1926.6    9847
GR1927.5  9879.8  1928.2  9908.3  1928.7  9926.4  1922.6  9939.6  1921.1  9947.4
GR1920.2  9965.8    1919  9973.5  1917.8   10000  1918.4 10010.3  1920.5 10026.5
GR1924.5 10045.6  1925.6 10071.7  1926.9 10108.7  1928.3 10146.3  1928.3 10165.5
GR  1928 10175.7  1926.5 10200.1  1925.2 10211.8  1923.6 10216.9  1923.6 10228.2
GR1922.4 10244.9  1927.1 10260.3    1928 10283.8  1927.9 10333.2  1926.4 10349.7
GR1927.2   10374  1926.2 10391.8  1925.9 10409.7  1924.3 10420.3  1923.7   10437
GR1926.1 10478.4  1925.7 10521.1  1925.7 10538.5    1926 10563.6  1926.4 10576.4
GR1922.6 10583.9  1924.1 10604.4    1924 10631.6  1925.6 10648.6  1931.2 10664.9
GR1939.2 10690.6
HD 31.14   10.00

X1 31.17      39  9852.5 10210.3     130     130     162
X3                      9653.3    1940   10530    1940
GR1936.3  9491.6    1932    9506  1929.3  9521.4  1928.2  9545.1    1928  9562.9
GR1928.1  9579.7  1929.3  9634.1  1929.5  9653.3  1928.9  9726.8    1929  9786.7
GR1929.9  9825.3  1931.1  9852.5  1922.6  9871.9  1922.6  9888.2  1920.8  9897.9
GR1921.3    9911  1924.7  9918.2  1924.7  9936.1  1923.2  9965.1  1921.7   10000
GR1921.7 10001.5  1923.1 10054.8  1923.8 10062.1  1926.2 10080.5  1926.9 10099.2
GR1927.8 10124.8  1928.2 10182.8  1930.9 10210.3  1928.3 10228.1  1926.1 10247.7
GR1924.7 10279.7  1928.2 10302.1  1928.8 10328.3  1928.5 10367.3    1928 10402.1
GR1926.3 10441.8  1924.6 10469.9  1925.2   10497  1935.7 10536.2
HD 31.17   10.00

X1 31.25      58  9783.9 10041.9     400     400     432
X3                       9750    1940   10480    1940
GR1938.6  9373.1  1936.9  9395.2  1936.4  9406.7    1935  9423.4    1935    9428
GR1933.5  9455.8  1931.6  9505.3  1932.3  9509.8  1932.8  9528.7  1932.9  9546.8
GR1932.5    9565  1931.7  9570.8  1932.8  9591.6  1933.2  9610.1  1934.5  9655.8
GR1934.5  9676.8  1934.9    9701  1934.9  9746.6  1934.1  9783.9    1926  9798.6
GR1925.5    9809  1925.4  9818.8  1928.3  9828.6  1929.5  9837.7  1930.7  9857.7
GR  1931  9867.3  1931.1  9881.1  1928.7  9937.9  1927.2  9978.9    1926  9992.1
GR  1926  9998.1  1926.1   10000  1925.9 10008.2  1927.4 10019.5  1931.4 10031.4
GR1932.1 10041.9    1932 10070.2  1931.1 10095.4    1931   10102  1930.7   10114
GR1928.7 10132.1  1930.9 10149.7  1929.9 10161.2  1931.8 10181.8  1931.8 10190.3
GR1932.1 10215.9  1932.1 10261.6  1931.9 10286.1  1931.3 10318.8  1932.6 10340.5
GR1932.7 10366.6  1931.9 10388.8  1931.8 10413.5  1931.3 10430.7    1929 10443.2
GR1928.6 10452.1  1929.3   10466    1940 10483.8
HD 31.25   10.00

X1 31.34      39  9930.2 10137.5     450     450     474
GR1943.7  9664.3  1943.4  9718.8  1939.1    9793  1937.3  9862.7  1937.1  9930.2
GR1935.5  9935.3  1933.3  9949.9  1931.5   10000  1933.2 10027.2  1934.1 10104.9
GR1933.1 10113.8  1932.9 10116.6  1935.4 10126.5  1936.5 10137.5  1935.1 10146.5
GR1934.7   10157  1932.9   10166  1932.1   10178  1932.9 10184.4  1936.1 10196.8
GR1936.6 10210.6  1936.5 10248.8    1936 10254.7  1935.9 10322.1  1935.1 10332.9
GR1935.1 10365.4  1932.4 10379.2  1931.5 10394.9  1931.9 10412.7  1934.9   10417
GR1935.8 10429.2  1935.2 10471.2  1935.9 10485.5  1935.8 10497.1  1934.5 10509.7
GR1933.7 10532.2  1933.8 10540.5  1934.1 10545.2    1940   10555
HD 31.34   10.00
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X1 31.45       48    9850   10031     590     620     592
GR1951.3  9794.4  1948.9  9827.8  1946.7  9836.9  1944.6    9850  1933.4  9861.9
GR1933.1  9869.7  1933.7  9885.4  1937.6  9905.9  1938.3  9927.1  1936.2  9964.4
GR1935.2  9983.8  1933.6  9993.3  1933.3   10000  1933.3 10008.5  1933.8 10009.4
GR1941.1   10031    1941 10073.8    1941 10110.3  1940.3 10145.4  1939.8 10163.5
GR1939.1 10168.6  1941.7 10186.5  1941.5 10204.8  1939.5 10230.5  1939.5 10250.8
GR1938.2 10270.7  1937.5 10293.2  1938.3 10327.6  1938.7 10334.1  1942.7 10346.9
GR1942.5 10385.9  1941.7 10399.4  1937.4   10439  1939.3 10462.8  1941.9 10480.5
GR1941.8 10521.6    1942 10548.4    1942 10567.9  1942.1 10608.9  1942.4   10642
GR1945.4 10694.7  1945.2 10736.6  1944.2 10772.4  1943.2 10798.3    1944 10813.1
GR1944.1 10862.6  1944.8 10879.9  1949.7 10899.7
HD 31.45   10.00

X1 31.54       44    9916 10182.8     475     475     484
GR1953.1  9903.1 1946.65    9916  1940.2  9928.9  1940.1  9945.4  1940.2  9977.3
GR1940.3   10000  1941.1 10041.5  1940.6 10050.6  1940.7 10073.6    1942   10094
GR1941.9 10112.1  1942.1 10138.9  1942.2 10155.4  1944.3 10165.5  1946.3 10182.8
GR1945.8 10201.5  1946.2 10229.8  1946.9 10266.6  1946.7 10296.7  1944.2 10320.8
GR  1945 10335.4  1944.8 10361.1  1943.4 10368.2  1941.6   10400  1940.6 10407.2
GR1940.7 10429.9  1941.7   10439  1941.5 10456.4    1945   10470  1946.2 10481.4
GR  1946 10490.5  1943.2 10514.6  1941.4 10538.9    1948   10556  1948.9 10565.9
GR1948.3 10611.6  1947.9   10647  1947.6 10681.6  1947.4 10740.1  1947.9 10783.6
GR1948.4   10820  1948.4 10875.2  1951.6 10907.6    1952 10932.1
HD 31.54   10.00

X1 31.63       41  9961.1 10153.9     450     430     453
GR1958.1  9746.7  1949.7  9772.3    1949  9798.9  1948.9  9843.2  1948.3  9868.4
GR1947.5  9884.3  1947.6  9917.9  1946.4  9928.5  1947.3  9961.1  1942.5  9972.7
GR1940.5  9988.2  1940.6   10000  1940.7 10001.6  1940.7 10023.2  1941.7   10037
GR1944.7 10056.6  1945.2 10070.9  1945.1 10102.8  1944.7 10113.1  1946.9 10125.9
GR1948.2 10153.9  1948.6 10190.6  1947.5 10229.8  1947.3 10260.8    1947 10312.4
GR1946.3 10336.4  1947.6 10337.3  1950.5 10361.7  1949.2 10392.2  1948.8 10414.1
GR1946.3 10424.8  1948.2 10444.7  1951.7 10460.1  1952.9 10492.2  1952.8 10511.8
GR1952.1   10540  1952.4   10555  1952.2 10593.1  1952.4 10675.7  1956.7 10701.9
GR1956.6 10708.4
HD 31.63   10.00

NC  0.07    0.07   0.044     0.1     0.3
X1 31.75       36  9797.4 10027.6     680     650     647
GR1968.8    9535    1958  9569.1  1956.1    9580  1955.6  9600.1  1955.1  9620.2
GR1955.2  9640.7  1955.2    9671  1955.2  9699.4    1954  9797.4    1951  9807.2
GR1951.4    9817  1947.9  9830.1  1947.8  9838.9  1947.7  9849.4  1951.2  9874.7
GR1951.4  9893.5  1950.8    9936    1948  9965.9  1946.5  9988.6  1946.9  9994.7
GR1947.2   10000  1951.4   10016    1953 10027.6  1953.5 10055.5    1954 10095.7
GR1957.1 10148.4  1957.3 10176.9  1957.5 10201.8  1957.4 10202.3  1957.5 10265.2
GR1957.8 10341.9  1958.4 10415.1  1959.7 10486.4  1960.5 10533.3  1961.2 10567.4
GR1964.1 10582.5
HD 31.75   10.00

X1 31.82       30  9839.4 10046.1     360     370     361
GR1968.8  9640.8 1959.59    9660  1955.8  9667.9  1954.9  9681.8  1956.6  9690.9
GR1957.2  9720.3  1957.2  9781.8  1957.1    9801  1956.7  9810.2  1963.5  9828.3
GR1963.3  9839.4  1953.4  9861.7  1953.4  9901.8  1953.2  9938.9  1952.7   10000
GR1956.1 10017.6    1957   10035  1959.4 10046.1    1959 10068.7  1961.5 10077.7
GR1960.7 10084.5  1961.3 10108.5  1961.4 10154.5  1961.1 10172.2  1961.9 10255.5
GR1962.5 10327.1  1963.5 10369.1  1964.2 10384.7  1965.9   10402    1967 10410.2
HD 31.82   10.00

X1 31.87       26  9848.6 10017.7     220     260     243
GR1971.3  9626.3  1969.2    9643  1966.3  9648.1  1961.2  9655.8  1960.6  9670.8
GR1960.1  9690.2  1959.1  9693.1  1958.9  9818.6  1966.8  9829.2  1967.4    9837
GR1966.2  9848.6  1957.6  9864.1  1955.4  9879.3  1955.5  9900.2  1953.7  9938.9
GR1953.6  9982.7  1953.8   10000  1953.9 10007.4  1959.6 10017.7  1961.5 10059.8
GR1962.7 10114.9  1963.6 10134.9  1965.1 10168.9  1966.1   10197  1967.7 10206.3
GR1973.5 10227.4
HD 31.87   10.00

NC  0.06    0.07   0.044     0.1     0.3
X1 31.91       32    9933 10050.7     240     210     208
GR  1972  9636.6    1971  9656.6  1963.7  9686.4  1959.7  9704.8  1960.1  9716.5
GR1960.3  9740.5  1959.1  9793.6  1957.7  9812.1    1956  9816.1    1956    9828
GR1959.3  9842.6  1961.4  9856.4  1958.9  9879.9  1959.2  9894.2  1959.2  9914.2
GR1959.7    9933    1959    9940    1956  9949.2  1954.5    9968    1954  9982.5
GR1953.3   10000  1953.4 10025.9  1953.5 10025.9  1961.3 10050.7  1962.7 10078.7
GR1963.8   10106  1964.8   10139    1966 10170.4  1967.8 10188.1  1968.7 10199.5
GR1970.1 10207.3  1973.4 10222.6
HD 31.91   10.00

EJ

T4  Project: Upper Cave Creek Watercourse Master Plan Studies
T5  Client : Flood Control District of Maricopa County (FCDMC)
T6  Date:    July 8, 1999
T7  Firm:    Stantec Consulting, Inc.
T8  ********************************************************
I1            10
I4  SAND      10       1      14       0       0       0       0       0
I5           0.5     0.5    0.25     0.5    0.25       0     1.0
LQ     Q       1    2000   12000   17000   27000   37000   42000
LT    QS       1    3732   38488   45655   63313  135982  155000
LF   VFS  0.0142  0.0142  0.0082  0.0091  0.0097  0.0278  0.0291
LF    FS  0.0280  0.0280  0.0193  0.0186  0.0211  0.0151  0.0161
LF    MS  0.0879  0.0879  0.0638  0.0393  0.0399  0.0539  0.0545
LF    CS  0.2299  0.2299  0.1727  0.1828  0.1697  0.1427  0.1421
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LF   VCS  0.2324  0.2324  0.1905  0.1731  0.1579  0.1549  0.1542
LF   VFG  0.1802  0.1802  0.1732  0.1621  0.1529  0.1512  0.1496
LF    FG  0.1479  0.1479  0.1907  0.1801  0.1710  0.1692  0.1683
LF    MG  0.0787  0.0787  0.1515  0.1642  0.1799  0.1844  0.1823
LF    CG  0.0008  0.0008  0.0300  0.0560  0.0850  0.0928  0.0927
LF   VCG       0       0  0.0001  0.0147  0.0129  0.0078  0.0109
LF    SC       0       0       0       0       0  0.0002  0.0002
LF    LC       0       0       0       0       0       0       0
LF    SB       0       0       0       0       0       0       0
LF    MB       0       0       0       0       0       0       0
PF        29.387     1.0  653.14  350.94      96  191.99      88  103.62      81
PFC 48.7      71   24.15      64    12.7      56    6.35    47.5    4.75    39.5
PFC 2.36    29.5     2.0    25.5    1.18    16.5   0.595       8    0.42       5
PFC .297     3.5   0.106     2.0   0.075     1.8

$HYD
$RATING
RC            18    2500       0       0 1623.90 1627.42 1628.31 1628.75 1629.10
RC       1629.50 1629.80 1630.15 1630.48 1630.70 1630.98 1631.08 1631.18 1631.35
RC       1632.00 1632.35 1632.90 1633.15

*    A  Level output at time step 1 (10.92 hrs)
Q     87
T     68
X         0.0455  0.4549
*    A  Level output at time step 2 (1 hr)
Q    446
W 0.0417
*    A  Level output at time step 3 (0.25 hrs)
Q    608
W 0.0104
*    A  Level output at time step 4 (0.25 hrs)
Q   1006
W 0.0104
*    A  Level output at time step 5 (0.25 hrs)
Q   1969
W 0.0104
*    A  Level output at time step 6 (0.25 hrs)
Q   2824
W 0.0104
*    A  Level output at time step 7 (0.25 hrs)
Q   3842
W 0.0104
*    A  Level output at time step 8 (0.25 hrs)
Q   7705
W 0.0104
*    A  Level output at time step 9 (0.25 hrs)
Q  18133
W 0.0104
*    A  Level output at time step 10 (0.25 hrs)
Q  30296
W 0.0104
*    A  Level output at time step 11 (0.25 hrs)
Q  36586
W 0.0104
*    A  Level output at time step 12 (0.25 hrs)
Q  37995
W 0.0104
*    A  Level output at time step 13 (0.25 hrs)
Q  37252
W 0.0104
*    A  Level output at time step 14 (0.25 hrs)
Q  35585
W 0.0104
*    A  Level output at time step 15 (0.25 hrs)
Q  33288
W 0.0104
*    A  Level output at time step 16 (0.75 hrs)
Q  27701
R 1631.7
W 0.0312
*    A  Level output at time step 17 (1 hr)
Q  18479
R 1634.4
W 0.0417
*    A  Level output at time step 18 (1 hr)
Q  11129
R 1636.0
W 0.0417
*    A  Level output at time step 19 (2 hrs)
Q   5648
R 1637.2
W 0.0833
*    A  Level output at time step 20 (10 hrs)
Q   1706
R 1638.8
W 0.1701
*    A  Level output at time step 21 (0.0451)
Q    161
R 1638.8
W 0.0019
$VOL
$$END
```

```
*************************************************     *********************************
*  SCOUR AND DEPOSITION IN RIVERS AND RESERVOIRS  *     *  U.S. ARMY CORPS OF ENGINEERS   *
*       Version: 4.1.00 -  OCTOBER 1993           *     *  HYDROLOGIC ENGINEERING CENTER  *
*  INPUT FILE:  CC-E100C.DAT                      *     *  609 SECOND STREET              *
*  OUTPUT FILE: CC-E100C.OUT                      *     *  DAVIS, CALIFORNIA 95616-4687   *
*  RUN DATE: 10 OCT 00    RUN TIME: 07:06:01      *     *  (916) 756-1104                 *
*************************************************     *********************************

                      X     X  XXXXXXX   XXXXX           XXXXX
                      X     X  X        X     X         X     X
                      X     X  X        X               X
                      XXXXXXX  XXXX     X        XXXXX  XXXXXX
                      X     X  X        X               X     X
                      X     X  X        X     X         X     X
                      X     X  XXXXXXX   XXXXX           XXXXX

          ******************************************************************
          *  MAXIMUM LIMITS FOR THIS VERSION ARE:                          *
          *       10  Stream Segments (Main Stem + Tributaries)            *
          *      500  Cross Sections                                       *
          *      200  Elevation/Station Points per Cross Section           *
          *       20  Grain Sizes                                          *
          *       10  Control Points                                       *
          ******************************************************************

T1       Cave Creek and Apache Wash WMP
T2       by Stantec:  Proj. No. 82000077                  File: CC-F100C.DAT
T3       for Flood Control District of Maricopa County   Date: 07-26-99 srg

N values...  Left   Channel   Right    Contraction    Expansion
           0.0700   0.0440   0.0600       1.1000      0.7000

SECTION NO.    24.525
...Left Encroachment defined at station  9865.000 at elevation  1628.100
...Right Encroachment defined at station 10009.000 at elevation  1628.100
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    24.646
...Left Encroachment defined at station  9430.000 at elevation  1640.000
...Right Encroachment defined at station 11000.000 at elevation  1640.000
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    24.752
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    24.845
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    24.919
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    25.010
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    25.099
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    25.180
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    25.233
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    25.326
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    25.388
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    25.458
...Ineffective Flow Area - Method 1 - Left Overbank  Right Overbank
          Natural Levees at Station       9916.800      10067.100
              Ineffective Elevation       1668.100       1669.100
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    25.519
...Ineffective Flow Area - Method 1 - Left Overbank  Right Overbank
          Natural Levees at Station       9946.000      10101.000
              Ineffective Elevation       1672.400       1672.200
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    25.580
...Ineffective Flow Area - Method 1 - Left Overbank  Right Overbank
          Natural Levees at Station       9974.400      10121.500
              Ineffective Elevation       1674.100       1673.700
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    25.644
...Ineffective Flow Area - Method 1 - Left Overbank  Right Overbank
          Natural Levees at Station       9908.800      10061.500
              Ineffective Elevation       1676.600       1677.300
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    25.699
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.
```

```
SECTION NO.    25.750
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    25.843
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    25.919
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    26.044
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    26.137
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    26.239
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    26.335
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    26.430
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    26.529
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    26.623
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    26.695
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    26.775
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    26.845
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    26.921
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    27.008
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    27.106
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    27.169
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    27.226
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    27.265
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    27.320
...Ineffective Flow Area - Method 1 - Left Overbank  Right Overbank
          Natural Levees at Station       9907.500      10072.300
              Ineffective Elevation       1749.800       1754.900
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    27.366
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    27.417
...Ineffective Flow Area - Method 1 - Left Overbank  Right Overbank
          Natural Levees at Station       9942.800      10200.800
              Ineffective Elevation       1756.800       1759.400
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
           0.0700   0.0360   0.0700       1.1000      0.7000

SECTION NO.    27.502
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    27.604
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    27.693
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    27.797
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    27.913
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
           0.0700   0.0440   0.0700       1.1000      0.7000

SECTION NO.    28.023
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...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    28.091
...Left Encroachment defined at station  9641.300 at elevation  1811.700
...Right Encroachment defined at station 10160.500 at elevation  1792.100
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    28.157
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    28.241
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
           0.0700   0.0360   0.0700       1.1000      0.7000

SECTION NO.    28.326
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    28.390
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    28.462
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    28.555
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    28.657
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    28.750
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    28.847
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    28.934
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    29.012
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    29.130
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
           0.0700   0.0440   0.0700       1.1000      0.7000

SECTION NO.    29.258
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
           0.0700   0.0500   0.0700       1.1000      0.7000

SECTION NO.    29.351
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    29.387
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    29.493
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    29.538
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
           0.0700   0.0440   0.0700       1.1000      0.7000

SECTION NO.    29.601
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    29.663
...Left Encroachment defined at station  9615.100 at elevation  1862.300
...Right Encroachment defined at station 10201.400 at elevation  1889.300
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
           0.0700   0.0400   0.0700       1.1000      0.7000

SECTION NO.    29.710
...Left Encroachment defined at station  9715.000 at elevation  1890.000
...Right Encroachment defined at station 10064.000 at elevation  1890.000
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
           0.0700   0.0360   0.0700       1.1000      0.7000

SECTION NO.    29.720
...Left Encroachment defined at station  9593.191 at elevation  1880.000
...Right Encroachment defined at station  9956.504 at elevation  1880.000
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
```

```
          0.0700   0.0360   0.0700       1.3000     0.5000

SECTION NO.    29.770
...Left Encroachment defined at station  9754.000 at elevation  1890.600
...Right Encroachment defined at station 10051.100 at elevation  1872.700
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
          0.0700   0.0360   0.0700       1.1000     0.7000

SECTION NO.    29.850
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
          0.0600   0.0360   0.0700       1.1000     0.7000

SECTION NO.    30.100
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
          0.0600   0.0440   0.0700       1.1000     0.7000

SECTION NO.    30.200
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    30.280
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    30.420
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    30.520
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    30.650
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
          0.0700   0.0440   0.0700       1.1000     0.7000

SECTION NO.    30.750
...Ineffective Flow Area - Method 1 - Left Overbank  Right Overbank
         Natural Levees at Station       9857.100      10184.400
             Ineffective Elevation       1909.700       1915.500
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
          0.0700   0.0440   0.0600       1.1000     0.7000

SECTION NO.    30.850
...Ineffective Flow Area - Method 1 - Left Overbank  Right Overbank
         Natural Levees at Station       9889.700      10051.300
             Ineffective Elevation       1915.000       1914.300
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    30.960
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    31.050
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    31.140
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    31.170
...Left Encroachment defined at station  9653.300 at elevation  1940.000
...Right Encroachment defined at station 10530.000 at elevation  1940.000
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    31.250
...Left Encroachment defined at station  9750.000 at elevation  1940.000
...Right Encroachment defined at station 10480.000 at elevation  1940.000
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    31.340
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    31.450
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    31.540
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    31.630
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
          0.0700   0.0440   0.0700       1.1000     0.7000

SECTION NO.    31.750
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    31.820
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.
```

```
SECTION NO.    31.870
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
           0.0600   0.0440   0.0700       1.1000      0.7000

SECTION NO.    31.910
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

NO. OF CROSS SECTIONS IN STREAM SEGMENT= 89
NO. OF INPUT DATA MESSAGES =   0

TOTAL NO. OF CROSS SECTIONS IN THE NETWORK =  89
TOTAL NO. OF STREAM SEGMENTS IN THE NETWORK=   1
END OF GEOMETRIC DATA
```

```
T4  Project: Upper Cave Creek Watercourse Master Plan Studies
T5  Client : Flood Control District of Maricopa County (FCDMC)
T6  Date:    July 8, 1999
T7  Firm:    Stantec Consulting, Inc.
T8  ********************************************************

        Cave Creek and Apache Wash WMP
        by Stantec:  Proj. No. 82000077                 File: CC-F100C.DAT
        for Flood Control District of Maricopa County   Date: 07-26-99 srg

- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
SEDIMENT PROPERITES AND PARAMETERS

       SPI     IBG    MNQ     SPGF     ACGR     NFALL    IBSHER
I1     10.      0      1     1.000    32.174     2         1
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 SANDS - BOULDERS ARE PRESENT

       MTC     IASA    LASA     SPGS      GSF      BSAE      PSI     UWDLB
I4     10       1      14      2.650     0.667    0.500    30.000    93.000

USING TRANSPORT CAPACITY RELATIONSHIP # 10, MPM(1948)
GRAIN SIZES UTILIZED (mean diameter - mm)
-----------------------------------------------------------------------
    VERY FINE SAND....     0.088  |  MEDIUM GRAVEL.....   11.314
    FINE SAND.........     0.177  |  COARSE GRAVEL.....   22.627
    MEDIUM SAND.......     0.354  |  VERY COARSE GRAVEL   45.255
    COARSE SAND.......     0.707  |  SMALL COBBLES.....   90.510
    VERY COARSE SAND..     1.414  |  LARGE COBBLES.....  181.019
    VERY FINE GRAVEL..     2.828  |  SMALL BOULDERS....  362.039
    FINE GRAVEL.......     5.657  |  MEDIUM BOULDERS...  724.077
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
COEFFICIENTS FOR COMPUTATION SCHEME WERE SPECIFIED
        DBI      DBN      XID      XIN      XIU      UBI      UBN      JSL
I5    0.500    0.500    0.250    0.500    0.250    0.000    1.000      1
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -

SEDIMENT LOAD TABLE FOR STREAM SEGMENT #   1
          LOAD BY GRAIN SIZE CLASS (tons/day)
```

LQ	Q	1.00000	2000.00	12000.0	17000.0	27000.0	37000.0	42000.0
LF	VFS	0.142000E-01	52.9944	315.602	415.461	614.136	3780.30	4510.50
LF	FS	0.280000E-01	104.496	742.818	849.183	1335.90	2053.33	2495.50
LF	MS	0.879000E-01	328.043	2455.53	1794.24	2526.19	7329.43	8447.50
LF	CS	0.229900	857.987	6646.88	8345.73	10744.2	19404.6	22025.5
LF	VCS	0.232400	867.317	7331.96	7902.88	9997.12	21063.6	23901.0
LF	VFG	0.180200	672.506	6666.12	7400.68	9680.56	20560.5	23188.0
LF	FG	0.147900	551.963	7339.66	8222.47	10826.5	23008.2	26086.5
LF	MG	0.787000E-01	293.708	5830.93	7496.55	11390.0	25075.1	28256.5
LF	CG	0.800000E-03	2.98560	1154.64	2556.68	5381.61	12619.1	14368.5
LF	VCG	0.100000E-19	0.100000E-19	3.84880	671.129	816.738	1060.66	1689.50
LF	SC	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	27.1964	31.0000
LF	LC	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19
LF	SB	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19
LF	MB	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19
TOTAL		1.00000	3732.00	38488.0	45655.0	63313.0	135982.	155000.

REACH GEOMETRY FOR STREAM SEGMENT 1

CROSS SECTION NO.	REACH LENGTH (ft)	MOVABLE BED WIDTH	INITIAL BED-ELEVATIONS LEFT SIDE (ft)	THALWEG (ft)	RIGHT SIDE (ft)	ACCUMULATED CHANNEL DISTANCE FROM DOWNSTREAM (ft)	(miles)
	0.000						
24.525		2933.300	1640.000	1623.900	1639.600	0.000	0.000
	640.000						
24.646		2200.900	1640.000	1626.000	1640.000	640.000	0.121
	560.000						
24.752		1502.000	1642.200	1629.200	1642.100	1200.000	0.227
	490.000						
24.845		1824.200	1648.400	1635.300	1647.400	1690.000	0.320
	390.000						
24.919		2107.700	1652.800	1634.900	1653.600	2080.000	0.394
	480.000						

25.010		1751.700	1653.400	1640.200	1654.300	2560.000	0.485
	470.000						
25.099		1747.400	1658.000	1646.000	1659.900	3030.000	0.574
	430.000						
25.180		1678.000	1660.400	1647.700	1661.800	3460.000	0.655
	280.000						
25.233		1938.900	1664.200	1647.300	1663.900	3740.000	0.708
	510.000						
25.326		1459.600	1666.500	1653.000	1666.300	4250.000	0.805
	360.000						
25.388		1761.000	1678.800	1656.600	1674.100	4610.000	0.873
	360.000						
25.458		1616.100	1677.100	1660.500	1677.600	4970.000	0.941
	310.000						
25.519		1518.700	1678.000	1661.600	1679.200	5280.000	1.000
	300.000						
25.580		1431.000	1678.000	1665.900	1680.600	5580.000	1.057
	320.000						
25.644		1559.000	1680.000	1669.300	1682.800	5900.000	1.117
	290.000						
25.699		1551.200	1683.700	1669.400	1685.100	6190.000	1.172
	280.000						
25.750		1859.800	1686.200	1671.600	1688.700	6470.000	1.225
	370.000						
25.843		1741.200	1698.300	1673.500	1690.600	6840.000	1.295
	400.000						
25.919		1874.300	1694.200	1678.400	1692.000	7240.000	1.371
	650.000						
26.044		2294.000	1702.900	1684.300	1698.000	7890.000	1.494
	495.000						
26.137		2490.000	1712.900	1685.700	1702.000	8385.000	1.588
	420.000						
26.239		2036.100	1707.800	1692.800	1704.300	8805.000	1.668
	500.000						
26.335		1884.800	1710.700	1695.600	1709.400	9305.000	1.762
	495.000						
26.430		1755.200	1711.800	1697.500	1713.300	9800.000	1.856
	520.000						
26.529		1584.100	1720.000	1702.600	1714.400	10320.000	1.955
	500.000						
26.623		1645.200	1721.700	1703.900	1720.100	10820.000	2.049
	380.000						
26.695		1800.800	1724.900	1709.500	1727.200	11200.000	2.121
	420.000						
26.775		1926.500	1732.600	1712.700	1732.200	11620.000	2.201
	370.000						
26.845		1735.100	1733.100	1717.000	1734.500	11990.000	2.271
	430.000						
26.921		1194.800	1739.400	1720.200	1735.900	12420.000	2.352
	400.000						
27.008		1189.500	1746.200	1723.000	1739.900	12820.000	2.428
	520.000						
27.106		1248.500	1755.700	1725.700	1745.600	13340.000	2.527
	330.000						
27.169		1261.000	1753.500	1732.100	1747.600	13670.000	2.589
	300.000						
27.226		1611.600	1765.000	1734.800	1753.400	13970.000	2.646
	210.000						
27.265		1683.700	1759.400	1735.700	1755.400	14180.000	2.686
	275.000						
27.320		1599.700	1760.800	1740.300	1758.200	14455.000	2.738
	240.000						
27.366		1890.500	1769.800	1742.300	1760.200	14695.000	2.783
	270.000						
27.417		1362.600	1765.100	1744.800	1762.900	14965.000	2.834
	450.000						
27.502		1530.500	1783.800	1748.800	1772.000	15415.000	2.920
	550.000						
27.604		1365.500	1786.600	1754.200	1774.500	15965.000	3.024
	470.000						
27.693		1855.300	1791.700	1756.300	1782.900	16435.000	3.113
	550.000						
27.797		1993.900	1785.600	1760.600	1785.100	16985.000	3.217
	610.000						
27.913		1467.400	1800.800	1763.100	1785.100	17595.000	3.332
	580.000						
28.023		1447.600	1792.600	1772.500	1789.000	18175.000	3.442
	360.000						
28.091		2404.600	1811.700	1780.800	1798.400	18535.000	3.510
	350.000						
28.157		1983.000	1807.000	1782.600	1800.000	18885.000	3.577
	440.000						
28.241		1789.400	1808.300	1789.900	1806.900	19325.000	3.660
	450.000						
28.326		1690.100	1822.400	1791.300	1812.800	19775.000	3.745
	340.000						
28.390		1650.400	1821.500	1792.800	1816.400	20115.000	3.810
	380.000						
28.462		1687.100	1827.900	1794.800	1819.300	20495.000	3.882
	490.000						
28.555		1135.800	1835.900	1799.400	1818.100	20985.000	3.974
	540.000						
28.657		1842.900	1841.500	1800.500	1826.400	21525.000	4.077
	490.000						
28.750		1954.900	1844.300	1808.300	1830.500	22015.000	4.170

	510.000						
28.847		1842.500	1848.500	1811.900	1828.800	22525.000	4.266
	460.000						
28.934		1371.300	1853.000	1815.500	1831.800	22985.000	4.353
	410.000						
29.012		971.700	1853.700	1818.700	1838.800	23395.000	4.431
	595.000						
29.130		1010.500	1855.000	1821.000	1842.700	23990.000	4.544
	705.000						
29.258		762.400	1852.700	1828.700	1851.400	24695.000	4.677
	490.000						
29.351		944.200	1864.000	1835.900	1854.400	25185.000	4.770
	190.000						
29.387		1036.600	1854.200	1838.800	1857.700	25375.000	4.806
	560.000						
29.493		972.100	1855.300	1843.400	1855.200	25935.000	4.912
	240.000						
29.538		1014.400	1860.000	1845.500	1857.700	26175.000	4.957
	330.000						
29.601		1048.300	1872.900	1849.900	1868.600	26505.000	5.020
	330.000						
29.663		2264.000	1874.600	1850.900	1889.300	26835.000	5.082
	233.000						
29.710		509.000	1890.000	1853.900	1890.000	27068.000	5.127
	127.000						
29.720		2587.000	1881.000	1855.000	1880.000	27195.000	5.151
	200.000						
29.770		878.500	1890.600	1857.200	1873.300	27395.000	5.188
	400.000						
29.850		741.500	1874.200	1857.700	1880.000	27795.000	5.264
	1304.000						
30.100		1314.500	1891.000	1867.400	1895.100	29099.000	5.511
	537.000						
30.200		1177.100	1897.800	1875.200	1897.900	29636.000	5.613
	421.000						
30.280		901.100	1901.600	1877.100	1894.300	30057.000	5.693
	713.000						
30.420		1051.000	1906.600	1885.800	1901.500	30770.000	5.828
	560.000						
30.520		1136.700	1904.700	1893.500	1904.800	31330.000	5.934
	696.000						
30.650		863.800	1913.000	1897.200	1911.200	32026.000	6.066
	486.000						
30.750		942.500	1918.100	1901.000	1916.900	32512.000	6.158
	569.000						
30.850		948.900	1919.800	1905.300	1921.700	33081.000	6.265
	541.000						
30.960		957.200	1926.000	1912.000	1924.100	33622.000	6.368
	494.000						
31.050		1053.300	1932.000	1916.900	1930.400	34116.000	6.461
	467.000						
31.140		1105.500	1936.600	1917.800	1939.200	34583.000	6.550
	162.000						
31.170		1044.600	1940.000	1920.800	1940.000	34745.000	6.580
	432.000						
31.250		1110.700	1940.000	1925.400	1940.000	35177.000	6.662
	474.000						
31.340		890.700	1943.700	1931.500	1940.000	35651.000	6.752
	592.000						
31.450		1105.300	1951.300	1933.100	1949.700	36243.000	6.864
	484.000						
31.540		1029.000	1953.100	1940.100	1952.000	36727.000	6.956
	453.000						
31.630		961.700	1958.100	1940.500	1956.600	37180.000	7.042
	647.000						
31.750		1047.500	1968.800	1946.500	1964.100	37827.000	7.164
	361.000						
31.820		769.400	1968.800	1952.700	1967.000	38188.000	7.233
	243.000						
31.870		601.100	1971.300	1953.600	1973.500	38431.000	7.279
	208.000						
31.910		586.000	1972.000	1953.300	1973.400	38639.000	7.318

BED MATERIAL GRADATION

SECNO	SAE	DMAX (ft)	DXPI (ft)	XPI	TOTAL BED	BED MATERIAL FRACTIONS per grain size							
24.525	1.000	2.143	2.143	1.000	1.000	VF SAND	0.005	VF GRVL	0.115	S	COBL	0.088
						F SAND	0.010	F GRVL	0.133	L	COBL	0.084
						M SAND	0.033	M GRVL	0.085	S	BLDR	0.066
						C SAND	0.079	C GRVL	0.079	M	BLDR	0.016
						VC SAND	0.111	VC GRVL	0.078			
24.646	1.000	2.143	2.143	1.000	1.000	VF SAND	0.005	VF GRVL	0.115	S	COBL	0.088
						F SAND	0.010	F GRVL	0.133	L	COBL	0.084
						M SAND	0.033	M GRVL	0.085	S	BLDR	0.066
						C SAND	0.079	C GRVL	0.079	M	BLDR	0.016
						VC SAND	0.111	VC GRVL	0.078			
24.752	1.000	2.143	2.143	1.000	1.000	VF SAND	0.005	VF GRVL	0.115	S	COBL	0.088
						F SAND	0.010	F GRVL	0.133	L	COBL	0.084
						M SAND	0.033	M GRVL	0.085	S	BLDR	0.066
						C SAND	0.079	C GRVL	0.079	M	BLDR	0.016
						VC SAND	0.111	VC GRVL	0.078			

24.845	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
24.919	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
25.010	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
25.099	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
25.180	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
25.233	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
25.326	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
25.368	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
25.456	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
25.519	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
25.580	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
25.644	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
25.699	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
25.750	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
25.843	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
25.919	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016

						VC	SAND	0.111	VC	GRVL	0.078				
26.044	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
26.137	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
26.239	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
26.335	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
26.430	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
26.529	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
26.623	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
26.695	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
26.775	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
26.845	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
26.921	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
27.008	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
27.106	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
27.169	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
27.226	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
27.265	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066

						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
27.320	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
27.366	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
27.417	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
27.502	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
27.604	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
27.693	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
27.797	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
27.913	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
28.023	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
28.091	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
28.157	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
28.241	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
28.326	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
28.390	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
28.462	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
28.555	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084

						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
28.657	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
28.750	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
28.847	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
28.934	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
29.012	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
29.130	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
29.258	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
29.351	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
29.387	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
29.493	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
29.538	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
29.601	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
29.663	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
29.710	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
29.720	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
29.770	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088

						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
29.850	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
30.100	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
30.200	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
30.280	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
30.420	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
30.520	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
30.650	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
30.750	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
30.850	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
30.960	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
31.050	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
31.140	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
31.170	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
31.250	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
31.340	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			

31.450	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
31.540	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
31.630	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
31.750	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
31.820	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
31.870	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
31.910	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			

BED SEDIMENT CONTROL VOLUMES

STREAM SEGMENT # 1: Cave Creek and Apache Wash WMP

SECTION NUMBER	LENGTH (ft)	WIDTH (ft)	DEPTH (ft)	VOLUME (cu.ft)	VOLUME (cu.yd)
24.525	320.000	2689.167	10.000	0.860533E+07	318716.
24.646	600.000	2222.387	10.000	0.133343E+08	493864.
24.752	525.000	1676.369	10.000	0.880094E+07	325961.
24.845	440.000	1806.278	10.000	0.794763E+07	294356.
24.919	435.000	1999.867	10.000	0.869942E+07	322201.
25.010	475.000	1810.949	10.000	0.860201E+07	318593.
25.099	450.000	1737.096	10.000	0.781693E+07	289516.
25.180	355.000	1726.307	10.000	0.612839E+07	226977.
25.233	395.000	1804.936	10.000	0.712950E+07	264055.
25.326	435.000	1594.829	10.000	0.693751E+07	256945.
25.388	360.000	1686.617	10.000	0.607182E+07	224882.
25.458	335.000	1627.030	10.000	0.545055E+07	201872.
25.519	305.000	1520.822	10.000	0.463851E+07	171797.
25.580	310.000	1467.167	10.000	0.454822E+07	168452.
25.644	305.000	1535.381	10.000	0.468291E+07	173441.
25.699	285.000	1603.054	10.000	0.456870E+07	169211.
25.750	325.000	1792.985	10.000	0.582720E+07	215822.
25.843	385.000	1783.244	10.000	0.686549E+07	254277.
25.919	525.000	1944.003	10.000	0.102060E+08	378001.
26.044	572.500	2242.825	10.000	0.128402E+08	475562.
26.137	457.500	2385.207	10.000	0.109123E+08	404160.
26.239	460.000	2077.762	10.000	0.955771E+07	353989.
26.335	497.500	1888.652	10.000	0.939604E+07	348002.
26.430	507.500	1747.049	10.000	0.886627E+07	328380.
26.529	510.000	1623.159	10.000	0.827811E+07	306597.
26.623	440.000	1656.025	10.000	0.728651E+07	269871.
26.695	400.000	1798.161	10.000	0.719264E+07	266394.
26.775	395.000	1874.343	10.000	0.740366E+07	274209.
26.845	400.000	1667.804	10.000	0.667122E+07	247082.
26.921	415.000	1287.253	10.000	0.534210E+07	197856.
27.008	460.000	1201.384	10.000	0.552637E+07	204680.
27.106	425.000	1238.086	10.000	0.526187E+07	194884.
27.169	315.000	1314.468	10.000	0.414058E+07	153355.
27.226	255.000	1552.751	10.000	0.395952E+07	146649.
27.265	242.500	1657.418	10.000	0.401924E+07	148861.
27.320	257.500	1659.824	10.000	0.427405E+07	158298.
27.366	255.000	1751.725	10.000	0.446690E+07	165441.
27.417	360.000	1463.567	10.000	0.526884E+07	195142.
27.502	500.000	1475.065	10.000	0.737533E+07	273160.
27.604	510.000	1470.388	10.000	0.749898E+07	277740.
27.693	510.000	1804.981	10.000	0.920540E+07	340941.
27.797	580.000	1879.706	10.000	0.109023E+08	403789.
27.913	595.000	1554.145	10.000	0.924716E+07	342488.
28.023	470.000	1573.843	10.000	0.739706E+07	273965.
28.091	355.000	2173.577	10.000	0.771620E+07	285785.
28.157	395.000	2009.319	10.000	0.793681E+07	293956.

28.241	445.000	1804.568	10.000	0.803033E+07	297420.
28.326	395.000	1703.259	10.000	0.672787E+07	249180.
28.390	360.000	1663.106	10.000	0.598718E+07	221747.
28.462	435.000	1578.256	10.000	0.686541E+07	254275.
28.555	515.000	1346.794	10.000	0.693599E+07	256888.
28.657	515.000	1737.090	10.000	0.894601E+07	331334.
28.750	500.000	1917.499	10.000	0.958749E+07	355092.
28.847	485.000	1787.714	10.000	0.867041E+07	321126.
28.934	435.000	1391.574	10.000	0.605335E+07	224198.
29.012	502.500	1033.697	10.000	0.519433E+07	192383.
29.130	650.000	959.732	10.000	0.623826E+07	231047.
29.258	597.500	836.038	10.000	0.499533E+07	185012.
29.351	340.000	909.138	10.000	0.309107E+07	114484.
29.387	375.000	1012.744	10.000	0.379779E+07	140659.
29.493	400.000	991.380	10.000	0.396552E+07	146871.
29.538	285.000	1015.005	10.000	0.289276E+07	107139.
29.601	330.000	1245.267	10.000	0.410938E+07	152199.
29.663	281.500	1784.369	10.000	0.502300E+07	186037.
29.710	180.000	1131.982	10.000	0.203757E+07	75465.5
29.720	163.500	1969.665	10.000	0.322040E+07	119274.
29.770	300.000	1037.889	10.000	0.311367E+07	115321.
29.850	852.000	898.384	10.000	0.765423E+07	283490.
30.100	920.500	1165.853	10.000	0.107317E+08	397470.
30.200	479.000	1162.343	10.000	0.556762E+07	206208.
30.280	567.000	966.672	10.000	0.548103E+07	203001.
30.420	636.500	1035.581	10.000	0.659147E+07	244129.
30.520	628.000	1073.555	10.000	0.674193E+07	249701.
30.650	591.000	928.150	10.000	0.548537E+07	203162.
30.750	527.500	931.566	10.000	0.491401E+07	182000.
30.850	555.000	949.155	10.000	0.526781E+07	195104.
30.960	517.500	971.043	10.000	0.502515E+07	186117.
31.050	480.500	1045.289	10.000	0.502261E+07	186023.
31.140	314.500	1087.353	10.000	0.341973E+07	126657.
31.170	297.000	1066.161	10.000	0.316650E+07	117278.
31.250	453.000	1061.828	10.000	0.481008E+07	178151.
31.340	533.000	963.034	10.000	0.513297E+07	190110.
31.450	538.000	1054.503	10.000	0.567323E+07	210120.
31.540	468.500	1031.292	10.000	0.483160E+07	178948.
31.630	550.000	987.760	10.000	0.543268E+07	201210.
31.750	504.000	995.944	10.000	0.501956E+07	185909.
31.820	302.000	802.235	10.000	0.242275E+07	89731.5
31.870	225.500	629.005	10.000	0.141841E+07	52533.6
31.910	104.000	591.033	10.000	614675.	22765.7

NO. OF INPUT DATA MESSAGES= 0
END OF SEDIMENT DATA

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$HYD
BEGIN COMPUTATIONS.

$RATING

Downstream Boundary Condition - Rating Curve

Elevation	Stage	Discharge	Elevation	Stage	Discharge
1623.900	1623.900	0.000	1630.700	1630.700	22500.000
1627.420	1627.420	2500.000	1630.980	1630.980	25000.000
1628.310	1628.310	5000.000	1631.080	1631.080	27500.000
1628.750	1628.750	7500.000	1631.180	1631.180	30000.000
1629.100	1629.100	10000.000	1631.350	1631.350	32500.000
1629.500	1629.500	12500.000	1632.000	1632.000	35000.000
1629.800	1629.800	15000.000	1632.350	1632.350	37500.000
1630.150	1630.150	17500.000	1632.900	1632.900	40000.000
1630.480	1630.480	20000.000	1633.150	1633.150	42500.000

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TIME STEP # 1
* A Level output at time step 1 (10.92 hrs)
COMPUTING FROM TIME= 0.0000 DAYS TO TIME= 0.4549 DAYS IN 10 COMPUTATION STEPS

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT # 1
Cave Creek and Apache Wash WMP
ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT

TIME DAYS	ENTRY POINT	INFLOW	SAND OUTFLOW	TRAP EFF
0.45	31.910	0.03		
TOTAL=	24.525	0.03	0.63	-21.47

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TIME STEP # 2
* A Level output at time step 2 (1 hr)

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT # 1
Cave Creek and Apache Wash WMP
ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT

TIME DAYS	ENTRY POINT	INFLOW	SAND OUTFLOW	TRAP EFF
0.50	31.910	0.04		
TOTAL=	24.525	0.04	0.72	-15.66

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==========================================================================================
TIME STEP #        3
*    A  Level output at time step 3 (0.25 hrs)

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME        ENTRY *              SAND            *
    DAYS        POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.51       31.910 *     0.05                     *
   TOTAL=      24.525 *     0.05      0.75    -14.34 *
*****************************************************

==========================================================================================
TIME STEP #        4
*    A  Level output at time step 4 (0.25 hrs)

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME        ENTRY *              SAND            *
    DAYS        POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.52       31.910 *     0.06                     *
   TOTAL=      24.525 *     0.06      0.77    -12.26 *
*****************************************************

==========================================================================================
TIME STEP #        5
*    A  Level output at time step 5 (0.25 hrs)

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME        ENTRY *              SAND            *
    DAYS        POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.53       31.910 *     0.08                     *
   TOTAL=      24.525 *     0.08      0.78     -9.15 *
*****************************************************

==========================================================================================
TIME STEP #        6
*    A  Level output at time step 6 (0.25 hrs)

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME        ENTRY *              SAND            *
    DAYS        POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.54       31.910 *     0.11                     *
   TOTAL=      24.525 *     0.11      0.79     -6.47 *
*****************************************************

==========================================================================================
TIME STEP #        7
*    A  Level output at time step 7 (0.25 hrs)

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME        ENTRY *              SAND            *
    DAYS        POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.55       31.910 *     0.15                     *
   TOTAL=      24.525 *     0.15      0.83     -4.50 *
*****************************************************

==========================================================================================
TIME STEP #        8
*    A  Level output at time step 8 (0.25 hrs)

         *ERROR 15            10009.0   10009.0

         *ERROR 15            10009.0   10009.0

         *ERROR 15            10009.0   10009.0

         *ERROR 15            10009.0   10009.0

         *ERROR 15            10009.0   10009.0

         *ERROR 15            10009.0   10009.0

         *ERROR 15            10009.0   10009.0

         *ERROR 15            10009.0   10009.0

         *ERROR 15            10009.0   10009.0

         *ERROR 15            10009.0   10009.0
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         *ERROR 15            10009.0   10009.0

         *ERROR 15            10009.0   10009.0

         *ERROR 15            10009.0   10009.0

         *ERROR 15            10009.0   10009.0

         *ERROR 15            10009.0   10009.0

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
**************************************************
    TIME       ENTRY *             SAND            *
    DAYS       POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.56      31.910 *      0.26                   *
   TOTAL=     24.525 *      0.26      0.89     -2.43 *
**************************************************

==========================================================================================
TIME STEP #       9
*    A  Level output at time step 9 (0.25 hrs)

         *ERROR 15            10009.0   10009.0

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
**************************************************
    TIME       ENTRY *             SAND            *
    DAYS       POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.57      31.910 *      0.50                   *
   TOTAL=     24.525 *      0.50      1.06     -1.10 *
**************************************************

==========================================================================================
TIME STEP #      10
*    A  Level output at time step 10 (0.25 hrs)

         *ERROR 15            10009.0   10009.0

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
**************************************************
    TIME       ENTRY *             SAND            *
    DAYS       POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.58      31.910 *      0.93                   *
   TOTAL=     24.525 *      0.93      1.34     -0.44 *
**************************************************

==========================================================================================
TIME STEP #      11
*    A  Level output at time step 11 (0.25 hrs)

         *ERROR 15            10009.0   10009.0

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
**************************************************
    TIME       ENTRY *             SAND            *
    DAYS       POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.59      31.910 *      1.61                   *
   TOTAL=     24.525 *      1.61      1.60      0.00 *
**************************************************

==========================================================================================
TIME STEP #      12
*    A  Level output at time step 12 (0.25 hrs)

         *ERROR 15            10009.0   10009.0

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
**************************************************
    TIME       ENTRY *             SAND            *
    DAYS       POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.60      31.910 *      2.33                   *
   TOTAL=     24.525 *      2.33      1.87      0.20 *
**************************************************

==========================================================================================
TIME STEP #      13
*    A  Level output at time step 13 (0.25 hrs)

         *ERROR 15            10009.0   10009.0

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
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    TIME        ENTRY *              SAND              *
    DAYS        POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.61       31.910 *      3.03                     *
   TOTAL=      24.525 *      3.03      2.16      0.29 *
*****************************************************

==========================================================================
TIME STEP #      14
*    A  Level output at time step 14 (0.25 hrs)

         *ERROR 15            10009.0   10009.0

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME        ENTRY *              SAND              *
    DAYS        POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.62       31.910 *      3.67                     *
   TOTAL=      24.525 *      3.67      2.46      0.33 *
*****************************************************

==========================================================================
TIME STEP #      15
*    A  Level output at time step 15 (0.25 hrs)

         *ERROR 15            10009.0   10009.0

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME        ENTRY *              SAND              *
    DAYS        POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.63       31.910 *      4.20                     *
   TOTAL=      24.525 *      4.20      2.79      0.34 *
*****************************************************

==========================================================================
TIME STEP #      16
*    A  Level output at time step 16 (0.75 hrs)

         *ERROR 15            10009.0   10009.0

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME        ENTRY *              SAND              *
    DAYS        POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.66       31.910 *      5.24                     *
   TOTAL=      24.525 *      5.24      3.42      0.35 *
*****************************************************

==========================================================================
TIME STEP #      17
*    A  Level output at time step 17 (1 hr)

         *ERROR 15            10009.0   10009.0

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME        ENTRY *              SAND              *
    DAYS        POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.70       31.910 *      6.24                     *
   TOTAL=      24.525 *      6.24      3.53      0.43 *
*****************************************************

==========================================================================
TIME STEP #      18
*    A  Level output at time step 18 (1 hr)

         *ERROR 15            10009.0   10009.0

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME        ENTRY *              SAND              *
    DAYS        POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.75       31.910 *      6.95                     *
   TOTAL=      24.525 *      6.95      3.54      0.49 *
*****************************************************

==========================================================================
TIME STEP #      19
*    A  Level output at time step 19 (2 hrs)

         *ERROR 15            10009.0   10009.0

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
```

```
*****************************************************
    TIME       ENTRY *              SAND             *
    DAYS       POINT *     INFLOW   OUTFLOW  TRAP EFF *
    0.83      31.910 *      7.53                    *
   TOTAL=     24.525 *      7.53      3.54      0.53 *
*****************************************************
```

```
==========================================================================================
TIME STEP #      20
*    A  Level output at time step 20 (10 hrs)

         *ERROR 15            10009.0   10009.0

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME       ENTRY *              SAND             *
    DAYS       POINT *     INFLOW   OUTFLOW  TRAP EFF *
    1.00      31.910 *      7.79                    *
   TOTAL=     24.525 *      7.79      3.54      0.55 *
*****************************************************
```

```
==========================================================================================
TIME STEP #      21
*    B  Level output at time step 21 (0.0451)

         *ERROR 15            10009.0   10009.0

- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
Cave Creek and Apache Wash WMP
       ACCUMULATED TIME (yrs)....       0.003
       FLOW DURATION (days)......       0.002

UPSTREAM BOUNDARY CONDITIONS
-----------------------------------------------------------------------
Stream Segment # 1      |   DISCHARGE   | SEDIMENT LOAD | TEMPERATURE
Section No.     31.910  |     (cfs)     |  (tons/day)   |   (deg F)
-----------------------------------------------------------------------
                INFLOW  |       161.00  |       244.31  |       68.00

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME       ENTRY *              SAND             *
    DAYS       POINT *     INFLOW   OUTFLOW  TRAP EFF *
    1.00      31.910 *      7.79                    *
   TOTAL=     24.525 *      7.79      3.54      0.55 *
*****************************************************
```

TABLE SB-1: SEDIMENT LOAD PASSING THE BOUNDARIES OF STREAM SEGMENT # 1

SEDIMENT INFLOW at the Upstream Boundary:

GRAIN SIZE	LOAD (tons/day)	GRAIN SIZE	LOAD (tons/day)
VERY FINE SAND....	3.47	MEDIUM GRAVEL.....	19.23
FINE SAND.....	6.84	COARSE GRAVEL.....	0.20
MEDIUM SAND.....	21.47	VERY COARSE GRAVEL	0.00
COARSE SAND.....	56.17	SMALL COBBLES.....	0.00
VERY COARSE SAND..	56.78	LARGE COBBLES.....	0.00
VERY FINE GRAVEL..	44.02	SMALL BOULDERS....	0.00
FINE GRAVEL.....	36.13	MEDIUM BOULDERS...	0.00
		TOTAL =	244.31

SEDIMENT OUTFLOW from the Downstream Boundary

GRAIN SIZE	LOAD (tons/day)	GRAIN SIZE	LOAD (tons/day)
VERY FINE SAND....	0.00	MEDIUM GRAVEL.....	0.00
FINE SAND.....	0.00	COARSE GRAVEL.....	0.00
MEDIUM SAND.....	0.00	VERY COARSE GRAVEL	0.00
COARSE SAND.....	0.00	SMALL COBBLES.....	0.00
VERY COARSE SAND..	0.00	LARGE COBBLES.....	0.00
VERY FINE GRAVEL..	0.00	SMALL BOULDERS....	0.00
FINE GRAVEL.....	0.00	MEDIUM BOULDERS...	0.00
		TOTAL =	0.00

TABLE SB-2: STATUS OF THE BED PROFILE AT TIME = 1.002 DAYS

SECTION NUMBER	BED CHANGE (ft)	WS ELEV (ft)	THALWEG (ft)	Q (cfs)	TRANSPORT RATE (tons/day) SAND
31.910	-1.46	1953.32	1951.84	161.	550.
31.870	-2.20	1952.66	1951.40	161.	342.
31.820	-1.98	1951.82	1950.72	161.	1598.
31.750	-0.38	1947.72	1946.12	161.	2257.
31.630	1.17	1943.41	1941.67	161.	1222.
31.540	-0.62	1940.07	1939.48	161.	2339.
31.450	0.86	1936.11	1933.96	161.	893.
31.340	-0.61	1931.81	1930.89	161.	1857.
31.250	-0.61	1926.91	1924.79	161.	1734.
31.170	1.42	1923.67	1922.22	161.	1264.
31.140	1.07	1920.78	1918.87	161.	692.
31.050	-0.56	1917.80	1916.34	161.	1496.
30.960	-0.05	1913.38	1911.95	161.	1696.

30.850	-0.63	1908.53	1906.87	161.	1292.
30.750	0.48	1903.66	1901.48	161.	621.
30.650	-0.29	1898.80	1896.91	161.	1319.
30.520	-0.66	1893.89	1892.84	161.	3866.
30.420	-0.42	1887.65	1885.38	161.	5115.
30.280	1.04	1880.11	1878.14	161.	1621.
30.200	-2.02	1874.78	1873.18	161.	2403.
30.100	0.45	1869.52	1867.85	161.	2630.
29.850	0.98	1859.73	1858.68	161.	1724.
29.770	-2.96	1856.29	1854.24	161.	2096.
29.720	-1.16	1856.09	1853.84	161.	1156.
29.710	0.75	1855.35	1854.65	161.	1333.
29.663	-0.92	1852.30	1849.98	161.	1686.
29.601	-0.20	1851.12	1849.70	161.	1735.
29.538	-0.53	1848.01	1844.97	161.	1816.
29.493	1.54	1846.83	1844.94	161.	956.
29.387	0.46	1839.96	1839.26	161.	1320.
29.351	-0.90	1836.93	1835.00	161.	3172.
29.258	0.78	1831.58	1829.48	161.	1196.
29.130	-1.79	1821.87	1819.21	161.	1230.
29.012	-0.71	1818.82	1817.99	161.	3171.
28.934	-0.69	1816.56	1814.81	161.	4109.
28.847	0.91	1813.54	1812.81	161.	2629.
28.750	-1.21	1808.34	1807.09	161.	5000.
28.657	2.56	1804.16	1803.06	161.	2095.
28.555	-1.69	1799.09	1797.71	161.	2600.
28.462	2.05	1797.74	1796.85	161.	920.
28.390	0.51	1794.31	1793.31	161.	1513.
28.326	-1.65	1791.97	1789.65	161.	1684.
28.241	0.03	1790.95	1789.93	161.	2145.
28.157	1.03	1784.91	1783.63	161.	2188.
28.091	-1.95	1780.06	1778.85	161.	3112.
28.023	-0.60	1774.24	1771.90	161.	2750.
27.913	2.94	1768.14	1766.04	161.	1993.
27.797	-2.16	1760.09	1758.44	161.	2015.
27.693	-1.32	1758.24	1754.98	161.	1642.
27.604	0.89	1756.01	1755.09	161.	1743.
27.502	-1.81	1749.30	1746.99	161.	1820.
27.417	0.85	1747.31	1745.65	161.	1985.
27.366	1.18	1744.03	1743.48	161.	2083.
27.320	-3.34	1739.10	1736.96	161.	2446.
27.265	0.89	1738.54	1736.59	161.	332.
27.226	1.33	1737.35	1736.13	161.	1466.
27.169	1.01	1734.39	1733.11	161.	2729.
27.106	1.42	1729.21	1727.12	161.	1914.
27.008	-0.72	1724.44	1722.28	161.	2571.
26.921	0.15	1721.35	1720.35	161.	2028.
26.845	-0.49	1718.01	1716.51	161.	4721.
26.775	0.92	1714.62	1713.62	161.	2274.
26.695	-2.23	1708.67	1707.27	161.	1701.
26.623	1.88	1706.83	1705.78	161.	717.
26.529	-0.50	1703.28	1702.10	161.	2935.
26.430	0.58	1699.43	1698.08	161.	1343.
26.335	-0.16	1697.10	1695.44	161.	3596.
26.239	-0.45	1692.95	1692.35	161.	2303.
26.137	1.41	1689.24	1687.11	161.	752.
26.044	-0.45	1684.88	1683.85	161.	2382.
25.919	-0.38	1679.77	1678.02	161.	3189.
25.843	1.30	1675.80	1674.80	161.	1159.
25.750	-0.36	1673.60	1671.24	161.	1941.
25.699	1.46	1672.21	1670.86	161.	403.
25.644	-0.61	1671.01	1669.19	161.	817.
25.580	-0.08	1670.52	1668.82	161.	420.
25.519	-1.18	1668.95	1667.12	161.	879.
25.458	-1.23	1665.09	1664.27	161.	2795.
25.388	1.22	1659.82	1657.82	161.	1641.
25.326	1.06	1655.92	1654.06	161.	750.
25.233	0.25	1650.48	1647.55	161.	468.
25.180	-0.41	1648.88	1647.29	161.	929.
25.099	-0.72	1646.80	1645.28	161.	1746.
25.010	-0.15	1640.91	1640.05	161.	2047.
24.919	1.38	1638.84	1636.28	161.	88.
24.845	-0.53	1638.80	1634.77	161.	1.
24.752	-0.18	1638.80	1629.02	161.	0.
24.646	0.37	1638.80	1626.37	161.	0.
24.525	-0.82	1638.80	1623.08	161.	0.

$VOL

STREAM SEGMENT # 1: Cave Creek and Apache Wash WMP

SUMMARY TABLE: MASS AND VOLUME OF SEDIMENT

SECTION	SEDIMENT THROUGH SECTION (tons)				SEDIMENT DEPOSITED IN REACH in cu. yds				
	TOTAL	SAND	SILT	CLAY	TOTAL	CUMULATIVE	SAND	SILT	CLAY
INFLOW	15788.	15788.	0.	0.	12575.				
31.910	18131.	18131.	0.	0.	-1867.	-1867.	-1867.	0.	0.
31.870	27243.	27243.	0.	0.	-7257.	-9124.	-7257.	0.	0.
31.820	38889.	38889.	0.	0.	-9276.	-18401.	-9276.	0.	0.
31.750	38831.	38831.	0.	0.	47.	-18354.	47.	0.	0.
31.630	27527.	27527.	0.	0.	9003.	-9351.	9003.	0.	0.
31.540	33395.	33395.	0.	0.	-4674.	-14024.	-4674.	0.	0.

31.450	21589.	21589.	0.	0.	9403.	-4621.	9403.	0.	0.
31.340	29795.	29795.	0.	0.	-6536.	-11157.	-6536.	0.	0.
31.250	33231.	33231.	0.	0.	-2737.	-13894.	-2737.	0.	0.
31.170	25009.	25009.	0.	0.	6549.	-7345.	6549.	0.	0.
31.140	18165.	18165.	0.	0.	5451.	-1894.	5451.	0.	0.
31.050	25934.	25934.	0.	0.	-6188.	-8082.	-6188.	0.	0.
30.960	24251.	24251.	0.	0.	1341.	-6741.	1341.	0.	0.
30.850	30564.	30564.	0.	0.	-5029.	-11770.	-5029.	0.	0.
30.750	25601.	25601.	0.	0.	3953.	-7817.	3953.	0.	0.
30.650	30540.	30540.	0.	0.	-3934.	-11750.	-3934.	0.	0.
30.520	41970.	41970.	0.	0.	-9104.	-20855.	-9104.	0.	0.
30.420	41639.	41639.	0.	0.	264.	-20590.	264.	0.	0.
30.280	36954.	36954.	0.	0.	3732.	-16859.	3732.	0.	0.
30.200	57390.	57390.	0.	0.	-16278.	-33137.	-16278.	0.	0.
30.100	39806.	39806.	0.	0.	14006.	-19131.	14006.	0.	0.
29.850	31140.	31140.	0.	0.	6902.	-12228.	6902.	0.	0.
29.770	43174.	43174.	0.	0.	-9585.	-21813.	-9585.	0.	0.
29.720	45123.	45123.	0.	0.	-1552.	-23365.	-1552.	0.	0.
29.710	45210.	45210.	0.	0.	-70.	-23435.	-70.	0.	0.
29.663	52524.	52524.	0.	0.	-5826.	-29261.	-5826.	0.	0.
29.601	52397.	52397.	0.	0.	101.	-29159.	101.	0.	0.
29.538	51228.	51228.	0.	0.	931.	-28228.	931.	0.	0.
29.493	28464.	28464.	0.	0.	18132.	-10097.	18132.	0.	0.
29.387	22274.	22274.	0.	0.	4930.	-5167.	4930.	0.	0.
29.351	25650.	25650.	0.	0.	-2689.	-7856.	-2689.	0.	0.
29.258	25039.	25039.	0.	0.	487.	-7369.	487.	0.	0.
29.130	43106.	43106.	0.	0.	-14391.	-21759.	-14391.	0.	0.
29.012	49480.	49480.	0.	0.	-5077.	-26836.	-5077.	0.	0.
28.934	54797.	54797.	0.	0.	-4235.	-31071.	-4235.	0.	0.
28.847	46371.	46371.	0.	0.	6711.	-24360.	6711.	0.	0.
28.750	55364.	55364.	0.	0.	-7163.	-31523.	-7163.	0.	0.
28.657	39323.	39323.	0.	0.	12777.	-18746.	12777.	0.	0.
28.555	51865.	51865.	0.	0.	-9990.	-28735.	-9990.	0.	0.
28.462	38563.	38563.	0.	0.	10594.	-18141.	10594.	0.	0.
28.390	32783.	32783.	0.	0.	4604.	-13537.	4604.	0.	0.
28.326	48715.	48715.	0.	0.	-12690.	-26227.	-12690.	0.	0.
28.241	44707.	44707.	0.	0.	3192.	-23035.	3192.	0.	0.
28.157	35003.	35003.	0.	0.	7730.	-15305.	7730.	0.	0.
28.091	41785.	41785.	0.	0.	-5402.	-20707.	-5402.	0.	0.
28.023	44277.	44277.	0.	0.	-1984.	-22691.	-1984.	0.	0.
27.913	32314.	32314.	0.	0.	9528.	-13164.	9528.	0.	0.
27.797	47796.	47796.	0.	0.	-12331.	-25494.	-12331.	0.	0.
27.693	55371.	55371.	0.	0.	-6034.	-31528.	-6034.	0.	0.
27.604	48364.	48364.	0.	0.	5581.	-25947.	5581.	0.	0.
27.502	64073.	64073.	0.	0.	-12513.	-38460.	-12513.	0.	0.
27.417	55593.	55593.	0.	0.	6755.	-31705.	6755.	0.	0.
27.366	40618.	40618.	0.	0.	11927.	-19777.	11927.	0.	0.
27.320	55321.	55321.	0.	0.	-11711.	-31488.	-11711.	0.	0.
27.265	62470.	62470.	0.	0.	-5694.	-37182.	-5694.	0.	0.
27.226	48801.	48801.	0.	0.	10887.	-26295.	10887.	0.	0.
27.169	37709.	37709.	0.	0.	8834.	-17461.	8834.	0.	0.
27.106	30827.	30827.	0.	0.	5482.	-11979.	5482.	0.	0.
27.008	36619.	36619.	0.	0.	-4614.	-16593.	-4614.	0.	0.
26.921	34477.	34477.	0.	0.	1706.	-14886.	1706.	0.	0.
26.845	37220.	37220.	0.	0.	-2185.	-17071.	-2185.	0.	0.
26.775	30997.	30997.	0.	0.	4956.	-12115.	4956.	0.	0.
26.695	44749.	44749.	0.	0.	-10953.	-23068.	-10953.	0.	0.
26.623	30904.	30904.	0.	0.	11028.	-12040.	11028.	0.	0.
26.529	36409.	36409.	0.	0.	-4384.	-16425.	-4384.	0.	0.
26.430	28363.	28363.	0.	0.	6408.	-10016.	6408.	0.	0.
26.335	29120.	29120.	0.	0.	-603.	-10619.	-603.	0.	0.
26.239	29663.	29663.	0.	0.	-432.	-11052.	-432.	0.	0.
26.137	12924.	12924.	0.	0.	13333.	2281.	13333.	0.	0.
26.044	16935.	16935.	0.	0.	-3195.	-914.	-3195.	0.	0.
25.919	18927.	18927.	0.	0.	-1587.	-2501.	-1587.	0.	0.
25.843	13122.	13122.	0.	0.	4624.	2123.	4624.	0.	0.
25.750	15152.	15152.	0.	0.	-1617.	506.	-1617.	0.	0.
25.699	10615.	10615.	0.	0.	3614.	4120.	3614.	0.	0.
25.644	19243.	19243.	0.	0.	-6872.	-2752.	-6872.	0.	0.
25.580	15969.	15969.	0.	0.	2607.	-145.	2607.	0.	0.
25.519	15228.	15228.	0.	0.	591.	446.	591.	0.	0.
25.458	15700.	15700.	0.	0.	-377.	69.	-377.	0.	0.
25.388	15856.	15856.	0.	0.	-124.	-54.	-124.	0.	0.
25.326	11384.	11384.	0.	0.	3562.	3508.	3562.	0.	0.
25.233	9728.	9728.	0.	0.	1319.	4826.	1319.	0.	0.
25.180	16392.	16392.	0.	0.	-5308.	-481.	-5308.	0.	0.
25.099	21639.	21639.	0.	0.	-4179.	-4661.	-4179.	0.	0.
25.010	20800.	20800.	0.	0.	669.	-3992.	669.	0.	0.
24.919	9670.	9670.	0.	0.	8865.	4873.	8865.	0.	0.
24.845	14576.	14576.	0.	0.	-3908.	965.	-3908.	0.	0.
24.752	14146.	14146.	0.	0.	343.	1308.	343.	0.	0.
24.646	7869.	7869.	0.	0.	4999.	6307.	4999.	0.	0.
24.525	7176.	7176.	0.	0.	552.	6859.	552.	0.	0.

```
$$END

      0   DATA ERRORS DETECTED.

TOTAL NO. OF TIME STEPS READ =        21
TOTAL NO. OF WS PROFILES =            30
ITERATIONS IN EXNER EQ =           26700

COMPUTATIONS COMPLETED
RUN TIME =  0 HOURS,  0 MINUTES &  5.00 SECONDS
```

APPENDIX H.2

Cave Creek Overbank Model, 100-year Flood, Existing Condition

```
T1      Cave Creek and Apache Wash WMP
T2      by Stantec:  Proj. No. 82000077                 File: CC-E100F.DAT
T3      for Flood Control District of Maricopa County  Date: 07-26-99 srg

NC  0.07     0.06   0.044     0.1     0.3
X124.525       48  9860.5 10093.3
X3                      9865  1628.1   10009  1628.1
GR  1640     8760    1630    8900    1626    8980    1624    9090  1623.9    9091
GR1624.8     9300    1626    9740    1628    9750  1629.5    9810  1629.3  9860.5
GR  1625   9875.7    1624  9888.6  1624.6  9950.3  1623.9   10000  1628.1   10009
GR1629.5  10093.3  1629.5 10189.4  1628.4 10203.4  1627.7   10276    1627 10289.6
GR1626.2  10343.7  1626.5 10386.8    1626 10487.2  1624.3 10496.5  1626.2   10571
GR  1626  10584.3  1625.6 10629.9  1626.5 10638.3  1626.8   10653  1626.7 10702.1
GR  1627  10722.5  1626.5   10773  1630.2 10821.2  1630.2 10962.7  1630.8 11060.9
GR1630.5  11152.9  1631.1 11227.9  1632.2 11276.1  1632.1 11287.4  1631.8 11327.4
GR1631.3  11358.7    1632 11397.3  1632.9 11424.4  1633.4 11439.7  1634.4 11448.3
GR1636.7    11484    1638 11605.1  1639.6 11693.3
HD24.525     10.0

X124.646       52    9580  9745.6     760     620     640
X3                     9430    1640   11000    1640
GR  1636     8810    1635    8850  1634.5    8900    1632    8960    1630    9160
GR  1630     9330    1631    9430    1630    9535  1630.5    9580    1630    9620
GR  1627     9630    1626    9690    1630    9700  1630.5  9745.6  1629.1  9767.3
GR1629.8   9787.4  1633.2  9795.5  1634.6  9817.1  1632.7  9845.8  1631.3  9859.1
GR1631.4   9876.2  1633.8  9889.7  1632.8  9930.1  1632.6  9963.4  1628.2   10000
GR1627.2  10034.8  1628.3 10043.8  1629.3 10084.6  1630.5 10091.3    1634 10154.9
GR1634.2  10243.2  1634.5   10271  1633.7   10357  1634.1 10370.5  1634.1 10385.2
GR1633.5  10413.3  1631.8 10425.9  1631.7 10453.6    1634 10467.1  1634.7 10488.2
GR1634.6  10534.6  1634.9 10602.2  1634.8 10665.2  1633.7 10680.4  1634.8 10734.7
GR1635.4  10757.4  1634.9 10836.8  1634.6 10852.8  1634.1 10871.6  1635.1 10916.3
GR1636.1  10970.3  1636.5 11010.9
HD24.646     10.0

X124.752       80  8835.7    8997     850     430     560
GR1642.2     8690    1641  8727.7  1632.4  8789.8  1638.2  8835.7  1637.5  8868.3
GR1632.4   8884.2  1629.8    8921  1629.3  8925.4  1629.2  8941.5  1632.4    8967
GR1638.3     8997  1637.9  9047.9  1633.4  9064.6  1633.2  9070.6  1634.2  9099.4
GR1636.1   9110.6  1632.5    9205  1633.1  9223.2  1633.6  9233.2  1638.1  9246.8
GR1638.6   9253.7  1638.4  9282.6  1637.9  9358.8  1634.7  9374.5  1634.3  9385.2
GR1633.5   9393.9  1633.4  9402.7  1637.7  9420.2  1638.2  9431.3  1638.4  9450.7
GR1638.3     9459  1638.1  9464.9  1635.5  9480.8  1636.3  9493.4  1637.7  9503.5
GR1638.8   9518.2  1637.9  9531.6  1635.9  9543.1  1635.4  9566.7  1634.8  9589.5
GR1634.9     9594  1636.7  9600.3  1637.5  9625.9  1636.3  9646.3  1637.7  9667.4
GR1634.1   9686.1  1633.1  9690.2  1633.3  9707.1  1633.6  9738.1  1638.5    9747
GR1639.4   9764.4  1639.6  9774.5  1639.6  9783.1  1639.1  9797.1  1637.1  9807.5
GR1635.1   9813.6  1637.9  9913.6  1638.8  9930.4  1638.4  9944.8  1637.5  9953.9
GR1635.1     9962  1633.7  9981.5  1633.5    9990  1633.5   10000  1634.2 10010.2
GR1635.9    10019  1638.7 10029.9  1639.8 10039.1    1640   10045  1640.2 10062.5
GR1640.2  10071.4  1639.3 10090.9  1638.2 10098.7  1638.1 10103.6    1638 10127.7
GR1635.2  10134.5  1636.6 10148.5    1638 10163.8  1638.4 10181.1  1642.1   10192
HD24.752     10.0

X124.845       49  8674.4  8792.8     560     490     490
GR1648.4   8242.8  1644.3  8353.1  1646.2  8493.6  1644.1  8556.4  1646.7  8674.4
GR1638.4   8697.6    1636  8702.9  1635.6  8721.1  1635.3  8773.9  1641.9  8792.8
GR1641.6   8826.7  1640.6    8873  1639.9  8878.1  1639.9  8893.9  1640.4  8914.9
GR1642.3   8921.4  1642.2  8981.3  1642.9  9007.5  1638.5  9040.8  1638.6  9043.4
GR1640.6   9066.8  1638.3  9103.1  1641.8    9129  1641.6  9191.6  1641.7  9245.9
GR1641.4   9249.8  1638.6  9272.1  1638.6  9279.6  1640.6  9296.3  1641.7  9345.5
GR1641.5   9388.9  1637.5  9406.6  1641.8  9448.5  1641.7  9507.2  1642.4  9526.6
GR1641.8   9556.3  1642.5  9630.9  1641.4  9667.2  1641.3  9689.7    1640  9710.8
GR1637.8   9730.6  1637.9  9749.6  1641.2  9781.1  1641.6  9840.6  1643.2  9961.4
GR1642.9   9967.8  1639.5  9988.1  1640.3 10038.9  1647.4   10067
HD24.845     10.0

X124.919       48  8494.5  8709.6     460     350     390
GR1652.8   8046.2  1649.7  8068.4  1646.8  8168.9  1647.1  8195.5    1648  8249.6
GR  1649   8266.1    1648  8326.9  1648.4  8422.4  1649.3  8461.9  1650.4  8494.5
GR1646.5   8588.8  1635.3    8604  1634.9  8637.8  1637.6  8647.2  1638.6  8695.7
GR1643.6   8709.6  1643.3  8729.6  1642.7  8768.3  1639.8  8785.3  1639.4  8813.8
GR1639.8   8836.9  1642.9  8858.9  1643.3  9045.7  1643.4  9126.5  1641.2  9133.6
GR1640.2   9152.9  1640.4  9184.9  1643.3  9199.9    1644  9243.9  1644.2  9302.9
GR1643.1   9335.8  1641.3  9351.3  1644.1  9379.6  1644.6  9538.9  1643.5  9559.5
GR1641.9   9583.1  1641.4  9599.3  1643.2  9611.3  1644.5  9654.2  1643.9  9688.9
GR1644.7   9795.8  1643.8  9882.5  1644.5  9927.7  1642.2  9936.8  1639.5  9971.5
GR1639.5    10000  1651.2 10008.5  1653.6 10153.9
HD24.919     10.0

X1 25.01       42  8823.5  9248.1     410     550     480
GR1653.4   8397.8  1653.2  8557.9  1650.2    8664  1645.5  8678.1  1645.1  8694.6
GR1643.6   8698.5  1642.1  8743.7  1643.4  8747.6  1644.1    8759    1645  8766.4
GR  1646   8823.5  1643.6  8878.3  1641.3  8880.6  1640.2  8929.6  1641.7  9059.1
GR  1641   9087.8  1641.2  9124.3  1642.7  9143.5  1642.5  9180.8  1647.3  9248.1
GR1646.9   9294.1  1646.9  9355.3    1644  9364.6  1644.4  9372.7  1646.5  9382.7
GR1647.4   9445.1  1648.3  9476.2  1649.3  9555.9  1650.4  9687.1  1647.5  9734.1
GR1647.4   9776.5  1646.5  9818.2    1644  9823.9  1645.2  9848.6    1648    9869
GR1646.9   9935.5  1644.5    9975  1643.9   10000  1642.5 10006.6  1642.7 10019.8
GR1652.2  10037.7  1654.3 10149.5
HD 25.01     10.0

X125.099       65  9327.5  9490.1     430     530     470
GR  1658   8593.8    1655    8775    1655    8880  1654.8    8914  1648.2  8923.1
GR1647.6   8947.9  1649.3    8959  1650.6    8988  1651.2    9029  1650.7  9064.3
GR1651.2   9091.8  1651.5  9112.7  1650.7  9150.2    1649  9209.7    1649  9215.4
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GR1651.3  9234.1  1652.4  9259.9  1652.5  9283.7  1652.5  9327.5    1652    9346
GR1646.9  9367.6  1646.2  9387.8    1646  9395.9    1646  9409.8  1649.2    9416
GR1650.8  9430.5    1652  9458.6  1652.6  9490.1  1651.6  9515.2    1650  9558.3
GR1648.1  9571.1  1648.2  9578.8  1650.6  9591.2  1652.3    9608  1653.1  9662.4
GR1652.4  9735.4  1650.6  9742.7  1650.3  9748.7  1650.4  9757.9  1653.2  9838.9
GR1652.5  9868.9  1651.7  9904.9  1651.4  9919.5  1651.3  9941.9  1648.4  9951.4
GR1648.9  9960.9  1649.4  9982.9  1648.2   10000  1648.9 10015.4  1651.3 10024.3
GR  1653   10032  1653.9 10048.6  1654.4 10063.9    1654 10087.5  1653.5 10094.2
GR1650.9 10100.6  1651.2   10104  1652.8 10111.3  1654.1 10146.3  1654.9   10167
GR  1655 10211.1  1655.4 10254.6  1653.4 10292.9  1654.8 10301.5  1659.9 10341.2
HD25.099    10.0

X1 25.18      56  9213.5  9413.7     500     430     430
GR1660.4  8859.3  1660.5  8905.9  1658.4  8986.1    1658    9017    1652  9047.1
GR  1652  9057.1  1653.4  9065.1  1654.4  9144.5  1652.9  9161.8    1652  9200.6
GR1654.5  9213.5  1654.1  9262.6  1651.1  9306.6  1647.8  9319.4  1647.7  9353.2
GR1653.4  9371.6  1653.8    9387  1655.1  9413.7  1656.2  9490.2  1654.9  9515.2
GR1655.5  9544.3  1655.7  9581.6  1654.1    9597  1655.9  9633.5  1654.6  9660.4
GR1655.1  9698.9  1651.5  9707.3  1651.7  9717.8  1654.4  9725.7  1653.5  9749.7
GR  1653  9785.9  1652.1  9814.3  1655.3  9830.6  1655.4  9894.7  1654.3  9911.5
GR1656.2  9924.2  1656.1  9944.4  1654.3  9955.6  1654.3  9969.6    1656  9978.6
GR1654.8  9986.8  1650.4   10000  1650.8 10046.2  1649.6 10072.4  1649.9 10076.1
GR1651.1 10097.1  1654.4   10114  1654.6 10135.8  1658.1 10157.7    1658 10214.9
GR1656.9 10240.1  1658.1   10265  1657.3 10356.6  1656.5 10390.4  1657.3 10430.2
GR1661.8 10537.3
HD 25.18    10.0

X125.233      60  9274.5  9383.8     390     180     280
GR1664.2  8536.3  1663.9  8595.2  1660.9  8692.2  1658.6  8798.9  1658.1  8854.9
GR1656.2  8987.4  1658.8  9021.1  1659.7  9057.1  1660.4  9131.9  1658.7  9192.7
GR1659.6  9228.6  1659.1  9274.5    1653  9289.5  1647.3  9290.8  1647.3  9296.1
GR1648.9  9301.1  1650.3  9327.4  1655.3  9341.1    1656  9383.8  1656.1  9418.4
GR1655.7  9471.9  1657.3  9484.7    1657    9548  1657.7    9570  1657.2  9608.2
GR1656.2  9622.6  1656.4  9634.3  1658.2  9647.4  1657.4  9707.8  1654.8  9728.7
GR1655.8  9748.3  1656.7  9778.2  1657.5  9803.8  1657.4    9881  1657.1  9908.4
GR1654.4  9924.8  1656.1  9935.3  1656.7  9956.8  1653.9  9994.4    1652   10000
GR  1652 10034.7  1657.4 10047.9  1656.8 10061.7  1655.4   10070  1656.6 10089.5
GR  1654 10118.4    1657 10139.2  1656.5 10155.7  1652.5 10163.6  1652.6 10169.9
GR1656.7 10179.7  1657.4 10221.7  1653.7 10235.2  1655.4 10247.3  1655.8 10283.7
GR1658.2 10303.2  1658.6 10429.1  1659.1 10448.8  1661.5 10459.3  1663.9 10475.2
HD25.233    10.0

X125.326      41  9335.1  9497.8     490     480     510
GR1666.5  9070.8  1665.5  9175.1  1661.1  9242.1  1661.4  9294.1  1661.5  9335.1
GR1657.2  9365.7  1653.2  9380.4    1653  9390.5  1657.2  9416.8    1657  9450.5
GR  1659  9472.3  1661.1  9497.8  1660.8  9532.7  1660.1  9592.2  1662.9  9612.1
GR1663.6  9698.9  1663.8    9758  1662.5  9788.6  1661.6  9855.4  1662.5  9861.2
GR1662.2  9900.1  1659.7    9912  1658.9  9952.9  1659.2  9988.9  1656.4   10000
GR1656.5 10023.6  1660.3 10032.1    1661 10151.4  1660.9 10178.5  1657.8 10187.9
GR1657.7 10204.3  1661.5 10221.8    1659 10242.5  1658.9 10267.3  1656.4 10281.7
GR1661.5 10296.6  1660.3 10348.3  1658.9 10399.4  1661.2 10407.9  1664.2 10513.8
GR1666.3 10530.4
HD25.326    10.0

X125.388      36  9467.9  9644.5     350     370     360
GR1678.8  9115.7  1668.5  9235.4    1666  9296.8  1665.6  9300.1  1666.4    9409
GR1665.9  9467.9  1661.5    9527  1656.6  9546.6  1660.5  9606.3  1663.8  9625.3
GR  1666  9644.5  1664.6    9663  1665.2    9704  1666.5  9725.8  1666.8    9766
GR1665.9  9777.3  1664.7    9782  1665.4  9857.4  1666.5  9872.6  1666.1  9918.6
GR  1665   10000  1666.3 10037.1  1666.1 10100.7  1664.3 10236.5  1665.2 10260.5
GR1664.2 10295.4  1662.9 10306.6  1664.8 10361.6  1665.9 10366.9  1666.4 10490.2
GR1662.5   10516  1662.2 10564.3  1660.1 10602.9  1660.4 10629.9  1663.8 10644.1
GR1665.5 10675.8  1672.2 10759.6  1674.1 10876.7
HD25.388    10.0

X125.458      27  9916.8 10067.1     390     380     360
X3    10
GR1677.1  9528.9  1672.1  9600.5    1668  9605.5  1667.8  9749.5  1668.1  9780.5
GR1669.2  9825.6  1667.7  9883.2  1668.1  9916.8  1666.8  9934.3  1665.7  9952.8
GR1665.5   10000  1667.2   10018  1669.1 10067.1  1664.9 10140.9    1668   10190
GR1668.1 10558.9  1667.8 10573.8  1665.9 10601.9  1669.5 10794.7  1664.6 10819.1
GR1664.3   10867  1667.1   10899  1667.1 10913.4  1664.1 10937.8  1660.5 10966.1
GR1673.9 10989.1  1677.6   11145
HD25.458    10.0

X125.519      24    9946   10101     450     290     310
X3    10
GR  1678  9567.7    1672    9570  1669.9  9663.3  1670.4  9770.3  1671.4  9836.4
GR1672.1  9915.1  1672.4    9946    1670    9970  1668.3   10000  1670.1 10058.9
GR1672.2   10101  1671.6 10154.1  1671.5 10186.1  1670.6 10394.1  1670.5 10492.4
GR1670.7 10616.3  1671.1 10795.5    1664 10831.1  1669.6 10872.3  1667.9   10940
GR1661.6 10957.3  1661.6 10970.3  1675.6 10993.4  1679.2 11086.4
HD25.519    10.0

X1 25.58      25  9974.4 10121.5     320     290     300
X3    10
GR  1678  9635.1    1677  9637.3  1671.6  9704.7  1671.8  9855.4  1674.1  9974.4
GR1668.9   10000  1670.8   10089  1673.7 10121.5  1673.7 10276.2  1674.3 10346.8
GR1673.5 10453.1  1672.9 10517.8  1672.2   10547  1672.9 10606.7  1673.9 10625.8
GR1675.8 10732.4  1674.2 10818.6  1670.4 10867.2  1669.9 10895.8  1667.3 10935.7
GR1665.9 10962.4  1666.8 10972.5    1670 10985.9  1675.5 11000.5  1680.6 11066.1
HD 25.58    10.0

X125.644      25  9908.8 10061.5     360     280     320
X3    10
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GR  1680  9535.3  1677.2  9767.4  1675.7  9804.1  1676.6  9908.8  1669.8  9926.6
GR1670.1    10000  1670.1 10013.5  1675.2 10030.5  1677.3 10061.5  1676.6 10119.8
GR1678.8 10141.2  1678.6 10246.3  1677.6 10388.7  1677.1 10485.4  1676.7 10586.1
GR1677.8    10633  1676.6 10683.4  1677.8 10719.7  1674.2 10774.8    1672    10825
GR1669.3 10861.2  1676.8 10895.7  1676.5 10968.6  1675.5 11020.2  1682.8 11094.3
HD25.644     10.0

X125.699       22  9886.9   10033     290     290     290
GR1683.7  9578.3  1678.6  9798.1  1677.9  9886.9  1671.6  9909.8    1670  9979.8
GR1669.4    10000  1672.4 10005.6  1673.1 10026.9  1678.4   10033  1681.5 10222.9
GR1681.3 10350.6  1680.2   10532  1679.8   10714  1678.2 10743.5  1672.4 10763.6
GR1671.9 10787.2  1672.1 10826.9  1675.7 10839.4  1678.6 10880.3  1679.2 10970.2
GR1680.4 11082.9  1685.1 11129.5
HD25.699     10.0

X1 25.75       40  9925.3 10085.9     270     280     280
GR1686.2  9574.2  1684.2  9577.4  1677.3  9588.3  1677.2  9602.8  1678.2  9608.9
GR1678.4  9649.3  1680.3    9706  1680.1  9746.5  1679.6  9804.2  1680.3  9864.7
GR  1682  9925.3  1675.5  9973.2  1671.6  9977.4  1672.1   10000    1673   10041
GR1681.9 10061.9  1682.4 10085.9  1680.2   10144  1677.4   10156  1674.9 10176.5
GR1674.5 10219.7  1678.7 10233.2  1680.6 10250.1  1681.5 10292.9  1684.2 10435.2
GR1684.7 10518.7  1682.8 10668.2  1679.8 10824.7  1675.2 10841.6  1675.3 10869.3
GR1678.7 10881.2  1679.6 10923.8  1680.5   10960  1679.4 11003.7    1678 11058.5
GR1681.2 11069.3  1682.8 11178.7  1686.9 11266.2  1687.5 11357.1  1688.7   11434
HD 25.75      10.0

X125.843       56  9891.5 10077.6     540     210     370
GR1698.3  9623.8  1684.2  9666.2  1682.9  9716.1  1685.7  9774.4  1685.9    9842
GR1686.1  9882.4  1685.8  9891.5  1682.4  9923.5  1679.7  9979.1  1676.2  9989.1
GR1673.9    10000  1673.5 10028.2  1674.4 10041.9  1685.5 10077.6  1684.1 10141.7
GR1685.2    10187  1684.6 10219.1  1682.3 10237.3  1678.2   10245  1678.1 10248.3
GR1679.5    10274  1680.1   10301  1676.7 10338.8  1682.8   10356  1684.8 10367.7
GR1684.8 10374.5  1683.7 10398.1  1682.5 10493.1  1679.7 10519.8  1679.8 10522.9
GR1681.2 10526.1  1684.2 10546.5  1685.2   10583  1685.1 10591.3  1683.1 10612.5
GR  1683 10626.2  1684.3 10653.9  1685.9 10669.7  1686.2 10698.5  1683.4 10909.7
GR1684.3 10924.9    1685 10965.7  1681.9 10979.2  1675.8 10989.6  1676.2 11011.8
GR1682.7 11026.3  1683.4 11033.3  1684.2 11109.4  1683.2 11157.4  1682.7 11199.4
GR1678.9 11211.5  1679.2 11219.1  1682.2 11227.6  1683.8 11233.3  1684.9 11290.6
GR1690.6    11365
HD25.843      10.0

X125.919       53  9857.9 10046.9     450     310     400
GR1694.2  9686.7  1690.3  9857.9  1690.2  9864.9  1686.4  9902.3  1684.4  9921.8
GR1680.8  9956.5  1678.9  9980.4  1678.5  9987.9  1678.4   10000  1678.4 10007.5
GR1678.9 10014.7  1679.3 10019.3    1681 10022.9  1687.1   10034  1689.1 10046.9
GR1688.2 10072.2  1688.2 10120.8  1685.3 10136.7  1685.4 10143.4  1686.6 10152.9
GR1687.7 10159.2  1687.3 10226.7  1681.8 10246.9  1680.5 10289.3  1680.4 10293.4
GR1682.5 10298.9  1685.8 10305.9  1686.8 10345.6  1687.7 10366.4  1687.1   10561
GR1685.6    10617  1685.5 10625.2  1683.6 10639.5  1683.3 10644.4  1683.3 10647.4
GR1685.7 10656.5  1686.2 10705.2  1687.4 10756.9  1688.1 10767.4  1688.7 10776.6
GR1689.9 10930.2  1689.9 10953.9  1687.2 11087.9  1687.9 11105.1  1688.5 11142.7
GR1687.8 11175.7    1686 11194.1  1685.3 11221.4  1684.5 11238.4  1683.3 11289.2
GR  1683    11299  1689.7 11338.8    1692   11561
HD25.919      10.0

X126.044       39    9926 10076.8     750     400     650
GR1702.9     9926    1685  9944.8  1684.3   10000  1691.1 10017.5  1691.8 10045.7
GR1694.1 10058.4  1694.2 10076.8  1694.2 10134.3  1693.8   10240  1690.9 10270.3
GR  1686    10332  1689.4 10342.7  1691.3 10378.5  1692.5 10407.2  1692.8 10465.5
GR1692.2 10541.6  1689.6 10574.8  1689.7 10591.8  1691.6 10609.2  1691.8 10748.9
GR1687.8 10824.9  1689.9 10849.3  1693.9 10865.8  1693.1   10957  1693.6 11034.8
GR1691.3 11097.4  1689.8 11180.3    1691 11196.2  1690.3 11249.8  1691.7 11302.9
GR  1691 11374.7  1686.1 11451.8  1687.1 11486.8  1686.7 11555.5  1689.2 11562.9
GR1692.6 11592.4  1693.7   11660    1696   12000    1698   12220
HD26.044      10.0

X126.137       47    9975 10296.6     500     475     495
GR1712.9     9975  1685.7   10000  1686.6 10024.6    1691 10054.7  1695.9 10106.9
GR1697.5 10139.1  1690.1   10162  1686.4 10231.1  1700.2 10296.6  1698.9 10317.4
GR1696.6 10379.3  1695.4 10460.7  1694.2 10518.2  1695.5 10560.3  1695.3 10586.9
GR1692.3 10631.9  1691.9 10643.6  1694.6 10660.5  1696.7 10744.8  1694.7 10795.2
GR1694.3 10833.6  1696.8   10841  1697.5   10938  1695.3 10998.8    1696 11030.5
GR1697.9 11148.8  1694.6 11214.6  1696.9 11262.3  1695.8 11297.9  1694.4 11316.3
GR1694.3 11363.6  1694.4 11379.7  1691.9 11399.4  1691.9 11418.1  1690.6 11474.1
GR1690.6 11490.6  1693.8 11497.1  1696.4   11536  1696.2 11621.4  1694.2 11662.1
GR1693.6 11733.6  1694.9 11770.6  1697.5 11787.8  1698.4 11923.7  1700.1 11940.2
GR1699.7 12055.1    1702   12465
HD26.137      10.0

X126.239       47    9925 10279.3     570     340     420
GR1707.8     9925  1692.8  9936.8  1692.8   10000  1697.2 10010.6    1700 10026.3
GR1700.8 10111.9  1695.5 10121.4  1693.3 10144.7  1693.1 10181.6  1699.5   10202
GR1701.3 10279.3    1702 10346.3  1699.1 10433.6  1698.2 10516.4  1699.5 10562.5
GR  1700 10627.5  1700.4 10668.5  1699.7 10720.3  1695.6 10737.6  1696.1   10755
GR1698.4 10763.3    1700 10838.9  1698.1 10861.7  1698.1 10872.1  1696.1 10895.3
GR  1695 10906.7  1700.5 10935.5  1700.7 11008.5  1699.2   11038  1698.6   11090
GR1699.5 11112.3  1699.1 11155.2  1697.7 11208.1  1693.3 11221.8  1693.6 11232.9
GR1696.2 11238.1  1697.2 11271.8  1697.8 11314.1    1699   11334    1700   11449
GR1699.8 11535.4    1699 11560.8  1696.2 11615.5  1695.6 11751.2  1698.9 11769.2
GR1702.2 11836.2  1704.3 11961.1
HD26.239      10.0

X126.335       39    9635 10333.4     495     520     500
GR1710.7     9635    1700  9645.81699.991    9646  1697.4  9701.2  1696.7  9715.3
GR1696.7  9771.9  1698.6  9794.1  1698.8  9886.3  1696.6  9953.9  1695.6   10000
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GR1698.8 10024.1  1699.7 10103.3  1698.6 10141.9  1698.9 10190.7  1696.9 10245.8
GR1704.2 10271.6  1705.6 10333.4  1705.8 10438.8  1702.6 10464.6  1702.8 10574.7
GR1701.1 10627.4  1704.5 10710.5  1703.5 10816.3  1702.4 10852.4  1700.5 10868.2
GR1699.9 10906.9  1699.2 10938.8    1699 10949.1    1704 10961.4  1705.3 11033.5
GR  1706   11149  1705.5 11213.4  1704.2 11298.3  1702.6 11389.1  1699.2   11435
GR1700.2 11451.6  1705.5 11466.4  1707.8 11486.3  1709.4 11519.8
HD26.335    10.0

X1 26.43      33    9770 10353.7     490     520     495
GR1711.8    9770    1700  9794.4  1700.9  9837.5  1699.8    9885    1700   10000
GR  1701   10044  1702.3   10080  1701.8 10154.1  1700.1   10207  1697.7 10219.1
GR1697.5 10240.1  1706.6 10258.3  1710.5 10297.2  1711.7 10353.7  1710.5   10461
GR1707.7 10590.9  1708.7 10644.9  1706.2 10710.7  1706.6 10734.7    1708 10748.8
GR1709.2 10805.8  1707.7 10914.2  1709.3 10982.6    1706 11021.1  1702.2 11039.4
GR1700.6   11097  1702.7 11102.7  1704.4 11124.2  1704.3 11138.7  1708.1 11249.2
GR1710.9   11352  1712.5 11426.3  1713.3 11525.2
HD 26.43    10.0

X126.529      38  9764.3 10177.6     530     520     520
GR  1720  9731.2  1719.8  9764.3  1709.3    9799  1708.5  9827.8  1708.1  9878.2
GR1704.8  9891.7  1702.9  9916.7  1702.6   10000  1703.6   10004  1703.8 10054.1
GR1705.3 10089.2  1705.2 10126.1  1703.3 10149.1    1714 10177.6  1713.4   10237
GR1712.2 10373.5  1711.5 10397.1  1713.8 10453.4  1713.5 10511.4  1714.4   10550
GR1713.3 10598.1  1712.7 10665.4  1708.3 10683.3  1709.1 10713.3  1710.3 10718.4
GR1710.4 10750.8  1712.3 10766.7  1712.2 10824.3  1712.7   10897  1712.7   10966
GR1710.3 11000.4  1706.5 11013.6    1706 11047.9  1704.8 11071.9  1711.3 11102.6
GR1711.9 11143.7  1713.1 11201.5  1714.4 11315.3
HD26.529    10.0

X126.623      38  9626.5 10128.4     500     530     500
GR1721.7  9626.5  1708.4  9663.1  1703.9  9698.7  1704.6  9722.9  1704.3    9776
GR1707.3  9810.3  1708.9  9851.6  1707.8  9912.1  1705.2  9958.1  1705.1   10000
GR1709.5 10015.2  1709.9 10044.4    1712   10071  1714.1 10078.2  1720.1 10128.4
GR1719.4 10159.4  1720.4 10281.2  1718.6 10327.7  1718.9 10358.4  1720.9   10384
GR1721.8 10424.9  1721.3 10463.5  1718.5 10548.7  1716.8 10606.9  1713.9 10625.6
GR1717.2 10657.9  1718.2 10687.4  1718.1 10785.1    1715 10842.2  1713.5 10865.9
GR1714.1 10902.1  1717.7 10924.6  1714.2 10974.2  1707.5 11001.4  1712.7 11033.6
GR1714.2   11113  1715.9 11183.7  1720.1 11271.7
HD26.623    10.0

X126.695      41  9772.8 10055.4     370     430     380
GR1724.9  9733.8  1723.1  9772.8  1718.4  9783.7  1714.6  9822.6  1714.3  9866.1
GR1721.4  9881.3  1719.6  9912.9  1710.6  9931.4  1709.5  9982.8  1709.5  9991.4
GR1709.9 10033.2    1710 10046.3  1724.6 10055.4  1723.8 10116.6  1721.7 10149.3
GR1723.3 10223.1  1727.2 10280.1  1725.9 10341.2  1713.2 10352.8  1713.1 10406.1
GR1716.9 10441.5  1718.6 10484.8  1720.9   10506  1719.7 10545.1    1715   10566
GR1719.2 10603.7  1724.2 10615.9  1722.9 10732.5  1723.6 10813.3  1722.9 10860.6
GR1721.2 10877.5    1722 10908.7  1722.4 11033.4  1721.5 11077.9  1722.9 11170.1
GR1722.6 11247.1  1721.6 11358.9  1714.6 11436.8  1714.9 11489.8  1725.3 11511.4
GR1727.2 11534.6
HD26.695    10.0

X126.775      39    9914   10229     390     470     420
GR1732.6  9691.5  1727.3  9766.7  1726.6    9914    1717    9920  1716.8    9967
GR1713.4  9980.1  1712.7   10000  1712.9 10018.8  1716.1   10027  1717.7 10072.7
GR1717.2 10107.9  1714.6 10187.6  1725.4 10207.6  1730.6   10229  1731.4 10296.7
GR1729.1 10391.5  1727.5 10446.8  1717.5 10465.7  1717.5 10489.7  1722.6   10502
GR1723.7 10561.3  1724.6 10596.4  1724.8   10685    1724 10729.9  1726.3 10770.1
GR1728.2 10806.5  1726.1 10931.3  1725.8 11003.7  1727.4 11039.1    1727 11121.5
GR1726.9   11192  1727.1 11304.1  1725.7 11425.9  1720.8 11447.1    1720 11492.7
GR1719.4 11554.6  1718.4 11576.7  1730.8 11599.8  1732.2   11618
HD26.775    10.0

X126.845      45  9657.8 10020.1     350     400     370
GR1733.1  9611.4  1731.1  9657.8  1721.2  9688.6  1721.3  9793.2  1718.9  9834.9
GR1718.8    9871    1717  9877.3    1718  9905.1  1717.4   10000    1728 10020.1
GR1727.3 10087.9  1729.9   10102  1729.5 10120.9  1719.2 10143.7  1719.6 10152.7
GR1722.4 10191.5  1730.2 10209.4  1730.2 10236.4  1724.1 10253.5  1725.3 10271.5
GR  1727 10290.8  1728.1 10349.1  1729.1 10437.8  1729.4 10474.8    1728 10537.7
GR1725.9 10556.6  1729.4 10581.4  1729.9 10622.5  1728.9 10684.7  1728.5   10712
GR1731.6 10721.6  1731.1 10793.1  1731.3 10864.9  1729.9 10914.9  1729.9 10946.4
GR1728.4 10982.9  1726.7 11003.8  1726.3 11030.4  1727.3 11042.7  1729.3 11090.1
GR1728.9 11124.8  1726.3 11229.8  1721.4 11246.7    1733 11279.8  1734.5 11346.5
HD26.845    10.0

X126.921      57  9712.1   10149     450     400     430
GR1739.4  9712.1    1725  9736.8  1723.7  9744.2  1723.1  9756.8  1722.1  9796.4
GR1722.1  9799.8  1723.2  9810.1    1722  9832.8  1723.2  9872.7  1723.9    9882
GR  1724    9891  1723.1    9908  1723.2  9939.1  1722.6  9946.3  1720.7  9952.7
GR1721.1  9972.1  1720.2   10000  1720.3 10017.5  1723.1 10027.8  1724.6 10048.1
GR  1725 10059.7  1725.1 10075.5  1724.1 10107.4  1722.7 10132.6  1731.9   10149
GR  1732 10156.7  1732.1 10165.7  1733.5 10186.9  1732.2 10193.6    1732 10237.1
GR1734.4 10263.2  1734.3 10321.7  1735.1 10345.3  1734.7 10409.7  1735.5   10443
GR1734.5 10480.4  1728.1 10545.4  1728.5 10554.4    1732 10577.8  1732.5 10599.1
GR1733.4 10618.4  1734.3 10657.4  1733.4 10682.2  1733.5 10717.8  1733.3 10729.5
GR1728.8 10764.1  1730.5 10771.1  1731.2 10781.6  1731.3 10797.6  1729.2 10812.9
GR1731.1 10828.1  1731.1 10839.5  1729.1   10863  1727.4 10868.7  1728.3 10888.3
GR1732.9 10899.2  1735.9 10906.9
HD26.921    10.0

X127.008      40  9677.5   10164     400     400     400
GR1746.2  9657.3  1745.5  9677.5  1731.7  9702.2  1724.6  9760.8    1724  9803.4
GR1725.9    9811  1725.7  9819.2  1725.2    9836  1727.3  9853.3  1725.7  9898.1
GR1726.6  9902.7  1727.3  9935.3  1726.4  9947.4    1723  9981.1  1723.9   10000
GR  1726 10013.3  1726.6 10033.6  1726.5 10072.1  1725.6 10089.8    1726 10119.1
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GR1724.9 10144.7  1724.9 10154.3  1736.3   10164  1735.8 10243.9  1734.5 10272.1
GR  1734 10293.2  1732.5 10322.9  1737.2 10346.2    1737 10441.5  1734.8 10548.5
GR1733.9 10662.5  1729.8 10671.2  1730.3 10675.8  1733.9 10683.5  1733.5   10724
GR1734.2 10735.7  1733.6 10771.9  1731.6   10788  1739.6 10811.4  1739.9 10846.8
HD27.008    10.0

X127.106      38  9730.7 10275.3     540     500     520
GR1755.7  9730.7  1755.7  9730.8  1731.8    9788  1731.6  9802.8  1733.6  9808.5
GR1734.8  9830.2  1734.7  9869.5  1733.3  9905.8  1734.4  9916.8  1732.4  9979.5
GR1729.1   10000  1728.6 10019.5    1731 10026.5  1731.4 10051.7  1732.4 10066.4
GR1730.6 10109.9  1732.1   10125  1728.9 10150.1  1727.7   10179  1725.7 10190.7
GR1727.8 10205.6  1736.1   10215  1736.8 10259.5  1742.7 10275.3    1742 10408.1
GR1738.5 10443.8    1739 10468.6  1738.6 10494.5  1741.2 10550.7  1737.2 10653.9
GR1739.5 10686.8  1738.8 10728.3  1736.2 10755.3  1736.9 10761.5  1737.4 10798.5
GR  1733 10818.3  1743.8   10877  1745.6 10979.2
HD27.106    10.0

X127.169      28  9850.9   10395     400     310     330
GR1753.5  9850.9  1734.4  9881.6    1736  9933.2  1735.9   10000  1732.1 10145.7
GR1733.2 10155.1  1732.9 10194.3  1738.9   10218  1732.7 10265.5  1733.2 10315.5
GR1733.9 10339.7  1743.4 10379.9  1745.5   10395  1741.7 10481.8  1741.6 10526.6
GR1743.1 10538.6  1744.8 10564.2  1744.7 10687.1  1741.1 10812.4  1739.1 10854.3
GR1740.2 10885.4  1734.5 10910.1  1734.7 10918.1  1738.5 10928.8  1736.7 10948.6
GR1737.7 10976.7  1746.9 11000.2  1747.6 11111.9
HD27.169    10.0

X127.226      35  9928.4   10380     310     300     300
GR  1765  9788.6    1765  9788.7  1744.5  9877.9  1743.7  9928.4  1735.6  9943.3
GR1735.3  9989.5  1737.7   10000    1739   10065  1739.8 10106.8  1737.7 10145.4
GR1736.4 10162.8  1737.7 10188.7  1736.6 10259.4    1735 10269.7  1735.6 10283.3
GR1735.6 10320.4  1734.8 10332.8    1749   10380  1748.3 10432.1  1746.1 10448.1
GR1744.5 10526.8    1745 10562.1  1747.2 10583.3  1745.3 10798.5  1739.5 10855.8
GR1742.4 10881.8  1744.1 10936.1  1741.8 10999.9  1741.2 11013.1  1736.7 11029.8
GR1737.8 11054.5  1739.5 11059.9  1750.7 11099.3  1750.6 11246.8  1753.4 11400.2
HD27.226    10.0

X127.265      46    9900 10164.2     210     220     210
GR1759.4  9689.5  1759.4  9689.6  1759.4  9689.7  1759.3  9703.1  1749.5  9739.2
GR  1751  9795.3  1750.2    9900    1747  9968.4  1735.7  9973.2  1736.3   10000
GR1740.8   10044  1741.2 10063.1  1741.4 10128.7    1749 10164.2  1749.5 10201.7
GR  1750 10298.4  1750.7   10337  1750.2 10382.1  1747.8   10397  1746.6 10460.8
GR1746.6 10469.8  1747.5 10509.2  1748.9 10531.9  1749.3 10575.2  1747.7 10618.4
GR1746.4 10638.3  1746.2 10687.3  1747.1 10707.3  1746.8 10752.2  1743.1 10780.1
GR1743.7 10795.7  1746.2 10810.8  1746.6 10849.5  1747.9 10861.6  1747.8 10861.7
GR  1748 10890.4  1744.6 10939.7  1745.4 10986.2  1746.1 11055.7  1739.9 11101.8
GR1739.5   11124  1738.8 11134.3  1739.7 11149.2  1751.6 11174.7  1753.3 11300.7
GR1755.4 11373.2
HD27.265    10.0

X1 27.32      30  9907.5 10072.3     260     300     275
X3    10
GR1760.8  9673.4  1752.3  9694.4  1752.8  9759.1  1749.8  9907.5    1743  9932.7
GR1742.9  9962.1  1740.3   10000  1740.9   10054  1754.9 10072.3  1751.7 10176.6
GR1750.2 10227.7  1750.3 10307.3  1751.9   10323  1752.2 10364.6  1750.2 10475.2
GR1751.7 10498.6  1752.1   10570  1749.6 10644.3  1751.5   10676  1750.8   10734
GR1751.3 10765.5  1749.9 10844.8  1746.3 10900.2  1746.8 10926.1  1749.3 11000.3
GR1744.4 11051.9  1742.8 11077.2  1743.9 11116.7  1755.9 11147.9  1758.2 11273.1
HD 27.32    10.0

X127.366      39  9737.6 10110.1     230     240     240
GR1769.8  9702.7  1755.9  9737.6  1745.3    9748  1746.2  9771.9  1746.7  9859.2
GR1748.4  9920.5  1745.5  9933.9  1746.9  9976.9  1742.6   10000  1742.3 10086.6
GR1743.4 10102.2  1755.1 10110.1  1755.6 10177.6  1755.3 10242.7  1755.9 10286.6
GR1754.6 10345.9  1754.7 10457.4  1750.9 10521.7  1751.5   10555  1753.4 10569.5
GR1753.3 10608.2  1750.7 10654.5  1753.3 10780.6  1751.3 10821.9  1752.1 10925.4
GR1751.4   10952  1747.6 11021.9    1746 11027.9  1746.4 11040.4  1749.8 11076.4
GR1745.8 11112.3  1756.7 11140.4  1758.8 11165.3  1759.3 11295.8  1757.2 11409.8
GR1757.7 11478.6  1756.1 11533.4    1758   11558  1760.2 11593.2
HD27.366    10.0

X127.417      26  9942.8 10200.8     250     290     270
X3    10
GR1765.1  9848.4  1755.1    9889  1756.8  9942.8  1753.6  9989.2  1746.8   10000
GR1750.1 10057.8  1748.6 10121.9  1745.1 10141.8  1744.8 10177.2  1759.4 10200.8
GR1759.2 10367.6  1758.1 10536.5  1757.1 10689.7  1755.3 10725.2  1754.4 10783.7
GR  1754   10842  1750.8 10860.1  1752.5 10893.3  1755.1 10912.4  1755.1 10941.7
GR1753.4 10962.6  1751.9 11035.1  1748.5   11041  1748.6 11049.8    1762 11095.5
GR1762.9   11211
HD27.417    10.0

NC  0.07    0.07   0.036     0.1     0.3
X127.502      37  9947.5 10150.4     430     510     450
GR1783.8  9853.5  1773.7  9947.5  1748.8  9983.2  1750.6   10000  1750.2 10025.5
GR1752.1 10058.7  1754.1 10086.3  1760.3 10126.6  1762.5 10150.4    1763   10240
GR1759.5 10265.8  1759.9 10275.2    1762 10280.7    1762   10302  1758.3 10312.7
GR1761.1   10330  1762.8 10350.4    1762 10409.1    1763 10489.2  1762.3 10589.5
GR1761.7   10675    1763 10723.2  1763.7 10740.2  1762.6 10779.4  1758.4 10837.3
GR1760.6 10852.6    1761 10887.2  1759.1 10918.1  1762.5 10935.3  1761.8   10969
GR1759.1 10979.4  1764.1   11005  1767.7 11054.2  1769.6 11108.1  1770.5 11175.4
GR1771.3 11287.4    1772   11384
HD27.502    10.0

X127.604      27  9740.2 10014.4     510     700     550
GR1786.6  9740.2  1757.7  9792.1  1757.8  9813.5  1759.2  9823.8  1759.9  9851.8
GR1757.7  9893.9  1754.3  9964.9  1754.2   10000  1765.2 10014.4  1764.4 10038.5
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GR1765.9 10081.8  1766.4 10113.1  1762.9 10150.4  1767.6   10183  1769.9 10240.7
GR1768.9 10369.3  1769.6 10444.5    1769 10528.9  1769.2 10644.4  1767.4 10727.3
GR1767.5   10765  1763.8 10793.9  1764.7 10830.3  1766.9 10867.7  1770.7 10888.5
GR1771.5 11019.7  1774.5 11105.7
HD27.604    10.0

X127.693      29  9961.1 10195.8     490     460     470
GR1791.7  9961.1  1756.3   10000  1757.7 10016.1  1760.3 10060.1  1762.8 10074.5
GR1762.8 10088.7  1770.2 10105.9  1771.7 10195.8    1771 10231.3  1770.9 10351.8
GR1772.3 10459.2  1774.7 10596.6  1775.1 10635.8  1773.7 10744.8  1769.7 10897.1
GR1770.5   10935  1767.3 10957.3  1769.3 10990.2  1773.7 11023.8  1775.9 11078.2
GR  1776   11145  1772.4 11215.7    1773 11230.9  1776.9 11311.4  1778.9 11389.9
GR1779.8 11565.4  1780.3   11724  1781.6 11801.6  1782.9 11816.4
HD27.693    10.0

X127.797      32    9969 10158.3     560     550     550
GR1785.6    9969  1760.6   10000  1761.3 10008.1  1761.4   10040  1765.8 10049.5
GR  1771 10077.1  1771.9 10089.7  1772.3   10120  1771.6 10150.2  1776.1 10158.3
GR1776.8 10265.3  1776.3 10353.5  1774.5 10418.5  1775.7 10519.8  1776.6 10634.1
GR1777.1 10778.4  1777.6   10916  1772.3   10988  1772.4 10992.9  1773.4 11016.9
GR1776.1   11050  1774.9 11106.7    1778 11127.1  1779.4 11190.5  1777.9 11313.3
GR1778.6 11394.9  1780.5   11441  1782.1 11568.4  1782.7 11689.7    1782 11743.2
GR1782.5 11912.3  1785.1 11962.9
HD27.797    10.0

X127.913      25  9944.2 10240.4     620     600     610
GR1800.8  9944.2  1763.1   10000  1767.4 10037.3    1772 10080.7    1776 10111.6
GR1776.8 10166.4  1776.7   10200  1777.9 10215.4  1781.2 10219.9  1782.1 10240.4
GR1781.9 10276.9    1781 10431.4  1780.9 10609.3  1781.9 10668.7  1781.9 10784.1
GR1778.4 10826.3  1777.5 10876.2  1780.8 10916.2  1781.2 10985.8  1782.2 11061.8
GR1783.3 11083.6  1783.4 11122.1  1780.9 11228.2  1782.2 11365.8  1785.1 11411.6
HD27.913    10.0

NC  0.07    0.07   0.044     0.1     0.3
X128.023      47    9770 10077.1     600     580     580
GR1792.6    9770  1775.2  9777.6    1775  9806.4  1774.3    9813  1775.2  9821.4
GR1776.6  9826.9  1779.2  9837.5  1780.7  9842.9  1781.5  9866.6  1782.4  9880.7
GR1782.9  9892.3  1782.1  9937.4    1781  9958.7  1773.7  9970.3  1773.1  9995.9
GR1772.5   10000  1773.7 10006.6  1775.1 10023.8  1777.1 10039.3    1778   10057
GR1778.8   10067    1784 10073.4  1785.2 10077.1  1785.2 10111.8  1786.6 10157.6
GR1787.2 10200.9  1789.7 10258.3  1789.6 10302.2  1787.7 10378.7  1787.3 10426.3
GR1785.5 10545.4  1784.3 10604.2  1783.1 10662.6  1781.9   10699  1781.8 10706.3
GR1780.7 10709.9  1780.7 10712.2  1783.4 10731.9  1782.8 10757.3  1783.1 10778.7
GR1785.4 10811.5  1786.8 10870.5  1786.6   10952  1787.5 11033.3  1787.8 11082.5
GR1788.5   11153    1789 11217.6
HD28.023    10.0

X128.091      33  9641.3 10160.5     330     400     360
X3                        9641.3  1811.7 10160.5  1792.1
GR1811.7  9641.3  1782.1  9676.9  1781.9  9726.3  1786.5  9742.3  1786.6  9856.7
GR1786.5  9900.2  1785.1  9967.4  1782.5  9978.8  1780.8   10000  1780.9 10010.4
GR1782.1 10050.9  1781.7 10108.3  1789.6 10121.5  1792.1 10160.5  1792.6 10223.1
GR1792.9 10307.6  1791.1 10457.3  1789.3 10591.5  1787.6 10748.9  1786.6 10778.3
GR1782.5 10797.4  1782.9 10809.4  1786.5 10850.7  1789.6 10876.8  1792.7 11005.3
GR1793.1 11117.2  1792.3 11229.1  1792.6 11377.9    1792 11520.3  1792.3 11698.5
GR1795.2 11860.8  1796.4 11901.4  1798.4 12045.9
HD28.091    10.0

X128.157      39  9591.2 10055.2     340     370     350
GR  1807  9591.2    1785  9646.4  1784.5  9667.1  1786.5  9689.6  1788.2  9722.3
GR1788.8  9789.6  1790.5  9804.4    1791  9831.6  1791.1  9866.2  1788.7    9893
GR1788.5    9942  1786.6  9970.6  1782.6   10000  1782.8 10043.2    1792 10055.2
GR1792.3   10073  1790.2 10110.2  1790.9 10121.6  1792.5   10139  1793.7 10222.1
GR1795.6   10322  1796.2 10374.2    1794 10485.5  1792.9 10581.9    1792   10712
GR1791.2 10720.5  1790.2 10824.2  1785.6 10837.6  1785.7 10842.6  1787.4 10865.9
GR1792.5 10897.9  1791.3 10939.7  1794.3 11027.4    1796 11060.5  1796.4 11145.9
GR1796.3 11285.8  1796.8 11405.2  1797.9 11552.6    1800 11574.2
HD28.157    10.0

X128.241      36  9639.9 10050.5     400     490     440
GR1808.3  9639.9  1795.4  9692.2  1795.8  9741.5    1795  9757.5  1794.5  9762.7
GR1793.6  9785.6  1793.6  9819.4  1791.7  9830.9  1789.9    9858  1791.1  9876.8
GR1790.7  9926.9    1790   10000  1795.7   10028  1796.6 10050.5  1795.7 10063.2
GR1797.2   10223  1798.6 10301.6  1797.7 10415.7    1797 10531.3  1797.1   10566
GR1794.2 10615.4  1791.9 10624.7  1794.1   10652  1793.8 10662.7  1792.1 10675.3
GR1795.8 10702.3  1797.3 10754.1  1801.3 10794.7  1802.6 10837.5  1802.5 10880.1
GR1801.9 10980.9  1803.2 11104.8  1803.7 11135.2    1805 11251.1  1804.9 11386.2
GR1806.9 11429.3
HD28.241    10.0

NC  0.07    0.07   0.036     0.1     0.3
X128.326      22  9817.5 10050.1     440     470     450
GR1822.4  9689.6  1809.8  9817.5  1794.9  9861.7  1792.4  9937.3  1791.3   10000
GR1801.8 10050.1  1801.9 10195.5  1801.4 10252.1  1802.1 10306.4  1799.1 10388.6
GR1799.1 10476.5  1800.3   10599  1799.1 10683.7  1800.9 10731.3  1800.8 10770.4
GR1803.6 10806.2  1803.5 10872.4  1805.2 10955.7  1806.2 11057.2  1807.9 11208.6
GR1810.2 11340.5  1812.8 11379.7
HD28.326    10.0

X1 28.39      28  9863.1 10063.6     350     340     340
GR1821.5  9819.6  1815.7  9863.1  1793.2  9907.7  1793.4  9924.1  1793.9  9961.5
GR1792.8   10000  1800.1 10013.4  1802.7 10063.6  1802.5 10104.8    1805 10139.1
GR  1804 10177.8    1803 10316.5  1802.6 10382.7    1803 10449.1  1803.8 10520.6
GR  1804   10603    1802 10705.5  1802.4 10716.7  1802.8 10767.7  1807.3 10800.6
GR1809.4 10917.5  1809.5 11054.7  1809.2 11066.1  1809.6 11175.1  1810.8 11281.1
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GR1811.5 11284.7    1812 11364.3  1816.4   11470
HD 28.39    10.0

X128.462      22  9871.7 10061.2     380     380     380
GR1827.9  9871.7  1794.9  9909.8  1794.8   10000  1803.6 10034.2  1805.6 10061.2
GR1805.3   10078  1806.6 10175.8  1805.7   10284  1807.2 10463.4  1808.6 10524.9
GR1807.4 10599.5  1805.3 10682.2  1805.1 10732.4  1808.1 10776.4    1809 10847.3
GR1812.2   10922  1812.7 11030.5  1812.5 11215.6  1812.6 11317.2  1814.1 11404.3
GR  1815 11476.1  1819.3 11558.8
HD28.462    10.0

X128.555      25  9919.4 10111.4     490     500     490
GR1835.9  9869.9  1833.2  9919.4  1817.6  9940.2  1800.2  9961.8  1800.1  9983.5
GR1799.4   10000  1799.4 10032.9    1801 10059.2  1809.1 10096.4    1810 10111.4
GR1809.1 10139.6  1811.3 10223.1  1811.4   10283  1810.6 10355.8  1810.2 10399.9
GR1811.2 10470.4    1812 10526.5  1813.1 10579.7    1813 10607.8  1813.2 10653.4
GR1812.6 10691.4  1813.9 10780.8  1816.4 10824.9  1817.2   10871  1818.1 11005.7
HD28.555    10.0

X128.657      31  9933.6   10197     550     540     540
GR1841.5  9910.1  1839.5  9933.6  1801.7  9961.9  1800.5  9986.1  1800.6   10000
GR1802.1 10009.7    1805 10034.1  1806.9 10053.9  1808.6 10069.1  1813.2 10089.5
GR1812.3   10113  1810.2 10124.3  1809.6   10130  1809.6 10142.8  1812.9   10162
GR1814.9   10179  1816.7   10197  1816.8 10224.3  1815.5 10327.9    1814 10385.1
GR1814.4 10514.2  1814.6 10614.1  1816.7 10650.2    1820 10678.3  1822.3 10877.4
GR1821.4 11067.7  1821.7 11198.8  1823.3   11264  1821.4 11476.7  1822.5 11657.4
GR1826.4   11753
HD28.657    10.0

X1 28.75      33  9866.8   10129     500     470     490
GR1844.3  9866.8  1812.6  9915.2  1812.5  9936.1  1809.4    9952  1808.3  9972.2
GR1808.5   10000  1808.9 10033.3  1809.5 10041.9  1811.1 10053.6  1811.1 10066.5
GR  1814 10101.5    1816 10113.1  1819.7   10129  1821.3 10171.9  1820.2 10292.1
GR1820.4 10343.7  1818.3 10481.8  1817.7 10539.4    1818 10623.4  1817.4 10650.9
GR  1818 10735.6  1818.7 10749.8  1825.1 10820.5    1824 10892.7  1824.3 10991.1
GR1823.6 11079.1  1824.2 11186.1  1825.2 11305.7  1823.8 11432.7  1824.2   11468
GR1825.2 11672.9  1825.5 11735.5  1830.5 11821.7
HD 28.75    10.0

X128.847      37  9881.1 10076.9     520     500     510
GR1848.5  9867.2    1847  9881.1  1814.5  9927.3  1813.5  9952.1  1811.9  9978.2
GR  1812   10000  1812.5 10041.6  1821.4 10076.9  1821.2 10110.6  1820.5 10147.8
GR1818.4 10162.1  1820.8 10179.8  1824.9 10200.5  1825.3 10242.3    1825 10284.1
GR1824.4 10343.6  1824.5 10403.2  1823.5 10447.7  1822.7 10492.8  1821.8 10553.5
GR1821.8 10574.2  1822.3 10617.2  1822.8 10650.1  1822.5 10692.5    1820 10726.3
GR1821.3 10757.2  1821.3 10780.5  1822.3   10814  1826.7 10837.2  1828.2 10862.2
GR1827.1 10897.8  1826.9 10969.2    1827   11071  1827.8 11206.2  1826.8 11575.5
GR1827.3 11637.6  1828.8 11709.7
HD28.847    10.0

X128.934      37  9824.7 10054.9     410     470     460
GR  1853  9795.5  1851.1  9824.7  1824.7  9864.6  1823.9  9894.9  1820.4  9914.2
GR1819.2  9923.4  1819.1  9934.8  1816.6  9940.2  1815.9  9967.7  1815.5   10000
GR1817.3 10007.5  1817.6 10022.2  1819.8 10035.2  1826.8 10054.9    1828 10096.7
GR  1827 10161.6  1825.9 10183.8  1826.4 10214.6  1825.4 10239.3  1824.2 10268.1
GR1823.9 10298.7  1824.1 10324.5  1827.5   10353  1828.5 10391.2  1829.3 10425.6
GR  1829 10455.1  1827.8 10502.7  1827.4 10545.1  1827.6 10578.5  1826.1   10687
GR1827.3 10744.9  1828.1 10818.8    1827 10868.7  1826.9   10873  1829.8 10900.6
GR1831.1 11009.4  1831.8 11166.8
HD28.934    10.0

X129.012      26  9922.8 10091.3     400     420     410
GR1853.7  9889.9    1850  9922.8    1819  9955.5  1818.9  9982.8  1818.7   10000
GR1820.6 10031.4  1822.8 10041.2  1822.6 10066.9  1827.5 10091.3  1828.5 10113.2
GR1828.1 10186.8  1828.8 10220.1  1828.6 10250.7  1827.9 10267.4  1828.5 10303.6
GR1829.6   10341  1830.3 10376.4  1830.2 10413.9    1831   10452  1832.7 10517.5
GR1832.8 10559.9  1831.5 10660.3  1831.6 10714.5  1830.7 10788.3  1831.7   10835
GR1838.8 10861.6
HD29.012   10.00

X1 29.13      31  9960.7 10106.7     590     600     595
GR  1855  9960.7  1824.5  9979.7    1821  9987.1  1821.6   10000  1822.1 10015.3
GR1824.1 10027.6  1826.2 10046.3  1827.7 10055.7  1827.9 10091.4  1829.1 10098.6
GR1831.5 10106.7  1834.5 10331.6  1834.2 10356.3  1834.1   10392    1834 10428.2
GR1833.4 10440.7  1835.9 10483.6  1835.1 10502.3  1834.8 10508.1  1836.2 10530.9
GR1838.1 10559.2  1838.9 10574.2  1839.3 10612.5  1838.3 10733.7  1836.4 10808.3
GR1836.4 10832.6  1837.2 10902.5  1836.9 10928.5  1837.6 10946.7  1839.3 10954.1
GR1842.7 10971.2
HD 29.13    10.0

NC  0.07    0.07   0.044     0.1     0.3
X129.258      23  9781.3 10051.4     710     710     705
GR1852.7  9781.3  1834.5  9805.1  1831.9  9824.7  1828.7  9842.8  1831.8  9857.3
GR1832.7  9870.6  1834.1  9915.5  1833.1  9954.2  1831.2   10000  1832.3 10016.4
GR1832.7 10026.1  1844.5 10051.4  1844.3 10107.4  1844.4 10169.9  1844.3 10230.7
GR1843.9 10274.3  1844.5 10318.2  1843.7 10378.2  1843.3 10417.3  1842.7 10451.7
GR1842.2 10494.3    1843 10508.4  1851.4 10543.7
HD29.258    10.0

NC  0.07    0.07    0.05     0.1     0.3
X129.351      39  9684.3 10296.9     500     490     490
GR  1864  9651.1  1858.9  9668.9  1849.7  9684.3  1836.7  9698.1  1839.1  9722.5
GR1838.9  9741.4  1836.7  9747.3  1836.8  9758.1  1838.3  9768.8  1841.6  9795.9
GR1839.9  9818.1  1839.5    9839  1842.7  9861.3  1845.3  9879.5    1839    9898
GR  1841  9912.1  1841.4  9924.3  1842.3  9957.8  1838.9  9979.9  1835.9   10000
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GR1836.7 10027.2    1838   10064  1841.9 10092.9    1842 10150.2  1840.3 10186.7
GR1842.3   10213  1840.9 10230.5  1841.3   10250  1845.9 10277.5  1847.8 10296.9
GR1848.9   10317  1849.3 10342.3  1849.2 10371.3  1848.8 10418.4  1849.3 10471.2
GR1848.5 10503.3  1847.1 10544.6  1847.7   10566  1854.4 10595.3
HD29.351    10.0

X129.387      39    9481 10107.4     190     200     190
GR1854.2    9481  1841.8  9493.6  1841.9  9511.4  1844.7  9527.3  1844.5  9552.5
GR1839.3  9575.8  1839.1  9627.7  1840.2  9645.2  1844.3  9667.5    1845  9682.9
GR1842.2  9722.4  1839.9    9732  1839.7  9749.9  1840.9  9757.7  1847.4  9778.9
GR1847.6  9822.3  1843.7  9845.5    1845  9863.2  1844.6  9906.2  1842.7  9921.9
GR1839.7  9960.2  1838.8  9986.9  1839.8   10000  1839.3   10037  1838.9 10066.4
GR1843.9   10082  1845.2 10107.4  1844.2 10128.4    1845 10146.8  1843.4 10179.3
GR1845.8 10240.2  1845.8 10277.7  1850.7 10302.4  1850.5 10351.2  1850.5 10398.2
GR1850.2 10434.3  1848.9 10467.4  1849.5 10486.8  1857.7 10517.6
HD29.387    10.0

X129.493      60  9336.2 10047.8     610     520     560
GR1855.3  9184.2  1850.5  9195.2  1850.5  9301.4  1850.3  9318.7  1850.7  9336.2
GR1846.3  9357.2  1843.9  9369.9  1843.4    9386  1843.8  9410.6  1845.6  9421.7
GR1845.7    9428    1848  9442.5  1848.1  9450.2  1847.9  9459.5  1847.4  9471.8
GR1846.6  9486.4  1847.6  9503.9  1847.9  9515.6  1848.2  9534.1  1849.3  9543.7
GR1849.5  9563.8  1850.7  9572.1  1850.8  9582.2  1850.6  9618.4  1847.2  9647.1
GR1846.8  9657.9  1846.1  9679.3  1849.6  9696.8  1848.9  9711.8  1848.6    9717
GR1849.3  9732.5  1848.9  9747.1  1846.3  9758.6  1845.5  9765.8  1845.4    9772
GR  1847    9786  1849.1  9807.2  1849.2  9819.2  1847.5  9831.7  1847.3  9838.8
GR1845.8  9868.6  1844.4  9885.7  1847.2  9905.8  1847.6    9907  1847.9  9915.7
GR1847.8  9951.2  1845.4  9989.8  1845.2   10000  1844.8   10018  1845.6 10024.4
GR1850.7 10038.6  1850.8 10047.8  1850.3 10063.5  1850.7 10071.1  1850.9 10089.3
GR1849.2 10099.8  1848.8 10106.4  1849.1 10109.9  1854.8 10142.8  1855.2 10156.3
HD29.493    10.0

X129.538      36  9400.2 10034.4     270     230     240
GR  1860    9071  1852.7  9096.6  1854.5  9109.2  1856.5  9115.6  1855.8  9129.7
GR  1855  9160.4  1856.2  9182.2  1856.6  9231.6  1856.8  9294.3  1855.1  9331.2
GR1853.7  9372.5  1850.6  9376.2  1854.1  9382.6  1854.4  9400.2  1848.9  9419.1
GR1850.1  9441.4  1851.4  9480.9  1851.9    9528  1851.1    9545  1849.7  9586.2
GR1850.4  9625.5  1850.7    9667  1850.1  9703.9  1852.7  9733.9    1851  9774.5
GR1851.2  9838.1  1850.5  9871.5  1850.9  9915.1  1848.7  9948.9  1848.7  9970.4
GR1847.4  9990.7  1845.5   10000  1848.1 10016.1  1854.1 10034.4  1856.5 10071.6
GR1857.7 10085.4
HD29.538   10.00

NC  0.07    0.07   0.044     0.1     0.3
X129.601      31    9679 10060.2     370     330     330
GR1872.9  9099.7  1868.4  9117.8  1856.1  9156.4    1859  9183.7    1860  9210.1
GR1861.3  9257.3  1861.4  9286.8  1859.7  9337.3  1857.8  9385.8  1857.6  9431.3
GR1856.4  9472.7  1856.9  9515.2  1858.9  9628.9  1859.4    9679  1858.5  9695.4
GR1850.7  9710.3  1849.9  9734.3  1851.2  9784.6  1852.1  9797.7  1854.3  9832.4
GR1854.3  9848.1  1853.5  9885.6  1851.5  9929.9  1851.1  9960.4    1851   10000
GR1852.2   10019  1857.7 10035.2    1859 10046.6  1867.1 10060.2  1867.9 10084.7
GR1868.6   10148
HD29.601   10.00

X129.663      35  9803.9 10194.6     330     330     330
X3                        9615.1  1862.3 10201.4  1889.3
GR1874.6    9166  1872.5  9201.1  1863.4  9233.9  1861.7  9249.5  1863.9  9285.2
GR1862.6  9357.9  1861.5  9384.7  1859.9  9415.8    1862  9468.3  1860.7    9538
GR1862.3  9615.1  1862.6  9670.5  1862.5  9803.9  1851.7  9827.7  1850.9  9840.5
GR1850.9  9860.9    1856  9897.3  1855.5  9915.3    1854  9955.8  1853.7   10000
GR1852.9 10025.2  1857.5 10051.5  1856.8   10159  1869.1 10194.6    1867 10357.1
GR1866.3 10470.9  1864.6 10698.7  1863.6 10792.8  1862.8 10916.7  1862.3 11013.8
GR1860.8 11221.1  1861.8 11281.8  1866.3 11330.4  1870.2 11375.2  1875.3   11430
HD29.663   10.00

NC  0.07    0.07    0.04     0.1     0.3
X1 29.71      15    9715   10064     533      73     233
X3                   9715    1890   10064    1890
GR  1872    9609  1871.2    9715    1862    9754    1860    9764    1858    9772
GR  1856    9788  1854.5    9801  1856.1 9833.16  1856.5 9887.97    1856 9908.97
GR  1854 9972.43  1853.9 9998.70    1855 10021.8 1870.95   10052    1872   10118
HD 29.71   10.00

NC  0.07    0.07   0.036     0.1     0.3
X1 29.72      249593.1919956.504     127     127     127
X3                  9593.191    18809956.504    1880
GR  1881  8869.7  1872.2 9215.52  1872.2 9314.09  1873.7 9421.28  1874.5 9524.46
GR  1876 9593.19  1875.4 9595.54  1871.4 9606.06  1864.2 9623.12  1856.19639.302
GR1858.4 9674.94  1858.6 9701.37  1857.5 9732.78    1855 9846.41  1862.8 9873.43
GR1870.3 9887.95  1875.2 9910.84  1875.9 9928.85  1876.1 9944.50  1870.7 10278.1
GR1869.9 10443.2  1873.4 10954.8    1874 11285.2    1875 11456.7
HD 29.72   10.00

NC  0.07    0.07   0.036     0.3     0.5
X1 29.77      30  9764.6 10051.1      50     550     200
X3                    9754  1890.6 10051.1  1872.7
GR  1874    9195    1872    9222    1866    9240  1865.3  9317.8  1864.3  9364.1
GR1863.8    9408    1863    9449  1862.2  9466.8  1863.7  9505.3    1863  9551.4
GR1862.1  9588.5    1862  9603.5  1861.8  9676.4  1863.6    9720  1864.1  9724.1
GR1867.1  9736.3    1870  9745.8  1870.5  9764.6  1866.9  9772.8  1861.7  9782.5
GR1857.2  9792.9  1858.2  9809.5    1859  9826.1  1859.7  9869.9  1857.3 10011.1
GR1858.4 10024.3  1864.1 10033.6  1869.2 10042.5  1872.7 10051.1  1873.3 10073.5
HD 29.77   10.00

NC  0.07    0.07   0.036     0.1     0.3
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X1 29.85      17  9924.1 10043.7     400     400     400
GR1874.2    9386    1872  9406.8    1870  9413.5    1868  9438.9    1868  9504.5
GR  1870  9609.1  1870.4  9646.3    1868  9735.6    1868  9757.6    1866  9924.1
GR  1864  9938.5    1860  9945.1  1857.7 10015.9    1858 10029.3    1872 10043.7
GR  1878 10081.4    1880 10127.5
HD 29.85   10.00

NC  0.06    0.07   0.036     0.1     0.3
X1  30.1      65  9817.8 10037.9    1100    1325    1304
GR  1891  8723.4  1877.9  8748.2  1875.5  8775.4    1876    8780    1878  8810.6
GR1880.5  8835.2  1878.9    8853  1879.6  8871.3  1878.8  8898.7  1879.2  8919.7
GR1880.2  8960.2  1879.7  9014.6  1878.9  9044.7  1879.9  9052.4  1880.3  9099.2
GR1880.3  9155.3  1880.9  9227.8  1876.8  9243.7  1876.3  9255.3  1874.4  9276.4
GR1874.2  9307.4  1872.2  9329.9  1872.1    9342  1873.5  9355.7  1876.3    9390
GR1873.5  9392.9  1871.8    9404  1873.1  9420.7  1874.2  9425.8  1876.8  9428.7
GR1878.7  9441.3  1877.8  9466.4  1877.8  9482.9  1880.2  9496.3  1881.2  9512.7
GR1880.1  9529.5  1878.9  9533.3    1877  9544.7  1877.4  9559.8  1878.1  9578.4
GR1879.3  9589.9  1877.1  9614.6  1874.7  9633.8  1871.3  9643.6  1872.3  9667.4
GR1871.1  9672.6  1870.2  9693.9  1870.5  9717.8  1872.1  9722.8  1873.4  9730.9
GR1874.4  9755.3  1874.7  9768.6  1880.6  9788.6  1881.3  9817.8  1880.6  9848.5
GR1879.2  9860.4  1875.7  9872.6    1875  9880.1    1874  9891.8    1873  9935.6
GR1868.2  9949.8  1867.4   10000  1869.6 10010.8  1895.1 10037.3  1895.1 10037.9
HD 30.10   10.00

NC  0.06    0.07   0.044     0.1     0.3
X1  30.2      54  9900.1 10132.3     535     545     537
GR1897.8  8955.2  1882.4    8990  1880.4  9026.6    1882  9055.2  1883.7  9073.3
GR  1885  9087.5  1885.1    9107  1884.1  9146.3  1881.8  9170.8  1881.9    9184
GR1882.7    9204    1882  9235.3  1882.4  9246.9  1882.3  9262.4  1883.5  9272.2
GR1884.4  9292.3  1883.6  9312.7  1881.6  9337.9  1881.1  9347.9  1882.5    9366
GR1882.6  9381.9  1886.1  9390.1  1885.7  9418.6  1884.4  9457.3    1883    9490
GR1883.8  9504.1  1883.4  9564.4    1882  9590.9  1883.3  9616.7  1883.5  9641.3
GR1879.3  9663.9  1879.5  9669.6  1882.3  9684.6  1882.8  9695.5  1881.9    9707
GR1879.8  9714.1  1879.9  9731.2  1882.8  9741.7    1883  9753.1  1883.3    9796
GR1884.1  9822.3  1883.7    9859  1882.8  9900.1  1876.5  9927.7  1875.8  9939.7
GR  1877  9976.9  1876.1   10000  1876.4 10000.6  1877.9 10021.2  1878.8 10045.5
GR1878.2 10069.8    1876   10086  1875.2 10093.2  1897.9 10132.3
HD  30.2   10.00

X1 30.28      40  9881.7 10033.5     550     430     421
GR1901.6  9132.4  1889.1  9162.5  1889.5  9181.6  1888.4  9200.7  1889.3  9222.8
GR  1890  9264.4  1890.1  9316.4  1890.2  9351.6  1888.4  9388.9    1887  9396.9
GR1886.6  9406.9    1888  9427.9  1888.6  9442.8  1887.8    9470  1889.3  9491.8
GR1890.2  9550.4  1889.5  9595.4  1889.6  9616.6  1887.7  9631.3    1887    9649
GR1889.5  9679.4  1888.6  9694.4  1886.6  9704.9  1889.5  9717.5  1890.4  9732.1
GR  1890  9751.7  1888.7  9775.3    1888    9814  1885.9  9833.6  1885.2  9881.7
GR1884.3  9895.3  1881.8  9908.6  1880.9  9934.5  1879.7  9947.3  1878.3  9978.3
GR1877.8  9989.9  1877.8   10000  1877.1 10008.3  1877.5 10014.5  1894.3 10033.5
HD 30.28   10.00

X1 30.42      43  9957.5 10487.8     500     650     713
GR1906.6  9501.6  1893.1    9533  1893.6  9568.7  1892.9  9613.1  1892.9  9631.9
GR1892.9  9666.7  1894.3  9714.6  1894.8  9733.5  1894.8  9755.5  1894.6  9800.7
GR1895.2  9854.8  1892.9    9868  1893.9  9893.2  1893.6  9900.4  1890.9  9907.3
GR1890.6  9916.4  1895.4  9931.2  1895.6  9957.5  1890.3  9970.3  1887.8  9999.9
GR1888.1   10000  1889.6 10037.1  1890.3 10052.9  1892.7 10080.7  1892.4 10102.6
GR1891.7 10123.6  1891.1 10145.5  1885.8 10159.9    1889 10186.9  1889.8 10200.7
GR1892.1 10211.4  1890.7 10239.2  1888.3 10258.2    1893 10277.2  1892.4 10320.1
GR1889.9 10362.3  1889.7 10390.2  1891.4 10402.9  1890.9 10438.8  1890.9   10443
GR1893.1 10455.4  1900.1 10487.8  1901.5 10552.6
HD 30.42   10.00

X1 30.52      50  9826.1 10401.4     600     500     560
GR1904.7  9283.8  1900.8    9298  1900.7  9317.2  1900.5    9342  1900.8  9401.2
GR1900.4  9431.3  1900.9    9463  1900.8  9498.9  1900.4  9566.3  1899.9  9630.3
GR  1900  9649.8  1900.1  9696.8  1899.9  9721.3  1899.1  9744.6  1899.3  9757.6
GR1899.2    9771  1899.6  9785.1  1900.4  9811.3  1900.9  9826.1    1900  9851.7
GR1898.1  9872.3  1894.7  9876.3  1894.9  9887.7    1895  9902.1  1897.4    9914
GR1898.2  9933.1  1896.5    9965  1893.6  9983.4  1893.8   10000  1893.5 10049.4
GR  1894 10061.6  1894.9 10068.7  1898.8 10095.2  1898.9 10107.9  1898.9 10132.4
GR1898.1 10161.8    1899 10213.6    1899 10221.1  1898.8 10242.8  1897.4 10260.3
GR1896.9 10275.9  1893.8   10291  1894.4 10300.9  1900.1 10323.3  1899.8 10340.6
GR1898.7 10361.4  1896.7 10366.8  1899.3 10383.8  1903.8 10401.4  1904.8 10420.5
HD 30.52   10.00

X1 30.65      39  9909.4 10027.8     700     650     696
GR  1913  9206.9  1910.7  9224.3  1909.7  9241.6  1908.9  9297.7    1908  9329.1
GR1907.1  9386.1  1907.9  9430.3  1908.6  9448.3  1908.9  9465.2  1908.4    9483
GR1908.7    9506    1908  9526.3  1906.8  9563.6  1906.3  9601.3  1905.9  9627.1
GR1905.5  9654.8  1905.5  9691.5  1905.8  9715.1  1906.1  9732.3  1906.2  9743.9
GR1901.9  9771.6  1900.6  9791.3  1901.6  9799.1  1903.2    9813  1904.1  9833.8
GR  1903    9871  1904.2  9891.8  1904.4  9909.4  1902.4  9919.7  1901.8  9933.9
GR1898.6  9943.8    1899  9971.6  1898.3  9988.4  1897.2  9995.5  1897.3   10000
GR1898.2 10019.6  1910.2 10027.8  1911.2 10041.2  1911.2 10070.7
HD 30.65   10.00

NC  0.07    0.07   0.044     0.1     0.3

X1 30.75      31  9857.1 10184.4     475     450     486
X3    10
GR1918.1  9299.3  1915.8  9316.1  1915.2  9339.6  1914.8  9376.8  1914.4  9417.3
GR1914.4    9491  1913.7  9531.6  1909.8  9560.3  1909.6  9621.7  1908.9  9660.3
GR1909.4  9712.4  1909.2  9755.1  1909.1  9793.8  1909.1  9820.7  1909.7  9857.1
GR1909.4  9869.1  1906.2  9885.3  1907.2  9912.3  1906.7    9935  1904.1  9963.4
GR1902.6  9982.7  1902.5  9993.3  1902.4   10000  1903.8 10050.3    1903 10096.8
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GR  1901 10116.3  1903.4 10126.1  1903.2 10142.7  1902.8 10165.8  1915.5 10184.4
GR1916.9 10241.8
HD 30.75   10.00

NC  0.07    0.06   0.044     0.1     0.3
X1 30.85      37  9889.7 10051.3     525     570     569
X3    10
GR1919.8  9554.5  1919.4  9596.5  1918.6  9645.1  1917.4  9696.1  1916.6  9729.2
GR  1916  9804.9  1915.8    9834  1915.8  9835.9  1915.6  9863.9    1915  9889.7
GR1912.1  9901.4  1908.2  9912.4  1909.4  9928.9  1908.5  9950.5  1909.1  9972.9
GR1907.5   10000  1907.9 10018.4  1914.3 10051.3  1914.5 10090.2  1915.2 10129.5
GR1915.3 10148.9  1915.5 10185.9  1914.7 10222.7  1910.5 10246.4  1913.3 10276.3
GR1913.9 10294.3  1914.1 10316.8  1911.5   10327  1910.9   10361  1909.4 10370.8
GR1908.6 10385.6  1910.2 10407.2  1907.9 10436.5  1905.6 10442.7  1905.3 10474.8
GR1907.4 10484.7  1921.7 10503.4
HD 30.85   10.00

X1 30.96      47  9925.5 10145.6     550     570     541
GR  1926  9841.1  1918.3    9870  1918.3  9883.8  1918.1  9925.5  1914.4  9943.8
GR1913.9  9973.8    1913  9986.9  1912.3   10000  1912.5 10026.1  1914.1   10032
GR1913.5 10040.4  1913.3 10048.6  1917.1   10068  1917.3 10108.6  1918.4 10126.3
GR1919.6 10145.6  1919.1 10178.2    1918   10215  1917.6 10251.6  1914.8 10288.4
GR1916.8 10300.7  1917.5 10314.7  1917.7 10337.5  1915.9 10354.8  1913.7 10368.2
GR1915.1   10381    1917 10420.6  1919.4 10463.2  1920.1 10491.4  1920.5 10517.7
GR1920.3 10535.8  1919.1 10566.8  1919.3 10590.8  1917.5 10602.1  1916.8 10612.3
GR1916.6 10626.6    1912 10646.3  1912.4 10653.8  1915.2 10665.1  1916.8 10676.9
GR1917.3 10689.9  1916.6   10727  1916.5 10740.6  1914.6 10749.9  1914.1 10758.8
GR1915.9 10771.1  1924.1 10798.3
HD 30.96   10.00

X1 31.05      49    9886 10109.5     470     460     494
GR  1932  9874.9 1923.33    9886  1918.8  9891.8  1918.9  9913.5  1920.4  9925.9
GR1918.3  9934.2  1917.1  9959.6  1917.8  9981.5  1917.8   10000  1918.1 10017.7
GR1919.2 10031.9  1920.9 10043.6  1920.4 10072.9  1921.7 10087.3  1922.6 10103.6
GR  1923 10109.5  1922.9 10135.9  1921.9 10144.8  1922.2 10184.5  1921.3 10203.3
GR1923.4   10234  1923.4 10256.6  1922.9   10289  1923.9 10317.1  1923.8 10318.2
GR1923.3 10374.4  1922.2 10391.5  1921.5 10427.9  1921.6 10450.6  1924.3 10476.8
GR1924.3 10506.7  1922.6 10573.2  1921.7   10624  1921.8   10643  1920.7 10662.9
GR1920.8 10689.1  1920.3 10706.9  1917.2   10715  1916.9 10722.6  1921.9   10745
GR1921.7 10764.6  1921.3 10790.9    1919 10806.3  1920.1 10836.8    1920 10849.3
GR  1918 10866.4  1917.4 10887.8  1928.6 10913.9  1930.4 10928.2
HD 31.05   10.00

X1 31.14      51  9926.4 10146.3     500     350     467
GR1936.6  9585.1  1932.6  9604.8  1929.8  9617.8    1928  9636.3  1927.7  9669.3
GR1927.8  9692.5  1927.9    9713  1927.5  9756.8  1926.6  9801.2  1926.6    9847
GR1927.5  9879.8  1928.2  9908.3  1928.7  9926.4  1922.6  9939.6  1921.1  9947.4
GR1920.2  9965.8    1919  9973.5  1917.8   10000  1918.4 10010.3  1920.5 10026.5
GR1924.5 10045.6  1925.6 10071.7  1926.9 10108.7  1928.3 10146.3  1928.3 10165.5
GR  1928 10175.7  1926.5 10200.1  1925.2 10211.8  1923.6 10216.9  1923.6 10228.2
GR1922.4 10244.9  1927.1 10260.3    1928 10283.8  1927.9 10333.2  1926.4 10349.7
GR1927.2   10374  1926.2 10391.8  1925.9 10409.7  1924.3 10420.3  1923.7   10437
GR1926.1 10478.4  1925.7 10521.1  1925.7 10538.5    1926 10563.6  1926.4 10576.4
GR1922.6 10583.9  1924.1 10604.4    1924 10631.6  1925.6 10648.6  1931.2 10664.9
GR1939.2 10690.6
HD 31.14   10.00

X1 31.17      39  9852.5 10210.3     130     130     162
X3                        9653.3    1940   10530    1940
GR1936.3  9491.6    1932    9506  1929.3  9521.4  1928.2  9545.1    1928  9562.9
GR1928.1  9579.7  1929.3  9634.1  1929.5  9653.3  1928.9  9726.8    1929  9786.7
GR1929.9  9825.3  1931.1  9852.5  1922.6  9871.9  1922.6  9888.2  1920.8  9897.9
GR1921.3    9911  1924.7  9918.2  1924.7  9936.1  1923.2  9965.1  1921.7   10000
GR1921.7 10001.5  1923.1 10054.8  1923.8 10062.1  1926.2 10080.5  1926.9 10099.2
GR1927.8 10124.8  1928.2 10182.8  1930.9 10210.3  1928.3 10228.1  1926.1 10247.7
GR1924.7 10279.7  1928.2 10302.1  1928.8 10328.3  1928.5 10367.3    1928 10402.1
GR1926.3 10441.8  1924.6 10469.9  1925.2   10497  1935.7 10536.2
HD 31.17   10.00

X1 31.25      58  9783.9 10041.9     400     400     432
X3                          9750    1940   10480    1940
GR1938.6  9373.1  1936.9  9395.2  1936.4  9406.7    1935  9423.4    1935    9428
GR1933.5  9455.8  1931.6  9505.3  1932.3  9509.8  1932.8  9528.7  1932.9  9546.8
GR1932.5    9565  1931.7  9570.8  1932.8  9591.6  1933.2  9610.1  1934.5  9655.8
GR1934.5  9676.8  1934.9    9701  1934.9  9746.6  1934.1  9783.9    1926  9798.6
GR1925.5    9809  1925.4  9818.8  1928.3  9828.6  1929.5  9837.7  1930.7  9857.7
GR  1931  9867.3  1931.1  9881.1  1928.7  9937.9  1927.2  9978.9    1926  9992.1
GR  1926  9998.1  1926.1   10000  1925.9 10008.2  1927.4 10019.5  1931.4 10031.4
GR1932.1 10041.9    1932 10070.2  1931.1 10095.4    1931   10102  1930.7   10114
GR1928.7 10132.1  1930.9 10149.7  1929.9 10161.2  1931.8 10181.8  1931.8 10190.3
GR1932.1 10215.9  1932.1 10261.6  1931.9 10286.1  1931.3 10318.8  1932.6 10340.5
GR1932.7 10366.6  1931.9 10388.8  1931.8 10413.5  1931.3 10430.7    1929 10443.2
GR1928.6 10452.1  1929.3   10466    1940 10483.8
HD 31.25   10.00

X1 31.34      39  9930.2 10137.5     450     450     474
GR1943.7  9664.3  1943.4  9718.8  1939.1    9793  1937.3  9862.7  1937.1  9930.2
GR1935.5  9935.3  1933.3  9949.9  1931.5   10000  1933.2 10027.2  1934.1 10104.9
GR1933.1 10113.8  1932.9 10116.6  1935.4 10126.5  1936.5 10137.5  1935.1 10146.5
GR1934.7   10157  1932.9   10166  1932.1   10178  1932.9 10184.4  1936.1 10196.8
GR1936.6 10210.6  1936.5 10248.8    1936 10254.7  1935.9 10322.1  1935.1 10332.9
GR1935.1 10365.4  1932.4 10379.2  1931.5 10394.9  1931.9 10412.7  1934.9   10417
GR1935.8 10429.2  1935.2 10471.2  1935.9 10485.5  1935.8 10497.1  1934.5 10509.7
GR1933.7 10532.2  1933.8 10540.5  1934.1 10545.2    1940   10555
HD 31.34   10.00
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X1 31.45       48     9850    10031      590      620      592
GR1951.3   9794.4   1948.9   9827.8   1946.7   9836.9   1944.6     9850   1933.4   9861.9
GR1933.1   9869.7   1933.7   9885.4   1937.6   9905.9   1938.3   9927.1   1936.2   9964.4
GR1935.2   9983.8   1933.6   9993.3   1933.3    10000   1933.3  10008.5   1933.8  10009.4
GR1941.1    10031     1941  10073.8     1941  10110.3   1940.3  10145.4   1939.8  10163.5
GR1939.1  10168.6   1941.7  10186.5   1941.5  10204.8   1939.5  10230.5   1939.5  10250.8
GR1938.2  10270.7   1937.5  10293.2   1938.3  10327.6   1938.7  10334.1   1942.7  10346.9
GR1942.5  10385.9   1941.7  10399.4   1937.4    10439   1939.3  10462.8   1941.9  10480.5
GR1941.8  10521.6     1942  10548.4     1942  10567.9   1942.1  10608.9   1942.4    10642
GR1945.4  10694.7   1945.2  10736.6   1944.2  10772.4   1943.2  10798.3     1944  10813.1
GR1944.1  10862.6   1944.8  10879.9   1949.7  10899.7
HD 31.45    10.00

X1 31.54       44     9916  10182.8      475      475      484
GR1953.1   9903.1  1946.65     9916   1940.2   9928.9   1940.1   9945.4   1940.2   9977.3
GR1940.3    10000   1941.1  10041.5   1940.6  10050.6   1940.7  10073.6     1942    10094
GR1941.9  10112.1   1942.1  10138.9   1942.2  10155.4   1944.3  10165.5   1946.3  10182.8
GR1945.8  10201.5   1946.2  10229.8   1946.9  10266.6   1946.7  10296.7   1944.2  10320.8
GR  1945  10335.4   1944.8  10361.1   1943.4  10368.2   1941.6    10400   1940.6  10407.2
GR1940.7  10429.9   1941.7    10439   1941.5  10456.4     1945    10470   1946.2  10481.4
GR  1946  10490.5   1943.2  10514.6   1941.4  10538.9     1948    10556   1948.9  10565.9
GR1948.3  10611.6   1947.9    10647   1947.6  10681.6   1947.4  10740.1   1947.9  10783.6
GR1948.4    10820   1948.4  10875.2   1951.6  10907.6     1952  10932.1
HD 31.54    10.00

X1 31.63       41   9961.1  10153.9      450      430      453
GR1958.1   9746.7   1949.7   9772.3     1949   9798.9   1948.9   9843.2   1948.3   9868.4
GR1947.5   9884.3   1947.6   9917.9   1946.4   9928.5   1947.3   9961.1   1942.5   9972.7
GR1940.5   9988.2   1940.6    10000   1940.7  10001.6   1940.7  10023.2   1941.7    10037
GR1944.7  10056.6   1945.2  10070.9   1945.1  10102.8   1944.7  10113.1   1946.9  10125.9
GR1948.2  10153.9   1948.6  10190.6   1947.5  10229.8   1947.3  10260.8     1947  10312.4
GR1946.3  10336.4   1947.6  10337.3   1950.5  10361.7   1949.2  10392.2   1948.8  10414.1
GR1946.3  10424.8   1948.2  10444.7   1951.7  10460.1   1952.9  10492.2   1952.8  10511.8
GR1952.1    10540   1952.4    10555   1952.2  10593.1   1952.4  10675.7   1956.7  10701.9
GR1956.6  10708.4
HD 31.63    10.00

NC  0.07     0.07    0.044      0.1      0.3
X1 31.75       36   9797.4  10027.6      680      650      647
GR1968.8     9535     1958   9569.1   1956.1     9580   1955.6   9600.1   1955.1   9620.2
GR1955.2   9640.7   1955.2     9671   1955.2   9699.4     1954   9797.4     1951   9807.2
GR1951.4     9817   1947.9   9830.1   1947.8   9838.9   1947.7   9849.4   1951.2   9874.7
GR1951.4   9893.5   1950.8     9936     1948   9965.9   1946.5   9988.6   1946.9   9994.7
GR1947.2    10000   1951.4    10016     1953  10027.6   1953.5  10055.5     1954  10095.7
GR1957.1  10146.4   1957.3  10176.9   1957.5  10201.8   1957.4  10202.3   1957.5  10265.2
GR1957.8  10341.9   1958.4  10415.1   1959.7  10486.4   1960.5  10533.3   1961.2  10567.4
GR1964.1  10582.5
HD 31.75    10.00

X1 31.82       30   9839.4  10046.1      360      370      361
GR1968.8   9640.8  1959.59     9660   1955.8   9667.9   1954.9   9681.8   1956.6   9690.9
GR1957.2   9720.3   1957.2   9781.8   1957.1     9801   1956.7   9810.2   1963.5   9828.3
GR1963.3   9839.4   1953.4   9861.7   1953.4   9901.8   1953.2   9938.9   1952.7    10000
GR1956.1  10017.6     1957    10035   1959.4  10046.1     1959  10068.7   1961.5  10077.7
GR1960.7  10084.5   1961.3  10108.5   1961.4  10154.5   1961.1  10172.2   1961.9  10255.5
GR1962.5  10327.1   1963.5  10369.1   1964.2  10384.7   1965.9    10402     1967  10410.2
HD 31.82    10.00

X1 31.87       26   9848.6  10017.7      220      260      243
GR1971.3   9626.3   1969.2     9643   1966.3   9648.1   1961.2   9655.8   1960.6   9670.8
GR1960.1   9690.2   1959.1   9693.1   1958.9   9818.6   1966.8   9829.2   1967.4     9837
GR1966.2   9848.6   1957.6   9864.1   1955.4   9879.3   1955.5   9900.2   1953.7   9938.9
GR1953.6   9982.7   1953.8    10000   1953.9  10007.4   1959.6  10017.7   1961.5  10059.8
GR1962.7  10114.9   1963.6  10134.9   1965.1  10168.9   1966.1    10197   1967.7  10206.3
GR1973.5  10227.4
HD 31.87    10.00

NC  0.06     0.07    0.044      0.1      0.3
X1 31.91       32     9933  10050.7      240      210      208
GR  1972   9636.6     1971   9656.6   1963.7   9686.4   1959.7   9704.8   1960.1   9716.5
GR1960.3   9740.5   1959.1   9793.6   1957.7   9812.1     1956   9816.1     1956     9828
GR1959.3   9842.6   1961.4   9856.4   1958.9   9879.9   1959.2   9894.2   1959.2   9914.2
GR1959.7     9933     1959     9940     1956   9949.2   1954.5     9968     1954   9982.5
GR1953.3    10000   1953.4  10025.9   1953.5  10025.9   1961.3  10050.7   1962.7  10078.7
GR1963.8    10106   1964.8    10139     1966  10170.4   1967.8  10188.1   1968.7  10199.5
GR1970.1  10207.3   1973.4  10222.6
HD 31.91    10.00

EJ

T4  Project: Upper Cave Creek Watercourse Master Plan Studies
T5  Client : Flood Control District of Maricopa County (FCDMC)
T6  Date:    July 8, 1999
T7  Firm:    Stantec Consulting, Inc.
T8  ******************************************************
I1            10
I4  SAND       4       1      14       0       0       0       0       0
I5           0.5     0.5    0.25     0.5    0.25       0     1.0
LQ     Q       1    2000   12000   17000   27000   37000   42000
LT    QS       1    3732   38488   45655   63313  135982  155000
LF   VFS  0.0142  0.0142  0.0082  0.0091  0.0097  0.0278  0.0291
LF    FS  0.0280  0.0280  0.0193  0.0186  0.0211  0.0151  0.0161
LF    MS  0.0879  0.0879  0.0638  0.0393  0.0399  0.0539  0.0545
LF    CS  0.2299  0.2299  0.1727  0.1828  0.1697  0.1427  0.1421
```

```
LF   VCS  0.2324  0.2324  0.1905  0.1731  0.1579  0.1549  0.1542
LF   VFG  0.1802  0.1802  0.1732  0.1621  0.1529  0.1512  0.1496
LF    FG  0.1479  0.1479  0.1907  0.1801  0.1710  0.1692  0.1683
LF    MG  0.0787  0.0787  0.1515  0.1642  0.1799  0.1844  0.1823
LF    CG  0.0008  0.0008  0.0300  0.0560  0.0850  0.0928  0.0927
LF   VCG       0       0  0.0001  0.0147  0.0129  0.0078  0.0109
LF    SC       0       0       0       0       0  0.0002  0.0002
LF    LC       0       0       0       0       0       0       0
LF    SB       0       0       0       0       0       0       0
LF    MB       0       0       0       0       0       0       0
PF        29.387     1.0    76.2    50.8      95    38.1      93    25.4      88
PFC 19.1      82    12.7      72   9.525      65    6.35      56    4.75      49
PFC 2.36      38       2      34    1.18      24   0.595      11    0.42       7
PFC0.297       5   0.106       3   0.075     2.6

$HYD
$RATING
RC            18    2500       0       0 1623.90 1627.42 1628.31 1628.75 1629.10
RC       1629.50 1629.80 1630.15 1630.48 1630.70 1630.98 1631.08 1631.18 1631.35
RC       1632.00 1632.35 1632.90 1633.15

*    A  Level output at time step 1 (10.92 hrs)
Q     87
T     68
X         0.0455  0.4549
*    A  Level output at time step 2 (1 hr)
Q    446
W 0.0417
*    A  Level output at time step 3 (0.25 hrs)
Q    608
W 0.0104
*    A  Level output at time step 4 (0.25 hrs)
Q   1006
W 0.0104
*    A  Level output at time step 5 (0.25 hrs)
Q   1969
W 0.0104
*    A  Level output at time step 6 (0.25 hrs)
Q   2824
W 0.0104
*    A  Level output at time step 7 (0.25 hrs)
Q   3842
W 0.0104
*    A  Level output at time step 8 (0.25 hrs)
Q   7705
W 0.0104
*    A  Level output at time step 9 (0.25 hrs)
Q  18133
W 0.0104
*    A  Level output at time step 10 (0.25 hrs)
Q  30296
W 0.0104
*    A  Level output at time step 11 (0.25 hrs)
Q  36586
W 0.0104
*    A  Level output at time step 12 (0.25 hrs)
Q  37995
W 0.0104
*    A  Level output at time step 13 (0.25 hrs)
Q  37252
W 0.0104
*    A  Level output at time step 14 (0.25 hrs)
Q  35585
W 0.0104
*    A  Level output at time step 15 (0.25 hrs)
Q  33288
W 0.0104
*    A  Level output at time step 16 (0.75 hrs)
Q  27701
R 1631.7
W 0.0312
*    A  Level output at time step 17 (1 hr)
Q  18479
R 1634.4
W 0.0417
*    A  Level output at time step 18 (1 hr)
Q  11129
R 1636.0
W 0.0417
*    A  Level output at time step 19 (2 hrs)
Q   5648
R 1637.2
W 0.0833
*    A  Level output at time step 20 (10 hrs)
Q   1706
R 1638.8
W 0.1701
*    A  Level output at time step 21 (0.0451)
Q    161
R 1638.8
W 0.0019
$VOL
$$END
```

```
*************************************************      *********************************
*  SCOUR AND DEPOSITION IN RIVERS AND RESERVOIRS  *      *  U.S. ARMY CORPS OF ENGINEERS   *
*       Version: 4.1.00 -  OCTOBER 1993           *      *  HYDROLOGIC ENGINEERING CENTER  *
*  INPUT FILE:  CC-E100F.DAT                      *      *  609 SECOND STREET              *
*  OUTPUT FILE: CC-E100F.OUT                      *      *  DAVIS, CALIFORNIA 95616-4687   *
*  RUN DATE: 10 OCT 00    RUN TIME: 07:21:07      *      *  (916) 756-1104                 *
*************************************************      *********************************

                    X     X  XXXXXXX   XXXXX           XXXXX
                    X     X  X        X     X         X     X
                    X     X  X        X               X
                    XXXXXXX  XXXX     X        XXXXX  XXXXXX
                    X     X  X        X               X     X
                    X     X  X        X     X         X     X
                    X     X  XXXXXXX   XXXXX           XXXXX

          ****************************************************************
          *  MAXIMUM LIMITS FOR THIS VERSION ARE:                        *
          *       10  Stream Segments (Main Stem + Tributaries)          *
          *      500  Cross Sections                                     *
          *      200  Elevation/Station Points per Cross Section         *
          *       20  Grain Sizes                                        *
          *       10  Control Points                                     *
          ****************************************************************

T1      Cave Creek and Apache Wash WMP
T2      by Stantec:  Proj. No. 82000077                 File: CC-E100F.DAT
T3      for Flood Control District of Maricopa County  Date: 07-26-99 srg

N values...  Left    Channel   Right    Contraction    Expansion
           0.0700   0.0440   0.0600       1.1000      0.7000

SECTION NO.    24.525
...Left Encroachment defined at station  9865.000 at elevation  1628.100
...Right Encroachment defined at station 10009.000 at elevation  1628.100
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    24.646
...Left Encroachment defined at station  9430.000 at elevation  1640.000
...Right Encroachment defined at station 11000.000 at elevation  1640.000
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    24.752
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    24.845
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    24.919
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    25.010
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    25.099
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    25.180
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    25.233
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    25.326
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    25.388
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    25.458
...Ineffective Flow Area - Method 1 - Left Overbank  Right Overbank
          Natural Levees at Station       9916.800      10067.100
              Ineffective Elevation       1668.100       1669.100
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    25.519
...Ineffective Flow Area - Method 1 - Left Overbank  Right Overbank
          Natural Levees at Station       9946.000      10101.000
              Ineffective Elevation       1672.400       1672.200
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    25.580
...Ineffective Flow Area - Method 1 - Left Overbank  Right Overbank
          Natural Levees at Station       9974.400      10121.500
              Ineffective Elevation       1674.100       1673.700
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    25.644
...Ineffective Flow Area - Method 1 - Left Overbank  Right Overbank
          Natural Levees at Station       9908.800      10061.500
              Ineffective Elevation       1676.600       1677.300
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    25.699
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.
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SECTION NO.    25.750
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    25.843
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    25.919
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    26.044
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    26.137
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    26.239
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    26.335
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    26.430
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    26.529
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    26.623
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    26.695
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    26.775
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    26.845
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    26.921
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    27.008
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    27.106
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    27.169
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    27.226
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    27.265
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    27.320
...Ineffective Flow Area - Method 1 - Left Overbank  Right Overbank
          Natural Levees at Station       9907.500      10072.300
              Ineffective Elevation       1749.800       1754.900
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    27.366
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    27.417
...Ineffective Flow Area - Method 1 - Left Overbank  Right Overbank
          Natural Levees at Station       9942.800      10200.800
              Ineffective Elevation       1756.800       1759.400
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
           0.0700   0.0360   0.0700       1.1000      0.7000

SECTION NO.    27.502
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    27.604
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    27.693
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    27.797
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    27.913
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
           0.0700   0.0440   0.0700       1.1000      0.7000

SECTION NO.    28.023
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...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    28.091
...Left Encroachment defined at station  9641.300 at elevation  1811.700
...Right Encroachment defined at station 10160.500 at elevation  1792.100
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    28.157
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    28.241
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
           0.0700   0.0360   0.0700       1.1000      0.7000

SECTION NO.    28.326
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    28.390
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    28.462
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    28.555
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    28.657
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    28.750
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    28.847
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    28.934
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    29.012
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    29.130
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
           0.0700   0.0440   0.0700       1.1000      0.7000

SECTION NO.    29.258
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
           0.0700   0.0500   0.0700       1.1000      0.7000

SECTION NO.    29.351
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    29.387
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    29.493
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    29.538
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
           0.0700   0.0440   0.0700       1.1000      0.7000

SECTION NO.    29.601
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    29.663
...Left Encroachment defined at station  9615.100 at elevation  1862.300
...Right Encroachment defined at station 10201.400 at elevation  1889.300
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
           0.0700   0.0400   0.0700       1.1000      0.7000

SECTION NO.    29.710
...Left Encroachment defined at station  9715.000 at elevation  1890.000
...Right Encroachment defined at station 10064.000 at elevation  1890.000
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
           0.0700   0.0360   0.0700       1.1000      0.7000

SECTION NO.    29.720
...Left Encroachment defined at station  9593.191 at elevation  1880.000
...Right Encroachment defined at station  9956.504 at elevation  1880.000
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
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          0.0700   0.0360   0.0700       1.3000     0.5000

SECTION NO.    29.770
...Left Encroachment defined at station  9754.000 at elevation  1890.600
...Right Encroachment defined at station 10051.100 at elevation  1872.700
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
          0.0700   0.0360   0.0700       1.1000     0.7000

SECTION NO.    29.850
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
          0.0600   0.0360   0.0700       1.1000     0.7000

SECTION NO.    30.100
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
          0.0600   0.0440   0.0700       1.1000     0.7000

SECTION NO.    30.200
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    30.280
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    30.420
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    30.520
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    30.650
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
          0.0700   0.0440   0.0700       1.1000     0.7000

SECTION NO.    30.750
...Ineffective Flow Area - Method 1 - Left Overbank  Right Overbank
         Natural Levees at Station       9857.100      10184.400
             Ineffective Elevation       1909.700       1915.500
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
          0.0700   0.0440   0.0600       1.1000     0.7000

SECTION NO.    30.850
...Ineffective Flow Area - Method 1 - Left Overbank  Right Overbank
         Natural Levees at Station       9889.700      10051.300
             Ineffective Elevation       1915.000       1914.300
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    30.960
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    31.050
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    31.140
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    31.170
...Left Encroachment defined at station  9653.300 at elevation  1940.000
...Right Encroachment defined at station 10530.000 at elevation  1940.000
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    31.250
...Left Encroachment defined at station  9750.000 at elevation  1940.000
...Right Encroachment defined at station 10480.000 at elevation  1940.000
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    31.340
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    31.450
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    31.540
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    31.630
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
          0.0700   0.0440   0.0700       1.1000     0.7000

SECTION NO.    31.750
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    31.820
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.
```

```
SECTION NO.    31.870
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
           0.0600   0.0440   0.0700       1.1000       0.7000

SECTION NO.    31.910
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

NO. OF CROSS SECTIONS IN STREAM SEGMENT= 89
NO. OF INPUT DATA MESSAGES =   0

TOTAL NO. OF CROSS SECTIONS IN THE NETWORK =  89
TOTAL NO. OF STREAM SEGMENTS IN THE NETWORK=   1
END OF GEOMETRIC DATA

==================================================================================================

T4  Project: Upper Cave Creek Watercourse Master Plan Studies
T5  Client : Flood Control District of Maricopa County (FCDMC)
T6  Date:    July 8, 1999
T7  Firm:    Stantec Consulting, Inc.
T8  ******************************************************

        Cave Creek and Apache Wash WMP
        by Stantec:  Proj. No. 82000077                File: CC-E100F.DAT
        for Flood Control District of Maricopa County  Date: 07-26-99 srg

- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
SEDIMENT PROPERITES AND PARAMETERS

       SPI      IBG     MNQ      SPGF      ACGR      NFALL     IBSHER
I1     10.       0       1      1.000    32.174       2          1
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 SANDS - BOULDERS ARE PRESENT

       MTC      IASA     LASA      SPGS       GSF       BSAE       PSI      UWDLB
I4      4        1       14      2.650      0.667     0.500     30.000    93.000

USING TRANSPORT CAPACITY RELATIONSHIP #  4, YANG
GRAIN SIZES UTILIZED (mean diameter - mm)
-----------------------------------------------------------------------
    VERY FINE SAND....     0.088  |  MEDIUM GRAVEL.....   11.314
    FINE SAND.........     0.177  |  COARSE GRAVEL.....   22.627
    MEDIUM SAND.......     0.354  |  VERY COARSE GRAVEL   45.255
    COARSE SAND.......     0.707  |  SMALL COBBLES.....   90.510
    VERY COARSE SAND..     1.414  |  LARGE COBBLES.....  181.019
    VERY FINE GRAVEL..     2.828  |  SMALL BOULDERS....  362.039
    FINE GRAVEL.......     5.657  |  MEDIUM BOULDERS...  724.077
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
COEFFICIENTS FOR COMPUTATION SCHEME WERE SPECIFIED
        DBI      DBN      XID      XIN      XIU      UBI      UBN      JSL
I5    0.500    0.500    0.250    0.500    0.250    0.000    1.000       1
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -

SEDIMENT LOAD TABLE FOR STREAM SEGMENT #   1
          LOAD BY GRAIN SIZE CLASS (tons/day)
-----------------------------------------------------------------------------------------------
LQ      Q | 1.00000    | 2000.00    | 12000.0    | 17000.0    | 27000.0    | 37000.0    | 42000.0    |
          ------------ ------------ ------------ ------------ ------------ ------------ ------------
LF    VFS |0.142000E-01| 52.9944    | 315.602    | 415.461    | 614.136    | 3780.30    | 4510.50    |
LF     FS |0.280000E-01| 104.496    | 742.818    | 849.183    | 1335.90    | 2053.33    | 2495.50    |
LF     MS |0.879000E-01| 328.043    | 2455.53    | 1794.24    | 2526.19    | 7329.43    | 8447.50    |
LF     CS |0.229900    | 857.987    | 6646.88    | 8345.73    | 10744.2    | 19404.6    | 22025.5    |
LF    VCS |0.232400    | 867.317    | 7331.96    | 7902.88    | 9997.12    | 21063.6    | 23901.0    |
LF    VFG |0.180200    | 672.506    | 6666.12    | 7400.68    | 9680.56    | 20560.5    | 23188.0    |
LF     FG |0.147900    | 551.963    | 7339.66    | 8222.47    | 10826.5    | 23008.2    | 26086.5    |
LF     MG |0.787000E-01| 293.708    | 5830.93    | 7496.55    | 11390.0    | 25075.1    | 28256.5    |
LF     CG |0.800000E-03| 2.98560    | 1154.64    | 2556.68    | 5381.61    | 12619.1    | 14368.5    |
LF    VCG |0.100000E-19|0.100000E-19| 3.84880    | 671.129    | 816.738    | 1060.66    | 1689.50    |
LF     SC |0.100000E-19|0.100000E-19|0.100000E-19|0.100000E-19|0.100000E-19| 27.1964    | 31.0000    |
LF     LC |0.100000E-19|0.100000E-19|0.100000E-19|0.100000E-19|0.100000E-19|0.100000E-19|0.100000E-19|
LF     SB |0.100000E-19|0.100000E-19|0.100000E-19|0.100000E-19|0.100000E-19|0.100000E-19|0.100000E-19|
LF     MB |0.100000E-19|0.100000E-19|0.100000E-19|0.100000E-19|0.100000E-19|0.100000E-19|0.100000E-19|
          ------------ ------------ ------------ ------------ ------------ ------------ ------------
   TOTAL | 1.00000    | 3732.00    | 38488.0    | 45655.0    | 63313.0    | 135982.    | 155000.    |
-----------------------------------------------------------------------------------------------

REACH GEOMETRY FOR STREAM SEGMENT  1
-------------------------------------
  CROSS        REACH    MOVABLE      INITIAL BED-ELEVATIONS        ACCUMULATED CHANNEL DISTANCE
  SECTION      LENGTH     BED     LEFT SIDE  THALWEG  RIGHT SIDE       FROM DOWNSTREAM
    NO.         (ft)     WIDTH       (ft)      (ft)      (ft)          (ft)       (miles)
-----------------------------------------------------------------------------------------------
                0.000
   24.525                2933.300  1640.000  1623.900  1639.600        0.000       0.000
              640.000
   24.646                2200.900  1640.000  1626.000  1640.000      640.000       0.121
              560.000
   24.752                1502.000  1642.200  1629.200  1642.100     1200.000       0.227
              490.000
   24.845                1824.200  1648.400  1635.300  1647.400     1690.000       0.320
              390.000
   24.919                2107.700  1652.800  1634.900  1653.600     2080.000       0.394
              480.000
```

25.010		1751.700	1653.400	1640.200	1654.300	2560.000	0.485
	470.000						
25.099		1747.400	1658.000	1646.000	1659.900	3030.000	0.574
	430.000						
25.180		1678.000	1660.400	1647.700	1661.800	3460.000	0.655
	280.000						
25.233		1938.900	1664.200	1647.300	1663.900	3740.000	0.708
	510.000						
25.326		1459.600	1666.500	1653.000	1666.300	4250.000	0.805
	360.000						
25.388		1761.000	1678.800	1656.600	1674.100	4610.000	0.873
	360.000						
25.458		1616.100	1677.100	1660.500	1677.600	4970.000	0.941
	310.000						
25.519		1518.700	1678.000	1661.600	1679.200	5280.000	1.000
	300.000						
25.580		1431.000	1678.000	1665.900	1680.600	5580.000	1.057
	320.000						
25.644		1559.000	1680.000	1669.300	1682.800	5900.000	1.117
	290.000						
25.699		1551.200	1683.700	1669.400	1685.100	6190.000	1.172
	280.000						
25.750		1859.800	1686.200	1671.600	1688.700	6470.000	1.225
	370.000						
25.843		1741.200	1698.300	1673.500	1690.600	6840.000	1.295
	400.000						
25.919		1874.300	1694.200	1678.400	1692.000	7240.000	1.371
	650.000						
26.044		2294.000	1702.900	1684.300	1698.000	7890.000	1.494
	495.000						
26.137		2490.000	1712.900	1685.700	1702.000	8385.000	1.588
	420.000						
26.239		2036.100	1707.800	1692.800	1704.300	8805.000	1.668
	500.000						
26.335		1884.800	1710.700	1695.600	1709.400	9305.000	1.762
	495.000						
26.430		1755.200	1711.800	1697.500	1713.300	9800.000	1.856
	520.000						
26.529		1584.100	1720.000	1702.600	1714.400	10320.000	1.955
	500.000						
26.623		1645.200	1721.700	1703.900	1720.100	10820.000	2.049
	380.000						
26.695		1800.800	1724.900	1709.500	1727.200	11200.000	2.121
	420.000						
26.775		1926.500	1732.600	1712.700	1732.200	11620.000	2.201
	370.000						
26.845		1735.100	1733.100	1717.000	1734.500	11990.000	2.271
	430.000						
26.921		1194.800	1739.400	1720.200	1735.900	12420.000	2.352
	400.000						
27.008		1189.500	1746.200	1723.000	1739.900	12820.000	2.428
	520.000						
27.106		1248.500	1755.700	1725.700	1745.600	13340.000	2.527
	330.000						
27.169		1261.000	1753.500	1732.100	1747.600	13670.000	2.589
	300.000						
27.226		1611.600	1765.000	1734.800	1753.400	13970.000	2.646
	210.000						
27.265		1683.700	1759.400	1735.700	1755.400	14180.000	2.686
	275.000						
27.320		1599.700	1760.800	1740.300	1758.200	14455.000	2.738
	240.000						
27.366		1890.500	1769.800	1742.300	1760.200	14695.000	2.783
	270.000						
27.417		1362.600	1765.100	1744.800	1762.900	14965.000	2.834
	450.000						
27.502		1530.500	1783.800	1748.800	1772.000	15415.000	2.920
	550.000						
27.604		1365.500	1786.600	1754.200	1774.500	15965.000	3.024
	470.000						
27.693		1855.300	1791.700	1756.300	1782.900	16435.000	3.113
	550.000						
27.797		1993.900	1785.600	1760.600	1785.100	16985.000	3.217
	610.000						
27.913		1467.400	1800.800	1763.100	1785.100	17595.000	3.332
	580.000						
28.023		1447.600	1792.600	1772.500	1789.000	18175.000	3.442
	360.000						
28.091		2404.600	1811.700	1780.800	1798.400	18535.000	3.510
	350.000						
28.157		1983.000	1807.000	1782.600	1800.000	18885.000	3.577
	440.000						
28.241		1789.400	1808.300	1789.900	1806.900	19325.000	3.660
	450.000						
28.326		1690.100	1822.400	1791.300	1812.800	19775.000	3.745
	340.000						
28.390		1650.400	1821.500	1792.800	1816.400	20115.000	3.810
	380.000						
28.462		1687.100	1827.900	1794.800	1819.300	20495.000	3.882
	490.000						
28.555		1135.800	1835.900	1799.400	1818.100	20985.000	3.974
	540.000						
28.657		1842.900	1841.500	1800.500	1826.400	21525.000	4.077
	490.000						
28.750		1954.900	1844.300	1808.300	1830.500	22015.000	4.170

	510.000						
28.847		1842.500	1848.500	1811.900	1828.800	22525.000	4.266
	460.000						
28.934		1371.300	1853.000	1815.500	1831.800	22985.000	4.353
	410.000						
29.012		971.700	1853.700	1818.700	1838.800	23395.000	4.431
	595.000						
29.130		1010.500	1855.000	1821.000	1842.700	23990.000	4.544
	705.000						
29.258		762.400	1852.700	1828.700	1851.400	24695.000	4.677
	490.000						
29.351		944.200	1864.000	1835.900	1854.400	25185.000	4.770
	190.000						
29.387		1036.600	1854.200	1838.800	1857.700	25375.000	4.806
	560.000						
29.493		972.100	1855.300	1843.400	1855.200	25935.000	4.912
	240.000						
29.538		1014.400	1860.000	1845.500	1857.700	26175.000	4.957
	330.000						
29.601		1048.300	1872.900	1849.900	1868.600	26505.000	5.020
	330.000						
29.663		2264.000	1874.600	1850.900	1889.300	26835.000	5.082
	233.000						
29.710		509.000	1890.000	1853.900	1890.000	27068.000	5.127
	127.000						
29.720		2587.000	1881.000	1855.000	1880.000	27195.000	5.151
	200.000						
29.770		878.500	1890.600	1857.200	1873.300	27395.000	5.188
	400.000						
29.850		741.500	1874.200	1857.700	1880.000	27795.000	5.264
	1304.000						
30.100		1314.500	1891.000	1867.400	1895.100	29099.000	5.511
	537.000						
30.200		1177.100	1897.800	1875.200	1897.900	29636.000	5.613
	421.000						
30.280		901.100	1901.600	1877.100	1894.300	30057.000	5.693
	713.000						
30.420		1051.000	1906.600	1885.800	1901.500	30770.000	5.828
	560.000						
30.520		1136.700	1904.700	1893.500	1904.800	31330.000	5.934
	696.000						
30.650		863.800	1913.000	1897.200	1911.200	32026.000	6.066
	486.000						
30.750		942.500	1918.100	1901.000	1916.900	32512.000	6.158
	569.000						
30.850		948.900	1919.800	1905.300	1921.700	33081.000	6.265
	541.000						
30.960		957.200	1926.000	1912.000	1924.100	33622.000	6.368
	494.000						
31.050		1053.300	1932.000	1916.900	1930.400	34116.000	6.461
	467.000						
31.140		1105.500	1936.600	1917.800	1939.200	34583.000	6.550
	162.000						
31.170		1044.600	1940.000	1920.800	1940.000	34745.000	6.580
	432.000						
31.250		1110.700	1940.000	1925.400	1940.000	35177.000	6.662
	474.000						
31.340		890.700	1943.700	1931.500	1940.000	35651.000	6.752
	592.000						
31.450		1105.300	1951.300	1933.100	1949.700	36243.000	6.864
	484.000						
31.540		1029.000	1953.100	1940.100	1952.000	36727.000	6.956
	453.000						
31.630		961.700	1958.100	1940.500	1956.600	37180.000	7.042
	647.000						
31.750		1047.500	1968.800	1946.500	1964.100	37827.000	7.164
	361.000						
31.820		769.400	1968.800	1952.700	1967.000	38188.000	7.233
	243.000						
31.870		601.100	1971.300	1953.600	1973.500	38431.000	7.279
	208.000						
31.910		586.000	1972.000	1953.300	1973.400	38639.000	7.318

BED MATERIAL GRADATION

SECNO	SAE	DMAX (ft)	DXPI (ft)	XPI	TOTAL BED	BED MATERIAL FRACTIONS per grain size							
24.525	1.000	0.250	0.250	1.000	1.000	VF SAND	0.008	VF GRVL	0.123	S	COBL	0.022
						F SAND	0.013	F GRVL	0.148	L	COBL	0.000
						M SAND	0.043	M GRVL	0.165	S	BLDR	0.000
						C SAND	0.119	C GRVL	0.132	M	BLDR	0.000
						VC SAND	0.131	VC GRVL	0.070			
24.646	1.000	0.250	0.250	1.000	1.000	VF SAND	0.008	VF GRVL	0.123	S	COBL	0.022
						F SAND	0.013	F GRVL	0.148	L	COBL	0.000
						M SAND	0.043	M GRVL	0.165	S	BLDR	0.000
						C SAND	0.119	C GRVL	0.132	M	BLDR	0.000
						VC SAND	0.131	VC GRVL	0.070			
24.752	1.000	0.250	0.250	1.000	1.000	VF SAND	0.008	VF GRVL	0.123	S	COBL	0.022
						F SAND	0.013	F GRVL	0.148	L	COBL	0.000
						M SAND	0.043	M GRVL	0.165	S	BLDR	0.000
						C SAND	0.119	C GRVL	0.132	M	BLDR	0.000
						VC SAND	0.131	VC GRVL	0.070			

24.845	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			
24.919	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			
25.010	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			
25.099	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			
25.180	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			
25.233	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			
25.326	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			
25.388	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			
25.458	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			
25.519	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			
25.580	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			
25.644	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			
25.699	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			
25.750	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			
25.843	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			
25.919	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000

						VC	SAND	0.131	VC	GRVL	0.070				
26.044	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022	
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000	
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000	
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000	
						VC	SAND	0.131	VC	GRVL	0.070				
26.137	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022	
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000	
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000	
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000	
						VC	SAND	0.131	VC	GRVL	0.070				
26.239	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022	
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000	
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000	
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000	
						VC	SAND	0.131	VC	GRVL	0.070				
26.335	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022	
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000	
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000	
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000	
						VC	SAND	0.131	VC	GRVL	0.070				
26.430	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022	
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000	
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000	
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000	
						VC	SAND	0.131	VC	GRVL	0.070				
26.529	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022	
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000	
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000	
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000	
						VC	SAND	0.131	VC	GRVL	0.070				
26.623	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022	
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000	
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000	
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000	
						VC	SAND	0.131	VC	GRVL	0.070				
26.695	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022	
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000	
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000	
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000	
						VC	SAND	0.131	VC	GRVL	0.070				
26.775	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022	
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000	
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000	
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000	
						VC	SAND	0.131	VC	GRVL	0.070				
26.845	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022	
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000	
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000	
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000	
						VC	SAND	0.131	VC	GRVL	0.070				
26.921	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022	
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000	
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000	
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000	
						VC	SAND	0.131	VC	GRVL	0.070				
27.008	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022	
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000	
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000	
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000	
						VC	SAND	0.131	VC	GRVL	0.070				
27.106	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022	
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000	
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000	
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000	
						VC	SAND	0.131	VC	GRVL	0.070				
27.169	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022	
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000	
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000	
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000	
						VC	SAND	0.131	VC	GRVL	0.070				
27.226	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022	
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000	
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000	
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000	
						VC	SAND	0.131	VC	GRVL	0.070				
27.265	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022	
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000	
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000	

						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			
27.320	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			
27.366	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			
27.417	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			
27.502	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			
27.604	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			
27.693	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			
27.797	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			
27.913	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			
28.023	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			
28.091	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			
28.157	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			
28.241	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			
28.326	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			
28.390	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			
28.462	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			
28.555	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000

						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			
28.657	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			
28.750	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			
28.847	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			
28.934	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			
29.012	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			
29.130	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			
29.258	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			
29.351	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			
29.387	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			
29.493	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			
29.538	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			
29.601	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			
29.663	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			
29.710	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			
29.720	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			
29.770	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022

						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			
29.850	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			
30.100	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			
30.200	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			
30.280	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			
30.420	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			
30.520	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			
30.650	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			
30.750	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			
30.850	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			
30.960	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			
31.050	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			
31.140	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			
31.170	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			
31.250	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			
31.340	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			

31.450	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			
31.540	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			
31.630	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			
31.750	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			
31.820	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			
31.870	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			
31.910	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			

BED SEDIMENT CONTROL VOLUMES

STREAM SEGMENT # 1: Cave Creek and Apache Wash WMP

SECTION NUMBER	LENGTH (ft)	WIDTH (ft)	DEPTH (ft)	VOLUME (cu.ft)	VOLUME (cu.yd)
24.525	320.000	2689.167	10.000	0.860533E+07	318716.
24.646	600.000	2222.387	10.000	0.133343E+08	493864.
24.752	525.000	1676.369	10.000	0.880094E+07	325961.
24.845	440.000	1806.278	10.000	0.794763E+07	294356.
24.919	435.000	1999.867	10.000	0.869942E+07	322201.
25.010	475.000	1810.949	10.000	0.860201E+07	318593.
25.099	450.000	1737.096	10.000	0.781693E+07	289516.
25.180	355.000	1726.307	10.000	0.612839E+07	226977.
25.233	395.000	1804.936	10.000	0.712950E+07	264055.
25.326	435.000	1594.829	10.000	0.693751E+07	256945.
25.388	360.000	1686.617	10.000	0.607182E+07	224882.
25.458	335.000	1627.030	10.000	0.545055E+07	201872.
25.519	305.000	1520.822	10.000	0.463851E+07	171797.
25.580	310.000	1467.167	10.000	0.454822E+07	168452.
25.644	305.000	1535.381	10.000	0.468291E+07	173441.
25.699	285.000	1603.054	10.000	0.456870E+07	169211.
25.750	325.000	1792.985	10.000	0.582720E+07	215822.
25.843	385.000	1783.244	10.000	0.686549E+07	254277.
25.919	525.000	1944.003	10.000	0.102060E+08	378001.
26.044	572.500	2242.825	10.000	0.128402E+08	475562.
26.137	457.500	2385.207	10.000	0.109123E+08	404160.
26.239	460.000	2077.762	10.000	0.955771E+07	353989.
26.335	497.500	1888.652	10.000	0.939604E+07	348002.
26.430	507.500	1747.049	10.000	0.886627E+07	328380.
26.529	510.000	1623.159	10.000	0.827811E+07	306597.
26.623	440.000	1656.025	10.000	0.728651E+07	269871.
26.695	400.000	1798.161	10.000	0.719264E+07	266394.
26.775	395.000	1874.343	10.000	0.740366E+07	274209.
26.845	400.000	1667.804	10.000	0.667122E+07	247082.
26.921	415.000	1287.253	10.000	0.534210E+07	197856.
27.008	460.000	1201.384	10.000	0.552637E+07	204680.
27.106	425.000	1238.086	10.000	0.526187E+07	194884.
27.169	315.000	1314.468	10.000	0.414058E+07	153355.
27.226	255.000	1552.751	10.000	0.395952E+07	146649.
27.265	242.500	1657.418	10.000	0.401924E+07	148861.
27.320	257.500	1659.824	10.000	0.427405E+07	158298.
27.366	255.000	1751.725	10.000	0.446690E+07	165441.
27.417	360.000	1463.567	10.000	0.526884E+07	195142.
27.502	500.000	1475.065	10.000	0.737533E+07	273160.
27.604	510.000	1470.388	10.000	0.749898E+07	277740.
27.693	510.000	1804.981	10.000	0.920540E+07	340941.
27.797	580.000	1879.706	10.000	0.109023E+08	403789.
27.913	595.000	1554.145	10.000	0.924716E+07	342488.
28.023	470.000	1573.843	10.000	0.739706E+07	273965.
28.091	355.000	2173.577	10.000	0.771620E+07	285785.
28.157	395.000	2009.319	10.000	0.793681E+07	293956.

28.241	445.000	1804.568	10.000	0.803033E+07	297420.
28.326	395.000	1703.259	10.000	0.672787E+07	249180.
28.390	360.000	1663.106	10.000	0.598718E+07	221747.
28.462	435.000	1578.256	10.000	0.686541E+07	254275.
28.555	515.000	1346.794	10.000	0.693599E+07	256888.
28.657	515.000	1737.090	10.000	0.894601E+07	331334.
28.750	500.000	1917.499	10.000	0.958749E+07	355092.
28.847	485.000	1787.714	10.000	0.867041E+07	321126.
28.934	435.000	1391.574	10.000	0.605335E+07	224198.
29.012	502.500	1033.697	10.000	0.519433E+07	192383.
29.130	650.000	959.732	10.000	0.623826E+07	231047.
29.258	597.500	836.038	10.000	0.499533E+07	185012.
29.351	340.000	909.138	10.000	0.309107E+07	114484.
29.387	375.000	1012.744	10.000	0.379779E+07	140659.
29.493	400.000	991.380	10.000	0.396552E+07	146871.
29.538	285.000	1015.005	10.000	0.289276E+07	107139.
29.601	330.000	1245.267	10.000	0.410938E+07	152199.
29.663	281.500	1784.369	10.000	0.502300E+07	186037.
29.710	180.000	1131.982	10.000	0.203757E+07	75465.5
29.720	163.500	1969.665	10.000	0.322040E+07	119274.
29.770	300.000	1037.889	10.000	0.311367E+07	115321.
29.850	852.000	898.384	10.000	0.765423E+07	283490.
30.100	920.500	1165.853	10.000	0.107317E+08	397470.
30.200	479.000	1162.343	10.000	0.556762E+07	206208.
30.280	567.000	966.672	10.000	0.548103E+07	203001.
30.420	636.500	1035.581	10.000	0.659147E+07	244129.
30.520	628.000	1073.555	10.000	0.674193E+07	249701.
30.650	591.000	928.150	10.000	0.548537E+07	203162.
30.750	527.500	931.566	10.000	0.491401E+07	182000.
30.850	555.000	949.155	10.000	0.526781E+07	195104.
30.960	517.500	971.043	10.000	0.502515E+07	186117.
31.050	480.500	1045.289	10.000	0.502261E+07	186023.
31.140	314.500	1087.353	10.000	0.341973E+07	126657.
31.170	297.000	1066.161	10.000	0.316650E+07	117278.
31.250	453.000	1061.828	10.000	0.481008E+07	178151.
31.340	533.000	963.034	10.000	0.513297E+07	190110.
31.450	538.000	1054.503	10.000	0.567323E+07	210120.
31.540	468.500	1031.292	10.000	0.483160E+07	178948.
31.630	550.000	987.760	10.000	0.543268E+07	201210.
31.750	504.000	995.944	10.000	0.501956E+07	185909.
31.820	302.000	802.235	10.000	0.242275E+07	89731.5
31.870	225.500	629.005	10.000	0.141841E+07	52533.6
31.910	104.000	591.033	10.000	614675.	22765.7

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NO. OF INPUT DATA MESSAGES=    0
END OF SEDIMENT DATA

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$HYD
BEGIN COMPUTATIONS.

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$RATING

Downstream Boundary Condition - Rating Curve
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Elevation	Stage	Discharge	Elevation	Stage	Discharge
1623.900	1623.900	0.000	1630.700	1630.700	22500.000
1627.420	1627.420	2500.000	1630.980	1630.980	25000.000
1628.310	1628.310	5000.000	1631.080	1631.080	27500.000
1628.750	1628.750	7500.000	1631.180	1631.180	30000.000
1629.100	1629.100	10000.000	1631.350	1631.350	32500.000
1629.500	1629.500	12500.000	1632.000	1632.000	35000.000
1629.800	1629.800	15000.000	1632.350	1632.350	37500.000
1630.150	1630.150	17500.000	1632.900	1632.900	40000.000
1630.480	1630.480	20000.000	1633.150	1633.150	42500.000

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==========================================================================================
TIME STEP #        1
*    A  Level output at time step 1 (10.92 hrs)
COMPUTING FROM TIME=      0.0000 DAYS TO TIME=      0.4549 DAYS IN    10 COMPUTATION STEPS

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME       ENTRY *              SAND             *
    DAYS       POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.45      31.910 *      0.03                    *
   TOTAL=     24.525 *      0.03      0.08     -1.68 *
*****************************************************

==========================================================================================
TIME STEP #        2
*    A  Level output at time step 2 (1 hr)

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME       ENTRY *              SAND             *
    DAYS       POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.50      31.910 *      0.04                    *
   TOTAL=     24.525 *      0.04      0.13     -1.96 *
```

```
*****************************************************

==========================================================================================
TIME STEP #        3
*    A  Level output at time step 3 (0.25 hrs)

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME        ENTRY *              SAND            *
    DAYS        POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.51       31.910 *      0.05                    *
   TOTAL=      24.525 *      0.05      0.15     -2.05 *
*****************************************************

==========================================================================================
TIME STEP #        4
*    A  Level output at time step 4 (0.25 hrs)

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME        ENTRY *              SAND            *
    DAYS        POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.52       31.910 *      0.06                    *
   TOTAL=      24.525 *      0.06      0.18     -2.20 *
*****************************************************

==========================================================================================
TIME STEP #        5
*    A  Level output at time step 5 (0.25 hrs)

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME        ENTRY *              SAND            *
    DAYS        POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.53       31.910 *      0.08                    *
   TOTAL=      24.525 *      0.08      0.26     -2.42 *
*****************************************************

==========================================================================================
TIME STEP #        6
*    A  Level output at time step 6 (0.25 hrs)

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME        ENTRY *              SAND            *
    DAYS        POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.54       31.910 *      0.11                    *
   TOTAL=      24.525 *      0.11      0.37     -2.45 *
*****************************************************

==========================================================================================
TIME STEP #        7
*    A  Level output at time step 7 (0.25 hrs)

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME        ENTRY *              SAND            *
    DAYS        POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.55       31.910 *      0.15                    *
   TOTAL=      24.525 *      0.15      0.55     -2.68 *
*****************************************************

==========================================================================================
TIME STEP #        8
*    A  Level output at time step 8 (0.25 hrs)

         *ERROR 15            10009.0   10009.0

         *ERROR 15            10009.0   10009.0

         *ERROR 15            10009.0   10009.0

         *ERROR 15            10009.0   10009.0

         *ERROR 15            10009.0   10009.0

         *ERROR 15            10009.0   10009.0

         *ERROR 15            10009.0   10009.0

         *ERROR 15            10009.0   10009.0

         *ERROR 15            10009.0   10009.0

         *ERROR 15            10009.0   10009.0
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        *ERROR 15            10009.0   10009.0

        *ERROR 15            10009.0   10009.0

        *ERROR 15            10009.0   10009.0

        *ERROR 15            10009.0   10009.0

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME       ENTRY *             SAND              *
    DAYS       POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.56      31.910 *      0.26                     *
   TOTAL=     24.525 *      0.26      0.90     -2.46 *
*****************************************************

=================================================================================
TIME STEP #       9
*    A  Level output at time step 9 (0.25 hrs)

        *ERROR 15            10009.0   10009.0

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME       ENTRY *             SAND              *
    DAYS       POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.57      31.910 *      0.50                     *
   TOTAL=     24.525 *      0.50      2.11     -3.18 *
*****************************************************

=================================================================================
TIME STEP #      10
*    A  Level output at time step 10 (0.25 hrs)

        *ERROR 15            10009.0   10009.0

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME       ENTRY *             SAND              *
    DAYS       POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.58      31.910 *      0.93                     *
   TOTAL=     24.525 *      0.93      4.48     -3.81 *
*****************************************************

=================================================================================
TIME STEP #      11
*    A  Level output at time step 11 (0.25 hrs)

        *ERROR 15            10009.0   10009.0

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME       ENTRY *             SAND              *
    DAYS       POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.59      31.910 *      1.61                     *
   TOTAL=     24.525 *      1.61      6.82     -3.23 *
*****************************************************

=================================================================================
TIME STEP #      12
*    A  Level output at time step 12 (0.25 hrs)

        *ERROR 15            10009.0   10009.0

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME       ENTRY *             SAND              *
    DAYS       POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.60      31.910 *      2.33                     *
   TOTAL=     24.525 *      2.33      9.24     -2.97 *
*****************************************************

=================================================================================
TIME STEP #      13
*    A  Level output at time step 13 (0.25 hrs)

        *ERROR 15            10009.0   10009.0

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME       ENTRY *             SAND              *
    DAYS       POINT *    INFLOW   OUTFLOW  TRAP EFF *
```

```
    0.61      31.910 *      3.03                        *
   TOTAL=     24.525 *      3.03      11.76      -2.88 *
*****************************************************

==========================================================================================
TIME STEP #      14
*    A  Level output at time step 14 (0.25 hrs)

         *ERROR 15            10009.0   10009.0

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME       ENTRY *             SAND               *
    DAYS       POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.62      31.910 *      3.67                      *
   TOTAL=     24.525 *      3.67      14.33      -2.91 *
*****************************************************

==========================================================================================
TIME STEP #      15
*    A  Level output at time step 15 (0.25 hrs)

         *ERROR 15            10009.0   10009.0

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME       ENTRY *             SAND               *
    DAYS       POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.63      31.910 *      4.20                      *
   TOTAL=     24.525 *      4.20      17.16      -3.08 *
*****************************************************

==========================================================================================
TIME STEP #      16
*    A  Level output at time step 16 (0.75 hrs)

         *ERROR 15            10009.0   10009.0

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME       ENTRY *             SAND               *
    DAYS       POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.66      31.910 *      5.24                      *
   TOTAL=     24.525 *      5.24      22.51      -3.30 *
*****************************************************

==========================================================================================
TIME STEP #      17
*    A  Level output at time step 17 (1 hr)

         *ERROR 15            10009.0   10009.0

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME       ENTRY *             SAND               *
    DAYS       POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.70      31.910 *      6.24                      *
   TOTAL=     24.525 *      6.24      23.86      -2.83 *
*****************************************************

==========================================================================================
TIME STEP #      18
*    A  Level output at time step 18 (1 hr)

         *ERROR 15            10009.0   10009.0

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME       ENTRY *             SAND               *
    DAYS       POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.75      31.910 *      6.95                      *
   TOTAL=     24.525 *      6.95      24.16      -2.48 *
*****************************************************

==========================================================================================
TIME STEP #      19
*    A  Level output at time step 19 (2 hrs)

         *ERROR 15            10009.0   10009.0

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME       ENTRY *             SAND               *
```

```
    DAYS        POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.83       31.910 *      7.53                    *
   TOTAL=      24.525 *      7.53     24.20     -2.21 *
*****************************************************

==========================================================================================
TIME STEP #      20
*    A  Level output at time step 20 (10 hrs)

         *ERROR 15            10009.0   10009.0

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME       ENTRY *             SAND              *
    DAYS       POINT *    INFLOW   OUTFLOW  TRAP EFF *
    1.00      31.910 *      7.79                    *
   TOTAL=     24.525 *      7.79     24.20     -2.10 *
*****************************************************

==========================================================================================
TIME STEP #      21
*    B  Level output at time step 21 (0.0451)

         *ERROR 15            10009.0   10009.0

- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
Cave Creek and Apache Wash WMP
       ACCUMULATED TIME (yrs)....       0.003
       FLOW DURATION (days)......       0.002

UPSTREAM BOUNDARY CONDITIONS
-------------------------------------------------------------------
Stream Segment # 1      |   DISCHARGE   | SEDIMENT LOAD | TEMPERATURE
Section No.     31.910 |     (cfs)     |  (tons/day)   |   (deg F)
-------------------------------------------------------------------
                INFLOW |        161.00 |        244.31 |       68.00

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME       ENTRY *             SAND              *
    DAYS       POINT *    INFLOW   OUTFLOW  TRAP EFF *
    1.00      31.910 *      7.79                    *
   TOTAL=     24.525 *      7.79     24.20     -2.10 *
*****************************************************

TABLE SB-1:  SEDIMENT LOAD PASSING THE  BOUNDARIES OF STREAM SEGMENT #  1
-------------------------------------------------------------------------------
  SEDIMENT INFLOW at the Upstream Boundary:
      GRAIN SIZE      LOAD (tons/day) |    GRAIN SIZE      LOAD (tons/day)
  ---------------------------------------------------------------------------
    VERY FINE SAND....          3.47  |  MEDIUM GRAVEL.....         19.23
    FINE SAND.........          6.84  |  COARSE GRAVEL.....          0.20
    MEDIUM SAND.......         21.47  |  VERY COARSE GRAVEL          0.00
    COARSE SAND.......         56.17  |  SMALL COBBLES.....          0.00
    VERY COARSE SAND..         56.78  |  LARGE COBBLES.....          0.00
    VERY FINE GRAVEL..         44.02  |  SMALL BOULDERS....          0.00
    FINE GRAVEL.......         36.13  |  MEDIUM BOULDERS...          0.00
                        -------------                        -------------
                                                   TOTAL =        244.31
  SEDIMENT OUTFLOW from the Downstream Boundary
      GRAIN SIZE      LOAD (tons/day) |    GRAIN SIZE      LOAD (tons/day)
  ---------------------------------------------------------------------------
    VERY FINE SAND....          0.00  |  MEDIUM GRAVEL.....          0.00
    FINE SAND.........          0.00  |  COARSE GRAVEL.....          0.00
    MEDIUM SAND.......          0.00  |  VERY COARSE GRAVEL          0.00
    COARSE SAND.......          0.00  |  SMALL COBBLES.....          0.00
    VERY COARSE SAND..          0.00  |  LARGE COBBLES.....          0.00
    VERY FINE GRAVEL..          0.00  |  SMALL BOULDERS....          0.00
    FINE GRAVEL.......          0.00  |  MEDIUM BOULDERS...          0.00
                        -------------                        -------------
                                                   TOTAL =          0.00

TABLE SB-2:  STATUS OF THE BED PROFILE AT TIME =     1.002 DAYS
-------------------------------------------------------------------------------
  SECTION   BED CHANGE   WS ELEV   THALWEG        Q      TRANSPORT RATE (tons/day)
  NUMBER       (ft)        (ft)      (ft)       (cfs)       SAND
     31.910      3.06   1957.24   1956.36       161.        658.
     31.870     -1.27   1953.23   1952.33       161.        132.
     31.820     -1.99   1951.86   1950.71       161.        169.
     31.750     -0.01   1948.00   1946.49       161.        171.
     31.630     -0.01   1942.63   1940.49       161.        163.
     31.540     -0.03   1940.68   1940.07       161.        161.
     31.450     -0.02   1935.41   1933.08       161.        160.
     31.340     -0.03   1932.51   1931.47       161.        165.
     31.250     -0.26   1926.89   1925.14       161.        502.
     31.170      0.01   1922.39   1920.81       161.        495.
     31.140     -0.01   1920.29   1917.79       161.        485.
     31.050     -0.03   1918.12   1916.87       161.        385.
     30.960     -0.03   1913.67   1911.97       161.        388.
     30.850     -0.03   1908.99   1907.47       161.        387.
     30.750     -0.01   1903.21   1900.99       161.        386.
```

30.650	-0.02	1899.08	1897.18	161.	386.
30.520	-0.13	1894.38	1893.37	161.	450.
30.420	-0.03	1887.98	1885.77	161.	482.
30.280	-0.03	1879.39	1877.07	161.	443.
30.200	-0.03	1876.93	1875.17	161.	439.
30.100	-0.05	1868.53	1867.35	161.	526.
29.850	-0.03	1859.23	1857.67	161.	513.
29.770	-1.82	1856.57	1855.38	161.	200.
29.720	-1.12	1855.80	1853.88	161.	216.
29.710	0.07	1854.80	1853.97	161.	234.
29.663	0.05	1852.59	1850.95	161.	207.
29.601	-0.30	1851.07	1849.60	161.	425.
29.538	-0.10	1847.80	1845.40	161.	431.
29.493	0.02	1845.05	1843.42	161.	407.
29.387	0.00	1839.75	1838.80	161.	357.
29.351	-0.04	1837.50	1835.86	161.	366.
29.258	-0.09	1831.30	1828.61	161.	389.
29.130	-0.18	1822.70	1820.82	161.	633.
29.012	-0.46	1819.48	1818.24	161.	260.
28.934	-0.73	1815.85	1814.77	161.	378.
28.847	-0.02	1813.12	1811.88	161.	401.
28.750	0.03	1809.11	1808.33	161.	217.
28.657	0.03	1802.68	1800.53	161.	262.
28.555	-0.04	1800.14	1799.36	161.	504.
28.462	0.05	1795.97	1794.85	161.	431.
28.390	0.24	1794.18	1793.04	161.	489.
28.326	-0.32	1792.92	1790.98	161.	379.
28.241	-0.02	1790.71	1789.88	161.	357.
28.157	0.01	1784.21	1782.61	161.	311.
28.091	-0.16	1781.97	1780.64	161.	638.
28.023	-0.06	1774.14	1772.44	161.	678.
27.913	-0.01	1765.98	1763.09	161.	671.
27.797	-0.37	1761.91	1760.23	161.	1304.
27.693	-0.48	1758.55	1755.82	161.	1376.
27.604	-0.04	1755.16	1754.16	161.	839.
27.502	-0.60	1750.53	1748.20	161.	728.
27.417	0.12	1745.96	1744.92	161.	419.
27.366	0.09	1743.33	1742.39	161.	497.
27.320	-0.86	1740.31	1739.44	161.	859.
27.265	-1.01	1736.92	1734.69	161.	1183.
27.226	0.06	1736.32	1734.86	161.	450.
27.169	0.06	1733.26	1732.16	161.	861.
27.106	0.12	1728.97	1725.82	161.	1377.
27.008	0.20	1724.77	1723.20	161.	1038.
26.921	0.30	1722.08	1720.50	161.	1291.
26.845	0.18	1718.17	1717.18	161.	1654.
26.775	-0.02	1714.44	1712.68	161.	1441.
26.695	0.07	1710.24	1709.57	161.	1376.
26.623	0.14	1705.62	1704.04	161.	797.
26.529	0.22	1703.74	1702.82	161.	1025.
26.430	0.13	1699.18	1697.63	161.	1116.
26.335	0.09	1697.46	1695.69	161.	780.
26.239	-0.06	1693.28	1692.74	161.	866.
26.137	0.03	1687.82	1685.73	161.	700.
26.044	0.01	1685.89	1684.31	161.	843.
25.919	-0.18	1679.17	1678.22	161.	768.
25.843	0.00	1675.42	1673.50	161.	537.
25.750	0.20	1673.21	1671.80	161.	736.
25.699	0.45	1672.08	1669.85	161.	436.
25.644	0.50	1671.49	1670.30	161.	234.
25.580	-0.12	1670.74	1668.78	161.	152.
25.519	-0.28	1669.80	1668.02	161.	133.
25.458	-0.08	1666.15	1665.42	161.	195.
25.388	0.00	1658.88	1656.60	161.	184.
25.326	-0.03	1654.82	1652.97	161.	153.
25.233	0.01	1650.49	1647.31	161.	129.
25.180	-0.03	1649.32	1647.67	161.	124.
25.099	-0.17	1647.42	1645.83	161.	299.
25.010	0.01	1640.99	1640.21	161.	537.
24.919	0.15	1638.85	1635.05	161.	180.
24.845	-0.02	1638.80	1635.28	161.	0.
24.752	0.09	1638.80	1629.29	161.	0.
24.646	0.22	1638.80	1626.22	161.	0.
24.525	0.28	1638.80	1624.18	161.	0.

$VOL

STREAM SEGMENT # 1: Cave Creek and Apache Wash WMP

SUMMARY TABLE: MASS AND VOLUME OF SEDIMENT

SECTION	SEDIMENT THROUGH SECTION (tons)				SEDIMENT DEPOSITED IN REACH in cu. yds				
	TOTAL	SAND	SILT	CLAY	TOTAL	CUMULATIVE	SAND	SILT	CLAY
INFLOW	15788.	15788.	0.	0.	12575.				
31.910	8980.	8980.	0.	0.	5422.	5422.	5422.	0.	0.
31.870	16763.	16763.	0.	0.	-6199.	-777.	-6199.	0.	0.
31.820	33194.	33194.	0.	0.	-13087.	-13864.	-13087.	0.	0.
31.750	32910.	32910.	0.	0.	226.	-13638.	226.	0.	0.
31.630	32862.	32862.	0.	0.	39.	-13599.	39.	0.	0.
31.540	33053.	33053.	0.	0.	-152.	-13752.	-152.	0.	0.
31.450	33257.	33257.	0.	0.	-163.	-13915.	-163.	0.	0.
31.340	33696.	33696.	0.	0.	-349.	-14264.	-349.	0.	0.

31.250	35929.	35929.	0.	0.	-1779.	-16043.	-1779.	0.	0.
31.170	35627.	35627.	0.	0.	240.	-15802.	240.	0.	0.
31.140	35772.	35772.	0.	0.	-115.	-15918.	-115.	0.	0.
31.050	36603.	36603.	0.	0.	-662.	-16579.	-662.	0.	0.
30.960	37172.	37172.	0.	0.	-454.	-17033.	-454.	0.	0.
30.850	37190.	37190.	0.	0.	-14.	-17047.	-14.	0.	0.
30.750	37432.	37432.	0.	0.	-192.	-17239.	-192.	0.	0.
30.650	38200.	38200.	0.	0.	-612.	-17851.	-612.	0.	0.
30.520	40136.	40136.	0.	0.	-1543.	-19394.	-1543.	0.	0.
30.420	40150.	40150.	0.	0.	-11.	-19405.	-11.	0.	0.
30.280	40251.	40251.	0.	0.	-80.	-19485.	-80.	0.	0.
30.200	40357.	40357.	0.	0.	-84.	-19569.	-84.	0.	0.
30.100	40667.	40667.	0.	0.	-247.	-19816.	-247.	0.	0.
29.850	41874.	41874.	0.	0.	-962.	-20778.	-962.	0.	0.
29.770	50881.	50881.	0.	0.	-7174.	-27952.	-7174.	0.	0.
29.720	53088.	53088.	0.	0.	-1757.	-29709.	-1757.	0.	0.
29.710	53028.	53028.	0.	0.	48.	-29662.	48.	0.	0.
29.663	53732.	53732.	0.	0.	-561.	-30223.	-561.	0.	0.
29.601	55934.	55934.	0.	0.	-1754.	-31977.	-1754.	0.	0.
29.538	56078.	56078.	0.	0.	-115.	-32091.	-115.	0.	0.
29.493	55401.	55401.	0.	0.	539.	-31552.	539.	0.	0.
29.387	54307.	54307.	0.	0.	871.	-30681.	871.	0.	0.
29.351	53694.	53694.	0.	0.	488.	-30193.	488.	0.	0.
29.258	53511.	53511.	0.	0.	146.	-30047.	146.	0.	0.
29.130	54019.	54019.	0.	0.	-404.	-30451.	-404.	0.	0.
29.012	55384.	55384.	0.	0.	-1087.	-31538.	-1087.	0.	0.
28.934	63826.	63826.	0.	0.	-6724.	-38262.	-6724.	0.	0.
28.847	64002.	64002.	0.	0.	-140.	-38402.	-140.	0.	0.
28.750	63754.	63754.	0.	0.	197.	-38205.	197.	0.	0.
28.657	63527.	63527.	0.	0.	181.	-38024.	181.	0.	0.
28.555	63795.	63795.	0.	0.	-213.	-38238.	-213.	0.	0.
28.462	64472.	64472.	0.	0.	-539.	-38777.	-539.	0.	0.
28.390	65607.	65607.	0.	0.	-904.	-39681.	-904.	0.	0.
28.326	70071.	70071.	0.	0.	-3555.	-43236.	-3555.	0.	0.
28.241	70122.	70122.	0.	0.	-41.	-43277.	-41.	0.	0.
28.157	69860.	69860.	0.	0.	209.	-43068.	209.	0.	0.
28.091	70321.	70321.	0.	0.	-368.	-43436.	-368.	0.	0.
28.023	70305.	70305.	0.	0.	13.	-43423.	13.	0.	0.
27.913	70321.	70321.	0.	0.	-13.	-43436.	-13.	0.	0.
27.797	71074.	71074.	0.	0.	-600.	-44036.	-600.	0.	0.
27.693	72744.	72744.	0.	0.	-1330.	-45365.	-1330.	0.	0.
27.604	73028.	73028.	0.	0.	-226.	-45592.	-226.	0.	0.
27.502	78653.	78653.	0.	0.	-4480.	-50072.	-4480.	0.	0.
27.417	77637.	77637.	0.	0.	809.	-49263.	809.	0.	0.
27.366	76409.	76409.	0.	0.	978.	-48285.	978.	0.	0.
27.320	79901.	79901.	0.	0.	-2782.	-51066.	-2782.	0.	0.
27.265	85936.	85936.	0.	0.	-4806.	-55873.	-4806.	0.	0.
27.226	85609.	85609.	0.	0.	260.	-55613.	260.	0.	0.
27.169	84372.	84372.	0.	0.	986.	-54627.	986.	0.	0.
27.106	82749.	82749.	0.	0.	1293.	-53334.	1293.	0.	0.
27.008	80950.	80950.	0.	0.	1433.	-51902.	1433.	0.	0.
26.921	78055.	78055.	0.	0.	2306.	-49596.	2306.	0.	0.
26.845	76284.	76284.	0.	0.	1411.	-48185.	1411.	0.	0.
26.775	76366.	76366.	0.	0.	-66.	-48251.	-66.	0.	0.
26.695	76005.	76005.	0.	0.	288.	-47963.	288.	0.	0.
26.623	75151.	75151.	0.	0.	680.	-47283.	680.	0.	0.
26.529	73641.	73641.	0.	0.	1202.	-46080.	1202.	0.	0.
26.430	71796.	71796.	0.	0.	1470.	-44611.	1470.	0.	0.
26.335	68276.	68276.	0.	0.	2804.	-41807.	2804.	0.	0.
26.239	68323.	68323.	0.	0.	-38.	-41844.	-38.	0.	0.
26.137	67538.	67538.	0.	0.	625.	-41219.	625.	0.	0.
26.044	65800.	65800.	0.	0.	1384.	-39835.	1384.	0.	0.
25.919	68043.	68043.	0.	0.	-1786.	-41621.	-1786.	0.	0.
25.843	67882.	67882.	0.	0.	128.	-41493.	128.	0.	0.
25.750	65950.	65950.	0.	0.	1539.	-39954.	1539.	0.	0.
25.699	66875.	66875.	0.	0.	-737.	-40691.	-737.	0.	0.
25.644	67620.	67620.	0.	0.	-593.	-41285.	-593.	0.	0.
25.580	69850.	69850.	0.	0.	-1776.	-43060.	-1776.	0.	0.
25.519	71504.	71504.	0.	0.	-1318.	-44378.	-1318.	0.	0.
25.458	71594.	71594.	0.	0.	-72.	-44450.	-72.	0.	0.
25.388	71413.	71413.	0.	0.	144.	-44305.	144.	0.	0.
25.326	71199.	71199.	0.	0.	170.	-44135.	170.	0.	0.
25.233	69862.	69862.	0.	0.	1065.	-43070.	1065.	0.	0.
25.180	69649.	69649.	0.	0.	169.	-42901.	169.	0.	0.
25.099	71632.	71632.	0.	0.	-1579.	-44480.	-1579.	0.	0.
25.010	70691.	70691.	0.	0.	750.	-43731.	750.	0.	0.
24.919	69542.	69542.	0.	0.	915.	-42815.	915.	0.	0.
24.845	70723.	70723.	0.	0.	-941.	-43756.	-941.	0.	0.
24.752	67921.	67921.	0.	0.	2232.	-41524.	2232.	0.	0.
24.646	59070.	59070.	0.	0.	7049.	-34475.	7049.	0.	0.
24.525	49010.	49010.	0.	0.	8013.	-26461.	8013.	0.	0.

```
$$END

      0   DATA ERRORS DETECTED.

TOTAL NO. OF TIME STEPS READ =        21
TOTAL NO. OF WS PROFILES =            30
ITERATIONS IN EXNER EQ =           26700

COMPUTATIONS COMPLETED
RUN TIME =  0 HOURS,  0 MINUTES &  5.00 SECONDS
```

APPENDIX H.3

Cave Creek Main Channel Model, 100-year Flood, Future Condition

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T1      Cave Creek and Apache Wash WMP
T2      by Stantec: Proj. No. 82000077                    File: CC-F100C.DAT
T3      for Flood Control District of Maricopa County     Date: 07-27-99  srg

NC  0.07    0.06   0.044     0.1     0.3
X124.525      48  9860.5 10093.3
X3                          9865  1628.1   10009  1628.1
GR  1640    8760    1630    8900    1626    8980    1624    9090  1623.9    9091
GR1624.8    9300    1626    9740    1628    9750  1629.5    9810  1629.3  9860.5
GR  1625  9875.7    1624  9888.6  1624.6  9950.3  1623.9   10000  1628.1   10009
GR1629.5 10093.3  1629.5 10189.4  1628.4 10203.4  1627.7   10276    1627 10289.6
GR1626.2 10343.7  1626.5 10386.8    1626 10487.2  1624.3 10496.5  1626.2   10571
GR  1626 10584.3  1625.6 10629.9  1626.5 10638.3  1626.8   10653  1626.7 10702.1
GR  1627 10722.5  1626.5   10773  1630.2 10821.2  1630.2 10962.7  1630.8 11060.9
GR1630.5 11152.9  1631.1 11227.9  1632.2 11276.1  1632.1 11287.4  1631.8 11327.4
GR1631.3 11358.7    1632 11397.3  1632.9 11424.4  1633.4 11439.7  1634.4 11448.3
GR1636.7   11484    1638 11605.1  1639.6 11693.3
HD24.525    10.0

X124.646      52    9580  9745.6     760     620     640
X3                          9430    1640   11000    1640
GR  1636    8810    1635    8850  1634.5    8900    1632    8960    1630    9160
GR  1630    9330    1631    9430    1630    9535  1630.5    9580    1630    9620
GR  1627    9630    1626    9690    1630    9700  1630.5  9745.6  1629.1  9767.3
GR1629.8  9787.4  1633.2  9795.5  1634.6  9817.1  1632.7  9845.8  1631.3  9859.1
GR1631.4  9876.2  1633.8  9889.7  1632.8  9930.1  1632.6  9963.4  1628.2   10000
GR1627.2 10034.8  1628.3 10043.8  1629.3 10084.6  1630.5 10091.3    1634 10154.9
GR1634.2 10243.2  1634.5   10271  1633.7   10357  1634.1 10370.5  1634.1 10385.2
GR1633.5 10413.3  1631.8 10425.9  1631.7 10453.6    1634 10467.1  1634.7 10488.2
GR1634.6 10534.6  1634.9 10602.2  1634.8 10665.2  1633.7 10680.4  1634.8 10734.7
GR1635.4 10757.4  1634.9 10836.8  1634.6 10852.8  1634.1 10871.6  1635.1 10916.3
GR1636.1 10970.3  1636.5 11010.9
HD24.646    10.0

X124.752      80  8835.7    8997     850     430     560
GR1642.2    8690    1641  8727.7  1632.4  8789.8  1638.2  8835.7  1637.5  8868.3
GR1632.4  8884.2  1629.8    8921  1629.3  8925.4  1629.2  8941.5  1632.4    8967
GR1638.3    8997  1637.9  9047.9  1633.4  9064.6  1633.2  9070.6  1634.2  9099.4
GR1636.1  9110.6  1632.5    9205  1633.1  9223.2  1633.6  9233.2  1638.1  9246.8
GR1638.6  9253.7  1638.4  9282.6  1637.9  9358.8  1634.7  9374.5  1634.3  9385.2
GR1633.5  9393.9  1633.4  9402.7  1637.7  9420.2  1638.2  9431.3  1638.4  9450.7
GR1638.3    9459  1638.1  9464.9  1635.5  9480.8  1636.3  9493.4  1637.7  9503.5
GR1638.8  9518.2  1637.9  9531.6  1635.9  9543.1  1635.4  9566.7  1634.8  9589.5
GR1634.9    9594  1636.7  9600.3  1637.5  9625.9  1636.3  9646.3  1637.7  9667.4
GR1634.1  9686.1  1633.1  9690.2  1633.3  9707.1  1633.6  9738.1  1638.5    9747
GR1639.4  9764.4  1639.6  9774.5  1639.6  9783.1  1639.1  9797.1  1637.1  9807.5
GR1635.1  9813.6  1637.9  9913.6  1638.8  9930.4  1638.4  9944.8  1637.5  9953.9
GR1635.1    9962  1633.7  9981.5  1633.5    9990  1633.5   10000  1634.2 10010.2
GR1635.9   10019  1638.7 10029.9  1639.8 10039.1    1640   10045  1640.2 10062.5
GR1640.2 10071.4  1639.3 10090.9  1638.2 10098.7  1638.1 10103.6    1638 10127.7
GR1635.2 10134.5  1636.6 10148.5    1638 10163.8  1638.4 10181.1  1642.1   10192
HD24.752    10.0

X124.845      49  8674.4  8792.8     560     490     490
GR1648.4  8242.8  1644.3  8353.1  1646.2  8493.6  1644.1  8556.4  1646.7  8674.4
GR1638.4  8697.6    1636  8702.9  1635.6  8721.1  1635.3  8773.9  1641.9  8792.8
GR1641.6  8826.7  1640.6    8873  1639.9  8878.1  1639.9  8893.9  1640.4  8914.9
GR1642.3  8921.4  1642.2  8981.3  1642.9  9007.5  1638.5  9040.8  1638.6  9043.4
GR1640.6  9066.8  1638.3  9103.1  1641.8    9129  1641.6  9191.6  1641.7  9245.9
GR1641.4  9249.8  1638.6  9272.1  1638.6  9279.6  1640.6  9296.3  1641.7  9345.5
GR1641.5  9388.9  1637.5  9406.6  1641.8  9448.5  1641.7  9507.2  1642.4  9526.6
GR1641.8  9556.3  1642.5  9630.9  1641.4  9667.2  1641.3  9689.7    1640  9710.8
GR1637.8  9730.6  1637.9  9749.6  1641.2  9781.1  1641.6  9840.6  1643.2  9961.4
GR1642.9  9967.8  1639.5  9988.1  1640.3 10038.9  1647.4   10067
HD24.845    10.0

X124.919      48  8494.5  8709.6     460     350     390
GR1652.8  8046.2  1649.7  8068.4  1646.8  8168.9  1647.1  8195.5    1648  8249.6
GR  1649  8266.1    1648  8326.9  1648.4  8422.4  1649.3  8461.9  1650.4  8494.5
GR1646.5  8588.8  1635.3    8604  1634.9  8637.8  1637.6  8647.2  1638.6  8695.7
GR1643.6  8709.6  1643.3  8729.6  1642.7  8768.3  1639.8  8785.3  1639.4  8813.8
GR1639.8  8836.9  1642.9  8858.9  1643.3  9045.7  1643.4  9126.5  1641.2  9133.6
GR1640.2  9152.9  1640.4  9184.9  1643.3  9199.9    1644  9243.9  1644.2  9302.9
GR1643.1  9335.8  1641.3  9351.3  1644.1  9379.6  1644.6  9538.9  1643.5  9559.5
GR1641.9  9583.1  1641.4  9599.3  1643.2  9611.3  1644.5  9654.2  1643.9  9688.9
GR1644.7  9795.8  1643.8  9882.5  1644.5  9927.7  1642.2  9936.8  1639.5  9971.5
GR1639.5   10000  1651.2 10008.5  1653.6 10153.9
HD24.919    10.0

X1 25.01      42  8823.5  9248.1     410     550     480
GR1653.4  8397.8  1653.2  8557.9  1650.2    8664  1645.5  8678.1  1645.1  8694.6
GR1643.6  8698.5  1642.1  8743.7  1643.4  8747.6  1644.1    8759    1645  8766.4
GR  1646  8823.5  1643.6  8878.3  1641.3  8880.6  1640.2  8929.6  1641.7  9059.1
GR  1641  9087.8  1641.2  9124.3  1642.7  9143.5  1642.5  9180.8  1647.3  9248.1
GR1646.9  9294.1  1646.9  9355.3    1644  9364.6  1644.4  9372.7  1646.5  9382.7
GR1647.4  9445.1  1648.3  9476.2  1649.3  9555.9  1650.4  9687.1  1647.5  9734.1
GR1647.4  9776.5  1646.5  9818.2    1644  9823.9  1645.2  9848.6    1648    9869
GR1646.9  9935.5  1644.5    9975  1643.9   10000  1642.5 10006.6  1642.7 10019.8
GR1652.2 10037.7  1654.3 10149.5
HD 25.01    10.0

X125.099      65  9327.5  9490.1     430     530     470
GR  1658  8593.8    1655    8775    1655    8880  1654.8    8914  1648.2  8923.1
GR1647.6  8947.9  1649.3    8959  1650.6    8988  1651.2    9029  1650.7  9064.3
GR1651.2  9091.8  1651.5  9112.7  1650.7  9150.2    1649  9209.7    1649  9215.4
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GR1651.3  9234.1  1652.4  9259.9  1652.5  9283.7  1652.5  9327.5    1652    9346
GR1646.9  9367.6  1646.2  9387.8    1646  9395.9    1646  9409.8  1649.2    9416
GR1650.8  9430.5    1652  9458.6  1652.6  9490.1  1651.6  9515.2    1650  9558.3
GR1648.1  9571.1  1648.2  9578.8  1650.6  9591.2  1652.3    9608  1653.1  9662.4
GR1652.4  9735.4  1650.6  9742.7  1650.3  9748.7  1650.4  9757.9  1653.2  9838.9
GR1652.5  9868.9  1651.7  9904.9  1651.4  9919.5  1651.3  9941.9  1648.4  9951.4
GR1648.9  9960.9  1649.4  9982.9  1648.2   10000  1648.9 10015.4  1651.3 10024.3
GR  1653   10032  1653.9 10048.6  1654.4 10063.9    1654 10087.5  1653.5 10094.2
GR1650.9 10100.6  1651.2   10104  1652.8 10111.3  1654.1 10146.3  1654.9   10167
GR  1655 10211.1  1655.4 10254.6  1653.4 10292.9  1654.8 10301.5  1659.9 10341.2
HD25.099    10.0

X1 25.18      56  9213.5  9413.7     500     430     430
GR1660.4  8859.3  1660.5  8905.9  1658.4  8986.1    1658    9017    1652  9047.1
GR  1652  9057.1  1653.4  9065.1  1654.4  9144.5  1652.9  9161.8    1652  9200.6
GR1654.5  9213.5  1654.1  9262.6  1651.1  9306.6  1647.8  9319.4  1647.7  9353.2
GR1653.4  9371.6  1653.8    9387  1655.1  9413.7  1656.2  9490.2  1654.9  9515.2
GR1655.5  9544.3  1655.7  9581.6  1654.1    9597  1655.9  9633.5  1654.6  9660.4
GR1655.1  9698.9  1651.5  9707.3  1651.7  9717.8  1654.4  9725.7  1653.5  9749.7
GR  1653  9785.9  1652.1  9814.3  1655.3  9830.6  1655.4  9894.7  1654.3  9911.5
GR1656.2  9924.2  1656.1  9944.4  1654.3  9955.6  1654.3  9969.6    1656  9978.6
GR1654.8  9986.8  1650.4   10000  1650.8 10046.2  1649.6 10072.4  1649.9 10076.1
GR1651.1 10097.1  1654.4   10114  1654.6 10135.8  1658.1 10157.7    1658 10214.9
GR1656.9 10240.1  1658.1   10265  1657.3 10356.6  1656.5 10390.4  1657.3 10430.2
GR1661.8 10537.3
HD 25.18    10.0

X125.233      60  9274.5  9383.8     390     180     280
GR1664.2  8536.3  1663.9  8595.2  1660.9  8692.2  1658.6  8798.9  1658.1  8854.9
GR1656.2  8987.4  1658.8  9021.1  1659.7  9057.1  1660.4  9131.9  1658.7  9192.7
GR1659.6  9228.6  1659.1  9274.5    1653  9289.5  1647.3  9290.8  1647.3  9296.1
GR1648.9  9301.1  1650.3  9327.4  1655.3  9341.1    1656  9383.8  1656.1  9418.4
GR1655.7  9471.9  1657.3  9484.7    1657    9548  1657.7    9570  1657.2  9608.2
GR1656.2  9622.6  1656.4  9634.3  1658.2  9647.4  1657.4  9707.8  1654.8  9728.7
GR1655.8  9748.3  1656.7  9778.2  1657.5  9803.8  1657.4    9881  1657.1  9908.4
GR1654.4  9924.8  1656.1  9935.3  1656.7  9956.8  1653.9  9994.4    1652   10000
GR  1652 10034.7  1657.4 10047.9  1656.8 10061.7  1655.4   10070  1656.6 10089.5
GR  1654 10118.4    1657 10139.2  1656.5 10155.7  1652.5 10163.6  1652.6 10169.9
GR1656.7 10179.7  1657.4 10221.7  1653.7 10235.2  1655.4 10247.3  1655.8 10283.7
GR1658.2 10303.2  1658.6 10429.1  1659.1 10448.8  1661.5 10459.3  1663.9 10475.2
HD25.233    10.0

X125.326      41  9335.1  9497.8     490     480     510
GR1666.5  9070.8  1665.5  9175.1  1661.1  9242.1  1661.4  9294.1  1661.5  9335.1
GR1657.2  9365.7  1653.2  9380.4    1653  9390.5  1657.2  9416.8    1657  9450.5
GR  1659  9472.3  1661.1  9497.8  1660.8  9532.7  1660.1  9592.2  1662.9  9612.1
GR1663.6  9698.9  1663.8    9758  1662.5  9788.6  1661.6  9855.4  1662.5  9861.2
GR1662.2  9900.1  1659.7    9912  1658.9  9952.9  1659.2  9988.9  1656.4   10000
GR1656.5 10023.8  1660.3 10032.1    1661 10151.4  1660.9 10178.5  1657.8 10187.9
GR1657.7 10204.3  1661.5 10221.8    1659 10242.5  1658.9 10267.3  1656.4 10281.7
GR1661.5 10296.8  1660.3 10348.3  1658.9 10399.4  1661.2 10407.9  1664.2 10513.8
GR1666.3 10530.4
HD25.326    10.0

X125.388      38  9467.9  9644.5     350     370     360
GR1678.8  9115.7  1668.5  9235.4    1666  9296.8  1665.6  9300.1  1666.4    9409
GR1665.9  9467.9  1661.5    9527  1656.6  9546.6  1660.5  9606.3  1663.8  9625.3
GR  1666  9644.5  1664.6    9663  1665.2    9704  1666.5  9725.8  1666.8    9766
GR1665.9  9777.3  1664.7    9782  1665.4  9857.4  1666.5  9872.6  1666.1  9918.6
GR  1665   10000  1666.3 10037.1  1666.1 10100.7  1664.3 10236.5  1665.2 10260.5
GR1664.2 10295.4  1662.9 10306.6  1664.8 10361.6  1665.9 10366.9  1666.4 10490.2
GR1662.5   10516  1662.2 10564.3  1660.1 10602.9  1660.4 10629.9  1663.8 10644.1
GR1665.5 10675.8  1672.2 10759.6  1674.1 10876.7
HD25.388    10.0

X125.458      27  9916.8 10067.1     390     380     360
X3    10
GR1677.1  9528.9  1672.1  9600.5    1668  9605.5  1667.8  9749.5  1668.1  9780.5
GR1669.2  9825.6  1667.7  9883.2  1668.1  9916.8  1666.8  9934.3  1665.7  9952.8
GR1665.5   10000  1667.2   10018  1669.1 10067.1  1664.9 10140.9    1668   10190
GR1668.1 10558.9  1667.8 10573.8  1665.9 10601.9  1669.5 10794.7  1664.6 10819.1
GR1664.3   10867  1667.1   10899  1667.1 10913.4  1664.1 10937.8  1660.5 10966.1
GR1673.9 10989.1  1677.6   11145
HD25.458    10.0

X125.519      24    9946   10101     450     290     310
X3    10
GR  1678  9567.7    1672    9570  1669.9  9663.3  1670.4  9770.3  1671.4  9836.4
GR1672.1  9915.1  1672.4    9946    1670    9970  1668.3   10000  1670.1 10058.9
GR1672.2   10101  1671.6 10154.1  1671.5 10186.1  1670.6 10394.1  1670.5 10492.4
GR1670.7 10616.3  1671.1 10795.5    1664 10831.1  1669.6 10872.3  1667.9   10940
GR1661.6 10957.3  1661.6 10970.3  1675.6 10993.4  1679.2 11086.4
HD25.519    10.0

X1 25.58      25  9974.4 10121.5     320     290     300
X3    10
GR  1678  9635.1    1677  9637.3  1671.6  9704.7  1671.8  9855.4  1674.1  9974.4
GR1668.9   10000  1670.8   10089  1673.7 10121.5  1673.7 10276.2  1674.3 10346.8
GR1673.5 10453.1  1672.9 10517.8  1672.2   10547  1672.9 10606.7  1673.9 10625.8
GR1675.8 10732.4  1674.2 10818.6  1670.4 10867.2  1669.9 10895.8  1667.3 10935.7
GR1665.9 10962.4  1666.8 10972.5    1670 10985.9  1675.5 11000.5  1680.6 11066.1
HD 25.58    10.0

X125.644      25  9908.8 10061.5     360     280     320
X3    10
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GR  1680  9535.3  1677.2  9767.4  1675.7  9804.1  1676.6  9908.8  1669.8  9926.6
GR1670.1    10000  1670.1 10013.5  1675.2 10030.5  1677.3 10061.5  1676.6 10119.8
GR1678.8 10141.2  1678.6 10246.3  1677.6 10388.7  1677.1 10485.4  1676.7 10586.1
GR1677.8    10633  1676.6 10683.4  1677.8 10719.7  1674.2 10774.8    1672   10825
GR1669.3 10861.2  1676.8 10895.7  1676.5 10968.6  1675.5 11020.2  1682.8 11094.3
HD25.644    10.0

X125.699      22  9886.9   10033     290     290     290
GR1683.7  9578.3  1678.6  9798.1  1677.9  9886.9  1671.6  9909.8    1670  9979.8
GR1669.4    10000  1672.4 10005.6  1673.1 10026.9  1678.4   10033  1681.5 10222.9
GR1681.3 10350.6  1680.2   10532  1679.8   10714  1678.2 10743.5  1672.4 10763.6
GR1671.9 10787.2  1672.1 10826.9  1675.7 10839.4  1678.6 10880.3  1679.2 10970.2
GR1680.4 11082.9  1685.1 11129.5
HD25.699    10.0

X1 25.75      40  9925.3 10085.9     270     280     280
GR1686.2  9574.2  1684.2  9577.4  1677.3  9588.3  1677.2  9602.8  1678.2  9608.9
GR1678.4  9649.3  1680.3    9706  1680.1  9746.5  1679.6  9804.2  1680.3  9864.7
GR  1682  9925.3  1675.5  9973.2  1671.6  9977.4  1672.1   10000    1673   10041
GR1681.9 10061.9  1682.4 10085.9  1680.2   10144  1677.4   10156  1674.9 10176.5
GR1674.5 10219.7  1678.7 10233.2  1680.6 10250.1  1681.5 10292.9  1684.2 10435.2
GR1684.7 10518.7  1682.8 10668.2  1679.8 10824.7  1675.2 10841.6  1675.3 10869.3
GR1678.7 10881.2  1679.6 10923.8  1680.5   10960  1679.4 11003.7    1678 11058.5
GR1681.2 11069.3  1682.8 11178.7  1686.9 11266.2  1687.5 11357.1  1688.7   11434
HD 25.75    10.0

X125.843      56  9891.5 10077.6     540     210     370
GR1698.3  9623.8  1684.2  9666.2  1682.9  9716.1  1685.7  9774.4  1685.9    9842
GR1686.1  9882.4  1685.8  9891.5  1682.4  9923.5  1679.7  9979.1  1676.2  9989.1
GR1673.9    10000  1673.5 10028.2  1674.4 10041.9  1685.5 10077.6  1684.1 10141.7
GR1685.2   10187  1684.6 10219.1  1682.3 10237.3  1678.2   10245  1678.1 10248.3
GR1679.5   10274  1680.1   10301  1676.7 10338.8  1682.8   10356  1684.8 10367.7
GR1684.8 10374.5  1683.7 10398.1  1682.5 10493.1  1679.7 10519.8  1679.8 10522.9
GR1681.2 10526.1  1684.2 10546.5  1685.2   10583  1685.1 10591.3  1683.1 10612.5
GR  1683 10626.2  1684.3 10653.9  1685.9 10669.7  1686.2 10698.5  1683.4 10909.7
GR1684.3 10924.9    1685 10965.7  1681.9 10979.2  1675.8 10989.6  1676.2 11011.8
GR1682.7 11026.3  1683.4 11033.3  1684.2 11109.4  1683.2 11157.4  1682.7 11199.4
GR1678.9 11211.5  1679.2 11219.1  1682.2 11227.6  1683.8 11233.3  1684.9 11290.6
GR1690.6   11365
HD25.843    10.0

X125.919      53  9857.9 10046.9     450     310     400
GR1694.2  9686.7  1690.3  9857.9  1690.2  9864.9  1686.4  9902.3  1684.4  9921.8
GR1680.8  9956.5  1678.9  9980.4  1678.5  9987.9  1678.4   10000  1678.4 10007.5
GR1678.8 10014.7  1679.3 10019.3    1681 10022.9  1687.1   10034  1689.1 10046.9
GR1688.2 10072.2  1688.2 10120.8  1685.3 10136.7  1685.4 10143.4  1686.6 10152.9
GR1687.7 10159.2  1687.3 10226.7  1681.8 10246.9  1680.5 10289.3  1680.4 10293.4
GR1682.5 10298.9  1685.8 10305.9  1686.8 10345.6  1687.7 10366.4  1687.1   10561
GR1685.6   10617  1685.5 10625.2  1683.6 10639.5  1683.3 10644.4  1683.3 10647.4
GR1685.7 10656.5  1686.2 10705.2  1687.4 10756.9  1688.1 10767.4  1688.7 10776.6
GR1689.9 10930.2  1689.9 10953.9  1687.2 11087.9  1687.9 11105.1  1688.5 11142.7
GR1687.8 11175.7    1686 11194.1  1685.3 11221.4  1684.5 11238.4  1683.3 11289.2
GR  1683   11299  1689.7 11338.8    1692   11561
HD25.919    10.0

X126.044      39    9926 10076.8     750     400     650
GR1702.9    9926    1685  9944.8  1684.3   10000  1691.1 10017.5  1691.8 10045.7
GR1694.1 10059.4  1694.2 10076.8  1694.2 10134.3  1693.8   10240  1690.9 10270.3
GR  1686   10332  1689.4 10342.7  1691.3 10378.5  1692.5 10407.2  1692.8 10465.5
GR1692.2 10541.6  1689.6 10574.8  1689.7 10591.8  1691.6 10609.2  1691.8 10748.9
GR1687.8 10824.9  1689.9 10849.3  1693.9 10865.8  1693.1   10957  1693.6 11034.8
GR1691.3 11097.4  1689.8 11180.3    1691 11196.2  1690.3 11249.8  1691.7 11302.9
GR  1691 11374.7  1686.1 11451.8  1687.1 11486.8  1686.7 11555.5  1689.2 11562.9
GR1692.6 11592.4  1693.7   11660    1696   12000    1698   12220
HD26.044    10.0

X126.137      47    9975 10296.6     500     475     495
GR1712.9    9975  1685.7   10000  1686.6 10024.6    1691 10054.7  1695.9 10106.9
GR1697.5 10139.1  1690.1   10162  1686.4 10231.1  1700.2 10296.6  1698.9 10317.4
GR1696.6 10379.3  1695.4 10460.7  1694.2 10518.2  1695.5 10560.3  1695.3 10586.9
GR1692.3 10631.9  1691.9 10643.6  1694.6 10660.5  1696.7 10744.8  1694.7 10795.2
GR1694.3 10833.6  1696.8   10841  1697.5   10938  1695.3 10998.8    1696 11030.5
GR1697.9 11148.8  1694.6 11214.6  1696.9 11262.3  1695.8 11297.9  1694.4 11316.3
GR1694.3 11363.6  1694.4 11379.7  1691.9 11399.4  1691.9 11418.1  1690.6 11474.1
GR1690.6 11490.6  1693.8 11497.1  1696.4   11536  1696.2 11621.4  1694.2 11662.1
GR1693.6 11733.6  1694.9 11770.6  1697.5 11787.8  1698.4 11923.7  1700.1 11940.2
GR1699.7 12055.1    1702   12465
HD26.137    10.0

X126.239      47    9925 10279.3     570     340     420
GR1707.8    9925  1692.8  9936.8  1692.8   10000  1697.2 10010.6    1700 10026.3
GR1700.8 10111.9  1695.5 10121.4  1693.3 10144.7  1693.1 10181.6  1699.5   10202
GR1701.3 10279.3    1702 10346.3  1699.1 10433.6  1698.2 10516.4  1699.5 10562.5
GR  1700 10627.5  1700.4 10668.5  1699.7 10720.3  1695.6 10737.6  1696.1   10755
GR1698.4 10763.3    1700 10838.9  1698.1 10861.7  1698.1 10872.1  1696.1 10895.3
GR  1695 10906.7  1700.5 10935.5  1700.7 11008.5  1699.2   11038  1698.6   11090
GR1699.5 11112.3  1699.1 11155.2  1697.7 11208.1  1693.3 11221.8  1693.6 11232.9
GR1696.2 11238.1  1697.2 11271.8  1697.8 11314.1    1699   11334    1700   11449
GR1699.8 11535.4    1699 11560.8  1696.2 11615.5  1695.6 11751.2  1698.9 11769.2
GR1702.2 11836.2  1704.3 11961.1
HD26.239    10.0

X126.335      39    9635 10333.4     495     520     500
GR1710.7    9635    1700  9645.81699.991    9646  1697.4  9701.2  1696.7  9715.3
GR1696.7  9771.9  1698.6  9794.1  1698.8  9886.3  1696.6  9953.9  1695.6   10000
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GR1698.8 10024.1  1699.7 10103.3  1698.6 10141.9  1698.9 10190.7  1696.9 10245.8
GR1704.2 10271.6  1705.6 10333.4  1705.8 10438.8  1702.6 10464.6  1702.8 10574.7
GR1701.1 10627.4  1704.5 10710.5  1703.5 10816.3  1702.4 10852.4  1700.5 10868.2
GR1699.9 10906.9  1699.2 10938.8    1699 10949.1    1704 10961.4  1705.3 11033.5
GR  1706   11149  1705.5 11213.4  1704.2 11298.3  1702.6 11389.1  1699.2   11435
GR1700.2 11451.6  1705.5 11466.4  1707.8 11486.3  1709.4 11519.8
HD26.335    10.0

X1 26.43      33    9770 10353.7     490     520     495
GR1711.8    9770    1700  9794.4  1700.9  9837.5  1699.8    9885    1700   10000
GR  1701   10044  1702.3   10080  1701.8 10154.1  1700.1   10207  1697.7 10219.1
GR1697.5 10240.1  1706.6 10258.3  1710.5 10297.2  1711.7 10353.7  1710.5   10461
GR1707.7 10590.9  1708.7 10644.9  1706.2 10710.7  1706.6 10734.7    1708 10748.8
GR1709.2 10805.8  1707.7 10914.2  1709.3 10982.6    1706 11021.1  1702.2 11039.4
GR1700.6   11097  1702.7 11102.7  1704.4 11124.2  1704.3 11138.7  1708.1 11249.2
GR1710.9   11352  1712.5 11426.3  1713.3 11525.2
HD 26.43    10.0

X126.529      38  9764.3 10177.6     530     520     520
GR  1720  9731.2  1719.8  9764.3  1709.3    9799  1708.5  9827.8  1708.1  9878.2
GR1704.8  9891.7  1702.9  9916.7  1702.6   10000  1703.6   10004  1703.8 10054.1
GR1705.3 10089.2  1705.2 10126.1  1703.3 10149.1    1714 10177.6  1713.4   10237
GR1712.2 10373.5  1711.5 10397.1  1713.8 10453.4  1713.5 10511.4  1714.4   10550
GR1713.3 10598.1  1712.7 10665.4  1708.3 10683.3  1709.1 10713.3  1710.3 10718.4
GR1710.4 10750.8  1712.3 10766.7  1712.2 10824.3  1712.7   10897  1712.7   10966
GR1710.3 11000.4  1706.5 11013.6    1706 11047.9  1704.8 11071.9  1711.3 11102.6
GR1711.9 11143.7  1713.1 11201.5  1714.4 11315.3
HD26.529    10.0

X126.623      38  9626.5 10128.4     500     530     500
GR1721.7  9626.5  1708.4  9663.1  1703.9  9698.7  1704.6  9722.9  1704.3    9776
GR1707.3  9810.3  1708.9  9851.6  1707.8  9912.1  1705.2  9958.1  1705.1   10000
GR1709.5 10015.2  1709.9 10044.4    1712   10071  1714.1 10078.2  1720.1 10128.4
GR1719.4 10159.4  1720.4 10281.2  1718.6 10327.7  1718.9 10358.4  1720.9   10384
GR1721.8 10424.9  1721.3 10463.5  1718.5 10548.7  1716.8 10606.9  1713.9 10625.6
GR1717.2 10657.9  1718.2 10687.4  1718.1 10785.1    1715 10842.2  1713.5 10865.9
GR1714.1 10902.1  1717.7 10924.6  1714.2 10974.2  1707.5 11001.4  1712.7 11033.6
GR1714.2   11113  1715.9 11183.7  1720.1 11271.7
HD26.623    10.0

X126.695      41  9772.8 10055.4     370     430     380
GR1724.9  9733.8  1723.1  9772.8  1718.4  9783.7  1714.6  9822.6  1714.3  9866.1
GR1721.4  9881.3  1719.6  9912.9  1710.6  9931.4  1709.5  9982.8  1709.5  9991.4
GR1709.9 10033.2    1710 10046.3  1724.6 10055.4  1723.8 10116.6  1721.7 10149.3
GR1723.3 10223.1  1727.2 10280.1  1725.9 10341.2  1713.2 10352.8  1713.1 10406.1
GR1716.9 10441.8  1718.6 10484.8  1720.9   10506  1719.7 10545.1    1715   10566
GR1719.2 10603.7  1724.2 10615.9  1722.9 10732.5  1723.6 10813.3  1722.9 10860.6
GR1721.2 10877.5    1722 10908.7  1722.4 11033.4  1721.5 11077.9  1722.9 11170.1
GR1722.6 11247.1  1721.6 11358.9  1714.6 11436.8  1714.9 11489.8  1725.3 11511.4
GR1727.2 11534.6
HD26.695    10.0

X126.775      39    9914   10229     390     470     420
GR1732.6  9691.5  1727.3  9766.7  1726.6    9914    1717    9920  1716.8    9967
GR1713.4  9980.1  1712.7   10000  1712.9 10018.8  1716.1   10027  1717.7 10072.7
GR1717.2 10107.9  1714.6 10187.6  1725.4 10207.6  1730.6   10229  1731.4 10296.7
GR1729.1 10391.5  1727.5 10446.8  1717.5 10465.7  1717.5 10489.7  1722.6   10502
GR1723.7 10561.3  1724.6 10596.4  1724.8   10685    1724 10729.9  1726.3 10770.1
GR1728.2 10806.5  1726.1 10931.3  1725.8 11003.7  1727.4 11039.1    1727 11121.5
GR1726.9   11192  1727.1 11304.1  1725.7 11425.9  1720.8 11447.1    1720 11492.7
GR1719.4 11554.6  1718.4 11578.7  1730.8 11599.8  1732.2   11618
HD26.775    10.0

X126.845      45  9657.8 10020.1     350     400     370
GR1733.1  9611.4  1731.1  9657.8  1721.2  9688.6  1721.3  9793.2  1718.9  9834.9
GR1718.8    9871    1717  9877.3    1718  9905.1  1717.4   10000    1728 10020.1
GR1727.3 10087.9  1729.9   10102  1729.5 10120.9  1719.2 10143.7  1719.6 10152.7
GR1722.4 10191.5  1730.2 10209.4  1730.2 10236.4  1724.1 10253.5  1725.3 10271.5
GR  1727 10290.8  1728.1 10349.1  1729.1 10437.8  1729.4 10474.8    1728 10537.7
GR1725.9 10556.6  1729.4 10581.4  1729.9 10622.5  1728.9 10684.7  1728.5   10712
GR1731.6 10721.6  1731.1 10793.1  1731.3 10864.9  1729.9 10914.9  1729.9 10946.4
GR1728.4 10982.9  1726.7 11003.8  1726.3 11030.4  1727.3 11042.7  1729.3 11090.1
GR1728.9 11124.8  1726.3 11229.8  1721.4 11246.7    1733 11279.8  1734.5 11346.5
HD26.845    10.0

X126.921      57  9712.1   10149     450     400     430
GR1739.4  9712.1    1725  9736.8  1723.7  9744.2  1723.1  9756.8  1722.1  9796.4
GR1722.1  9799.8  1723.2  9810.1    1722  9832.8  1723.2  9872.7  1723.9    9882
GR  1724    9891  1723.1    9908  1723.2  9939.1  1722.6  9946.3  1720.7  9952.7
GR1721.1  9972.1  1720.2   10000  1720.3 10017.5  1723.1 10027.8  1724.6 10048.1
GR  1725 10059.7  1725.1 10075.5  1724.1 10107.4  1722.7 10132.6  1731.9   10149
GR  1732 10156.7  1732.1 10165.7  1733.5 10186.9  1732.2 10193.6    1732 10237.1
GR1734.4 10263.2  1734.3 10321.7  1735.1 10345.3  1734.7 10409.7  1735.5   10443
GR1734.5 10480.4  1728.1 10545.4  1728.5 10554.4    1732 10577.8  1732.5 10599.1
GR1733.4 10618.4  1734.3 10657.4  1733.4 10682.2  1733.5 10717.8  1733.3 10729.5
GR1728.8 10764.1  1730.5 10771.1  1731.2 10781.6  1731.3 10797.6  1729.2 10812.9
GR1731.1 10828.1  1731.1 10839.5  1729.1   10863  1727.4 10868.7  1728.3 10888.3
GR1732.9 10899.2  1735.9 10906.9
HD26.921    10.0

X127.008      40  9677.5   10164     400     400     400
GR1746.2  9657.3  1745.5  9677.5  1731.7  9702.2  1724.6  9760.8    1724  9803.4
GR1725.9    9811  1725.7  9819.2  1725.2    9836  1727.3  9853.3  1725.7  9898.1
GR1726.6  9902.7  1727.3  9935.3  1726.4  9947.4    1723  9981.1  1723.9   10000
GR  1726 10013.3  1726.6 10033.6  1726.5 10072.1  1725.6 10089.8    1726 10119.1
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GR1724.9 10144.7  1724.9 10154.3  1736.3   10164  1735.8 10243.9  1734.5 10272.1
GR  1734 10293.2  1732.5 10322.9  1737.2 10346.2    1737 10441.5  1734.8 10548.5
GR1733.9 10662.5  1729.8 10671.2  1730.3 10675.8  1733.9 10683.5  1733.5   10724
GR1734.2 10735.7  1733.6 10771.9  1731.6   10788  1739.6 10811.4  1739.9 10846.8
HD27.008    10.0

X127.106      38  9730.7 10275.3     540     500     520
GR1755.7  9730.7  1755.7  9730.8  1731.8    9788  1731.6  9802.8  1733.6  9808.5
GR1734.8  9830.2  1734.7  9869.5  1733.3  9905.8  1734.4  9916.8  1732.4  9979.5
GR1729.1   10000  1728.6 10019.5    1731 10026.5  1731.4 10051.7  1732.4 10066.4
GR1730.6 10109.9  1732.1   10125  1728.9 10150.1  1727.7   10179  1725.7 10190.7
GR1727.8 10205.6  1736.1   10215  1736.8 10259.5  1742.7 10275.3    1742 10408.1
GR1738.5 10443.8    1739 10468.6  1738.6 10494.5  1741.2 10550.7  1737.2 10653.9
GR1739.5 10686.8  1738.8 10728.3  1736.2 10755.3  1736.9 10761.5  1737.4 10798.5
GR  1733 10818.3  1743.8   10877  1745.6 10979.2
HD27.106    10.0

X127.169      28  9850.9   10395     400     310     330
GR1753.5  9850.9  1734.4  9881.6    1736  9933.2  1735.9   10000  1732.1 10145.7
GR1733.2 10155.1  1732.9 10194.3  1738.9   10218  1732.7 10265.5  1733.2 10315.5
GR1733.9 10339.7  1743.4 10379.9  1745.5   10395  1741.7 10481.8  1741.6 10526.6
GR1743.1 10538.6  1744.8 10564.2  1744.7 10687.1  1741.1 10812.4  1739.1 10854.3
GR1740.2 10885.4  1734.5 10910.1  1734.7 10918.1  1738.5 10928.8  1736.7 10948.6
GR1737.7 10976.7  1746.9 11000.2  1747.6 11111.9
HD27.169    10.0

X127.226      35  9928.4   10380     310     300     300
GR  1765  9788.6    1765  9788.7  1744.5  9877.9  1743.7  9928.4  1735.6  9943.3
GR1735.3  9989.5  1737.7   10000    1739   10065  1739.8 10106.8  1737.7 10145.4
GR1736.4 10162.8  1737.7 10188.7  1736.6 10259.4    1735 10269.7  1735.6 10283.3
GR1735.6 10320.4  1734.8 10332.8    1749   10380  1748.3 10432.1  1746.1 10448.1
GR1744.5 10526.8    1745 10562.1  1747.2 10583.3  1745.3 10798.5  1739.5 10855.8
GR1742.4 10881.8  1744.1 10936.1  1741.8 10999.9  1741.2 11013.1  1736.7 11029.8
GR1737.8 11054.5  1739.5 11059.9  1750.7 11099.3  1750.6 11246.8  1753.4 11400.2
HD27.226    10.0

X127.265      46    9900 10164.2     210     220     210
GR1759.4  9689.5  1759.4  9689.6  1759.4  9689.7  1759.3  9703.1  1749.5  9739.2
GR  1751  9795.3  1750.2    9900    1747  9968.4  1735.7  9973.2  1736.3   10000
GR1740.8   10044  1741.2 10063.1  1741.4 10128.7    1749 10164.2  1749.5 10201.7
GR  1750 10298.4  1750.7   10337  1750.2 10382.1  1747.8   10397  1746.6 10460.8
GR1746.6 10469.8  1747.5 10509.2  1748.9 10531.9  1749.3 10575.2  1747.7 10618.4
GR1746.4 10638.3  1746.2 10687.3  1747.1 10707.3  1746.8 10752.2  1743.1 10780.1
GR1743.7 10795.7  1746.2 10810.8  1746.6 10849.5  1747.9 10861.6  1747.8 10861.7
GR  1748 10890.4  1744.6 10939.7  1745.4 10986.2  1746.1 11055.7  1739.9 11101.8
GR1739.5   11124  1738.8 11134.3  1739.7 11149.2  1751.6 11174.7  1753.3 11300.7
GR1755.4 11373.2
HD27.265    10.0

X: 27.32      30  9907.5 10072.3     260     300     275
X3    10
GR1760.8  9673.4  1752.3  9694.4  1752.8  9759.1  1749.8  9907.5    1743  9932.7
GR1742.9  9962.1  1740.3   10000  1740.9   10054  1754.9 10072.3  1751.7 10176.6
GR1750.2 10227.7  1750.3 10307.3  1751.9   10323  1752.2 10364.6  1750.2 10475.2
GR1751.7 10498.6  1752.1   10570  1749.6 10644.3  1751.5   10676  1750.8   10734
GR1751.3 10765.5  1749.9 10844.8  1746.3 10900.2  1746.8 10926.1  1749.3 11000.3
GR1744.4 11051.9  1742.8 11077.2  1743.9 11116.7  1755.9 11147.9  1758.2 11273.1
HD 27.32    10.0

X127.366      39  9737.6 10110.1     230     240     240
GR1769.8  9702.7  1755.9  9737.6  1745.3    9748  1746.2  9771.9  1746.7  9859.2
GR1748.4  9920.5  1745.5  9933.9  1746.9  9976.9  1742.6   10000  1742.3 10086.6
GR1743.4 10102.2  1755.1 10110.1  1755.6 10177.6  1755.3 10242.7  1755.9 10286.6
GR1754.6 10345.9  1754.7 10457.4  1750.9 10521.7  1751.5   10555  1753.4 10569.5
GR1753.3 10608.2  1750.7 10654.5  1753.3 10780.6  1751.3 10821.9  1752.1 10925.4
GR1751.4   10952  1747.6 11021.9    1746 11027.9  1746.4 11040.4  1749.8 11076.4
GR1745.8 11112.3  1756.7 11140.4  1758.8 11165.3  1759.3 11295.8  1757.2 11409.8
GR1757.7 11478.6  1756.1 11533.4    1758   11558  1760.2 11593.2
HD27.366    10.0

X127.417      26  9942.8 10200.8     250     290     270
X3    10
GR1765.1  9848.4  1755.1    9889  1756.8  9942.8  1753.6  9989.2  1746.8   10000
GR1750.1 10057.8  1748.6 10121.9  1745.1 10141.8  1744.8 10177.2  1759.4 10200.8
GR1759.2 10367.6  1758.1 10536.5  1757.1 10689.7  1755.3 10725.2  1754.4 10783.7
GR  1754   10842  1750.8 10860.1  1752.5 10893.3  1755.1 10912.4  1755.1 10941.7
GR1753.4 10962.6  1751.9 11035.1  1748.5   11041  1748.6 11049.8    1762 11095.5
GR1762.9   11211
HD27.417    10.0

NC  0.07    0.07   0.036     0.1     0.3
X127.502      37  9947.5 10150.4     430     510     450
GR1783.8  9853.5  1773.7  9947.5  1748.8  9983.2  1750.6   10000  1750.2 10025.5
GR1752.1 10058.7  1754.1 10086.3  1760.3 10126.6  1762.5 10150.4    1763   10240
GR1759.5 10265.8  1759.9 10275.2    1762 10280.7    1762   10302  1758.3 10312.7
GR1761.1   10330  1762.8 10350.4    1762 10409.1    1763 10489.2  1762.3 10589.5
GR1761.7   10675    1763 10723.2  1763.7 10740.2  1762.6 10779.4  1758.4 10837.3
GR1760.6 10852.6    1761 10887.2  1759.1 10918.1  1762.5 10935.3  1761.8   10969
GR1759.1 10979.4  1764.1   11005  1767.7 11054.2  1769.6 11108.1  1770.5 11175.4
GR1771.3 11287.4    1772   11384
HD27.502    10.0

X127.604      27  9740.2 10014.4     510     700     550
GR1786.6  9740.2  1757.7  9792.1  1757.8  9813.5  1759.2  9823.8  1759.9  9851.8
GR1757.7  9893.9  1754.3  9964.9  1754.2   10000  1765.2 10014.4  1764.4 10038.5
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GR1765.9 10081.8  1766.4 10113.1  1762.9 10150.4  1767.6   10183  1769.9 10240.7
GR1768.9 10369.3  1769.6 10444.5    1769 10528.9  1769.2 10644.4  1767.4 10727.3
GR1767.5   10765  1763.8 10793.9  1764.7 10830.3  1766.9 10867.7  1770.7 10888.5
GR1771.5 11019.7  1774.5 11105.7
HD27.604    10.0

X127.693      29  9961.1 10195.8     490     460     470
GR1791.7  9961.1  1756.3   10000  1757.7 10016.1  1760.3 10060.1  1762.8 10074.5
GR1762.8 10088.7  1770.2 10105.9  1771.7 10195.8    1771 10231.3  1770.9 10351.8
GR1772.3 10459.2  1774.7 10596.6  1775.1 10635.8  1773.7 10744.8  1769.7 10897.1
GR1770.5   10935  1767.3 10957.3  1769.3 10990.2  1773.7 11023.8  1775.9 11078.2
GR  1776   11145  1772.4 11215.7    1773 11230.9  1776.9 11311.4  1778.9 11389.9
GR1779.8 11565.4  1780.3   11724  1781.6 11801.6  1782.9 11816.4
HD27.693    10.0

X127.797      32     9969 10158.3     560     550     550
GR1785.6    9969  1760.6   10000  1761.3 10008.1  1761.4   10040  1765.8 10049.5
GR  1771 10077.1  1771.9 10089.7  1772.3   10120  1771.6 10150.2  1776.1 10158.3
GR1776.8 10265.3  1776.3 10353.5  1774.5 10418.5  1775.7 10519.8  1776.6 10634.1
GR1777.1 10778.4  1777.6   10916  1772.3   10988  1772.4 10992.9  1773.4 11016.9
GR1776.1   11050  1774.9 11106.7    1778 11127.1  1779.4 11190.5  1777.9 11313.3
GR1778.6 11394.9  1780.5   11441  1782.1 11568.4  1782.7 11689.7    1782 11743.2
GR1782.5 11912.3  1785.1 11962.9
HD27.797    10.0

X127.913      25  9944.2 10240.4     620     600     610
GR1800.8  9944.2  1763.1   10000  1767.4 10037.3    1772 10080.7    1776 10111.6
GR1776.8 10166.4  1776.7   10200  1777.9 10215.4  1781.2 10219.9  1782.1 10240.4
GR1781.9 10276.9    1781 10431.4  1780.9 10609.3  1781.9 10668.7  1781.9 10784.1
GR1778.4 10826.3  1777.5 10876.2  1780.8 10916.2  1781.2 10985.8  1782.2 11061.8
GR1783.3 11083.6  1783.4 11122.1  1780.9 11228.2  1782.2 11365.8  1785.1 11411.6
HD27.913    10.0

NC  0.07    0.07   0.044     0.1     0.3
X128.023      47    9770 10077.1     600     580     580
GR1792.6    9770  1775.2  9777.6    1775  9806.4  1774.3    9813  1775.2  9821.4
GR1776.6  9826.9  1779.2  9837.5  1780.7  9842.9  1781.5  9866.6  1782.4  9880.7
GR1782.9  9892.3  1782.1  9937.4    1781  9958.7  1773.7  9970.3  1773.1  9995.9
GR1772.5   10000  1773.7 10006.6  1775.1 10023.8  1777.1 10039.3    1778   10057
GR1778.8   10067    1784 10073.4  1785.2 10077.1  1785.2 10111.8  1786.6 10157.6
GR1787.2 10200.9  1789.7 10258.3  1789.6 10302.2  1787.7 10378.7  1787.3 10426.3
GR1785.5 10545.4  1784.3 10604.2  1783.1 10662.6  1781.9   10699  1781.8 10706.3
GR1780.7 10709.9  1780.7 10712.2  1783.4 10731.9  1782.8 10757.3  1783.1 10778.7
GR1785.4 10811.5  1786.8 10870.5  1786.6   10952  1787.5 11033.3  1787.8 11082.5
GR1786.5   11153    1789 11217.6
HD28.023    10.0

X128.091      33  9641.3 10160.5     330     400     360
X3                        9641.3  1811.7 10160.5  1792.1
GR1811.7  9641.3  1782.1  9676.9  1781.9  9726.3  1786.5  9742.3  1786.6  9856.7
GR1786.5  9900.2  1785.1  9967.4  1782.5  9978.8  1780.8   10000  1780.9 10010.4
GR1782.1 10050.9  1781.7 10108.3  1789.6 10121.5  1792.1 10160.5  1792.6 10223.1
GR1792.9 10307.6  1791.1 10457.3  1789.3 10591.5  1787.6 10748.9  1786.6 10778.3
GR1782.5 10797.4  1782.9 10809.4  1786.5 10850.7  1789.6 10876.8  1792.7 11005.3
GR1793.1 11117.2  1792.3 11229.1  1792.6 11377.9    1792 11520.3  1792.3 11698.5
GR1795.2 11860.8  1796.4 11901.4  1798.4 12045.9
HD28.091    10.0

X128.157      39  9591.2 10055.2     340     370     350
GR  1807  9591.2    1785  9646.4  1784.5  9667.1  1786.5  9689.6  1788.2  9722.3
GR1788.8  9789.6  1790.5  9804.4    1791  9831.6  1791.1  9866.2  1788.7    9893
GR1788.5    9942  1786.6  9970.6  1782.6   10000  1782.8 10043.2    1792 10055.2
GR1792.3   10073  1790.2 10110.2  1790.9 10121.6  1792.5   10139  1793.7 10222.1
GR1795.6   10322  1796.2 10374.2    1794 10485.5  1792.9 10581.9    1792   10712
GR1791.2 10720.5  1790.2 10824.2  1785.6 10837.6  1785.7 10842.6  1787.4 10865.9
GR1792.5 10897.9  1791.3 10939.7  1794.3 11027.4    1796 11060.5  1796.4 11145.9
GR1796.3 11285.8  1796.8 11405.2  1797.9 11552.6    1800 11574.2
HD28.157    10.0

X128.241      36  9639.9 10050.5     400     490     440
GR1808.3  9639.9  1795.4  9692.2  1795.8  9741.5    1795  9757.5  1794.5  9762.7
GR1793.6  9785.6  1793.6  9819.4  1791.7  9830.9  1789.9    9858  1791.1  9876.8
GR1790.7  9926.9    1790   10000  1795.7   10028  1796.6 10050.5  1795.7 10063.2
GR1797.2   10223  1798.6 10301.6  1797.7 10415.7    1797 10531.3  1797.1   10566
GR1794.2 10615.4  1791.9 10624.7  1794.1   10652  1793.8 10662.7  1792.1 10675.3
GR1795.8 10702.3  1797.3 10754.1  1801.3 10794.7  1802.6 10837.5  1802.5 10880.1
GR1801.9 10980.9  1803.2 11104.8  1803.7 11135.2    1805 11251.1  1804.9 11386.2
GR1806.9 11429.3
HD28.241    10.0

NC  0.07    0.07   0.036     0.1     0.3
X128.326      22  9817.5 10050.1     440     470     450
GR1822.4  9689.6  1809.8  9817.5  1794.9  9861.7  1792.4  9937.3  1791.3   10000
GR1801.8 10050.1  1801.9 10195.5  1801.4 10252.1  1802.1 10306.4  1799.1 10388.6
GR1799.1 10476.5  1800.3   10599  1799.1 10683.7  1800.9 10731.3  1800.8 10770.4
GR1803.6 10806.2  1803.5 10872.4  1805.2 10955.7  1806.2 11057.2  1807.9 11208.6
GR1810.2 11340.5  1812.8 11379.7
HD28.326    10.0

X1 28.39      28  9863.1 10063.6     350     340     340
GR1821.5  9819.6  1815.7  9863.1  1793.2  9907.7  1793.4  9924.1  1793.9  9961.5
GR1792.8   10000  1800.1 10013.4  1802.7 10063.6  1802.5 10104.8    1805 10139.1
GR  1804 10177.8    1803 10316.5  1802.6 10382.7    1803 10449.1  1803.8 10520.6
GR  1804   10603    1802 10705.5  1802.4 10716.7  1802.8 10767.7  1807.3 10800.6
GR1809.4 10917.5  1809.5 11054.7  1809.2 11066.1  1809.6 11175.1  1810.8 11281.1
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GR1811.5 11284.7    1812 11364.3  1816.4   11470
HD 28.39    10.0

X128.462      22  9871.7 10061.2     380     380     380
GR1827.9  9871.7  1794.9  9909.8  1794.8   10000  1803.6 10034.2  1805.6 10061.2
GR1805.3   10078  1806.6 10175.8  1805.7   10284  1807.2 10463.4  1808.6 10524.9
GR1807.4 10599.5  1805.3 10682.2  1805.1 10732.4  1808.1 10776.4    1809 10847.3
GR1812.2   10922  1812.7 11030.5  1812.5 11215.6  1812.6 11317.2  1814.1 11404.3
GR  1815 11476.1  1819.3 11558.8
HD28.462    10.0

X128.555      25  9919.4 10111.4     490     500     490
GR1835.9  9869.9  1833.2  9919.4  1817.6  9940.2  1800.2  9961.8  1800.1  9983.5
GR1799.4   10000  1799.4 10032.9    1801 10059.2  1809.1 10096.4    1810 10111.4
GR1809.1 10139.6  1811.3 10223.1  1811.4   10283  1810.6 10355.8  1810.2 10399.9
GR1811.2 10470.4    1812 10526.5  1813.1 10579.7    1813 10607.8  1813.2 10653.4
GR1812.6 10691.4  1813.9 10780.8  1816.4 10824.9  1817.2   10871  1818.1 11005.7
HD28.555    10.0

X128.657      31  9933.6   10197     550     540     540
GR1841.5  9910.1  1839.5  9933.6  1801.7  9961.9  1800.5  9986.1  1800.6   10000
GR1802.1 10009.7    1805 10034.1  1806.9 10053.9  1808.6 10069.1  1813.2 10089.5
GR1812.3   10113  1810.2 10124.3  1809.6   10130  1809.6 10142.8  1812.9   10162
GR1814.9   10179  1816.7   10197  1816.8 10224.3  1815.5 10327.9    1814 10385.1
GR1814.4 10514.2  1814.6 10614.1  1816.7 10650.2    1820 10678.3  1822.3 10877.4
GR1821.4 11067.7  1821.7 11188.8  1823.3   11264  1821.4 11476.7  1822.5 11657.4
GR1826.4   11753
HD28.657    10.0

X1 28.75      33  9866.8   10129     500     470     490
GR1844.3  9866.8  1812.6  9915.2  1812.5  9936.1  1809.4    9952  1808.3  9972.2
GR1808.5   10000  1808.9 10033.3  1809.5 10041.9  1811.1 10053.6  1811.1 10066.5
GR  1814 10101.5    1816 10113.1  1819.7   10129  1821.3 10171.9  1820.2 10292.1
GR1820.4 10343.7  1818.3 10481.8  1817.7 10539.4    1818 10623.4  1817.4 10650.9
GR  1818 10735.6  1818.7 10749.8  1825.1 10820.5    1824 10892.7  1824.3 10991.1
GR1823.6 11079.1  1824.2 11186.1  1825.2 11305.7  1823.8 11432.7  1824.2   11468
GR1825.2 11672.9  1825.5 11735.5  1830.5 11821.7
HD 28.75    10.0

X128.847      37  9881.1 10076.9     520     500     510
GR1848.5  9867.2    1847  9881.1  1814.5  9927.3  1813.5  9952.1  1811.9  9978.2
GR  1812   10000  1812.5 10041.6  1821.4 10076.9  1821.2 10110.6  1820.5 10147.8
GR1818.4 10162.1  1820.8 10179.8  1824.9 10200.5  1825.3 10242.3    1825 10284.1
GR1824.4 10343.6  1824.5 10403.2  1823.5 10447.7  1822.7 10492.8  1821.8 10553.5
GR1821.8 10574.2  1822.3 10617.2  1822.8 10650.1  1822.5 10692.5    1820 10726.3
GR1821.3 10757.2  1821.3 10780.5  1822.3   10814  1826.7 10837.2  1828.2 10862.2
GR1827.1 10897.8  1826.9 10969.2    1827   11071  1827.8 11206.2  1826.8 11575.5
GR1827.3 11637.6  1828.8 11709.7
HD28.847    10.0

X128.934      37  9824.7 10054.9     410     470     460
GR  1853  9795.5  1851.1  9824.7  1824.7  9864.6  1823.9  9894.9  1820.4  9914.2
GR1819.2  9923.4  1819.1  9934.8  1816.6  9940.2  1815.9  9967.7  1815.5   10000
GR1817.3 10007.5  1817.6 10022.2  1819.8 10035.2  1826.8 10054.9    1828 10096.7
GR  1827 10161.6  1825.9 10183.8  1826.4 10214.6  1825.4 10239.3  1824.2 10268.1
GR1823.9 10298.7  1824.1 10324.5  1827.5   10353  1828.5 10391.2  1829.3 10425.6
GR  1829 10455.1  1827.6 10502.7  1827.4 10545.1  1827.6 10578.5  1826.1   10687
GR1827.3 10744.9  1828.1 10818.8    1827 10868.7  1826.9   10873  1829.8 10900.6
GR1831.1 11009.4  1831.6 11166.8
HD28.934    10.0

X129.012      26  9922.8 10091.3     400     420     410
GR1853.7  9889.9    1850  9922.8    1819  9955.5  1818.9  9982.8  1818.7   10000
GR1820.6 10031.4  1822.8 10041.2  1822.6 10066.9  1827.5 10091.3  1828.5 10113.2
GR1828.1 10186.8  1828.8 10220.1  1828.6 10250.7  1827.9 10267.4  1828.5 10303.6
GR1829.6   10341  1830.3 10376.4  1830.2 10413.9    1831   10452  1832.7 10517.5
GR1832.8 10558.9  1831.5 10660.3  1831.6 10714.5  1830.7 10788.3  1831.7   10835
GR1838.8 10861.6
HD29.012   10.00

X1 29.13      31  9960.7 10106.7     590     600     595
GR  1855  9960.7  1824.5  9979.7    1821  9987.1  1821.6   10000  1822.1 10015.3
GR1824.1 10027.6  1826.2 10046.3  1827.7 10055.7  1827.9 10091.4  1829.1 10098.6
GR1831.5 10106.7  1834.5 10331.6  1834.2 10356.3  1834.1   10392    1834 10428.2
GR1833.4 10440.7  1835.9 10483.6  1835.1 10502.3  1834.8 10508.1  1836.2 10530.9
GR1838.1 10559.2  1838.9 10574.2  1839.3 10612.5  1838.3 10733.7  1836.4 10808.3
GR1836.4 10832.6  1837.2 10902.5  1836.9 10928.5  1837.6 10946.7  1839.3 10954.1
GR1842.7 10971.2
HD 29.13    10.0

NC  0.07    0.07   0.044     0.1     0.3
X129.258      23  9781.3 10051.4     710     710     705
GR1852.7  9781.3  1834.5  9805.1  1831.9  9824.7  1828.7  9842.8  1831.8  9857.3
GR1832.7  9870.6  1834.1  9915.5  1833.1  9954.2  1831.2   10000  1832.3 10016.4
GR1832.7 10026.1  1844.5 10051.4  1844.3 10107.4  1844.4 10169.9  1844.3 10230.7
GR1843.9 10274.3  1844.5 10318.2  1843.7 10378.2  1843.3 10417.3  1842.7 10451.7
GR1842.2 10494.3    1843 10508.4  1851.4 10543.7
HD29.258    10.0

NC  0.07    0.07    0.05     0.1     0.3
X129.351      39  9684.3 10296.9     500     490     490
GR  1864  9651.1  1858.9  9668.9  1849.7  9684.3  1836.7  9698.1  1839.1  9722.5
GR1838.9  9741.4  1836.7  9747.3  1836.8  9758.1  1838.3  9768.8  1841.6  9795.9
GR1839.9  9818.1  1839.5    9839  1842.7  9861.3  1845.3  9879.5    1839    9898
GR  1841  9912.1  1841.4  9924.3  1842.3  9957.8  1838.9  9979.9  1835.9   10000
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GR1836.7 10027.2    1838   10064  1841.9 10092.9    1842 10150.2  1840.3 10186.7
GR1842.3   10213  1840.9 10230.5  1841.3   10250  1845.9 10277.5  1847.8 10296.9
GR1848.9   10317  1849.3 10342.3  1849.2 10371.3  1848.8 10418.4  1849.3 10471.2
GR1848.5 10503.3  1847.1 10544.6  1847.7   10566  1854.4 10595.3
HD29.351    10.0

X129.387      39    9481 10107.4     190     200     190
GR1854.2    9481  1841.8  9493.6  1841.9  9511.4  1844.7  9527.3  1844.5  9552.5
GR1839.3  9575.8  1839.1  9627.7  1840.2  9645.2  1844.3  9667.5    1845  9682.9
GR1842.2  9722.4  1839.9    9732  1839.7  9749.9  1840.9  9757.7  1847.4  9778.9
GR1847.6  9822.3  1843.7  9845.5    1845  9863.2  1844.6  9906.2  1842.7  9921.9
GR1839.7  9960.2  1838.8  9986.9  1839.8   10000  1839.3   10037  1838.9 10066.4
GR1843.9   10082  1845.2 10107.4  1844.2 10128.4    1845 10146.8  1843.4 10179.3
GR1845.8 10240.2  1845.8 10277.7  1850.7 10302.4  1850.5 10351.2  1850.5 10398.2
GR1850.2 10434.3  1848.9 10467.4  1849.5 10486.8  1857.7 10517.6
HD29.387    10.0

X129.493      60  9336.2 10047.8     610     520     560
GR1855.3  9184.2  1850.5  9195.2  1850.5  9301.4  1850.3  9318.7  1850.7  9336.2
GR1846.3  9357.2  1843.9  9369.9  1843.4    9386  1843.8  9410.6  1845.6  9421.7
GR1845.7    9428    1848  9442.5  1848.1  9450.2  1847.9  9459.5  1847.4  9471.8
GR1846.6  9486.4  1847.6  9503.9  1847.9  9515.6  1848.2  9534.1  1849.3  9543.7
GR1849.5  9563.8  1850.7  9572.1  1850.8  9582.2  1850.6  9618.4  1847.2  9647.1
GR1846.8  9657.9  1846.1  9679.3  1849.6  9696.8  1848.9  9711.8  1848.6    9717
GR1849.3  9732.5  1848.9  9747.1  1846.3  9758.6  1845.5  9765.8  1845.4    9772
GR  1847    9786  1849.1  9807.2  1849.2  9819.2  1847.5  9831.7  1847.3  9838.8
GR1845.8  9868.6  1844.4  9885.7  1847.2  9905.8  1847.6    9907  1847.9  9915.7
GR1847.8  9951.2  1845.4  9989.8  1845.2   10000  1844.8   10018  1845.6 10024.4
GR1850.7 10038.6  1850.8 10047.8  1850.3 10063.5  1850.7 10071.1  1850.9 10089.3
GR1849.2 10099.8  1848.8 10106.4  1849.1 10109.9  1854.8 10142.8  1855.2 10156.3
HD29.493    10.0

X129.538      36  9400.2 10034.4     270     230     240
GR  1860    9071  1852.7  9096.6  1854.5  9109.2  1856.5  9115.6  1855.8  9129.7
GR  1855  9160.4  1856.2  9182.2  1856.6  9231.6  1856.8  9294.3  1855.1  9331.2
GR1853.7  9372.5  1850.6  9376.2  1854.1  9382.6  1854.4  9400.2  1848.9  9419.1
GR1850.1  9441.4  1851.4  9480.9  1851.9    9528  1851.1    9545  1849.7  9586.2
GR1850.4  9625.5  1850.7    9667  1850.1  9703.9  1852.7  9733.9    1851  9774.5
GR1851.2  9838.1  1850.5  9871.5  1850.9  9915.1  1848.7  9948.9  1848.7  9970.4
GR1847.4  9990.7  1845.5   10000  1848.1 10016.1  1854.1 10034.4  1856.5 10071.6
GR1857.7 10085.4
HD29.538   10.00

NC  0.07    0.07   0.044     0.1     0.3
X129.601      31    9679 10060.2     370     330     330
GR1872.9  9099.7  1868.4  9117.8  1856.1  9156.4    1859  9183.7    1860  9210.1
GR1861.3  9257.3  1861.4  9286.8  1859.7  9337.3  1857.8  9385.8  1857.6  9431.3
GR1856.4  9472.7  1856.9  9515.2  1858.9  9628.9  1859.4    9679  1858.5  9695.4
GR1850.7  9710.3  1849.9  9734.3  1851.2  9784.6  1852.1  9797.7  1854.3  9832.4
GR1854.8  9848.1  1853.5  9885.6  1851.5  9929.9  1851.1  9960.4    1851   10000
GR1852.2   10019  1857.7 10035.2    1859 10046.6  1867.1 10060.2  1867.9 10084.7
GR1868.6   10148
HD29.601   10.00

X129.663      35  9803.9 10194.6     330     330     330
X3                        9615.1  1862.3 10201.4  1889.3
GR1874.6    9166  1872.5  9201.1  1863.4  9233.9  1861.7  9249.5  1863.9  9285.2
GR1862.6  9357.9  1861.5  9384.7  1859.9  9415.8    1862  9468.3  1860.7    9538
GR1862.3  9615.1  1862.6  9670.5  1862.5  9803.9  1851.7  9827.7  1850.9  9840.5
GR1850.9  9860.9    1856  9897.3  1855.5  9915.3    1854  9955.8  1853.7   10000
GR1852.9 10025.2  1857.5 10051.5  1856.8   10159  1869.1 10194.6    1867 10357.1
GR1866.3 10470.9  1864.6 10698.7  1863.6 10792.8  1862.8 10916.7  1862.3 11013.8
GR1860.8 11221.1  1861.8 11281.8  1866.3 11330.4  1870.2 11375.2  1875.3   11430
HD29.663   10.00

NC  0.07    0.07    0.04     0.1     0.3
X1 29.71      15    9715   10064     533      73     233
X3                   9715    1890   10064    1890
GR  1872    9609  1871.2    9715    1862    9754    1860    9764    1858    9772
GR  1856    9788  1854.5    9801  1856.1 9833.16  1856.5 9887.97    1856 9908.97
GR  1854 9972.43  1853.9 9998.70    1855 10021.8 1870.95   10052    1872   10118
HD 29.71   10.00

NC  0.07    0.07   0.036     0.1     0.3
X1 29.72      249593.1919956.504     127     127     127
X3                  9593.191    18809956.504    1880
GR  1881  8869.7  1872.2 9215.52  1872.2 9314.09  1873.7 9421.28  1874.5 9524.46
GR  1876 9593.19  1875.4 9595.54  1871.4 9606.06  1864.2 9623.12  1856.19639.302
GR1858.4 9674.94  1858.6 9701.37  1857.5 9732.78    1855 9846.41  1862.8 9873.43
GR1870.3 9887.95  1875.2 9910.84  1875.9 9928.85  1876.1 9944.50  1870.7 10278.1
GR1869.9 10443.2  1873.4 10954.8    1874 11285.2    1875 11456.7
HD 29.72   10.00

NC  0.07    0.07   0.036     0.3     0.5
X1 29.77      30  9764.6 10051.1      50     550     200
X3                    9754  1890.6 10051.1  1872.7
GR  1874    9195    1872    9222    1866    9240  1865.3  9317.8  1864.3  9364.1
GR1863.8    9408    1863    9449  1862.2  9466.8  1863.7  9505.3    1863  9551.4
GR1862.1  9588.5    1862  9603.5  1861.8  9676.4  1863.6    9720  1864.1  9724.1
GR1867.1  9736.3    1870  9745.8  1870.5  9764.6  1866.9  9772.8  1861.7  9782.5
GR1857.2  9792.9  1858.2  9809.5    1859  9826.1  1859.7  9869.9  1857.3 10011.1
GR1858.4 10024.3  1864.1 10033.6  1869.2 10042.5  1872.7 10051.1  1873.3 10073.5
HD 29.77   10.00

NC  0.07    0.07   0.036     0.1     0.3
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X1 29.85      17  9924.1 10043.7     400     400     400
GR1874.2    9386    1872  9406.8    1870  9413.5    1868  9438.9    1868  9504.5
GR  1870  9609.1  1870.4  9646.3    1868  9735.6    1868  9757.6    1866  9924.1
GR  1864  9938.5    1860  9945.1  1857.7 10015.9    1858 10029.3    1872 10043.7
GR  1878 10081.4    1880 10127.5
HD 29.85   10.00

NC  0.06    0.07   0.036     0.1     0.3
X1  30.1      65  9817.8 10037.9    1100    1325    1304
GR  1891  8723.4  1877.9  8748.2  1875.5  8775.4    1876    8780    1878  8810.6
GR1880.5  8835.2  1878.9    8853  1879.6  8871.3  1878.8  8898.7  1879.2  8919.7
GR1880.2  8960.2  1879.7  9014.6  1878.9  9044.7  1879.9  9052.4  1880.3  9099.2
GR1880.3  9155.3  1880.9  9227.8  1876.8  9243.7  1876.3  9255.3  1874.4  9276.4
GR1874.2  9307.4  1872.2  9329.9  1872.1    9342  1873.5  9355.7  1876.3    9390
GR1873.5  9392.9  1871.8    9404  1873.1  9420.7  1874.2  9425.8  1876.8  9428.7
GR1878.7  9441.3  1877.8  9466.4  1877.8  9482.9  1880.2  9496.3  1881.2  9512.7
GR1880.1  9529.5  1878.9  9533.3    1877  9544.7  1877.4  9559.8  1878.1  9578.4
GR1879.3  9589.9  1877.1  9614.6  1874.7  9633.8  1871.3  9643.6  1872.3  9667.4
GR1871.1  9672.6  1870.2  9693.9  1870.5  9717.8  1872.1  9722.8  1873.4  9730.9
GR1874.4  9755.3  1874.7  9768.6  1880.6  9788.6  1881.3  9817.8  1880.6  9848.5
GR1879.2  9860.4  1875.7  9872.6    1875  9880.1    1874  9891.8    1873  9935.6
GR1868.2  9949.8  1867.4   10000  1869.6 10010.8  1895.1 10037.3  1895.1 10037.9
HD 30.10   10.00

NC  0.06    0.07   0.044     0.1     0.3
X1  30.2      54  9900.1 10132.3     535     545     537
GR1897.8  8955.2  1882.4    8990  1880.4  9026.6    1882  9055.2  1883.7  9073.3
GR  1885  9087.5  1885.1    9107  1884.1  9146.3  1881.8  9170.8  1881.9    9184
GR1882.7    9204    1882  9235.3  1882.4  9246.9  1882.3  9262.4  1883.5  9272.2
GR1884.4  9292.3  1883.6  9312.7  1881.6  9337.9  1881.1  9347.9  1882.5    9366
GR1882.6  9381.9  1886.1  9390.1  1885.7  9418.6  1884.4  9457.3    1883    9490
GR1883.8  9504.1  1883.4  9564.4    1882  9590.9  1883.3  9616.7  1883.5  9641.3
GR1879.3  9663.9  1879.5  9669.6  1882.3  9684.6  1882.8  9695.5  1881.9    9707
GR1879.8  9714.1  1879.9  9731.2  1882.8  9741.7    1883  9753.1  1883.3    9796
GR1884.1  9822.3  1883.7    9859  1882.8  9900.1  1876.5  9927.7  1875.8  9939.7
GR  1877  9976.9  1876.1   10000  1876.4 10000.6  1877.9 10021.2  1878.8 10045.5
GR1878.2 10069.8    1876   10086  1875.2 10093.2  1897.9 10132.3
HD  30.2   10.00

X1 30.28      40  9881.7 10033.5     550     430     421
GR1901.6  9132.4  1889.1  9162.5  1889.5  9181.6  1888.4  9200.7  1889.3  9222.8
GR  1890  9264.4  1890.1  9316.4  1890.2  9351.6  1888.4  9388.9    1887  9396.9
GR1886.6  9406.9    1888  9427.9  1888.6  9442.8  1887.8    9470  1889.3  9491.8
GR1890.2  9550.4  1889.5  9595.4  1889.6  9616.6  1887.7  9631.3    1887    9649
GR1889.5  9679.4  1888.6  9694.4  1886.6  9704.9  1889.5  9717.5  1890.4  9732.1
GR  1890  9751.7  1888.7  9775.3    1888    9814  1885.9  9833.6  1885.2  9881.7
GR1884.3  9895.3  1881.8  9908.6  1880.9  9934.5  1879.7  9947.3  1878.3  9978.3
GR1877.8  9989.9  1877.8   10000  1877.1 10008.3  1877.5 10014.5  1894.3 10033.5
HD 30.28   10.00

X1 30.42      43  9957.5 10487.8     500     650     713
GR1906.6  9501.6  1893.1    9533  1893.6  9568.7  1892.9  9613.1  1892.9  9631.9
GR1892.9  9666.7  1894.3  9714.6  1894.8  9733.5  1894.8  9755.5  1894.6  9800.7
GR1895.2  9854.8  1892.9    9868  1893.9  9893.2  1893.6  9900.4  1890.9  9907.3
GR1890.6  9918.4  1895.4  9931.2  1895.6  9957.5  1890.3  9970.3  1887.8  9999.9
GR1888.1   10000  1889.6 10037.1  1890.3 10052.9  1892.7 10080.7  1892.4 10102.6
GR1891.7 10123.6  1891.1 10145.5  1885.8 10159.9    1889 10186.9  1889.8 10200.7
GR1892.1 10211.4  1890.7 10239.2  1888.3 10258.2    1893 10277.2  1892.4 10320.1
GR1889.9 10362.3  1889.7 10390.2  1891.4 10402.9  1890.9 10438.8  1890.9   10443
GR1893.1 10455.4  1900.1 10487.8  1901.5 10552.6
HD 30.42   10.00

X1 30.52      50  9826.1 10401.4     600     500     560
GR1904.7  9283.8  1900.8    9298  1900.7  9317.2  1900.5    9342  1900.8  9401.2
GR1900.4  9431.3  1900.9    9463  1900.8  9498.9  1900.4  9566.3  1899.9  9630.3
GR  1900  9649.8  1900.1  9696.8  1899.9  9721.3  1899.1  9744.6  1899.3  9757.6
GR1899.2    9771  1899.6  9785.1  1900.4  9811.3  1900.9  9826.1    1900  9851.7
GR1898.1  9872.3  1894.7  9876.3  1894.9  9887.7    1895  9902.1  1897.4    9914
GR1898.2  9933.1  1896.5    9965  1893.6  9983.4  1893.8   10000  1893.5 10049.4
GR  1894 10061.8  1894.9 10068.7  1898.8 10095.2  1898.9 10107.9  1898.9 10132.4
GR1898.1 10161.8    1899 10213.6    1899 10221.1  1898.8 10242.8  1897.4 10260.3
GR1896.9 10275.9  1893.8   10291  1894.4 10300.9  1900.1 10323.3  1899.8 10340.6
GR1898.7 10361.4  1896.7 10366.8  1899.3 10383.8  1903.8 10401.4  1904.8 10420.5
HD 30.52   10.00

X1 30.65      39  9909.4 10027.8     700     650     696
GR  1913  9206.9  1910.7  9224.3  1909.7  9241.6  1908.9  9297.7    1908  9329.1
GR1907.1  9386.1  1907.9  9430.3  1908.6  9448.3  1908.9  9465.2  1908.4    9483
GR1908.7    9506    1908  9526.3  1906.8  9563.6  1906.3  9601.3  1905.9  9627.1
GR1905.5  9654.8  1905.5  9691.5  1905.8  9715.1  1906.1  9732.3  1906.2  9743.9
GR1901.9  9771.6  1900.6  9791.3  1901.6  9799.1  1903.2    9813  1904.1  9833.8
GR  1903    9871  1904.2  9891.8  1904.4  9909.4  1902.4  9919.7  1901.8  9933.9
GR1898.6  9943.8    1899  9971.6  1898.3  9988.4  1897.2  9995.5  1897.3   10000
GR1898.2 10019.6  1910.2 10027.8  1911.2 10041.2  1911.2 10070.7
HD 30.65   10.00

NC  0.07    0.07   0.044     0.1     0.3

X1 30.75      31  9857.1 10184.4     475     450     486
X3    10
GR1918.1  9299.3  1915.8  9316.1  1915.2  9339.6  1914.8  9376.8  1914.4  9417.3
GR1914.4    9491  1913.7  9531.6  1909.8  9560.3  1909.6  9621.7  1908.9  9660.3
GR1909.4  9712.4  1909.2  9755.1  1909.1  9793.8  1909.1  9820.7  1909.7  9857.1
GR1909.4  9869.1  1906.2  9885.3  1907.2  9912.3  1906.7    9935  1904.1  9963.4
GR1902.6  9982.7  1902.5  9993.3  1902.4   10000  1903.8 10050.3    1903 10096.8
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GR  1901 10116.3  1903.4 10126.1  1903.2 10142.7  1902.8 10165.8  1915.5 10184.4
GR1916.9 10241.8
HD 30.75   10.00

NC  0.07    0.06   0.044     0.1     0.3
X1 30.85      37  9889.7 10051.3     525     570     569
X3    10
GR1919.8  9554.5  1919.4  9596.5  1918.6  9645.1  1917.4  9696.1  1916.6  9729.2
GR  1916  9804.9  1915.8    9834  1915.8  9835.9  1915.6  9863.9    1915  9889.7
GR1912.1  9901.4  1908.2  9912.4  1909.4  9928.9  1908.5  9950.5  1909.1  9972.9
GR1907.5   10000  1907.9 10018.4  1914.3 10051.3  1914.5 10090.2  1915.2 10129.5
GR1915.3 10148.9  1915.5 10185.9  1914.7 10222.7  1910.5 10246.4  1913.3 10276.3
GR1913.9 10294.3  1914.1 10316.8  1911.5   10327  1910.9   10361  1909.4 10370.8
GR1908.6 10385.6  1910.2 10407.2  1907.9 10436.5  1905.6 10442.7  1905.3 10474.8
GR1907.4 10484.7  1921.7 10503.4
HD 30.85   10.00

X1 30.96      47  9925.5 10145.6     550     570     541
GR  1926  9841.1  1918.3    9870  1918.3  9883.8  1918.1  9925.5  1914.4  9943.8
GR1913.9  9973.8    1913  9986.9  1912.3   10000  1912.5 10026.1  1914.1   10032
GR1913.5 10040.4  1913.3 10048.6  1917.1   10068  1917.3 10108.6  1918.4 10126.3
GR1919.6 10145.6  1919.1 10178.2    1918   10215  1917.6 10251.6  1914.8 10288.4
GR1916.8 10300.7  1917.5 10314.7  1917.7 10337.5  1915.9 10354.8  1913.7 10368.2
GR1915.1   10381    1917 10420.6  1919.4 10463.2  1920.1 10491.4  1920.5 10517.7
GR1920.3 10535.8  1919.1 10566.8  1919.3 10590.8  1917.5 10602.1  1916.8 10612.3
GR1916.6 10626.6    1912 10646.3  1912.4 10653.8  1915.2 10665.1  1916.8 10676.9
GR1917.3 10689.9  1916.6   10727  1916.5 10740.6  1914.6 10749.9  1914.1 10758.8
GR1915.9 10771.1  1924.1 10798.3
HD 30.96   10.00

X1 31.05      49    9886 10109.5     470     460     494
GR  1932  9874.9 1923.33    9886  1918.8  9891.8  1918.9  9913.5  1920.4  9925.9
GR1918.3  9934.2  1917.1  9959.6  1917.8  9981.5  1917.8   10000  1918.1 10017.7
GR1919.2 10031.9  1920.9 10043.6  1920.4 10072.9  1921.7 10087.3  1922.6 10103.6
GR  1923 10109.5  1922.9 10135.9  1921.9 10144.8  1922.2 10184.5  1921.3 10203.3
GR1923.4   10234  1923.4 10256.6  1922.9   10289  1923.9 10317.1  1923.8 10318.2
GR1923.3 10374.4  1922.2 10391.5  1921.5 10427.9  1921.6 10450.6  1924.3 10476.8
GR1924.3 10506.7  1922.6 10573.2  1921.7   10624  1921.8   10643  1920.7 10662.9
GR1920.8 10689.1  1920.3 10706.9  1917.2   10715  1916.9 10722.6  1921.9   10745
GR1921.7 10764.6  1921.3 10790.9    1919 10806.3  1920.1 10836.8    1920 10849.3
GR  1918 10866.4  1917.4 10887.8  1928.6 10913.9  1930.4 10928.2
HD 31.05   10.00

X1 31.14      51  9926.4 10146.3     500     350     467
GR1936.6  9585.1  1932.6  9604.8  1929.8  9617.8    1928  9636.3  1927.7  9669.3
GR1927.8  9692.5  1927.9    9713  1927.5  9756.8  1926.6  9801.2  1926.6    9847
GR1927.5  9879.8  1928.2  9908.3  1928.7  9926.4  1922.6  9939.6  1921.1  9947.4
GR1920.2  9965.8    1919  9973.5  1917.8   10000  1918.4 10010.3  1920.5 10026.5
GR1924.5 10045.6  1925.6 10071.7  1926.9 10108.7  1928.3 10146.3  1928.3 10165.5
GR  1928 10175.7  1926.5 10200.1  1925.2 10211.8  1923.6 10216.9  1923.6 10228.2
GR1922.4 10244.9  1927.1 10260.3    1928 10283.8  1927.9 10333.2  1926.4 10349.7
GR1927.2   10374  1926.2 10391.8  1925.9 10409.7  1924.3 10420.3  1923.7   10437
GR1926.1 10478.4  1925.7 10521.1  1925.7 10538.5    1926 10563.6  1926.4 10576.4
GR1922.6 10583.9  1924.1 10604.4    1924 10631.6  1925.6 10648.6  1931.2 10664.9
GR1939.2 10690.6
HD 31.14   10.00

X1 31.17      39  9852.5 10210.3     130     130     162
X3                         9653.3    1940   10530    1940
GR1936.3  9491.6    1932    9506  1929.3  9521.4  1928.2  9545.1    1928  9562.9
GR1928.1  9579.7  1929.3  9634.1  1929.5  9653.3  1928.9  9726.8    1929  9786.7
GR1929.9  9825.3  1931.1  9852.5  1922.6  9871.9  1922.6  9888.2  1920.8  9897.9
GR1921.3    9911  1924.7  9918.2  1924.7  9936.1  1923.2  9965.1  1921.7   10000
GR1921.7 10001.5  1923.1 10054.8  1923.8 10062.1  1926.2 10080.5  1926.9 10099.2
GR1927.8 10124.8  1928.2 10182.8  1930.9 10210.3  1928.3 10228.1  1926.1 10247.7
GR1924.7 10279.7  1928.2 10302.1  1928.8 10328.3  1928.5 10367.3    1928 10402.1
GR1926.3 10441.8  1924.6 10469.9  1925.2   10497  1935.7 10536.2
HD 31.17   10.00

X1 31.25      58  9783.9 10041.9     400     400     432
X3                           9750    1940   10480    1940
GR1938.6  9373.1  1936.9  9395.2  1936.4  9406.7    1935  9423.4    1935    9428
GR1933.5  9455.8  1931.6  9505.3  1932.3  9509.8  1932.8  9528.7  1932.9  9546.8
GR1932.5    9565  1931.7  9570.8  1932.8  9591.6  1933.2  9610.1  1934.5  9655.8
GR1934.5  9676.8  1934.9    9701  1934.9  9746.6  1934.1  9783.9    1926  9798.6
GR1925.5    9809  1925.4  9818.8  1928.3  9828.6  1929.5  9837.7  1930.7  9857.7
GR  1931  9867.3  1931.1  9881.1  1928.7  9937.9  1927.2  9978.9    1926  9992.1
GR  1926  9998.1  1926.1   10000  1925.9 10008.2  1927.4 10019.5  1931.4 10031.4
GR1932.1 10041.9    1932 10070.2  1931.1 10095.4    1931   10102  1930.7   10114
GR1928.7 10132.1  1930.9 10149.7  1929.9 10161.2  1931.8 10181.8  1931.8 10190.3
GR1932.1 10215.9  1932.1 10261.6  1931.9 10286.1  1931.3 10318.8  1932.6 10340.5
GR1932.7 10366.6  1931.9 10388.8  1931.8 10413.5  1931.3 10430.7    1929 10443.2
GR1928.6 10452.1  1929.3   10466    1940 10483.8
HD 31.25   10.00

X1 31.34      39  9930.2 10137.5     450     450     474
GR1943.7  9664.3  1943.4  9718.8  1939.1    9793  1937.3  9862.7  1937.1  9930.2
GR1935.5  9935.3  1933.3  9949.9  1931.5   10000  1933.2 10027.2  1934.1 10104.9
GR1933.1 10113.8  1932.9 10116.6  1935.4 10126.5  1936.5 10137.5  1935.1 10146.5
GR1934.7   10157  1932.9   10166  1932.1   10178  1932.9 10184.4  1936.1 10196.8
GR1936.6 10210.6  1936.5 10248.8    1936 10254.7  1935.9 10322.1  1935.1 10332.9
GR1935.1 10365.4  1932.4 10379.2  1931.5 10394.9  1931.9 10412.7  1934.9   10417
GR1935.8 10429.2  1935.2 10471.2  1935.9 10485.5  1935.8 10497.1  1934.5 10509.7
GR1933.7 10532.2  1933.8 10540.5  1934.1 10545.2    1940   10555
HD 31.34   10.00
```

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X1 31.45      48    9850   10031     590     620     592
GR1951.3  9794.4  1948.9  9827.8  1946.7  9836.9  1944.6    9850  1933.4  9861.9
GR1933.1  9869.7  1933.7  9885.4  1937.6  9905.9  1938.3  9927.1  1936.2  9964.4
GR1935.2  9983.8  1933.6  9993.3  1933.3   10000  1933.3 10008.5  1933.8 10009.4
GR1941.1   10031    1941 10073.8    1941 10110.3  1940.3 10145.4  1939.8 10163.5
GR1939.1 10168.6  1941.7 10186.5  1941.5 10204.8  1939.5 10230.5  1939.5 10250.8
GR1938.2 10270.7  1937.5 10293.2  1938.3 10327.6  1938.7 10334.1  1942.7 10346.9
GR1942.5 10385.9  1941.7 10399.4  1937.4   10439  1939.3 10462.8  1941.9 10480.5
GR1941.8 10521.6    1942 10548.4    1942 10567.9  1942.1 10608.9  1942.4   10642
GR1945.4 10694.7  1945.2 10736.6  1944.2 10772.4  1943.2 10798.3    1944 10813.1
GR1944.1 10862.6  1944.8 10879.9  1949.7 10899.7
HD 31.45   10.00

X1 31.54      44    9916 10182.8     475     475     484
GR1953.1  9903.1 1946.65    9916  1940.2  9928.9  1940.1  9945.4  1940.2  9977.3
GR1940.3   10000  1941.1 10041.5  1940.6 10050.6  1940.7 10073.6    1942   10094
GR1941.9 10112.1  1942.1 10138.9  1942.2 10155.4  1944.3 10165.5  1946.3 10182.8
GR1945.8 10201.5  1946.2 10229.8  1946.9 10266.6  1946.7 10296.7  1944.2 10320.8
GR  1945 10335.4  1944.8 10361.1  1943.4 10368.2  1941.6   10400  1940.6 10407.2
GR1940.7 10429.9  1941.7   10439  1941.5 10456.4    1945   10470  1946.2 10481.4
GR  1946 10490.5  1943.2 10514.6  1941.4 10538.9    1948   10556  1948.9 10565.9
GR1948.3 10611.6  1947.9   10647  1947.6 10681.6  1947.4 10740.1  1947.9 10783.6
GR1948.4   10820  1948.4 10875.2  1951.6 10907.6    1952 10932.1
HD 31.54   10.00

X1 31.63      41  9961.1 10153.9     450     430     453
GR1958.1  9746.7  1949.7  9772.3    1949  9798.9  1948.9  9843.2  1948.3  9868.4
GR1947.5  9884.3  1947.6  9917.9  1946.4  9928.5  1947.3  9961.1  1942.5  9972.7
GR1940.5  9988.2  1940.6   10000  1940.7 10001.6  1940.7 10023.2  1941.7   10037
GR1944.7 10056.6  1945.2 10070.9  1945.1 10102.8  1944.7 10113.1  1946.9 10125.9
GR1948.2 10153.9  1948.6 10190.6  1947.5 10229.8  1947.3 10260.8    1947 10312.4
GR1946.3 10336.4  1947.6 10337.3  1950.5 10361.7  1949.2 10392.2  1948.8 10414.1
GR1946.3 10424.8  1948.2 10444.7  1951.7 10460.1  1952.9 10492.2  1952.8 10511.8
GR1952.1   10540  1952.4   10555  1952.2 10593.1  1952.4 10675.7  1956.7 10701.9
GR1956.6 10708.4
HD 31.63   10.00

NC  0.07    0.07   0.044     0.1     0.3
X1 31.75      36  9797.4 10027.6     680     650     647
GR1968.8    9535    1958  9569.1  1956.1    9580  1955.6  9600.1  1955.1  9620.2
GR1955.2  9640.7  1955.2    9671  1955.2  9699.4    1954  9797.4    1951  9807.2
GR1951.4    9817  1947.9  9830.1  1947.8  9838.9  1947.7  9849.4  1951.2  9874.7
GR1951.4  9893.5  1950.8    9936    1948  9965.9  1946.5  9988.6  1946.9  9994.7
GR1947.2   10000  1951.4   10016    1953 10027.6  1953.5 10055.5    1954 10095.7
GR1957.1 10148.4  1957.3 10176.9  1957.5 10201.8  1957.4 10202.3  1957.5 10265.2
GR1957.8 10341.9  1958.4 10415.1  1959.7 10486.4  1960.5 10533.3  1961.2 10567.4
GR1964.1 10582.5
HD 31.75   10.00

X1 31.82      30  9839.4 10046.1     360     370     361
GR1968.8  9640.8 1959.59    9660  1955.8  9667.9  1954.9  9681.8  1956.6  9690.9
GR1957.2  9720.3  1957.2  9781.8  1957.1    9801  1956.7  9810.2  1963.5  9828.3
GR1963.3  9839.4  1953.4  9861.7  1953.4  9901.8  1953.2  9938.9  1952.7   10000
GR1956.1 10017.6    1957   10035  1959.4 10046.1    1959 10068.7  1961.5 10077.7
GR1960.7 10084.5  1961.3 10108.5  1961.4 10154.5  1961.1 10172.2  1961.9 10255.5
GR1962.5 10327.1  1963.5 10369.1  1964.2 10384.7  1965.9   10402    1967 10410.2
HD 31.82   10.00

X1 31.87      26  9848.6 10017.7     220     260     243
GR1971.3  9626.3  1969.2    9643  1966.3  9648.1  1961.2  9655.8  1960.6  9670.8
GR1960.1  9690.2  1959.1  9693.1  1958.9  9818.6  1966.8  9829.2  1967.4    9837
GR1966.2  9848.6  1957.6  9864.1  1955.4  9879.3  1955.5  9900.2  1953.7  9938.9
GR1953.6  9982.7  1953.8   10000  1953.9 10007.4  1959.6 10017.7  1961.5 10059.8
GR1962.7 10114.9  1963.6 10134.9  1965.1 10168.9  1966.1   10197  1967.7 10206.3
GR1973.5 10227.4
HD 31.87   10.00

NC  0.06    0.07   0.044     0.1     0.3
X1 31.91      32    9933 10050.7     240     210     208
GR  1972  9636.6    1971  9656.6  1963.7  9686.4  1959.7  9704.8  1960.1  9716.5
GR1960.3  9740.5  1959.1  9793.6  1957.7  9812.1    1956  9816.1    1956    9828
GR1959.3  9842.6  1961.4  9856.4  1958.9  9879.9  1959.2  9894.2  1959.2  9914.2
GR1959.7    9933    1959    9940    1956  9949.2  1954.5    9968    1954  9982.5
GR1953.3   10000  1953.4 10025.9  1953.5 10025.9  1961.3 10050.7  1962.7 10078.7
GR1963.8   10106  1964.8   10139    1966 10170.4  1967.8 10188.1  1968.7 10199.5
GR1970.1 10207.3  1973.4 10222.6
HD 31.91   10.00

EJ

T4  Project: Upper Cave Creek Watercourse Master Plan Studies
T5  Client : Flood Control District of Maricopa County (FCDMC)
T6  Date:    July 8, 1999
T7  Firm:    Stantec Consulting, Inc.
T8  ********************************************************
I1            10
I4  SAND      10       1      14       0       0       0       0       0
I5           0.5     0.5    0.25     0.5    0.25       0     1.0
LQ     Q       1    2000   12000   17000   27000   37000   42000
LT    QS       1    3732   38488   45655   63313  135982  155000
LF   VFS  0.0142  0.0142  0.0082  0.0091  0.0097  0.0278  0.0291
LF    FS  0.0280  0.0280  0.0193  0.0186  0.0211  0.0151  0.0161
LF    MS  0.0879  0.0879  0.0638  0.0393  0.0399  0.0539  0.0545
LF    CS  0.2299  0.2299  0.1727  0.1828  0.1697  0.1427  0.1421
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```
LF    VCS  0.2324  0.2324  0.1905  0.1731  0.1579  0.1549  0.1542
LF    VFG  0.1802  0.1802  0.1732  0.1621  0.1529  0.1512  0.1496
LF     FG  0.1479  0.1479  0.1907  0.1801  0.1710  0.1692  0.1683
LF     MG  0.0787  0.0787  0.1515  0.1642  0.1799  0.1844  0.1823
LF     CG  0.0008  0.0008  0.0300  0.0560  0.0850  0.0928  0.0927
LF    VCG       0       0  0.0001  0.0147  0.0129  0.0078  0.0109
LF     SC       0       0       0       0       0  0.0002  0.0002
LF     LC       0       0       0       0       0       0       0
LF     SB       0       0       0       0       0       0       0
LF     MB       0       0       0       0       0       0       0
PF         29.387     1.0  653.14  350.94      96  191.99      88  103.62      81
PFC 48.7       71   24.15      64    12.7      56    6.35    47.5    4.75    39.5
PFC 2.36     29.5     2.0    25.5    1.18    16.5   0.595       8    0.42       5
PFC .297      3.5   0.106     2.0   0.075     1.8

$HYD
$RATING
RC             18    2500       0       0 1623.90 1627.42 1628.31 1628.75 1629.10
RC        1629.50 1629.80 1630.15 1630.48 1630.70 1630.98 1631.08 1631.18 1631.35
RC        1632.00 1632.35 1632.90 1633.15

*    A  Level output at time step 1 (0.455 day)
Q    258
T     68
X          0.0455   0.455
*    A  Level output at time step 2 (0.0417 day)
Q   1036
W 0.0417
*    A  Level output at time step 3 (0.0104 day)
Q   1823
W 0.0104
*    A  Level output at time step 4 (0.0104 day)
Q   2829
W 0.0104
*    A  Level output at time step 5 (0.0104 day)
Q   3820
W 0.0104
*    A  Level output at time step 6 (0.0104 day)
Q   5119
W 0.0104
*    A  Level output at time step 7 (0.0104 day)
Q   9327
W 0.0104
*    A  Level output at time step 8 (0.0104 day)
Q  19790
W 0.0104
*    A  Level output at time step 9 (0.0104 day)
Q  32471
W 0.0104
*    A  Level output at time step 10 (0.0104 day)
Q  39534
W 0.0104
*    A  Level output at time step 11 (0.0104 day)
Q  41252
W 0.0104
*    A  Level output at time step 12 (0.0104 day)
Q  40388
W 0.0104
*    A  Level output at time step 13 (0.0104 day)
Q  38186
W 0.0104
*    A  Level output at time step 14 (0.0104 day)
Q  35366
W 0.0104
*    A  Level output at time step 15 (0.0104 day)
Q  32226
W 0.0104
*    A  Level output at time step 16 (0.0312 day)
Q  26075
R 1633.7
W 0.0312
*    A  Level output at time step 17 (0.0417 day)
Q  17337
R 1636.1
W 0.0417
*    A  Level output at time step 18 (0.0417 day)
Q  10616
R 1637.7
W 0.0417
*    A  Level output at time step 19 (0.0833 day)
Q   5570
R 1638.9
W 0.0833
*    A  Level output at time step 20 (0.1701 day)
Q   1867
R 1640.2
W 0.1701
*    A  Level output at time step 21 (0.0019 day)
Q    203
R 1640.2
W 0.0019
$VOL   A
$$END
```

```
*************************************************      ********************************
*  SCOUR AND DEPOSITION IN RIVERS AND RESERVOIRS  *      *  U.S. ARMY CORPS OF ENGINEERS  *
*       Version: 4.1.00 -  OCTOBER 1993           *      *  HYDROLOGIC ENGINEERING CENTER *
*  INPUT FILE:  CC-F100C.DAT                      *      *  609 SECOND STREET             *
*  OUTPUT FILE: CC-F100C.OUT                      *      *  DAVIS, CALIFORNIA 95616-4687  *
*  RUN DATE: 10 OCT 00    RUN TIME: 07:27:25      *      *  (916) 756-1104                *
*************************************************      ********************************

                      X     X  XXXXXXX   XXXXX           XXXXX
                      X     X  X        X     X         X     X
                      X     X  X        X               X
                      XXXXXXX  XXXX     X        XXXXX  XXXXXX
                      X     X  X        X               X     X
                      X     X  X        X     X         X     X
                      X     X  XXXXXXX   XXXXX           XXXXX

          ****************************************************************
          *  MAXIMUM LIMITS FOR THIS VERSION ARE:                        *
          *       10  Stream Segments (Main Stem + Tributaries)          *
          *      500  Cross Sections                                     *
          *      200  Elevation/Station Points per Cross Section         *
          *       20  Grain Sizes                                        *
          *       10  Control Points                                     *
          ****************************************************************

T1      Cave Creek and Apache Wash WMP
T2      by Stantec: Proj. No. 82000077                    File: CC-F100C.DAT
T3      for Flood Control District of Maricopa County     Date: 07-27-99  srg

N values...  Left    Channel   Right    Contraction    Expansion
           0.0700   0.0440   0.0600       1.1000      0.7000

SECTION NO.    24.525
...Left Encroachment defined at station  9865.000 at elevation  1628.100
...Right Encroachment defined at station 10009.000 at elevation  1628.100
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    24.646
...Left Encroachment defined at station  9430.000 at elevation  1640.000
...Right Encroachment defined at station 11000.000 at elevation  1640.000
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    24.752
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    24.845
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    24.919
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    25.010
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    25.099
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    25.180
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    25.233
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    25.326
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    25.388
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    25.458
...Ineffective Flow Area - Method 1 - Left Overbank  Right Overbank
         Natural Levees at Station       9916.800      10067.100
             Ineffective Elevation       1668.100       1669.100
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    25.519
...Ineffective Flow Area - Method 1 - Left Overbank  Right Overbank
         Natural Levees at Station       9946.000      10101.000
             Ineffective Elevation       1672.400       1672.200
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    25.580
...Ineffective Flow Area - Method 1 - Left Overbank  Right Overbank
         Natural Levees at Station       9974.400      10121.500
             Ineffective Elevation       1674.100       1673.700
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    25.644
...Ineffective Flow Area - Method 1 - Left Overbank  Right Overbank
         Natural Levees at Station       9908.800      10061.500
             Ineffective Elevation       1676.600       1677.300
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    25.699
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.
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SECTION NO.    25.750
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    25.843
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    25.919
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    26.044
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    26.137
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    26.239
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    26.335
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    26.430
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    26.529
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    26.623
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    26.695
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    26.775
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    26.845
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    26.921
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    27.008
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    27.106
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    27.169
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    27.226
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    27.265
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    27.320
...Ineffective Flow Area - Method 1 - Left Overbank  Right Overbank
         Natural Levees at Station       9907.500      10072.300
             Ineffective Elevation       1749.800       1754.900
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    27.366
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    27.417
...Ineffective Flow Area - Method 1 - Left Overbank  Right Overbank
         Natural Levees at Station       9942.800      10200.800
             Ineffective Elevation       1756.800       1759.400
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
           0.0700   0.0360   0.0700       1.1000      0.7000

SECTION NO.    27.502
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    27.604
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    27.693
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    27.797
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    27.913
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
           0.0700   0.0440   0.0700       1.1000      0.7000

SECTION NO.    28.023
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...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    28.091
...Left Encroachment defined at station  9641.300 at elevation  1811.700
...Right Encroachment defined at station 10160.500 at elevation  1792.100
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    28.157
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    28.241
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
           0.0700   0.0360   0.0700       1.1000      0.7000

SECTION NO.    28.326
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    28.390
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    28.462
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    28.555
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    28.657
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    28.750
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    28.847
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    28.934
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    29.012
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    29.130
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
           0.0700   0.0440   0.0700       1.1000      0.7000

SECTION NO.    29.258
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
           0.0700   0.0500   0.0700       1.1000      0.7000

SECTION NO.    29.351
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    29.387
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    29.493
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    29.538
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
           0.0700   0.0440   0.0700       1.1000      0.7000

SECTION NO.    29.601
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    29.663
...Left Encroachment defined at station  9615.100 at elevation  1862.300
...Right Encroachment defined at station 10201.400 at elevation  1889.300
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
           0.0700   0.0400   0.0700       1.1000      0.7000

SECTION NO.    29.710
...Left Encroachment defined at station  9715.000 at elevation  1890.000
...Right Encroachment defined at station 10064.000 at elevation  1890.000
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
           0.0700   0.0360   0.0700       1.1000      0.7000

SECTION NO.    29.720
...Left Encroachment defined at station  9593.191 at elevation  1880.000
...Right Encroachment defined at station  9956.504 at elevation  1880.000
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
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          0.0700   0.0360   0.0700       1.3000     0.5000

SECTION NO.    29.770
...Left Encroachment defined at station  9754.000 at elevation  1890.600
...Right Encroachment defined at station 10051.100 at elevation  1872.700
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
          0.0700   0.0360   0.0700       1.1000     0.7000

SECTION NO.    29.850
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
          0.0600   0.0360   0.0700       1.1000     0.7000

SECTION NO.    30.100
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
          0.0600   0.0440   0.0700       1.1000     0.7000

SECTION NO.    30.200
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    30.280
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    30.420
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    30.520
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    30.650
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
          0.0700   0.0440   0.0700       1.1000     0.7000

SECTION NO.    30.750
...Ineffective Flow Area - Method 1 - Left Overbank  Right Overbank
         Natural Levees at Station       9857.100      10184.400
             Ineffective Elevation       1909.700       1915.500
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
          0.0700   0.0440   0.0600       1.1000     0.7000

SECTION NO.    30.850
...Ineffective Flow Area - Method 1 - Left Overbank  Right Overbank
         Natural Levees at Station       9889.700      10051.300
             Ineffective Elevation       1915.000       1914.300
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    30.960
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    31.050
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    31.140
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    31.170
...Left Encroachment defined at station  9653.300 at elevation  1940.000
...Right Encroachment defined at station 10530.000 at elevation  1940.000
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    31.250
...Left Encroachment defined at station  9750.000 at elevation  1940.000
...Right Encroachment defined at station 10480.000 at elevation  1940.000
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    31.340
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    31.450
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    31.540
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    31.630
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
          0.0700   0.0440   0.0700       1.1000     0.7000

SECTION NO.    31.750
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    31.820
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.
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SECTION NO.    31.870
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
           0.0600   0.0440   0.0700       1.1000      0.7000

SECTION NO,    31.910
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

NO. OF CROSS SECTIONS IN STREAM SEGMENT= 89
NO. OF INPUT DATA MESSAGES =   0

TOTAL NO. OF CROSS SECTIONS IN THE NETWORK =  89
TOTAL NO. OF STREAM SEGMENTS IN THE NETWORK=   1
END OF GEOMETRIC DATA
```

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T4  Project: Upper Cave Creek Watercourse Master Plan Studies
T5  Client : Flood Control District of Maricopa County (FCDMC)
T6  Date:    July 8, 1999
T7  Firm:    Stantec Consulting, Inc.
T8  ******************************************************

        Cave Creek and Apache Wash WMP
        by Stantec: Proj. No. 82000077                    File: CC-F100C.DAT
        for Flood Control District of Maricopa County     Date: 07-27-99  srg

- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
SEDIMENT PROPERITES AND PARAMETERS

       SPI      IBG     MNQ      SPGF      ACGR     NFALL    IBSHER
I1     10.       0       1      1.000    32.174       2         1
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 SANDS - BOULDERS ARE PRESENT

       MTC      IASA     LASA      SPGS       GSF      BSAE       PSI     UWDLB
I4     10        1       14      2.650      0.667     0.500    30.000    93.000

USING TRANSPORT CAPACITY RELATIONSHIP # 10, MPM(1948)
GRAIN SIZES UTILIZED (mean diameter - mm)
-----------------------------------------------------------------------
    VERY FINE SAND....     0.088  |  MEDIUM GRAVEL.....   11.314
    FINE SAND.........     0.177  |  COARSE GRAVEL.....   22.627
    MEDIUM SAND.......     0.354  |  VERY COARSE GRAVEL   45.255
    COARSE SAND.......     0.707  |  SMALL COBBLES.....   90.510
    VERY COARSE SAND..     1.414  |  LARGE COBBLES.....  181.019
    VERY FINE GRAVEL..     2.828  |  SMALL BOULDERS....  362.039
    FINE GRAVEL.......     5.657  |  MEDIUM BOULDERS...  724.077
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
COEFFICIENTS FOR COMPUTATION SCHEME WERE SPECIFIED
        DBI      DBN      XID      XIN      XIU      UBI      UBN      JSL
I5    0.500    0.500    0.250    0.500    0.250    0.000    1.000        1
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -

SEDIMENT LOAD TABLE FOR STREAM SEGMENT #   1
          LOAD BY GRAIN SIZE CLASS (tons/day)
```

LQ	Q	1.00000	2000.00	12000.0	17000.0	27000.0	37000.0	42000.0
LF	VFS	0.142000E-01	52.9944	315.602	415.461	614.136	3780.30	4510.50
LF	FS	0.280000E-01	104.496	742.818	849.183	1335.90	2053.33	2495.50
LF	MS	0.879000E-01	328.043	2455.53	1794.24	2526.19	7329.43	8447.50
LF	CS	0.229900	857.987	6646.88	8345.73	10744.2	19404.6	22025.5
LF	VCS	0.232400	867.317	7331.96	7902.88	9997.12	21063.6	23901.0
LF	VFG	0.180200	672.506	6666.12	7400.68	9680.56	20560.5	23188.0
LF	FG	0.147900	551.963	7339.66	8222.47	10826.5	23008.2	26086.5
LF	MG	0.787000E-01	293.708	5830.93	7496.55	11390.0	25075.1	28256.5
LF	CG	0.800000E-03	2.98560	1154.64	2556.68	5381.61	12619.1	14368.5
LF	VCG	0.100000E-19	0.100000E-19	3.84880	671.129	816.738	1060.66	1689.50
LF	SC	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	27.1964	31.0000
LF	LC	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19
LF	SB	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19
LF	MB	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19
	TOTAL	1.00000	3732.00	38488.0	45655.0	63313.0	135982.	155000.

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REACH GEOMETRY FOR STREAM SEGMENT  1
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CROSS SECTION NO.	REACH LENGTH (ft)	MOVABLE BED WIDTH	INITIAL BED-ELEVATIONS LEFT SIDE (ft)	THALWEG (ft)	RIGHT SIDE (ft)	ACCUMULATED CHANNEL DISTANCE FROM DOWNSTREAM (ft)	(miles)
	0.000						
24.525		2933.300	1640.000	1623.900	1639.600	0.000	0.000
	640.000						
24.646		2200.900	1640.000	1626.000	1640.000	640.000	0.121
	560.000						
24.752		1502.000	1642.200	1629.200	1642.100	1200.000	0.227
	490.000						
24.845		1824.200	1648.400	1635.300	1647.400	1690.000	0.320
	390.000						
24.919		2107.700	1652.800	1634.900	1653.600	2080.000	0.394
	480.000						

25.010		1751.700	1653.400	1640.200	1654.300	2560.000	0.485
	470.000						
25.099		1747.400	1658.000	1646.000	1659.900	3030.000	0.574
	430.000						
25.180		1678.000	1660.400	1647.700	1661.800	3460.000	0.655
	280.000						
25.233		1938.900	1664.200	1647.300	1663.900	3740.000	0.708
	510.000						
25.326		1459.600	1666.500	1653.000	1666.300	4250.000	0.805
	360.000						
25.388		1761.000	1678.800	1656.600	1674.100	4610.000	0.873
	360.000						
25.458		1616.100	1677.100	1660.500	1677.600	4970.000	0.941
	310.000						
25.519		1518.700	1678.000	1661.600	1679.200	5280.000	1.000
	300.000						
25.580		1431.000	1678.000	1665.900	1680.600	5580.000	1.057
	320.000						
25.644		1559.000	1680.000	1669.300	1682.800	5900.000	1.117
	290.000						
25.699		1551.200	1683.700	1669.400	1685.100	6190.000	1.172
	280.000						
25.750		1859.800	1686.200	1671.600	1688.700	6470.000	1.225
	370.000						
25.843		1741.200	1698.300	1673.500	1690.600	6840.000	1.295
	400.000						
25.919		1874.300	1694.200	1678.400	1692.000	7240.000	1.371
	650.000						
26.044		2294.000	1702.900	1684.300	1698.000	7890.000	1.494
	495.000						
26.137		2490.000	1712.900	1685.700	1702.000	8385.000	1.588
	420.000						
26.239		2036.100	1707.800	1692.800	1704.300	8805.000	1.668
	500.000						
26.335		1884.800	1710.700	1695.600	1709.400	9305.000	1.762
	495.000						
26.430		1755.200	1711.800	1697.500	1713.300	9800.000	1.856
	520.000						
26.529		1584.100	1720.000	1702.600	1714.400	10320.000	1.955
	500.000						
26.623		1645.200	1721.700	1703.900	1720.100	10820.000	2.049
	380.000						
26.695		1800.800	1724.900	1709.500	1727.200	11200.000	2.121
	420.000						
26.775		1926.500	1732.600	1712.700	1732.200	11620.000	2.201
	370.000						
26.845		1735.100	1733.100	1717.000	1734.500	11990.000	2.271
	430.000						
26.921		1194.800	1739.400	1720.200	1735.900	12420.000	2.352
	400.000						
27.008		1189.500	1746.200	1723.000	1739.900	12820.000	2.428
	520.000						
27.106		1248.500	1755.700	1725.700	1745.600	13340.000	2.527
	330.000						
27.169		1261.000	1753.500	1732.100	1747.600	13670.000	2.589
	300.000						
27.226		1611.600	1765.000	1734.800	1753.400	13970.000	2.646
	210.000						
27.265		1683.700	1759.400	1735.700	1755.400	14180.000	2.686
	275.000						
27.320		1599.700	1760.800	1740.300	1758.200	14455.000	2.738
	240.000						
27.366		1890.500	1769.800	1742.300	1760.200	14695.000	2.783
	270.000						
27.417		1362.600	1765.100	1744.800	1762.900	14965.000	2.834
	450.000						
27.502		1530.500	1783.800	1748.800	1772.000	15415.000	2.920
	550.000						
27.604		1365.500	1786.600	1754.200	1774.500	15965.000	3.024
	470.000						
27.693		1855.300	1791.700	1756.300	1782.900	16435.000	3.113
	550.000						
27.797		1993.900	1785.600	1760.600	1785.100	16985.000	3.217
	610.000						
27.913		1467.400	1800.800	1763.100	1785.100	17595.000	3.332
	580.000						
28.023		1447.600	1792.600	1772.500	1789.000	18175.000	3.442
	360.000						
28.091		2404.600	1811.700	1780.800	1798.400	18535.000	3.510
	350.000						
28.157		1983.000	1807.000	1782.600	1800.000	18885.000	3.577
	440.000						
28.241		1789.400	1808.300	1789.900	1806.900	19325.000	3.660
	450.000						
28.326		1690.100	1822.400	1791.300	1812.800	19775.000	3.745
	340.000						
28.390		1650.400	1821.500	1792.800	1816.400	20115.000	3.810
	380.000						
28.462		1687.100	1827.900	1794.800	1819.300	20495.000	3.882
	490.000						
28.555		1135.800	1835.900	1799.400	1818.100	20985.000	3.974
	540.000						
28.657		1842.900	1841.500	1800.500	1826.400	21525.000	4.077
	490.000						
28.750		1954.900	1844.300	1808.300	1830.500	22015.000	4.170

	510.000						
28.847		1842.500	1848.500	1811.900	1828.800	22525.000	4.266
	460.000						
28.934		1371.300	1853.000	1815.500	1831.800	22985.000	4.353
	410.000						
29.012		971.700	1853.700	1818.700	1838.800	23395.000	4.431
	595.000						
29.130		1010.500	1855.000	1821.000	1842.700	23990.000	4.544
	705.000						
29.258		762.400	1852.700	1828.700	1851.400	24695.000	4.677
	490.000						
29.351		944.200	1864.000	1835.900	1854.400	25185.000	4.770
	190.000						
29.387		1036.600	1854.200	1838.800	1857.700	25375.000	4.806
	560.000						
29.493		972.100	1855.300	1843.400	1855.200	25935.000	4.912
	240.000						
29.538		1014.400	1860.000	1845.500	1857.700	26175.000	4.957
	330.000						
29.601		1048.300	1872.900	1849.900	1868.600	26505.000	5.020
	330.000						
29.663		2264.000	1874.600	1850.900	1889.300	26835.000	5.082
	233.000						
29.710		509.000	1890.000	1853.900	1890.000	27068.000	5.127
	127.000						
29.720		2587.000	1881.000	1855.000	1880.000	27195.000	5.151
	200.000						
29.770		878.500	1890.600	1857.200	1873.300	27395.000	5.188
	400.000						
29.850		741.500	1874.200	1857.700	1880.000	27795.000	5.264
	1304.000						
30.100		1314.500	1891.000	1867.400	1895.100	29099.000	5.511
	537.000						
30.200		1177.100	1897.800	1875.200	1897.900	29636.000	5.613
	421.000						
30.280		901.100	1901.600	1877.100	1894.300	30057.000	5.693
	713.000						
30.420		1051.000	1906.600	1885.800	1901.500	30770.000	5.828
	560.000						
30.520		1136.700	1904.700	1893.500	1904.800	31330.000	5.934
	696.000						
30.650		863.800	1913.000	1897.200	1911.200	32026.000	6.066
	486.000						
30.750		942.500	1918.100	1901.000	1916.900	32512.000	6.158
	569.000						
30.850		948.900	1919.800	1905.300	1921.700	33081.000	6.265
	541.000						
30.960		957.200	1926.000	1912.000	1924.100	33622.000	6.368
	494.000						
31.050		1053.300	1932.000	1916.900	1930.400	34116.000	6.461
	467.000						
31.140		1105.500	1936.600	1917.800	1939.200	34583.000	6.550
	162.000						
31.170		1044.600	1940.000	1920.800	1940.000	34745.000	6.580
	432.000						
31.250		1110.700	1940.000	1925.400	1940.000	35177.000	6.662
	474.000						
31.340		890.700	1943.700	1931.500	1940.000	35651.000	6.752
	592.000						
31.450		1105.300	1951.300	1933.100	1949.700	36243.000	6.864
	484.000						
31.540		1029.000	1953.100	1940.100	1952.000	36727.000	6.956
	453.000						
31.630		961.700	1958.100	1940.500	1956.600	37180.000	7.042
	647.000						
31.750		1047.500	1968.800	1946.500	1964.100	37827.000	7.164
	361.000						
31.820		769.400	1968.800	1952.700	1967.000	38188.000	7.233
	243.000						
31.870		601.100	1971.300	1953.600	1973.500	38431.000	7.279
	208.000						
31.910		586.000	1972.000	1953.300	1973.400	38639.000	7.318

BED MATERIAL GRADATION

SECNO	SAE	DMAX (ft)	DXPI (ft)	XPI	TOTAL BED	BED MATERIAL FRACTIONS per grain size		
24.525	1.000	2.143	2.143	1.000	1.000	VF SAND 0.005 | VF GRVL 0.115 | S COBL 0.088		
						F SAND 0.010 | F GRVL 0.133 | L COBL 0.084		
						M SAND 0.033 | M GRVL 0.085 | S BLDR 0.066		
						C SAND 0.079 | C GRVL 0.079 | M BLDR 0.016		
						VC SAND 0.111 | VC GRVL 0.078		
24.646	1.000	2.143	2.143	1.000	1.000	VF SAND 0.005 | VF GRVL 0.115 | S COBL 0.088		
						F SAND 0.010 | F GRVL 0.133 | L COBL 0.084		
						M SAND 0.033 | M GRVL 0.085 | S BLDR 0.066		
						C SAND 0.079 | C GRVL 0.079 | M BLDR 0.016		
						VC SAND 0.111 | VC GRVL 0.078		
24.752	1.000	2.143	2.143	1.000	1.000	VF SAND 0.005 | VF GRVL 0.115 | S COBL 0.088		
						F SAND 0.010 | F GRVL 0.133 | L COBL 0.084		
						M SAND 0.033 | M GRVL 0.085 | S BLDR 0.066		
						C SAND 0.079 | C GRVL 0.079 | M BLDR 0.016		
						VC SAND 0.111 | VC GRVL 0.078		

24.845	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
24.919	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
25.010	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
25.099	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
25.180	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
25.233	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
25.326	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
25.388	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
25.458	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
25.519	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
25.580	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
25.644	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
25.699	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
25.750	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
25.843	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
25.919	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016

						VC	SAND	0.111	VC	GRVL	0.078				
26.044	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
26.137	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
26.239	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
26.335	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
26.430	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
26.529	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
26.623	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
26.695	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
26.775	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
26.845	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
26.921	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
27.008	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
27.106	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
27.169	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
27.226	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
27.265	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066

						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
27.320	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
27.366	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
27.417	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
27.502	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
27.604	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
27.693	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
27.797	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
27.913	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
28.023	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
28.091	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
28.157	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
28.241	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
28.326	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
28.390	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
28.462	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
28.555	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084

						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
28.657	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
28.750	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
28.847	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
28.934	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
29.012	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
29.130	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
29.258	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
29.351	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
29.387	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
29.493	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
29.538	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
29.601	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
29.663	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
29.710	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
29.720	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
29.770	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088

						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
29.850	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
30.100	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
30.200	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
30.280	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
30.420	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
30.520	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
30.650	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
30.750	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
30.850	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
30.960	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
31.050	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
31.140	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
31.170	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
31.250	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
31.340	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			

31.450	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
31.540	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
31.630	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
31.750	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
31.820	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
31.870	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			
31.910	1.000	2.143	2.143	1.000	1.000	VF	SAND	0.005	VF	GRVL	0.115	S	COBL	0.088
						F	SAND	0.010	F	GRVL	0.133	L	COBL	0.084
						M	SAND	0.033	M	GRVL	0.085	S	BLDR	0.066
						C	SAND	0.079	C	GRVL	0.079	M	BLDR	0.016
						VC	SAND	0.111	VC	GRVL	0.078			

BED SEDIMENT CONTROL VOLUMES

STREAM SEGMENT # 1: Cave Creek and Apache Wash WMP

SECTION NUMBER	LENGTH (ft)	WIDTH (ft)	DEPTH (ft)	VOLUME (cu.ft)	VOLUME (cu.yd)
24.525	320.000	2689.167	10.000	0.860533E+07	318716.
24.646	600.000	2222.387	10.000	0.133343E+08	493864.
24.752	525.000	1676.369	10.000	0.880094E+07	325961.
24.845	440.000	1806.278	10.000	0.794763E+07	294356.
24.919	435.000	1999.867	10.000	0.869942E+07	322201.
25.010	475.000	1810.949	10.000	0.860201E+07	318593.
25.099	450.000	1737.096	10.000	0.781693E+07	289516.
25.180	355.000	1726.307	10.000	0.612839E+07	226977.
25.233	395.000	1804.936	10.000	0.712950E+07	264055.
25.326	435.000	1594.829	10.000	0.693751E+07	256945.
25.388	360.000	1686.617	10.000	0.607182E+07	224882.
25.458	335.000	1627.030	10.000	0.545055E+07	201872.
25.519	305.000	1520.822	10.000	0.463851E+07	171797.
25.580	310.000	1467.167	10.000	0.454822E+07	168452.
25.644	305.000	1535.381	10.000	0.468291E+07	173441.
25.699	285.000	1603.054	10.000	0.456870E+07	169211.
25.750	325.000	1792.985	10.000	0.582720E+07	215822.
25.843	385.000	1783.244	10.000	0.686549E+07	254277.
25.919	525.000	1944.003	10.000	0.102060E+08	378001.
26.044	572.500	2242.825	10.000	0.128402E+08	475562.
26.137	457.500	2385.207	10.000	0.109123E+08	404160.
26.239	460.000	2077.762	10.000	0.955771E+07	353989.
26.335	497.500	1888.652	10.000	0.939604E+07	348002.
26.430	507.500	1747.049	10.000	0.886627E+07	328380.
26.529	510.000	1623.159	10.000	0.827811E+07	306597.
26.623	440.000	1656.025	10.000	0.728651E+07	269871.
26.695	400.000	1798.161	10.000	0.719264E+07	266394.
26.775	395.000	1874.343	10.000	0.740366E+07	274209.
26.845	400.000	1667.804	10.000	0.667122E+07	247082.
26.921	415.000	1287.253	10.000	0.534210E+07	197856.
27.008	460.000	1201.384	10.000	0.552637E+07	204680.
27.106	425.000	1238.086	10.000	0.526187E+07	194884.
27.169	315.000	1314.468	10.000	0.414058E+07	153355.
27.226	255.000	1552.751	10.000	0.395952E+07	146649.
27.265	242.500	1657.418	10.000	0.401924E+07	148861.
27.320	257.500	1659.824	10.000	0.427405E+07	158298.
27.366	255.000	1751.725	10.000	0.446690E+07	165441.
27.417	360.000	1463.567	10.000	0.526884E+07	195142.
27.502	500.000	1475.065	10.000	0.737533E+07	273160.
27.604	510.000	1470.388	10.000	0.749898E+07	277740.
27.693	510.000	1804.981	10.000	0.920540E+07	340941.
27.797	580.000	1879.706	10.000	0.109023E+08	403789.
27.913	595.000	1554.145	10.000	0.924716E+07	342488.
28.023	470.000	1573.843	10.000	0.739706E+07	273965.
28.091	355.000	2173.577	10.000	0.771620E+07	285785.
28.157	395.000	2009.319	10.000	0.793681E+07	293956.

28.241	445.000	1804.568	10.000	0.803033E+07	297420.
28.326	395.000	1703.259	10.000	0.672787E+07	249180.
28.390	360.000	1663.106	10.000	0.598718E+07	221747.
28.462	435.000	1578.256	10.000	0.686541E+07	254275.
28.555	515.000	1346.794	10.000	0.693599E+07	256888.
28.657	515.000	1737.090	10.000	0.894601E+07	331334.
28.750	500.000	1917.499	10.000	0.958749E+07	355092.
28.847	485.000	1787.714	10.000	0.867041E+07	321126.
28.934	435.000	1391.574	10.000	0.605335E+07	224198.
29.012	502.500	1033.697	10.000	0.519433E+07	192383.
29.130	650.000	959.732	10.000	0.623826E+07	231047.
29.258	597.500	836.038	10.000	0.499533E+07	185012.
29.351	340.000	909.138	10.000	0.309107E+07	114484.
29.387	375.000	1012.744	10.000	0.379779E+07	140659.
29.493	400.000	991.380	10.000	0.396552E+07	146871.
29.538	285.000	1015.005	10.000	0.289276E+07	107139.
29.601	330.000	1245.267	10.000	0.410938E+07	152199.
29.663	281.500	1784.369	10.000	0.502300E+07	186037.
29.710	180.000	1131.982	10.000	0.203757E+07	75465.5
29.720	163.500	1969.665	10.000	0.322040E+07	119274.
29.770	300.000	1037.889	10.000	0.311367E+07	115321.
29.850	852.000	898.384	10.000	0.765423E+07	283490.
30.100	920.500	1165.853	10.000	0.107317E+08	397470.
30.200	479.000	1162.343	10.000	0.556762E+07	206208.
30.280	567.000	966.672	10.000	0.548103E+07	203001.
30.420	636.500	1035.581	10.000	0.659147E+07	244129.
30.520	628.000	1073.555	10.000	0.674193E+07	249701.
30.650	591.000	928.150	10.000	0.548537E+07	203162.
30.750	527.500	931.566	10.000	0.491401E+07	182000.
30.850	555.000	949.155	10.000	0.526781E+07	195104.
30.960	517.500	971.043	10.000	0.502515E+07	186117.
31.050	480.500	1045.289	10.000	0.502261E+07	186023.
31.140	314.500	1087.353	10.000	0.341973E+07	126657.
31.170	297.000	1066.161	10.000	0.316650E+07	117278.
31.250	453.000	1061.828	10.000	0.481008E+07	178151.
31.340	533.000	963.034	10.000	0.513297E+07	190110.
31.450	538.000	1054.503	10.000	0.567323E+07	210120.
31.540	468.500	1031.292	10.000	0.483160E+07	178948.
31.630	550.000	987.760	10.000	0.543268E+07	201210.
31.750	504.000	995.944	10.000	0.501956E+07	185909.
31.820	302.000	802.235	10.000	0.242275E+07	89731.5
31.870	225.500	629.005	10.000	0.141841E+07	52533.6
31.910	104.000	591.033	10.000	614675.	22765.7

NO. OF INPUT DATA MESSAGES= 0
END OF SEDIMENT DATA

==========

$HYD
BEGIN COMPUTATIONS.

$RATING

Downstream Boundary Condition - Rating Curve

Elevation	Stage	Discharge	Elevation	Stage	Discharge
1623.900	1623.900	0.000	1630.700	1630.700	22500.000
1627.420	1627.420	2500.000	1630.980	1630.980	25000.000
1628.310	1628.310	5000.000	1631.080	1631.080	27500.000
1628.750	1628.750	7500.000	1631.180	1631.180	30000.000
1629.100	1629.100	10000.000	1631.350	1631.350	32500.000
1629.500	1629.500	12500.000	1632.000	1632.000	35000.000
1629.800	1629.800	15000.000	1632.350	1632.350	37500.000
1630.150	1630.150	17500.000	1632.900	1632.900	40000.000
1630.480	1630.480	20000.000	1633.150	1633.150	42500.000

==========

TIME STEP # 1
* A Level output at time step 1 (0.455 day)
COMPUTING FROM TIME= 0.0000 DAYS TO TIME= 0.4550 DAYS IN 10 COMPUTATION STEPS

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT # 1
Cave Creek and Apache Wash WMP
ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT

TIME DAYS	ENTRY POINT	INFLOW	SAND OUTFLOW	TRAP EFF
0.45	31.910	0.09		
TOTAL=	24.525	0.09	1.11	-11.10

==========

TIME STEP # 2
* A Level output at time step 2 (0.0417 day)

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT # 1
Cave Creek and Apache Wash WMP
ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT

TIME DAYS	ENTRY POINT	INFLOW	SAND OUTFLOW	TRAP EFF
0.50	31.910	0.13		
TOTAL=	24.525	0.13	1.17	-8.05

```
*****************************************************

==========================================================================================
TIME STEP #        3
*    A  Level output at time step 3 (0.0104 day)

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME        ENTRY *              SAND              *
    DAYS        POINT *     INFLOW   OUTFLOW  TRAP EFF *
    0.51       31.910 *      0.15                      *
   TOTAL=      24.525 *      0.15      1.18     -7.06 *
*****************************************************

==========================================================================================
TIME STEP #        4
*    A  Level output at time step 4 (0.0104 day)

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME        ENTRY *              SAND              *
    DAYS        POINT *     INFLOW   OUTFLOW  TRAP EFF *
    0.52       31.910 *      0.18                      *
   TOTAL=      24.525 *      0.18      1.20     -5.79 *
*****************************************************

==========================================================================================
TIME STEP #        5
*    A  Level output at time step 5 (0.0104 day)

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME        ENTRY *              SAND              *
    DAYS        POINT *     INFLOW   OUTFLOW  TRAP EFF *
    0.53       31.910 *      0.22                      *
   TOTAL=      24.525 *      0.22      1.23     -4.58 *
*****************************************************

==========================================================================================
TIME STEP #        6
*    A  Level output at time step 6 (0.0104 day)

         *ERROR 15            10009.0   10009.0

         *ERROR 15            10009.0   10009.0

         *ERROR 15            10009.0   10009.0

         *ERROR 15            10009.0   10009.0

         *ERROR 15            10009.0   10009.0

         *ERROR 15            10009.0   10009.0

         *ERROR 15            10009.0   10009.0

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         *ERROR 15            10009.0   10009.0

         *ERROR 15            10009.0   10009.0

         *ERROR 15            10009.0   10009.0

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME        ENTRY *              SAND              *
    DAYS        POINT *     INFLOW   OUTFLOW  TRAP EFF *
    0.54       31.910 *      0.28                      *
   TOTAL=      24.525 *      0.28      1.26     -3.46 *
*****************************************************

==========================================================================================
TIME STEP #        7
*    A  Level output at time step 7 (0.0104 day)

         *ERROR 15            10009.0   10009.0

         *ERROR 15            10009.0   10009.0

         *ERROR 15            10009.0   10009.0
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         *ERROR 15            10009.0   10009.0

         *ERROR 15            10009.0   10009.0

         *ERROR 15            10009.0   10009.0

         *ERROR 15            10009.0   10009.0

         *ERROR 15            10009.0   10009.0

         *ERROR 15            10009.0   10009.0

         *ERROR 15            10009.0   10009.0

         *ERROR 15            10009.0   10009.0

         *ERROR 15            10009.0   10009.0

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME       ENTRY *             SAND              *
    DAYS       POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.55      31.910 *      0.42                     *
   TOTAL=     24.525 *      0.42      1.35     -2.19 *
*****************************************************

=====================================================================================
TIME STEP #       8
*    A  Level output at time step 8 (0.0104 day)

         *ERROR 15            10009.0   10009.0

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME       ENTRY *             SAND              *
    DAYS       POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.56      31.910 *      0.68                     *
   TOTAL=     24.525 *      0.68      1.55     -1.26 *
*****************************************************

=====================================================================================
TIME STEP #       9
*    A  Level output at time step 9 (0.0104 day)

         *ERROR 15            10009.0   10009.0

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME       ENTRY *             SAND              *
    DAYS       POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.57      31.910 *      1.19                     *
   TOTAL=     24.525 *      1.19      1.87     -0.57 *
*****************************************************

=====================================================================================
TIME STEP #      10
*    A  Level output at time step 10 (0.0104 day)

         *ERROR 15            10009.0   10009.0

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME       ENTRY *             SAND              *
    DAYS       POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.58      31.910 *      1.94                     *
   TOTAL=     24.525 *      1.94      2.10     -0.08 *
*****************************************************

=====================================================================================
TIME STEP #      11
*    A  Level output at time step 11 (0.0104 day)

         *ERROR 15            10009.0   10009.0

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME       ENTRY *             SAND              *
    DAYS       POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.59      31.910 *      2.72                     *
   TOTAL=     24.525 *      2.72      2.34      0.14 *
*****************************************************

=====================================================================================
TIME STEP #      12
```

```
*    A  Level output at time step 12 (0.0104 day)

         *ERROR 15            10009.0   10009.0

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
**************************************************
    TIME       ENTRY *             SAND            *
    DAYS       POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.60      31.910 *      3.48                   *
   TOTAL=     24.525 *      3.48      2.58      0.26 *
**************************************************

==========================================================================================
TIME STEP #      13
*    A  Level output at time step 13 (0.0104 day)

         *ERROR 15            10009.0   10009.0

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
**************************************************
    TIME       ENTRY *             SAND            *
    DAYS       POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.61      31.910 *      4.20                   *
   TOTAL=     24.525 *      4.20      2.85      0.32 *
**************************************************

==========================================================================================
TIME STEP #      14
*    A  Level output at time step 14 (0.0104 day)

         *ERROR 15            10009.0   10009.0

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
**************************************************
    TIME       ENTRY *             SAND            *
    DAYS       POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.62      31.910 *      4.83                   *
   TOTAL=     24.525 *      4.83      3.17      0.34 *
**************************************************

==========================================================================================
TIME STEP #      15
*    A  Level output at time step 15 (0.0104 day)

         *ERROR 15            10009.0   10009.0

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
**************************************************
    TIME       ENTRY *             SAND            *
    DAYS       POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.63      31.910 *      5.33                   *
   TOTAL=     24.525 *      5.33      3.56      0.33 *
**************************************************

==========================================================================================
TIME STEP #      16
*    A  Level output at time step 16 (0.0312 day)

         *ERROR 15            10009.0   10009.0

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
**************************************************
    TIME       ENTRY *             SAND            *
    DAYS       POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.66      31.910 *      6.28                   *
   TOTAL=     24.525 *      6.28      3.76      0.40 *
**************************************************

==========================================================================================
TIME STEP #      17
*    A  Level output at time step 17 (0.0417 day)

         *ERROR 15            10009.0   10009.0

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
**************************************************
    TIME       ENTRY *             SAND            *
    DAYS       POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.70      31.910 *      7.23                   *
   TOTAL=     24.525 *      7.23      3.78      0.48 *
**************************************************

==========================================================================================
```

```
TIME STEP #      18
*    A  Level output at time step 18 (0.0417 day)

         *ERROR 15            10009.0   10009.0

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME       ENTRY *             SAND              *
    DAYS       POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.75      31.910 *      7.90                    *
   TOTAL=     24.525 *      7.90      3.78      0.52 *
*****************************************************

==========================================================================================
TIME STEP #      19
*    A  Level output at time step 19 (0.0833 day)

         *ERROR 15            10009.0   10009.0

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME       ENTRY *             SAND              *
    DAYS       POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.83      31.910 *      8.47                    *
   TOTAL=     24.525 *      8.47      3.78      0.55 *
*****************************************************

==========================================================================================
TIME STEP #      20
*    A  Level output at time step 20 (0.1701 day)

         *ERROR 15            10009.0   10009.0

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME       ENTRY *             SAND              *
    DAYS       POINT *    INFLOW   OUTFLOW  TRAP EFF *
    1.00      31.910 *      8.76                    *
   TOTAL=     24.525 *      8.76      3.78      0.57 *
*****************************************************

==========================================================================================
TIME STEP #      21
*    B  Level output at time step 21 (0.0019 day)

         *ERROR 15            10009.0   10009.0

- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
Cave Creek and Apache Wash WMP
       ACCUMULATED TIME (yrs)....        0.003
       FLOW DURATION (days)......        0.002

UPSTREAM BOUNDARY CONDITIONS
-----------------------------------------------------------------------
Stream Segment # 1      |   DISCHARGE   | SEDIMENT LOAD | TEMPERATURE
Section No.     31.910  |     (cfs)     |  (tons/day)   |   (deg F)
-----------------------------------------------------------------------
                INFLOW  |       203.00  |       313.96  |       68.00

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME       ENTRY *             SAND              *
    DAYS       POINT *    INFLOW   OUTFLOW  TRAP EFF *
    1.00      31.910 *      8.76                    *
   TOTAL=     24.525 *      8.76      3.78      0.57 *
*****************************************************

TABLE SB-1:  SEDIMENT LOAD PASSING THE  BOUNDARIES OF STREAM SEGMENT #  1
-------------------------------------------------------------------------------
  SEDIMENT INFLOW at the Upstream Boundary:
     GRAIN SIZE      LOAD (tons/day) |    GRAIN SIZE      LOAD (tons/day)
  ---------------------------------------------------------------------------
    VERY FINE SAND....          4.46  |  MEDIUM GRAVEL.....         24.71
    FINE SAND.........          8.79  |  COARSE GRAVEL.....          0.25
    MEDIUM SAND.......         27.60  |  VERY COARSE GRAVEL          0.00
    COARSE SAND.......         72.18  |  SMALL COBBLES.....          0.00
    VERY COARSE SAND..         72.96  |  LARGE COBBLES.....          0.00
    VERY FINE GRAVEL..         56.57  |  SMALL BOULDERS....          0.00
    FINE GRAVEL.......         46.43  |  MEDIUM BOULDERS...          0.00
                        -------------                       -------------
                                                   TOTAL =        313.96
  SEDIMENT OUTFLOW from the Downstream Boundary
     GRAIN SIZE      LOAD (tons/day) |    GRAIN SIZE      LOAD (tons/day)
  ---------------------------------------------------------------------------
    VERY FINE SAND....          0.00  |  MEDIUM GRAVEL.....          0.00
    FINE SAND.........          0.00  |  COARSE GRAVEL.....          0.00
    MEDIUM SAND.......          0.00  |  VERY COARSE GRAVEL          0.00
```

COARSE SAND.....	0.00	SMALL COBBLES.....	0.00
VERY COARSE SAND..	0.00	LARGE COBBLES.....	0.00
VERY FINE GRAVEL..	0.00	SMALL BOULDERS....	0.00
FINE GRAVEL.....	0.00	MEDIUM BOULDERS...	0.00
		TOTAL =	0.00

TABLE SB-2: STATUS OF THE BED PROFILE AT TIME = 1.002 DAYS

SECTION NUMBER	BED CHANGE (ft)	WS ELEV (ft)	THALWEG (ft)	Q (cfs)	TRANSPORT RATE (tons/day) SAND
31.910	-1.56	1953.41	1951.74	203.	423.
31.870	-2.27	1952.85	1951.33	203.	365.
31.820	-1.88	1952.01	1950.82	203.	1750.
31.750	-0.41	1947.78	1946.09	203.	2420.
31.630	1.10	1943.57	1941.60	203.	1260.
31.540	-0.66	1940.12	1939.44	203.	2659.
31.450	1.04	1936.24	1934.14	203.	810.
31.340	-0.82	1931.97	1930.68	203.	1489.
31.250	-0.88	1926.34	1924.52	203.	1338.
31.170	0.51	1923.35	1921.31	203.	865.
31.140	2.21	1921.85	1920.01	203.	844.
31.050	-0.59	1917.84	1916.31	203.	2680.
30.960	-0.03	1913.51	1911.97	203.	1704.
30.850	-0.66	1908.62	1906.84	203.	1416.
30.750	0.61	1903.91	1901.61	203.	822.
30.650	-0.24	1898.94	1896.96	203.	1990.
30.520	-0.74	1893.90	1892.76	203.	2903.
30.420	-0.28	1888.27	1885.52	203.	3275.
30.280	0.92	1880.15	1878.02	203.	1526.
30.200	-2.07	1874.86	1873.13	203.	2750.
30.100	0.39	1869.51	1867.79	203.	2962.
29.850	0.82	1859.83	1858.52	203.	2122.
29.770	-1.94	1856.89	1855.26	203.	3752.
29.720	-0.81	1856.37	1854.19	203.	1440.
29.710	0.84	1855.81	1854.74	203.	2800.
29.663	0.32	1852.43	1851.22	203.	2766.
29.601	-1.46	1850.21	1848.44	203.	2947.
29.538	0.20	1849.11	1845.70	203.	1738.
29.493	1.23	1845.73	1844.63	203.	2667.
29.387	-0.72	1839.27	1838.08	203.	3838.
29.351	-0.27	1837.07	1835.63	203.	4180.
29.258	-0.91	1831.27	1827.79	203.	2765.
29.130	1.53	1824.26	1822.53	203.	1705.
29.012	-1.90	1818.10	1816.80	203.	3612.
28.934	-0.73	1816.61	1814.77	203.	3277.
28.847	0.69	1813.42	1812.59	203.	3395.
28.750	-1.01	1808.66	1807.29	203.	6176.
28.657	2.86	1804.63	1803.36	203.	2358.
28.555	-1.60	1799.42	1797.80	203.	2842.
28.462	2.34	1797.98	1797.14	203.	1170.
28.390	0.28	1794.33	1793.08	203.	1470.
28.326	-1.47	1792.25	1789.83	203.	2583.
28.241	-0.05	1790.78	1789.85	203.	3441.
28.157	0.77	1784.90	1783.37	203.	2445.
28.091	-1.68	1780.35	1779.12	203.	2798.
28.023	-0.82	1774.34	1771.68	203.	3078.
27.913	3.78	1769.02	1766.88	203.	1848.
27.797	-2.75	1760.11	1757.85	203.	1707.
27.693	-1.36	1757.83	1754.94	203.	1798.
27.604	-0.09	1755.55	1754.11	203.	2298.
27.502	-0.88	1750.01	1747.92	203.	4216.
27.417	0.52	1747.22	1745.32	203.	2998.
27.366	1.33	1744.27	1743.63	203.	3006.
27.320	-2.91	1739.38	1737.39	203.	2448.
27.265	0.07	1739.04	1735.77	203.	418.
27.226	2.14	1737.99	1736.94	203.	2794.
27.169	-0.39	1733.30	1731.71	203.	7329.
27.106	2.37	1730.34	1728.07	203.	2475.
27.008	-0.69	1724.38	1722.31	203.	2839.
26.921	-0.02	1721.46	1720.18	203.	2396.
26.845	-0.53	1717.84	1716.47	203.	7256.
26.775	-0.91	1712.94	1711.79	203.	5906.
26.695	-1.18	1709.74	1708.32	203.	3636.
26.623	2.57	1707.84	1706.47	203.	775.
26.529	-0.61	1702.97	1701.99	203.	1314.
26.430	-0.18	1700.27	1697.32	203.	828.
26.335	0.72	1697.94	1696.32	203.	533.
26.239	-0.80	1692.79	1692.00	203.	1472.
26.137	1.54	1689.46	1687.24	203.	821.
26.044	-0.47	1685.03	1683.83	203.	2413.
25.919	-0.36	1679.88	1678.04	203.	3766.
25.843	1.41	1676.14	1674.91	203.	1124.
25.750	-0.36	1673.83	1671.24	203.	1803.
25.699	1.57	1672.48	1670.97	203.	509.
25.644	-0.71	1671.17	1669.09	203.	834.
25.580	-0.13	1670.77	1668.77	203.	414.
25.519	-0.70	1669.28	1667.60	203.	1857.
25.458	-1.42	1665.06	1664.08	203.	2835.
25.388	1.24	1659.90	1657.84	203.	1558.
25.326	1.46	1656.69	1654.46	203.	862.
25.233	0.59	1650.83	1647.89	203.	627.
25.180	-0.53	1649.07	1647.17	203.	1500.
25.099	-0.87	1646.71	1645.13	203.	2069.
25.010	-0.12	1641.11	1640.08	203.	1374.

24.919	1.49	1640.21	1636.39	203.	21.
24.845	-0.57	1640.20	1634.73	203.	0.
24.752	-0.23	1640.20	1628.97	203.	0.
24.646	0.32	1640.20	1626.32	203.	0.
24.525	-0.66	1640.20	1623.24	203.	0.

$VOL A

STREAM SEGMENT # 1: Cave Creek and Apache Wash WMP

SUMMARY TABLE: MASS AND VOLUME OF SEDIMENT

SECTION	SEDIMENT THROUGH SECTION (tons)				SEDIMENT DEPOSITED IN REACH in cu. yds				
	TOTAL	SAND	SILT	CLAY	TOTAL	CUMULATIVE	SAND	SILT	CLAY
INFLOW	17745.	17745.	0.	0.	14134.				
31.910	20343.	20343.	0.	0.	-2069.	-2069.	-2069.	0.	0.
31.870	29265.	29265.	0.	0.	-7107.	-9176.	-7107.	0.	0.
31.820	39990.	39990.	0.	0.	-8542.	-17718.	-8542.	0.	0.
31.750	41501.	41501.	0.	0.	-1203.	-18922.	-1203.	0.	0.
31.630	30510.	30510.	0.	0.	8754.	-10168.	8754.	0.	0.
31.540	36339.	36339.	0.	0.	-4643.	-14811.	-4643.	0.	0.
31.450	22919.	22919.	0.	0.	10689.	-4122.	10689.	0.	0.
31.340	33335.	33335.	0.	0.	-8296.	-12418.	-8296.	0.	0.
31.250	37201.	37201.	0.	0.	-3079.	-15497.	-3079.	0.	0.
31.170	34507.	34507.	0.	0.	2146.	-13351.	2146.	0.	0.
31.140	21070.	21070.	0.	0.	10703.	-2649.	10703.	0.	0.
31.050	27930.	27930.	0.	0.	-5464.	-8113.	-5464.	0.	0.
30.960	26442.	26442.	0.	0.	1185.	-6928.	1185.	0.	0.
30.850	31176.	31176.	0.	0.	-3770.	-10698.	-3770.	0.	0.
30.750	25059.	25059.	0.	0.	4873.	-5826.	4873.	0.	0.
30.650	31333.	31333.	0.	0.	-4997.	-10823.	-4997.	0.	0.
30.520	44961.	44961.	0.	0.	-10855.	-21678.	-10855.	0.	0.
30.420	46047.	46047.	0.	0.	-865.	-22543.	-865.	0.	0.
30.280	40472.	40472.	0.	0.	4441.	-18102.	4441.	0.	0.
30.200	59303.	59303.	0.	0.	-14999.	-33101.	-14999.	0.	0.
30.100	42808.	42808.	0.	0.	13138.	-19963.	13138.	0.	0.
29.850	36320.	36320.	0.	0.	5168.	-14795.	5168.	0.	0.
29.770	43592.	43592.	0.	0.	-5793.	-20588.	-5793.	0.	0.
29.720	44999.	44999.	0.	0.	-1121.	-21708.	-1121.	0.	0.
29.710	44934.	44934.	0.	0.	52.	-21656.	52.	0.	0.
29.663	44535.	44535.	0.	0.	318.	-21338.	318.	0.	0.
29.601	57489.	57489.	0.	0.	-10318.	-31656.	-10318.	0.	0.
29.538	51522.	51522.	0.	0.	4753.	-26903.	4753.	0.	0.
29.493	33424.	33424.	0.	0.	14415.	-12489.	14415.	0.	0.
29.387	37283.	37283.	0.	0.	-3074.	-15563.	-3074.	0.	0.
29.351	37668.	37668.	0.	0.	-306.	-15869.	-306.	0.	0.
29.258	48057.	48057.	0.	0.	-8275.	-24143.	-8275.	0.	0.
29.130	41004.	41004.	0.	0.	5617.	-18526.	5617.	0.	0.
29.012	55255.	55255.	0.	0.	-11351.	-29877.	-11351.	0.	0.
28.934	61697.	61697.	0.	0.	-5131.	-35008.	-5131.	0.	0.
28.847	53777.	53777.	0.	0.	6308.	-28699.	6308.	0.	0.
28.750	60550.	60550.	0.	0.	-5395.	-34095.	-5395.	0.	0.
28.657	44600.	44600.	0.	0.	12704.	-21391.	12704.	0.	0.
28.555	55325.	55325.	0.	0.	-8542.	-29933.	-8542.	0.	0.
28.462	40826.	40826.	0.	0.	11549.	-18384.	11549.	0.	0.
28.390	36469.	36469.	0.	0.	3470.	-14914.	3470.	0.	0.
28.326	52375.	52375.	0.	0.	-12668.	-27583.	-12668.	0.	0.
28.241	48724.	48724.	0.	0.	2908.	-24675.	2908.	0.	0.
28.157	39681.	39681.	0.	0.	7203.	-17472.	7203.	0.	0.
28.091	45849.	45849.	0.	0.	-4913.	-22385.	-4913.	0.	0.
28.023	50083.	50083.	0.	0.	-3372.	-25757.	-3372.	0.	0.
27.913	34520.	34520.	0.	0.	12396.	-13362.	12396.	0.	0.
27.797	52560.	52560.	0.	0.	-14368.	-27730.	-14368.	0.	0.
27.693	60839.	60839.	0.	0.	-6594.	-34324.	-6594.	0.	0.
27.604	63970.	63970.	0.	0.	-2494.	-36818.	-2494.	0.	0.
27.502	69060.	69060.	0.	0.	-4054.	-40873.	-4054.	0.	0.
27.417	64039.	64039.	0.	0.	4000.	-36873.	4000.	0.	0.
27.366	50940.	50940.	0.	0.	10433.	-26440.	10433.	0.	0.
27.320	61208.	61208.	0.	0.	-8179.	-34618.	-8179.	0.	0.
27.265	66681.	66681.	0.	0.	-4359.	-38978.	-4359.	0.	0.
27.226	53799.	53799.	0.	0.	10260.	-28717.	10260.	0.	0.
27.169	53759.	53759.	0.	0.	32.	-28686.	32.	0.	0.
27.106	35473.	35473.	0.	0.	14565.	-14121.	14565.	0.	0.
27.008	41626.	41626.	0.	0.	-4901.	-19022.	-4901.	0.	0.
26.921	40635.	40635.	0.	0.	790.	-18232.	790.	0.	0.
26.845	43497.	43497.	0.	0.	-2279.	-20511.	-2279.	0.	0.
26.775	47693.	47693.	0.	0.	-3342.	-23854.	-3342.	0.	0.
26.695	54542.	54542.	0.	0.	-5455.	-29309.	-5455.	0.	0.
26.623	34009.	34009.	0.	0.	16354.	-12955.	16354.	0.	0.
26.529	40629.	40629.	0.	0.	-5272.	-18227.	-5272.	0.	0.
26.430	41538.	41538.	0.	0.	-724.	-18951.	-724.	0.	0.
26.335	23518.	23518.	0.	0.	14353.	-4599.	14353.	0.	0.
26.239	28649.	28649.	0.	0.	-4087.	-8685.	-4087.	0.	0.
26.137	13485.	13485.	0.	0.	12078.	3393.	12078.	0.	0.
26.044	17766.	17766.	0.	0.	-3409.	-17.	-3409.	0.	0.
25.919	20319.	20319.	0.	0.	-2034.	-2050.	-2034.	0.	0.
25.843	14729.	14729.	0.	0.	4452.	2402.	4452.	0.	0.
25.750	16492.	16492.	0.	0.	-1404.	998.	-1404.	0.	0.
25.699	11384.	11384.	0.	0.	4069.	5067.	4069.	0.	0.
25.644	21284.	21284.	0.	0.	-7886.	-2819.	-7886.	0.	0.
25.580	18727.	18727.	0.	0.	2037.	-783.	2037.	0.	0.
25.519	16364.	16364.	0.	0.	1883.	1100.	1883.	0.	0.

25.458	16548.	16548.	0.	0.	-147.	953.	-147.	0.	0.
25.388	17108.	17108.	0.	0.	-446.	507.	-446.	0.	0.
25.326	12688.	12688.	0.	0.	3521.	4028.	3521.	0.	0.
25.233	8489.	8489.	0.	0.	3344.	7372.	3344.	0.	0.
25.180	14246.	14246.	0.	0.	-4585.	2787.	-4585.	0.	0.
25.099	20079.	20079.	0.	0.	-4646.	-1859.	-4646.	0.	0.
25.010	19860.	19860.	0.	0.	175.	-1685.	175.	0.	0.
24.919	9923.	9923.	0.	0.	7914.	6230.	7914.	0.	0.
24.845	13852.	13852.	0.	0.	-3129.	3101.	-3129.	0.	0.
24.752	13827.	13827.	0.	0.	20.	3121.	20.	0.	0.
24.646	8108.	8108.	0.	0.	4555.	7676.	4555.	0.	0.
24.525	7663.	7663.	0.	0.	354.	8030.	354.	0.	0.

TOTAL SEDIMENT - per grain size - THROUGH EACH CROSS SECTION (tons)

UPSTREAM INFLOW

VF SAND	324.	VF GRVL	2817.	S	COBL	1.
F SAND	329.	F GRVL	3052.	L	COBL	0.
M SAND	962.	M GRVL	2948.	S	BLDR	0.
C SAND	2928.	C GRVL	1214.	M	BLDR	0.
VC SAND	3019.	VC GRVL	149.			

SECTION NO. 31.910

VF SAND	337.	VF GRVL	3154.	S	COBL	355.
F SAND	357.	F GRVL	3448.	L	COBL	2.
M SAND	1054.	M GRVL	3199.	S	BLDR	0.
C SAND	3152.	C GRVL	1472.	M	BLDR	0.
VC SAND	3335.	VC GRVL	476.			

SECTION NO. 31.870

VF SAND	376.	VF GRVL	4294.	S	COBL	1368.
F SAND	452.	F GRVL	4767.	L	COBL	703.
M SAND	1364.	M GRVL	3962.	S	BLDR	0.
C SAND	3877.	C GRVL	2307.	M	BLDR	0.
VC SAND	4404.	VC GRVL	1392.			

SECTION NO. 31.820

VF SAND	421.	VF GRVL	5608.	S	COBL	2696.
F SAND	563.	F GRVL	6281.	L	COBL	1773.
M SAND	1720.	M GRVL	4843.	S	BLDR	0.
C SAND	4728.	C GRVL	3239.	M	BLDR	0.
VC SAND	5642.	VC GRVL	2477.			

SECTION NO. 31.750

VF SAND	424.	VF GRVL	5714.	S	COBL	3352.
F SAND	574.	F GRVL	6410.	L	COBL	1245.
M SAND	1751.	M GRVL	4919.	S	BLDR	0.
C SAND	4787.	C GRVL	3435.	M	BLDR	0.
VC SAND	5743.	VC GRVL	3147.			

SECTION NO. 31.630

VF SAND	396.	VF GRVL	5108.	S	COBL	269.
F SAND	521.	F GRVL	5813.	L	COBL	0.
M SAND	1523.	M GRVL	3993.	S	BLDR	0.
C SAND	3984.	C GRVL	2618.	M	BLDR	0.
VC SAND	5037.	VC GRVL	1248.			

SECTION NO. 31.540

VF SAND	420.	VF GRVL	5754.	S	COBL	1410.
F SAND	576.	F GRVL	6556.	L	COBL	189.
M SAND	1703.	M GRVL	4444.	S	BLDR	0.
C SAND	4407.	C GRVL	3157.	M	BLDR	0.
VC SAND	5651.	VC GRVL	2072.			

SECTION NO. 31.450

VF SAND	375.	VF GRVL	4057.	S	COBL	63.
F SAND	452.	F GRVL	4504.	L	COBL	0.
M SAND	1210.	M GRVL	2788.	S	BLDR	0.
C SAND	3049.	C GRVL	1692.	M	BLDR	0.
VC SAND	4001.	VC GRVL	727.			

SECTION NO. 31.340

VF SAND	417.	VF GRVL	5429.	S	COBL	1290.
F SAND	551.	F GRVL	6040.	L	COBL	113.
M SAND	1597.	M GRVL	3722.	S	BLDR	0.
C SAND	3969.	C GRVL	2820.	M	BLDR	0.
VC SAND	5321.	VC GRVL	2067.			

SECTION NO. 31.250

VF SAND	434.	VF GRVL	5897.	S	COBL	1892.
F SAND	590.	F GRVL	6561.	L	COBL	173.
M SAND	1730.	M GRVL	4034.	S	BLDR	0.
C SAND	4283.	C GRVL	3192.	M	BLDR	0.
VC SAND	5773.	VC GRVL	2641.			

SECTION NO. 31.170

VF SAND	420.	VF GRVL	5486.	S	COBL	1821.
F SAND	558.	F GRVL	6060.	L	COBL	0.
M SAND	1617.	M GRVL	3663.	S	BLDR	0.
C SAND	3990.	C GRVL	2919.	M	BLDR	0.
VC SAND	5385.	VC GRVL	2587.			

SECTION NO. 31.140

VF SAND	385.	VF GRVL	3944.	S	COBL	9.
F SAND	467.	F GRVL	4188.	L	COBL	0.
M SAND	1190.	M GRVL	2239.	S	BLDR	0.
C SAND	2900.	C GRVL	1353.	M	BLDR	0.
VC SAND	3930.	VC GRVL	465.			

SECTION NO. 31.050

VF SAND	410.	VF GRVL	4740.	S	COBL	1012.
F SAND	529.	F GRVL	5121.	L	COBL	0.
M SAND	1411.	M GRVL	2882.	S	BLDR	0.
C SAND	3436.	C GRVL	2158.	M	BLDR	0.
VC SAND	4685.	VC GRVL	1547.			

SECTION NO. 30.960

VF	SAND	392.	VF	GRVL	4516.	S	COBL	564.
F	SAND	505.	F	GRVL	4865.	L	COBL	0.
M	SAND	1348.	M	GRVL	2748.	S	BLDR	0.
C	SAND	3278.	C	GRVL	2191.	M	BLDR	0.
VC	SAND	4471.	VC	GRVL	1565.			
SECTION NO.		30.850						
VF	SAND	411.	VF	GRVL	5114.	S	COBL	1176.
F	SAND	554.	F	GRVL	5562.	L	COBL	0.
M	SAND	1516.	M	GRVL	3224.	S	BLDR	0.
C	SAND	3686.	C	GRVL	2729.	M	BLDR	0.
VC	SAND	5042.	VC	GRVL	2162.			
SECTION NO.		30.750						
VF	SAND	377.	VF	GRVL	4325.	S	COBL	111.
F	SAND	485.	F	GRVL	4652.	L	COBL	0.
M	SAND	1295.	M	GRVL	2666.	S	BLDR	0.
C	SAND	3141.	C	GRVL	2263.	M	BLDR	0.
VC	SAND	4288.	VC	GRVL	1456.			
SECTION NO.		30.650						
VF	SAND	398.	VF	GRVL	5483.	S	COBL	37.
F	SAND	570.	F	GRVL	6075.	L	COBL	0.
M	SAND	1606.	M	GRVL	3695.	S	BLDR	0.
C	SAND	3904.	C	GRVL	2832.	M	BLDR	0.
VC	SAND	5365.	VC	GRVL	1369.			
SECTION NO.		30.520						
VF	SAND	457.	VF	GRVL	7174.	S	COBL	2421.
F	SAND	710.	F	GRVL	8005.	L	COBL	182.
M	SAND	2084.	M	GRVL	4911.	S	BLDR	0.
C	SAND	5072.	C	GRVL	3949.	M	BLDR	0.
VC	SAND	6990.	VC	GRVL	3006.			
SECTION NO.		30.420						
VF	SAND	454.	VF	GRVL	7282.	S	COBL	2501.
F	SAND	714.	F	GRVL	8122.	L	COBL	0.
M	SAND	2117.	M	GRVL	4973.	S	BLDR	0.
C	SAND	5150.	C	GRVL	4031.	M	BLDR	0.
VC	SAND	7097.	VC	GRVL	3605.			
SECTION NO.		30.280						
VF	SAND	430.	VF	GRVL	7174.	S	COBL	222.
F	SAND	695.	F	GRVL	7903.	L	COBL	0.
M	SAND	2102.	M	GRVL	4637.	S	BLDR	0.
C	SAND	5107.	C	GRVL	3370.	M	BLDR	0.
VC	SAND	7027.	VC	GRVL	1805.			
SECTION NO.		30.200						
VF	SAND	511.	VF	GRVL	9308.	S	COBL	2819.
F	SAND	880.	F	GRVL	10348.	L	COBL	2350.
M	SAND	2705.	M	GRVL	6201.	S	BLDR	0.
C	SAND	6581.	C	GRVL	4908.	M	BLDR	0.
VC	SAND	9076.	VC	GRVL	3614.			
SECTION NO.		30.100						
VF	SAND	453.	VF	GRVL	6780.	S	COBL	2945.
F	SAND	701.	F	GRVL	7421.	L	COBL	486.
M	SAND	2001.	M	GRVL	4303.	S	BLDR	0.
C	SAND	4855.	C	GRVL	3261.	M	BLDR	0.
VC	SAND	6667.	VC	GRVL	2935.			
SECTION NO.		29.850						
VF	SAND	423.	VF	GRVL	6263.	S	COBL	509.
F	SAND	652.	F	GRVL	6910.	L	COBL	0.
M	SAND	1841.	M	GRVL	4061.	S	BLDR	0.
C	SAND	4470.	C	GRVL	3062.	M	BLDR	0.
VC	SAND	6143.	VC	GRVL	1986.			
SECTION NO.		29.770						
VF	SAND	454.	VF	GRVL	7089.	S	COBL	1472.
F	SAND	722.	F	GRVL	7863.	L	COBL	929.
M	SAND	2074.	M	GRVL	4678.	S	BLDR	0.
C	SAND	5038.	C	GRVL	3657.	M	BLDR	0.
VC	SAND	6934.	VC	GRVL	2684.			
SECTION NO.		29.720						
VF	SAND	464.	VF	GRVL	7180.	S	COBL	1951.
F	SAND	732.	F	GRVL	7944.	L	COBL	1268.
M	SAND	2104.	M	GRVL	4704.	S	BLDR	0.
C	SAND	5110.	C	GRVL	3668.	M	BLDR	0.
VC	SAND	7030.	VC	GRVL	2845.			
SECTION NO.		29.710						
VF	SAND	464.	VF	GRVL	7343.	S	COBL	1876.
F	SAND	745.	F	GRVL	8160.	L	COBL	114.
M	SAND	2145.	M	GRVL	4891.	S	BLDR	0.
C	SAND	5212.	C	GRVL	3903.	M	BLDR	0.
VC	SAND	7176.	VC	GRVL	2904.			
SECTION NO.		29.663						
VF	SAND	470.	VF	GRVL	7679.	S	COBL	734.
F	SAND	768.	F	GRVL	8538.	L	COBL	0.
M	SAND	2238.	M	GRVL	5012.	S	BLDR	0.
C	SAND	5437.	C	GRVL	3746.	M	BLDR	0.
VC	SAND	7493.	VC	GRVL	2422.			
SECTION NO.		29.601						
VF	SAND	527.	VF	GRVL	9189.	S	COBL	2482.
F	SAND	899.	F	GRVL	10276.	L	COBL	1310.
M	SAND	2664.	M	GRVL	6146.	S	BLDR	0.
C	SAND	6477.	C	GRVL	4847.	M	BLDR	0.
VC	SAND	8940.	VC	GRVL	3732.			
SECTION NO.		29.538						
VF	SAND	501.	VF	GRVL	8515.	S	COBL	2196.
F	SAND	843.	F	GRVL	9477.	L	COBL	23.
M	SAND	2478.	M	GRVL	5604.	S	BLDR	0.
C	SAND	6022.	C	GRVL	4309.	M	BLDR	0.
VC	SAND	8302.	VC	GRVL	3252.			

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SECTION NO.     29.493
      VF SAND       441.   VF GRVL      6207.   S  COBL         0.
      F  SAND       678.   F  GRVL      6720.   L  COBL         0.
      M  SAND      1852.   M  GRVL      3788.   S  BLDR         0.
      C  SAND      4481.   C  GRVL      2421.   M  BLDR         0.
      VC SAND      6135.   VC GRVL       701.
SECTION NO.     29.387
      VF SAND       464.   VF GRVL      6794.   S  COBL         0.
      F  SAND       730.   F  GRVL      7406.   L  COBL         0.
      M  SAND      2016.   M  GRVL      4256.   S  BLDR         0.
      C  SAND      4883.   C  GRVL      2880.   M  BLDR         0.
      VC SAND      6695.   VC GRVL      1158.
SECTION NO.     29.351
      VF SAND       461.   VF GRVL      6799.   S  COBL       102.
      F  SAND       730.   F  GRVL      7416.   L  COBL         0.
      M  SAND      2018.   M  GRVL      4292.   S  BLDR         0.
      C  SAND      4886.   C  GRVL      2894.   M  BLDR         0.
      VC SAND      6699.   VC GRVL      1369.
SECTION NO.     29.258
      VF SAND       510.   VF GRVL      8068.   S  COBL      1459.
      F  SAND       839.   F  GRVL      8885.   L  COBL       678.
      M  SAND      2373.   M  GRVL      5248.   S  BLDR         0.
      C  SAND      5756.   C  GRVL      3827.   M  BLDR         0.
      VC SAND      7911.   VC GRVL      2502.
SECTION NO.     29.130
      VF SAND       480.   VF GRVL      7334.   S  COBL       419.
      F  SAND       769.   F  GRVL      7995.   L  COBL         0.
      M  SAND      2169.   M  GRVL      4591.   S  BLDR         0.
      C  SAND      5254.   C  GRVL      3149.   M  BLDR         0.
      VC SAND      7213.   VC GRVL      1631.
SECTION NO.     29.012
      VF SAND       540.   VF GRVL      8926.   S  COBL      2208.
      F  SAND       906.   F  GRVL      9841.   L  COBL      1932.
      M  SAND      2617.   M  GRVL      5798.   S  BLDR         3.
      C  SAND      6348.   C  GRVL      4357.   M  BLDR         0.
      VC SAND      8735.   VC GRVL      3042.
SECTION NO.     28.934
      VF SAND       561.   VF GRVL      9542.   S  COBL      3203.
      F  SAND       957.   F  GRVL     10552.   L  COBL      3181.
      M  SAND      2790.   M  GRVL      6259.   S  BLDR         2.
      C  SAND      6773.   C  GRVL      4863.   M  BLDR         0.
      VC SAND      9326.   VC GRVL      3686.
SECTION NO.     28.847
      VF SAND       539.   VF GRVL      8533.   S  COBL      3156.
      F  SAND       899.   F  GRVL      9387.   L  COBL       767.
      M  SAND      2512.   M  GRVL      5524.   S  BLDR         0.
      C  SAND      6083.   C  GRVL      4404.   M  BLDR         0.
      VC SAND      8365.   VC GRVL      3607.
SECTION NO.     28.750
      VF SAND       565.   VF GRVL      9232.   S  COBL      4073.
      F  SAND       960.   F  GRVL     10190.   L  COBL      1857.
      M  SAND      2711.   M  GRVL      6049.   S  BLDR         0.
      C  SAND      6568.   C  GRVL      4988.   M  BLDR         0.
      VC SAND      9038.   VC GRVL      4320.
SECTION NO.     28.657
      VF SAND       527.   VF GRVL      7543.   S  COBL      1110.
      F  SAND       849.   F  GRVL      8309.   L  COBL         7.
      M  SAND      2231.   M  GRVL      4922.   S  BLDR         0.
      C  SAND      5389.   C  GRVL      3817.   M  BLDR         0.
      VC SAND      7405.   VC GRVL      2491.
SECTION NO.     28.555
      VF SAND       570.   VF GRVL      8729.   S  COBL      2427.
      F  SAND       948.   F  GRVL      9682.   L  COBL      1718.
      M  SAND      2560.   M  GRVL      5814.   S  BLDR         0.
      C  SAND      6201.   C  GRVL      4673.   M  BLDR         0.
      VC SAND      8536.   VC GRVL      3467.
SECTION NO.     28.462
      VF SAND       538.   VF GRVL      6774.   S  COBL      1302.
      F  SAND       845.   F  GRVL      7443.   L  COBL        34.
      M  SAND      2035.   M  GRVL      4406.   S  BLDR         0.
      C  SAND      4849.   C  GRVL      3482.   M  BLDR         0.
      VC SAND      6658.   VC GRVL      2459.
SECTION NO.     28.390
      VF SAND       527.   VF GRVL      6461.   S  COBL       351.
      F  SAND       817.   F  GRVL      7082.   L  COBL         0.
      M  SAND      1948.   M  GRVL      4019.   S  BLDR         0.
      C  SAND      4615.   C  GRVL      2795.   M  BLDR         0.
      VC SAND      6342.   VC GRVL      1513.
SECTION NO.     28.326
      VF SAND       591.   VF GRVL      8282.   S  COBL      2400.
      F  SAND       960.   F  GRVL      9183.   L  COBL      1897.
      M  SAND      2449.   M  GRVL      5410.   S  BLDR         0.
      C  SAND      5866.   C  GRVL      4199.   M  BLDR         0.
      VC SAND      8085.   VC GRVL      3052.
SECTION NO.     28.241
      VF SAND       571.   VF GRVL      7792.   S  COBL      2973.
      F  SAND       915.   F  GRVL      8604.   L  COBL       360.
      M  SAND      2313.   M  GRVL      5024.   S  BLDR         0.
      C  SAND      5532.   C  GRVL      3906.   M  BLDR         0.
      VC SAND      7619.   VC GRVL      3115.
SECTION NO.     28.157
      VF SAND       538.   VF GRVL      6889.   S  COBL       188.
      F  SAND       833.   F  GRVL      7610.   L  COBL         0.
      M  SAND      2049.   M  GRVL      4586.   S  BLDR         0.
      C  SAND      4907.   C  GRVL      3500.   M  BLDR         0.
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      VC SAND      6749.   VC GRVL      1832.
SECTION NO.     28.091
      VF SAND       565.   VF GRVL      7671.   S  COBL      1251.
      F  SAND       897.   F  GRVL      8516.   L  COBL        13.
      M  SAND      2268.   M  GRVL      5181.   S  BLDR         0.
      C  SAND      5443.   C  GRVL      4063.   M  BLDR         0.
      VC SAND      7497.   VC GRVL      2483.
SECTION NO.     28.023
      VF SAND       566.   VF GRVL      7968.   S  COBL      2979.
      F  SAND       910.   F  GRVL      8858.   L  COBL       489.
      M  SAND      2350.   M  GRVL      5423.   S  BLDR         0.
      C  SAND      5651.   C  GRVL      4257.   M  BLDR         0.
      VC SAND      7784.   VC GRVL      2849.
SECTION NO.     27.913
      VF SAND       514.   VF GRVL      6125.   S  COBL       234.
      F  SAND       753.   F  GRVL      6635.   L  COBL         0.
      M  SAND      1833.   M  GRVL      3817.   S  BLDR         0.
      C  SAND      4425.   C  GRVL      2764.   M  BLDR         0.
      VC SAND      6058.   VC GRVL      1362.
SECTION NO.     27.797
      VF SAND       585.   VF GRVL      8115.   S  COBL      2557.
      F  SAND       910.   F  GRVL      8946.   L  COBL      2615.
      M  SAND      2388.   M  GRVL      5319.   S  BLDR         0.
      C  SAND      5785.   C  GRVL      4259.   M  BLDR         0.
      VC SAND      7954.   VC GRVL      3126.
SECTION NO.     27.693
      VF SAND       617.   VF GRVL      9040.   S  COBL      3604.
      F  SAND       986.   F  GRVL     10013.   L  COBL      3842.
      M  SAND      2647.   M  GRVL      6013.   S  BLDR         0.
      C  SAND      6420.   C  GRVL      4930.   M  BLDR         0.
      VC SAND      8838.   VC GRVL      3887.
SECTION NO.     27.604
      VF SAND       625.   VF GRVL      9388.   S  COBL      4278.
      F  SAND      1012.   F  GRVL     10414.   L  COBL      4008.
      M  SAND      2745.   M  GRVL      6268.   S  BLDR         0.
      C  SAND      6659.   C  GRVL      5177.   M  BLDR         0.
      VC SAND      9172.   VC GRVL      4224.
SECTION NO.     27.502
      VF SAND       645.   VF GRVL      9973.   S  COBL      5119.
      F  SAND      1060.   F  GRVL     11087.   L  COBL      4462.
      M  SAND      2910.   M  GRVL      6700.   S  BLDR         0.
      C  SAND      7063.   C  GRVL      5591.   M  BLDR         0.
      VC SAND      9733.   VC GRVL      4716.
SECTION NO.     27.417
      VF SAND       630.   VF GRVL      9493.   S  COBL      4787.
      F  SAND      1024.   F  GRVL     10532.   L  COBL      2758.
      M  SAND      2775.   M  GRVL      6340.   S  BLDR         0.
      C  SAND      6733.   C  GRVL      5258.   M  BLDR         0.
      VC SAND      9273.   VC GRVL      4436.
SECTION NO.     27.366
      VF SAND       613.   VF GRVL      8577.   S  COBL       868.
      F  SAND       994.   F  GRVL      9563.   L  COBL         0.
      M  SAND      2553.   M  GRVL      5822.   S  BLDR         0.
      C  SAND      6066.   C  GRVL      4642.   M  BLDR         0.
      VC SAND      8363.   VC GRVL      2879.
SECTION NO.     27.320
      VF SAND       655.   VF GRVL      9661.   S  COBL      2381.
      F  SAND      1089.   F  GRVL     10802.   L  COBL      1887.
      M  SAND      2863.   M  GRVL      6600.   S  BLDR         0.
      C  SAND      6814.   C  GRVL      5352.   M  BLDR         0.
      VC SAND      9403.   VC GRVL      3701.
SECTION NO.     27.265
      VF SAND       697.   VF GRVL     10089.   S  COBL      3660.
      F  SAND      1144.   F  GRVL     11276.   L  COBL      3105.
      M  SAND      2977.   M  GRVL      6873.   S  BLDR         0.
      C  SAND      7113.   C  GRVL      5611.   M  BLDR         0.
      VC SAND      9818.   VC GRVL      4317.
SECTION NO.     27.226
      VF SAND       659.   VF GRVL      8901.   S  COBL      1819.
      F  SAND      1059.   F  GRVL      9900.   L  COBL         0.
      M  SAND      2650.   M  GRVL      5965.   S  BLDR         0.
      C  SAND      6299.   C  GRVL      4695.   M  BLDR         0.
      VC SAND      8685.   VC GRVL      3166.
SECTION NO.     27.169
      VF SAND       656.   VF GRVL      8904.   S  COBL      1661.
      F  SAND      1057.   F  GRVL      9901.   L  COBL         0.
      M  SAND      2651.   M  GRVL      5958.   S  BLDR         0.
      C  SAND      6302.   C  GRVL      4699.   M  BLDR         0.
      VC SAND      8688.   VC GRVL      3283.
SECTION NO.     27.106
      VF SAND       578.   VF GRVL      6552.   S  COBL         0.
      F  SAND       841.   F  GRVL      7089.   L  COBL         0.
      M  SAND      1987.   M  GRVL      3934.   S  BLDR         0.
      C  SAND      4714.   C  GRVL      2443.   M  BLDR         0.
      VC SAND      6466.   VC GRVL       869.
SECTION NO.     27.008
      VF SAND       600.   VF GRVL      7279.   S  COBL       922.
      F  SAND       890.   F  GRVL      7932.   L  COBL         0.
      M  SAND      2185.   M  GRVL      4514.   S  BLDR         0.
      C  SAND      5215.   C  GRVL      3171.   M  BLDR         0.
      VC SAND      7161.   VC GRVL      1758.
SECTION NO.     26.921
      VF SAND       586.   VF GRVL      7103.   S  COBL       833.
      F  SAND       869.   F  GRVL      7715.   L  COBL         0.
      M  SAND      2137.   M  GRVL      4365.   S  BLDR         0.
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      C  SAND      5100.   C  GRVL      3084.   M  BLDR         0.
      VC SAND      6999.   VC GRVL      1843.
SECTION NO.     26.845
      VF SAND       595.   VF GRVL      7422.   S  COBL      1267.
      F  SAND       895.   F  GRVL      8076.   L  COBL         0.
      M  SAND      2227.   M  GRVL      4603.   S  BLDR         0.
      C  SAND      5322.   C  GRVL      3415.   M  BLDR         0.
      VC SAND      7307.   VC GRVL      2368.
SECTION NO.     26.775
      VF SAND       611.   VF GRVL      7943.   S  COBL      1750.
      F  SAND       937.   F  GRVL      8674.   L  COBL        75.
      M  SAND      2374.   M  GRVL      4998.   S  BLDR         0.
      C  SAND      5683.   C  GRVL      3886.   M  BLDR         0.
      VC SAND      7808.   VC GRVL      2954.
SECTION NO.     26.695
      VF SAND       638.   VF GRVL      8771.   S  COBL      2721.
      F  SAND      1000.   F  GRVL      9633.   L  COBL       477.
      M  SAND      2605.   M  GRVL      5627.   S  BLDR         0.
      C  SAND      6253.   C  GRVL      4539.   M  BLDR         0.
      VC SAND      8601.   VC GRVL      3678.
SECTION NO.     26.623
      VF SAND       550.   VF GRVL      6211.   S  COBL        38.
      F  SAND       766.   F  GRVL      6681.   L  COBL         0.
      M  SAND      1868.   M  GRVL      3672.   S  BLDR         0.
      C  SAND      4491.   C  GRVL      2471.   M  BLDR         0.
      VC SAND      6149.   VC GRVL      1111.
SECTION NO.     26.529
      VF SAND       575.   VF GRVL      7001.   S  COBL      1098.
      F  SAND       826.   F  GRVL      7611.   L  COBL         0.
      M  SAND      2087.   M  GRVL      4312.   S  BLDR         0.
      C  SAND      5030.   C  GRVL      3225.   M  BLDR         0.
      VC SAND      6900.   VC GRVL      1964.
SECTION NO.     26.430
      VF SAND       568.   VF GRVL      6992.   S  COBL      1508.
      F  SAND       822.   F  GRVL      7589.   L  COBL         0.
      M  SAND      2088.   M  GRVL      4317.   S  BLDR         0.
      C  SAND      5032.   C  GRVL      3288.   M  BLDR         0.
      VC SAND      6899.   VC GRVL      2434.
SECTION NO.     26.335
      VF SAND       465.   VF GRVL      4339.   S  COBL         0.
      F  SAND       574.   F  GRVL      4508.   L  COBL         0.
      M  SAND      1344.   M  GRVL      2420.   S  BLDR         0.
      C  SAND      3230.   C  GRVL      1702.   M  BLDR         0.
      VC SAND      4378.   VC GRVL       558.
SECTION NO.     26.239
      VF SAND       472.   VF GRVL      4950.   S  COBL       447.
      F  SAND       612.   F  GRVL      5257.   L  COBL         0.
      M  SAND      1510.   M  GRVL      3014.   S  BLDR         0.
      C  SAND      3638.   C  GRVL      2293.   M  BLDR         0.
      VC SAND      4950.   VC GRVL      1505.
SECTION NO.     26.137
      VF SAND       403.   VF GRVL      2655.   S  COBL         0.
      F  SAND       426.   F  GRVL      2659.   L  COBL         0.
      M  SAND       842.   M  GRVL      1250.   S  BLDR         0.
      C  SAND      2021.   C  GRVL       466.   M  BLDR         0.
      VC SAND      2720.   VC GRVL        43.
SECTION NO.     26.044
      VF SAND       397.   VF GRVL      2998.   S  COBL       714.
      F  SAND       436.   F  GRVL      3084.   L  COBL         0.
      M  SAND       942.   M  GRVL      1638.   S  BLDR         0.
      C  SAND      2265.   C  GRVL      1148.   M  BLDR         0.
      VC SAND      3056.   VC GRVL      1088.
SECTION NO.     25.919
      VF SAND       386.   VF GRVL      3119.   S  COBL      1491.
      F  SAND       431.   F  GRVL      3264.   L  COBL         0.
      M  SAND       980.   M  GRVL      1834.   S  BLDR         0.
      C  SAND      2355.   C  GRVL      1463.   M  BLDR         0.
      VC SAND      3176.   VC GRVL      1819.
SECTION NO.     25.843
      VF SAND       354.   VF GRVL      2717.   S  COBL         0.
      F  SAND       367.   F  GRVL      2831.   L  COBL         0.
      M  SAND       851.   M  GRVL      1547.   S  BLDR         0.
      C  SAND      2047.   C  GRVL       973.   M  BLDR         0.
      VC SAND      2763.   VC GRVL       279.
SECTION NO.     25.750
      VF SAND       350.   VF GRVL      2861.   S  COBL       433.
      F  SAND       370.   F  GRVL      2996.   L  COBL         0.
      M  SAND       891.   M  GRVL      1653.   S  BLDR         0.
      C  SAND      2144.   C  GRVL      1146.   M  BLDR         0.
      VC SAND      2899.   VC GRVL       750.
SECTION NO.     25.699
      VF SAND       320.   VF GRVL      2251.   S  COBL         0.
      F  SAND       298.   F  GRVL      2238.   L  COBL         0.
      M  SAND       710.   M  GRVL       982.   S  BLDR         0.
      C  SAND      1706.   C  GRVL       448.   M  BLDR         0.
      VC SAND      2300.   VC GRVL       130.
SECTION NO.     25.644
      VF SAND       353.   VF GRVL      3549.   S  COBL      1035.
      F  SAND       394.   F  GRVL      3776.   L  COBL       149.
      M  SAND      1068.   M  GRVL      2060.   S  BLDR         0.
      C  SAND      2584.   C  GRVL      1542.   M  BLDR         0.
      VC SAND      3529.   VC GRVL      1245.
SECTION NO.     25.580
      VF SAND       332.   VF GRVL      3180.   S  COBL       506.
      F  SAND       361.   F  GRVL      3368.   L  COBL         0.
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        M  SAND       964.   M  GRVL      1858.   S  BLDR        0.
        C  SAND      2331.   C  GRVL      1487.   M  BLDR        0.
        VC SAND      3177.   VC GRVL      1163.
  SECTION NO.     25.519
        VF SAND       309.   VF GRVL      2697.   S  COBL      342.
        F  SAND       323.   F  GRVL      2839.   L  COBL        0.
        M  SAND       825.   M  GRVL      1596.   S  BLDR        0.
        C  SAND      1990.   C  GRVL      1301.   M  BLDR        0.
        VC SAND      2706.   VC GRVL      1437.
  SECTION NO.     25.458
        VF SAND       299.   VF GRVL      2481.   S  COBL     1466.
        F  SAND       308.   F  GRVL      2623.   L  COBL        0.
        M  SAND       761.   M  GRVL      1531.   S  BLDR        0.
        C  SAND      1833.   C  GRVL      1308.   M  BLDR        0.
        VC SAND      2490.   VC GRVL      1450.
  SECTION NO.     25.388
        VF SAND       277.   VF GRVL      2819.   S  COBL        0.
        F  SAND       300.   F  GRVL      3198.   L  COBL        0.
        M  SAND       834.   M  GRVL      2116.   S  BLDR        0.
        C  SAND      2018.   C  GRVL      2073.   M  BLDR        0.
        VC SAND      2765.   VC GRVL       709.
  SECTION NO.     25.326
        VF SAND       248.   VF GRVL      2497.   S  COBL        0.
        F  SAND       256.   F  GRVL      2661.   L  COBL        0.
        M  SAND       760.   M  GRVL      1403.   S  BLDR        0.
        C  SAND      1835.   C  GRVL       497.   M  BLDR        0.
        VC SAND      2496.   VC GRVL        36.
  SECTION NO.     25.233
        VF SAND       225.   VF GRVL      1752.   S  COBL        0.
        F  SAND       218.   F  GRVL      1706.   L  COBL        0.
        M  SAND       563.   M  GRVL       690.   S  BLDR        0.
        C  SAND      1350.   C  GRVL       162.   M  BLDR        0.
        VC SAND      1810.   VC GRVL        13.
  SECTION NO.     25.180
        VF SAND       233.   VF GRVL      2398.   S  COBL      632.
        F  SAND       256.   F  GRVL      2503.   L  COBL        0.
        M  SAND       737.   M  GRVL      1336.   S  BLDR        0.
        C  SAND      1777.   C  GRVL      1014.   M  BLDR        0.
        VC SAND      2413.   VC GRVL       946.
  SECTION NO.     25.099
        VF SAND       241.   VF GRVL      2844.   S  COBL     2186.
        F  SAND       292.   F  GRVL      3018.   L  COBL        0.
        M  SAND       864.   M  GRVL      1711.   S  BLDR        0.
        C  SAND      2087.   C  GRVL      1557.   M  BLDR        0.
        VC SAND      2843.   VC GRVL      2436.
  SECTION NO.     25.010
        VF SAND       235.   VF GRVL      2884.   S  COBL      685.
        F  SAND       293.   F  GRVL      3092.   L  COBL        0.
        M  SAND       874.   M  GRVL      1793.   S  BLDR        0.
        C  SAND      2111.   C  GRVL      2049.   M  BLDR        0.
        VC SAND      2877.   VC GRVL      2968.
  SECTION NO.     24.919
        VF SAND       196.   VF GRVL      1995.   S  COBL        0.
        F  SAND       220.   F  GRVL      2045.   L  COBL        0.
        M  SAND       613.   M  GRVL       946.   S  BLDR        0.
        C  SAND      1480.   C  GRVL       397.   M  BLDR        0.
        VC SAND      2010.   VC GRVL        22.
  SECTION NO.     24.845
        VF SAND       192.   VF GRVL      2162.   S  COBL     1308.
        F  SAND       231.   F  GRVL      2280.   L  COBL        0.
        M  SAND       655.   M  GRVL      1169.   S  BLDR        0.
        C  SAND      1582.   C  GRVL       857.   M  BLDR        0.
        VC SAND      2157.   VC GRVL      1258.
  SECTION NO.     24.752
        VF SAND       172.   VF GRVL      1883.   S  COBL     1321.
        F  SAND       204.   F  GRVL      2009.   L  COBL        0.
        M  SAND       574.   M  GRVL      1134.   S  BLDR        0.
        C  SAND      1382.   C  GRVL      1187.   M  BLDR        0.
        VC SAND      1877.   VC GRVL      2084.
  SECTION NO.     24.646
        VF SAND       135.   VF GRVL      1399.   S  COBL        0.
        F  SAND       148.   F  GRVL      1535.   L  COBL        0.
        M  SAND       429.   M  GRVL       998.   S  BLDR        0.
        C  SAND      1032.   C  GRVL       773.   M  BLDR        0.
        VC SAND      1399.   VC GRVL       259.
  SECTION NO.     24.525
        VF SAND       131.   VF GRVL      1171.   S  COBL      384.
        F  SAND       146.   F  GRVL      1245.   L  COBL        0.
        M  SAND       364.   M  GRVL       726.   S  BLDR        0.
        C  SAND       875.   C  GRVL       499.   M  BLDR        0.
        VC SAND      1182.   VC GRVL       940.

-----------------------------------------------------------------------------------------
$$END

      0   DATA ERRORS DETECTED.

TOTAL NO. OF TIME STEPS READ =        21
TOTAL NO. OF WS PROFILES =            30
ITERATIONS IN EXNER EQ =           26700

COMPUTATIONS COMPLETED
RUN TIME =  0 HOURS,  0 MINUTES &  5.00 SECONDS
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APPENDIX H.4

Cave Creek Overbank Model, 100-year Flood, Future Condition

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T1      Cave Creek and Apache Wash WMP                    FILE:  CC-F100F.DAT
T2      Project No. 28900077 for (Flood Control District of Maricopa County)
T3      This is the 100-Year Future Floodplain Model

NC  0.07    0.06   0.044     0.1     0.3
X124.525      48  9860.5 10093.3
X3                     9865  1628.1   10009  1628.1
GR  1640    8760    1630    8900    1626    8980    1624    9090  1623.9    9091
GR1624.8    9300    1626    9740    1628    9750  1629.5    9810  1629.3  9860.5
GR  1625  9875.7    1624  9888.6  1624.6  9950.3  1623.9   10000  1628.1   10009
GR1629.5 10093.3  1629.5 10189.4  1628.4 10203.4  1627.7   10276    1627 10289.6
GR1626.2 10343.7  1626.5 10386.8    1626 10487.2  1624.3 10496.5  1626.2   10571
GR  1626 10584.3  1625.6 10629.9  1626.5 10638.3  1626.8   10653  1626.7 10702.1
GR  1627 10722.5  1626.5   10773  1630.2 10821.2  1630.2 10962.7  1630.8 11060.9
GR1630.5 11152.9  1631.1 11227.9  1632.2 11276.1  1632.1 11287.4  1631.8 11327.4
GR1631.3 11358.7    1632 11397.3  1632.9 11424.4  1633.4 11439.7  1634.4 11448.3
GR1636.7   11484    1638 11605.1  1639.6 11693.3
HD24.525    10.0

X124.646      52    9580  9745.6     760     620     640
X3                     9430    1640   11000    1640
GR  1636    8810    1635    8850  1634.5    8900    1632    8960    1630    9160
GR  1630    9330    1631    9430    1630    9535  1630.5    9580    1630    9620
GR  1627    9630    1626    9690    1630    9700  1630.5  9745.6  1629.1  9767.3
GR1629.8  9787.4  1633.2  9795.5  1634.6  9817.1  1632.7  9845.8  1631.3  9859.1
GR1631.4  9876.2  1633.8  9889.7  1632.8  9930.1  1632.6  9963.4  1628.2   10000
GR1627.2 10034.8  1628.3 10043.8  1629.3 10084.6  1630.5 10091.3    1634 10154.9
GR1634.2 10243.2  1634.5   10271  1633.7   10357  1634.1 10370.5  1634.1 10385.2
GR1633.5 10413.3  1631.8 10425.9  1631.7 10453.6    1634 10467.1  1634.7 10488.2
GR1634.6 10534.6  1634.9 10602.2  1634.8 10665.2  1633.7 10680.4  1634.8 10734.7
GR1635.4 10757.4  1634.9 10836.8  1634.6 10852.8  1634.1 10871.6  1635.1 10916.3
GR1636.1 10970.3  1636.5 11010.9
HD24.646    10.0

X124.752      80  8835.7    8997     850     430     560
GR1642.2    8690    1641  8727.7  1632.4  8789.8  1638.2  8835.7  1637.5  8868.3
GR1632.4  8884.2  1629.8    8921  1629.3  8925.4  1629.2  8941.5  1632.4    8967
GR1638.3    8997  1637.9  9047.9  1633.4  9064.6  1633.2  9070.6  1634.2  9099.4
GR1636.1  9110.6  1632.5    9205  1633.1  9223.2  1633.6  9233.2  1638.1  9246.8
GR1638.6  9253.7  1638.4  9282.6  1637.9  9358.8  1634.7  9374.5  1634.3  9385.2
GR1633.5  9393.9  1633.4  9402.7  1637.7  9420.2  1638.2  9431.3  1638.4  9450.7
GR1638.3    9459  1638.1  9464.9  1635.5  9480.8  1636.3  9493.4  1637.7  9503.5
GR1638.8  9518.2  1637.9  9531.6  1635.9  9543.1  1635.4  9566.7  1634.8  9589.5
GR1634.9    9594  1636.7  9600.3  1637.5  9625.9  1636.3  9646.3  1637.7  9667.4
GR1634.1  9686.1  1633.1  9690.2  1633.3  9707.1  1633.6  9738.1  1638.5    9747
GR1639.4  9764.4  1639.6  9774.5  1639.6  9783.1  1639.1  9797.1  1637.1  9807.5
GR1635.1  9813.6  1637.9  9913.6  1638.8  9930.4  1638.4  9944.8  1637.5  9953.9
GR1635.1    9962  1633.7  9981.5  1633.5    9990  1633.5   10000  1634.2 10010.2
GR1635.9   10019  1638.7 10029.9  1639.8 10039.1    1640   10045  1640.2 10062.5
GR1640.2 10071.4  1639.3 10090.9  1638.2 10098.7  1638.1 10103.6    1638 10127.7
GR1635.2 10134.5  1636.6 10148.5    1638 10163.8  1638.4 10181.1  1642.1   10192
HD24.752    10.0

X124.845      49  8674.4  8792.8     560     490     490
GR1648.4  8242.8  1644.3  8353.1  1646.2  8493.6  1644.1  8556.4  1646.7  8674.4
GR1636.4  8697.6    1636  8702.9  1635.6  8721.1  1635.3  8773.9  1641.9  8792.8
GR1641.6  8826.7  1640.6    8873  1639.9  8878.1  1639.9  8893.9  1640.4  8914.9
GR1642.3  8921.4  1642.2  8981.3  1642.9  9007.5  1638.5  9040.8  1638.6  9043.4
GR1640.6  9066.8  1638.3  9103.1  1641.8    9129  1641.6  9191.6  1641.7  9245.9
GR1641.4  9249.8  1638.6  9272.1  1638.6  9279.6  1640.6  9296.3  1641.7  9345.5
GR1641.5  9388.9  1637.5  9406.6  1641.8  9448.5  1641.7  9507.2  1642.4  9526.6
GR1641.8  9556.3  1642.5  9630.9  1641.4  9667.2  1641.3  9689.7    1640  9710.8
GR1637.8  9730.6  1637.9  9749.6  1641.2  9781.1  1641.6  9840.6  1643.2  9961.4
GR1642.9  9967.8  1639.5  9988.1  1640.3 10038.9  1647.4   10067
HD24.845    10.0

X124.919      48  8494.5  8709.6     460     350     390
GR1652.8  8046.2  1649.7  8068.4  1646.8  8168.9  1647.1  8195.5    1648  8249.6
GR  1649  8266.1    1648  8326.9  1648.4  8422.4  1649.3  8461.9  1650.4  8494.5
GR1646.5  8588.8  1635.3    8604  1634.9  8637.8  1637.6  8647.2  1638.6  8695.7
GR1643.6  8709.6  1643.3  8729.6  1642.7  8768.3  1639.8  8785.3  1639.4  8813.8
GR1639.8  8836.9  1642.9  8858.9  1643.3  9045.7  1643.4  9126.5  1641.2  9133.6
GR1640.2  9152.9  1640.4  9184.9  1643.3  9199.9    1644  9243.9  1644.2  9302.9
GR1643.1  9335.8  1641.3  9351.3  1644.1  9379.6  1644.6  9538.9  1643.5  9559.5
GR1641.9  9583.1  1641.4  9599.3  1643.2  9611.3  1644.5  9654.2  1643.9  9688.9
GR1644.7  9795.8  1643.8  9882.5  1644.5  9927.7  1642.2  9936.8  1639.5  9971.5
GR1639.5   10000  1651.2 10008.5  1653.6 10153.9
HD24.919    10.0

X1 25.01      42  8823.5  9248.1     410     550     480
GR1653.4  8397.8  1653.2  8557.9  1650.2    8664  1645.5  8678.1  1645.1  8694.6
GR1643.6  8698.5  1642.1  8743.7  1643.4  8747.6  1644.1    8759    1645  8766.4
GR  1646  8823.5  1643.6  8878.3  1641.3  8880.6  1640.2  8929.6  1641.7  9059.1
GR  1641  9087.8  1641.2  9124.3  1642.7  9143.5  1642.5  9180.8  1647.3  9248.1
GR1646.9  9294.1  1646.9  9355.3    1644  9364.6  1644.4  9372.7  1646.5  9382.7
GR1647.4  9445.1  1648.3  9476.2  1649.3  9555.9  1650.4  9687.1  1647.5  9734.1
GR1647.4  9776.5  1646.5  9818.2    1644  9823.9  1645.2  9848.6    1648    9869
GR1646.9  9935.5  1644.5    9975  1643.9   10000  1642.5 10006.6  1642.7 10019.8
GR1652.2 10037.7  1654.3 10149.5
HD 25.01    10.0

X125.099      65  9327.5  9490.1     430     530     470
GR  1658  8593.8    1655    8775    1655    8880  1654.8    8914  1648.2  8923.1
GR1647.6  8947.9  1649.3    8959  1650.6    8988  1651.2    9029  1650.7  9064.3
GR1651.2  9091.8  1651.5  9112.7  1650.7  9150.2    1649  9209.7    1649  9215.4
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GR1651.3  9234.1  1652.4  9259.9  1652.5  9283.7  1652.5  9327.5    1652    9346
GR1646.9  9367.6  1646.2  9387.8    1646  9395.9    1646  9409.8  1649.2    9416
GR1650.8  9430.5    1652  9458.6  1652.6  9490.1  1651.6  9515.2    1650  9558.3
GR1648.1  9571.1  1648.2  9578.8  1650.6  9591.2  1652.3    9608  1653.1  9662.4
GR1652.4  9735.4  1650.6  9742.7  1650.3  9748.7  1650.4  9757.9  1653.2  9838.9
GR1652.5  9868.9  1651.7  9904.9  1651.4  9919.5  1651.3  9941.9  1648.4  9951.4
GR1648.9  9960.9  1649.4  9982.9  1648.2   10000  1648.9 10015.4  1651.3 10024.3
GR  1653   10032  1653.9 10048.6  1654.4 10063.9    1654 10087.5  1653.5 10094.2
GR1650.9 10100.6  1651.2   10104  1652.8 10111.3  1654.1 10146.3  1654.9   10167
GR  1655 10211.1  1655.4 10254.6  1653.4 10292.9  1654.8 10301.5  1659.9 10341.2
HD25.099    10.0

X1 25.18      56  9213.5  9413.7     500     430     430
GR1660.4  8859.3  1660.5  8905.9  1658.4  8986.1    1658    9017    1652  9047.1
GR  1652  9057.1  1653.4  9065.1  1654.4  9144.5  1652.9  9161.8    1652  9200.6
GR1654.5  9213.5  1654.1  9262.6  1651.1  9306.6  1647.8  9319.4  1647.7  9353.2
GR1653.4  9371.6  1653.8    9387  1655.1  9413.7  1656.2  9490.2  1654.9  9515.2
GR1655.5  9544.3  1655.7  9581.6  1654.1    9597  1655.9  9633.5  1654.6  9660.4
GR1655.1  9698.9  1651.5  9707.3  1651.7  9717.8  1654.4  9725.7  1653.5  9749.7
GR  1653  9785.9  1652.1  9814.3  1655.3  9830.6  1655.4  9894.7  1654.3  9911.5
GR1656.2  9924.2  1656.1  9944.4  1654.3  9955.6  1654.3  9969.6    1656  9978.6
GR1654.8  9986.8  1650.4   10000  1650.8 10046.2  1649.6 10072.4  1649.9 10076.1
GR1651.1 10097.1  1654.4   10114  1654.6 10135.8  1658.1 10157.7    1658 10214.9
GR1656.9 10240.1  1658.1   10265  1657.3 10356.6  1656.5 10390.4  1657.3 10430.2
GR1661.8 10537.3
HD 25.18    10.0

X125.233      60  9274.5  9383.8     390     180     280
GR1664.2  8536.3  1663.9  8595.2  1660.9  8692.2  1658.6  8798.9  1658.1  8854.9
GR1656.2  8987.4  1658.8  9021.1  1659.7  9057.1  1660.4  9131.9  1658.7  9192.7
GR1659.6  9228.6  1659.1  9274.5    1653  9289.5  1647.3  9290.8  1647.3  9296.1
GR1648.9  9301.1  1650.3  9327.4  1655.3  9341.1    1656  9383.8  1656.1  9418.4
GR1655.7  9471.9  1657.3  9484.7    1657    9548  1657.7    9570  1657.2  9608.2
GR1656.2  9622.6  1656.4  9634.3  1658.2  9647.4  1657.4  9707.8  1654.8  9728.7
GR1655.8  9748.3  1656.7  9778.2  1657.5  9803.8  1657.4    9881  1657.1  9908.4
GR1654.4  9924.8  1656.1  9935.3  1656.7  9956.8  1653.9  9994.4    1652   10000
GR  1652 10034.7  1657.4 10047.9  1656.8 10061.7  1655.4   10070  1656.6 10089.5
GR  1654 10118.4    1657 10139.2  1656.5 10155.7  1652.5 10163.6  1652.6 10169.9
GR1656.7 10179.7  1657.4 10221.7  1653.7 10235.2  1655.4 10247.3  1655.8 10283.7
GR1658.2 10303.2  1658.6 10429.1  1659.1 10448.8  1661.5 10459.3  1663.9 10475.2
HD25.233    10.0

X125.326      41  9335.1  9497.8     490     480     510
GR1666.5  9070.8  1665.5  9175.1  1661.1  9242.1  1661.4  9294.1  1661.5  9335.1
GR1657.2  9365.7  1653.2  9380.4    1653  9390.5  1657.2  9416.8    1657  9450.5
GR  1659  9472.3  1661.1  9497.8  1660.8  9532.7  1660.1  9592.2  1662.9  9612.1
GR1663.6  9698.9  1663.8    9758  1662.5  9788.6  1661.6  9855.4  1662.5  9861.2
GR1662.2  9900.1  1659.7    9912  1658.9  9952.9  1659.2  9988.9  1656.4   10000
GR1656.5 10023.8  1660.3 10032.1    1661 10151.4  1660.9 10178.5  1657.8 10187.9
GR1657.7 10204.3  1661.5 10221.8    1659 10242.5  1658.9 10267.3  1656.4 10281.7
GR1661.5 10296.8  1660.3 10348.3  1658.9 10399.4  1661.2 10407.9  1664.2 10513.8
GR1666.3 10530.4
HD25.326    10.0

X125.388      38  9467.9  9644.5     350     370     360
GR1678.8  9115.7  1668.5  9235.4    1666  9296.8  1665.6  9300.1  1666.4    9409
GR1665.9  9467.9  1661.5    9527  1656.6  9546.6  1660.5  9606.3  1663.8  9625.3
GR  1666  9644.5  1664.6    9663  1665.2    9704  1666.5  9725.8  1666.8    9766
GR1665.9  9777.3  1664.7    9782  1665.4  9857.4  1666.5  9872.6  1666.1  9918.6
GR  1665   10000  1666.3 10037.1  1666.1 10100.7  1664.3 10236.5  1665.2 10260.5
GR1664.2 10295.4  1662.9 10306.6  1664.8 10361.6  1665.9 10366.9  1666.4 10490.2
GR1662.5   10516  1662.2 10564.3  1660.1 10602.9  1660.4 10629.9  1663.8 10644.1
GR1665.5 10675.8  1672.2 10759.6  1674.1 10876.7
HD25.388    10.0

X125.458      27  9916.8 10067.1     390     380     360
X3    10
GR1677.1  9528.9  1672.1  9600.5    1668  9605.5  1667.8  9749.5  1668.1  9780.5
GR1669.2  9825.6  1667.7  9883.2  1668.1  9916.8  1666.8  9934.3  1665.7  9952.8
GR1665.5   10000  1667.2   10018  1669.1 10067.1  1664.9 10140.9    1668   10190
GR1668.1 10558.9  1667.8 10573.8  1665.9 10601.9  1669.5 10794.7  1664.6 10819.1
GR1664.3   10867  1667.1   10899  1667.1 10913.4  1664.1 10937.8  1660.5 10966.1
GR1673.9 10989.1  1677.6   11145
HD25.458    10.0

X125.519      24    9946   10101     450     290     310
X3    10
GR  1678  9567.7    1672    9570  1669.9  9663.3  1670.4  9770.3  1671.4  9836.4
GR1672.1  9915.1  1672.4    9946    1670    9970  1668.3   10000  1670.1 10058.9
GR1672.2   10101  1671.6 10154.1  1671.5 10186.1  1670.6 10394.1  1670.5 10492.4
GR1670.7 10616.3  1671.1 10795.5    1664 10831.1  1669.6 10872.3  1667.9   10940
GR1661.6 10957.3  1661.6 10970.3  1675.6 10993.4  1679.2 11086.4
HD25.519    10.0

X1 25.58      25  9974.4 10121.5     320     290     300
X3    10
GR  1678  9635.1    1677  9637.3  1671.6  9704.7  1671.8  9855.4  1674.1  9974.4
GR1668.9   10000  1670.8   10089  1673.7 10121.5  1673.7 10276.2  1674.3 10346.8
GR1673.5 10453.1  1672.9 10517.8  1672.2   10547  1672.9 10606.7  1673.9 10625.8
GR1675.8 10732.4  1674.2 10818.6  1670.4 10867.2  1669.9 10895.8  1667.3 10935.7
GR1665.9 10962.4  1666.8 10972.5    1670 10985.9  1675.5 11000.5  1680.6 11066.1
HD 25.58    10.0

X125.644      25  9908.8 10061.5     360     280     320
X3    10
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GR  1680  9535.3  1677.2  9767.4  1675.7  9804.1  1676.6  9908.8  1669.8  9926.6
GR1670.1    10000  1670.1 10013.5  1675.2 10030.5  1677.3 10061.5  1676.6 10119.8
GR1678.8 10141.2  1678.6 10246.3  1677.6 10388.7  1677.1 10485.4  1676.7 10586.1
GR1677.8    10633  1676.6 10683.4  1677.8 10719.7  1674.2 10774.8    1672    10825
GR1669.3 10861.2  1676.8 10895.7  1676.5 10968.6  1675.5 11020.2  1682.8 11094.3
HD25.644     10.0

X125.699      22  9886.9   10033     290     290     290
GR1683.7  9578.3  1678.6  9798.1  1677.9  9886.9  1671.6  9909.8    1670  9979.8
GR1669.4    10000  1672.4 10005.6  1673.1 10026.9  1678.4   10033  1681.5 10222.9
GR1681.3 10350.6  1680.2   10532  1679.8   10714  1678.2 10743.5  1672.4 10763.6
GR1671.9 10787.2  1672.1 10826.9  1675.7 10839.4  1678.6 10880.3  1679.2 10970.2
GR1680.4 11082.9  1685.1 11129.5
HD25.699     10.0

X1 25.75      40  9925.3 10085.9     270     280     280
GR1686.2  9574.2  1684.2  9577.4  1677.3  9588.3  1677.2  9602.8  1678.2  9608.9
GR1678.4  9649.3  1680.3    9706  1680.1  9746.5  1679.6  9804.2  1680.3  9864.7
GR  1682  9925.3  1675.5  9973.2  1671.6  9977.4  1672.1   10000    1673   10041
GR1681.9 10061.9  1682.4 10085.9  1680.2   10144  1677.4   10156  1674.9 10176.5
GR1674.5 10219.7  1678.7 10233.2  1680.6 10250.1  1681.5 10292.9  1684.2 10435.2
GR1684.7 10518.7  1682.8 10668.2  1679.8 10824.7  1675.2 10841.6  1675.3 10869.3
GR1678.7 10881.2  1679.6 10923.8  1680.5   10960  1679.4 11003.7    1678 11058.5
GR1681.2 11069.3  1682.8 11178.7  1686.9 11266.2  1687.5 11357.1  1688.7   11434
HD 25.75      10.0

X125.843      56  9891.5 10077.6     540     210     370
GR1698.3  9623.8  1684.2  9666.2  1682.9  9716.1  1685.7  9774.4  1685.9    9842
GR1686.1  9882.4  1685.8  9891.5  1682.4  9923.5  1679.7  9979.1  1676.2  9989.1
GR1673.9    10000  1673.5 10028.2  1674.4 10041.9  1685.5 10077.6  1684.1 10141.7
GR1685.2    10187  1684.6 10219.1  1682.3 10237.3  1678.2   10245  1678.1 10248.3
GR1679.5    10274  1680.1   10301  1676.7 10338.8  1682.8   10356  1684.8 10367.7
GR1684.8 10374.5  1683.7 10398.1  1682.5 10493.1  1679.7 10519.8  1679.8 10522.9
GR1681.2 10526.1  1684.2 10546.5  1685.2   10583  1685.1 10591.3  1683.1 10612.5
GR  1683 10626.2  1684.3 10653.9  1685.9 10669.7  1686.2 10698.5  1683.4 10909.7
GR1684.3 10924.9    1685 10965.7  1681.9 10979.2  1675.8 10989.6  1676.2 11011.8
GR1682.7 11026.3  1683.4 11033.3  1684.2 11109.4  1683.2 11157.4  1682.7 11199.4
GR1678.9 11211.5  1679.2 11219.1  1682.2 11227.6  1683.8 11233.3  1684.9 11290.6
GR1690.6   11365
HD25.843      10.0

X125.919      53  9857.9 10046.9     450     310     400
GR1694.2  9686.7  1690.3  9857.9  1690.2  9864.9  1686.4  9902.3  1684.4  9921.8
GR1680.8  9956.5  1678.9  9980.4  1678.5  9987.9  1678.4   10000  1678.4 10007.5
GR1678.8 10014.7  1679.3 10019.3    1681 10022.9  1687.1   10034  1689.1 10046.9
GR1688.2 10072.2  1688.2 10120.8  1685.3 10136.7  1685.4 10143.4  1686.6 10152.9
GR1687.7 10159.2  1687.3 10226.7  1681.8 10246.9  1680.5 10289.3  1680.4 10293.4
GR1682.5 10298.9  1685.8 10305.9  1686.8 10345.6  1687.7 10366.4  1687.1   10561
GR1685.6    10617  1685.5 10625.2  1683.6 10639.5  1683.3 10644.4  1683.3 10647.4
GR1685.7 10656.5  1686.2 10705.2  1687.4 10756.9  1688.1 10767.4  1688.7 10776.6
GR1689.9 10930.2  1689.9 10953.9  1687.2 11087.9  1687.9 11105.1  1688.5 11142.7
GR1687.8 11175.7    1686 11194.1  1685.3 11221.4  1684.5 11238.4  1683.3 11289.2
GR  1683   11299  1689.7 11338.8    1692   11561
HD25.919      10.0

X126.044      39    9926 10076.8     750     400     650
GR1702.9    9926    1685  9944.8  1684.3   10000  1691.1 10017.5  1691.8 10045.7
GR1694.1 10058.4  1694.2 10076.8  1694.2 10134.3  1693.8   10240  1690.9 10270.3
GR  1686   10332  1689.4 10342.7  1691.3 10378.5  1692.5 10407.2  1692.8 10465.5
GR1692.2 10541.6  1689.6 10574.8  1689.7 10591.8  1691.6 10609.2  1691.8 10748.9
GR1687.8 10824.9  1689.9 10849.3  1693.9 10865.8  1693.1   10957  1693.6 11034.8
GR1691.3 11097.4  1689.8 11180.3    1691 11196.2  1690.3 11249.8  1691.7 11302.9
GR  1691 11374.7  1686.1 11451.8  1687.1 11486.8  1686.7 11555.5  1689.2 11562.9
GR1692.6 11592.4  1693.7   11660    1696   12000    1698   12220
HD26.044      10.0

X126.137      47    9975 10296.6     500     475     495
GR1712.9    9975  1685.7   10000  1686.6 10024.6    1691 10054.7  1695.9 10106.9
GR1697.5 10139.1  1690.1   10162  1686.4 10231.1  1700.2 10296.6  1698.9 10317.4
GR1696.6 10379.3  1695.4 10460.7  1694.2 10518.2  1695.5 10560.3  1695.3 10586.9
GR1692.3 10631.9  1691.9 10643.6  1694.6 10660.5  1696.7 10744.8  1694.7 10795.2
GR1694.3 10833.6  1696.8   10841  1697.5   10938  1695.3 10998.8    1696 11030.5
GR1697.9 11148.8  1694.6 11214.6  1696.9 11262.3  1695.8 11297.9  1694.4 11316.3
GR1694.3 11363.6  1694.4 11379.7  1691.9 11399.4  1691.9 11418.1  1690.6 11474.1
GR1690.6 11490.6  1693.8 11497.1  1696.4   11536  1696.2 11621.4  1694.2 11662.1
GR1693.6 11733.6  1694.9 11770.6  1697.5 11787.8  1698.4 11923.7  1700.1 11940.2
GR1699.7 12055.1    1702   12465
HD26.137      10.0

X126.239      47    9925 10279.3     570     340     420
GR1707.8    9925  1692.8  9936.8  1692.8   10000  1697.2 10010.6    1700 10026.3
GR1700.8 10111.9  1695.5 10121.4  1693.3 10144.7  1693.1 10181.6  1699.5   10202
GR1701.3 10279.3    1702 10346.3  1699.1 10433.6  1698.2 10516.4  1699.5 10562.5
GR  1700 10627.5  1700.4 10668.5  1699.7 10720.3  1695.6 10737.6  1696.1   10755
GR1698.4 10763.3    1700 10838.9  1698.1 10861.7  1698.1 10872.1  1696.1 10895.3
GR  1695 10906.7  1700.5 10935.5  1700.7 11008.5  1699.2   11038  1698.6   11090
GR1699.5 11112.3  1699.1 11155.2  1697.7 11208.1  1693.3 11221.8  1693.6 11232.9
GR1696.2 11238.1  1697.2 11271.8  1697.8 11314.1    1699   11334    1700   11449
GR1699.8 11535.4    1699 11560.8  1696.2 11615.5  1695.6 11751.2  1698.9 11769.2
GR1702.2 11836.2  1704.3 11961.1
HD26.239      10.0

X126.335      39    9635 10333.4     495     520     500
GR1710.7    9635    1700  9645.81699.991    9646  1697.4  9701.2  1696.7  9715.3
GR1696.7  9771.9  1698.6  9794.1  1698.8  9886.3  1696.6  9953.9  1695.6   10000
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GR1698.8 10024.1  1699.7 10103.3  1698.6 10141.9  1698.9 10190.7  1696.9 10245.8
GR1704.2 10271.6  1705.6 10333.4  1705.8 10438.8  1702.6 10464.6  1702.8 10574.7
GR1701.1 10627.4  1704.5 10710.5  1703.5 10816.3  1702.4 10852.4  1700.5 10868.2
GR1699.9 10906.9  1699.2 10938.8    1699 10949.1    1704 10961.4  1705.3 11033.5
GR  1706   11149  1705.5 11213.4  1704.2 11298.3  1702.6 11389.1  1699.2   11435
GR1700.2 11451.6  1705.5 11466.4  1707.8 11486.3  1709.4 11519.8
HD26.335    10.0

X1 26.43      33    9770 10353.7     490     520     495
GR1711.8    9770    1700  9794.4  1700.9  9837.5  1699.8    9885    1700   10000
GR  1701   10044  1702.3   10080  1701.8 10154.1  1700.1   10207  1697.7 10219.1
GR1697.5 10240.1  1706.6 10258.3  1710.5 10297.2  1711.7 10353.7  1710.5   10461
GR1707.7 10590.9  1708.7 10644.9  1706.2 10710.7  1706.6 10734.7    1708 10748.8
GR1709.2 10805.8  1707.7 10914.2  1709.3 10982.6    1706 11021.1  1702.2 11039.4
GR1700.6   11097  1702.7 11102.7  1704.4 11124.2  1704.3 11138.7  1708.1 11249.2
GR1710.9   11352  1712.5 11426.3  1713.3 11525.2
HD 26.43    10.0

X126.529      38  9764.3 10177.6     530     520     520
GR  1720  9731.2  1719.8  9764.3  1709.3    9799  1708.5  9827.8  1708.1  9878.2
GR1704.8  9891.7  1702.9  9916.7  1702.6   10000  1703.6   10004  1703.8 10054.1
GR1705.3 10089.2  1705.2 10126.1  1703.3 10149.1    1714 10177.6  1713.4   10237
GR1712.2 10373.5  1711.5 10397.1  1713.8 10453.4  1713.5 10511.4  1714.4   10550
GR1713.3 10598.1  1712.7 10665.4  1708.3 10683.3  1709.1 10713.3  1710.3 10718.4
GR1710.4 10750.8  1712.3 10766.7  1712.2 10824.3  1712.7   10897  1712.7   10966
GR1710.3 11000.4  1706.5 11013.6    1706 11047.9  1704.8 11071.9  1711.3 11102.6
GR1711.9 11143.7  1713.1 11201.5  1714.4 11315.3
HD26.529    10.0

X126.623      38  9626.5 10128.4     500     530     500
GR1721.7  9626.5  1708.4  9663.1  1703.9  9698.7  1704.6  9722.9  1704.3    9776
GR1707.3  9810.3  1708.9  9851.6  1707.8  9912.1  1705.2  9958.1  1705.1   10000
GR1709.5 10015.2  1709.9 10044.4    1712   10071  1714.1 10078.2  1720.1 10128.4
GR1719.4 10159.4  1720.4 10281.2  1718.6 10327.7  1718.9 10358.4  1720.9   10384
GR1721.8 10424.9  1721.3 10463.5  1718.5 10548.7  1716.8 10606.9  1713.9 10625.6
GR1717.2 10657.9  1718.2 10687.4  1718.1 10785.1    1715 10842.2  1713.5 10865.9
GR1714.1 10902.1  1717.7 10924.6  1714.2 10974.2  1707.5 11001.4  1712.7 11033.6
GR1714.2   11113  1715.9 11183.7  1720.1 11271.7
HD26.623    10.0

X126.695      41  9772.8 10055.4     370     430     380
GR1724.9  9733.8  1723.1  9772.8  1718.4  9783.7  1714.6  9822.6  1714.3  9866.1
GR1721.4  9881.3  1719.6  9912.9  1710.6  9931.4  1709.5  9982.8  1709.5  9991.4
GR1709.9 10033.2    1710 10046.3  1724.6 10055.4  1723.8 10116.6  1721.7 10149.3
GR1723.3 10223.1  1727.2 10280.1  1725.9 10341.2  1713.2 10352.8  1713.1 10406.1
GR1716.9 10441.8  1718.6 10484.8  1720.9   10506  1719.7 10545.1    1715   10566
GR1719.2 10603.7  1724.2 10615.9  1722.9 10732.5  1723.6 10813.3  1722.9 10860.6
GR1721.2 10877.5    1722 10908.7  1722.4 11033.4  1721.5 11077.9  1722.9 11170.1
GR1722.6 11247.1  1721.6 11358.9  1714.6 11436.8  1714.9 11489.8  1725.3 11511.4
GR1727.2 11534.6
HD26.695    10.0

X126.775      39    9914   10229     390     470     420
GR1732.6  9691.5  1727.3  9766.7  1726.6    9914    1717    9920  1716.8    9967
GR1713.4  9980.1  1712.7   10000  1712.9 10018.8  1716.1   10027  1717.7 10072.7
GR1717.2 10107.9  1714.6 10187.6  1725.4 10207.6  1730.6   10229  1731.4 10296.7
GR1729.1 10391.5  1727.5 10446.8  1717.5 10465.7  1717.5 10489.7  1722.6   10502
GR1723.7 10561.3  1724.6 10596.4  1724.8   10685    1724 10729.9  1726.3 10770.1
GR1728.2 10806.5  1726.1 10931.3  1725.8 11003.7  1727.4 11039.1    1727 11121.5
GR1726.9   11192  1727.1 11304.1  1725.7 11425.9  1720.8 11447.1    1720 11492.7
GR1719.4 11554.6  1718.4 11578.7  1730.8 11599.8  1732.2   11618
HD26.775    10.0

X126.845      45  9657.8 10020.1     350     400     370
GR1733.1  9611.4  1731.1  9657.8  1721.2  9688.6  1721.3  9793.2  1718.9  9834.9
GR1718.8    9871    1717  9877.3    1718  9905.1  1717.4   10000    1728 10020.1
GR1727.3 10087.9  1729.9   10102  1729.5 10120.9  1719.2 10143.7  1719.6 10152.7
GR1722.4 10191.5  1730.2 10209.4  1730.2 10236.4  1724.1 10253.5  1725.3 10271.5
GR  1727 10290.8  1728.1 10349.1  1729.1 10437.8  1729.4 10474.8    1728 10537.7
GR1725.9 10556.6  1729.4 10581.4  1729.9 10622.5  1728.9 10684.7  1728.5   10712
GR1731.6 10721.6  1731.1 10793.1  1731.3 10864.9  1729.9 10914.9  1729.9 10946.4
GR1728.4 10982.9  1726.7 11003.8  1726.3 11030.4  1727.3 11042.7  1729.3 11090.1
GR1728.9 11124.8  1726.3 11229.8  1721.4 11246.7    1733 11279.8  1734.5 11346.5
HD26.845    10.0

X126.921      57  9712.1   10149     450     400     430
GR1739.4  9712.1    1725  9736.8  1723.7  9744.2  1723.1  9756.8  1722.1  9796.4
GR1722.1  9799.8  1723.2  9810.1    1722  9832.8  1723.2  9872.7  1723.9    9882
GR  1724    9891  1723.1    9908  1723.2  9939.1  1722.6  9946.3  1720.7  9952.7
GR1721.1  9972.1  1720.2   10000  1720.3 10017.5  1723.1 10027.8  1724.6 10048.1
GR  1725 10059.7  1725.1 10075.5  1724.1 10107.4  1722.7 10132.6  1731.9   10149
GR  1732 10156.7  1732.1 10165.7  1733.5 10186.9  1732.2 10193.6    1732 10237.1
GR1734.4 10263.2  1734.3 10321.7  1735.1 10345.3  1734.7 10409.7  1735.5   10443
GR1734.5 10480.4  1728.1 10545.4  1728.5 10554.4    1732 10577.8  1732.5 10599.1
GR1733.4 10618.4  1734.3 10657.4  1733.4 10682.2  1733.5 10717.8  1733.3 10729.5
GR1728.8 10764.1  1730.5 10771.1  1731.2 10781.6  1731.3 10797.6  1729.2 10812.9
GR1731.1 10828.1  1731.1 10839.5  1729.1   10863  1727.4 10868.7  1728.3 10888.3
GR1732.9 10899.2  1735.9 10906.9
HD26.921    10.0

X127.008      40  9677.5   10164     400     400     400
GR1746.2  9657.3  1745.5  9677.5  1731.7  9702.2  1724.6  9760.8    1724  9803.4
GR1725.9    9811  1725.7  9819.2  1725.2    9836  1727.3  9853.3  1725.7  9898.1
GR1726.6  9902.7  1727.3  9935.3  1726.4  9947.4    1723  9981.1  1723.9   10000
GR  1726 10013.3  1726.6 10033.6  1726.5 10072.1  1725.6 10089.8    1726 10119.1
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GR1724.9 10144.7  1724.9 10154.3  1736.3   10164  1735.8 10243.9  1734.5 10272.1
GR  1734 10293.2  1732.5 10322.9  1737.2 10346.2    1737 10441.5  1734.8 10548.5
GR1733.9 10662.5  1729.8 10671.2  1730.3 10675.8  1733.9 10683.5  1733.5   10724
GR1734.2 10735.7  1733.6 10771.9  1731.6   10788  1739.6 10811.4  1739.9 10846.8
HD27.008    10.0

X127.106      38  9730.7 10275.3     540     500     520
GR1755.7  9730.7  1755.7  9730.8  1731.8    9788  1731.6  9802.8  1733.6  9808.5
GR1734.8  9830.2  1734.7  9869.5  1733.3  9905.8  1734.4  9916.8  1732.4  9979.5
GR1729.1   10000  1728.6 10019.5    1731 10026.5  1731.4 10051.7  1732.4 10066.4
GR1730.6 10109.9  1732.1   10125  1728.9 10150.1  1727.7   10179  1725.7 10190.7
GR1727.8 10205.6  1736.1   10215  1736.8 10259.5  1742.7 10275.3    1742 10408.1
GR1738.5 10443.8    1739 10468.6  1738.6 10494.5  1741.2 10550.7  1737.2 10653.9
GR1739.5 10686.8  1738.8 10728.3  1736.2 10755.3  1736.9 10761.5  1737.4 10798.5
GR  1733 10818.3  1743.8   10877  1745.6 10979.2
HD27.106    10.0

X127.169      28  9850.9   10395     400     310     330
GR1753.5  9850.9  1734.4  9881.6    1736  9933.2  1735.9   10000  1732.1 10145.7
GR1733.2 10155.1  1732.9 10194.3  1738.9   10218  1732.7 10265.5  1733.2 10315.5
GR1733.9 10339.7  1743.4 10379.9  1745.5   10395  1741.7 10481.8  1741.6 10526.6
GR1743.1 10538.6  1744.8 10564.2  1744.7 10687.1  1741.1 10812.4  1739.1 10854.3
GR1740.2 10885.4  1734.5 10910.1  1734.7 10918.1  1738.5 10928.8  1736.7 10948.6
GR1737.7 10976.7  1746.9 11000.2  1747.6 11111.9
HD27.169    10.0

X127.226      35  9928.4   10380     310     300     300
GR  1765  9788.6    1765  9788.7  1744.5  9877.9  1743.7  9928.4  1735.6  9943.3
GR1735.3  9989.5  1737.7   10000    1739   10065  1739.8 10106.8  1737.7 10145.4
GR1736.4 10162.8  1737.7 10188.7  1736.6 10259.4    1735 10269.7  1735.6 10283.3
GR1735.6 10320.4  1734.8 10332.8    1749   10380  1748.3 10432.1  1746.1 10448.1
GR1744.5 10526.8    1745 10562.1  1747.2 10583.3  1745.3 10798.5  1739.5 10855.8
GR1742.4 10881.8  1744.1 10936.1  1741.8 10999.9  1741.2 11013.1  1736.7 11029.8
GR1737.8 11054.5  1739.5 11059.9  1750.7 11099.3  1750.6 11246.8  1753.4 11400.2
HD27.226    10.0

X127.265      46    9900 10164.2     210     220     210
GR1759.4  9689.5  1759.4  9689.6  1759.4  9689.7  1759.3  9703.1  1749.5  9739.2
GR  1751  9795.3  1750.2    9900    1747  9968.4  1735.7  9973.2  1736.3   10000
GR1740.8   10044  1741.2 10063.1  1741.4 10128.7    1749 10164.2  1749.5 10201.7
GR  1750 10298.4  1750.7   10337  1750.2 10382.1  1747.8   10397  1746.6 10460.8
GR1746.6 10469.8  1747.5 10509.2  1748.9 10531.9  1749.3 10575.2  1747.7 10618.4
GR1746.4 10638.3  1746.2 10687.3  1747.1 10707.3  1746.8 10752.2  1743.1 10780.1
GR1743.7 10795.7  1746.2 10810.8  1746.6 10849.5  1747.9 10861.6  1747.8 10861.7
GR  1748 10890.4  1744.6 10939.7  1745.4 10986.2  1746.1 11055.7  1739.9 11101.8
GR1739.5   11124  1738.8 11134.3  1739.7 11149.2  1751.6 11174.7  1753.3 11300.7
GR1755.4 11373.2
HD27.265    10.0

X1 27.32      30  9907.5 10072.3     260     300     275
X3    10
GR1760.8  9673.4  1752.3  9694.4  1752.8  9759.1  1749.8  9907.5    1743  9932.7
GR1742.9  9962.1  1740.3   10000  1740.9   10054  1754.9 10072.3  1751.7 10176.6
GR1750.2 10227.7  1750.3 10307.3  1751.9   10323  1752.2 10364.6  1750.2 10475.2
GR1751.7 10498.6  1752.1   10570  1749.6 10644.3  1751.5   10676  1750.8   10734
GR1751.3 10765.5  1749.9 10844.8  1746.3 10900.2  1746.8 10926.1  1749.3 11000.3
GR1744.4 11051.9  1742.8 11077.2  1743.9 11116.7  1755.9 11147.9  1758.2 11273.1
HD 27.32    10.0

X127.366      39  9737.6 10110.1     230     240     240
GR1769.8  9702.7  1755.9  9737.6  1745.3    9748  1746.2  9771.9  1746.7  9859.2
GR1748.4  9920.5  1745.5  9933.9  1746.9  9976.9  1742.6   10000  1742.3 10086.6
GR1743.4 10102.2  1755.1 10110.1  1755.6 10177.6  1755.3 10242.7  1755.9 10286.6
GR1754.6 10345.9  1754.7 10457.4  1750.9 10521.7  1751.5   10555  1753.4 10569.5
GR1753.3 10608.2  1750.7 10654.5  1753.3 10780.6  1751.3 10821.9  1752.1 10925.4
GR1751.4   10952  1747.6 11021.9    1746 11027.9  1746.4 11040.4  1749.8 11076.4
GR1745.8 11112.3  1756.7 11140.4  1758.8 11165.3  1759.3 11295.8  1757.2 11409.8
GR1757.7 11478.6  1756.1 11533.4    1758   11558  1760.2 11593.2
HD27.366    10.0

X127.417      26  9942.8 10200.8     250     290     270
X3    10
GR1765.1  9848.4  1755.1    9889  1756.8  9942.8  1753.6  9989.2  1746.8   10000
GR1750.1 10057.8  1748.6 10121.9  1745.1 10141.8  1744.8 10177.2  1759.4 10200.8
GR1759.2 10367.6  1758.1 10536.5  1757.1 10689.7  1755.3 10725.2  1754.4 10783.7
GR  1754   10842  1750.8 10860.1  1752.5 10893.3  1755.1 10912.4  1755.1 10941.7
GR1753.4 10962.6  1751.9 11035.1  1748.5   11041  1748.6 11049.8    1762 11095.5
GR1762.9   11211
HD27.417    10.0

NC  0.07    0.07   0.036     0.1     0.3
X127.502      37  9947.5 10150.4     430     510     450
GR1783.8  9853.5  1773.7  9947.5  1748.8  9983.2  1750.6   10000  1750.2 10025.5
GR1752.1 10058.7  1754.1 10086.3  1760.3 10126.6  1762.5 10150.4    1763   10240
GR1759.5 10265.8  1759.9 10275.2    1762 10280.7    1762   10302  1758.3 10312.7
GR1761.1   10330  1762.8 10350.4    1762 10409.1    1763 10489.2  1762.3 10589.5
GR1761.7   10675    1763 10723.2  1763.7 10740.2  1762.6 10779.4  1758.4 10837.3
GR1760.6 10852.6    1761 10887.2  1759.1 10918.1  1762.5 10935.3  1761.8   10969
GR1759.1 10979.4  1764.1   11005  1767.7 11054.2  1769.6 11108.1  1770.5 11175.4
GR1771.3 11287.4    1772   11384
HD27.502    10.0

X127.604      27  9740.2 10014.4     510     700     550
GR1786.6  9740.2  1757.7  9792.1  1757.8  9813.5  1759.2  9823.8  1759.9  9851.8
GR1757.7  9893.9  1754.3  9964.9  1754.2   10000  1765.2 10014.4  1764.4 10038.5
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GR1765.9 10081.8  1766.4 10113.1  1762.9 10150.4  1767.6   10183  1769.9 10240.7
GR1768.9 10369.3  1769.6 10444.5   1769 10528.9  1769.2 10644.4  1767.4 10727.3
GR1767.5   10765  1763.8 10793.9  1764.7 10830.3  1766.9 10867.7  1770.7 10888.5
GR1771.5 11019.7  1774.5 11105.7
HD27.604    10.0

X127.693      29  9961.1 10195.8     490     460     470
GR1791.7  9961.1  1756.3   10000  1757.7 10016.1  1760.3 10060.1  1762.8 10074.5
GR1762.8 10088.7  1770.2 10105.9  1771.7 10195.8    1771 10231.3  1770.9 10351.8
GR1772.3 10459.2  1774.7 10596.6  1775.1 10635.8  1773.7 10744.8  1769.7 10897.1
GR1770.5   10935  1767.3 10957.3  1769.3 10990.2  1773.7 11023.8  1775.9 11078.2
GR  1776   11145  1772.4 11215.7    1773 11230.9  1776.9 11311.4  1778.9 11389.9
GR1779.8 11565.4  1780.3   11724  1781.6 11801.6  1782.9 11816.4
HD27.693    10.0

X127.797      32    9969 10158.3     560     550     550
GR1785.6    9969  1760.6   10000  1761.3 10008.1  1761.4   10040  1765.8 10049.5
GR  1771 10077.1  1771.9 10089.7  1772.3   10120  1771.6 10150.2  1776.1 10158.3
GR1776.8 10265.3  1776.3 10353.5  1774.5 10418.5  1775.7 10519.8  1776.6 10634.1
GR1777.1 10778.4  1777.6   10916  1772.3   10988  1772.4 10992.9  1773.4 11016.9
GR1776.1   11050  1774.9 11106.7    1778 11127.1  1779.4 11190.5  1777.9 11313.3
GR1779.6 11394.9  1780.5   11441  1782.1 11568.4  1782.7 11689.7    1782 11743.2
GR1782.5 11912.3  1785.1 11962.9
HD27.797    10.0

X127.913      25  9944.2 10240.4     620     600     610
GR1800.8  9944.2  1763.1   10000  1767.4 10037.3    1772 10080.7    1776 10111.6
GR1776.8 10166.4  1776.7   10200  1777.9 10215.4  1781.2 10219.9  1782.1 10240.4
GR1781.9 10276.9    1781 10431.4  1780.9 10609.3  1781.9 10668.7  1781.9 10784.1
GR1778.4 10826.3  1777.5 10876.2  1780.8 10916.2  1781.2 10985.8  1782.2 11061.8
GR1783.3 11083.6  1783.4 11122.1  1780.9 11228.2  1782.2 11365.8  1785.1 11411.6
HD27.913    10.0

NC  0.07    0.07   0.044     0.1     0.3
X128.023      47    9770 10077.1     600     580     580
GR1792.6    9770  1775.2  9777.6    1775  9806.4  1774.3    9813  1775.2  9821.4
GR1776.6  9826.9  1779.2  9837.5  1780.7  9842.9  1781.5  9866.6  1782.4  9880.7
GR1782.9  9892.3  1782.1  9937.4    1781  9958.7  1773.7  9970.3  1773.1  9995.9
GR1772.5   10000  1773.7 10006.6  1775.1 10023.8  1777.1 10039.3    1778   10057
GR1778.8   10067    1784 10073.4  1785.2 10077.1  1785.2 10111.8  1786.6 10157.6
GR1787.2 10200.9  1789.7 10258.3  1789.6 10302.2  1787.7 10378.7  1787.3 10426.3
GR1785.5 10545.4  1784.3 10604.2  1783.1 10662.6  1781.9   10699  1781.8 10706.3
GR1780.7 10709.9  1780.7 10712.2  1783.4 10731.9  1782.8 10757.3  1783.1 10778.7
GR1785.4 10811.5  1786.8 10870.5  1786.6   10952  1787.5 11033.3  1787.8 11082.5
GR1788.5   11153    1789 11217.6
HD28.023    10.0

X128.091      33  9641.3 10160.5     330     400     360
X3                        9641.3  1811.7 10160.5  1792.1
GR1811.7  9641.3  1782.1  9676.9  1781.9  9726.3  1786.5  9742.3  1786.6  9856.7
GR1786.5  9900.2  1785.1  9967.4  1782.5  9978.8  1780.8   10000  1780.9 10010.4
GR1782.1 10050.9  1781.7 10108.3  1789.6 10121.5  1792.1 10160.5  1792.6 10223.1
GR1792.9 10307.6  1791.1 10457.3  1789.3 10591.5  1787.6 10748.9  1786.6 10778.3
GR1782.5 10797.4  1782.9 10809.4  1786.5 10850.7  1789.6 10876.8  1792.7 11005.3
GR1793.1 11117.2  1792.3 11229.1  1792.6 11377.9    1792 11520.3  1792.3 11698.5
GR1795.2 11860.8  1796.4 11901.4  1798.4 12045.9
HD28.091    10.0

X128.157      39  9591.2 10055.2     340     370     350
GR  1807  9591.2    1785  9646.4  1784.5  9667.1  1786.5  9689.6  1788.2  9722.3
GR1788.8  9789.6  1790.5  9804.4    1791  9831.6  1791.1  9866.2  1788.7    9893
GR1788.5    9942  1786.6  9970.6  1782.6   10000  1782.8 10043.2    1792 10055.2
GR1792.3   10073  1790.2 10110.2  1790.9 10121.6  1792.5   10139  1793.7 10222.1
GR1795.6   10322  1796.2 10374.2    1794 10485.5  1792.9 10581.9    1792   10712
GR1791.2 10720.5  1790.2 10824.2  1785.6 10837.6  1785.7 10842.6  1787.4 10865.9
GR1792.5 10897.9  1791.3 10939.7  1794.3 11027.4    1796 11060.5  1796.4 11145.9
GR1796.3 11285.8  1796.8 11405.2  1797.9 11552.6    1800 11574.2
HD28.157    10.0

X128.241      36  9639.9 10050.5     400     490     440
GR1808.3  9639.9  1795.4  9692.2  1795.8  9741.5    1795  9757.5  1794.5  9762.7
GR1793.6  9785.6  1793.6  9819.4  1791.7  9830.9  1789.9    9858  1791.1  9876.8
GR1790.7  9926.9    1790   10000  1795.7   10028  1796.6 10050.5  1795.7 10063.2
GR1797.2   10223  1798.6 10301.6  1797.7 10415.7    1797 10531.3  1797.1   10566
GR1794.2 10615.4  1791.9 10624.7  1794.1   10652  1793.8 10662.7  1792.1 10675.3
GR1795.8 10702.3  1797.3 10754.1  1801.3 10794.7  1802.6 10837.5  1802.5 10880.1
GR1801.9 10980.9  1803.2 11104.8  1803.7 11135.2    1805 11251.1  1804.9 11386.2
GR1806.9 11429.3
HD28.241    10.0

NC  0.07    0.07   0.036     0.1     0.3
X128.326      22  9817.5 10050.1     440     470     450
GR1822.4  9689.6  1809.8  9817.5  1794.9  9861.7  1792.4  9937.3  1791.3   10000
GR1801.8 10050.1  1801.9 10195.5  1801.4 10252.1  1802.1 10306.4  1799.1 10388.6
GR1799.1 10476.5  1800.3   10599  1799.1 10683.7  1800.9 10731.3  1800.8 10770.4
GR1803.6 10806.2  1803.5 10872.4  1805.2 10955.7  1806.2 11057.2  1807.9 11208.6
GR1810.2 11340.5  1812.8 11379.7
HD28.326    10.0

X1 28.39      28  9863.1 10063.6     350     340     340
GR1821.5  9819.6  1815.7  9863.1  1793.2  9907.7  1793.4  9924.1  1793.9  9961.5
GR1792.8   10000  1800.1 10013.4  1802.7 10063.6  1802.5 10104.8    1805 10139.1
GR  1804 10177.8    1803 10316.5  1802.6 10382.7    1803 10449.1  1803.8 10520.6
GR  1804   10603    1802 10705.5  1802.4 10716.7  1802.8 10767.7  1807.3 10800.6
GR1809.4 10917.5  1809.5 11054.7  1809.2 11066.1  1809.6 11175.1  1810.8 11281.1
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GR1811.5 11284.7    1812 11364.3  1816.4   11470
HD 28.39    10.0

X128.462      22  9871.7 10061.2     380     380     380
GR1827.9  9871.7  1794.9  9909.8  1794.8   10000  1803.6 10034.2  1805.6 10061.2
GR1805.3   10078  1806.6 10175.8  1805.7   10284  1807.2 10463.4  1808.6 10524.9
GR1807.4 10599.5  1805.3 10682.2  1805.1 10732.4  1808.1 10776.4    1809 10847.3
GR1812.2   10922  1812.7 11030.5  1812.5 11215.6  1812.6 11317.2  1814.1 11404.3
GR  1815 11476.1  1819.3 11558.8
HD28.462    10.0

X128.555      25  9919.4 10111.4     490     500     490
GR1835.9  9869.9  1833.2  9919.4  1817.6  9940.2  1800.2  9961.8  1800.1  9983.5
GR1799.4   10000  1799.4 10032.9    1801 10059.2  1809.1 10096.4    1810 10111.4
GR1809.1 10139.6  1811.3 10223.1  1811.4   10283  1810.6 10355.8  1810.2 10399.9
GR1811.2 10470.4    1812 10526.5  1813.1 10579.7    1813 10607.8  1813.2 10653.4
GR1812.6 10691.4  1813.9 10780.8  1816.4 10824.9  1817.2   10871  1818.1 11005.7
HD28.555    10.0

X128.657      31  9933.6   10197     550     540     540
GR1841.5  9910.1  1839.5  9933.6  1801.7  9961.9  1800.5  9986.1  1800.6   10000
GR1802.1 10009.7    1805 10034.1  1806.9 10053.9  1808.6 10069.1  1813.2 10089.5
GR1812.3   10113  1810.2 10124.3  1809.6   10130  1809.6 10142.8  1812.9   10162
GR1814.9   10179  1816.7   10197  1816.8 10224.3  1815.5 10327.9    1814 10385.1
GR1814.4 10514.2  1814.6 10614.1  1816.7 10650.2    1820 10678.3  1822.3 10877.4
GR1821.4 11067.7  1821.7 11188.8  1823.3   11264  1821.4 11476.7  1822.5 11657.4
GR1826.4   11753
HD28.657    10.0

X1 28.75      33  9866.8   10129     500     470     490
GR1844.3  9866.8  1812.6  9915.2  1812.5  9936.1  1809.4    9952  1808.3  9972.2
GR1808.5   10000  1808.9 10033.3  1809.5 10041.9  1811.1 10053.6  1811.1 10066.5
GR  1814 10101.5    1816 10113.1  1819.7   10129  1821.3 10171.9  1820.2 10292.1
GR1820.4 10343.7  1818.3 10481.8  1817.7 10539.4    1818 10623.4  1817.4 10650.9
GR  1818 10735.6  1818.7 10749.8  1825.1 10820.5    1824 10892.7  1824.3 10991.1
GR1823.6 11079.1  1824.2 11186.1  1825.2 11305.7  1823.8 11432.7  1824.2   11468
GR1825.2 11672.9  1825.5 11735.5  1830.5 11821.7
HD 28.75    10.0

X128.847      37  9881.1 10076.9     520     500     510
GR1848.5  9867.2    1847  9881.1  1814.5  9927.3  1813.5  9952.1  1811.9  9978.2
GR  1812   10000  1812.5 10041.6  1821.4 10076.9  1821.2 10110.6  1820.5 10147.8
GR1818.4 10162.1  1820.8 10179.8  1824.9 10200.5  1825.3 10242.3    1825 10284.1
GR1824.4 10343.6  1824.5 10403.2  1823.5 10447.7  1822.7 10492.8  1821.8 10553.5
GR1821.8 10574.2  1822.3 10617.2  1822.8 10650.1  1822.5 10692.5    1820 10726.3
GR1821.3 10757.2  1821.3 10780.5  1822.3   10814  1826.7 10837.2  1828.2 10862.2
GR1827.1 10897.8  1826.9 10969.2    1827   11071  1827.8 11206.2  1826.8 11575.5
GR1827.3 11637.6  1828.8 11709.7
HD28.847    10.0

X128.934      37  9824.7 10054.9     410     470     460
GR  1853  9795.5  1851.1  9824.7  1824.7  9864.6  1823.9  9894.9  1820.4  9914.2
GR1819.2  9923.4  1819.1  9934.8  1816.6  9940.2  1815.9  9967.7  1815.5   10000
GR1817.3 10007.5  1817.6 10022.2  1819.8 10035.2  1826.8 10054.9    1828 10096.7
GR  1827 10161.6  1825.9 10183.8  1826.4 10214.6  1825.4 10239.3  1824.2 10268.1
GR1823.9 10298.7  1824.1 10324.5  1827.5   10353  1828.5 10391.2  1829.3 10425.6
GR  1829 10455.1  1827.8 10502.7  1827.4 10545.1  1827.6 10578.5  1826.1   10687
GR1827.3 10744.9  1828.1 10818.8    1827 10868.7  1826.9   10873  1829.8 10900.6
GR1831.1 11009.4  1831.8 11166.8
HD28.934    10.0

X129.012      26  9922.8 10091.3     400     420     410
GR1853.7  9889.9    1850  9922.8    1819  9955.5  1818.9  9982.8  1818.7   10000
GR1820.6 10031.4  1822.8 10041.2  1822.6 10066.9  1827.5 10091.3  1828.5 10113.2
GR1828.1 10186.8  1828.8 10220.1  1828.6 10250.7  1827.9 10267.4  1828.5 10303.6
GR1829.6   10341  1830.3 10376.4  1830.2 10413.9    1831   10452  1832.7 10517.5
GR1832.8 10558.9  1831.5 10660.3  1831.6 10714.5  1830.7 10788.3  1831.7   10835
GR1838.8 10861.6
HD29.012   10.00

X1 29.13      31  9960.7 10106.7     590     600     595
GR  1855  9960.7  1824.5  9979.7    1821  9987.1  1821.6   10000  1822.1 10015.3
GR1824.1 10027.6  1826.2 10046.3  1827.7 10055.7  1827.9 10091.4  1829.1 10098.6
GR1831.5 10106.7  1834.5 10331.6  1834.2 10356.3  1834.1   10392    1834 10428.2
GR1833.4 10440.7  1835.9 10483.6  1835.1 10502.3  1834.8 10508.1  1836.2 10530.9
GR1838.1 10559.2  1838.9 10574.2  1839.3 10612.5  1838.3 10733.7  1836.4 10808.3
GR1836.4 10832.6  1837.2 10902.5  1836.9 10928.5  1837.6 10946.7  1839.3 10954.1
GR1842.7 10971.2
HD 29.13    10.0

NC  0.07    0.07   0.044     0.1     0.3
X129.258      23  9781.3 10051.4     710     710     705
GR1852.7  9781.3  1834.5  9805.1  1831.9  9824.7  1828.7  9842.8  1831.8  9857.3
GR1832.7  9870.6  1834.1  9915.5  1833.1  9954.2  1831.2   10000  1832.3 10016.4
GR1832.7 10026.1  1844.5 10051.4  1844.3 10107.4  1844.4 10169.9  1844.3 10230.7
GR1843.9 10274.3  1844.5 10318.2  1843.7 10378.2  1843.3 10417.3  1842.7 10451.7
GR1842.2 10494.3    1843 10508.4  1851.4 10543.7
HD29.258    10.0

NC  0.07    0.07    0.05     0.1     0.3
X129.351      39  9684.3 10296.9     500     490     490
GR  1864  9651.1  1858.9  9668.9  1849.7  9684.3  1836.7  9698.1  1839.1  9722.5
GR1838.9  9741.4  1836.7  9747.3  1836.8  9758.1  1838.3  9768.8  1841.6  9795.9
GR1839.9  9818.1  1839.5    9839  1842.7  9861.3  1845.3  9879.5    1839    9898
GR  1841  9912.1  1841.4  9924.3  1842.3  9957.8  1838.9  9979.9  1835.9   10000
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GR1836.7 10027.2    1838   10064  1841.9 10092.9    1842 10150.2  1840.3 10186.7
GR1842.3   10213  1840.9 10230.5  1841.3   10250  1845.9 10277.5  1847.8 10296.9
GR1848.9   10317  1849.3 10342.3  1849.2 10371.3  1848.8 10418.4  1849.3 10471.2
GR1848.5 10503.3  1847.1 10544.6  1847.7   10566  1854.4 10595.3
HD29.351    10.0

X129.387      39    9481 10107.4     190     200     190
GR1854.2    9481  1841.8  9493.6  1841.9  9511.4  1844.7  9527.3  1844.5  9552.5
GR1839.3  9575.8  1839.1  9627.7  1840.2  9645.2  1844.3  9667.5    1845  9682.9
GR1842.2  9722.4  1839.9    9732  1839.7  9749.9  1840.9  9757.7  1847.4  9778.9
GR1847.6  9822.3  1843.7  9845.5    1845  9863.2  1844.6  9906.2  1842.7  9921.9
GR1839.7  9960.2  1838.8  9986.9  1839.8   10000  1839.3   10037  1838.9 10066.4
GR1843.9   10082  1845.2 10107.4  1844.2 10128.4    1845 10146.8  1843.4 10179.3
GR1845.8 10240.2  1845.8 10277.7  1850.7 10302.4  1850.5 10351.2  1850.5 10398.2
GR1850.2 10434.3  1848.9 10467.4  1849.5 10486.8  1857.7 10517.6
HD29.387    10.0

X129.493      60  9336.2 10047.8     610     520     560
GR1855.3  9184.2  1850.5  9195.2  1850.5  9301.4  1850.3  9318.7  1850.7  9336.2
GR1846.3  9357.2  1843.9  9369.9  1843.4    9386  1843.8  9410.6  1845.6  9421.7
GR1845.7    9428    1848  9442.5  1848.1  9450.2  1847.9  9459.5  1847.4  9471.8
GR1846.6  9486.4  1847.6  9503.9  1847.9  9515.6  1848.2  9534.1  1849.3  9543.7
GR1849.5  9563.8  1850.7  9572.1  1850.8  9582.2  1850.6  9618.4  1847.2  9647.1
GR1846.8  9657.9  1846.1  9679.3  1849.6  9696.8  1848.9  9711.8  1848.6    9717
GR1849.3  9732.5  1848.9  9747.1  1846.3  9758.6  1845.5  9765.8  1845.4    9772
GR  1847    9786  1849.1  9807.2  1849.2  9819.2  1847.5  9831.7  1847.3  9838.8
GR1845.8  9868.6  1844.4  9885.7  1847.2  9905.8  1847.6    9907  1847.9  9915.7
GR1847.8  9951.2  1845.4  9989.8  1845.2   10000  1844.8   10018  1845.6 10024.4
GR1850.7 10038.6  1850.8 10047.8  1850.3 10063.5  1850.7 10071.1  1850.9 10089.3
GR1849.2 10099.8  1848.8 10106.4  1849.1 10109.9  1854.8 10142.8  1855.2 10156.3
HD29.493    10.0

X129.538      36  9400.2 10034.4     270     230     240
GR  1860    9071  1852.7  9096.6  1854.5  9109.2  1856.5  9115.6  1855.8  9129.7
GR  1855  9160.4  1856.2  9182.2  1856.6  9231.6  1856.8  9294.3  1855.1  9331.2
GR1853.7  9372.5  1850.6  9376.2  1854.1  9382.6  1854.4  9400.2  1848.9  9419.1
GR1850.1  9441.4  1851.4  9480.9  1851.9    9528  1851.1    9545  1849.7  9586.2
GR1850.4  9625.5  1850.7    9667  1850.1  9703.9  1852.7  9733.9    1851  9774.5
GR1851.2  9838.1  1850.5  9871.5  1850.9  9915.1  1848.7  9948.9  1848.7  9970.4
GR1847.4  9990.7  1845.5   10000  1848.1 10016.1  1854.1 10034.4  1856.5 10071.6
GR1857.7 10085.4
HD29.538   10.00

NC  0.07    0.07   0.044     0.1     0.3
X129.601      31    9679 10060.2     370     330     330
GR1872.9  9099.7  1868.4  9117.8  1856.1  9156.4    1859  9183.7    1860  9210.1
GR1861.3  9257.3  1861.4  9286.8  1859.7  9337.3  1857.8  9385.8  1857.6  9431.3
GR1856.4  9472.7  1856.9  9515.2  1858.9  9628.9  1859.4    9679  1858.5  9695.4
GR1850.7  9710.3  1849.9  9734.3  1851.2  9784.6  1852.1  9797.7  1854.3  9832.4
GR1854.8  9848.1  1853.5  9885.6  1851.5  9929.9  1851.1  9960.4    1851   10000
GR1852.2   10019  1857.7 10035.2    1859 10046.6  1867.1 10060.2  1867.9 10084.7
GR1868.6   10148
HD29.601   10.00

X129.663      35  9803.9 10194.6     330     330     330
X3                        9615.1  1862.3 10201.4  1889.3
GR1874.6    9166  1872.5  9201.1  1863.4  9233.9  1861.7  9249.5  1863.9  9285.2
GR1862.6  9357.9  1861.5  9384.7  1859.9  9415.8    1862  9468.3  1860.7    9538
GR1862.3  9615.1  1862.6  9670.5  1862.5  9803.9  1851.7  9827.7  1850.9  9840.5
GR1850.9  9860.9    1856  9897.3  1855.5  9915.3    1854  9955.8  1853.7   10000
GR1852.9 10025.2  1857.5 10051.5  1856.8   10159  1869.1 10194.6    1867 10357.1
GR1866.3 10470.9  1864.6 10698.7  1863.6 10792.8  1862.8 10916.7  1862.3 11013.8
GR1860.8 11221.1  1861.8 11281.8  1866.3 11330.4  1870.2 11375.2  1875.3   11430
HD29.663   10.00

NC  0.07    0.07    0.04     0.1     0.3
X1 29.71      15    9715   10064     533      73     233
X3                          9715    1890   10064    1890
GR  1872    9609  1871.2    9715    1862    9754    1860    9764    1858    9772
GR  1856    9788  1854.5    9801  1856.1 9833.16  1856.5 9887.97    1856 9908.97
GR  1854 9972.43  1853.9 9998.70    1855 10021.8 1870.95   10052    1872   10118
HD 29.71   10.00

NC  0.07    0.07   0.036     0.1     0.3
X1 29.72      249593.1919956.504     127     127     127
X3                      9593.191    18809956.504    1880
GR  1881  8869.7  1872.2 9215.52  1872.2 9314.09  1873.7 9421.28  1874.5 9524.46
GR  1876 9593.19  1875.4 9595.54  1871.4 9606.06  1864.2 9623.12  1856.19639.302
GR1858.4 9674.94  1858.6 9701.37  1857.5 9732.78    1855 9846.41  1862.8 9873.43
GR1870.3 9887.95  1875.2 9910.84  1875.9 9928.85  1876.1 9944.50  1870.7 10278.1
GR1869.9 10443.2  1873.4 10954.8    1874 11285.2    1875 11456.7
HD 29.72   10.00

NC  0.07    0.07   0.036     0.3     0.5
X1 29.77      30  9764.6 10051.1      50     550     200
X3                          9754  1890.6 10051.1  1872.7
GR  1874    9195    1872    9222    1866    9240  1865.3  9317.8  1864.3  9364.1
GR1863.8    9408    1863    9449  1862.2  9466.8  1863.7  9505.3    1863  9551.4
GR1862.1  9588.5    1862  9603.5  1861.8  9676.4  1863.6    9720  1864.1  9724.1
GR1867.1  9736.3    1870  9745.8  1870.5  9764.6  1866.9  9772.8  1861.7  9782.5
GR1857.2  9792.9  1858.2  9809.5    1859  9826.1  1859.7  9869.9  1857.3 10011.1
GR1858.4 10024.3  1864.1 10033.6  1869.2 10042.5  1872.7 10051.1  1873.3 10073.5
HD 29.77   10.00

NC  0.07    0.07   0.036     0.1     0.3
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X1 29.85      17  9924.1 10043.7     400     400     400
GR1874.2    9386    1872  9406.8    1870  9413.5    1868  9438.9    1868  9504.5
GR  1870  9609.1  1870.4  9646.3    1868  9735.6    1868  9757.6    1866  9924.1
GR  1864  9938.5    1860  9945.1  1857.7 10015.9    1858 10029.3    1872 10043.7
GR  1878 10081.4    1880 10127.5
HD 29.85   10.00

NC  0.06    0.07   0.036     0.1     0.3
X1  30.1      65  9817.8 10037.9    1100    1325    1304
GR  1891  8723.4  1877.9  8748.2  1875.5  8775.4    1876    8780    1878  8810.6
GR1880.5  8835.2  1878.9    8853  1879.6  8871.3  1878.8  8898.7  1879.2  8919.7
GR1880.2  8960.2  1879.7  9014.6  1878.9  9044.7  1879.9  9052.4  1880.3  9099.2
GR1880.3  9155.3  1880.9  9227.8  1876.8  9243.7  1876.3  9255.3  1874.4  9276.4
GR1874.2  9307.4  1872.2  9329.9  1872.1    9342  1873.5  9355.7  1876.3    9390
GR1873.5  9392.9  1871.8    9404  1873.1  9420.7  1874.2  9425.8  1876.8  9428.7
GR1878.7  9441.3  1877.8  9466.4  1877.8  9482.9  1880.2  9496.3  1881.2  9512.7
GR1880.1  9529.5  1878.9  9533.3    1877  9544.7  1877.4  9559.8  1878.1  9578.4
GR1879.3  9589.9  1877.1  9614.6  1874.7  9633.8  1871.3  9643.6  1872.3  9667.4
GR1871.1  9672.6  1870.2  9693.9  1870.5  9717.8  1872.1  9722.8  1873.4  9730.9
GR1874.4  9755.3  1874.7  9768.6  1880.6  9788.6  1881.3  9817.8  1880.6  9848.5
GR1879.2  9860.4  1875.7  9872.6    1875  9880.1    1874  9891.8    1873  9935.6
GR1868.2  9949.8  1867.4   10000  1869.6 10010.8  1895.1 10037.3  1895.1 10037.9
HD 30.10   10.00

NC  0.06    0.07   0.044     0.1     0.3
X1  30.2      54  9900.1 10132.3     535     545     537
GR1897.8  8955.2  1882.4    8990  1880.4  9026.6    1882  9055.2  1883.7  9073.3
GR  1885  9087.5  1885.1    9107  1884.1  9146.3  1881.8  9170.8  1881.9    9184
GR1882.7    9204    1882  9235.3  1882.4  9246.9  1882.3  9262.4  1883.5  9272.2
GR1884.4  9292.3  1883.6  9312.7  1881.6  9337.9  1881.1  9347.9  1882.5    9366
GR1882.6  9381.9  1886.1  9390.1  1885.7  9418.6  1884.4  9457.3    1883    9490
GR1883.8  9504.1  1883.4  9564.4    1882  9590.9  1883.3  9616.7  1883.5  9641.3
GR1879.3  9663.9  1879.5  9669.6  1882.3  9684.6  1882.8  9695.5  1881.9    9707
GR1879.8  9714.1  1879.9  9731.2  1882.8  9741.7    1883  9753.1  1883.3    9796
GR1884.1  9822.3  1883.7    9859  1882.8  9900.1  1876.5  9927.7  1875.8  9939.7
GR  1877  9976.9  1876.1   10000  1876.4 10000.6  1877.9 10021.2  1878.8 10045.5
GR1878.2 10069.8    1876   10086  1875.2 10093.2  1897.9 10132.3
HD  30.2   10.00

X1 30.28      40  9881.7 10033.5     550     430     421
GR1901.6  9132.4  1889.1  9162.5  1889.5  9181.6  1888.4  9200.7  1889.3  9222.8
GR  1890  9264.4  1890.1  9316.4  1890.2  9351.6  1888.4  9388.9    1887  9396.9
GR1886.6  9406.9    1888  9427.9  1888.6  9442.8  1887.8    9470  1889.3  9491.8
GR1890.2  9550.4  1889.5  9595.4  1889.6  9616.6  1887.7  9631.3    1887    9649
GR1889.5  9679.4  1886.6  9694.4  1886.6  9704.9  1889.5  9717.5  1890.4  9732.1
GR  1890  9751.7  1888.7  9775.3    1888    9814  1885.9  9833.6  1885.2  9881.7
GR1884.3  9895.3  1881.8  9908.6  1880.9  9934.5  1879.7  9947.3  1878.3  9978.3
GR1877.8  9989.9  1877.8   10000  1877.1 10008.3  1877.5 10014.5  1894.3 10033.5
HD 30.28   10.00

X1 30.42      43  9957.5 10487.8     500     650     713
GR1906.6  9501.6  1893.1    9533  1893.6  9568.7  1892.9  9613.1  1892.9  9631.9
GR1892.9  9666.7  1894.3  9714.6  1894.8  9733.5  1894.8  9755.5  1894.6  9800.7
GR1895.2  9854.8  1892.9    9868  1893.9  9893.2  1893.6  9900.4  1890.9  9907.3
GR1890.6  9918.4  1895.4  9931.2  1895.6  9957.5  1890.3  9970.3  1887.8  9999.9
GR1888.1   10000  1889.6 10037.1  1890.3 10052.9  1892.7 10080.7  1892.4 10102.6
GR1891.7 10123.6  1891.1 10145.5  1885.8 10159.9    1889 10186.9  1889.8 10200.7
GR1892.1 10211.4  1890.7 10239.2  1888.3 10258.2    1893 10277.2  1892.4 10320.1
GR1889.9 10362.3  1889.7 10390.2  1891.4 10402.9  1890.9 10438.8  1890.9   10443
GR1893.1 10455.4  1900.1 10487.8  1901.5 10552.6
HD 30.42   10.00

X1 30.52      50  9826.1 10401.4     600     500     560
GR1904.7  9283.8  1900.8    9298  1900.7  9317.2  1900.5    9342  1900.8  9401.2
GR1900.4  9431.3  1900.9    9463  1900.8  9498.9  1900.4  9566.3  1899.9  9630.3
GR  1900  9649.8  1900.1  9696.8  1899.9  9721.3  1899.1  9744.6  1899.3  9757.6
GR1899.2    9771  1899.6  9785.1  1900.4  9811.3  1900.9  9826.1    1900  9851.7
GR1898.1  9872.3  1894.7  9876.3  1894.9  9887.7    1895  9902.1  1897.4    9914
GR1898.2  9933.1  1896.5    9965  1893.6  9983.4  1893.8   10000  1893.5 10049.4
GR  1894 10061.8  1894.9 10068.7  1898.8 10095.2  1898.9 10107.9  1898.9 10132.4
GR1898.1 10161.8    1899 10213.6    1899 10221.1  1898.8 10242.8  1897.4 10260.3
GR1896.9 10275.9  1893.8   10291  1894.4 10300.9  1900.1 10323.3  1899.8 10340.6
GR1898.7 10361.4  1896.7 10366.8  1899.3 10383.8  1903.8 10401.4  1904.8 10420.5
HD 30.52   10.00

X1 30.65      39  9909.4 10027.8     700     650     696
GR  1913  9206.9  1910.7  9224.3  1909.7  9241.6  1908.9  9297.7    1908  9329.1
GR1907.1  9386.1  1907.9  9430.3  1908.6  9448.3  1908.9  9465.2  1908.4    9483
GR1908.7    9506    1908  9526.3  1906.8  9563.6  1906.3  9601.3  1905.9  9627.1
GR1905.5  9654.8  1905.5  9691.5  1905.8  9715.1  1906.1  9732.3  1906.2  9743.9
GR1901.9  9771.6  1900.6  9791.3  1901.6  9799.1  1903.2    9813  1904.1  9833.8
GR  1903    9871  1904.2  9891.8  1904.4  9909.4  1902.4  9919.7  1901.8  9933.9
GR1898.6  9943.8    1899  9971.6  1898.3  9988.4  1897.2  9995.5  1897.3   10000
GR1898.2 10019.6  1910.2 10027.8  1911.2 10041.2  1911.2 10070.7
HD 30.65   10.00

NC  0.07    0.07   0.044     0.1     0.3

X1 30.75      31  9857.1 10184.4     475     450     486
X3    10
GR1918.1  9299.3  1915.8  9316.1  1915.2  9339.6  1914.8  9376.8  1914.4  9417.3
GR1914.4    9491  1913.7  9531.6  1909.8  9560.3  1909.6  9621.7  1908.9  9660.3
GR1909.4  9712.4  1909.2  9755.1  1909.1  9793.8  1909.1  9820.7  1909.7  9857.1
GR1909.4  9869.1  1906.2  9885.3  1907.2  9912.3  1906.7    9935  1904.1  9963.4
GR1902.6  9982.7  1902.5  9993.3  1902.4   10000  1903.8 10050.3    1903 10096.8
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GR  1901 10116.3  1903.4 10126.1  1903.2 10142.7  1902.8 10165.8  1915.5 10184.4
GR1916.9 10241.8
HD 30.75   10.00

NC  0.07     0.06   0.044      0.1      0.3
X1 30.85       37  9889.7 10051.3      525      570      569
X3    10
GR1919.8  9554.5  1919.4  9596.5  1918.6  9645.1  1917.4  9696.1  1916.6  9729.2
GR  1916  9804.9  1915.8    9834  1915.8  9835.9  1915.6  9863.9    1915  9889.7
GR1912.1  9901.4  1908.2  9912.4  1909.4  9928.9  1908.5  9950.5  1909.1  9972.9
GR1907.5   10000  1907.9 10018.4  1914.3 10051.3  1914.5 10090.2  1915.2 10129.5
GR1915.3 10148.9  1915.5 10185.9  1914.7 10222.7  1910.5 10246.4  1913.3 10276.3
GR1913.9 10294.3  1914.1 10316.8  1911.5   10327  1910.9   10361  1909.4 10370.8
GR1908.6 10385.6  1910.2 10407.2  1907.9 10436.5  1905.6 10442.7  1905.3 10474.8
GR1907.4 10484.7  1921.7 10503.4
HD 30.85   10.00

X1 30.96       47  9925.5 10145.6      550      570      541
GR  1926  9841.1  1918.3    9870  1918.3  9883.8  1918.1  9925.5  1914.4  9943.8
GR1913.9  9973.8    1913  9986.9  1912.3   10000  1912.5 10026.1  1914.1   10032
GR1913.5 10040.4  1913.3 10048.6  1917.1   10068  1917.3 10108.6  1918.4 10126.3
GR1919.6 10145.6  1919.1 10178.2    1918   10215  1917.6 10251.6  1914.8 10288.4
GR1916.8 10300.7  1917.5 10314.7  1917.7 10337.5  1915.9 10354.8  1913.7 10368.2
GR1915.1   10381    1917 10420.6  1919.4 10463.2  1920.1 10491.4  1920.5 10517.7
GR1920.3 10535.8  1919.1 10566.8  1919.3 10590.8  1917.5 10602.1  1916.8 10612.3
GR1916.6 10626.6    1912 10646.3  1912.4 10653.8  1915.2 10665.1  1916.8 10676.9
GR1917.3 10689.9  1916.6   10727  1916.5 10740.6  1914.6 10749.9  1914.1 10758.8
GR1915.9 10771.1  1924.1 10798.3
HD 30.96   10.00

X1 31.05       49    9886 10109.5      470      460      494
GR  1932  9874.9 1923.33    9886  1918.8  9891.8  1918.9  9913.5  1920.4  9925.9
GR1918.3  9934.2  1917.1  9959.6  1917.8  9981.5  1917.8   10000  1918.1 10017.7
GR1919.2 10031.9  1920.9 10043.6  1920.4 10072.9  1921.7 10087.3  1922.6 10103.6
GR  1923 10109.5  1922.9 10135.9  1921.9 10144.8  1922.2 10184.5  1921.3 10203.3
GR1923.4   10234  1923.4 10256.6  1922.9   10289  1923.9 10317.1  1923.8 10318.2
GR1923.3 10374.4  1922.2 10391.5  1921.5 10427.9  1921.6 10450.6  1924.3 10476.8
GR1924.3 10506.7  1922.6 10573.2  1921.7   10624  1921.8   10643  1920.7 10662.9
GR1920.8 10689.1  1920.3 10706.9  1917.2   10715  1916.9 10722.6  1921.9   10745
GR1921.7 10764.6  1921.3 10790.9    1919 10806.3  1920.1 10836.8    1920 10849.3
GR  1918 10866.4  1917.4 10887.8  1928.6 10913.9  1930.4 10928.2
HD 31.05   10.00

X1 31.14       51  9926.4 10146.3      500      350      467
GR1936.6  9585.1  1932.6  9604.8  1929.8  9617.8    1928  9636.3  1927.7  9669.3
GR1927.8  9692.5  1927.9    9713  1927.5  9756.8  1926.6  9801.2  1926.6    9847
GR1927.5  9879.8  1928.2  9908.3  1928.7  9926.4  1922.6  9939.6  1921.1  9947.4
GR1920.2  9965.8    1919  9973.5  1917.8   10000  1918.4 10010.3  1920.5 10026.5
GR1924.5 10045.6  1925.6 10071.7  1926.9 10108.7  1928.3 10146.3  1928.3 10165.5
GR  1928 10175.7  1926.5 10200.1  1925.2 10211.8  1923.6 10216.9  1923.6 10228.2
GR1922.4 10244.9  1927.1 10260.3    1928 10283.8  1927.9 10333.2  1926.4 10349.7
GR1927.2   10374  1926.2 10391.8  1925.9 10409.7  1924.3 10420.3  1923.7   10437
GR1926.1 10476.4  1925.7 10521.1  1925.7 10538.5    1926 10563.6  1926.4 10576.4
GR1922.6 10583.9  1924.1 10604.4    1924 10631.6  1925.6 10648.6  1931.2 10664.9
GR1939.2 10690.6
HD 31.14   10.00

X1 31.17       39  9852.5 10210.3      130      130      162
X3                        9653.3     1940    10530     1940
GR1936.3  9491.6    1932    9506  1929.3  9521.4  1928.2  9545.1    1928  9562.9
GR1928.1  9579.7  1929.3  9634.1  1929.5  9653.3  1928.9  9726.8    1929  9786.7
GR1929.9  9825.3  1931.1  9852.5  1922.6  9871.9  1922.6  9888.2  1920.8  9897.9
GR1921.3    9911  1924.7  9918.2  1924.7  9936.1  1923.2  9965.1  1921.7   10000
GR1921.7 10001.5  1923.1 10054.8  1923.8 10062.1  1926.2 10080.5  1926.9 10099.2
GR1927.8 10124.8  1928.2 10182.8  1930.9 10210.3  1928.3 10228.1  1926.1 10247.7
GR1924.7 10279.7  1928.2 10302.1  1928.8 10328.3  1928.5 10367.3    1928 10402.1
GR1926.3 10441.8  1924.6 10469.9  1925.2   10497  1935.7 10536.2
HD 31.17   10.00

X1 31.25       58  9783.9 10041.9      400      400      432
X3                        9750     1940    10480     1940
GR1938.6  9373.1  1936.9  9395.2  1936.4  9406.7    1935  9423.4    1935    9428
GR1933.5  9455.8  1931.6  9505.3  1932.3  9509.8  1932.8  9528.7  1932.9  9546.8
GR1932.5    9565  1931.7  9570.8  1932.8  9591.6  1933.2  9610.1  1934.5  9655.8
GR1934.5  9676.8  1934.9    9701  1934.9  9746.6  1934.1  9783.9    1926  9798.6
GR1925.5    9809  1925.4  9818.8  1928.3  9828.6  1929.5  9837.7  1930.7  9857.7
GR  1931  9867.3  1931.1  9881.1  1928.7  9937.9  1927.2  9978.9    1926  9992.1
GR  1926  9998.1  1926.1   10000  1925.9 10008.2  1927.4 10019.5  1931.4 10031.4
GR1932.1 10041.9    1932 10070.2  1931.1 10095.4    1931   10102  1930.7   10114
GR1928.7 10132.1  1930.9 10149.7  1929.9 10161.2  1931.8 10181.8  1931.8 10190.3
GR1932.1 10215.9  1932.1 10261.6  1931.9 10286.1  1931.3 10318.8  1932.6 10340.5
GR1932.7 10366.6  1931.9 10388.8  1931.8 10413.5  1931.3 10430.7    1929 10443.2
GR1928.6 10452.1  1929.3   10466    1940 10483.8
HD 31.25   10.00

X1 31.34       39  9930.2 10137.5      450      450      474
GR1943.7  9664.3  1943.4  9718.8  1939.1    9793  1937.3  9862.7  1937.1  9930.2
GR1935.5  9935.3  1933.3  9949.9  1931.5   10000  1933.2 10027.2  1934.1 10104.9
GR1933.1 10113.8  1932.9 10116.6  1935.4 10126.5  1936.5 10137.5  1935.1 10146.5
GR1934.7   10157  1932.9   10166  1932.1   10178  1932.9 10184.4  1936.1 10196.8
GR1936.6 10210.6  1936.5 10248.8    1936 10254.7  1935.9 10322.1  1935.1 10332.9
GR1935.1 10365.4  1932.4 10379.2  1931.5 10394.9  1931.9 10412.7  1934.9   10417
GR1935.8 10429.2  1935.2 10471.2  1935.9 10485.5  1935.8 10497.1  1934.5 10509.7
GR1933.7 10532.2  1933.8 10540.5  1934.1 10545.2    1940   10555
HD 31.34   10.00
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X1 31.45      48    9850   10031     590     620     592
GR1951.3  9794.4  1948.9  9827.8  1946.7  9836.9  1944.6    9850  1933.4  9861.9
GR1933.1  9869.7  1933.7  9885.4  1937.6  9905.9  1938.3  9927.1  1936.2  9964.4
GR1935.2  9983.8  1933.6  9993.3  1933.3   10000  1933.3 10008.5  1933.8 10009.4
GR1941.1   10031    1941 10073.8    1941 10110.3  1940.3 10145.4  1939.8 10163.5
GR1939.1 10168.6  1941.7 10186.5  1941.5 10204.8  1939.5 10230.5  1939.5 10250.8
GR1938.2 10270.7  1937.5 10293.2  1938.3 10327.6  1938.7 10334.1  1942.7 10346.9
GR1942.5 10385.9  1941.7 10399.4  1937.4   10439  1939.3 10462.8  1941.9 10480.5
GR1941.8 10521.6    1942 10548.4    1942 10567.9  1942.1 10608.9  1942.4   10642
GR1945.4 10694.7  1945.2 10736.6  1944.2 10772.4  1943.2 10798.3    1944 10813.1
GR1944.1 10862.6  1944.8 10879.9  1949.7 10899.7
HD 31.45   10.00

X1 31.54      44    9916 10182.8     475     475     484
GR1953.1  9903.1 1946.65    9916  1940.2  9928.9  1940.1  9945.4  1940.2  9977.3
GR1940.3   10000  1941.1 10041.5  1940.6 10050.6  1940.7 10073.6    1942   10094
GR1941.9 10112.1  1942.1 10138.9  1942.2 10155.4  1944.3 10165.5  1946.3 10182.8
GR1945.8 10201.5  1946.2 10229.8  1946.9 10266.6  1946.7 10296.7  1944.2 10320.8
GR  1945 10335.4  1944.8 10361.1  1943.4 10368.2  1941.6   10400  1940.6 10407.2
GR1940.7 10429.9  1941.7   10439  1941.5 10456.4    1945   10470  1946.2 10481.4
GR  1946 10490.5  1943.2 10514.6  1941.4 10538.9    1948   10556  1948.9 10565.9
GR1948.3 10611.6  1947.9   10647  1947.6 10681.6  1947.4 10740.1  1947.9 10783.6
GR1948.4   10820  1948.4 10875.2  1951.6 10907.6    1952 10932.1
HD 31.54   10.00

X1 31.63      41  9961.1 10153.9     450     430     453
GR1958.1  9746.7  1949.7  9772.3    1949  9798.9  1948.9  9843.2  1948.3  9868.4
GR1947.5  9884.3  1947.6  9917.9  1946.4  9928.5  1947.3  9961.1  1942.5  9972.7
GR1940.5  9988.2  1940.6   10000  1940.7 10001.6  1940.7 10023.2  1941.7   10037
GR1944.7 10056.6  1945.2 10070.9  1945.1 10102.8  1944.7 10113.1  1946.9 10125.9
GR1948.2 10153.9  1948.6 10190.6  1947.5 10229.8  1947.3 10260.8    1947 10312.4
GR1946.3 10336.4  1947.6 10337.3  1950.5 10361.7  1949.2 10392.2  1948.8 10414.1
GR1946.3 10424.8  1948.2 10444.7  1951.7 10460.1  1952.9 10492.2  1952.8 10511.8
GR1952.1   10540  1952.4   10555  1952.2 10593.1  1952.4 10675.7  1956.7 10701.9
GR1956.6 10708.4
HD 31.63   10.00

NC  0.07    0.07   0.044     0.1     0.3
X1 31.75      36  9797.4 10027.6     680     650     647
GR1968.8    9535    1958  9569.1  1956.1    9580  1955.6  9600.1  1955.1  9620.2
GR1955.2  9640.7  1955.2    9671  1955.2  9699.4    1954  9797.4    1951  9807.2
GR1951.4    9817  1947.9  9830.1  1947.8  9838.9  1947.7  9849.4  1951.2  9874.7
GR1951.4  9893.5  1950.8    9936    1948  9965.9  1946.5  9988.6  1946.9  9994.7
GR1947.2   10000  1951.4   10016    1953 10027.6  1953.5 10055.5    1954 10095.7
GR1957.1 10148.4  1957.3 10176.9  1957.5 10201.8  1957.4 10202.3  1957.5 10265.2
GR1957.8 10341.9  1958.4 10415.1  1959.7 10486.4  1960.5 10533.3  1961.2 10567.4
GR1964.1 10582.5
HD 31.75   10.00

X1 31.82      30  9839.4 10046.1     360     370     361
GR1968.8  9640.6 1959.59    9660  1955.8  9667.9  1954.9  9681.8  1956.6  9690.9
GR1957.2  9720.3  1957.2  9781.8  1957.1    9801  1956.7  9810.2  1963.5  9828.3
GR1963.3  9839.4  1953.4  9861.7  1953.4  9901.8  1953.2  9938.9  1952.7   10000
GR1956.1 10017.6    1957   10035  1959.4 10046.1    1959 10068.7  1961.5 10077.7
GR1960.7 10084.5  1961.3 10108.5  1961.4 10154.5  1961.1 10172.2  1961.9 10255.5
GR1962.5 10327.1  1963.5 10369.1  1964.2 10384.7  1965.9   10402    1967 10410.2
HD 31.82   10.00

X1 31.87      26  9848.6 10017.7     220     260     243
GR1971.3  9626.3  1969.2    9643  1966.3  9648.1  1961.2  9655.8  1960.6  9670.8
GR1960.1  9690.2  1959.1  9693.1  1958.9  9818.6  1966.8  9829.2  1967.4    9837
GR1966.2  9848.6  1957.6  9864.1  1955.4  9879.3  1955.5  9900.2  1953.7  9938.9
GR1953.6  9982.7  1953.8   10000  1953.9 10007.4  1959.6 10017.7  1961.5 10059.8
GR1962.7 10114.9  1963.6 10134.9  1965.1 10168.9  1966.1   10197  1967.7 10206.3
GR1973.5 10227.4
HD 31.87   10.00

NC  0.06    0.07   0.044     0.1     0.3
X1 31.91      32    9933 10050.7     240     210     208
GR  1972  9636.6    1971  9656.6  1963.7  9686.4  1959.7  9704.8  1960.1  9716.5
GR1960.3  9740.5  1959.1  9793.6  1957.7  9812.1    1956  9816.1    1956    9828
GR1959.3  9842.6  1961.4  9856.4  1958.9  9879.9  1959.2  9894.2  1959.2  9914.2
GR1959.7    9933    1959    9940    1956  9949.2  1954.5    9968    1954  9982.5
GR1953.3   10000  1953.4 10025.9  1953.5 10025.9  1961.3 10050.7  1962.7 10078.7
GR1963.8   10106  1964.8   10139    1966 10170.4  1967.8 10188.1  1968.7 10199.5
GR1970.1 10207.3  1973.4 10222.6
HD 31.91   10.00

EJ

T4  Project: Upper Cave Creek Watercourse Master Plan Studies
T5  Client : Flood Control District of Maricopa County (FCDMC)
T6  Date:    July 8, 1999
T7  Firm:    Stantec Consulting, Inc.
T8  ******************************************************
I1            10
I4  SAND       4       1      14       0       0       0       0       0
I5           0.5     0.5    0.25     0.5    0.25       0     1.0
LQ     Q       1    2000   12000   17000   27000   37000   42000
LT    QS       1    3732   38488   45655   63313  135982  155000
LF   VFS  0.0142  0.0142  0.0082  0.0091  0.0097  0.0278  0.0291
LF    FS  0.0280  0.0280  0.0193  0.0186  0.0211  0.0151  0.0161
LF    MS  0.0879  0.0879  0.0638  0.0393  0.0399  0.0539  0.0545
LF    CS  0.2299  0.2299  0.1727  0.1828  0.1697  0.1427  0.1421
```

```
LF   VCS  0.2324  0.2324  0.1905  0.1731  0.1579  0.1549  0.1542
LF   VFG  0.1802  0.1802  0.1732  0.1621  0.1529  0.1512  0.1496
LF    FG  0.1479  0.1479  0.1907  0.1801  0.1710  0.1692  0.1683
LF    MG  0.0787  0.0787  0.1515  0.1642  0.1799  0.1844  0.1823
LF    CG  0.0008  0.0008  0.0300  0.0560  0.0850  0.0928  0.0927
LF   VCG       0       0  0.0001  0.0147  0.0129  0.0078  0.0109
LF    SC       0       0       0       0       0  0.0002  0.0002
LF    LC       0       0       0       0       0       0       0
LF    SB       0       0       0       0       0       0       0
LF    MB       0       0       0       0       0       0       0
PF        29.387     1.0    76.2    50.8      95    38.1      93    25.4      88
PFC 19.1      82    12.7      72   9.525      65    6.35      56    4.75      49
PFC 2.36      38       2      34    1.18      24   0.595      11    0.42       7
PFC0.297       5   0.106       3   0.075     2.6

$HYD
$RATING
RC            18    2500       0       0 1623.90 1627.42 1628.31 1628.75 1629.10
RC       1629.50 1629.80 1630.15 1630.48 1630.70 1630.98 1631.08 1631.18 1631.35
RC       1632.00 1632.35 1632.90 1633.15

*    A  Level output at time step 1 (10.92 hrs)
Q    258
T     68
X         0.0455   0.455
*    A  Level output at time step 2 (1 hr)
Q   1036
W 0.0417
*    A  Level output at time step 3 (0.25 hrs)
Q   1823
W 0.0104
*    A  Level output at time step 4 (0.25 hrs)
Q   2829
W 0.0104
*    A  Level output at time step 5 (0.25 hrs)
Q   3820
W 0.0104
*    A  Level output at time step 6 (0.25 hrs)
Q   5119
W 0.0104
*    A  Level output at time step 7 (0.25 hrs)
Q   9327
W 0.0104
*    A  Level output at time step 8 (0.25 hrs)
Q  19790
W 0.0104
*    A  Level output at time step 9 (0.25 hrs)
Q  32471
W 0.0104
*    A  Level output at time step 10 (0.25 hrs)
Q  39534
W 0.0104
*    A  Level output at time step 11 (0.25 hrs)
Q  41252
W 0.0104
*    A  Level output at time step 12 (0.25 hrs)
Q  40388
W 0.0104
*    A  Level output at time step 13 (0.25 hrs)
Q  38186
W 0.0104
*    A  Level output at time step 14 (0.25 hrs)
Q  35366
W 0.0104
*    A  Level output at time step 15 (0.25 hrs)
Q  32226
W 0.0104
*    A  Level output at time step 16 (0.75 hrs)
Q  26075
R 1633.7
W 0.0312
*    A  Level output at time step 17 (1 hr)
Q  17337
R 1636.1
W 0.0417
*    A  Level output at time step 18 (1 hr)
Q  10616
R 1637.7
W 0.0417
*    A  Level output at time step 19 (2 hrs)
Q   5570
R 1638.9
W 0.0833
*    A  Level output at time step 20 (10 hrs)
Q   1867
R 1640.2
W 0.1701
*    A  Level output at time step 21 (0.0451)
Q    203
R 1640.2
W 0.0019
$VOL
$$END
```

```
*************************************************     ********************************
*  SCOUR AND DEPOSITION IN RIVERS AND RESERVOIRS  *     *  U.S. ARMY CORPS OF ENGINEERS   *
*       Version: 4.1.00 -  OCTOBER 1993           *     *  HYDROLOGIC ENGINEERING CENTER  *
*  INPUT FILE:  CC-F100F.DAT                      *     *  609 SECOND STREET              *
*  OUTPUT FILE: CC-F100F.OUT                      *     *  DAVIS, CALIFORNIA 95616-4687   *
*  RUN DATE: 10 OCT 00    RUN TIME: 07:30:32      *     *  (916) 756-1104                 *
*************************************************     ********************************

                    X     X  XXXXXXX   XXXXX           XXXXX
                    X     X  X        X     X         X     X
                    X     X  X        X               X
                    XXXXXXX  XXXX     X        XXXXX  XXXXXX
                    X     X  X        X               X     X
                    X     X  X        X     X         X     X
                    X     X  XXXXXXX   XXXXX           XXXXX

         ****************************************************************
         *  MAXIMUM LIMITS FOR THIS VERSION ARE:                        *
         *       10  Stream Segments (Main Stem + Tributaries)          *
         *      500  Cross Sections                                     *
         *      200  Elevation/Station Points per Cross Section         *
         *       20  Grain Sizes                                        *
         *       10  Control Points                                     *
         ****************************************************************

T1      Cave Creek and Apache Wash WMP                    FILE:  CC-F100F.DAT
T2      Project No. 28900077 for (Flood Control District of Maricopa County)
T3      This is the 100-Year Future Floodplain Model

N values...  Left   Channel   Right    Contraction    Expansion
           0.0700   0.0440   0.0600       1.1000      0.7000

SECTION NO.    24.525
...Left Encroachment defined at station  9865.000 at elevation  1628.100
...Right Encroachment defined at station 10009.000 at elevation  1628.100
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    24.646
...Left Encroachment defined at station  9430.000 at elevation  1640.000
...Right Encroachment defined at station 11000.000 at elevation  1640.000
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    24.752
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    24.845
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    24.919
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    25.010
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    25.099
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    25.180
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    25.233
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    25.326
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    25.388
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    25.458
...Ineffective Flow Area - Method 1 - Left Overbank  Right Overbank
          Natural Levees at Station       9916.800      10067.100
              Ineffective Elevation       1668.100       1669.100
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    25.519
...Ineffective Flow Area - Method 1 - Left Overbank  Right Overbank
          Natural Levees at Station       9946.000      10101.000
              Ineffective Elevation       1672.400       1672.200
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    25.580
...Ineffective Flow Area - Method 1 - Left Overbank  Right Overbank
          Natural Levees at Station       9974.400      10121.500
              Ineffective Elevation       1674.100       1673.700
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    25.644
...Ineffective Flow Area - Method 1 - Left Overbank  Right Overbank
          Natural Levees at Station       9908.800      10061.500
              Ineffective Elevation       1676.600       1677.300
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    25.699
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.
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SECTION NO.    25.750
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    25.843
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    25.919
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    26.044
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    26.137
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    26.239
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    26.335
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    26.430
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    26.529
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    26.623
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    26.695
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    26.775
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    26.845
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    26.921
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    27.008
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    27.106
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    27.169
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    27.226
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    27.265
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    27.320
...Ineffective Flow Area - Method 1 - Left Overbank  Right Overbank
          Natural Levees at Station       9907.500      10072.300
              Ineffective Elevation       1749.800       1754.900
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    27.366
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    27.417
...Ineffective Flow Area - Method 1 - Left Overbank  Right Overbank
          Natural Levees at Station       9942.800      10200.800
              Ineffective Elevation       1756.800       1759.400
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
           0.0700   0.0360   0.0700       1.1000      0.7000

SECTION NO.    27.502
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    27.604
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    27.693
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    27.797
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    27.913
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
           0.0700   0.0440   0.0700       1.1000      0.7000

SECTION NO.    28.023
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...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    28.091
...Left Encroachment defined at station  9641.300 at elevation  1811.700
...Right Encroachment defined at station 10160.500 at elevation  1792.100
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    28.157
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    28.241
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
           0.0700   0.0360   0.0700       1.1000      0.7000

SECTION NO.    28.326
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    28.390
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    28.462
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    28.555
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    28.657
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    28.750
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    28.847
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    28.934
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    29.012
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    29.130
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
           0.0700   0.0440   0.0700       1.1000      0.7000

SECTION NO.    29.258
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
           0.0700   0.0500   0.0700       1.1000      0.7000

SECTION NO.    29.351
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    29.387
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    29.493
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    29.538
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
           0.0700   0.0440   0.0700       1.1000      0.7000

SECTION NO.    29.601
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    29.663
...Left Encroachment defined at station  9615.100 at elevation  1862.300
...Right Encroachment defined at station 10201.400 at elevation  1889.300
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
           0.0700   0.0400   0.0700       1.1000      0.7000

SECTION NO.    29.710
...Left Encroachment defined at station  9715.000 at elevation  1890.000
...Right Encroachment defined at station 10064.000 at elevation  1890.000
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
           0.0700   0.0360   0.0700       1.1000      0.7000

SECTION NO.    29.720
...Left Encroachment defined at station  9593.191 at elevation  1880.000
...Right Encroachment defined at station  9956.504 at elevation  1880.000
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
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          0.0700   0.0360   0.0700       1.3000     0.5000

SECTION NO.    29.770
...Left Encroachment defined at station  9754.000 at elevation  1890.600
...Right Encroachment defined at station 10051.100 at elevation  1872.700
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
          0.0700   0.0360   0.0700       1.1000     0.7000

SECTION NO.    29.850
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
          0.0600   0.0360   0.0700       1.1000     0.7000

SECTION NO.    30.100
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
          0.0600   0.0440   0.0700       1.1000     0.7000

SECTION NO.    30.200
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    30.280
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    30.420
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    30.520
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    30.650
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
          0.0700   0.0440   0.0700       1.1000     0.7000

SECTION NO.    30.750
...Ineffective Flow Area - Method 1 - Left Overbank  Right Overbank
         Natural Levees at Station       9857.100      10184.400
             Ineffective Elevation       1909.700       1915.500
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
          0.0700   0.0440   0.0600       1.1000     0.7000

SECTION NO.    30.850
...Ineffective Flow Area - Method 1 - Left Overbank  Right Overbank
         Natural Levees at Station       9889.700      10051.300
             Ineffective Elevation       1915.000       1914.300
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    30.960
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    31.050
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    31.140
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    31.170
...Left Encroachment defined at station  9653.300 at elevation  1940.000
...Right Encroachment defined at station 10530.000 at elevation  1940.000
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    31.250
...Left Encroachment defined at station  9750.000 at elevation  1940.000
...Right Encroachment defined at station 10480.000 at elevation  1940.000
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    31.340
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    31.450
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    31.540
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    31.630
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
          0.0700   0.0440   0.0700       1.1000     0.7000

SECTION NO.    31.750
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.    31.820
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.
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SECTION NO.     31.870
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
           0.0600   0.0440   0.0700       1.1000      0.7000

SECTION NO.     31.910
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

NO. OF CROSS SECTIONS IN STREAM SEGMENT= 89
NO. OF INPUT DATA MESSAGES =   0

TOTAL NO. OF CROSS SECTIONS IN THE NETWORK =  89
TOTAL NO. OF STREAM SEGMENTS IN THE NETWORK=   1
END OF GEOMETRIC DATA

==========================================================================================

T4  Project: Upper Cave Creek Watercourse Master Plan Studies
T5  Client : Flood Control District of Maricopa County (FCDMC)
T6  Date:    July 8, 1999
T7  Firm:    Stantec Consulting, Inc.
T8  ******************************************************

        Cave Creek and Apache Wash WMP                    FILE:  CC-F100F.DAT
        Project No. 28900077 for (Flood Control District of Maricopa County)
        This is the 100-Year Future Floodplain Model

- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
SEDIMENT PROPERITES AND PARAMETERS

       SPI     IBG    MNQ     SPGF     ACGR     NFALL    IBSHER
I1     10.      0      1     1.000    32.174      2         1
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 SANDS - BOULDERS ARE PRESENT

       MTC     IASA    LASA     SPGS      GSF      BSAE      PSI     UWDLB
I4      4       1      14      2.650     0.667     0.500    30.000    93.000

USING TRANSPORT CAPACITY RELATIONSHIP #  4, YANG
GRAIN SIZES UTILIZED (mean diameter - mm)
-----------------------------------------------------------------------
    VERY FINE SAND....     0.088  |  MEDIUM GRAVEL.....   11.314
    FINE SAND.........     0.177  |  COARSE GRAVEL.....   22.627
    MEDIUM SAND.......     0.354  |  VERY COARSE GRAVEL   45.255
    COARSE SAND.......     0.707  |  SMALL COBBLES.....   90.510
    VERY COARSE SAND..     1.414  |  LARGE COBBLES.....  181.019
    VERY FINE GRAVEL..     2.828  |  SMALL BOULDERS....  362.039
    FINE GRAVEL.......     5.657  |  MEDIUM BOULDERS...  724.077
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
COEFFICIENTS FOR COMPUTATION SCHEME WERE SPECIFIED
        DBI      DBN      XID      XIN      XIU      UBI      UBN      JSL
I5    0.500    0.500    0.250    0.500    0.250    0.000    1.000      1
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -

SEDIMENT LOAD TABLE FOR STREAM SEGMENT #   1
          LOAD BY GRAIN SIZE CLASS (tons/day)
-----------------------------------------------------------------------------------------------
LQ      Q | 1.00000    | 2000.00    | 12000.0    | 17000.0    | 27000.0    | 37000.0    | 42000.0    |
          ------------ ------------ ------------ ------------ ------------ ------------ ------------
LF    VFS |0.142000E-01| 52.9944    | 315.602    | 415.461    | 614.136    | 3780.30    | 4510.50    |
LF     FS |0.280000E-01| 104.496    | 742.818    | 849.183    | 1335.90    | 2053.33    | 2495.50    |
LF     MS |0.879000E-01| 328.043    | 2455.53    | 1794.24    | 2526.19    | 7329.43    | 8447.50    |
LF     CS |0.229900    | 857.987    | 6646.88    | 8345.73    | 10744.2    | 19404.6    | 22025.5    |
LF    VCS |0.232400    | 867.317    | 7331.96    | 7902.88    | 9997.12    | 21063.6    | 23901.0    |
LF    VFG |0.180200    | 672.506    | 6666.12    | 7400.68    | 9680.56    | 20560.5    | 23188.0    |
LF     FG |0.147900    | 551.963    | 7339.66    | 8222.47    | 10826.5    | 23008.2    | 26086.5    |
LF     MG |0.787000E-01| 293.708    | 5830.93    | 7496.55    | 11390.0    | 25075.1    | 28256.5    |
LF     CG |0.800000E-03| 2.98560    | 1154.64    | 2556.68    | 5381.61    | 12619.1    | 14368.5    |
LF    VCG |0.100000E-19|0.100000E-19| 3.84880    | 671.129    | 816.738    | 1060.66    | 1689.50    |
LF     SC |0.100000E-19|0.100000E-19|0.100000E-19|0.100000E-19|0.100000E-19| 27.1964    | 31.0000    |
LF     LC |0.100000E-19|0.100000E-19|0.100000E-19|0.100000E-19|0.100000E-19|0.100000E-19|0.100000E-19|
LF     SB |0.100000E-19|0.100000E-19|0.100000E-19|0.100000E-19|0.100000E-19|0.100000E-19|0.100000E-19|
LF     MB |0.100000E-19|0.100000E-19|0.100000E-19|0.100000E-19|0.100000E-19|0.100000E-19|0.100000E-19|
          ------------ ------------ ------------ ------------ ------------ ------------ ------------
   TOTAL | 1.00000    | 3732.00    | 38488.0    | 45655.0    | 63313.0    | 135982.    | 155000.    |
-----------------------------------------------------------------------------------------------

REACH GEOMETRY FOR STREAM SEGMENT  1
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  CROSS        REACH    MOVABLE      INITIAL BED-ELEVATIONS        ACCUMULATED CHANNEL DISTANCE
  SECTION      LENGTH     BED    LEFT SIDE  THALWEG  RIGHT SIDE        FROM DOWNSTREAM
    NO.         (ft)     WIDTH      (ft)      (ft)      (ft)          (ft)        (miles)
-----------------------------------------------------------------------------------------
                0.000
   24.525                2933.300  1640.000  1623.900  1639.600        0.000        0.000
              640.000
   24.646                2200.900  1640.000  1626.000  1640.000      640.000        0.121
              560.000
   24.752                1502.000  1642.200  1629.200  1642.100     1200.000        0.227
              490.000
   24.845                1824.200  1648.400  1635.300  1647.400     1690.000        0.320
              390.000
   24.919                2107.700  1652.800  1634.900  1653.600     2080.000        0.394
              480.000
```

25.010		1751.700	1653.400	1640.200	1654.300	2560.000	0.485
	470.000						
25.099		1747.400	1658.000	1646.000	1659.900	3030.000	0.574
	430.000						
25.180		1678.000	1660.400	1647.700	1661.800	3460.000	0.655
	280.000						
25.233		1938.900	1664.200	1647.300	1663.900	3740.000	0.708
	510.000						
25.326		1459.600	1666.500	1653.000	1666.300	4250.000	0.805
	360.000						
25.388		1761.000	1678.800	1656.600	1674.100	4610.000	0.873
	360.000						
25.458		1616.100	1677.100	1660.500	1677.600	4970.000	0.941
	310.000						
25.519		1518.700	1678.000	1661.600	1679.200	5280.000	1.000
	300.000						
25.580		1431.000	1678.000	1665.900	1680.600	5580.000	1.057
	320.000						
25.644		1559.000	1680.000	1669.300	1682.800	5900.000	1.117
	290.000						
25.699		1551.200	1683.700	1669.400	1685.100	6190.000	1.172
	280.000						
25.750		1859.800	1686.200	1671.600	1688.700	6470.000	1.225
	370.000						
25.843		1741.200	1698.300	1673.500	1690.600	6840.000	1.295
	400.000						
25.919		1874.300	1694.200	1678.400	1692.000	7240.000	1.371
	650.000						
26.044		2294.000	1702.900	1684.300	1698.000	7890.000	1.494
	495.000						
26.137		2490.000	1712.900	1685.700	1702.000	8385.000	1.588
	420.000						
26.239		2036.100	1707.800	1692.800	1704.300	8805.000	1.668
	500.000						
26.335		1884.800	1710.700	1695.600	1709.400	9305.000	1.762
	495.000						
26.430		1755.200	1711.800	1697.500	1713.300	9800.000	1.856
	520.000						
26.529		1584.100	1720.000	1702.600	1714.400	10320.000	1.955
	500.000						
26.623		1645.200	1721.700	1703.900	1720.100	10820.000	2.049
	380.000						
26.695		1800.800	1724.900	1709.500	1727.200	11200.000	2.121
	420.000						
26.775		1926.500	1732.600	1712.700	1732.200	11620.000	2.201
	370.000						
26.845		1735.100	1733.100	1717.000	1734.500	11990.000	2.271
	430.000						
26.921		1194.800	1739.400	1720.200	1735.900	12420.000	2.352
	400.000						
27.008		1189.500	1746.200	1723.000	1739.900	12820.000	2.428
	520.000						
27.106		1248.500	1755.700	1725.700	1745.600	13340.000	2.527
	330.000						
27.169		1261.000	1753.500	1732.100	1747.600	13670.000	2.589
	300.000						
27.226		1611.600	1765.000	1734.800	1753.400	13970.000	2.646
	210.000						
27.265		1683.700	1759.400	1735.700	1755.400	14180.000	2.686
	275.000						
27.320		1599.700	1760.800	1740.300	1758.200	14455.000	2.738
	240.000						
27.366		1890.500	1769.800	1742.300	1760.200	14695.000	2.783
	270.000						
27.417		1362.600	1765.100	1744.800	1762.900	14965.000	2.834
	450.000						
27.502		1530.500	1783.800	1748.800	1772.000	15415.000	2.920
	550.000						
27.604		1365.500	1786.600	1754.200	1774.500	15965.000	3.024
	470.000						
27.693		1855.300	1791.700	1756.300	1782.900	16435.000	3.113
	550.000						
27.797		1993.900	1785.600	1760.600	1785.100	16985.000	3.217
	610.000						
27.913		1467.400	1800.800	1763.100	1785.100	17595.000	3.332
	580.000						
28.023		1447.600	1792.600	1772.500	1789.000	18175.000	3.442
	360.000						
28.091		2404.600	1811.700	1780.800	1798.400	18535.000	3.510
	350.000						
28.157		1983.000	1807.000	1782.600	1800.000	18885.000	3.577
	440.000						
28.241		1789.400	1808.300	1789.900	1806.900	19325.000	3.660
	450.000						
28.326		1690.100	1822.400	1791.300	1812.800	19775.000	3.745
	340.000						
28.390		1650.400	1821.500	1792.800	1816.400	20115.000	3.810
	380.000						
28.462		1687.100	1827.900	1794.800	1819.300	20495.000	3.882
	490.000						
28.555		1135.800	1835.900	1799.400	1818.100	20985.000	3.974
	540.000						
28.657		1842.900	1841.500	1800.500	1826.400	21525.000	4.077
	490.000						
28.750		1954.900	1844.300	1808.300	1830.500	22015.000	4.170

	510.000						
28.847		1842.500	1848.500	1811.900	1828.800	22525.000	4.266
	460.000						
28.934		1371.300	1853.000	1815.500	1831.800	22985.000	4.353
	410.000						
29.012		971.700	1853.700	1818.700	1838.800	23395.000	4.431
	595.000						
29.130		1010.500	1855.000	1821.000	1842.700	23990.000	4.544
	705.000						
29.258		762.400	1852.700	1828.700	1851.400	24695.000	4.677
	490.000						
29.351		944.200	1864.000	1835.900	1854.400	25185.000	4.770
	190.000						
29.387		1036.600	1854.200	1838.800	1857.700	25375.000	4.806
	560.000						
29.493		972.100	1855.300	1843.400	1855.200	25935.000	4.912
	240.000						
29.538		1014.400	1860.000	1845.500	1857.700	26175.000	4.957
	330.000						
29.601		1048.300	1872.900	1849.900	1868.600	26505.000	5.020
	330.000						
29.663		2264.000	1874.600	1850.900	1889.300	26835.000	5.082
	233.000						
29.710		509.000	1890.000	1853.900	1890.000	27068.000	5.127
	127.000						
29.720		2587.000	1881.000	1855.000	1880.000	27195.000	5.151
	200.000						
29.770		878.500	1890.600	1857.200	1873.300	27395.000	5.188
	400.000						
29.850		741.500	1874.200	1857.700	1880.000	27795.000	5.264
	1304.000						
30.100		1314.500	1891.000	1867.400	1895.100	29099.000	5.511
	537.000						
30.200		1177.100	1897.800	1875.200	1897.900	29636.000	5.613
	421.000						
30.280		901.100	1901.600	1877.100	1894.300	30057.000	5.693
	713.000						
30.420		1051.000	1906.600	1885.800	1901.500	30770.000	5.828
	560.000						
30.520		1136.700	1904.700	1893.500	1904.800	31330.000	5.934
	696.000						
30.650		863.800	1913.000	1897.200	1911.200	32026.000	6.066
	486.000						
30.750		942.500	1918.100	1901.000	1916.900	32512.000	6.158
	569.000						
30.850		948.900	1919.800	1905.300	1921.700	33081.000	6.265
	541.000						
30.960		957.200	1926.000	1912.000	1924.100	33622.000	6.368
	494.000						
31.050		1053.300	1932.000	1916.900	1930.400	34116.000	6.461
	467.000						
31.140		1105.500	1936.600	1917.800	1939.200	34583.000	6.550
	162.000						
31.170		1044.600	1940.000	1920.800	1940.000	34745.000	6.580
	432.000						
31.250		1110.700	1940.000	1925.400	1940.000	35177.000	6.662
	474.000						
31.340		890.700	1943.700	1931.500	1940.000	35651.000	6.752
	592.000						
31.450		1105.300	1951.300	1933.100	1949.700	36243.000	6.864
	484.000						
31.540		1029.000	1953.100	1940.100	1952.000	36727.000	6.956
	453.000						
31.630		961.700	1958.100	1940.500	1956.600	37180.000	7.042
	647.000						
31.750		1047.500	1968.800	1946.500	1964.100	37827.000	7.164
	361.000						
31.820		769.400	1968.800	1952.700	1967.000	38188.000	7.233
	243.000						
31.870		601.100	1971.300	1953.600	1973.500	38431.000	7.279
	208.000						
31.910		586.000	1972.000	1953.300	1973.400	38639.000	7.318

BED MATERIAL GRADATION

SECNO	SAE	DMAX (ft)	DXPI (ft)	XPI	TOTAL BED	BED MATERIAL FRACTIONS per grain size							
24.525	1.000	0.250	0.250	1.000	1.000	VF SAND	0.008	VF GRVL	0.123	S	COBL	0.022	
						F SAND	0.013	F GRVL	0.148	L	COBL	0.000	
						M SAND	0.043	M GRVL	0.165	S	BLDR	0.000	
						C SAND	0.119	C GRVL	0.132	M	BLDR	0.000	
						VC SAND	0.131	VC GRVL	0.070				
24.646	1.000	0.250	0.250	1.000	1.000	VF SAND	0.008	VF GRVL	0.123	S	COBL	0.022	
						F SAND	0.013	F GRVL	0.148	L	COBL	0.000	
						M SAND	0.043	M GRVL	0.165	S	BLDR	0.000	
						C SAND	0.119	C GRVL	0.132	M	BLDR	0.000	
						VC SAND	0.131	VC GRVL	0.070				
24.752	1.000	0.250	0.250	1.000	1.000	VF SAND	0.008	VF GRVL	0.123	S	COBL	0.022	
						F SAND	0.013	F GRVL	0.148	L	COBL	0.000	
						M SAND	0.043	M GRVL	0.165	S	BLDR	0.000	
						C SAND	0.119	C GRVL	0.132	M	BLDR	0.000	
						VC SAND	0.131	VC GRVL	0.070				

24.845	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			
24.919	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			
25.010	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			
25.099	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			
25.180	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			
25.233	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			
25.326	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			
25.388	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			
25.458	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			
25.519	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			
25.580	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			
25.644	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			
25.699	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			
25.750	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			
25.843	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			
25.919	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000

						VC	SAND	0.131	VC	GRVL	0.070				
26.044	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			
26.137	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			
26.239	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			
26.335	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			
26.430	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			
26.529	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			
26.623	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			
26.695	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			
26.775	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			
26.845	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			
26.921	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			
27.008	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			
27.106	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			
27.169	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			
27.226	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			
27.265	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000

						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			
27.320	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			
27.366	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			
27.417	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			
27.502	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			
27.604	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			
27.693	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			
27.797	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			
27.913	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			
28.023	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			
28.091	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			
28.157	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			
28.241	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			
28.326	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			
28.390	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			
28.462	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			
28.555	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000

						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			
28.657	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			
28.750	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			
28.847	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			
28.934	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			
29.012	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			
29.130	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			
29.248	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			
29.351	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			
29.387	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			
29.493	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			
29.538	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			
29.601	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			
29.663	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			
29.710	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			
29.720	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			
29.770	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022

						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			
29.850	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			
30.100	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			
30.200	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			
30.280	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			
30.420	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			
30.520	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			
30.650	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			
30.750	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			
30.850	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			
30.960	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			
31.050	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			
31.140	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			
31.170	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			
31.250	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			
31.340	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			

31.450	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			
31.540	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			
31.630	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			
31.750	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			
31.820	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			
31.870	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			
31.910	1.000	0.250	0.250	1.000	1.000	VF	SAND	0.008	VF	GRVL	0.123	S	COBL	0.022
						F	SAND	0.013	F	GRVL	0.148	L	COBL	0.000
						M	SAND	0.043	M	GRVL	0.165	S	BLDR	0.000
						C	SAND	0.119	C	GRVL	0.132	M	BLDR	0.000
						VC	SAND	0.131	VC	GRVL	0.070			

BED SEDIMENT CONTROL VOLUMES

STREAM SEGMENT # 1: Cave Creek and Apache Wash WMP FILE: CC-F100F.DAT

SECTION NUMBER	LENGTH (ft)	WIDTH (ft)	DEPTH (ft)	VOLUME (cu.ft)	VOLUME (cu.yd)
24.525	320.000	2689.167	10.000	0.860533E+07	318716.
24.646	600.000	2222.387	10.000	0.133343E+08	493864.
24.752	525.000	1676.369	10.000	0.880094E+07	325961.
24.845	440.000	1806.278	10.000	0.794763E+07	294356.
24.919	435.000	1999.867	10.000	0.869942E+07	322201.
25.010	475.000	1810.949	10.000	0.860201E+07	318593.
25.099	450.000	1737.096	10.000	0.781693E+07	289516.
25.180	355.000	1726.307	10.000	0.612839E+07	226977.
25.233	395.000	1804.936	10.000	0.712950E+07	264055.
25.326	435.000	1594.829	10.000	0.693751E+07	256945.
25.388	360.000	1686.617	10.000	0.607182E+07	224882.
25.458	335.000	1627.030	10.000	0.545055E+07	201872.
25.519	305.000	1520.822	10.000	0.463851E+07	171797.
25.580	310.000	1467.167	10.000	0.454822E+07	168452.
25.644	305.000	1535.381	10.000	0.468291E+07	173441.
25.699	285.000	1603.054	10.000	0.456870E+07	169211.
25.750	325.000	1792.985	10.000	0.582720E+07	215822.
25.843	385.000	1783.244	10.000	0.686549E+07	254277.
25.919	525.000	1944.003	10.000	0.102060E+08	378001.
26.044	572.500	2242.825	10.000	0.128402E+08	475562.
26.137	457.500	2385.207	10.000	0.109123E+08	404160.
26.239	460.000	2077.762	10.000	0.955771E+07	353989.
26.335	497.500	1888.652	10.000	0.939604E+07	348002.
26.430	507.500	1747.049	10.000	0.886627E+07	328380.
26.529	510.000	1623.159	10.000	0.827811E+07	306597.
26.623	440.000	1656.025	10.000	0.728651E+07	269871.
26.695	400.000	1798.161	10.000	0.719264E+07	266394.
26.775	395.000	1874.343	10.000	0.740366E+07	274209.
26.845	400.000	1667.804	10.000	0.667122E+07	247082.
26.921	415.000	1287.253	10.000	0.534210E+07	197856.
27.008	460.000	1201.384	10.000	0.552637E+07	204680.
27.106	425.000	1238.086	10.000	0.526187E+07	194884.
27.169	315.000	1314.468	10.000	0.414058E+07	153355.
27.226	255.000	1552.751	10.000	0.395952E+07	146649.
27.265	242.500	1657.418	10.000	0.401924E+07	148861.
27.320	257.500	1659.824	10.000	0.427405E+07	158298.
27.366	255.000	1751.725	10.000	0.446690E+07	165441.
27.417	360.000	1463.567	10.000	0.526884E+07	195142.
27.502	500.000	1475.065	10.000	0.737533E+07	273160.
27.604	510.000	1470.388	10.000	0.749898E+07	277740.
27.693	510.000	1804.981	10.000	0.920540E+07	340941.
27.797	580.000	1879.706	10.000	0.109023E+08	403789.
27.913	595.000	1554.145	10.000	0.924716E+07	342488.
28.023	470.000	1573.843	10.000	0.739706E+07	273965.
28.091	355.000	2173.577	10.000	0.771620E+07	285785.
28.157	395.000	2009.319	10.000	0.793681E+07	293956.

28.241	445.000	1804.568	10.000	0.803033E+07	297420.
28.326	395.000	1703.259	10.000	0.672787E+07	249180.
28.390	360.000	1663.106	10.000	0.598718E+07	221747.
28.462	435.000	1578.256	10.000	0.686541E+07	254275.
28.555	515.000	1346.794	10.000	0.693599E+07	256888.
28.657	515.000	1737.090	10.000	0.894601E+07	331334.
28.750	500.000	1917.499	10.000	0.958749E+07	355092.
28.847	485.000	1787.714	10.000	0.867041E+07	321126.
28.934	435.000	1391.574	10.000	0.605335E+07	224198.
29.012	502.500	1033.697	10.000	0.519433E+07	192383.
29.130	650.000	959.732	10.000	0.623826E+07	231047.
29.258	597.500	836.038	10.000	0.499533E+07	185012.
29.351	340.000	909.138	10.000	0.309107E+07	114484.
29.387	375.000	1012.744	10.000	0.379779E+07	140659.
29.493	400.000	991.380	10.000	0.396552E+07	146871.
29.538	285.000	1015.005	10.000	0.289276E+07	107139.
29.601	330.000	1245.267	10.000	0.410938E+07	152199.
29.663	281.500	1784.369	10.000	0.502300E+07	186037.
29.710	180.000	1131.982	10.000	0.203757E+07	75465.5
29.720	163.500	1969.665	10.000	0.322040E+07	119274.
29.770	300.000	1037.889	10.000	0.311367E+07	115321.
29.850	852.000	898.384	10.000	0.765423E+07	283490.
30.100	920.500	1165.853	10.000	0.107317E+08	397470.
30.200	479.000	1162.343	10.000	0.556762E+07	206208.
30.280	567.000	966.672	10.000	0.548103E+07	203001.
30.420	636.500	1035.581	10.000	0.659147E+07	244129.
30.520	628.000	1073.555	10.000	0.674193E+07	249701.
30.650	591.000	928.150	10.000	0.548537E+07	203162.
30.750	527.500	931.566	10.000	0.491401E+07	182000.
30.850	555.000	949.155	10.000	0.526781E+07	195104.
30.960	517.500	971.043	10.000	0.502515E+07	186117.
31.050	480.500	1045.289	10.000	0.502261E+07	186023.
31.140	314.500	1087.353	10.000	0.341973E+07	126657.
31.170	297.000	1066.161	10.000	0.316650E+07	117278.
31.250	453.000	1061.828	10.000	0.481008E+07	178151.
31.340	533.000	963.034	10.000	0.513297E+07	190110.
31.450	538.000	1054.503	10.000	0.567323E+07	210120.
31.540	468.500	1031.292	10.000	0.483160E+07	178948.
31.630	550.000	987.760	10.000	0.543268E+07	201210.
31.750	504.000	995.944	10.000	0.501956E+07	185909.
31.820	302.000	802.235	10.000	0.242275E+07	89731.5
31.870	225.500	629.005	10.000	0.141841E+07	52533.6
31.910	104.000	591.033	10.000	614675.	22765.7

NO. OF INPUT DATA MESSAGES= 0
END OF SEDIMENT DATA

==========

$HYD
BEGIN COMPUTATIONS.

$RATING

Downstream Boundary Condition - Rating Curve

Elevation	Stage	Discharge	Elevation	Stage	Discharge
1623.900	1623.900	0.000	1630.700	1630.700	22500.000
1627.420	1627.420	2500.000	1630.980	1630.980	25000.000
1628.310	1628.310	5000.000	1631.080	1631.080	27500.000
1628.750	1628.750	7500.000	1631.180	1631.180	30000.000
1629.100	1629.100	10000.000	1631.350	1631.350	32500.000
1629.500	1629.500	12500.000	1632.000	1632.000	35000.000
1629.800	1629.800	15000.000	1632.350	1632.350	37500.000
1630.150	1630.150	17500.000	1632.900	1632.900	40000.000
1630.480	1630.480	20000.000	1633.150	1633.150	42500.000

==========

TIME STEP # 1
* A Level output at time step 1 (10.92 hrs)
COMPUTING FROM TIME= 0.0000 DAYS TO TIME= 0.4550 DAYS IN 10 COMPUTATION STEPS

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT # 1
Cave Creek and Apache Wash WMP FILE: CC-F100F.DAT
ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT

TIME DAYS	ENTRY POINT	INFLOW	SAND OUTFLOW	TRAP EFF
0.45	31.910	0.09		
TOTAL=	24.525	0.09	0.34	-2.73

==========

TIME STEP # 2
* A Level output at time step 2 (1 hr)

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT # 1
Cave Creek and Apache Wash WMP FILE: CC-F100F.DAT
ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT

TIME DAYS	ENTRY POINT	INFLOW	SAND OUTFLOW	TRAP EFF
0.50	31.910	0.13		
TOTAL=	24.525	0.13	0.47	-2.61

```
*****************************************************

==========================================================================================
TIME STEP #        3
*    A  Level output at time step 3 (0.25 hrs)

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache Wash WMP                    FILE:  CC-F100F.DAT
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME        ENTRY *              SAND              *
    DAYS        POINT *     INFLOW   OUTFLOW  TRAP EFF *
    0.51       31.910 *      0.15                     *
   TOTAL=      24.525 *      0.15      0.52     -2.56 *
*****************************************************

==========================================================================================
TIME STEP #        4
*    A  Level output at time step 4 (0.25 hrs)

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache Wash WMP                    FILE:  CC-F100F.DAT
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME        ENTRY *              SAND              *
    DAYS        POINT *     INFLOW   OUTFLOW  TRAP EFF *
    0.52       31.910 *      0.18                     *
   TOTAL=      24.525 *      0.18      0.60     -2.40 *
*****************************************************

==========================================================================================
TIME STEP #        5
*    A  Level output at time step 5 (0.25 hrs)

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache Wash WMP                    FILE:  CC-F100F.DAT
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME        ENTRY *              SAND              *
    DAYS        POINT *     INFLOW   OUTFLOW  TRAP EFF *
    0.53       31.910 *      0.22                     *
   TOTAL=      24.525 *      0.22      0.76     -2.46 *
*****************************************************

==========================================================================================
TIME STEP #        6
*    A  Level output at time step 6 (0.25 hrs)

         *ERROR 15            10009.0   10009.0

         *ERROR 15            10009.0   10009.0

         *ERROR 15            10009.0   10009.0

         *ERROR 15            10009.0   10009.0

         *ERROR 15            10009.0   10009.0

         *ERROR 15            10009.0   10009.0

         *ERROR 15            10009.0   10009.0

         *ERROR 15            10009.0   10009.0

         *ERROR 15            10009.0   10009.0

         *ERROR 15            10009.0   10009.0

         *ERROR 15            10009.0   10009.0

         *ERROR 15            10009.0   10009.0

         *ERROR 15            10009.0   10009.0

         *ERROR 15            10009.0   10009.0

         *ERROR 15            10009.0   10009.0

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache Wash WMP                    FILE:  CC-F100F.DAT
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME        ENTRY *              SAND              *
    DAYS        POINT *     INFLOW   OUTFLOW  TRAP EFF *
    0.54       31.910 *      0.28                     *
   TOTAL=      24.525 *      0.28      0.90     -2.17 *
*****************************************************

==========================================================================================
TIME STEP #        7
*    A  Level output at time step 7 (0.25 hrs)

         *ERROR 15            10009.0   10009.0

         *ERROR 15            10009.0   10009.0
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         *ERROR 15            10009.0   10009.0

         *ERROR 15            10009.0   10009.0

         *ERROR 15            10009.0   10009.0

         *ERROR 15            10009.0   10009.0

         *ERROR 15            10009.0   10009.0

         *ERROR 15            10009.0   10009.0

         *ERROR 15            10009.0   10009.0

         *ERROR 15            10009.0   10009.0

         *ERROR 15            10009.0   10009.0

         *ERROR 15            10009.0   10009.0

         *ERROR 15            10009.0   10009.0

         *ERROR 15            10009.0   10009.0

         *ERROR 15            10009.0   10009.0

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache Wash WMP                    FILE:  CC-F100F.DAT
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME       ENTRY *              SAND              *
    DAYS       POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.55      31.910 *      0.42                     *
   TOTAL=     24.525 *      0.42      1.41     -2.34 *
*****************************************************

==========================================================================================
TIME STEP #       8
*    A  Level output at time step 8 (0.25 hrs)

         *ERROR 15            10009.0   10009.0

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache Wash WMP                    FILE:  CC-F100F.DAT
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME       ENTRY *              SAND              *
    DAYS       POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.56      31.910 *      0.68                     *
   TOTAL=     24.525 *      0.68      2.75     -3.02 *
*****************************************************

==========================================================================================
TIME STEP #       9
*    A  Level output at time step 9 (0.25 hrs)

         *ERROR 15            10009.0   10009.0

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache Wash WMP                    FILE:  CC-F100F.DAT
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME       ENTRY *              SAND              *
    DAYS       POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.57      31.910 *      1.19                     *
   TOTAL=     24.525 *      1.19      5.29     -3.44 *
*****************************************************

==========================================================================================
TIME STEP #      10
*    A  Level output at time step 10 (0.25 hrs)

         *ERROR 15            10009.0   10009.0

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache Wash WMP                    FILE:  CC-F100F.DAT
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME       ENTRY *              SAND              *
    DAYS       POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.58      31.910 *      1.94                     *
   TOTAL=     24.525 *      1.94      7.42     -2.83 *
*****************************************************

==========================================================================================
TIME STEP #      11
*    A  Level output at time step 11 (0.25 hrs)

         *ERROR 15            10009.0   10009.0

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache Wash WMP                    FILE:  CC-F100F.DAT
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
```

```
    TIME        ENTRY *              SAND              *
    DAYS        POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.59       31.910 *      2.72                     *
   TOTAL=      24.525 *      2.72      9.90     -2.64 *
*****************************************************

==========================================================================================
TIME STEP #       12
*    A  Level output at time step 12 (0.25 hrs)

         *ERROR 15            10009.0   10009.0

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache Wash WMP                    FILE:  CC-F100F.DAT
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME        ENTRY *              SAND              *
    DAYS        POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.60       31.910 *      3.48                     *
   TOTAL=      24.525 *      3.48     12.54     -2.60 *
*****************************************************

==========================================================================================
TIME STEP #       13
*    A  Level output at time step 13 (0.25 hrs)

         *ERROR 15            10009.0   10009.0

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache Wash WMP                    FILE:  CC-F100F.DAT
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME        ENTRY *              SAND              *
    DAYS        POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.61       31.910 *      4.20                     *
   TOTAL=      24.525 *      4.20     15.45     -2.67 *
*****************************************************

==========================================================================================
TIME STEP #       14
*    A  Level output at time step 14 (0.25 hrs)

         *ERROR 15            10009.0   10009.0

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache Wash WMP                    FILE:  CC-F100F.DAT
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME        ENTRY *              SAND              *
    DAYS        POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.62       31.910 *      4.83                     *
   TOTAL=      24.525 *      4.83     18.28     -2.78 *
*****************************************************

==========================================================================================
TIME STEP #       15
*    A  Level output at time step 15 (0.25 hrs)

         *ERROR 15            10009.0   10009.0

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache Wash WMP                    FILE:  CC-F100F.DAT
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME        ENTRY *              SAND              *
    DAYS        POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.63       31.910 *      5.33                     *
   TOTAL=      24.525 *      5.33     21.28     -2.99 *
*****************************************************

==========================================================================================
TIME STEP #       16
*    A  Level output at time step 16 (0.75 hrs)

         *ERROR 15            10009.0   10009.0

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache Wash WMP                    FILE:  CC-F100F.DAT
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME        ENTRY *              SAND              *
    DAYS        POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.66       31.910 *      6.28                     *
   TOTAL=      24.525 *      6.28     23.39     -2.73 *
*****************************************************

==========================================================================================
TIME STEP #       17
*    A  Level output at time step 17 (1 hr)

         *ERROR 15            10009.0   10009.0

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache Wash WMP                    FILE:  CC-F100F.DAT
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
```

```
*************************************************
    TIME       ENTRY *             SAND          *
    DAYS       POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.70      31.910 *      7.23                   *
   TOTAL=     24.525 *      7.23     24.11     -2.33 *
*************************************************

==========================================================================
TIME STEP #      18
*    A  Level output at time step 18 (1 hr)

         *ERROR 15            10009.0   10009.0

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache Wash WMP                    FILE:  CC-F100F.DAT
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*************************************************
    TIME       ENTRY *             SAND          *
    DAYS       POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.75      31.910 *      7.90                   *
   TOTAL=     24.525 *      7.90     24.24     -2.07 *
*************************************************

==========================================================================
TIME STEP #      19
*    A  Level output at time step 19 (2 hrs)

         *ERROR 15            10009.0   10009.0

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache Wash WMP                    FILE:  CC-F100F.DAT
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*************************************************
    TIME       ENTRY *             SAND          *
    DAYS       POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.83      31.910 *      8.47                   *
   TOTAL=     24.525 *      8.47     24.24     -1.86 *
*************************************************

==========================================================================
TIME STEP #      20
*    A  Level output at time step 20 (10 hrs)

         *ERROR 15            10009.0   10009.0

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache Wash WMP                    FILE:  CC-F100F.DAT
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*************************************************
    TIME       ENTRY *             SAND          *
    DAYS       POINT *    INFLOW   OUTFLOW  TRAP EFF *
    1.00      31.910 *      8.76                   *
   TOTAL=     24.525 *      8.76     24.24     -1.77 *
*************************************************

==========================================================================
TIME STEP #      21
*    B  Level output at time step 21 (0.0451)

         *ERROR 15            10009.0   10009.0

- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
Cave Creek and Apache Wash WMP                    FILE:  CC-F100F.DAT
       ACCUMULATED TIME (yrs)....        0.003
       FLOW DURATION (days)......        0.002

UPSTREAM BOUNDARY CONDITIONS
-----------------------------------------------------------------------
Stream Segment # 1      |   DISCHARGE   | SEDIMENT LOAD | TEMPERATURE
Section No.     31.910  |     (cfs)     |  (tons/day)   |   (deg F)
-----------------------------------------------------------------------
                INFLOW  |       203.00  |       313.96  |       68.00

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache Wash WMP                    FILE:  CC-F100F.DAT
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*************************************************
    TIME       ENTRY *             SAND          *
    DAYS       POINT *    INFLOW   OUTFLOW  TRAP EFF *
    1.00      31.910 *      8.76                   *
   TOTAL=     24.525 *      8.76     24.24     -1.77 *
*************************************************

TABLE SB-1:  SEDIMENT LOAD PASSING THE  BOUNDARIES OF STREAM SEGMENT #  1
-----------------------------------------------------------------------------
  SEDIMENT INFLOW at the Upstream Boundary:
      GRAIN SIZE      LOAD (tons/day) |    GRAIN SIZE      LOAD (tons/day)
  ---------------------------------------------------------------------------
    VERY FINE SAND....          4.46  |  MEDIUM GRAVEL.....         24.71
    FINE SAND.........          8.79  |  COARSE GRAVEL.....          0.25
    MEDIUM SAND.......         27.60  |  VERY COARSE GRAVEL          0.00
    COARSE SAND.......         72.18  |  SMALL COBBLES.....          0.00
    VERY COARSE SAND..         72.96  |  LARGE COBBLES.....          0.00
    VERY FINE GRAVEL..         56.57  |  SMALL BOULDERS....          0.00
    FINE GRAVEL.......         46.43  |  MEDIUM BOULDERS...          0.00
```

TOTAL =	313.96

SEDIMENT OUTFLOW from the Downstream Boundary

GRAIN SIZE	LOAD (tons/day)	GRAIN SIZE	LOAD (tons/day)
VERY FINE SAND....	0.00	MEDIUM GRAVEL.....	0.00
FINE SAND.....	0.00	COARSE GRAVEL.....	0.00
MEDIUM SAND.....	0.00	VERY COARSE GRAVEL	0.00
COARSE SAND.....	0.00	SMALL COBBLES.....	0.00
VERY COARSE SAND..	0.00	LARGE COBBLES.....	0.00
VERY FINE GRAVEL..	0.00	SMALL BOULDERS....	0.00
FINE GRAVEL.....	0.00	MEDIUM BOULDERS...	0.00
		TOTAL =	0.00

TABLE SB-2: STATUS OF THE BED PROFILE AT TIME = 1.002 DAYS

SECTION NUMBER	BED CHANGE (ft)	WS ELEV (ft)	THALWEG (ft)	Q (cfs)	TRANSPORT RATE (tons/day) SAND
31.910	3.53	1958.00	1956.83	203.	296.
31.870	-0.91	1953.44	1952.69	203.	199.
31.820	-2.32	1951.65	1950.38	203.	235.
31.750	-0.03	1948.06	1946.47	203.	229.
31.630	-0.01	1942.83	1940.49	203.	213.
31.540	-0.03	1940.74	1940.07	203.	209.
31.450	-0.02	1935.63	1933.08	203.	208.
31.340	-0.04	1932.58	1931.46	203.	226.
31.250	-0.28	1927.03	1925.12	203.	587.
31.170	-0.05	1922.47	1920.75	203.	551.
31.140	-0.01	1920.54	1917.79	203.	537.
31.050	-0.03	1918.23	1916.87	203.	504.
30.960	-0.04	1913.80	1911.96	203.	514.
30.850	-0.03	1909.09	1907.47	203.	512.
30.750	-0.01	1903.40	1900.99	203.	511.
30.650	-0.02	1899.18	1897.18	203.	512.
30.520	-0.18	1894.54	1893.32	203.	871.
30.420	-0.04	1888.21	1885.76	203.	912.
30.280	-0.03	1879.44	1877.07	203.	801.
30.200	-0.06	1877.13	1875.14	203.	855.
30.100	-0.32	1868.20	1867.08	203.	974.
29.850	-0.03	1859.65	1857.67	203.	794.
29.770	-1.30	1857.06	1855.90	203.	458.
29.720	-1.39	1855.86	1853.61	203.	476.
29.710	0.10	1854.97	1854.00	203.	469.
29.663	0.06	1852.77	1850.96	203.	342.
29.601	-0.26	1851.23	1849.64	203.	697.
29.538	-0.12	1847.93	1845.38	203.	621.
29.493	0.03	1845.21	1843.43	203.	585.
29.387	0.00	1839.82	1838.80	203.	519.
29.351	-0.04	1837.65	1835.86	203.	531.
29.258	-0.10	1831.60	1828.60	203.	556.
29.130	-0.30	1822.68	1820.70	203.	1500.
29.012	-0.76	1819.36	1817.94	203.	393.
28.934	-0.78	1815.91	1814.72	203.	722.
28.847	-0.02	1813.25	1811.88	203.	594.
28.750	0.03	1809.20	1808.33	203.	307.
28.657	0.04	1802.90	1800.54	203.	354.
28.555	-0.02	1800.25	1799.38	203.	695.
28.462	0.06	1796.10	1794.86	203.	622.
28.390	0.26	1794.26	1793.06	203.	743.
28.326	-0.33	1793.05	1790.97	203.	545.
28.241	-0.01	1790.82	1789.89	203.	497.
28.157	0.01	1784.34	1782.61	203.	425.
28.091	-0.06	1782.08	1780.74	203.	445.
28.023	-0.11	1774.15	1772.39	203.	518.
27.913	-0.05	1766.23	1763.05	203.	456.
27.797	-0.06	1762.43	1760.54	203.	798.
27.693	-0.40	1758.70	1755.90	203.	1231.
27.604	-0.11	1755.34	1754.09	203.	953.
27.502	-0.29	1750.94	1748.51	203.	1838.
27.417	0.04	1746.00	1744.84	203.	736.
27.366	0.15	1743.58	1742.45	203.	687.
27.320	-0.13	1741.33	1740.17	203.	952.
27.265	-0.14	1737.30	1735.56	203.	591.
27.226	0.01	1736.42	1734.81	203.	612.
27.169	0.04	1733.25	1732.14	203.	934.
27.106	0.01	1729.08	1725.71	203.	1155.
27.008	0.08	1724.74	1723.08	203.	1062.
26.921	0.11	1722.07	1720.31	203.	1379.
26.845	0.07	1718.12	1717.07	203.	1761.
26.775	-0.16	1714.66	1712.54	203.	1489.
26.695	0.00	1710.22	1709.50	203.	1192.
26.623	0.11	1705.75	1704.01	203.	918.
26.529	0.18	1703.89	1702.78	203.	1208.
26.430	0.10	1699.30	1697.60	203.	1388.
26.335	0.10	1697.54	1695.70	203.	1087.
26.239	-0.08	1693.32	1692.72	203.	1036.
26.137	0.03	1688.03	1685.73	203.	902.
26.044	0.02	1686.04	1684.32	203.	1017.
25.919	-0.07	1679.43	1678.33	203.	787.
25.843	0.01	1675.63	1673.51	203.	599.
25.750	0.19	1673.30	1671.79	203.	999.
25.699	0.32	1672.15	1669.72	203.	561.
25.644	0.37	1671.57	1670.17	203.	312.
25.580	-0.13	1670.81	1665.77	203.	274.

25.519	-0.44	1669.80	1667.86	203.	390.
25.458	-0.16	1666.16	1665.34	203.	475.
25.388	0.01	1659.12	1656.61	203.	464.
25.326	-0.09	1654.94	1652.91	203.	386.
25.233	0.01	1650.74	1647.31	203.	344.
25.180	0.03	1649.70	1647.73	203.	585.
25.099	-0.08	1647.51	1645.92	203.	497.
25.010	0.05	1641.21	1640.25	203.	720.
24.919	0.26	1640.21	1635.16	203.	68.
24.845	-0.05	1640.20	1635.25	203.	0.
24.752	0.10	1640.20	1629.30	203.	0.
24.646	0.25	1640.20	1626.25	203.	0.
24.525	0.31	1640.20	1624.21	203.	0.

$VOL

STREAM SEGMENT # 1: Cave Creek and Apache Wash WMP FILE: CC-F100F.DAT

SUMMARY TABLE: MASS AND VOLUME OF SEDIMENT

SECTION	SEDIMENT THROUGH SECTION (tons)				SEDIMENT DEPOSITED IN REACH in cu. yds				
	TOTAL	SAND	SILT	CLAY	TOTAL	CUMULATIVE	SAND	SILT	CLAY
INFLOW	17745.	17745.	0.	0.	14134.				
31.910	10063.	10063.	0.	0.	6118.	6118.	6118.	0.	0.
31.870	15836.	15836.	0.	0.	-4598.	1520.	-4598.	0.	0.
31.820	35293.	35293.	0.	0.	-15497.	-13977.	-15497.	0.	0.
31.750	35091.	35091.	0.	0.	161.	-13816.	161.	0.	0.
31.630	35045.	35045.	0.	0.	37.	-13779.	37.	0.	0.
31.540	35202.	35202.	0.	0.	-125.	-13905.	-125.	0.	0.
31.450	35377.	35377.	0.	0.	-140.	-14044.	-140.	0.	0.
31.340	35823.	35823.	0.	0.	-355.	-14399.	-355.	0.	0.
31.250	38169.	38169.	0.	0.	-1869.	-16268.	-1869.	0.	0.
31.170	38048.	38048.	0.	0.	97.	-16171.	97.	0.	0.
31.140	38071.	38071.	0.	0.	-18.	-16190.	-18.	0.	0.
31.050	38761.	38761.	0.	0.	-550.	-16740.	-550.	0.	0.
30.960	39337.	39337.	0.	0.	-459.	-17198.	-459.	0.	0.
30.850	39413.	39413.	0.	0.	-60.	-17258.	-60.	0.	0.
30.750	39768.	39768.	0.	0.	-283.	-17541.	-283.	0.	0.
30.650	40623.	40623.	0.	0.	-681.	-18223.	-681.	0.	0.
30.520	43615.	43615.	0.	0.	-2383.	-20606.	-2383.	0.	0.
30.420	43813.	43813.	0.	0.	-158.	-20764.	-158.	0.	0.
30.280	43909.	43909.	0.	0.	-76.	-20840.	-76.	0.	0.
30.200	44078.	44078.	0.	0.	-135.	-20975.	-135.	0.	0.
30.100	51202.	51202.	0.	0.	-5674.	-26648.	-5674.	0.	0.
29.850	51916.	51916.	0.	0.	-569.	-27217.	-569.	0.	0.
29.770	58621.	58621.	0.	0.	-5340.	-32557.	-5340.	0.	0.
29.720	61397.	61397.	0.	0.	-2212.	-34769.	-2212.	0.	0.
29.710	61238.	61238.	0.	0.	127.	-34642.	127.	0.	0.
29.663	62059.	62059.	0.	0.	-654.	-35296.	-654.	0.	0.
29.601	63988.	63988.	0.	0.	-1536.	-36832.	-1536.	0.	0.
29.538	64272.	64272.	0.	0.	-227.	-37059.	-227.	0.	0.
29.493	63536.	63536.	0.	0.	586.	-36473.	586.	0.	0.
29.387	62503.	62503.	0.	0.	823.	-35649.	823.	0.	0.
29.351	61569.	61569.	0.	0.	743.	-34906.	743.	0.	0.
29.258	61427.	61427.	0.	0.	113.	-34793.	113.	0.	0.
29.130	62977.	62977.	0.	0.	-1235.	-36028.	-1235.	0.	0.
29.012	69303.	69303.	0.	0.	-5038.	-41066.	-5038.	0.	0.
28.934	79831.	79831.	0.	0.	-8386.	-49452.	-8386.	0.	0.
28.847	79871.	79871.	0.	0.	-32.	-49483.	-32.	0.	0.
28.750	79630.	79630.	0.	0.	192.	-49291.	192.	0.	0.
28.657	79300.	79300.	0.	0.	263.	-49029.	263.	0.	0.
28.555	79548.	79548.	0.	0.	-197.	-49226.	-197.	0.	0.
28.462	80261.	80261.	0.	0.	-568.	-49794.	-568.	0.	0.
28.390	80966.	80966.	0.	0.	-562.	-50356.	-562.	0.	0.
28.326	86203.	86203.	0.	0.	-4171.	-54527.	-4171.	0.	0.
28.241	86441.	86441.	0.	0.	-190.	-54716.	-190.	0.	0.
28.157	86059.	86059.	0.	0.	305.	-54412.	305.	0.	0.
28.091	86008.	86008.	0.	0.	40.	-54371.	40.	0.	0.
28.023	85044.	85044.	0.	0.	768.	-53604.	768.	0.	0.
27.913	84052.	84052.	0.	0.	790.	-52814.	790.	0.	0.
27.797	83895.	83895.	0.	0.	125.	-52688.	125.	0.	0.
27.693	85303.	85303.	0.	0.	-1121.	-53810.	-1121.	0.	0.
27.604	86136.	86136.	0.	0.	-663.	-54473.	-663.	0.	0.
27.502	87432.	87432.	0.	0.	-1033.	-55506.	-1033.	0.	0.
27.417	86523.	86523.	0.	0.	724.	-54782.	724.	0.	0.
27.366	85179.	85179.	0.	0.	1070.	-53712.	1070.	0.	0.
27.320	85229.	85229.	0.	0.	-40.	-53751.	-40.	0.	0.
27.265	85648.	85648.	0.	0.	-334.	-54085.	-334.	0.	0.
27.226	85749.	85749.	0.	0.	-80.	-54165.	-80.	0.	0.
27.169	85349.	85349.	0.	0.	319.	-53847.	319.	0.	0.
27.106	85577.	85577.	0.	0.	-181.	-54028.	-181.	0.	0.
27.008	85027.	85027.	0.	0.	438.	-53590.	438.	0.	0.
26.921	83647.	83647.	0.	0.	1099.	-52491.	1099.	0.	0.
26.845	82759.	82759.	0.	0.	708.	-51783.	708.	0.	0.
26.775	84204.	84204.	0.	0.	-1151.	-52935.	-1151.	0.	0.
26.695	84056.	84056.	0.	0.	118.	-52817.	118.	0.	0.
26.623	83368.	83368.	0.	0.	548.	-52269.	548.	0.	0.
26.529	82396.	82396.	0.	0.	775.	-51494.	775.	0.	0.
26.430	80944.	80944.	0.	0.	1156.	-50338.	1156.	0.	0.
26.335	77305.	77305.	0.	0.	2898.	-47440.	2898.	0.	0.
26.239	77371.	77371.	0.	0.	-53.	-47492.	-53.	0.	0.
26.137	76036.	76036.	0.	0.	1064.	-46429.	1064.	0.	0.

26.044	73869.	73869.	0.	0.	1726.	-44703.	1726.	0.	0.
25.919	74265.	74265.	0.	0.	-316.	-45018.	-316.	0.	0.
25.843	74051.	74051.	0.	0.	170.	-44848.	170.	0.	0.
25.750	71915.	71915.	0.	0.	1702.	-43146.	1702.	0.	0.
25.699	73276.	73276.	0.	0.	-1084.	-44230.	-1084.	0.	0.
25.644	75020.	75020.	0.	0.	-1389.	-45619.	-1389.	0.	0.
25.580	77888.	77888.	0.	0.	-2284.	-47904.	-2284.	0.	0.
25.519	80751.	80751.	0.	0.	-2280.	-50184.	-2280.	0.	0.
25.458	80855.	80855.	0.	0.	-83.	-50267.	-83.	0.	0.
25.388	80626.	80626.	0.	0.	183.	-50084.	183.	0.	0.
25.326	80024.	80024.	0.	0.	479.	-49606.	479.	0.	0.
25.233	77702.	77702.	0.	0.	1850.	-47755.	1850.	0.	0.
25.180	76787.	76787.	0.	0.	729.	-47027.	729.	0.	0.
25.099	77289.	77289.	0.	0.	-400.	-47427.	-400.	0.	0.
25.010	75782.	75782.	0.	0.	1200.	-46227.	1200.	0.	0.
24.919	73540.	73540.	0.	0.	1786.	-44441.	1786.	0.	0.
24.845	76077.	76077.	0.	0.	-2020.	-46461.	-2020.	0.	0.
24.752	71957.	71957.	0.	0.	3281.	-43180.	3281.	0.	0.
24.646	61194.	61194.	0.	0.	8572.	-34607.	8572.	0.	0.
24.525	49098.	49098.	0.	0.	9635.	-24973.	9635.	0.	0.

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$$END

      0   DATA ERRORS DETECTED.

TOTAL NO. OF TIME STEPS READ =        21
TOTAL NO. OF WS PROFILES =            30
ITERATIONS IN EXNER EQ =           26700

COMPUTATIONS COMPLETED
RUN TIME =  0 HOURS,  0 MINUTES &  5.00 SECONDS
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*************************************************     ********************************
*  SCOUR AND DEPOSITION IN RIVERS AND RESERVOIRS  *     *  U.S. ARMY CORPS OF ENGINEERS  *
*       Version: 4.1.00 -  OCTOBER 1993           *     *  HYDROLOGIC ENGINEERING CENTER *
*  INPUT FILE:  AW-E100C.DAT                      *     *  609 SECOND STREET             *
*  OUTPUT FILE: AW-E100C.OUT                      *     *  DAVIS, CALIFORNIA 95616-4687  *
*  RUN DATE: 10 OCT 00    RUN TIME: 07:36:32      *     *  (916) 756-1104                *
*************************************************     ********************************

                    X     X  XXXXXXX   XXXXX           XXXXX
                    X     X  X        X     X         X     X
                    X     X  X        X               X
                    XXXXXXX  XXXX     X        XXXXX  XXXXXX
                    X     X  X        X               X     X
                    X     X  X        X     X         X     X
                    X     X  XXXXXXX   XXXXX           XXXXX

          ****************************************************************
          *  MAXIMUM LIMITS FOR THIS VERSION ARE:                        *
          *       10  Stream Segments (Main Stem + Tributaries)          *
          *      500  Cross Sections                                     *
          *      200  Elevation/Station Points per Cross Section         *
          *       20  Grain Sizes                                        *
          *       10  Control Points                                     *
          ****************************************************************

T1      Cave Creek and Apache WMP
T2      by Stantec:  Proj. No. 82000077                    File: AW-E100C.DAT
T3      for Flood Control District of Maricopa County      Date: 07-28-99   srg

N values...  Left    Channel   Right    Contraction    Expansion
           0.0550   0.0300   0.0550       1.1000      0.7000

SECTION NO.     0.200
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

LOCAL INFLOW POINT  1 occurs upstream from Section No.       0.200

SECTION NO.     0.330
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     0.430
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     0.540
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     0.630
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     0.710
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     0.750
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left    Channel   Right    Contraction    Expansion
           0.0550   0.0300   0.0550       1.3000      0.5000

SECTION NO.     0.840
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     0.990
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left    Channel   Right    Contraction    Expansion
           0.0550   0.0300   0.0550       1.1000      0.7000

SECTION NO.     1.090
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left    Channel   Right    Contraction    Expansion
           0.0550   0.0300   0.0550       1.3000      0.5000

SECTION NO.     1.180
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     1.270
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left    Channel   Right    Contraction    Expansion
           0.0550   0.0300   0.0550       1.1000      0.7000

SECTION NO.     1.370
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     1.470
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     1.560
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     1.600
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     1.660
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...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     1.750
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     1.810
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     1.850
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     1.880
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     2.000
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     2.080
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     2.170
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     2.240
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     2.330
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     2.400
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
           0.0550   0.0300   0.0550       1.3000      0.5000

SECTION NO.     2.470
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
           0.0550   0.0300   0.0550       1.1000      0.7000

SECTION NO.     2.520
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     2.600
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
           0.0550   0.0300   0.0550       1.3000      0.5000

LOCAL INFLOW POINT  2 occurs upstream from Section No.       2.600

SECTION NO.     2.730
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
           0.0550   0.0430   0.0550       1.3000      0.5000

SECTION NO.     2.820
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
           0.0550   0.0360   0.0550       1.1000      0.7000

SECTION NO.     2.870
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
           0.0550   0.0370   0.0550       1.1000      0.7000

SECTION NO.     2.900
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
           0.0550   0.0480   0.0550       1.1000      0.7000

SECTION NO.     2.920
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
           0.0550   0.0490   0.0550       1.1000      0.7000

LOCAL INFLOW POINT  3 occurs upstream from Section No.       2.920

SECTION NO.     2.970
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
           0.0550   0.0300   0.0550       1.3000      0.5000

SECTION NO.     3.070
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
           0.0550   0.0300   0.0550       1.1000      0.7000
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SECTION NO.     3.130
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     3.210
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     3.320
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     3.400
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     3.480
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     3.520
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     3.600
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     3.650
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     3.750
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
           0.0550   0.0300   0.0550       1.3000     0.5000

SECTION NO.     3.780
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
           0.0550   0.0300   0.0550       1.1000     0.7000

LOCAL INFLOW POINT  4 occurs upstream from Section No.       3.780

SECTION NO.     3.860
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     3.960
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
           0.0550   0.0300   0.0550       1.3000     0.5000

SECTION NO.     4.050
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
           0.0550   0.0300   0.0550       1.1000     0.7000

SECTION NO.     4.110
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     4.220
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     4.230
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     4.310
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     4.400
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     4.490
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     4.560
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
           0.0550   0.0300   0.0550       1.3000     0.5000

SECTION NO.     4.570
...Left Encroachment defined at station  9980.000 at elevation  1808.000
...Right Encroachment defined at station 10011.000 at elevation  1808.000
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
           0.0550   0.0300   0.0550       1.1000     0.7000

SECTION NO.     4.580
...Left Encroachment defined at station  9982.000 at elevation  1807.000
...Right Encroachment defined at station 10013.000 at elevation  1807.000
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     4.600
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     4.650
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...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     4.740
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     4.780
...Left Encroachment defined at station  9964.870 at elevation  1818.000
...Right Encroachment defined at station 10211.720 at elevation  1816.000
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     4.820
...Ineffective Flow Area - Method 1 - Left Overbank  Right Overbank
          Natural Levees at Station       9975.000      10009.430
              Ineffective Elevation       1820.000       1820.000
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     4.900
...Left Encroachment defined at station  9940.000 at elevation  1824.000
...Right Encroachment defined at station 10018.000 at elevation  1824.000
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     4.960
...Right Encroachment defined at station 10156.630 at elevation  1826.000
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     5.030
...Right Encroachment defined at station 10133.330 at elevation  1830.000
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     5.090
...Right Encroachment defined at station 10075.000 at elevation  1834.000
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     5.150
...Right Encroachment defined at station 10170.000 at elevation  1836.000
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     5.210
...Right Encroachment defined at station 10135.000 at elevation  1840.000
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
           0.0550   0.0300   0.0550       1.3000     0.5000

SECTION NO.     5.310
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     5.380
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
           0.0550   0.0300   0.0550       1.1000     0.7000

SECTION NO.     5.480
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     5.570
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     5.640
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     5.660
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     5.760
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     5.830
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     5.920
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     6.010
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     6.090
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

LOCAL INFLOW POINT  5 occurs upstream from Section No.       6.090

SECTION NO.     6.160
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     6.250
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     6.320
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     6.430
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     6.500
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...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     6.580
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     6.630
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     6.710
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     6.800
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     6.900
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
           0.0550   0.0300   0.0550       1.3000      0.5000

SECTION NO.     6.980
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
           0.0550   0.0300   0.0550       1.1000      0.7000

SECTION NO.     7.080
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     7.170
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
           0.0550   0.0300   0.0550       1.3000      0.5000

SECTION NO.     7.280
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
           0.0550   0.0300   0.0550       1.1000      0.7000

SECTION NO.     7.360
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     7.460
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     7.550
...DEPTH of the Bed Sediment Control Volume =    0.00 ft.

SECTION NO.     7.650
...DEPTH of the Bed Sediment Control Volume =    0.00 ft.

SECTION NO.     7.740
...DEPTH of the Bed Sediment Control Volume =    0.00 ft.

SECTION NO.     7.840
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     7.890
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     7.980
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     8.020
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

NO. OF CROSS SECTIONS IN STREAM SEGMENT=104
NO. OF INPUT DATA MESSAGES =   0

TOTAL NO. OF CROSS SECTIONS IN THE NETWORK = 104
TOTAL NO. OF STREAM SEGMENTS IN THE NETWORK=   1
END OF GEOMETRIC DATA

==========================================================================================

T4  Project: Upper Cave Creek Watercourse Master Plan Studies
T5  Client : Flood Control District of Maricopa County (FCDMC)
T6  Date:    August 3, 1999
T7  Firm:    Stantec Consulting, Inc.
T8  ******************************************************

        Cave Creek and Apache WMP
        by Stantec:  Proj. No. 82000077                    File: AW-E100C.DAT
        for Flood Control District of Maricopa County      Date: 07-28-99   srg

- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
SEDIMENT PROPERITES AND PARAMETERS

       SPI      IBG     MNQ      SPGF      ACGR      NFALL     IBSHER
I1     10.        0       1     1.000    32.174         2          1
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 SANDS - BOULDERS ARE PRESENT
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	MTC	IASA	LASA	SPGS	GSF	BSAE	PSI	UWDLB
I4	10	1	14	2.650	0.667	0.500	30.000	93.000

USING TRANSPORT CAPACITY RELATIONSHIP # 10, MPM(1948)
GRAIN SIZES UTILIZED (mean diameter - mm)

VERY FINE SAND....	0.088	MEDIUM GRAVEL.....	11.314
FINE SAND.....	0.177	COARSE GRAVEL.....	22.627
MEDIUM SAND.....	0.354	VERY COARSE GRAVEL	45.255
COARSE SAND.....	0.707	SMALL COBBLES.....	90.510
VERY COARSE SAND..	1.414	LARGE COBBLES.....	181.019
VERY FINE GRAVEL..	2.828	SMALL BOULDERS....	362.039
FINE GRAVEL.....	5.657	MEDIUM BOULDERS...	724.077

COEFFICIENTS FOR COMPUTATION SCHEME WERE SPECIFIED

	DBI	DBN	XID	XIN	XIU	UBI	UBN	JSL
I5	0.500	0.500	0.250	0.500	0.250	0.000	1.000	1

SEDIMENT LOAD TABLE FOR STREAM SEGMENT # 1
LOAD BY GRAIN SIZE CLASS (tons/day)

LQ	Q	1.00000	2500.00	5000.00	7500.00
LF	VFS	0.151200E-02	134.810	219.719	311.647
LF	FS	0.311500E-02	277.733	374.054	516.714
LF	MS	0.624400E-02	556.715	757.927	1050.23
LF	CS	0.650900E-02	580.342	789.233	1089.29
LF	VCS	0.718700E-02	640.793	872.869	1203.64
LF	VFG	0.996500E-02	888.479	1207.65	1662.01
LF	FG	0.147040E-01	1311.01	1776.81	2431.56
LF	MG	0.214080E-01	1908.74	2582.91	3486.77
LF	CG	0.262980E-01	2344.73	2406.17	3122.85
LF	VCG	0.217500E-02	193.923	396.465	425.694
LF	SC	0.870000E-03	77.5692	149.945	246.143
LF	LC	0.140000E-04	1.24824	18.2522	12.2916
LF	SB	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19
LF	MB	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19
	TOTAL	0.100001	8916.09	11552.0	15558.8

REACH GEOMETRY FOR STREAM SEGMENT 1

CROSS SECTION NO.	REACH LENGTH (ft)	MOVABLE BED WIDTH	INITIAL BED-ELEVATIONS LEFT SIDE (ft)	THALWEG (ft)	RIGHT SIDE (ft)	ACCUMULATED CHANNEL DISTANCE FROM DOWNSTREAM (ft)	(miles)
	0.000						
0.200		903.650	1660.000	1646.000	1660.000	0.000	0.000
	650.000						
0.330		743.070	1663.000	1652.200	1664.000	650.000	0.123
	500.000						
0.430		890.000	1666.000	1655.000	1666.000	1150.000	0.218
	640.000						
0.540		1014.050	1670.000	1660.000	1670.000	1790.000	0.339
	500.000						
0.630		980.420	1673.000	1664.000	1673.040	2290.000	0.434
	400.000						
0.710		790.870	1676.000	1664.000	1676.000	2690.000	0.509
	200.000						
0.750		1059.940	1676.000	1666.000	1676.000	2890.000	0.547
	440.000						
0.840		735.180	1679.000	1670.000	1680.000	3330.000	0.631
	900.000						
0.990		1897.510	1686.000	1678.000	1685.990	4230.000	0.801
	500.000						
1.090		1732.000	1690.000	1680.000	1690.000	4730.000	0.896
	500.000						
1.180		1063.000	1694.000	1680.000	1693.500	5230.000	0.991
	460.000						
1.270		1127.000	1698.000	1684.000	1698.000	5690.000	1.078
	500.000						
1.370		560.560	1698.000	1688.000	1698.000	6190.000	1.172
	500.000						
1.470		641.430	1702.000	1690.000	1702.000	6690.000	1.267
	500.000						
1.560		664.340	1706.000	1692.000	1706.000	7190.000	1.362
	180.000						
1.600		646.210	1706.000	1692.000	1706.000	7370.000	1.396
	250.000						
1.660		561.750	1708.000	1696.000	1708.000	7620.000	1.443
	500.000						
1.750		552.560	1710.000	1698.000	1710.000	8120.000	1.538
	300.000						
1.810		541.980	1712.000	1700.000	1712.000	8420.000	1.595
	190.000						
1.850		632.870	1712.000	1700.000	1712.000	8610.000	1.631
	200.000						
1.880		712.350	1713.000	1702.100	1713.100	8810.000	1.669
	490.000						
2.000		865.540	1715.900	1708.500	1716.000	9300.000	1.761
	440.000						
2.080		777.980	1718.000	1710.000	1718.000	9740.000	1.845
	520.000						

2.170		658.780	1722.000	1714.000	1722.000	10260.000	1.943
	380.000						
2.240		433.760	1726.000	1714.000	1726.000	10640.000	2.015
	450.000						
2.330		267.000	1730.000	1717.000	1730.000	11090.000	2.100
	360.000						
2.400		253.340	1732.000	1718.000	1732.030	11450.000	2.169
	400.000						
2.470		439.460	1734.000	1720.000	1734.000	11850.000	2.244
	260.000						
2.520		654.550	1736.000	1721.000	1736.000	12110.000	2.294
	430.000						
2.600		712.650	1736.000	1724.000	1736.100	12540.000	2.375
	640.000						
2.730		370.960	1740.000	1728.000	1740.050	13180.000	2.496
	430.000						
2.820		733.000	1744.000	1730.000	1744.000	13610.000	2.578
	260.000						
2.870		1019.000	1746.000	1732.000	1744.000	13870.000	2.627
	200.000						
2.900		1350.000	1746.000	1734.000	1744.000	14070.000	2.665
	155.000						
2.920		1782.000	1748.000	1734.000	1746.000	14225.000	2.694
	270.000						
2.970		1668.000	1748.000	1736.000	1746.000	14495.000	2.745
	550.000						
3.070		555.420	1750.000	1741.000	1750.000	15045.000	2.849
	280.000						
3.130		657.460	1752.000	1742.000	1752.000	15325.000	2.902
	310.000						
3.210		795.100	1754.000	1746.000	1754.000	15635.000	2.961
	520.000						
3.320		1330.580	1758.000	1750.000	1758.000	16155.000	3.060
	470.000						
3.400		1347.000	1762.000	1752.000	1761.000	16625.000	3.149
	400.000						
3.480		994.710	1764.000	1755.000	1764.000	17025.000	3.224
	200.000						
3.520		977.370	1766.000	1756.000	1766.000	17225.000	3.262
	420.000						
3.600		987.500	1770.000	1760.000	1770.000	17645.000	3.342
	280.000						
3.650		1011.570	1771.600	1762.000	1770.000	17925.000	3.395
	500.000						
3.750		1295.000	1776.000	1764.000	1776.000	18425.000	3.490
	170.000						
3.780		990.710	1776.000	1766.000	1775.000	18595.000	3.522
	400.000						
3.860		768.650	1780.000	1770.000	1780.000	18995.000	3.598
	520.000						
3.960		948.840	1784.000	1774.000	1784.000	19515.000	3.696
	500.000						
4.050		360.000	1788.000	1779.000	1786.800	20015.000	3.791
	250.000						
4.110		534.800	1792.000	1782.000	1790.000	20265.000	3.838
	280.000						
4.220		700.000	1796.000	1785.500	1792.400	20545.000	3.891
	150.000						
4.230		611.750	1796.000	1786.000	1794.000	20695.000	3.920
	420.000						
4.310		444.060	1798.000	1788.000	1796.500	21115.000	3.999
	510.000						
4.400		345.000	1802.000	1792.300	1801.000	21625.000	4.096
	450.000						
4.490		518.010	1806.000	1796.000	1804.500	22075.000	4.181
	365.000						
4.560		510.000	1810.000	1799.000	1808.000	22440.000	4.250
	110.000						
4.570		960.000	1810.000	1800.000	1808.000	22550.000	4.271
	105.000						
4.580		815.000	1810.000	1801.300	1808.000	22655.000	4.291
	83.000						
4.600		825.190	1812.000	1802.000	1808.000	22738.000	4.306
	280.000						
4.650		960.000	1815.500	1806.000	1810.000	23018.000	4.359
	500.000						
4.740		1199.860	1818.000	1810.000	1815.000	23518.000	4.454
	200.000						
4.780		896.310	1820.000	1813.000	1818.000	23718.000	4.492
	480.000						
4.820		1085.000	1826.000	1817.100	1824.000	24198.000	4.583
	200.000						
4.900		1020.000	1826.000	1822.000	1828.000	24398.000	4.621
	320.000						
4.960		1073.820	1828.000	1822.000	1830.000	24718.000	4.681
	365.000						
5.030		1235.000	1833.000	1826.000	1832.500	25083.000	4.751
	300.000						
5.090		1300.000	1835.000	1830.000	1836.000	25383.000	4.807
	352.000						
5.150		910.000	1839.000	1830.000	1840.000	25735.000	4.874
	310.000						
5.210		840.000	1842.000	1834.000	1842.000	26045.000	4.933
	500.000						
5.310		1240.000	1847.000	1838.000	1846.000	26545.000	5.027

	375.000						
5.380		645.000	1850.000	1841.000	1850.000	26920.000	5.098
	500.000						
5.480		1326.530	1855.000	1846.000	1856.000	27420.000	5.193
	450.000						
5.570		899.000	1859.000	1850.000	1860.000	27870.000	5.278
	345.000						
5.640		925.000	1862.000	1855.000	1862.500	28215.000	5.344
	440.000						
5.660		1110.140	1864.000	1854.000	1863.000	28655.000	5.427
	540.000						
5.760		504.930	1870.000	1862.000	1870.000	29195.000	5.529
	380.000						
5.830		750.000	1874.000	1865.500	1875.000	29575.000	5.601
	400.000						
5.920		630.370	1877.000	1870.000	1878.000	29975.000	5.677
	490.000						
6.010		830.000	1883.000	1875.500	1886.000	30465.000	5.770
	445.000						
6.090		705.000	1886.000	1879.500	1888.000	30910.000	5.854
	360.000						
6.160		593.670	1892.500	1883.000	1893.080	31270.000	5.922
	460.000						
6.250		657.990	1898.000	1888.000	1898.000	31730.000	6.009
	390.000						
6.320		460.860	1900.000	1890.000	1900.000	32120.000	6.083
	450.000						
6.430		630.000	1906.000	1896.500	1906.000	32570.000	6.169
	345.000						
6.500		550.610	1910.000	1899.000	1910.000	32915.000	6.234
	430.000						
6.580		385.280	1912.000	1902.000	1912.000	33345.000	6.315
	290.000						
6.630		341.580	1916.000	1905.000	1916.000	33635.000	6.370
	390.000						
6.710		255.000	1918.000	1907.500	1918.000	34025.000	6.444
	495.000						
6.800		380.000	1924.000	1914.000	1923.700	34520.000	6.538
	529.000						
6.900		428.100	1930.000	1920.000	1930.000	35049.000	6.638
	437.000						
6.980		377.630	1934.000	1924.000	1934.000	35486.000	6.721
	500.000						
7.080		164.890	1940.000	1929.000	1940.000	35986.000	6.816
	500.000						
7.170		147.990	1944.000	1934.000	1944.000	36486.000	6.910
	554.000						
7.280		337.200	1950.000	1940.800	1950.000	37040.000	7.015
	446.000						
7.360		321.860	1954.000	1944.500	1954.000	37486.000	7.100
	500.000						
7.460		312.350	1960.000	1951.500	1960.000	37986.000	7.194
	500.000						
7.550		415.720	1968.000	1956.700	1968.000	38486.000	7.289
	500.000						
7.650		378.000	1970.000	1961.800	1971.000	38986.000	7.384
	500.000						
7.740		405.000	1978.000	1969.100	1978.000	39486.000	7.478
	500.000						
7.840		474.000	1984.000	1974.400	1983.000	39986.000	7.573
	300.000						
7.890		500.000	1986.000	1977.000	1985.500	40286.000	7.630
	465.000						
7.980		627.000	1992.000	1981.800	1992.000	40751.000	7.718
	235.000						
8.020		515.000	1996.000	1985.100	1996.000	40986.000	7.763

BED MATERIAL GRADATION

SECNO	SAE	DMAX (ft)	DXPI (ft)	XPI	TOTAL BED	BED MATERIAL FRACTIONS per grain size							
0.200	1.000	1.220	1.220	1.000	1.000	VF SAND	0.003	VF GRVL	0.093	S	COBL	0.080
						F SAND	0.008	F GRVL	0.101	L	COBL	0.055
						M SAND	0.038	M GRVL	0.118	S	BLDR	0.025
						C SAND	0.113	C GRVL	0.144	M	BLDR	0.000
						VC SAND	0.094	VC GRVL	0.117			
0.330	1.000	1.220	1.220	1.000	1.000	VF SAND	0.003	VF GRVL	0.093	S	COBL	0.080
						F SAND	0.008	F GRVL	0.101	L	COBL	0.055
						M SAND	0.038	M GRVL	0.118	S	BLDR	0.025
						C SAND	0.113	C GRVL	0.144	M	BLDR	0.000
						VC SAND	0.094	VC GRVL	0.117			
0.430	1.000	1.220	1.220	1.000	1.000	VF SAND	0.003	VF GRVL	0.093	S	COBL	0.080
						F SAND	0.008	F GRVL	0.101	L	COBL	0.055
						M SAND	0.038	M GRVL	0.118	S	BLDR	0.025
						C SAND	0.113	C GRVL	0.144	M	BLDR	0.000
						VC SAND	0.094	VC GRVL	0.117			
0.540	1.000	1.220	1.220	1.000	1.000	VF SAND	0.003	VF GRVL	0.093	S	COBL	0.080
						F SAND	0.008	F GRVL	0.101	L	COBL	0.055
						M SAND	0.038	M GRVL	0.118	S	BLDR	0.025
						C SAND	0.113	C GRVL	0.144	M	BLDR	0.000
						VC SAND	0.094	VC GRVL	0.117			

0.630	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
0.710	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
0.750	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
0.840	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
0.990	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
1.090	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
1.180	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
1.270	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
1.370	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
1.470	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
1.560	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
1.600	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
1.660	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
1.750	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
1.810	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
1.850	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000

						VC	SAND	0.094	VC	GRVL	0.117				
1.880	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
2.000	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
2.080	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
2.170	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
2.240	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
2.330	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
2.400	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
2.470	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
2.520	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
2.600	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
2.730	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
2.820	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
2.870	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
2.900	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
2.920	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
2.970	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025

						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
3.070	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
3.130	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
3.210	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
3.320	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
3.400	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
3.480	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
3.520	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
3.600	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
3.650	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
3.750	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
3.780	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
3.860	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
3.960	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
4.050	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
4.110	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
4.220	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055

						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
4.230	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
4.310	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
4.400	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
4.490	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
4.560	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
4.570	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
4.580	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
4.600	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
4.650	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
4.740	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
4.780	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
4.820	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
4.900	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
4.960	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
5.030	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
5.090	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080

						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
5.150	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
5.210	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
5.310	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
5.380	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
5.480	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
5.570	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
5.640	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
5.660	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
5.760	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
5.830	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
5.920	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
6.010	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
6.090	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
6.160	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
6.250	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			

6.320	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
6.430	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
6.500	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
6.580	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
6.630	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
6.710	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
6.800	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
6.900	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
6.980	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
7.080	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
7.170	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
7.260	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
7.360	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
7.460	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
7.550	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
7.650	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			

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     7.740  1.000  1.220  1.220  1.000  1.000 | VF SAND  0.003 | VF GRVL  0.093 | S  COBL  0.080 |
                                               | F  SAND  0.008 | F  GRVL  0.101 | L  COBL  0.055 |
                                               | M  SAND  0.038 | M  GRVL  0.118 | S  BLDR  0.025 |
                                               | C  SAND  0.113 | C  GRVL  0.144 | M  BLDR  0.000 |
                                               | VC SAND  0.094 | VC GRVL  0.117 |

     7.840  1.000  1.220  1.220  1.000  1.000 | VF SAND  0.003 | VF GRVL  0.093 | S  COBL  0.080 |
                                               | F  SAND  0.008 | F  GRVL  0.101 | L  COBL  0.055 |
                                               | M  SAND  0.038 | M  GRVL  0.118 | S  BLDR  0.025 |
                                               | C  SAND  0.113 | C  GRVL  0.144 | M  BLDR  0.000 |
                                               | VC SAND  0.094 | VC GRVL  0.117 |

     7.890  1.000  1.220  1.220  1.000  1.000 | VF SAND  0.003 | VF GRVL  0.093 | S  COBL  0.080 |
                                               | F  SAND  0.008 | F  GRVL  0.101 | L  COBL  0.055 |
                                               | M  SAND  0.038 | M  GRVL  0.118 | S  BLDR  0.025 |
                                               | C  SAND  0.113 | C  GRVL  0.144 | M  BLDR  0.000 |
                                               | VC SAND  0.094 | VC GRVL  0.117 |

     7.980  1.000  1.220  1.220  1.000  1.000 | VF SAND  0.003 | VF GRVL  0.093 | S  COBL  0.080 |
                                               | F  SAND  0.008 | F  GRVL  0.101 | L  COBL  0.055 |
                                               | M  SAND  0.038 | M  GRVL  0.118 | S  BLDR  0.025 |
                                               | C  SAND  0.113 | C  GRVL  0.144 | M  BLDR  0.000 |
                                               | VC SAND  0.094 | VC GRVL  0.117 |

     8.020  1.000  1.220  1.220  1.000  1.000 | VF SAND  0.003 | VF GRVL  0.093 | S  COBL  0.080 |
                                               | F  SAND  0.008 | F  GRVL  0.101 | L  COBL  0.055 |
                                               | M  SAND  0.038 | M  GRVL  0.118 | S  BLDR  0.025 |
                                               | C  SAND  0.113 | C  GRVL  0.144 | M  BLDR  0.000 |
                                               | VC SAND  0.094 | VC GRVL  0.117 |

..LOCAL INFLOW DATA...
SEDIMENT LOAD TABLE FOR STREAM SEGMENT #   1
                AT LOCAL INFLOW POINT #   1
          LOAD BY GRAIN SIZE CLASS (tons/day)
-----------------------------------
LQL     Q |0.100000     | 1000.00     |
          ------------ ------------
LFL   VFS |0.100000E-01|0.100000E-01|
LFL    FS |0.100000E-01|0.100000E-01|
LFL    MS |0.100000E-01|0.100000E-01|
LFL    CS |0.100000E-01|0.100000E-01|
LFL   VCS |0.100000E-01|0.100000E-01|
LFL   VFG |0.100000E-01|0.100000E-01|
LFL    FG |0.100000E-01|0.100000E-01|
LFL    MG |0.100000E-01|0.100000E-01|
LFL    CG |0.500000E-02|0.500000E-02|
LFL   VCG |0.500000E-02|0.500000E-02|
LFL    SC |0.500000E-02|0.500000E-02|
LFL    LC |0.500000E-02|0.500000E-02|
LFL    SB |0.100000E-19|0.100000E-19|
LFL    MB |0.100000E-19|0.100000E-19|
          ------------ ------------
   TOTAL |0.100000     |0.100000     |
-----------------------------------

..LOCAL INFLOW DATA...
SEDIMENT LOAD TABLE FOR STREAM SEGMENT #   1
                AT LOCAL INFLOW POINT #   2
          LOAD BY GRAIN SIZE CLASS (tons/day)
-------------------------------------------------------------
LQL     Q |0.100000     | 1000.00     | 3000.00     | 5000.00     |
          ------------ ------------ ------------ ------------
LFL   VFS |0.105800E-02| 87.2274     | 205.530     | 262.894     |
LFL    FS |0.443600E-02| 348.910     | 756.503     | 1052.41     |
LFL    MS |0.262670E-01| 2036.95     | 4861.83     | 5471.19     |
LFL    CS |0.147970E-01| 1174.55     | 2852.91     | 3147.22     |
LFL   VCS |0.659800E-02| 546.680     | 1354.24     | 1491.95     |
LFL   VFG |0.778100E-02| 687.121     | 1783.40     | 1956.49     |
LFL    FG |0.149000E-01| 1379.73     | 3940.53     | 4254.21     |
LFL    MG |0.224440E-01| 2291.78     | 7781.87     | 8037.63     |
LFL    CG |0.171800E-02| 2995.22     | 7836.55     | 7998.88     |
LFL   VCG |0.100000E-19| 2166.70     | 4885.21     | 5824.49     |
LFL    SB |0.100000E-19|0.100000E-19| 1453.04     | 2164.81     |
LFL    LC |0.100000E-19|0.100000E-19|0.100000E-19|0.100000E-19|
LFL    SB |0.100000E-19|0.100000E-19|0.100000E-19|0.100000E-19|
LFL    MB |0.100000E-19|0.100000E-19|0.100000E-19|0.100000E-19|
          ------------ ------------ ------------ ------------
   TOTAL |0.999990E-01| 13714.9     | 37711.6     | 41662.2     |
-------------------------------------------------------------

..LOCAL INFLOW DATA...
SEDIMENT LOAD TABLE FOR STREAM SEGMENT #   1
                AT LOCAL INFLOW POINT #   3
          LOAD BY GRAIN SIZE CLASS (tons/day)
-----------------------------------------------------------------------
LQL     Q |0.100000     | 11.0000     | 3300.00     | 6600.00     | 9900.00     |
          ------------ ------------ ------------ ------------ ------------
LFL   VFS |0.125400E-02|0.326040     | 24.4173     | 33.9698     | 42.6855     |
LFL    FS |0.737200E-02| 1.91672     | 136.832     | 193.647     | 243.825     |
LFL    MS |0.302410E-01| 7.86266     | 566.016     | 691.392     | 942.056     |
LFL    CS |0.260280E-01| 6.76728     | 525.659     | 617.407     | 824.994     |
LFL   VCS |0.152710E-01| 3.97046     | 351.096     | 413.780     | 553.618     |
LFL   VFG |0.902700E-02| 2.34702     | 282.023     | 334.421     | 449.491     |
```

LFL	FG	0.942800E-02	2.45128	716.818	833.605	1159.23
LFL	MG	0.137900E-02	0.358540	1213.82	1346.89	1980.48
LFL	CG	0.100000E-19	0.100000E-19	1431.67	3319.93	3906.89
LFL	VCG	0.100000E-19	0.100000E-19	721.654	1810.86	2794.61
LFL	SB	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	36.9941
LFL	LC	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19
LFL	SB	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19
LFL	MB	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19
TOTAL		0.100000	26.0000	5970.00	9595.90	12934.9

..LOCAL INFLOW DATA...
SEDIMENT LOAD TABLE FOR STREAM SEGMENT # 1
AT LOCAL INFLOW POINT # 4
LOAD BY GRAIN SIZE CLASS (tons/day)

LQL	Q	0.100000	1000.00
LFL	VFS	0.100000E-01	0.100000E-01
LFL	FS	0.100000E-01	0.100000E-01
LFL	MS	0.100000E-01	0.100000E-01
LFL	CS	0.100000E-01	0.100000E-01
LFL	VCS	0.100000E-01	0.100000E-01
LFL	VFG	0.100000E-01	0.100000E-01
LFL	FG	0.100000E-01	0.100000E-01
LFL	MG	0.100000E-01	0.100000E-01
LFL	CG	0.500000E-02	0.500000E-02
LFL	VCG	0.500000E-02	0.500000E-02
LFL	SC	0.500000E-02	0.500000E-02
LFL	LC	0.500000E-02	0.500000E-02
LFL	SB	0.100000E-19	0.100000E-19
LFL	MB	0.100000E-19	0.100000E-19
TOTAL		0.100000	0.100000

..LOCAL INFLOW DATA...
SEDIMENT LOAD TABLE FOR STREAM SEGMENT # 1
AT LOCAL INFLOW POINT # 5
LOAD BY GRAIN SIZE CLASS (tons/day)

LQL	Q	0.100000	1000.00
LFL	VFS	0.100000E-01	0.100000E-01
LFL	FS	0.100000E-01	0.100000E-01
LFL	MS	0.100000E-01	0.100000E-01
LFL	CS	0.100000E-01	0.100000E-01
LFL	VCS	0.100000E-01	0.100000E-01
LFL	VFG	0.100000E-01	0.100000E-01
LFL	FG	0.100000E-01	0.100000E-01
LFL	MG	0.100000E-01	0.100000E-01
LFL	CG	0.500000E-02	0.500000E-02
LFL	VCG	0.500000E-02	0.500000E-02
LFL	SC	0.500000E-02	0.500000E-02
LFL	LC	0.500000E-02	0.500000E-02
LFL	SB	0.100000E-19	0.100000E-19
LFL	MB	0.100000E-19	0.100000E-19
TOTAL		0.100000	0.100000

BED SEDIMENT CONTROL VOLUMES

STREAM SEGMENT # 1: Cave Creek and Apache WMP

SECTION NUMBER	LENGTH (ft)	WIDTH (ft)	DEPTH (ft)	VOLUME (cu.ft)	VOLUME (cu.yd)
0.200	325.000	850.123	10.000	0.276290E+07	102330.
0.330	575.000	794.618	10.000	0.456906E+07	169224.
0.430	570.000	891.733	10.000	0.508288E+07	188255.
0.540	570.000	985.919	10.000	0.561974E+07	208139.
0.630	450.000	958.566	10.000	0.431355E+07	159761.
0.710	300.000	862.889	10.000	0.258867E+07	95876.5
0.750	320.000	957.488	10.000	0.306396E+07	113480.
0.840	670.000	1030.949	10.000	0.690736E+07	255828.
0.990	700.000	1628.736	10.000	0.114012E+08	422265.
1.090	500.000	1648.085	10.000	0.824043E+07	305201.
1.180	480.000	1189.368	10.000	0.570897E+07	211443.
1.270	480.000	1018.438	10.000	0.488850E+07	181056.
1.370	500.000	668.445	10.000	0.334223E+07	123786.
1.470	500.000	631.770	10.000	0.315885E+07	116994.
1.560	340.000	657.125	10.000	0.223423E+07	82749.1
1.600	215.000	632.372	10.000	0.135960E+07	50355.5
1.660	375.000	569.092	10.000	0.213410E+07	79040.6
1.750	400.000	553.152	10.000	0.221261E+07	81948.5
1.810	245.000	555.887	10.000	0.136192E+07	50441.6
1.850	195.000	631.696	10.000	0.123181E+07	45622.5
1.880	345.000	740.933	10.000	0.255622E+07	94674.8
2.000	465.000	824.827	10.000	0.383545E+07	142054.
2.080	480.000	769.835	10.000	0.369521E+07	136860.
2.170	450.000	650.068	10.000	0.292530E+07	108345.
2.240	415.000	437.963	10.000	0.181755E+07	67316.5
2.330	405.000	295.858	10.000	0.119822E+07	44378.7
2.400	380.000	288.149	10.000	0.109497E+07	40554.4

2.470	330.000	430.104	10.000	0.141934E+07	52568.3
2.520	345.000	639.603	10.000	0.220663E+07	81727.0
2.600	535.000	636.742	10.000	0.340657E+07	126169.
2.730	535.000	487.583	10.000	0.260857E+07	96613.6
2.820	345.000	693.716	10.000	0.239332E+07	88641.5
2.870	230.000	1013.087	10.000	0.233010E+07	86300.0
2.900	177.500	1350.714	10.000	0.239752E+07	88796.9
2.920	212.500	1705.341	10.000	0.362385E+07	134217.
2.970	410.000	1431.765	10.000	0.587024E+07	217416.
3.070	415.000	812.645	10.000	0.337248E+07	124907.
3.130	295.000	665.425	10.000	0.196300E+07	72703.8
3.210	415.000	889.791	10.000	0.369263E+07	136764.
3.320	495.000	1239.424	10.000	0.613515E+07	227228.
3.400	435.000	1290.052	10.000	0.561173E+07	207842.
3.480	300.000	1071.070	10.000	0.321321E+07	119008.
3.520	310.000	981.522	10.000	0.304272E+07	112693.
3.600	350.000	988.683	10.000	0.346039E+07	128163.
3.650	390.000	1069.252	10.000	0.417008E+07	154447.
3.750	335.000	1198.759	10.000	0.401584E+07	148735.
3.780	285.000	969.017	10.000	0.276170E+07	102285.
3.860	460.000	834.781	10.000	0.383999E+07	142222.
3.960	510.000	822.004	10.000	0.419222E+07	155267.
4.050	375.000	510.276	10.000	0.191353E+07	70871.6
4.110	265.000	536.408	10.000	0.142148E+07	52647.4
4.220	215.000	653.881	10.000	0.140584E+07	52068.3
4.230	285.000	578.304	10.000	0.164817E+07	61043.2
4.310	465.000	451.196	10.000	0.209806E+07	77706.0
4.400	480.000	389.575	10.000	0.186996E+07	69257.7
4.490	407.500	484.972	10.000	0.197626E+07	73194.8
4.560	237.500	546.789	10.000	0.129862E+07	48097.1
4.570	107.500	859.651	10.000	924125.	34226.9
4.580	94.000	843.494	10.000	792885.	29366.1
4.600	181.500	859.075	10.000	0.155922E+07	57748.9
4.650	390.000	995.121	10.000	0.388097E+07	143740.
4.740	350.000	1113.841	10.000	0.389844E+07	144387.
4.780	340.000	970.467	10.000	0.329959E+07	122207.
4.820	340.000	1034.230	10.000	0.351638E+07	130236.
4.900	260.000	1039.373	10.000	0.270237E+07	100088.
4.960	342.500	1094.067	10.000	0.374718E+07	138784.
5.030	332.500	1215.285	10.000	0.404082E+07	149660.
5.090	326.000	1219.847	10.000	0.397670E+07	147285.
5.150	331.000	968.197	10.000	0.320473E+07	118694.
5.210	405.000	931.235	10.000	0.377150E+07	139685.
5.310	437.500	1078.810	10.000	0.471979E+07	174807.
5.380	437.500	859.815	10.000	0.376169E+07	139322.
5.480	475.000	1139.459	10.000	0.541243E+07	200460.
5.570	397.500	983.427	10.000	0.390912E+07	144782.
5.640	392.500	955.782	10.000	0.375144E+07	138942.
5.660	490.000	971.271	10.000	0.475923E+07	176268.
5.760	460.000	657.082	10.000	0.302258E+07	111947.
5.830	390.000	689.753	10.000	0.269004E+07	99631.0
5.920	445.000	684.928	10.000	0.304793E+07	112886.
6.010	467.500	775.296	10.000	0.362451E+07	134241.
6.090	492.500	711.437	10.000	0.286354E+07	106057.
6.160	410.000	621.990	10.000	0.255016E+07	94450.3
6.250	425.000	616.238	10.000	0.261901E+07	97000.4
6.320	420.000	521.572	10.000	0.219060E+07	81133.4
6.430	397.500	586.603	10.000	0.233175E+07	86361.0
6.500	367.500	531.813	10.000	0.206078E+07	76325.1
6.580	360.000	412.326	10.000	0.148437E+07	54976.8
6.630	340.000	331.240	10.000	0.112622E+07	41711.7
6.710	442.500	291.023	10.000	0.128778E+07	47695.4
6.800	512.000	368.141	10.000	0.188488E+07	69810.5
6.900	483.000	411.709	10.000	0.198856E+07	73650.2
6.980	468.500	347.635	10.000	0.162867E+07	60321.2
7.080	500.000	197.530	10.000	987650.	36579.6
7.170	527.000	183.813	10.000	968695.	35877.6
7.280	500.000	299.979	10.000	0.149989E+07	55551.6
7.360	473.000	322.595	10.000	0.152588E+07	56513.9
7.460	500.000	331.163	10.000	0.165582E+07	61326.5
7.550	500.000	392.205	0.000	0.000000	0.000000
7.650	500.000	388.787	0.000	0.000000	0.000000
7.740	500.000	412.000	0.000	0.000000	0.000000
7.840	400.000	462.875	10.000	0.185150E+07	68574.1
7.890	382.500	522.333	10.000	0.199793E+07	73997.2
7.980	350.000	586.345	10.000	0.205221E+07	76007.7
8.020	117.500	552.333	10.000	648992.	24036.7

NO. OF INPUT DATA MESSAGES= 0
END OF SEDIMENT DATA

==========

$HYD
BEGIN COMPUTATIONS.

$RATING

Downstream Boundary Condition - Rating Curve

Elevation	Stage	Discharge	Elevation	Stage	Discharge
1646.000	1646.000	0.000	1657.730	1657.730	12000.000
1650.850	1650.850	2000.000	1658.430	1658.430	14000.000
1652.850	1652.850	4000.000	1658.930	1658.930	16000.000

```
   1654.340    1654.340     6000.000 |   1659.310    1659.310    18000.000
   1655.540    1655.540     8000.000 |   1659.780    1659.780    20000.000
   1657.390    1657.390    10000.000 |
=================================================================================
TIME STEP #        1
*    A  Level output at time step 1 (0.2500 day)
COMPUTING FROM TIME=      0.0000 DAYS TO TIME=      0.2500 DAYS IN     5 COMPUTATION STEPS

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15             9717.0    9716.2

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0
```

```
*ERROR 15             10013.0   10013.0
*ERROR 15             10013.0   10013.0
*ERROR 15             10013.0   10013.0
*ERROR 15             10013.0   10013.0
*ERROR 15             10013.0   10013.0
*ERROR 15             10013.0   10013.0
*ERROR 15             10013.0   10013.0
*ERROR 15             10013.0   10013.0
*ERROR 15             10013.0   10013.0
*ERROR 15             10013.0   10013.0
*ERROR 15             10013.0   10013.0
*ERROR 15             10013.0   10013.0
*ERROR 15             10013.0   10013.0
*ERROR 15             10013.0   10013.0
*ERROR 15             10013.0   10013.0
*ERROR 15             10013.0   10013.0
*ERROR 15             10013.0   10013.0
*ERROR 15             10013.0   10013.0
*ERROR 15             10013.0   10013.0
*ERROR 15             10013.0   10013.0
*ERROR 15             10013.0   10013.0

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME        ENTRY *            SAND              *
    DAYS        POINT *   INFLOW   OUTFLOW  TRAP EFF *
    0.25        8.020 *    0.00                      *
                6.090 *    0.00                      *
                3.780 *    0.00                      *
                2.920 *    0.00                      *
                2.600 *    0.00                      *
                0.200 *    0.00                      *
   TOTAL=       0.200 *    0.00       0.48   -464.17 *
*****************************************************

==========================================================================================
TIME STEP #       2
*    A  Level output at time step 2 (0.0139 day)

*ERROR 15             10013.0   10013.0
*ERROR 15             10013.0   10013.0
*ERROR 15             10013.0   10013.0
*ERROR 15             10013.0   10013.0
*ERROR 15             10013.0   10013.0
*ERROR 15             10013.0   10013.0
*ERROR 15             10013.0   10013.0
*ERROR 15             10013.0   10013.0
*ERROR 15             10013.0   10013.0
*ERROR 15             10013.0   10013.0
*ERROR 15             10013.0   10013.0
*ERROR 15             10013.0   10013.0
*ERROR 15             10013.0   10013.0
*ERROR 15             10013.0   10013.0
*ERROR 15             10013.0   10013.0
*ERROR 15             10013.0   10013.0
*ERROR 15             10013.0   10013.0
```

```
*ERROR 15          10013.0   10013.0
*ERROR 15          10013.0   10013.0
*ERROR 15          10211.7   10211.7
*ERROR 15          10211.7   10211.7
*ERROR 15          10211.7   10211.7
*ERROR 15          10211.7   10211.7
*ERROR 15          10211.7   10211.7
*ERROR 15          10211.7   10211.7
*ERROR 15          10211.7   10211.7
*ERROR 15          10211.7   10211.7
*ERROR 15          10211.7   10211.7
*ERROR 15          10211.7   10211.7
*ERROR 15          10211.7   10211.7
*ERROR 15          10211.7   10211.7
*ERROR 15          10211.7   10211.7
*ERROR 15          10018.0   10018.0
*ERROR 15          10018.0   10018.0
*ERROR 15          10018.0   10018.0
*ERROR 15          10018.0   10018.0
*ERROR 15          10018.0   10018.0
*ERROR 15          10018.0   10018.0
*ERROR 15          10018.0   10018.0
*ERROR 15          10018.0   10018.0
*ERROR 15          10018.0   10018.0
*ERROR 15          10018.0   10018.0
*ERROR 15          10018.0   10018.0
*ERROR 15          10018.0   10018.0
*ERROR 15          10018.0   10018.0
*ERROR 15          10018.0   10018.0
*ERROR 15          10018.0   10018.0
*ERROR 15          10018.0   10018.0
*ERROR 15          10018.0   10018.0
*ERROR 15          10018.0   10018.0
*ERROR 15          10018.0   10018.0
*ERROR 15          10133.3   10133.3
*ERROR 15          10133.3   10133.3
*ERROR 15          10133.3   10133.3
*ERROR 15          10133.3   10133.3
*ERROR 15          10133.3   10133.3
*ERROR 15          10133.3   10133.3
*ERROR 15          10133.3   10133.3
*ERROR 15          10133.3   10133.3
*ERROR 15          10133.3   10133.3
*ERROR 15          10133.3   10133.3
*ERROR 15          10133.3   10133.3
** Q ABOVE TABLE **                                                                    **INLOAD**
**WATER DISCHARGE, WATER-SEDIMENT LOAD TABLE ENDPOINT**        3682.00        1000.00        0.010000

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME        ENTRY *              SAND              *
    DAYS        POINT *     INFLOW   OUTFLOW  TRAP EFF *
    0.26        8.020 *      0.02                      *
                6.090 *      0.00                      *
                3.780 *      0.00                      *
```

```
              2.920 *      0.00                    *
              2.600 *      0.00                    *
              0.200 *      0.00                    *
   TOTAL=     0.200 *      0.02      0.54    -28.10 *
*****************************************************

==========================================================================================
TIME STEP #       3
*    A  Level output at time step 3 (0.0208 day)

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10018.0   10018.0

        *ERROR 15            10018.0   10018.0

        *ERROR 15            10018.0   10018.0

        *ERROR 15            10133.3   10133.3

        *ERROR 15            10133.3   10133.3

        *ERROR 15            10133.3   10133.3

        *ERROR 15            10133.3   10133.3

        *ERROR 15            10133.3   10133.3

        *ERROR 15            10133.3   10133.3

        *ERROR 15            10133.3   10133.3

        *ERROR 15            10133.3   10133.3

        *ERROR 15            10133.3   10133.3
```

```
        *ERROR 15            10133.3   10133.3

        *ERROR 15            10133.3   10133.3

        *ERROR 15            10133.3   10133.3
** Q ABOVE TABLE **                                                                                    **INLOAD**
**WATER DISCHARGE, WATER-SEDIMENT LOAD TABLE ENDPOINT**        1977.00        1000.00       0.010000

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
****************************************************
    TIME        ENTRY *              SAND              *
    DAYS        POINT *     INFLOW   OUTFLOW  TRAP EFF *
    0.28        8.020 *      0.03                     *
                6.090 *      0.00                     *
                3.780 *      0.00                     *
                2.920 *      0.00                     *
                2.600 *      0.00                     *
                0.200 *      0.00                     *
   TOTAL=       0.200 *      0.03       0.66    -18.02 *
****************************************************

==========================================================================================
TIME STEP #       4
*    A  Level output at time step 4 (0.0208 day)

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7
```

*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	9717.0	9716.2
*ERROR 15	10133.3	10133.3
*ERROR 15	10133.3	10133.3
*ERROR 15	10133.3	10133.3
*ERROR 15	10133.3	10133.3
*ERROR 15	9590.6	9515.0
*ERROR 15	10133.3	10133.3
*ERROR 15	9590.6	9515.0
*ERROR 15	10133.3	10133.3
*ERROR 15	9590.6	9515.0
*ERROR 15	10133.3	10133.3
*ERROR 15	10133.3	10133.3
*ERROR 15	10133.3	10133.3
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*ERROR 15	10133.3	10133.3
*ERROR 15	10133.3	10133.3
*ERROR 15	10133.3	10133.3
*ERROR 15	10133.3	10133.3
*ERROR 15	10133.3	10133.3
*ERROR 15	10133.3	10133.3
*ERROR 15	10133.3	10133.3
*ERROR 15	10133.3	10133.3
*ERROR 15	10133.3	10133.3
*ERROR 15	9515.0	9480.0

*ERROR 15	10075.0	10075.0
*ERROR 15	9515.0	9480.0
*ERROR 15	10075.0	10075.0
*ERROR 15	9515.0	9480.0
*ERROR 15	10075.0	10075.0
*ERROR 15	9515.0	9480.0
*ERROR 15	10075.0	10075.0
*ERROR 15	9515.0	9480.0
*ERROR 15	10075.0	10075.0
*ERROR 15	9515.0	9480.0
*ERROR 15	10075.0	10075.0
*ERROR 15	9515.0	9480.0
*ERROR 15	10075.0	10075.0
*ERROR 15	9515.0	9480.0
*ERROR 15	10075.0	10075.0
*ERROR 15	9515.0	9480.0
*ERROR 15	10075.0	10075.0
*ERROR 15	9515.0	9480.0
*ERROR 15	10075.0	10075.0
*ERROR 15	10170.0	10170.0
*ERROR 15	10170.0	10170.0
*ERROR 15	10170.0	10170.0
*ERROR 15	10170.0	10170.0
*ERROR 15	10170.0	10170.0
*ERROR 15	10170.0	10170.0
*ERROR 15	10170.0	10170.0
*ERROR 15	10170.0	10170.0
*ERROR 15	10170.0	10170.0
*ERROR 15	9780.0	9685.0
*ERROR 15	10135.0	10135.0
*ERROR 15	9780.0	9685.0
*ERROR 15	10135.0	10135.0
*ERROR 15	9780.0	9685.0
*ERROR 15	10135.0	10135.0
*ERROR 15	9780.0	9685.0
*ERROR 15	10135.0	10135.0
*ERROR 15	9780.0	9685.0
*ERROR 15	10135.0	10135.0
*ERROR 15	9780.0	9685.0
*ERROR 15	10135.0	10135.0
*ERROR 15	9780.0	9685.0
*ERROR 15	10135.0	10135.0
*ERROR 15	9780.0	9685.0
*ERROR 15	10135.0	10135.0
*ERROR 15	9780.0	9685.0
*ERROR 15	10135.0	10135.0

*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
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*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	9717.0	9716.2
*ERROR 15	9717.0	9716.2
*ERROR 15	9717.0	9716.2
*ERROR 15	9717.0	9716.2
*ERROR 15	9717.0	9716.2
*ERROR 15	9717.0	9716.2
*ERROR 15	9717.0	9716.2
*ERROR 15	9717.0	9716.2
*ERROR 15	9717.0	9716.2
*ERROR 15	9717.0	9716.2
*ERROR 15	9717.0	9716.2
*ERROR 15	9717.0	9716.2
*ERROR 15	10133.3	10133.3
*ERROR 15	9590.6	9515.0
*ERROR 15	10133.3	10133.3
*ERROR 15	9590.6	9515.0
*ERROR 15	10133.3	10133.3
*ERROR 15	9590.6	9515.0
*ERROR 15	10133.3	10133.3
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*ERROR 15	10133.3	10133.3
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*ERROR 15	10133.3	10133.3
*ERROR 15	9590.6	9515.0

*ERROR 15	10133.3	10133.3
*ERROR 15	9590.6	9515.0
*ERROR 15	10133.3	10133.3
*ERROR 15	9590.6	9515.0
*ERROR 15	10133.3	10133.3
*ERROR 15	9590.6	9515.0
*ERROR 15	10133.3	10133.3
*ERROR 15	9590.6	9515.0
*ERROR 15	10133.3	10133.3
*ERROR 15	9590.6	9515.0
*ERROR 15	10133.3	10133.3
*ERROR 15	9515.0	9480.0
*ERROR 15	10075.0	10075.0
*ERROR 15	9515.0	9480.0
*ERROR 15	10075.0	10075.0
*ERROR 15	9515.0	9480.0
*ERROR 15	10075.0	10075.0
*ERROR 15	9515.0	9480.0
*ERROR 15	10075.0	10075.0
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*ERROR 15	9515.0	9480.0
*ERROR 15	10075.0	10075.0
*ERROR 15	9515.0	9480.0
*ERROR 15	10075.0	10075.0
*ERROR 15	10170.0	10170.0
*ERROR 15	10170.0	10170.0
*ERROR 15	10170.0	10170.0
*ERROR 15	10170.0	10170.0
*ERROR 15	9945.0	9870.0
*ERROR 15	10170.0	10170.0
*ERROR 15	9945.0	9870.0

*ERROR 15	10170.0	10170.0
*ERROR 15	9945.0	9870.0
*ERROR 15	10170.0	10170.0
*ERROR 15	9945.0	9870.0
*ERROR 15	10170.0	10170.0
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*ERROR 15	10170.0	10170.0
*ERROR 15	9945.0	9870.0
*ERROR 15	10170.0	10170.0
*ERROR 15	9945.0	9870.0
*ERROR 15	10170.0	10170.0
*ERROR 15	9780.0	9685.0
*ERROR 15	10135.0	10135.0
*ERROR 15	9780.0	9685.0
*ERROR 15	10135.0	10135.0
*ERROR 15	9780.0	9685.0
*ERROR 15	10135.0	10135.0
*ERROR 15	9780.0	9685.0
*ERROR 15	10135.0	10135.0
*ERROR 15	9780.0	9685.0
*ERROR 15	10135.0	10135.0
*ERROR 15	9780.0	9685.0
*ERROR 15	10135.0	10135.0
*ERROR 15	9780.0	9685.0
*ERROR 15	10135.0	10135.0
*ERROR 15	9780.0	9685.0
*ERROR 15	10135.0	10135.0

```
        *ERROR 15            9780.0    9685.0

        *ERROR 15           10135.0   10135.0

        *ERROR 15            9780.0    9685.0

        *ERROR 15           10135.0   10135.0

        *ERROR 15            9780.0    9685.0

        *ERROR 15           10135.0   10135.0

        *ERROR 15            9780.0    9685.0

        *ERROR 15           10135.0   10135.0

        *ERROR 15            9780.0    9685.0

        *ERROR 15           10135.0   10135.0

        *ERROR 15            9780.0    9685.0

        *ERROR 15           10135.0   10135.0

        *ERROR 15            9780.0    9685.0

        *ERROR 15           10135.0   10135.0

        *ERROR 15            9780.0    9685.0

        *ERROR 15           10135.0   10135.0

        *ERROR 15            9780.0    9685.0

        *ERROR 15           10135.0   10135.0

        *ERROR 15            9780.0    9685.0

        *ERROR 15           10135.0   10135.0

        *ERROR 15            9780.0    9685.0

        *ERROR 15           10135.0   10135.0

        *ERROR 15            9780.0    9685.0

        *ERROR 15           10135.0   10135.0
** Q ABOVE TABLE **                                                                    **INLOAD**
**WATER DISCHARGE, WATER-SEDIMENT LOAD TABLE ENDPOINT**      14261.00        7500.00     311.646770
** Q ABOVE TABLE **                                                                    **INLOAD**
**WATER DISCHARGE, WATER-SEDIMENT LOAD TABLE ENDPOINT**       1356.00        1000.00       0.010000

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME       ENTRY *             SAND             *
    DAYS       POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.32       8.020 *      0.28                    *
               6.090 *      0.00                    *
               3.780 *      0.00                    *
               2.920 *      0.01                    *
               2.600 *      0.04                    *
               0.200 *      0.00                    *
   TOTAL=      0.200 *      0.32      1.47     -3.54 *
*****************************************************

==================================================================================
TIME STEP #       6
*    A  Level output at time step 6 (0.0139 day)

        *ERROR 15           10013.0   10013.0

        *ERROR 15           10013.0   10013.0

        *ERROR 15           10013.0   10013.0

        *ERROR 15           10211.7   10211.7

        *ERROR 15           10211.7   10211.7

        *ERROR 15           10211.7   10211.7

        *ERROR 15           10211.7   10211.7

        *ERROR 15           10211.7   10211.7

        *ERROR 15           10211.7   10211.7

        *ERROR 15           10211.7   10211.7

        *ERROR 15           10211.7   10211.7

        *ERROR 15           10211.7   10211.7

        *ERROR 15           10211.7   10211.7
```

*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	9717.0	9716.2
*ERROR 15	9717.0	9716.2
*ERROR 15	9717.0	9716.2
*ERROR 15	9717.0	9716.2
*ERROR 15	9717.0	9716.2
*ERROR 15	9717.0	9716.2
*ERROR 15	9717.0	9716.2
*ERROR 15	9717.0	9716.2
*ERROR 15	9717.0	9716.2
*ERROR 15	9717.0	9716.2
*ERROR 15	9717.0	9716.2
*ERROR 15	9717.0	9716.2
*ERROR 15	9717.0	9716.2
*ERROR 15	9590.6	9515.0
*ERROR 15	10133.3	10133.3
*ERROR 15	10133.3	10133.3
*ERROR 15	10133.3	10133.3
*ERROR 15	10133.3	10133.3
*ERROR 15	9590.6	9515.0
*ERROR 15	10133.3	10133.3
*ERROR 15	9590.6	9515.0
*ERROR 15	10133.3	10133.3

*ERROR 15	9590.6	9515.0
*ERROR 15	10133.3	10133.3
*ERROR 15	9590.6	9515.0
*ERROR 15	10133.3	10133.3
*ERROR 15	9590.6	9515.0
*ERROR 15	10133.3	10133.3
*ERROR 15	9590.6	9515.0
*ERROR 15	10133.3	10133.3
*ERROR 15	9590.6	9515.0
*ERROR 15	10133.3	10133.3
*ERROR 15	9590.6	9515.0
*ERROR 15	10133.3	10133.3
*ERROR 15	9590.6	9515.0
*ERROR 15	10133.3	10133.3
*ERROR 15	9590.6	9515.0
*ERROR 15	10133.3	10133.3
*ERROR 15	9590.6	9515.0
*ERROR 15	10133.3	10133.3
*ERROR 15	9590.6	9515.0
*ERROR 15	10133.3	10133.3
*ERROR 15	9590.6	9515.0
*ERROR 15	10133.3	10133.3
*ERROR 15	9590.6	9515.0
*ERROR 15	10133.3	10133.3
*ERROR 15	9590.6	9515.0
*ERROR 15	10133.3	10133.3
*ERROR 15	9590.6	9515.0
*ERROR 15	10133.3	10133.3
*ERROR 15	9515.0	9480.0
*ERROR 15	10075.0	10075.0
*ERROR 15	9515.0	9480.0
*ERROR 15	10075.0	10075.0
*ERROR 15	9515.0	9480.0
*ERROR 15	10075.0	10075.0
*ERROR 15	9945.0	9870.0
*ERROR 15	10170.0	10170.0
*ERROR 15	10170.0	10170.0
*ERROR 15	9945.0	9870.0
*ERROR 15	10170.0	10170.0
*ERROR 15	9945.0	9870.0
*ERROR 15	10170.0	10170.0
*ERROR 15	9945.0	9870.0
*ERROR 15	10170.0	10170.0
*ERROR 15	9945.0	9870.0
*ERROR 15	10170.0	10170.0
*ERROR 15	10170.0	10170.0
*ERROR 15	10170.0	10170.0

*ERROR 15	10170.0	10170.0
*ERROR 15	10170.0	10170.0
*ERROR 15	9945.0	9870.0
*ERROR 15	10170.0	10170.0
*ERROR 15	9945.0	9870.0
*ERROR 15	10170.0	10170.0
*ERROR 15	9945.0	9870.0
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*ERROR 15	9945.0	9870.0
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*ERROR 15	10170.0	10170.0
*ERROR 15	10170.0	10170.0
*ERROR 15	9945.0	9870.0
*ERROR 15	10170.0	10170.0
*ERROR 15	9780.0	9685.0
*ERROR 15	10135.0	10135.0
*ERROR 15	9780.0	9685.0
*ERROR 15	10135.0	10135.0
*ERROR 15	9780.0	9685.0
*ERROR 15	10135.0	10135.0
*ERROR 15	9780.0	9685.0
*ERROR 15	10135.0	10135.0
*ERROR 15	9780.0	9685.0
*ERROR 15	10135.0	10135.0
*ERROR 15	9780.0	9685.0
*ERROR 15	10135.0	10135.0
*ERROR 15	9780.0	9685.0
*ERROR 15	10135.0	10135.0
*ERROR 15	9780.0	9685.0
*ERROR 15	10135.0	10135.0
*ERROR 15	9780.0	9685.0
*ERROR 15	10135.0	10135.0
*ERROR 15	9780.0	9685.0
*ERROR 15	10135.0	10135.0
*ERROR 15	9780.0	9685.0
*ERROR 15	10135.0	10135.0
*ERROR 15	9780.0	9685.0
*ERROR 15	10135.0	10135.0
*ERROR 15	9780.0	9685.0
*ERROR 15	10135.0	10135.0
*ERROR 15	9780.0	9685.0
*ERROR 15	10135.0	10135.0
*ERROR 15	9780.0	9685.0
*ERROR 15	10135.0	10135.0

```
        *ERROR 15            9780.0    9685.0

        *ERROR 15           10135.0   10135.0

        *ERROR 15            9780.0    9685.0

        *ERROR 15           10135.0   10135.0
** Q ABOVE TABLE **                                                                                  **INLOAD**
**WATER DISCHARGE, WATER-SEDIMENT LOAD TABLE ENDPOINT**        8043.00        7500.00     311.646770
** Q ABOVE TABLE **                                                                                  **INLOAD**
**WATER DISCHARGE, WATER-SEDIMENT LOAD TABLE ENDPOINT**        2216.00        1000.00       0.010000
** Q ABOVE TABLE **                                                                                  **INLOAD**
**WATER DISCHARGE, WATER-SEDIMENT LOAD TABLE ENDPOINT**        1024.00        1000.00       0.010000

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME        ENTRY *              SAND              *
    DAYS        POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.33        8.020 *      0.38                     *
                6.090 *      0.00                     *
                3.780 *      0.00                     *
                2.920 *      0.06                     *
                2.600 *      0.14                     *
                0.200 *      0.00                     *
   TOTAL=       0.200 *      0.58      1.87     -2.23 *
*****************************************************

==========================================================================================
TIME STEP #       7
*    A  Level output at time step 7 (0.0208 day)

        *ERROR 15           10013.0   10013.0

        *ERROR 15           10013.0   10013.0

        *ERROR 15           10013.0   10013.0

        *ERROR 15           10013.0   10013.0

        *ERROR 15           10013.0   10013.0

        *ERROR 15           10013.0   10013.0

        *ERROR 15           10013.0   10013.0

        *ERROR 15           10013.0   10013.0

        *ERROR 15           10013.0   10013.0

        *ERROR 15           10013.0   10013.0

        *ERROR 15           10013.0   10013.0

        *ERROR 15           10013.0   10013.0

        *ERROR 15           10013.0   10013.0

        *ERROR 15           10013.0   10013.0

        *ERROR 15           10013.0   10013.0

        *ERROR 15           10013.0   10013.0

        *ERROR 15           10211.7   10211.7

        *ERROR 15           10211.7   10211.7

        *ERROR 15           10211.7   10211.7

        *ERROR 15           10211.7   10211.7

        *ERROR 15           10211.7   10211.7

        *ERROR 15           10211.7   10211.7

        *ERROR 15           10211.7   10211.7

        *ERROR 15           10211.7   10211.7

        *ERROR 15           10211.7   10211.7

        *ERROR 15           10211.7   10211.7

        *ERROR 15           10211.7   10211.7

        *ERROR 15           10211.7   10211.7

        *ERROR 15           10211.7   10211.7

        *ERROR 15           10211.7   10211.7

        *ERROR 15           10211.7   10211.7
```

*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	9717.0	9716.2
*ERROR 15	9590.6	9515.0
*ERROR 15	10133.3	10133.3
*ERROR 15	10133.3	10133.3
*ERROR 15	10133.3	10133.3
*ERROR 15	10133.3	10133.3
*ERROR 15	10133.3	10133.3
*ERROR 15	10133.3	10133.3
*ERROR 15	10133.3	10133.3
*ERROR 15	10133.3	10133.3
*ERROR 15	10133.3	10133.3
*ERROR 15	10133.3	10133.3
*ERROR 15	10133.3	10133.3
*ERROR 15	10133.3	10133.3
*ERROR 15	10133.3	10133.3
*ERROR 15	10133.3	10133.3
*ERROR 15	10133.3	10133.3
*ERROR 15	10133.3	10133.3
*ERROR 15	10133.3	10133.3
*ERROR 15	10133.3	10133.3
*ERROR 15	9515.0	9480.0
*ERROR 15	10075.0	10075.0
*ERROR 15	9945.0	9870.0
*ERROR 15	10170.0	10170.0
*ERROR 15	10170.0	10170.0
*ERROR 15	10170.0	10170.0
*ERROR 15	10170.0	10170.0
*ERROR 15	9780.0	9685.0
*ERROR 15	10135.0	10135.0

** Q ABOVE TABLE ** **INLOAD**

WATER DISCHARGE, WATER-SEDIMENT LOAD TABLE ENDPOINT 2075.00 1000.00 0.010000

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT # 1
Cave Creek and Apache WMP

```
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME        ENTRY *              SAND            *
    DAYS        POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.35        8.020 *     0.38                     *
                6.090 *     0.00                     *
                3.780 *     0.00                     *
                2.920 *     0.19                     *
                2.600 *     0.55                     *
                0.200 *     0.00                     *
   TOTAL=       0.200 *     1.12      2.47     -1.20 *
*****************************************************

==========================================================================================
TIME STEP #        8
/    A  Level output at time step 8 (0.0208 day)

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10211.7   10211.7

         *ERROR 15            10211.7   10211.7

         *ERROR 15            10211.7   10211.7

         *ERROR 15            10211.7   10211.7

         *ERROR 15            10211.7   10211.7

         *ERROR 15            10211.7   10211.7

         *ERROR 15            10211.7   10211.7

         *ERROR 15            10211.7   10211.7

         *ERROR 15            10211.7   10211.7

         *ERROR 15            10211.7   10211.7

         *ERROR 15            10211.7   10211.7

         *ERROR 15            10211.7   10211.7

         *ERROR 15            10211.7   10211.7

         *ERROR 15            10211.7   10211.7

         *ERROR 15            10211.7   10211.7

         *ERROR 15            10211.7   10211.7

         *ERROR 15            10211.7   10211.7

         *ERROR 15            10211.7   10211.7

         *ERROR 15            10018.0   10018.0

         *ERROR 15            10133.3   10133.3

         *ERROR 15            10170.0   10170.0
** HYPER-CONCENTRATIONS EXIST **
         AT SECTION NO. ......................      7.080
         ON STREAM SEGMENT....................          1
         TIME STEP #..........................      8          DISCHARGE(Q)........................      3.000
         CONCENTRATION(PPM)...................   408185.5
         ENTRAINMENT COEFFICIENT REDUCED BY...  0.9928
** HYPER-CONCENTRATIONS EXIST **
         AT SECTION NO. ......................      6.980
         ON STREAM SEGMENT....................          1
```

```
        TIME STEP #.........................   8          DISCHARGE(Q)........................      3.000
        CONCENTRATION(PPM)..................   546264.1
        ENTRAINMENT COEFFICIENT REDUCED BY...  0.8434
** HYPER-CONCENTRATIONS EXIST **
        AT SECTION NO. .....................      6.320
        ON STREAM SEGMENT...................          1
        TIME STEP #.........................   8          DISCHARGE(Q)........................      3.000
        CONCENTRATION(PPM)..................   443036.9
        ENTRAINMENT COEFFICIENT REDUCED BY...  0.9612
** HYPER-CONCENTRATIONS EXIST **
        AT SECTION NO. .....................      6.160
        ON STREAM SEGMENT...................          1
        TIME STEP #.........................   8          DISCHARGE(Q)........................      3.000
        CONCENTRATION(PPM)..................   429200.7
        ENTRAINMENT COEFFICIENT REDUCED BY...  0.9742

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME       ENTRY *             SAND              *
    DAYS       POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.37       8.020 *      0.38                    *
               6.090 *      0.00                    *
               3.780 *      0.00                    *
               2.920 *      0.31                    *
               2.600 *      0.98                    *
               0.200 *      0.00                    *
   TOTAL=      0.200 *      1.67      2.97     -0.78 *
*****************************************************

==========================================================================================
TIME STEP #       9
*    A  Level output at time step 9 (0.0278 day)

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7
```

```
        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7
** HYPER-CONCENTRATIONS EXIST **
        AT SECTION NO. ......................      7.360
        ON STREAM SEGMENT....................          1
        TIME STEP #..........................    9          DISCHARGE(Q)........................      1.000
        CONCENTRATION(PPM)...................   536909.8
        ENTRAINMENT COEFFICIENT REDUCED BY...  0.8558
** HYPER-CONCENTRATIONS EXIST **
        AT SECTION NO. ......................      6.980
        ON STREAM SEGMENT....................          1
        TIME STEP #..........................    9          DISCHARGE(Q)........................      1.000
        CONCENTRATION(PPM)...................   703932.8
        ENTRAINMENT COEFFICIENT REDUCED BY...  0.5485
** HYPER-CONCENTRATIONS EXIST **
        AT SECTION NO. ......................      6.580
        ON STREAM SEGMENT....................          1
        TIME STEP #..........................    9          DISCHARGE(Q)........................      1.000
        CONCENTRATION(PPM)...................   470355.6
        ENTRAINMENT COEFFICIENT REDUCED BY...  0.9338
** HYPER-CONCENTRATIONS EXIST **
        AT SECTION NO. ......................      6.160
        ON STREAM SEGMENT....................          1
        TIME STEP #..........................    9          DISCHARGE(Q)........................      1.000
        CONCENTRATION(PPM)...................   693426.3
        ENTRAINMENT COEFFICIENT REDUCED BY...  0.5757

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME       ENTRY *              SAND            *
    DAYS       POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.40       6.020 *      0.38                    *
               6.090 *      0.00                    *
               3.780 *      0.00                    *
               2.920 *      0.41                    *
               2.600 *      1.40                    *
               0.200 *      0.00                    *
   TOTAL=      0.200 *      2.20      3.36     -0.53 *
*****************************************************

==============================================================================
TIME STEP #      10
*    A  Level output at time step 10 (0.0278 day)

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10211.7   10211.7
** HYPER-CONCENTRATIONS EXIST **
        AT SECTION NO. ......................      7.360
        ON STREAM SEGMENT....................          1
        TIME STEP #..........................   10          DISCHARGE(Q)........................      1.000
        CONCENTRATION(PPM)...................   618783.7
```

```
        ENTRAINMENT COEFFICIENT REDUCED BY...  0.7317
** HYPER-CONCENTRATIONS EXIST **
        AT SECTION NO. ......................      7.080
        ON STREAM SEGMENT....................          1
        TIME STEP #..........................   10          DISCHARGE(Q)........................      1.000
        CONCENTRATION(PPM)...................   717569.5
        ENTRAINMENT COEFFICIENT REDUCED BY...  0.5104
** HYPER-CONCENTRATIONS EXIST **
        AT SECTION NO. ......................      6.980
        ON STREAM SEGMENT....................          1
        TIME STEP #..........................   10          DISCHARGE(Q)........................      1.000
        CONCENTRATION(PPM)...................   708536.2
        ENTRAINMENT COEFFICIENT REDUCED BY...  0.5360
** HYPER-CONCENTRATIONS EXIST **
        AT SECTION NO. ......................      6.320
        ON STREAM SEGMENT....................          1
        TIME STEP #..........................   10          DISCHARGE(Q)........................      1.000
        CONCENTRATION(PPM)...................   679442.1
        ENTRAINMENT COEFFICIENT REDUCED BY...  0.6094
** HYPER-CONCENTRATIONS EXIST **
        AT SECTION NO. ......................      6.160
        ON STREAM SEGMENT....................          1
        TIME STEP #..........................   10          DISCHARGE(Q)........................      1.000
        CONCENTRATION(PPM)...................   674946.2
        ENTRAINMENT COEFFICIENT REDUCED BY...  0.6197

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME       ENTRY *              SAND              *
    DAYS       POINT *     INFLOW   OUTFLOW  TRAP EFF *
    0.43       8.020 *      0.38                     *
               6.090 *      0.00                     *
               3.780 *      0.00                     *
               2.920 *      0.46                     *
               2.600 *      1.63                     *
               0.200 *      0.00                     *
   TOTAL=      0.200 *      2.47       3.76     -0.52 *
*****************************************************

==========================================================================================
TIME STEP #       11
*    A  Level output at time step 11 (0.0278 day)

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10211.7   10211.7

         *ERROR 15            10211.7   10211.7

         *ERROR 15            10211.7   10211.7

         *ERROR 15            10211.7   10211.7

         *ERROR 15            10211.7   10211.7

         *ERROR 15            10211.7   10211.7

         *ERROR 15            10211.7   10211.7

         *ERROR 15            10211.7   10211.7

         *ERROR 15            10211.7   10211.7

         *ERROR 15            10211.7   10211.7
```

```
        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME        ENTRY *              SAND            *
    DAYS        POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.46        8.020 *      0.39                    *
                6.090 *      0.00                    *
                3.780 *      0.00                    *
                2.920 *      0.49                    *
                2.600 *      1.73                    *
                0.200 *      0.00                    *
   TOTAL=       0.200 *      2.60      4.07     -0.57 *
*****************************************************

=====================================================================================
TIME STEP #      12
*    A  Level output at time step 12 (0.0347 day)

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME        ENTRY *              SAND            *
    DAYS        POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.49        8.020 *      0.40                    *
                6.090 *      0.00                    *
                3.780 *      0.00                    *
                2.920 *      0.50                    *
                2.600 *      1.80                    *
                0.200 *      0.00                    *
   TOTAL=       0.200 *      2.70      4.37     -0.62 *
*****************************************************

=====================================================================================
```

```
TIME STEP #      13
*    A  Level output at time step 13 (0.0764 day)

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10211.7   10211.7

         *ERROR 15            10211.7   10211.7

         *ERROR 15            10211.7   10211.7

         *ERROR 15            10211.7   10211.7

         *ERROR 15            10211.7   10211.7

         *ERROR 15            10211.7   10211.7

         *ERROR 15            10211.7   10211.7

         *ERROR 15            10211.7   10211.7

         *ERROR 15            10211.7   10211.7

         *ERROR 15            10211.7   10211.7

         *ERROR 15            10211.7   10211.7

         *ERROR 15            10211.7   10211.7

         *ERROR 15            10211.7   10211.7

         *ERROR 15            10211.7   10211.7

         *ERROR 15            10211.7   10211.7

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
**************************************************
    TIME       ENTRY *              SAND          *
    DAYS       POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.57       8.020 *      0.41                   *
               6.090 *      0.00                   *
               3.780 *      0.00                   *
               2.920 *      0.53                   *
               2.600 *      1.90                   *
               0.200 *      0.00                   *
   TOTAL=      0.200 *      2.84      4.94     -0.74 *
**************************************************

==========================================================================================
TIME STEP #      14
*    A  Level output at time step 14 (0.0764 day)

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10211.7   10211.7

         *ERROR 15            10211.7   10211.7

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
**************************************************
    TIME       ENTRY *              SAND          *
    DAYS       POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.65       8.020 *      0.43                   *
               6.090 *      0.00                   *
               3.780 *      0.00                   *
               2.920 *      0.55                   *
               2.600 *      1.96                   *
               0.200 *      0.00                   *
   TOTAL=      0.200 *      2.94      5.39     -0.84 *
**************************************************

==========================================================================================
TIME STEP #      15
*    A  Level output at time step 15 (0.1458 day)

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

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         *ERROR 15            10211.7   10211.7

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TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*************************************************
    TIME       ENTRY *              SAND          *
    DAYS       POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.79       8.020 *     0.45                     *
               6.090 *     0.00                     *
               3.780 *     0.00                     *
               2.920 *     0.62                     *
               2.600 *     2.17                     *
               0.200 *     0.00                     *
  TOTAL=       0.200 *     3.25      6.35     -0.96 *
*************************************************

=================================================================================
TIME STEP #      16
*    B  Level output at time step 16 (0.2083 day)
COMPUTING FROM TIME=      0.7916 DAYS TO TIME=      0.9999 DAYS IN    10 COMPUTATION STEPS

*ERROR 15          10013.0   10013.0

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Cave Creek and Apache WMP
ACCUMULATED TIME (yrs).... 0.003
FLOW DURATION (days)...... 0.021

UPSTREAM BOUNDARY CONDITIONS

Stream Segment # 1 Section No. 8.020	DISCHARGE (cfs)	SEDIMENT LOAD (tons/day)	TEMPERATURE (deg F)
INFLOW	163.00	167.01	68.00

Upstream of SECTION NO. 6.090 is...

LOCAL INFLOW POINT # 5	DISCHARGE (cfs)	SEDIMENT LOAD (tons/day)	TEMPERATURE (deg F)
MAINSTEM INFLOW	163.00	167.01	68.00
LOCAL INFLOW	41.00	0.10	68.00
TOTAL	204.00	167.11	68.00

Upstream of SECTION NO. 3.780 is...

LOCAL INFLOW POINT # 4	DISCHARGE (cfs)	SEDIMENT LOAD (tons/day)	TEMPERATURE (deg F)
MAINSTEM INFLOW	204.00	167.11	68.00
LOCAL INFLOW	51.00	0.10	68.00
TOTAL	255.00	167.21	68.00

Upstream of SECTION NO. 2.920 is...

LOCAL INFLOW POINT # 3	DISCHARGE (cfs)	SEDIMENT LOAD (tons/day)	TEMPERATURE (deg F)
MAINSTEM INFLOW	255.00	167.21	68.00
LOCAL INFLOW	156.00	228.70	68.00
TOTAL	411.00	395.91	68.00

Upstream of SECTION NO. 2.600 is...

LOCAL INFLOW POINT # 2	DISCHARGE (cfs)	SEDIMENT LOAD (tons/day)	TEMPERATURE (deg F)
MAINSTEM INFLOW	411.00	395.91	68.00
LOCAL INFLOW	87.00	485.12	68.00
TOTAL	498.00	881.04	68.00

Upstream of SECTION NO. 0.200 is...

LOCAL INFLOW POINT # 1	DISCHARGE (cfs)	SEDIMENT LOAD (tons/day)	TEMPERATURE (deg F)
MAINSTEM INFLOW	498.00	881.04	68.00
LOCAL INFLOW	15.00	0.10	68.00
TOTAL	513.00	881.14	68.00

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT # 1
Cave Creek and Apache WMP
ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT

TIME DAYS	ENTRY POINT	INFLOW	SAND OUTFLOW	TRAP EFF
1.00	8.020	0.47		
	6.090	0.00		
	3.780	0.00		
	2.920	0.64		
	2.600	2.22		
	0.200	0.00		
TOTAL=	0.200	3.34	6.90	-1.07

TABLE SB-1: SEDIMENT LOAD PASSING THE BOUNDARIES OF STREAM SEGMENT # 1

SEDIMENT INFLOW at the Upstream Boundary:

GRAIN SIZE	LOAD (tons/day)	GRAIN SIZE	LOAD (tons/day)
VERY FINE SAND....	2.53	MEDIUM GRAVEL.....	35.75
FINE SAND.....	5.20	COARSE GRAVEL.....	43.92
MEDIUM SAND.....	10.43	VERY COARSE GRAVEL	3.63
COARSE SAND.....	10.87	SMALL COBBLES.....	1.45
VERY COARSE SAND..	12.00	LARGE COBBLES.....	0.02
VERY FINE GRAVEL..	16.64	SMALL BOULDERS....	0.00
FINE GRAVEL.....	24.56	MEDIUM BOULDERS...	0.00
		TOTAL =	167.01

SEDIMENT OUTFLOW from the Downstream Boundary

GRAIN SIZE	LOAD (tons/day)	GRAIN SIZE	LOAD (tons/day)
VERY FINE SAND....	32.54	MEDIUM GRAVEL.....	753.40
FINE SAND.....	87.18	COARSE GRAVEL.....	513.89
MEDIUM SAND.....	369.38	VERY COARSE GRAVEL	0.00
COARSE SAND.....	1078.77	SMALL COBBLES.....	0.00
VERY COARSE SAND..	875.50	LARGE COBBLES.....	0.00
VERY FINE GRAVEL..	826.30	SMALL BOULDERS....	0.00
FINE GRAVEL.....	802.10	MEDIUM BOULDERS...	0.00
		TOTAL =	5339.06

TABLE SB-2: STATUS OF THE BED PROFILE AT TIME = 1.000 DAYS

SECTION NUMBER	BED CHANGE (ft)	WS ELEV (ft)	THALWEG (ft)	Q (cfs)	TRANSPORT RATE (tons/day) SAND
8.020	-3.50	1983.98	1981.60	163.	444.
7.980	-1.48	1981.97	1980.32	163.	1005.
7.890	-0.92	1978.05	1976.08	163.	936.
7.840	0.04	1976.12	1974.44	163.	1447.
7.740	0.04	1970.78	1969.14	163.	1449.
7.650	0.18	1963.29	1961.98	163.	1410.
7.550	0.35	1958.52	1957.05	163.	1104.
7.460	-2.53	1950.91	1948.97	163.	1612.
7.360	2.24	1948.14	1946.74	163.	1835.
7.280	-0.06	1942.35	1940.74	163.	3032.
7.170	-1.14	1934.56	1932.86	163.	3214.
7.080	0.78	1931.11	1929.78	163.	1471.
6.980	-0.37	1925.34	1923.63	163.	2904.
6.900	-0.86	1920.76	1919.14	163.	2635.
6.800	-0.02	1915.71	1913.98	163.	2436.
6.710	2.77	1911.68	1910.27	163.	1584.
6.630	-1.21	1906.29	1903.79	163.	1738.
6.580	1.52	1904.93	1903.52	163.	1104.
6.500	-0.55	1899.75	1898.45	163.	1804.
6.430	-2.08	1896.17	1894.42	163.	1714.
6.320	2.36	1893.49	1892.36	163.	1512.
6.250	-2.30	1887.34	1885.70	163.	1755.
6.160	-0.16	1884.23	1882.84	163.	2222.
6.090	0.58	1880.95	1880.08	204.	2532.
6.010	-0.76	1876.62	1874.74	204.	2436.
5.920	0.93	1872.39	1870.93	204.	1156.
5.830	-1.51	1866.48	1863.99	204.	1683.
5.760	1.62	1864.62	1863.62	204.	1521.
5.660	-0.43	1857.13	1853.57	204.	1636.
5.640	0.12	1855.88	1855.12	204.	1350.
5.570	-1.28	1851.63	1848.72	204.	1677.
5.480	2.31	1849.81	1848.31	204.	1200.

5.380	-1.07	1843.30	1839.93	204.	2230.
5.310	1.15	1841.08	1839.15	204.	1729.
5.210	-1.02	1835.20	1832.98	204.	2040.
5.150	1.27	1833.61	1831.27	204.	961.
5.090	-0.80	1831.16	1829.20	204.	1467.
5.030	0.05	1828.25	1826.05	204.	1922.
4.960	0.53	1824.77	1822.53	204.	2061.
4.900	-1.87	1821.10	1820.13	204.	2858.
4.820	-0.36	1819.53	1817.64	204.	2886.
4.780	0.94	1815.53	1813.94	204.	2960.
4.740	-1.61	1811.26	1808.39	204.	3610.
4.650	1.46	1808.68	1807.46	204.	2350.
4.600	-1.25	1803.40	1800.75	204.	2791.
4.580	0.23	1802.69	1801.53	204.	2729.
4.570	-0.27	1801.35	1799.73	204.	2670.
4.560	0.66	1801.02	1799.66	204.	1261.
4.490	1.20	1798.35	1797.20	204.	1751.
4.400	-0.42	1794.61	1791.88	204.	2006.
4.310	1.18	1791.23	1789.18	204.	1383.
4.230	-1.08	1787.03	1784.92	204.	1684.
4.220	-1.44	1785.78	1784.06	204.	1851.
4.110	-1.03	1783.54	1780.97	204.	1906.
4.050	1.69	1782.40	1780.69	204.	1407.
3.960	-1.00	1775.47	1773.00	204.	1912.
3.860	1.19	1772.76	1771.19	204.	1330.
3.780	-1.62	1768.16	1764.38	255.	1410.
3.750	1.30	1767.35	1765.30	255.	1183.
3.650	-0.16	1763.39	1761.84	255.	1892.
3.600	-0.87	1761.85	1759.13	255.	2125.
3.520	1.46	1759.71	1757.46	255.	2116.
3.480	-1.35	1757.37	1753.65	255.	2224.
3.400	1.37	1755.73	1753.37	255.	1772.
3.320	-1.35	1750.21	1748.65	255.	2003.
3.210	-0.31	1747.89	1745.69	255.	1977.
3.130	2.00	1745.81	1744.00	255.	2093.
3.070	-1.18	1742.18	1739.82	255.	2419.
2.970	1.41	1738.72	1737.41	255.	1584.
2.920	0.38	1736.66	1734.38	411.	1605.
2.900	-0.53	1735.47	1733.47	411.	1745.
2.870	0.37	1733.67	1732.37	411.	1558.
2.820	-0.45	1732.37	1729.55	411.	1966.
2.730	-1.41	1728.18	1726.59	411.	2163.
2.600	-0.75	1726.32	1723.25	498.	3109.
2.520	1.16	1724.10	1722.16	498.	2813.
2.470	-1.40	1722.33	1718.60	498.	3566.
2.400	1.17	1720.61	1719.17	498.	1982.
2.330	-0.98	1718.54	1716.02	498.	2568.
2.240	0.94	1717.41	1714.94	498.	1604.
2.170	-0.14	1715.04	1713.86	498.	3024.
2.080	-0.68	1711.08	1709.32	498.	3661.
2.000	-0.37	1709.33	1708.13	498.	3997.
1.880	0.90	1705.11	1703.00	498.	4104.
1.850	0.60	1702.98	1700.60	498.	4181.
1.810	-0.83	1702.93	1699.17	498.	4243.
1.750	2.28	1701.90	1700.28	498.	2128.
1.660	-1.64	1697.25	1694.36	498.	2887.
1.600	1.00	1695.63	1693.00	498.	3210.
1.560	-1.43	1694.56	1690.57	498.	3389.
1.470	1.14	1692.84	1691.14	498.	2029.
1.370	-0.86	1689.44	1687.14	498.	2502.
1.270	0.95	1686.79	1684.95	498.	2500.
1.180	1.12	1683.43	1681.12	498.	1954.
1.090	-0.46	1681.86	1679.54	498.	2563.
0.990	0.09	1678.90	1678.09	498.	2253.
0.840	-0.69	1671.67	1669.31	498.	3892.
0.750	1.11	1668.81	1667.11	498.	3901.
0.710	0.76	1666.94	1664.76	498.	3979.
0.630	-1.42	1664.22	1662.58	498.	4044.
0.540	-0.46	1661.79	1659.54	498.	3930.
0.430	0.84	1657.68	1655.84	498.	3235.
0.330	-0.95	1653.33	1651.25	498.	5726.
0.200	0.73	1648.52	1646.73	513.	5339.

$VOL A

STREAM SEGMENT # 1: Cave Creek and Apache WMP

SUMMARY TABLE: MASS AND VOLUME OF SEDIMENT

SECTION	SEDIMENT THROUGH SECTION (tons)				SEDIMENT DEPOSITED IN REACH in cu. yds				
	TOTAL	SAND	SILT	CLAY	TOTAL	CUMULATIVE	SAND	SILT	CLAY
INFLOW	956.	956.	0.	0.	761.				
8.020	3950.	3950.	0.	0.	-2385.	-2385.	-2385.	0.	0.
7.980	6418.	6418.	0.	0.	-1966.	-4351.	-1966.	0.	0.
7.890	8606.	8606.	0.	0.	-1743.	-6094.	-1743.	0.	0.
7.840	7587.	7587.	0.	0.	812.	-5282.	812.	0.	0.
7.740	6382.	6382.	0.	0.	959.	-4322.	959.	0.	0.
7.650	5959.	5959.	0.	0.	337.	-3985.	337.	0.	0.
7.550	5488.	5488.	0.	0.	375.	-3610.	375.	0.	0.
7.460	13942.	13942.	0.	0.	-6733.	-10343.	-6733.	0.	0.
7.360	5668.	5668.	0.	0.	6590.	-3754.	6590.	0.	0.
7.280	4706.	4706.	0.	0.	766.	-2987.	766.	0.	0.

7.170	7171.	7171.	0.	0.	-1963.	-4951.	-1963.	0.	0.
7.080	7921.	7921.	0.	0.	-597.	-5548.	-597.	0.	0.
6.980	10594.	10594.	0.	0.	-2129.	-7677.	-2129.	0.	0.
6.900	11432.	11432.	0.	0.	-667.	-8344.	-667.	0.	0.
6.800	9896.	9896.	0.	0.	1223.	-7121.	1223.	0.	0.
6.710	5965.	5965.	0.	0.	3131.	-3990.	3131.	0.	0.
6.630	8455.	8455.	0.	0.	-1983.	-5973.	-1983.	0.	0.
6.580	6654.	6654.	0.	0.	1435.	-4538.	1435.	0.	0.
6.500	6560.	6560.	0.	0.	74.	-4464.	74.	0.	0.
6.430	10387.	10387.	0.	0.	-3048.	-7512.	-3048.	0.	0.
6.320	5269.	5269.	0.	0.	4076.	-3435.	4076.	0.	0.
6.250	11293.	11293.	0.	0.	-4798.	-8233.	-4798.	0.	0.
6.160	12583.	12583.	0.	0.	-1027.	-9261.	-1027.	0.	0.
LOCAL	0.	0.	0.	0.	0.				
6.090	8329.	8329.	0.	0.	3388.	-5873.	3388.	0.	0.
6.010	11564.	11564.	0.	0.	-2577.	-8450.	-2577.	0.	0.
5.920	9047.	9047.	0.	0.	2005.	-6445.	2005.	0.	0.
5.830	15892.	15892.	0.	0.	-5452.	-11897.	-5452.	0.	0.
5.760	7836.	7836.	0.	0.	6417.	-5480.	6417.	0.	0.
5.660	7564.	7564.	0.	0.	217.	-5264.	217.	0.	0.
5.640	6848.	6848.	0.	0.	571.	-4693.	571.	0.	0.
5.570	10674.	10674.	0.	0.	-3048.	-7740.	-3048.	0.	0.
5.480	5681.	5681.	0.	0.	3976.	-3764.	3976.	0.	0.
5.380	8614.	8614.	0.	0.	-2335.	-6099.	-2335.	0.	0.
5.310	4500.	4500.	0.	0.	3277.	-2823.	3277.	0.	0.
5.210	6651.	6651.	0.	0.	-1713.	-4536.	-1713.	0.	0.
5.150	6396.	6396.	0.	0.	203.	-4333.	203.	0.	0.
5.090	8181.	8181.	0.	0.	-1421.	-5755.	-1421.	0.	0.
5.030	5334.	5334.	0.	0.	2267.	-3487.	2267.	0.	0.
4.960	4622.	4622.	0.	0.	567.	-2920.	567.	0.	0.
4.900	9775.	9775.	0.	0.	-4104.	-7024.	-4104.	0.	0.
4.820	9031.	9031.	0.	0.	592.	-6432.	592.	0.	0.
4.780	6026.	6026.	0.	0.	2393.	-4039.	2393.	0.	0.
4.740	13475.	13475.	0.	0.	-5933.	-9971.	-5933.	0.	0.
4.650	6733.	6733.	0.	0.	5370.	-4601.	5370.	0.	0.
4.600	5500.	5500.	0.	0.	982.	-3620.	982.	0.	0.
4.580	5024.	5024.	0.	0.	380.	-3240.	380.	0.	0.
4.570	6451.	6451.	0.	0.	-1137.	-4377.	-1137.	0.	0.
4.560	8770.	8770.	0.	0.	-1847.	-6224.	-1847.	0.	0.
4.490	6178.	6178.	0.	0.	2064.	-4160.	2064.	0.	0.
4.400	6181.	6181.	0.	0.	-2.	-4162.	-2.	0.	0.
4.310	3822.	3822.	0.	0.	1879.	-2283.	1879.	0.	0.
4.230	5128.	5128.	0.	0.	-1041.	-3323.	-1041.	0.	0.
4.220	8345.	8345.	0.	0.	-2562.	-5886.	-2562.	0.	0.
4.110	11812.	11812.	0.	0.	-2761.	-8647.	-2761.	0.	0.
4.050	7412.	7412.	0.	0.	3505.	-5142.	3505.	0.	0.
3.960	11196.	11196.	0.	0.	-3014.	-8156.	-3014.	0.	0.
3.860	11357.	11357.	0.	0.	-128.	-9284.	-128.	0.	0.
LOCAL	0.	0.	0.	0.	0.				
3.780	14906.	14906.	0.	0.	-2827.	-11111.	-2827.	0.	0.
3.750	6132.	6132.	0.	0.	6988.	-4123.	6988.	0.	0.
3.650	4908.	4908.	0.	0.	975.	-3148.	975.	0.	0.
3.600	8288.	8288.	0.	0.	-2692.	-5840.	-2692.	0.	0.
3.520	5222.	5222.	0.	0.	2442.	-3398.	2442.	0.	0.
3.480	7266.	7266.	0.	0.	-1628.	-5026.	-1628.	0.	0.
3.400	4893.	4893.	0.	0.	1890.	-3136.	1890.	0.	0.
3.320	7608.	7608.	0.	0.	-2162.	-5298.	-2162.	0.	0.
3.210	8529.	8529.	0.	0.	-733.	-6032.	-733.	0.	0.
3.130	5552.	5552.	0.	0.	2371.	-3661.	2371.	0.	0.
3.070	12238.	12238.	0.	0.	-5326.	-8987.	-5326.	0.	0.
2.970	3189.	3189.	0.	0.	7208.	-1779.	7208.	0.	0.
LOCAL	1297.	1297.	0.	0.	1033.				
2.920	2124.	2124.	0.	0.	1882.	103.	1882.	0.	0.
2.900	3299.	3299.	0.	0.	-936.	-833.	-936.	0.	0.
2.870	2177.	2177.	0.	0.	893.	60.	893.	0.	0.
2.820	4147.	4147.	0.	0.	-1569.	-1509.	-1569.	0.	0.
2.730	12026.	12026.	0.	0.	-6276.	-7785.	-6276.	0.	0.
LOCAL	4504.	4504.	0.	0.	3587.				
2.600	19955.	19955.	0.	0.	-2727.	-10512.	-2727.	0.	0.
2.520	12724.	12724.	0.	0.	5759.	-4753.	5759.	0.	0.
2.470	16463.	16463.	0.	0.	-2978.	-7731.	-2978.	0.	0.
2.400	14539.	14539.	0.	0.	1533.	-6198.	1533.	0.	0.
2.330	18310.	18310.	0.	0.	-3004.	-9202.	-3004.	0.	0.
2.240	14238.	14238.	0.	0.	3244.	-5958.	3244.	0.	0.
2.170	13086.	13086.	0.	0.	917.	-5042.	917.	0.	0.
2.080	18480.	18480.	0.	0.	-4296.	-9337.	-4296.	0.	0.
2.000	23605.	23605.	0.	0.	-4082.	-13419.	-4082.	0.	0.
1.880	18629.	18629.	0.	0.	3963.	-9456.	3963.	0.	0.
1.850	15575.	15575.	0.	0.	2432.	-7024.	2432.	0.	0.
1.810	19127.	19127.	0.	0.	-2829.	-9853.	-2829.	0.	0.
1.750	9808.	9808.	0.	0.	7423.	-2430.	7423.	0.	0.
1.660	15195.	15195.	0.	0.	-4291.	-6721.	-4291.	0.	0.
1.600	12026.	12026.	0.	0.	2525.	-4197.	2525.	0.	0.
1.560	15543.	15543.	0.	0.	-2802.	-6998.	-2802.	0.	0.
1.470	19576.	19576.	0.	0.	-3212.	-10210.	-3212.	0.	0.
1.370	20993.	20993.	0.	0.	-1128.	-11339.	-1128.	0.	0.
1.270	13585.	13585.	0.	0.	5900.	-5438.	5900.	0.	0.

1.180	8176.	8176.	0.	0.	4308.	-1130.	4308.	0.	0.
1.090	10810.	10810.	0.	0.	-2098.	-3229.	-2098.	0.	0.
0.990	9135.	9135.	0.	0.	1335.	-1894.	1335.	0.	0.
0.840	14485.	14485.	0.	0.	-4261.	-6155.	-4261.	0.	0.
0.750	12554.	12554.	0.	0.	1538.	-4617.	1538.	0.	0.
0.710	11958.	11958.	0.	0.	475.	-4143.	475.	0.	0.
0.630	20498.	20498.	0.	0.	-6802.	-10945.	-6802.	0.	0.
0.540	19908.	19908.	0.	0.	470.	-10475.	470.	0.	0.
0.430	14636.	14636.	0.	0.	4199.	-6275.	4199.	0.	0.
0.330	18218.	18218.	0.	0.	-2853.	-9129.	-2853.	0.	0.
LOCAL	0.	0.	0.	0.	0.				
0.200	13971.	13971.	0.	0.	3383.	-5746.	3383.	0.	0.

TOTAL SEDIMENT - per grain size - THROUGH EACH CROSS SECTION (tons)

UPSTREAM INFLOW

VF	SAND	18.	VF	GRVL	100.	S	COBL	13.
F	SAND	31.	F	GRVL	147.	L	COBL	1.
M	SAND	63.	M	GRVL	212.	S	BLDR	0.
C	SAND	65.	C	GRVL	209.	M	BLDR	0.
VC	SAND	72.	VC	GRVL	26.			

SECTION NO. 8.020

VF	SAND	26.	VF	GRVL	367.	S	COBL	435.
F	SAND	53.	F	GRVL	428.	L	COBL	231.
M	SAND	168.	M	GRVL	533.	S	BLDR	0.
C	SAND	390.	C	GRVL	604.	M	BLDR	0.
VC	SAND	344.	VC	GRVL	372.			

SECTION NO. 7.980

VF	SAND	32.	VF	GRVL	575.	S	COBL	553.
F	SAND	72.	F	GRVL	668.	L	COBL	130.
M	SAND	250.	M	GRVL	865.	S	BLDR	0.
C	SAND	630.	C	GRVL	1128.	M	BLDR	0.
VC	SAND	548.	VC	GRVL	968.			

SECTION NO. 7.890

VF	SAND	38.	VF	GRVL	784.	S	COBL	673.
F	SAND	89.	F	GRVL	906.	L	COBL	184.
M	SAND	331.	M	GRVL	1182.	S	BLDR	0.
C	SAND	878.	C	GRVL	1539.	M	BLDR	0.
VC	SAND	754.	VC	GRVL	1248.			

SECTION NO. 7.840

VF	SAND	38.	VF	GRVL	734.	S	COBL	479.
F	SAND	87.	F	GRVL	852.	L	COBL	79.
M	SAND	304.	M	GRVL	1101.	S	BLDR	0.
C	SAND	820.	C	GRVL	1400.	M	BLDR	0.
VC	SAND	705.	VC	GRVL	987.			

SECTION NO. 7.740

VF	SAND	36.	VF	GRVL	653.	S	COBL	274.
F	SAND	79.	F	GRVL	757.	L	COBL	12.
M	SAND	270.	M	GRVL	969.	S	BLDR	0.
C	SAND	732.	C	GRVL	1203.	M	BLDR	0.
VC	SAND	628.	VC	GRVL	768.			

SECTION NO. 7.650

VF	SAND	35.	VF	GRVL	629.	S	COBL	226.
F	SAND	76.	F	GRVL	726.	L	COBL	3.
M	SAND	260.	M	GRVL	922.	S	BLDR	0.
C	SAND	706.	C	GRVL	1112.	M	BLDR	0.
VC	SAND	605.	VC	GRVL	658.			

SECTION NO. 7.550

VF	SAND	34.	VF	GRVL	594.	S	COBL	212.
F	SAND	73.	F	GRVL	679.	L	COBL	1.
M	SAND	248.	M	GRVL	831.	S	BLDR	0.
C	SAND	670.	C	GRVL	931.	M	BLDR	0.
VC	SAND	574.	VC	GRVL	642.			

SECTION NO. 7.460

VF	SAND	61.	VF	GRVL	1421.	S	COBL	858.
F	SAND	146.	F	GRVL	1573.	L	COBL	443.
M	SAND	583.	M	GRVL	1882.	S	BLDR	15.
C	SAND	1672.	C	GRVL	2247.	M	BLDR	0.
VC	SAND	1407.	VC	GRVL	1632.			

SECTION NO. 7.360

VF	SAND	50.	VF	GRVL	742.	S	COBL	98.
F	SAND	109.	F	GRVL	789.	L	COBL	1.
M	SAND	309.	M	GRVL	840.	S	BLDR	0.
C	SAND	894.	C	GRVL	729.	M	BLDR	0.
VC	SAND	747.	VC	GRVL	361.			

SECTION NO. 7.280

VF	SAND	48.	VF	GRVL	628.	S	COBL	59.
F	SAND	99.	F	GRVL	655.	L	COBL	0.
M	SAND	264.	M	GRVL	671.	S	BLDR	0.
C	SAND	766.	C	GRVL	635.	M	BLDR	0.
VC	SAND	637.	VC	GRVL	244.			

SECTION NO. 7.170

VF	SAND	55.	VF	GRVL	877.	S	COBL	183.
F	SAND	119.	F	GRVL	924.	L	COBL	47.
M	SAND	367.	M	GRVL	988.	S	BLDR	0.
C	SAND	1071.	C	GRVL	1051.	M	BLDR	0.
VC	SAND	890.	VC	GRVL	599.			

SECTION NO. 7.080

VF	SAND	58.	VF	GRVL	943.	S	COBL	320.
F	SAND	125.	F	GRVL	988.	L	COBL	114.
M	SAND	394.	M	GRVL	1046.	S	BLDR	3.
C	SAND	1157.	C	GRVL	1114.	M	BLDR	0.

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      VC SAND       960.   VC GRVL       698.
SECTION NO.      6.980
      VF SAND        66.   VF GRVL      1215.   S  COBL       551.
      F  SAND       147.   F  GRVL      1279.   L  COBL       248.
      M  SAND       504.   M  GRVL      1380.   S  BLDR         0.
      C  SAND      1485.   C  GRVL      1498.   M  BLDR         0.
      VC SAND      1233.   VC GRVL       988.
SECTION NO.      6.900
      VF SAND        69.   VF GRVL      1303.   S  COBL       651.
      F  SAND       154.   F  GRVL      1370.   L  COBL       288.
      M  SAND       541.   M  GRVL      1473.   S  BLDR         1.
      C  SAND      1596.   C  GRVL      1594.   M  BLDR         0.
      VC SAND      1324.   VC GRVL      1067.
SECTION NO.      6.800
      VF SAND        67.   VF GRVL      1171.   S  COBL       511.
      F  SAND       146.   F  GRVL      1218.   L  COBL       160.
      M  SAND       492.   M  GRVL      1286.   S  BLDR         0.
      C  SAND      1444.   C  GRVL      1341.   M  BLDR         0.
      VC SAND      1195.   VC GRVL       864.
SECTION NO.      6.710
      VF SAND        61.   VF GRVL       792.   S  COBL       122.
      F  SAND       122.   F  GRVL       791.   L  COBL         7.
      M  SAND       352.   M  GRVL       776.   S  BLDR         0.
      C  SAND      1006.   C  GRVL       726.   M  BLDR         0.
      VC SAND       825.   VC GRVL       387.
SECTION NO.      6.630
      VF SAND        67.   VF GRVL      1023.   S  COBL       368.
      F  SAND       138.   F  GRVL      1040.   L  COBL       166.
      M  SAND       445.   M  GRVL      1069.   S  BLDR         0.
      C  SAND      1287.   C  GRVL      1099.   M  BLDR         0.
      VC SAND      1058.   VC GRVL       693.
SECTION NO.      6.580
      VF SAND        62.   VF GRVL       821.   S  COBL       321.
      F  SAND       121.   F  GRVL       820.   L  COBL        48.
      M  SAND       364.   M  GRVL       817.   S  BLDR         0.
      C  SAND      1047.   C  GRVL       819.   M  BLDR         0.
      VC SAND       856.   VC GRVL       559.
SECTION NO.      6.500
      VF SAND        61.   VF GRVL       842.   S  COBL       131.
      F  SAND       117.   F  GRVL       846.   L  COBL         0.
      M  SAND       369.   M  GRVL       860.   S  BLDR         0.
      C  SAND      1073.   C  GRVL       863.   M  BLDR         0.
      VC SAND       878.   VC GRVL       518.
SECTION NO.      6.430
      VF SAND        71.   VF GRVL      1207.   S  COBL       510.
      F  SAND       146.   F  GRVL      1241.   L  COBL       176.
      M  SAND       518.   M  GRVL      1328.   S  BLDR         0.
      C  SAND      1515.   C  GRVL      1447.   M  BLDR         0.
      VC SAND      1246.   VC GRVL       983.
SECTION NO.      6.320
      VF SAND        63.   VF GRVL       715.   S  COBL        49.
      F  SAND       116.   F  GRVL       714.   L  COBL         0.
      M  SAND       313.   M  GRVL       712.   S  BLDR         0.
      C  SAND       917.   C  GRVL       630.   M  BLDR         0.
      VC SAND       748.   VC GRVL       292.
SECTION NO.      6.250
      VF SAND        80.   VF GRVL      1306.   S  COBL       506.
      F  SAND       164.   F  GRVL      1355.   L  COBL       261.
      M  SAND       554.   M  GRVL      1467.   S  BLDR         0.
      C  SAND      1632.   C  GRVL      1571.   M  BLDR         0.
      VC SAND      1343.   VC GRVL      1055.
SECTION NO.      6.160
      VF SAND        81.   VF GRVL      1414.   S  COBL       762.
      F  SAND       169.   F  GRVL      1471.   L  COBL       343.
      M  SAND       597.   M  GRVL      1601.   S  BLDR         0.
      C  SAND      1763.   C  GRVL      1778.   M  BLDR         0.
      VC SAND      1452.   VC GRVL      1151.

LOCAL INFLOW
      VF SAND         0.   VF GRVL         0.   S  COBL         0.
      F  SAND         0.   F  GRVL         0.   L  COBL         0.
      M  SAND         0.   M  GRVL         0.   S  BLDR         0.
      C  SAND         0.   C  GRVL         0.   M  BLDR         0.
      VC SAND         0.   VC GRVL         0.

SECTION NO.      6.090
      VF SAND        76.   VF GRVL      1082.   S  COBL       141.
      F  SAND       146.   F  GRVL      1124.   L  COBL         0.
      M  SAND       458.   M  GRVL      1198.   S  BLDR         0.
      C  SAND      1351.   C  GRVL      1126.   M  BLDR         0.
      VC SAND      1112.   VC GRVL       516.
SECTION NO.      6.010
      VF SAND        86.   VF GRVL      1447.   S  COBL       272.
      F  SAND       176.   F  GRVL      1520.   L  COBL        22.
      M  SAND       605.   M  GRVL      1637.   S  BLDR         0.
      C  SAND      1787.   C  GRVL      1645.   M  BLDR         0.
      VC SAND      1477.   VC GRVL       890.
SECTION NO.      5.920
      VF SAND        78.   VF GRVL      1185.   S  COBL       211.
      F  SAND       151.   F  GRVL      1207.   L  COBL        19.
      M  SAND       505.   M  GRVL      1217.   S  BLDR         0.
      C  SAND      1489.   C  GRVL      1138.   M  BLDR         0.
      VC SAND      1224.   VC GRVL       623.
SECTION NO.      5.830
      VF SAND        99.   VF GRVL      1867.   S  COBL       682.
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	F	SAND	210.	F	GRVL	1944.	L	COBL	308.
	M	SAND	786.	M	GRVL	2089.	S	BLDR	0.
	C	SAND	2322.	C	GRVL	2222.	M	BLDR	0.
	VC	SAND	1914.	VC	GRVL	1450.			
SECTION NO.			5.760						
	VF	SAND	85.	VF	GRVL	1061.	S	COBL	137.
	F	SAND	159.	F	GRVL	1054.	L	COBL	2.
	M	SAND	465.	M	GRVL	1031.	S	BLDR	0.
	C	SAND	1366.	C	GRVL	895.	M	BLDR	0.
	VC	SAND	1114.	VC	GRVL	467.			
SECTION NO.			5.660						
	VF	SAND	82.	VF	GRVL	1069.	S	COBL	46.
	F	SAND	149.	F	GRVL	1056.	L	COBL	0.
	M	SAND	467.	M	GRVL	1011.	S	BLDR	0.
	C	SAND	1374.	C	GRVL	876.	M	BLDR	0.
	VC	SAND	1121.	VC	GRVL	311.			
SECTION NO.			5.640						
	VF	SAND	78.	VF	GRVL	1002.	S	COBL	6.
	F	SAND	135.	F	GRVL	988.	L	COBL	0.
	M	SAND	439.	M	GRVL	926.	S	BLDR	0.
	C	SAND	1291.	C	GRVL	700.	M	BLDR	0.
	VC	SAND	1052.	VC	GRVL	230.			
SECTION NO.			5.570						
	VF	SAND	84.	VF	GRVL	1367.	S	COBL	344.
	F	SAND	163.	F	GRVL	1384.	L	COBL	38.
	M	SAND	589.	M	GRVL	1410.	S	BLDR	0.
	C	SAND	1733.	C	GRVL	1363.	M	BLDR	0.
	VC	SAND	1420.	VC	GRVL	779.			
SECTION NO.			5.480						
	VF	SAND	71.	VF	GRVL	806.	S	COBL	38.
	F	SAND	120.	F	GRVL	776.	L	COBL	0.
	M	SAND	363.	M	GRVL	739.	S	BLDR	0.
	C	SAND	1063.	C	GRVL	625.	M	BLDR	0.
	VC	SAND	860.	VC	GRVL	221.			
SECTION NO.			5.380						
	VF	SAND	77.	VF	GRVL	1084.	S	COBL	293.
	F	SAND	138.	F	GRVL	1079.	L	COBL	70.
	M	SAND	477.	M	GRVL	1115.	S	BLDR	0.
	C	SAND	1401.	C	GRVL	1117.	M	BLDR	0.
	VC	SAND	1140.	VC	GRVL	625.			
SECTION NO.			5.310						
	VF	SAND	66.	VF	GRVL	643.	S	COBL	31.
	F	SAND	102.	F	GRVL	613.	L	COBL	0.
	M	SAND	294.	M	GRVL	581.	S	BLDR	0.
	C	SAND	858.	C	GRVL	459.	M	BLDR	0.
	VC	SAND	691.	VC	GRVL	161.			
SECTION NO.			5.210						
	VF	SAND	69.	VF	GRVL	892.	S	COBL	73.
	F	SAND	114.	F	GRVL	885.	L	COBL	2.
	M	SAND	396.	M	GRVL	903.	S	BLDR	0.
	C	SAND	1161.	C	GRVL	798.	M	BLDR	0.
	VC	SAND	943.	VC	GRVL	413.			
SECTION NO.			5.150						
	VF	SAND	66.	VF	GRVL	917.	S	COBL	120.
	F	SAND	111.	F	GRVL	903.	L	COBL	5.
	M	SAND	405.	M	GRVL	793.	S	BLDR	0.
	C	SAND	1189.	C	GRVL	598.	M	BLDR	0.
	VC	SAND	967.	VC	GRVL	323.			
SECTION NO.			5.090						
	VF	SAND	69.	VF	GRVL	997.	S	COBL	269.
	F	SAND	119.	F	GRVL	990.	L	COBL	51.
	M	SAND	440.	M	GRVL	1036.	S	BLDR	0.
	C	SAND	1290.	C	GRVL	1173.	M	BLDR	0.
	VC	SAND	1049.	VC	GRVL	699.			
SECTION NO.			5.030						
	VF	SAND	63.	VF	GRVL	691.	S	COBL	39.
	F	SAND	98.	F	GRVL	679.	L	COBL	0.
	M	SAND	309.	M	GRVL	712.	S	BLDR	0.
	C	SAND	905.	C	GRVL	802.	M	BLDR	0.
	VC	SAND	733.	VC	GRVL	303.			
SECTION NO.			4.960						
	VF	SAND	58.	VF	GRVL	689.	S	COBL	3.
	F	SAND	87.	F	GRVL	691.	L	COBL	0.
	M	SAND	302.	M	GRVL	661.	S	BLDR	0.
	C	SAND	886.	C	GRVL	449.	M	BLDR	0.
	VC	SAND	722.	VC	GRVL	76.			
SECTION NO.			4.900						
	VF	SAND	70.	VF	GRVL	1145.	S	COBL	445.
	F	SAND	125.	F	GRVL	1183.	L	COBL	96.
	M	SAND	488.	M	GRVL	1294.	S	BLDR	0.
	C	SAND	1439.	C	GRVL	1410.	M	BLDR	0.
	VC	SAND	1182.	VC	GRVL	896.			
SECTION NO.			4.820						
	VF	SAND	66.	VF	GRVL	1021.	S	COBL	341.
	F	SAND	114.	F	GRVL	1056.	L	COBL	20.
	M	SAND	436.	M	GRVL	1183.	S	BLDR	0.
	C	SAND	1284.	C	GRVL	1421.	M	BLDR	0.
	VC	SAND	1054.	VC	GRVL	1037.			
SECTION NO.			4.780						
	VF	SAND	60.	VF	GRVL	877.	S	COBL	8.
	F	SAND	99.	F	GRVL	884.	L	COBL	0.
	M	SAND	378.	M	GRVL	879.	S	BLDR	0.
	C	SAND	1114.	C	GRVL	664.	M	BLDR	0.
	VC	SAND	912.	VC	GRVL	151.			
SECTION NO.			4.740						

VF SAND	80.	VF GRVL	1617.	S	COBL	632.
F SAND	163.	F GRVL	1677.	L	COBL	86.
M SAND	683.	M GRVL	1813.	S	BLDR	0.
C SAND	2017.	C GRVL	1885.	M	BLDR	0.
VC SAND	1662.	VC GRVL	1159.			
SECTION NO.	4.650					
VF SAND	63.	VF GRVL	937.	S	COBL	43.
F SAND	108.	F GRVL	928.	L	COBL	0.
M SAND	410.	M GRVL	913.	S	BLDR	0.
C SAND	1206.	C GRVL	817.	M	BLDR	0.
VC SAND	984.	VC GRVL	325.			
SECTION NO.	4.600					
VF SAND	62.	VF GRVL	752.	S	COBL	45.
F SAND	102.	F GRVL	738.	L	COBL	0.
M SAND	337.	M GRVL	720.	S	BLDR	0.
C SAND	975.	C GRVL	683.	M	BLDR	0.
VC SAND	793.	VC GRVL	292.			
SECTION NO.	4.580					
VF SAND	62.	VF GRVL	687.	S	COBL	60.
F SAND	100.	F GRVL	683.	L	COBL	0.
M SAND	318.	M GRVL	674.	S	BLDR	0.
C SAND	883.	C GRVL	587.	M	BLDR	0.
VC SAND	720.	VC GRVL	249.			
SECTION NO.	4.570					
VF SAND	66.	VF GRVL	847.	S	COBL	126.
F SAND	111.	F GRVL	856.	L	COBL	0.
M SAND	376.	M GRVL	874.	S	BLDR	0.
C SAND	1076.	C GRVL	817.	M	BLDR	0.
VC SAND	881.	VC GRVL	420.			
SECTION NO.	4.560					
VF SAND	72.	VF GRVL	1078.	S	COBL	493.
F SAND	127.	F GRVL	1101.	L	COBL	59.
M SAND	468.	M GRVL	1147.	S	BLDR	0.
C SAND	1356.	C GRVL	1082.	M	BLDR	0.
VC SAND	1115.	VC GRVL	674.			
SECTION NO.	4.490					
VF SAND	63.	VF GRVL	865.	S	COBL	79.
F SAND	107.	F GRVL	863.	L	COBL	0.
M SAND	380.	M GRVL	836.	S	BLDR	0.
C SAND	1105.	C GRVL	636.	M	BLDR	0.
VC SAND	904.	VC GRVL	339.			
SECTION NO.	4.400					
VF SAND	63.	VF GRVL	874.	S	COBL	69.
F SAND	108.	F GRVL	861.	L	COBL	2.
M SAND	385.	M GRVL	814.	S	BLDR	0.
C SAND	1125.	C GRVL	651.	M	BLDR	0.
VC SAND	918.	VC GRVL	311.			
SECTION NO.	4.310					
VF SAND	54.	VF GRVL	591.	S	COBL	13.
F SAND	85.	F GRVL	543.	L	COBL	0.
M SAND	274.	M GRVL	439.	S	BLDR	0.
C SAND	797.	C GRVL	283.	M	BLDR	0.
VC SAND	641.	VC GRVL	101.			
SECTION NO.	4.230					
VF SAND	57.	VF GRVL	746.	S	COBL	19.
F SAND	96.	F GRVL	706.	L	COBL	0.
M SAND	339.	M GRVL	613.	S	BLDR	0.
C SAND	990.	C GRVL	504.	M	BLDR	0.
VC SAND	799.	VC GRVL	259.			
SECTION NO.	4.220					
VF SAND	66.	VF GRVL	1035.	S	COBL	338.
F SAND	121.	F GRVL	1025.	L	COBL	89.
M SAND	456.	M GRVL	1014.	S	BLDR	0.
C SAND	1338.	C GRVL	1057.	M	BLDR	0.
VC SAND	1089.	VC GRVL	718.			
SECTION NO.	4.110					
VF SAND	75.	VF GRVL	1345.	S	COBL	676.
F SAND	147.	F GRVL	1363.	L	COBL	257.
M SAND	582.	M GRVL	1429.	S	BLDR	0.
C SAND	1713.	C GRVL	1636.	M	BLDR	0.
VC SAND	1401.	VC GRVL	1188.			
SECTION NO.	4.050					
VF SAND	65.	VF GRVL	967.	S	COBL	158.
F SAND	118.	F GRVL	982.	L	COBL	1.
M SAND	420.	M GRVL	1032.	S	BLDR	0.
C SAND	1235.	C GRVL	921.	M	BLDR	0.
VC SAND	1008.	VC GRVL	506.			
SECTION NO.	3.960					
VF SAND	75.	VF GRVL	1369.	S	COBL	366.
F SAND	151.	F GRVL	1426.	L	COBL	60.
M SAND	582.	M GRVL	1575.	S	BLDR	0.
C SAND	1714.	C GRVL	1517.	M	BLDR	0.
VC SAND	1409.	VC GRVL	952.			
SECTION NO.	3.860					
VF SAND	73.	VF GRVL	1367.	S	COBL	477.
F SAND	147.	F GRVL	1427.	L	COBL	140.
M SAND	579.	M GRVL	1570.	S	BLDR	0.
C SAND	1707.	C GRVL	1477.	M	BLDR	0.
VC SAND	1404.	VC GRVL	989.			
LOCAL INFLOW						
VF SAND	0.	VF GRVL	0.	S	COBL	0.
F SAND	0.	F GRVL	0.	L	COBL	0.
M SAND	0.	M GRVL	0.	S	BLDR	0.
C SAND	0.	C GRVL	0.	M	BLDR	0.

VC SAND	0.	VC GRVL	0.				
SECTION NO.	3.780						
VF SAND	81.	VF GRVL	1680.	S	COBL	850.	
F SAND	172.	F GRVL	1762.	L	COBL	406.	
M SAND	707.	M GRVL	1952.	S	BLDR	25.	
C SAND	2087.	C GRVL	2017.	M	BLDR	0.	
VC SAND	1720.	VC GRVL	1447.				
SECTION NO.	3.750						
VF SAND	74.	VF GRVL	844.	S	COBL	98.	
F SAND	143.	F GRVL	845.	L	COBL	3.	
M SAND	406.	M GRVL	824.	S	BLDR	0.	
C SAND	1080.	C GRVL	636.	M	BLDR	0.	
VC SAND	882.	VC GRVL	297.				
SECTION NO.	3.650						
VF SAND	71.	VF GRVL	718.	S	COBL	28.	
F SAND	134.	F GRVL	709.	L	COBL	0.	
M SAND	330.	M GRVL	648.	S	BLDR	0.	
C SAND	926.	C GRVL	455.	M	BLDR	0.	
VC SAND	754.	VC GRVL	135.				
SECTION NO.	3.600						
VF SAND	77.	VF GRVL	1029.	S	COBL	258.	
F SAND	153.	F GRVL	1045.	L	COBL	104.	
M SAND	452.	M GRVL	1076.	S	BLDR	0.	
C SAND	1303.	C GRVL	1079.	M	BLDR	0.	
VC SAND	1068.	VC GRVL	644.				
SECTION NO.	3.520						
VF SAND	71.	VF GRVL	737.	S	COBL	32.	
F SAND	133.	F GRVL	723.	L	COBL	0.	
M SAND	343.	M GRVL	702.	S	BLDR	0.	
C SAND	954.	C GRVL	570.	M	BLDR	0.	
VC SAND	776.	VC GRVL	182.				
SECTION NO.	3.480						
VF SAND	75.	VF GRVL	934.	S	COBL	240.	
F SAND	142.	F GRVL	935.	L	COBL	8.	
M SAND	416.	M GRVL	956.	S	BLDR	0.	
C SAND	1194.	C GRVL	896.	M	BLDR	0.	
VC SAND	976.	VC GRVL	496.				
SECTION NO.	3.400						
VF SAND	66.	VF GRVL	662.	S	COBL	49.	
F SAND	109.	F GRVL	644.	L	COBL	0.	
M SAND	299.	M GRVL	648.	S	BLDR	0.	
C SAND	867.	C GRVL	580.	M	BLDR	0.	
VC SAND	792.	VC GRVL	267.				
SECTION NO.	3.320						
VF SAND	69.	VF GRVL	932.	S	COBL	140.	
F SAND	121.	F GRVL	942.	L	COBL	0.	
M SAND	407.	M GRVL	1038.	S	BLDR	0.	
C SAND	1191.	C GRVL	1128.	M	BLDR	0.	
VC SAND	973.	VC GRVL	668.				
SECTION NO.	3.210						
VF SAND	69.	VF GRVL	1026.	S	COBL	290.	
F SAND	122.	F GRVL	1050.	L	COBL	10.	
M SAND	444.	M GRVL	1174.	S	BLDR	0.	
C SAND	1302.	C GRVL	1261.	M	BLDR	0.	
VC SAND	1066.	VC GRVL	716.				
SECTION NO.	3.130						
VF SAND	63.	VF GRVL	788.	S	COBL	14.	
F SAND	105.	F GRVL	789.	L	COBL	0.	
M SAND	346.	M GRVL	790.	S	BLDR	0.	
C SAND	1011.	C GRVL	650.	M	BLDR	0.	
VC SAND	825.	VC GRVL	171.				
SECTION NO.	3.070						
VF SAND	83.	VF GRVL	1495.	S	COBL	356.	
F SAND	164.	F GRVL	1549.	L	COBL	0.	
M SAND	635.	M GRVL	1709.	S	BLDR	0.	
C SAND	1869.	C GRVL	1774.	M	BLDR	0.	
VC SAND	1538.	VC GRVL	1065.				
SECTION NO.	2.970						
VF SAND	57.	VF GRVL	545.	S	COBL	0.	
F SAND	72.	F GRVL	486.	L	COBL	0.	
M SAND	259.	M GRVL	326.	S	BLDR	0.	
C SAND	751.	C GRVL	94.	M	BLDR	0.	
VC SAND	599.	VC GRVL	0.				
LOCAL INFLOW							
VF SAND	7.	VF GRVL	72.	S	COBL	0.	
F SAND	39.	F GRVL	161.	L	COBL	0.	
M SAND	157.	M GRVL	212.	S	BLDR	0.	
C SAND	142.	C GRVL	256.	M	BLDR	0.	
VC SAND	93.	VC GRVL	157.				
SECTION NO.	2.920						
VF SAND	53.	VF GRVL	368.	S	COBL	0.	
F SAND	72.	F GRVL	267.	L	COBL	0.	
M SAND	249.	M GRVL	83.	S	BLDR	0.	
C SAND	586.	C GRVL	0.	M	BLDR	0.	
VC SAND	445.	VC GRVL	0.				
SECTION NO.	2.900						
VF SAND	56.	VF GRVL	514.	S	COBL	0.	
F SAND	82.	F GRVL	442.	L	COBL	0.	
M SAND	303.	M GRVL	319.	S	BLDR	0.	
C SAND	757.	C GRVL	236.	M	BLDR	0.	
VC SAND	589.	VC GRVL	0.				
SECTION NO.	2.870						

VF SAND	49.	VF GRVL	372.	S	COBL	0.
F SAND	62.	F GRVL	304.	L	COBL	0.
M SAND	224.	M GRVL	157.	S	BLDR	0.
C SAND	569.	C GRVL	3.	M	BLDR	0.
VC SAND	437.	VC GRVL	0.			
SECTION NO.	2.820					
VF SAND	56.	VF GRVL	682.	S	COBL	0.
F SAND	86.	F GRVL	628.	L	COBL	0.
M SAND	340.	M GRVL	453.	S	BLDR	0.
C SAND	927.	C GRVL	233.	M	BLDR	0.
VC SAND	741.	VC GRVL	0.			
SECTION NO.	2.730					
VF SAND	82.	VF GRVL	1494.	S	COBL	450.
F SAND	156.	F GRVL	1512.	L	COBL	0.
M SAND	667.	M GRVL	1511.	S	BLDR	0.
C SAND	1904.	C GRVL	1558.	M	BLDR	0.
VC SAND	1556.	VC GRVL	1137.			
LOCAL INFLOW						
VF SAND	30.	VF GRVL	237.	S	COBL	83.
F SAND	118.	F GRVL	498.	L	COBL	0.
M SAND	683.	M GRVL	893.	S	BLDR	0.
C SAND	395.	C GRVL	918.	M	BLDR	0.
VC SAND	185.	VC GRVL	465.			
SECTION NO.	2.600					
VF SAND	119.	VF GRVL	2117.	S	COBL	817.
F SAND	294.	F GRVL	2359.	L	COBL	69.
M SAND	1437.	M GRVL	2782.	S	BLDR	0.
C SAND	2741.	C GRVL	3010.	M	BLDR	0.
VC SAND	2148.	VC GRVL	2061.			
SECTION NO.	2.520					
VF SAND	112.	VF GRVL	1534.	S	COBL	93.
F SAND	260.	F GRVL	1665.	L	COBL	0.
M SAND	1008.	M GRVL	1894.	S	BLDR	0.
C SAND	2005.	C GRVL	1827.	M	BLDR	0.
VC SAND	1575.	VC GRVL	751.			
SECTION NO.	2.470					
VF SAND	125.	VF GRVL	1932.	S	COBL	359.
F SAND	291.	F GRVL	2097.	L	COBL	8.
M SAND	1158.	M GRVL	2387.	S	BLDR	0.
C SAND	2480.	C GRVL	2421.	M	BLDR	0.
VC SAND	1974.	VC GRVL	1231.			
SECTION NO.	2.400					
VF SAND	121.	VF GRVL	1782.	S	COBL	337.
F SAND	264.	F GRVL	1882.	L	COBL	37.
M SAND	993.	M GRVL	2038.	S	BLDR	0.
C SAND	2286.	C GRVL	1934.	M	BLDR	0.
VC SAND	1833.	VC GRVL	1031.			
SECTION NO.	2.330					
VF SAND	133.	VF GRVL	2184.	S	COBL	569.
F SAND	295.	F GRVL	2311.	L	COBL	137.
M SAND	1142.	M GRVL	2530.	S	BLDR	0.
C SAND	2768.	C GRVL	2540.	M	BLDR	0.
VC SAND	2239.	VC GRVL	1462.			
SECTION NO.	2.240					
VF SAND	121.	VF GRVL	1820.	S	COBL	273.
F SAND	253.	F GRVL	1875.	L	COBL	0.
M SAND	919.	M GRVL	1953.	S	BLDR	0.
C SAND	2324.	C GRVL	1838.	M	BLDR	0.
VC SAND	1882.	VC GRVL	978.			
SECTION NO.	2.170					
VF SAND	119.	VF GRVL	1756.	S	COBL	73.
F SAND	243.	F GRVL	1804.	L	COBL	0.
M SAND	867.	M GRVL	1859.	S	BLDR	0.
C SAND	2240.	C GRVL	1681.	M	BLDR	0.
VC SAND	1818.	VC GRVL	626.			
SECTION NO.	2.080					
VF SAND	135.	VF GRVL	2350.	S	COBL	282.
F SAND	289.	F GRVL	2445.	L	COBL	0.
M SAND	1094.	M GRVL	2607.	S	BLDR	0.
C SAND	2954.	C GRVL	2580.	M	BLDR	0.
VC SAND	2416.	VC GRVL	1327.			
SECTION NO.	2.000					
VF SAND	151.	VF GRVL	2886.	S	COBL	666.
F SAND	333.	F GRVL	3026.	L	COBL	50.
M SAND	1305.	M GRVL	3301.	S	BLDR	0.
C SAND	3603.	C GRVL	3403.	M	BLDR	0.
VC SAND	2956.	VC GRVL	1927.			
SECTION NO.	1.880					
VF SAND	140.	VF GRVL	2394.	S	COBL	389.
F SAND	292.	F GRVL	2476.	L	COBL	16.
M SAND	1081.	M GRVL	2632.	S	BLDR	0.
C SAND	3013.	C GRVL	2499.	M	BLDR	0.
VC SAND	2467.	VC GRVL	1232.			
SECTION NO.	1.850					
VF SAND	136.	VF GRVL	2125.	S	COBL	103.
F SAND	277.	F GRVL	2168.	L	COBL	0.
M SAND	980.	M GRVL	2217.	S	BLDR	0.
C SAND	2696.	C GRVL	1940.	M	BLDR	0.
VC SAND	2202.	VC GRVL	731.			
SECTION NO.	1.810					
VF SAND	146.	VF GRVL	2459.	S	COBL	440.
F SAND	305.	F GRVL	2527.	L	COBL	82.
M SAND	1113.	M GRVL	2634.	S	BLDR	0.

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      C  SAND      3103.   C  GRVL      2489.   M  BLDR        0.
      VC SAND      2540.   VC GRVL      1288.
SECTION NO.      1.750
      VF SAND       129.   VF GRVL      1384.   S  COBL       66.
      F  SAND       226.   F  GRVL      1356.   L  COBL        0.
      M  SAND       653.   M  GRVL      1274.   S  BLDR        0.
      C  SAND      1801.   C  GRVL      1001.   M  BLDR        0.
      VC SAND      1461.   VC GRVL       457.
SECTION NO.      1.660
      VF SAND       143.   VF GRVL      1932.   S  COBL      363.
      F  SAND       268.   F  GRVL      1954.   L  COBL        2.
      M  SAND       869.   M  GRVL      2005.   S  BLDR        0.
      C  SAND      2463.   C  GRVL      1957.   M  BLDR        0.
      VC SAND      2012.   VC GRVL      1228.
SECTION NO.      1.600
      VF SAND       138.   VF GRVL      1665.   S  COBL       22.
      F  SAND       253.   F  GRVL      1662.   L  COBL        0.
      M  SAND       773.   M  GRVL      1639.   S  BLDR        0.
      C  SAND      2137.   C  GRVL      1451.   M  BLDR        0.
      VC SAND      1743.   VC GRVL       543.
SECTION NO.      1.560
      VF SAND       148.   VF GRVL      2068.   S  COBL      252.
      F  SAND       286.   F  GRVL      2083.   L  COBL        0.
      M  SAND       938.   M  GRVL      2081.   S  BLDR        0.
      C  SAND      2630.   C  GRVL      1952.   M  BLDR        0.
      VC SAND      2152.   VC GRVL       953.
SECTION NO.      1.470
      VF SAND       157.   VF GRVL      2408.   S  COBL      764.
      F  SAND       306.   F  GRVL      2454.   L  COBL      193.
      M  SAND      1060.   M  GRVL      2535.   S  BLDR        0.
      C  SAND      3038.   C  GRVL      2545.   M  BLDR        0.
      VC SAND      2493.   VC GRVL      1622.
SECTION NO.      1.370
      VF SAND       161.   VF GRVL      2559.   S  COBL      789.
      F  SAND       315.   F  GRVL      2622.   L  COBL       67.
      M  SAND      1119.   M  GRVL      2758.   S  BLDR        0.
      C  SAND      3219.   C  GRVL      2862.   M  BLDR        0.
      VC SAND      2644.   VC GRVL      1880.
SECTION NO.      1.270
      VF SAND       145.   VF GRVL      1828.   S  COBL      107.
      F  SAND       260.   F  GRVL      1836.   L  COBL        0.
      M  SAND       807.   M  GRVL      1856.   S  BLDR        0.
      C  SAND      2334.   C  GRVL      1712.   M  BLDR        0.
      VC SAND      1908.   VC GRVL       793.
SECTION NO.      1.180
      VF SAND       127.   VF GRVL      1239.   S  COBL        0.
      F  SAND       203.   F  GRVL      1177.   L  COBL        0.
      M  SAND       559.   M  GRVL      1032.   S  BLDR        0.
      C  SAND      1624.   C  GRVL       717.   M  BLDR        0.
      VC SAND      1317.   VC GRVL       182.
SECTION NO.      1.090
      VF SAND       130.   VF GRVL      1523.   S  COBL       48.
      F  SAND       214.   F  GRVL      1471.   L  COBL        0.
      M  SAND       676.   M  GRVL      1397.   S  BLDR        0.
      C  SAND      1974.   C  GRVL      1216.   M  BLDR        0.
      VC SAND      1607.   VC GRVL       554.
SECTION NO.      0.990
      VF SAND       116.   VF GRVL      1291.   S  COBL       40.
      F  SAND       176.   F  GRVL      1257.   L  COBL        0.
      M  SAND       574.   M  GRVL      1210.   S  BLDR        0.
      C  SAND      1677.   C  GRVL      1025.   M  BLDR        0.
      VC SAND      1364.   VC GRVL       404.
SECTION NO.      0.840
      VF SAND       127.   VF GRVL      1850.   S  COBL      221.
      F  SAND       218.   F  GRVL      1880.   L  COBL        0.
      M  SAND       798.   M  GRVL      1990.   S  BLDR        0.
      C  SAND      2344.   C  GRVL      2003.   M  BLDR        0.
      VC SAND      1920.   VC GRVL      1133.
SECTION NO.      0.750
      VF SAND       119.   VF GRVL      1715.   S  COBL       60.
      F  SAND       204.   F  GRVL      1744.   L  COBL        0.
      M  SAND       739.   M  GRVL      1793.   S  BLDR        0.
      C  SAND      2170.   C  GRVL      1638.   M  BLDR        0.
      VC SAND      1779.   VC GRVL       593.
SECTION NO.      0.710
      VF SAND       116.   VF GRVL      1727.   S  COBL       68.
      F  SAND       201.   F  GRVL      1689.   L  COBL        1.
      M  SAND       753.   M  GRVL      1615.   S  BLDR        0.
      C  SAND      2210.   C  GRVL      1351.   M  BLDR        0.
      VC SAND      1807.   VC GRVL       420.
SECTION NO.      0.630
      VF SAND       140.   VF GRVL      2553.   S  COBL      814.
      F  SAND       273.   F  GRVL      2566.   L  COBL      169.
      M  SAND      1094.   M  GRVL      2646.   S  BLDR        0.
      C  SAND      3220.   C  GRVL      2671.   M  BLDR        0.
      VC SAND      2645.   VC GRVL      1707.
SECTION NO.      0.540
      VF SAND       137.   VF GRVL      2464.   S  COBL      754.
      F  SAND       265.   F  GRVL      2470.   L  COBL        5.
      M  SAND      1062.   M  GRVL      2560.   S  BLDR        0.
      C  SAND      3123.   C  GRVL      2673.   M  BLDR        0.
      VC SAND      2561.   VC GRVL      1835.
SECTION NO.      0.430
      VF SAND       122.   VF GRVL      1941.   S  COBL      102.
      F  SAND       220.   F  GRVL      1946.   L  COBL        0.
```

```
        M  SAND       844.   M  GRVL      2028.   S  BLDR         0.
        C  SAND      2479.   C  GRVL      1980.   M  BLDR         0.
        VC SAND      2027.   VC GRVL       947.
  SECTION NO.      0.330
        VF SAND       130.   VF GRVL      2281.   S  COBL       370.
        F  SAND       248.   F  GRVL      2328.   L  COBL         0.
        M  SAND       981.   M  GRVL      2506.   S  BLDR         0.
        C  SAND      2886.   C  GRVL      2623.   M  BLDR         0.
        VC SAND      2366.   VC GRVL      1500.

  LOCAL INFLOW
        VF SAND         0.   VF GRVL         0.   S  COBL         0.
        F  SAND         0.   F  GRVL         0.   L  COBL         0.
        M  SAND         0.   M  GRVL         0.   S  BLDR         0.
        C  SAND         0.   C  GRVL         0.   M  BLDR         0.
        VC SAND         0.   VC GRVL         0.

  SECTION NO.      0.200
        VF SAND       123.   VF GRVL      1839.   S  COBL       105.
        F  SAND       226.   F  GRVL      1864.   L  COBL         0.
        M  SAND       801.   M  GRVL      1958.   S  BLDR         0.
        C  SAND      2341.   C  GRVL      1921.   M  BLDR         0.
        VC SAND      1915.   VC GRVL       876.
-----------------------------------------------------------------------------------------
$$END

      0   DATA ERRORS DETECTED.

TOTAL NO. OF TIME STEPS READ =        16
TOTAL NO. OF WS PROFILES =            29
ITERATIONS IN EXNER EQ =           30160

COMPUTATIONS COMPLETED
RUN TIME =  0 HOURS,  0 MINUTES &  4.00 SECONDS
```

APPENDIX H.6

Apache Wash Overbank Model, 100-year Flood, Future Condition

```
T1      Cave Creek and Apache WMP
T2      by Stantec:  Proj. No. 82000077                    File: AW-E100F.DAT
T3      for Flood Control District of Maricopa County      Date: 07-28-99   srg

NC 0.055   0.055    0.03     0.1     0.3
X1   0.2      12 9967.74 10039.4
GR  1660 9288.16    1658 9525.13    1658 9606.89    1656 9642.09    1656 9827.21
GR  1654 9904.07    1650 9967.74    1646  9981.5    1646 10015.7    1656 10039.4
GR  165610160.82    166010191.81
HD   0.2    10.0

QT

X1  0.33      16 9945.78   10090     350     700     650
GR  1663 9631.93    1662    9645    1660    9722    1660    9820    1661    9900
GR  1658 9945.78  1652.2    9980  1652.2   10020    1658   10090    1658   10135
GR1652.6   10150    1656   10170    1658   10220    1660   10250    1662   10305
GR  1664   10375
HD  0.33    10.0

X1  0.43      17    9940   10050     505     440     500
GR  1666    9730    1664    9900    1662    9940    1655    9985    1655   10015
GR1661.8   10050  1661.8   10120    1660   10190    1658   10240    1660   10270
GR  1662   10290    1662   10350    1660   10405    1660   10430    1662   10500
GR  1664   10535    1666   10620
HD  0.43    10.0

X1  0.54      17    996510027.02     800     400     640
GR  1670    9600    1668    9840    1664    9875    1664    9965    1660 9975.73
GR  166010018.71    166410027.02    166410027.05    166410027.06    166610068.43
GR  166610068.89    166610360.71    166410418.56    166410470.56    166610510.35
GR  166810530.78    167010614.05
HD  0.54    10.0

X1  0.63      23 9967.2710044.06     300     600     500
GR  1673 9246.69    1672    9300    1672 9467.58    1672 9467.59    1670 9524.47
GR  1670 9524.59    1670 9661.89    1670 9662.28    1668 9798.92    1668 9967.22
GR  1668 9967.27    1666 9971.89    1666 9971.91    1664 9976.44    1664 9976.56
GR  166410025.48    166610033.05    166610033.09    166810044.06    166810044.68
GR  166810151.63    1672   10188 1673.0410227.11
HD  0.63    10.0

X1  0.71      29 9973.9410029.59     370     440     400
GR  1676 9410.74    1674 9517.84    1672 9806.35    1672 9806.66    1670 9929.72
GR  1670 9930.71    1668 9973.93    1668 9973.94    1666 9979.82    1666  9979.9
GR  1664 9985.76    1664  9985.8    166410015.71    1664 10015.9    166610024.34
GR  166610024.46    166810029.59    166810030.23    166810045.83    166810045.97
GR  166610052.42    166610052.62    166610063.21    1666 10063.3    166810070.56
GR  166810070.63    1670 10092.7    167610201.55    167610201.61
HD  0.71    10.0

X1  0.75      32 9943.8210027.72     180     210     200
GR  1676 9452.11    1674 9623.97    1674 9849.05    1674 9850.71    1672 9883.74
GR  1672 9884.15    1670 9943.61    1670 9943.82    1668 9967.12    1668 9967.18
GR  1666 9978.88    166610014.77    167010027.72    167010080.45    167010080.56
GR  167210093.84    1672   10094    167210119.59    167210119.71    167010128.45
GR  1670 10128.5    1670 10145.7    167010145.78    1672 10173.1    167210173.36
GR  167410214.32    1674 10214.6    167410391.18    167410391.21    167610479.43
GR  167610479.48    167610512.05
HD  0.75    10.0

NC 0.055   0.055    0.03     0.3     0.5

X1  0.84      17    9975   10030     420     430     440
GR  1679 9854.82    1676    9910    1672    9975    1670 9980.41    167010019.82
GR  1672   10030  1673.8   10080    1672   10110    1670   10125    1674   10150
GR  1674   10230    1678   10290    1678   10320    1676   10380    1676   10400
GR  1678   10460    1680   10590
HD  0.84    10.0

X1  0.99      18 9969.6610026.04     890     550     900
GR  1686 9925.53    1682 9950.02    1680 9969.66    1678 9977.26    167810017.26
GR  168010026.04    168210147.08    1682 10189.7    168010277.01    167810326.93
GR  167810418.53    168010542.32    168210764.47    168210913.43    168210917.62
GR  1684   11420    1684   11790 1685.9911823.04
HD  0.99    10.0

NC 0.055   0.055    0.03     0.1     0.3

X1  1.09      18    9968   10034     500     460     500
GR  1690    9920    1688    9926    1686    9932    1684    9938    1682    9968
GR  1680    9974    1680   10026    1682   10034    1682   10098    1684   10120
GR  1686   10185    1684   10335    1684   10362    1686   10582    1685   10770
GR  1686   10920    1688   11621    1690   11652
HD  1.09    10.0

NC 0.055   0.055    0.03     0.3     0.5

X1  1.18      21 9937.4210028.94     500     350     500
GR  1694    9840    1692    9875    1690    9902    1688    9920    1686    9936
GR  1684    9947    1682    9957    1680   10015    1680   10020    1682   10025
GR  1684   10030    1686   10061    1688   10102    1690   10180    1690   10270
GR  1689   10390  1689.9   10460  1688.2   10600    1690   10670    1692   10863
GR1693.5   10903
HD  1.18    10.0
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X1  1.27      16    9917   10020     450     500     460
GR  1698    9673    1696    9745    1694    9795    1692    9817    1690    9842
GR  1688    9917    1686    9925    1684    9950    1684    9975    1686   10020
GR  1688   10077    1690   10163    1692   10260    1694   10395    1696   10505
GR  1698   10800
HD  1.27    10.0

NC 0.055   0.055    0.03     0.1     0.3

X1  1.37      10 9932.08 10030.2     400     440     500
GR  1698 9493.05    1696 9549.07    1694 9580.08    1692 9932.08    1690 9963.31
GR  1688 9978.48    1688 10013.4    169010022.33    1692 10030.2    169810053.61
HD  1.37    10.0

X1  1.47      12 9964.3710032.41     490     520     500
GR  1702 9462.33    1700 9530.85    1698 9560.22    1698 9800.63    1696 9911.62
GR  1694 9964.37    1690 9980.91    169010017.61    169410032.41    169810056.56
GR  170010067.04    170210103.76
HD  1.47    10.0

X1  1.56      13 9951.3710028.61     400     540     500
GR  1706 9426.84    1704 9453.43    1702 9496.71    1700 9564.46    1700 9690.11
GR  1698 9951.37    1696 9973.37    1692 9983.09    169210014.85    169810028.61
GR  170210039.18    170410058.37    170610091.18
HD  1.56    10.0

X1   1.6      13 9959.7310016.94     190     180     180
GR  1706 9416.18    1704 9448.11    1702 9518.79    1700 9799.12    1698 9907.12
GR  1696 9959.73    1694 9980.66    1692  9995.9    1692 10008.9    169410012.95
GR  169610016.94    170410031.18    170610062.39
HD   1.6    10.0

X1  1.66      14 9952.11   10034     300     240     250
GR  1708 9744.33    1704 9829.76    1702 9931.63    1700 9952.11    1698 9967.65
GR  1696 9993.88    169610014.03    169810029.43    1700   10034 1700.0110204.97
GR  170210212.95    170410237.12    170610277.66    170810306.08
HD  1.66    10.0

X1  1.75      12 9970.0510072.31     480     520     500
GR  1710 9951.17    1704 9965.64    1702 9970.05    1700 9974.47    1698 9978.76
GR  169810016.76    170010034.19    170210072.31    170410151.35    170610320.71
GR  170810429.93    171010503.73
HD  1.75    10.0

X1  1.81      14 9971.05   10031     300     240     300
GR  1712 9944.51    1704 9965.71    1702 9971.05    1700 9975.82    170010012.24
GR  1702   10031    170410060.69    170610188.05    170610206.68    170410298.14
GR  170410327.71    170610350.59    170810431.76    171210486.49
HD  1.81    10.0

X1  1.85      16 9954.9910041.54     210     150     190
GR  1712 9819.07    1710 9828.06    1708 9836.36    1706 9915.83    1704 9954.99
GR  170010002.05    170010011.48    170410041.54    170610064.87    170810129.94
GR  170810187.04    170610294.81    170610368.04    170810414.01    171010424.61
GR  171210451.94
HD  1.85    10.0

X1  1.88      16    9950   10040     190     230     200
GR  1713 9767.17    1708    9790    1708    9890    1706    9950    1704    9975
GR1702.1    9990  1702.1   10010    1706   10040    1710   10085    1710   10210
GR  1708   10300    1706   10340    1706   10370    1708   10390    1710   10455
GR1713.110479.52
HD  1.88    10.0

X1     2      14    9980   10115     550     230     490
GR1715.9 9964.46    1710    9980  1708.5    9985  1708.5   10020    1710   10115
GR  1712   10150  1713.8   10360    1712   10535    1710   10590  1708.5   10610
GR1708.5   10675    1710   10700    1714   10805    1716   10830
HD     2    10.0

X1  2.08      16 9971.0310080.47     440     270     440
GR  1718 9967.02    1716 9971.03    1710 9983.46    171010015.75    1714 10034.4
GR  171610080.47    171710200.63    1716   10300    1714   10360    1712   10450
GR  1710   10490    1710   10510    1712   10545    1714   10580    1716   10700
GR  1718   10745
HD  2.08    10.0

X1  2.17      12 9948.1610055.88     500     350     520
GR  1722 9809.96    1720 9833.72    1716 9889.63    1716 9892.16    1716 9948.16
GR  1714 9962.44    171410027.88    171610055.88    1716 10199.6    171810234.24
GR  172010416.55    172210468.74
HD  2.17    10.0

X1  2.24      10 9939.5710055.42     380     390     380
GR  1726 9781.96    1724 9796.25    1720 9855.35    1718 9939.57    1714 9973.56
GR  171410001.06    171810055.42    172010148.55    172410188.25    172610215.72
HD  2.24    10.0

X1  2.33      10    9945   10030     450     450     450
GR  1730    9778    1724    9840    1722    9870    1720    9890    1720    9945
GR  1718    9960    1717   10000    1718   10028    1720   10030    1730   10045
HD  2.33    10.0

X1   2.4       8    9940 10024.1     300     370     360
```

```
GR  1732    9795    1730    9800    1724    9840    1720    9940    1718    9980
GR  1718   10020 1719.97 10024.1 1732.0310048.34
HD   2.4    10.0

NC 0.055   0.055    0.03     0.3     0.5

X1  2.47      12 9962.2610027.81     340     450     400
GR  1734 9920.54    1732 9942.57    1724 9962.26    1720  9972.1    1720 9990.76
GR  172210013.06    172410027.81    1726 10090.1    172610200.41    172810300.68
GR  1730   10340    1734   10360
HD  2.47    10.0

NC 0.055   0.055    0.03     0.1     0.3

X1  2.52      14 9957.5910028.76     270     250     260
GR  1736 9805.03    1734 9840.17    1732 9866.23    1728 9886.43    1726 9957.59
GR  1722 9970.16    172110021.48    172610028.76    172810120.86    172810316.87
GR  173010363.84    173210395.26    173410419.34    173610459.58
HD  2.52    10.0

X1   2.6      11    994510028.92     390     450     430
GR  1736    9750    1732    9820    1732    9935    1730    9945    1724    9960
GR  1724    9965    1726   10020  1729.510028.92    1732   10265    173210415.66
GR1736.110462.65
HD  2.52    10.0

NC 0.055   0.055    0.03     0.3     0.5

QT

X1  2.73      10 9971.8710036.42     250     900     640
GR  1740 9756.45    1738 9787.82    1736 9811.88    1732 9971.87    1728 9986.23
GR  172810019.94    173210036.42    173410071.17    173810101.17 1740.0510127.41
HD  2.73    10.0

NC 0.055   0.055   0.043     0.3     0.5

X1  2.82      26    9978   10294     250     470     430
GR  1744    9654    1742    9680    1740    9705    1738    9724    1736    9764
GR1735.5    9884    1736    9934    1736    9978    1734    9982    1731    9994
GR  1731   10006    1734   10024    1736   10034    1736   10140    1736   10210
GR  1734   10248    1732   10254    1730   10260    1730   10282    1732   10288
GR  1734   10294    1736   10324    1738   10340    1740   10355    1742   10370
GR  1744   10387
HD  2.82    10.0

NC 0.055   0.055   0.036     0.1     0.3

X1  2.87      29    9979   10485     240     250     260
GR  1746    9679    1744    9706    1742    9737    1740    9771    1738    9979
GR  1736    9983    1734    9987    1734   10013    1736   10019    1738   10031
GR1738.5   10099    1738   10191    1736   10259    1734   10269    1732   10277
GR  1732   10314    1734   10320    1736   10327    1736   10387    1734   10417
GR  1732   10427    1732   10439    1734   10452    1736   10485    1738   10560
GR  1740   10627    1742   10666    1744   10698
HD  2.87    10.0

NC 0.055   0.055   0.037     0.1     0.3

X1   2.9      32    9978   10469     140     300     200
GR  1746    9726    1744    9756    1742    9794    1740    9826    1738    9978
GR  1736    9984    1734    9990    1734   10010    1736   10016    1738   10022
GR  1740   10100  1740.5   10141    1740   10186    1738   10301    1736   10307
GR  1734   10313    1734   10341    1736   10351    1738   10469    1740   10481
GR  1742   10494    1744   10502    1746   10513    1746   10530    1744   10536
GR  1742   10544    1740   10558    1738   10571    1738   10871    1740   10961
GR  1742   11016    1744   11076
HD   2.9    10.0

NC 0.055   0.055   0.048     0.1     0.3

X1  2.92      30    9970   10660     155     145     155
GR  1748    9820    1746    9845    1744    9870    1742    9910    1740    9970
GR  1738    9980    1735    9990    1735   10010    1738   10014    1740   10022
GR1741.5   10157    1740   10412    1738   10537    1736   10543    1734   10549
GR  1734   10565    1736   10585    1738   10596    1738   10660    1740   10671
GR  1742   10686    1742   10707    1740   10713    1738   10717    1738   10751
GR  1740   11007    1742   11187    1742   11377    1744   11482    1746   11602
HD  2.92    10.0

NC 0.055   0.055   0.049     0.1     0.3

QT

X1  2.97      27    9980   11098     270     280     270
GR  1748    9934    1746    9959    1744    9974    1742    9980    1740    9984
GR  1738    9988    1738   10012    1740   10020    1742   10052    1742   10134
GR1743.5   10314    1742   10552    1740   10718  1738.5   10764    1740   10822
GR  1738   10826    1736   10830    1736   10860    1738   10864    1740   10870
GR  1740   10927    1739   10974    1740   11044    1740   11098    1742   11354
GR  1744   11484    1746   11602
HD  2.97    10.0

NC 0.055   0.055    0.03     0.3     0.5
```

```
X1  3.07      11 9979.9510028.11     570     500     550
GR  1750    9625    1748    9640    1746    9665    1746 9912.66    1744 9979.95
GR  1742 9989.15    174110019.02    174410028.11    174610080.68    174810180.41
GR  175010180.42
HD  3.07    10.0

NC 0.055   0.055    0.03     0.1     0.3

X1  3.13      10 9978.4110027.88     200     300     280
GR  1752 9442.64    1748 9512.79    1748 9870.47    1746 9978.41    1742 9996.99
GR  174210009.71    174810027.88    175010067.68  1750.2   10100    1752 10100.1
HD  3.13    10.0

X1  3.21      14    996510029.09     250     350     310
GR  1754    9595    1752    9630    1750    9660    1749    9680    1750    9710
GR  1751    9900    1750    9965    1746 9990.25    174610009.88 1749.9810029.09
GR  1750   10130    1752   10315  1752.1   10390    1754 10390.1
HD  3.21    10.0

X1  3.32      16 9955.2210020.21     520     520     520
GR  1758 9599.26    1758 9599.45    1756 9630.94    1756 9632.14    1754 9725.16
GR  1754 9955.22    1752 9974.26    1750 9981.64    175010008.82    175410020.21
GR  175410242.15  1756.7   10490  1756.2   10560  1756.2   10725  1756.5   10790
GR  175810929.84
HD  3.32    10.0

X1   3.4      14    9984   10031     480     440     470
GR  1762    9462    1760    9493    1758    9714    1758    9869    1756    9914
GR  1756    9979    1754    9984    1752   10000    1754   10016    1756   10031
GR  1758   10057    1758   10212    1760   10464    1761   10809
HD   3.4    10.0

X1  3.48      11 9985.3910018.81     400     400     400
GR  1764 9620.29    1762  9671.6    1762 9965.97    1760 9985.39    1758  9988.6
GR  1756 9993.36    175510009.59    175810018.81    1760 10110.6    176210298.95
GR  1764   10615
HD  3.48    10.0

X1  3.52      14 9981.9610017.06     200     200     200
GR  1766 9669.22    1764 9704.26    1764 9883.69    1762 9945.91    1762 9977.47
GR  1762 9977.93    1760 9981.96    1758 9986.06    175610002.04    175610006.86
GR  176010017.06    176210100.32    176410273.56    176610646.59
HD  3.52    10.0

X1   3.6       9 9979.8510013.99     400     450     420
GR  1770 9378.25    1768 9475.66    1766 9891.47    1764 9979.85    1760 9990.66
GR  176010010.55    176210013.99    176810247.91    177010365.75
HD   3.6    10.0

X1  3.65       9    9970   10015     250     260     280
GR1771.6 9358.43    1768    9470    1770    9580    1770    9830    1764    9970
GR  1762 9990.15    176210009.75    1764   10015    1770   10370
HD  3.65    10.0

X1  3.75      14 9982.65   10020     500     500     500
GR  1776    9590    1774    9655    1772    9710    1772    9725    1774    9780
GR  1774    9945    1772    9975    1768 9982.65    1764 9991.06    1764   10010
GR  1768   10020    1772   10310    1772   10840    1776   10885
HD  3.75    10.0

NC 0.055   0.055    0.03     0.3     0.5

X1  3.78      17  9978.410060.68     170     170     170
GR  1776 9660.11  1774.1    9740    1774  9978.4    1770 9983.58    1766 9992.92
GR  1766 9993.96    177010036.94    177210060.68    177210120.11    177010142.25
GR  176810151.27    176810155.15    177010163.26    177210225.58    177410348.04
GR  177410545.54    177510650.82
HD  3.78    10.0

NC 0.055   0.055    0.03     0.1     0.3

QT

X1  3.86      15 9980.73 10048.5     360     490     400
GR  1780 9728.15    1778 9811.03    1776 9980.73    1770 9992.41    177010006.32
GR  177210015.17    1774 10048.5    1774 10108.2    177610125.25    1778 10163.1
GR  177810205.78    177410274.92    177410300.77    177810373.74    1780 10496.8
HD  3.86    10.0

X1  3.96      16 9882.8510057.49     490     460     520
GR  1784 9852.78    1782 9882.85    1780 9912.96    1778 9952.91    1776 9978.94
GR  1774 9989.34    177410006.21    178010028.53    178210057.49    178210179.95
GR  178010409.79    177810418.05    1778 10422.6    178010433.36    178210548.23
GR  178410801.62
HD  3.96    10.0

NC 0.055   0.055    0.03     0.3     0.5

X1  4.05       9 9981.93   10025     400     285     500
GR  1788    9960    1782 9981.93    1780    9990    1779   10000    1780   10015
GR  1782   10025    1782   10200    1786   10270  1786.8   10320
HD  4.05    10.0

NC 0.055   0.055    0.03     0.1     0.3
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X1  4.11      11 9978.48 10107.8     240     300     250
GR  1792 9954.62    1790 9972.66    1786 9978.48    1784 9982.42    1782 9988.23
GR  178210014.08    1784 10019.7    1786 10107.8    1788 10273.4    179010355.58
GR  179010489.42
HD  4.11    10.0

X1  4.22      13    9975   10030     280     260     280
GR  1796    9435    1794    9530    1792    9595    1790    9650    1788    9780
GR  1788    9885    1790    9975    1786    9990  1785.5 9999.81    1786   10010
GR  1790   10030    1792   10085  1792.4   10135
HD  4.22    10.0

X1  4.23      13 9980.1610030.19     140     150     150
GR  1796 9520.61    1794 9614.39    1790 9762.38    1788 9933.91    1790 9961.17
GR  1790 9980.16    1788 9985.61    1786 9991.04    178610007.85    178810015.65
GR  179010030.19    179210081.29    179410132.36
HD  4.23    10.0

X1  4.31      12 9980.5410019.75     410     410     420
GR  1798 9706.51    1796  9770.7    1794 9896.31    1792 9980.54    1790  9986.9
GR  178810005.88    178810009.89    179010014.81    179210019.75    179410055.21
GR  179610110.95  1796.510150.57
HD  4.31    10.0

X1   4.4      14    9990   10030     475     490     510
GR  1802    9925    1800    9940    1798    9970    1796    9990    1794    9995
GR1792.3   10005    1794   10020    1796   10030    1796   10080  1794.3   10090
GR  1796   10110    1798   10175    1800   10210    1801   10270
HD   4.4    10.0

X1  4.49      12  9954.910053.62     490     450     450
GR  1806 9821.99    1804 9901.91    1802 9916.74    1800  9954.9    1798 9973.89
GR  1796 9983.53    1796 10011.1    179810018.97    180010053.62    180210105.02
GR  180410240.68  1804.5   10340
HD  4.49    10.0

X1  4.56       9    9975   10115     365     350     365
GR  1810    9730    1808    9915    1806    9945    1802    9975    1799   10000
GR  1802   10115    1804   10150    1806   10215    1808   10240
HD  4.56    10.0

NC 0.055   0.055    0.03     0.3     0.5

X1  4.57       9  9980.5 10011.5     110     100     110
X3     0                    9980    1808   10011    1808
GR  1810    9540    1808    9760    1806    9950    1806  9980.5    1800  9980.5
GR  1800 10011.5    1806 10011.5    1806   10220    1806   10500
HD  4.57    10.0

NC 0.055   0.055    0.03     0.1     0.3

X1  4.58      10    9982   10013     105     105     105
X3                        9982    1807   10013    1807
GR  1810    9685    1808    9790    1806    9945    1804    9982  1801.3    9982
GR1801.3   10013    1804   10013    1804   10250    1806   10320    1808   10500
HD  4.58    10.0

X1   4.6      18  9971.410015.98      83      83      83
GR  1812    9675    1810 9812.65    1810 9836.34    1808 9875.78    1808 9883.17
GR  1806 9966.89    1806  9971.4    1802  9987.4    1802 9998.69    1802 9998.98
GR  180610015.98    180610022.46    1806   10123    180410130.11    180410281.42
GR  180610322.77    180610440.24    180810500.19
HD   4.6    10.0

X1  4.65      14 9982.4710093.98     260     260     280
GR1815.5    9400    1814    9600    1810 9830.73    1808 9982.47    1806 9997.03
GR  180610002.86    180810014.29    180810049.57    180610059.42    180610060.51
GR  180810093.98    180810250.89    1810   10270    1810   10360
HD  4.65    10.0

X1  4.74      22 9960.2910029.03     400     500     500
GR  1818 9500.14    1816 9960.29    1814 9979.29    1812 9986.69    1810    9994
GR  1810 9994.01    1810 9999.53    1810 9999.55    181210010.02    181410029.03
GR  181410029.36    181410136.55    1813   10140    1814   10160    1814   10380
GR  1811   10400    1814   10425    1814   10440    1813   10485    1814   10530
GR  1815   10590    1815   10700
HD  4.74    10.0

X1  4.78      17 9964.8710021.41     300     100     200
X3                       9964.87    181810211.72    1816
GR  1820 9743.69    1818 9905.26    1818 9905.48    1818 9964.87    1818 9964.88
GR  1816 9983.35    1813 9995.72    181310010.03    181610021.41    181610211.72
GR  181610230.89    181410317.17    181310376.07    1814 10488.8    1814 10508.5
GR  1816   10540    1818   10640
HD  4.78    10.0

X1  4.82      28    997510009.43     480     480     480
X3    10
GR  1826    9480    1824 9740.85    1822 9830.85    1820 9875.16    1818 9888.17
GR  1818 9903.71    1820 9930.33    1820 9930.34    1820 9974.99    1820    9975
GR  1818 9990.22    181810005.12    182010009.43    1822 10013.6    182210024.29
GR  182010070.59    1818   10100    182010126.15    182010181.41    181810189.94
GR1817.1   10200    181810207.92    182010217.21    182010264.85    1818   10280
GR  1820   10315    1822   10435    1824   10565
HD  4.82    10.0
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X1   4.9      14    9940   10018     220     160     200
X3                        9940    1824   10018    1824
GR  1826    9730    1824    9825    1824    9940    1822  9961.4    182210007.63
GR  1824   10018    1824   10030    1822   10155    1822   10290    1822   10310
GR  1822   10330    1824   10405    1826   10560    1828   10750
HD   4.9    10.0

X1  4.96      17 9974.1910011.03     400     200     320
X3                                 10156.63    1826
GR  1828 9716.18    1828 9717.02    1826 9800.79    1826 9974.19    1822 9995.82
GR  182210000.05    182610011.03    182610011.04    182610156.72    182610156.73
GR  1824   10310    182410344.97    182610425.12    182710592.76    182710594.98
GR  1828   10670    1830   10790
HD  4.96    10.0

X1  5.03      13 9975.1210012.26     345     340     365
X3                                 10133.33    1830
GR  1833    9515    1832 9590.59    1830 9640.88    1830 9975.12    1826 9992.06
GR  182610001.75    183010012.26    1830 10053.1    183010133.33    182810188.37
GR  182810281.59    1832   10620  1832.5   10750
HD  5.03    10.0

X1  5.09      14    9970   10025     300     310     300
X3                                         10075    1834
GR  1835    9480    1834    9515    1832    9550    1832    9970    1830    9985
GR  1831   10000    1832   10025    1834   10075    1830   10120    1832   10145
GR  1832   10255    1834   10320    1834   10435    1836   10780
HD  5.09    10.0

X1  5.15      14    9978   10025     350     355     352
X3                                         10170    1836
GR  1839    9870    1838    9945    1836    9978    1834    9988    1830   10000
GR  1830   10010    1834   10025    1834   10130    1836   10170    1836   10200
GR  1835   10320    1836   10495    1838   10522    1840   10780
HD  5.15    10.0

X1  5.21      21    9970   10030     330     300     310
X3                                         10135    1840
GR  1842    9685    1840    9780    1838    9860    1836    9885    1836    9890
GR  1838    9915    1838    9970    1836    9985    1834   10000    1836   10015
GR  1838   10030    1838   10085    1837   10110    1838   10120    1840   10135
GR  1840   10150    1838   10245    1838   10310    1840   10355    1840   10400
GR  1842   10525
HD  5.21    10.0

NC 0.055   0.055    0.03     0.3     0.5

X1  5.31      19 9988.2310044.49     500     480     500
GR  1847    9325    1846 9444.34    1844 9557.15    1844 9887.76    1840 9911.33
GR  1840 9919.33    1840 9919.34    1842 9933.33    1842 9933.43    1842 9988.23
GR  1842 9988.24    1838 9997.67    183810005.97    1842 10024.7    184410044.49
GR  1844 10044.5    184410061.08    184410218.05    1846   10565
HD  5.31    10.0

X1  5.38      11    9985   10015     350     425     375
GR  1850    9815    1848    9880    1846    9900    1844    9910    1844    9985
GR  1841   10000    1844   10015    1846   10030    1846   10110    1848   10255
GR  1850   10460
HD  5.38    10.0

NC 0.055   0.055    0.03     0.1     0.3

X1  5.48      15 9978.4110044.06     530     500     500
GR  1855    9300    1854    9440    1854    9750    1852    9790    1852    9895
GR  1850 9929.99    1850 9978.41    184610000.42    1846 10004.4    185010044.06
GR  185210141.09    185210147.22    185210418.73    185410547.75    185610626.53
HD  5.48    10.0

X1  5.57      16    9977   10035     400     450     450
GR  1859    9400    1858    9520    1856    9700    1858    9731    1858    9800
GR  1856    9812    1854    9824    1854    9977    1852    9985    1850    9993
GR  1850   10005    1852   10014    1854   10024    1856   10035    1858   10170
GR  1860   10299
HD  5.57    10.0

X1  5.64       9    9955   10170     370     320     345
GR  1862    9650    1860    9775    1858    9870    1856    9955    185510037.94
GR  1856   10170    1858   10275    1860   10365  1862.5   10575
HD  5.64    10.0

X1  5.66      23 9980.02   10030     460     320     440
GR  1864 9504.86    1864 9505.03    1862  9622.9    1862 9622.94    1862 9802.24
GR  1862 9802.28    1862 9805.57    1862 9805.58    1860 9814.49    1858 9838.73
GR  1858 9838.74    1858 9839.05    1860 9857.77    1860 9980.02    1854 9995.33
GR  1854 10003.7    185810014.57    1859   10030    1860 10136.3    186010136.31
GR  186210169.16  1862.5   10210    1863   10615
HD  5.66    10.0

X1  5.76      15 9968.5810043.06     470     570     540
GR  1870    9640    1868 9674.85    1866 9704.99    1864 9712.43    1866 9741.92
GR  1866    9835    1866    9865    1864 9968.58    1862 9985.72    186210014.25
GR  186410043.06    186610096.64    1868 10124.8    187010142.86    187010144.93
HD  5.76    10.0
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X1  5.83      16    9960   10030     375     380     380
GR  1874    9500    1872    9550    1872    9650    1872    9710    1870    9735
GR  1870    9890    1868    9960    1866    9990  1865.5   10000    1866   10005
GR  1868   10030    1868   10105    1870   10120    1872   10140    1874   10155
GR  1875   10250
HD  5.83    10.0

X1  5.92      19 9948.3410024.34     375     375     400
GR  1877    9720    1876 9854.04    1874 9948.34    1872 9975.43  1870.2   10000
GR  187210006.77    187410015.55    187610024.34    187610034.96    187410094.25
GR  187210130.93    1870 10149.3    187010150.59    187210177.58    187410238.14
GR  187410251.91    187410318.15    187610335.66    187810350.37
HD  5.92    10.0

X1  6.01      17    9920   10035     485     510     490
GR  1883    9750    1882    9870    1880    9920    1878    9955    1876    9980
GR1875.5   10000    1876   10010    1878   10020    1880   10035    1880   10075
GR  1878   10160    1877   10175    1878   10190    1880   10260    1882   10280
GR  1884   10400    1886   10580
HD  6.01    10.0

X1  6.09      10    9935   10070     470     435     445
GR  1886    9815    1884    9890    1882    9935    1880    9970  1879.5   10010
GR  1880   10050    1882   10070    1884   10345    1886   10380    1888   10520
HD  6.09    10.0

QT

X1  6.16      20 9977.6510050.58     270     450     360
GR1892.5    9875    1892 9961.21    1890  9972.1    1888 9977.65    1886  9983.3
GR  1884 9989.16    1883 9996.77    1883 9997.18    188410022.78    188610039.58
GR  188810050.58    188810110.58    188610208.91    188610225.08    188810318.94
GR  189010345.72    1892 10414.9    189210424.02    189210428.81 1893.0810468.67
HD  6.16    10.0

X1  6.25      14 9961.8410045.42     490     430     460
GR  1898 9911.34    1896 9931.58    1894 9947.24    1892 9961.84    1890 9976.08
GR  1888    9990    1888   10015    1890 10030.1    189210045.42    189210069.44
GR  189210268.14    189410454.21    189610476.27    189810569.33
HD  6.25    10.0

X1  6.32      14 9970.9910020.18     410     350     390
GR  1900 9951.16    1898  9957.9    1896 9964.52    1894 9970.99    1892 9977.55
GR  1890 9984.06    189010006.52    189210013.72    189410020.18    189610100.18
GR  189810266.52    189810293.42    189810347.28    190010412.02
HD  6.32    10.0

X1  6.43      13    9925   10030     475     360     450
GR  1906    9655    1904    9665    1902    9680    1900    9690    1900    9925
GR  1898    9970  1896.5    9990  1896.5   10010    1898   10020    1900   10030
GR  1902   10040    1904   10120    1906   10285
HD  6.43    10.0

X1   6.5      16 9947.4510071.54     310     355     345
GR  1910 9636.39    1908 9702.53    1906 9718.78    1904 9747.02    1904  9794.4
GR  1904 9947.45    1902 9967.32    1900 9987.47    1899    9995    1899   10010
GR  190010019.82    190210042.69    190410071.54    190610099.13    1908 10152.4
GR  1910   10187
HD   6.5    10.0

X1  6.58      12  9965.110022.84     430     430     430
GR  1912 9897.27    1910 9926.14    1908 9950.13    1906  9965.1    1904 9980.22
GR  1902 9998.11    190210006.79    190410014.85    190610022.84    190810088.23
GR  191010249.56    191210282.55
HD  6.58    10.0

X1  6.63      14 9985.9110021.82     300     290     290
GR  1916 9976.91    1914 9982.13    1912 9983.41    1910 9984.66    1908 9985.91
GR  1906 9987.08    1905    9995    1905   10005    190610015.13    190810021.82
GR  191010050.15    191210131.79    191410273.67    191610318.49
HD  6.63    10.0

X1  6.71      10 9981.63   10025     425     350     390
GR  1918    9970 1914.04 9977.71 1912.03 9981.63    1908    9990  1907.5   10000
GR  1908   10010    1912   10025    1914   10045    1916   10090    1918   10225
HD  6.71    10.0

X1   6.8      23 9976.6310016.52     500     400     495
GR  1924    9660    1920    9705    1919    9725    1920    9755    1920    9800
GR  1920 9880.75    1920 9901.03    1918 9976.63    1918 9976.81    1916 9982.58
GR  1916 9982.91    1914  9988.6    1914 9988.73    191410004.27    191410004.41
GR  191610010.43    191610010.46    1918 10016.4    191810016.52    192010022.44
GR  192010022.57    192210028.44  1923.7   10040
HD   6.8    10.0

X1   6.9      16 9954.1710017.39     490     560     529
GR  1930 9598.79    1926    9625    1926    9705    1928    9770    1928    9800
GR  1928 9822.48    1926 9857.37    1924 9954.17    1922 9987.42    192010000.76
GR  192010011.02    192210014.22    192410017.39    192610020.56    192810023.72
GR  193010026.89
HD   6.9    10.0

NC 0.055   0.055    0.03     0.3     0.5

X1  6.98      14 9975.9710031.62     400     470     437
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GR  1934 9723.34    1932    9740    1932    9900    1932    9935    1930 9944.17
GR  1928 9975.97    1926  9985.4    1924 9994.24    192410004.06    192610020.09
GR  192810031.62    193010071.11    193210085.11    193410100.97
HD  6.98    10.0

NC 0.055   0.055    0.03     0.1     0.3

X1  7.08      13 9953.0710021.87     485     500     500
GR  1940 9917.61    1938 9925.72    1936 9934.65    1934 9943.58    1932 9953.07
GR  1930 9965.94    1929    9987    193010007.17    193210021.87    193410036.31
GR  1936 10051.7    1938 10067.1    1940 10082.5
HD  7.08    10.0

X1  7.17      13 9978.7610024.18     500     520     500
GR  1944 9950.59    1942 9955.33    1940 9960.08    1938 9967.15    1936 9978.76
GR  1934  9991.7  1934.3   10000    193410014.37    193610024.18    1938   10034
GR  194010043.85    194210082.22    194410098.58
HD  7.17    10.0

NC 0.055   0.055    0.03     0.3     0.5

X1  7.28      14 9988.7110010.16     475     410     554
GR  1950    9710    1944    9760    1942    9800    1942 9836.63  1941.8 9849.74
GR1941.8 9874.17    1942 9924.41    1942 9988.71  1940.8    9998    194210010.16
GR  194410021.65    194610030.54    1948 10038.9    1950 10047.2
HD  7.28    10.0

NC 0.055   0.055    0.03     0.1     0.3

X1  7.36      12 9949.3210023.48     420     470     446
GR  1954    9725    1952    9740    1950    9800    1950 9835.52    1948 9949.32
GR  1946 9977.98  1944.5    9998    194610011.65    194810023.48    195010033.89
GR  195210040.39    195410046.86
HD  7.36    10.0

X1  7.46      13 9969.4710051.31     490     510     500
GR  1960 9830.45    1958 9861.07    1956 9923.22    1954 9969.47    1952 9976.86
GR1951.5    9990    1952 10000.7    195210032.17    195310051.31    195410081.59
GR  1956 10119.3    195810130.99    1960 10142.8
HD  7.46    10.0

X1  7.55      14 9970.0710028.16     510     480     500
GR  1968 9877.72    1966 9895.81    1964 9913.89    1962 9929.39    1960 9970.07
GR  1958 9981.49  1956.7   10000    195810024.51    196010028.16    196010145.16
GR  196210158.57    196410173.58    1966 10182.6    196810293.44
HD  7.55

X1  7.65      13 9977.3710022.56     520     470     500
GR  1970    9767    1966    9805  1965.5    9882    1964    9917    1964 9977.37
GR  1962 9986.15  1961.8   10000    196210010.39    196410016.47    196610022.56
GR  196810109.69    197010128.52    1971   10165
HD  7.65

X1  7.74      22 9983.7410035.24     425     475     500
GR  1978    9733    1976    9744    1974    9754    1972    9765    1972    9800
GR1972.3    9836    1972    9888    1972    9915  1972.4    9968    1972    9981
GR1970.9 9983.74    1970    9987  1969.1   10000    1970   10010    197110035.24
GR  1972   10062  1972.3   10086    1972   10097    1972   10123    1974   10127
GR  1976   10133    1978   10138
HD  7.74

X1  7.84      16    9984   10025     575     425     500
GR  1984    9793    1982    9828    1980    9841    1978    9908    1976    9916
GR  1976    9918    1976    9941    1976    9975    1976    9984  1974.4   10000
GR  1976   10025    1978   10036    1978   10073    1980   10206    1982   10222
GR  1983   10267
HD  7.84    10.0

X1  7.89      18    9983   10054     300     220     300
GR  1986    9756    1984    9764    1984    9845    1984    9878    1982    9978
GR  1982    9983    1980    9987    1978    9992    1977   10000    1978   10020
GR  1980   10054    1980   10082  1981.8   10149    1982   10170    1982   10189
GR  1982   10219    1984   10224  1985.5   10256
HD  7.89    10.0

X1  7.98      20    9975   10039     280     520     465
GR  1992    9500    1990    9570    1988    9630    1986    9740    1986    9773
GR  1986    9859  1986.4    9898    1986    9927    1986    9950    1986    9975
GR  1984    9982    1982    9991  1981.8   10000    1982   10005    1984   10017
GR  1986   10039    1988   10075  1988.2   10097    1990   10116    1992   10127
HD  7.98    10.0

X1  8.02      16    9977   10037     215     245     235
GR  1996    9610    1992    9700  1991.9    9765    1990    9862    1988    9894
GR  1988    9897  1989.2    9951    1988    9977    1986    9989  1985.1   10000
GR  1986   10020    1988   10037    1990   10077    1992   10109    1994   10116
GR  1996   10125
HD  8.02    10.0
EJ

T4  Project: Upper Cave Creek Watercourse Master Plan Studies
T5  Client : Flood Control District of Maricopa County (FCDMC)
T6  Date:    August 3, 1999
T7  Firm:    Stantec Consulting, Inc.
T8  ********************************************************
```

```
I1            10
I4  SAND       4       1      14       0       0       0       0       0
I5           0.5     0.5    0.25     0.5    0.25       0     1.0
LQ    Q        1    2500    5000    7500
LT   QS      0.1    8916   11552   15559
LF  VFS  0.01512 0.01512 0.01902 0.02003
LF   FS  0.03115 0.03115 0.03238 0.03321
LF   MS  0.06244 0.06244 0.06561 0.06750
LF   CS  0.06509 0.06509 0.06832 0.07001
LF  VCS  0.07187 0.07187 0.07556 0.07736
LF  VFG  0.09965 0.09965 0.10454 0.10682
LF   FG  0.14704 0.14704 0.15381 0.15628
LF   MG  0.21408 0.21408 0.22359 0.22410
LF   CG  0.26298 0.26298 0.20829 0.20071
LF  VCG  0.02175 0.02175 0.03432 0.02736
LF   SC  0.00870 0.00870 0.01298 0.01582
LF   LC  0.00014 0.00014 0.00158 0.00079
LF   SB        0       0       0       0
LF   MB        0       0       0       0
PF          8.02     1.0   152.4   101.6      88    76.2      85   50.8      79
PFC 38.1      71    25.4      63   19.05      57    12.7      47   9.525      40
PFC 6.35      33    4.75      28    2.38      21       2      19    1.19      15
PFC 0.59      10    0.42       8     0.3       5   0.149       3   0.074     1.8

$LOCAL
        Trib at RS 0.33
LQL    Q     0.1    1000
LTL   QS    0.10    0.10
LFL  VFS    0.10    0.10
LFL   FS    0.10    0.10
LFL   MS    0.10    0.10
LFL   CS    0.10    0.10
LFL  VCS    0.10    0.10
LFL  VFG    0.10    0.10
LFL   FG    0.10    0.10
LFL   MG    0.10    0.10
LFL   CG    0.05    0.05
LFL  VCG    0.05    0.05
LFL   SC    0.05    0.05
LFL   LC    0.05    0.05
LFL   SB    0.00    0.00
LFL   MB    0.00    0.00

        Paradise Wash
LQL    Q     0.1    1000    3000    5000
LTL   Qs     0.1   13715   37712   41663
LFL  VFS 0.01058 0.00636 0.00545 0.00631
LFL   FS 0.04436 0.02544 0.02006 0.02526
LFL   MS 0.26267 0.14852 0.12892 0.13132
LFL   CS 0.14797 0.08564 0.07565 0.07554
LFL  VCS 0.06598 0.03986 0.03591 0.03581
LFL  VFG 0.07781 0.05010 0.04729 0.04696
LFL   FG 0.14900 0.10060 0.10449 0.10211
LFL   MG 0.22444 0.16710 0.20635 0.19292
LFL   CG 0.01716 0.21839 0.20780 0.19199
LFL  VCG       0 0.15798 0.12954 0.13980
LFL   SB       0       0 0.03853 0.05196
LFL   LC       0       0       0       0
LFL   SB       0       0       0       0
LFL   MB       0       0       0       0

        Desert Hills Wash
LQL    Q     0.1      11    3300    6600    9900
LTL   Qs     0.1      26    5970    9596   12935
LFL  VFS 0.01254 0.01254 0.00409 0.00354 0.00330
LFL   FS 0.07372 0.07372 0.02292 0.02018 0.01885
LFL   MS 0.30241 0.30241 0.09481 0.07205 0.07283
LFL   CS 0.26028 0.26028 0.08805 0.06434 0.06378
LFL  VCS 0.15271 0.15271 0.05881 0.04312 0.04280
LFL  VFG 0.09027 0.09027 0.04724 0.03485 0.03475
LFL   FG 0.09428 0.09428 0.12007 0.08687 0.08962
LFL   MG 0.01379 0.01379 0.20332 0.14036 0.15311
LFL   CG 0.00000 0.00000 0.23981 0.34597 0.30204
LFL  VCG 0.00000 0.00000 0.12088 0.18871 0.21605
LFL   SB 0.00000 0.00000 0.00000 0.00000 0.00286
LFL   LC 0.00000 0.00000 0.00000 0.00000 0.00000
LFL   SB       0       0       0       0       0
LFL   MB       0       0       0       0       0

        Trib near RS 3.86
LQL    Q     0.1    1000
LTL   QS    0.10    0.10
LFL  VFS    0.10    0.10
LFL   FS    0.10    0.10
LFL   MS    0.10    0.10
LFL   CS    0.10    0.10
LFL  VCS    0.10    0.10
LFL  VFG    0.10    0.10
LFL   FG    0.10    0.10
LFL   MG    0.10    0.10
LFL   CG    0.05    0.05
LFL  VCG    0.05    0.05
LFL   SC    0.05    0.05
LFL   LC    0.05    0.05
LFL   SB    0.00    0.00
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 LFL   MB    0.00    0.00

         Trib near RS 6.09
 LQL    Q     0.1    1000
 LTL   QS    0.10    0.10
 LFL  VFS    0.10    0.10
 LFL   FS    0.10    0.10
 LFL   MS    0.10    0.10
 LFL   CS    0.10    0.10
 LFL  VCS    0.10    0.10
 LFL  VFG    0.10    0.10
 LFL   FG    0.10    0.10
 LFL   MG    0.10    0.10
 LFL   CG    0.05    0.05
 LFL  VCG    0.05    0.05
 LFL   SC    0.05    0.05
 LFL   LC    0.05    0.05
 LFL   SB    0.00    0.00
 LFL   MB    0.00    0.00

$HYD
$RATING
RC            11    2000       0       0 1646.00 1650.85 1652.85 1654.34 1655.54
RC       1657.39 1657.73 1658.43 1658.93 1659.31 1659.78
*    A  Level output at time step 1 (0.2500 day)
Q    184     165       0       1       0       0
T     68      68      68      68      68      68
X            0.05  0.2500
*    A  Level output at time step 2 (0.0139 day)
Q   4750    3682       1       3      12       0
W 0.0139
*    A  Level output at time step 3 (0.0208 day)
Q   3088    1977       1       4     330      13
W 0.0208
*    A  Level output at time step 4 (0.0208 day)
Q   7002    1673      60      19     446     409
W 0.0208
*    A  Level output at time step 5 (0.0139 day)
Q  18128    1356     558     920     367     666
W 0.0139
*    A  Level output at time step 6 (0.0139 day)
Q  16959    1024    1044    4632       0    2216
W 0.0139
*    A  Level output at time step 7 (0.0208 day)
Q  16565     720    4205    9270     143    2075
W 0.0208
*    A  Level output at time step 8 (0.0208 day)
Q  14910     490    4804    8753     413     447
W 0.0208
*    A  Level output at time step 9 (0.0278 day)
Q   8784     340    2529    5004     470     440
W 0.0278
*    A  Level output at time step 10 (0.0278 day)
Q   4709     263    1230    2535     347     333
W 0.0278
*    A  Level output at time step 11 (0.0278 day)
Q   3090     205     705    1469     243     236
W 0.0278
*    A  Level output at time step 12 (0.0347 day)
Q   2243     172     454     943     159     175
W 0.0347
*    A  Level output at time step 13 (0.0764 day)
Q   1602     147     304     636      89     120
W 0.0764
*    A  Level output at time step 14 (0.0764 day)
Q   1429     268     233     482      66      88
W 0.0764
*    A  Level output at time step 15 (0.1458 day)
Q   1706     123     354     745      52     137
W 0.1458
*    A  Level output at time step 16 (0.2083 day)
Q    513      15      87     156      51      41
X         0.02083  0.2083
$VOL  A
$$END
```

```
*************************************************     *********************************
*  SCOUR AND DEPOSITION IN RIVERS AND RESERVOIRS  *     *  U.S. ARMY CORPS OF ENGINEERS   *
*        Version: 4.1.00 -  OCTOBER 1993          *     *  HYDROLOGIC ENGINEERING CENTER  *
*  INPUT FILE:  AW-E100F.DAT                      *     *  609 SECOND STREET              *
*  OUTPUT FILE: AW-E100F.OUT                      *     *  DAVIS, CALIFORNIA 95616-4687   *
*  RUN DATE: 10 OCT 00    RUN TIME: 07:39:52      *     *  (916) 756-1104                 *
*************************************************     *********************************

                    X     X  XXXXXXX   XXXXX           XXXXX
                    X     X  X        X     X         X     X
                    X     X  X        X               X
                    XXXXXXX  XXXX     X        XXXXX  XXXXXX
                    X     X  X        X               X     X
                    X     X  X        X     X         X     X
                    X     X  XXXXXXX   XXXXX           XXXXX

         ****************************************************************
         *  MAXIMUM LIMITS FOR THIS VERSION ARE:                        *
         *       10  Stream Segments (Main Stem + Tributaries)          *
         *      500  Cross Sections                                     *
         *      200  Elevation/Station Points per Cross Section         *
         *       20  Grain Sizes                                        *
         *       10  Control Points                                     *
         ****************************************************************

T1      Cave Creek and Apache WMP
T2      by Stantec:  Proj. No. 82000077                    File: AW-E100F.DAT
T3      for Flood Control District of Maricopa County      Date: 07-28-99   srg

N values...  Left   Channel   Right    Contraction    Expansion
           0.0550   0.0300   0.0550       1.1000      0.7000

SECTION NO.     0.200
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

LOCAL INFLOW POINT  1 occurs upstream from Section No.       0.200

SECTION NO.     0.330
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     0.430
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     0.540
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     0.630
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     0.710
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     0.750
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
           0.0550   0.0300   0.0550       1.3000      0.5000

SECTION NO.     0.840
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     0.990
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
           0.0550   0.0300   0.0550       1.1000      0.7000

SECTION NO.     1.090
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
           0.0550   0.0300   0.0550       1.3000      0.5000

SECTION NO.     1.180
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     1.270
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
           0.0550   0.0300   0.0550       1.1000      0.7000

SECTION NO.     1.370
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     1.470
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     1.560
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     1.600
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     1.660
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...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     1.750
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     1.810
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     1.850
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     1.880
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     2.000
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     2.080
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     2.170
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     2.240
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     2.330
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     2.400
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
           0.0550   0.0300   0.0550       1.3000      0.5000

SECTION NO.     2.470
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
           0.0550   0.0300   0.0550       1.1000      0.7000

SECTION NO.     2.520
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     2.600
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
           0.0550   0.0300   0.0550       1.3000      0.5000

LOCAL INFLOW POINT  2 occurs upstream from Section No.       2.600

SECTION NO.     2.730
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
           0.0550   0.0430   0.0550       1.3000      0.5000

SECTION NO.     2.820
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
           0.0550   0.0360   0.0550       1.1000      0.7000

SECTION NO.     2.870
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
           0.0550   0.0370   0.0550       1.1000      0.7000

SECTION NO.     2.900
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
           0.0550   0.0480   0.0550       1.1000      0.7000

SECTION NO.     2.920
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
           0.0550   0.0490   0.0550       1.1000      0.7000

LOCAL INFLOW POINT  3 occurs upstream from Section No.       2.920

SECTION NO.     2.970
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
           0.0550   0.0300   0.0550       1.3000      0.5000

SECTION NO.     3.070
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
           0.0550   0.0300   0.0550       1.1000      0.7000
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SECTION NO.      3.130
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.      3.210
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.      3.320
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.      3.400
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.      3.480
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.      3.520
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.      3.600
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.      3.650
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.      3.750
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left    Channel   Right    Contraction    Expansion
           0.0550   0.0300   0.0550       1.3000      0.5000

SECTION NO.      3.780
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left    Channel   Right    Contraction    Expansion
           0.0550   0.0300   0.0550       1.1000      0.7000

LOCAL INFLOW POINT  4 occurs upstream from Section No.       3.780

SECTION NO.      3.860
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.      3.960
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left    Channel   Right    Contraction    Expansion
           0.0550   0.0300   0.0550       1.3000      0.5000

SECTION NO.      4.050
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left    Channel   Right    Contraction    Expansion
           0.0550   0.0300   0.0550       1.1000      0.7000

SECTION NO.      4.110
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.      4.220
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.      4.230
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.      4.310
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.      4.400
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.      4.490
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.      4.560
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left    Channel   Right    Contraction    Expansion
           0.0550   0.0300   0.0550       1.3000      0.5000

SECTION NO.      4.570
...Left Encroachment defined at station  9980.000 at elevation  1808.000
...Right Encroachment defined at station 10011.000 at elevation  1808.000
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left    Channel   Right    Contraction    Expansion
           0.0550   0.0300   0.0550       1.1000      0.7000

SECTION NO.      4.580
...Left Encroachment defined at station  9982.000 at elevation  1807.000
...Right Encroachment defined at station 10013.000 at elevation  1807.000
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.      4.600
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.      4.650
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...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     4.740
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     4.780
...Left Encroachment defined at station  9964.870 at elevation  1818.000
...Right Encroachment defined at station 10211.720 at elevation  1816.000
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     4.820
...Ineffective Flow Area - Method 1 - Left Overbank  Right Overbank
          Natural Levees at Station       9975.000      10009.430
              Ineffective Elevation       1820.000       1820.000
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     4.900
...Left Encroachment defined at station  9940.000 at elevation  1824.000
...Right Encroachment defined at station 10018.000 at elevation  1824.000
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     4.960
...Right Encroachment defined at station 10156.630 at elevation  1826.000
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     5.030
...Right Encroachment defined at station 10133.330 at elevation  1830.000
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     5.090
...Right Encroachment defined at station 10075.000 at elevation  1834.000
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     5.150
...Right Encroachment defined at station 10170.000 at elevation  1836.000
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     5.210
...Right Encroachment defined at station 10135.000 at elevation  1840.000
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
           0.0550   0.0300   0.0550       1.3000      0.5000

SECTION NO.     5.310
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     5.380
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
           0.0550   0.0300   0.0550       1.1000      0.7000

SECTION NO.     5.480
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     5.570
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     5.640
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     5.660
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     5.760
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     5.830
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     5.920
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     6.010
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     6.090
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

LOCAL INFLOW POINT  5 occurs upstream from Section No.       6.090

SECTION NO.     6.160
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     6.250
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     6.320
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     6.430
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     6.500
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...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     6.580
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     6.630
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     6.710
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     6.800
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     6.900
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
           0.0550   0.0300   0.0550       1.3000     0.5000

SECTION NO.     6.980
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
           0.0550   0.0300   0.0550       1.1000     0.7000

SECTION NO.     7.080
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     7.170
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
           0.0550   0.0300   0.0550       1.3000     0.5000

SECTION NO.     7.280
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
           0.0550   0.0300   0.0550       1.1000     0.7000

SECTION NO.     7.360
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     7.460
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     7.550
...DEPTH of the Bed Sediment Control Volume =    0.00 ft.

SECTION NO.     7.650
...DEPTH of the Bed Sediment Control Volume =    0.00 ft.

SECTION NO.     7.740
...DEPTH of the Bed Sediment Control Volume =    0.00 ft.

SECTION NO.     7.840
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     7.890
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     7.980
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     8.020
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

NO. OF CROSS SECTIONS IN STREAM SEGMENT=104
NO. OF INPUT DATA MESSAGES =   0

TOTAL NO. OF CROSS SECTIONS IN THE NETWORK = 104
TOTAL NO. OF STREAM SEGMENTS IN THE NETWORK=   1
END OF GEOMETRIC DATA

==========================================================================================

T4  Project: Upper Cave Creek Watercourse Master Plan Studies
T5  Client : Flood Control District of Maricopa County (FCDMC)
T6  Date:    August 3, 1999
T7  Firm:    Stantec Consulting, Inc.
T8  ******************************************************

        Cave Creek and Apache WMP
        by Stantec:  Proj. No. 82000077                    File: AW-E100F.DAT
        for Flood Control District of Maricopa County      Date: 07-28-99   srg

- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
SEDIMENT PROPERITES AND PARAMETERS

       SPI     IBG    MNQ      SPGF      ACGR     NFALL    IBSHER
I1     10.       0      1     1.000    32.174         2         1
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 SANDS - BOULDERS ARE PRESENT
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	MTC	IASA	LASA	SPGS	GSF	BSAE	PSI	UWDLB
I4	4	1	14	2.650	0.667	0.500	30.000	93.000

USING TRANSPORT CAPACITY RELATIONSHIP # 4, YANG
GRAIN SIZES UTILIZED (mean diameter - mm)

VERY FINE SAND....	0.088	MEDIUM GRAVEL.....	11.314
FINE SAND.....	0.177	COARSE GRAVEL.....	22.627
MEDIUM SAND.....	0.354	VERY COARSE GRAVEL	45.255
COARSE SAND.....	0.707	SMALL COBBLES.....	90.510
VERY COARSE SAND..	1.414	LARGE COBBLES.....	181.019
VERY FINE GRAVEL..	2.828	SMALL BOULDERS....	362.039
FINE GRAVEL.....	5.657	MEDIUM BOULDERS...	724.077

COEFFICIENTS FOR COMPUTATION SCHEME WERE SPECIFIED

	DBI	DBN	XID	XIN	XIU	UBI	UBN	JSL
I5	0.500	0.500	0.250	0.500	0.250	0.000	1.000	1

SEDIMENT LOAD TABLE FOR STREAM SEGMENT # 1
LOAD BY GRAIN SIZE CLASS (tons/day)

LQ	Q	1.00000	2500.00	5000.00	7500.00
LF	VFS	0.151200E-02	134.810	219.719	311.647
LF	FS	0.311500E-02	277.733	374.054	516.714
LF	MS	0.624400E-02	556.715	757.927	1050.23
LF	CS	0.650900E-02	580.342	789.233	1089.29
LF	VCS	0.718700E-02	640.793	872.869	1203.64
LF	VFG	0.996500E-02	888.479	1207.65	1662.01
LF	FG	0.147040E-01	1311.01	1776.81	2431.56
LF	MG	0.214080E-01	1908.74	2582.91	3486.77
LF	CG	0.262980E-01	2344.73	2406.17	3122.85
LF	VCG	0.217500E-02	193.923	396.465	425.694
LF	SC	0.870000E-03	77.5692	149.945	246.143
LF	LC	0.140000E-04	1.24824	18.2522	12.2916
LF	SB	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19
LF	MB	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19
	TOTAL	0.100001	8916.09	11552.0	15558.8

REACH GEOMETRY FOR STREAM SEGMENT 1

CROSS SECTION NO.	REACH LENGTH (ft)	MOVABLE BED WIDTH	INITIAL BED-ELEVATIONS LEFT SIDE (ft)	THALWEG (ft)	RIGHT SIDE (ft)	ACCUMULATED CHANNEL DISTANCE FROM DOWNSTREAM (ft)	(miles)
	0.000						
0.200		903.650	1660.000	1646.000	1660.000	0.000	0.000
	650.000						
0.330		743.070	1663.000	1652.200	1664.000	650.000	0.123
	500.000						
0.430		890.000	1666.000	1655.000	1666.000	1150.000	0.218
	640.000						
0.540		1014.050	1670.000	1660.000	1670.000	1790.000	0.339
	500.000						
0.630		980.420	1673.000	1664.000	1673.040	2290.000	0.434
	400.000						
0.710		790.870	1676.000	1664.000	1676.000	2690.000	0.509
	200.000						
0.750		1059.940	1676.000	1666.000	1676.000	2890.000	0.547
	440.000						
0.840		735.180	1679.000	1670.000	1680.000	3330.000	0.631
	900.000						
0.990		1897.510	1686.000	1678.000	1685.990	4230.000	0.801
	500.000						
1.090		1732.000	1690.000	1680.000	1690.000	4730.000	0.896
	500.000						
1.180		1063.000	1694.000	1680.000	1693.500	5230.000	0.991
	460.000						
1.270		1127.000	1698.000	1684.000	1698.000	5690.000	1.078
	500.000						
1.370		560.560	1698.000	1688.000	1698.000	6190.000	1.172
	500.000						
1.470		641.430	1702.000	1690.000	1702.000	6690.000	1.267
	500.000						
1.560		664.340	1706.000	1692.000	1706.000	7190.000	1.362
	180.000						
1.600		646.210	1706.000	1692.000	1706.000	7370.000	1.396
	250.000						
1.660		561.750	1708.000	1696.000	1708.000	7620.000	1.443
	500.000						
1.750		552.560	1710.000	1698.000	1710.000	8120.000	1.538
	300.000						
1.810		541.980	1712.000	1700.000	1712.000	8420.000	1.595
	190.000						
1.850		632.870	1712.000	1700.000	1712.000	8610.000	1.631
	200.000						
1.880		712.350	1713.000	1702.100	1713.100	8810.000	1.669
	490.000						
2.000		865.540	1715.900	1708.500	1716.000	9300.000	1.761
	440.000						
2.080		777.980	1718.000	1710.000	1718.000	9740.000	1.845
	520.000						

2.170		658.780	1722.000	1714.000	1722.000	10260.000	1.943
	380.000						
2.240		433.760	1726.000	1714.000	1726.000	10640.000	2.015
	450.000						
2.330		267.000	1730.000	1717.000	1730.000	11090.000	2.100
	360.000						
2.400		253.340	1732.000	1718.000	1732.030	11450.000	2.169
	400.000						
2.470		439.460	1734.000	1720.000	1734.000	11850.000	2.244
	260.000						
2.520		654.550	1736.000	1721.000	1736.000	12110.000	2.294
	430.000						
2.600		712.650	1736.000	1724.000	1736.100	12540.000	2.375
	640.000						
2.730		370.960	1740.000	1728.000	1740.050	13180.000	2.496
	430.000						
2.820		733.000	1744.000	1730.000	1744.000	13610.000	2.578
	260.000						
2.870		1019.000	1746.000	1732.000	1744.000	13870.000	2.627
	200.000						
2.900		1350.000	1746.000	1734.000	1744.000	14070.000	2.665
	155.000						
2.920		1782.000	1748.000	1734.000	1746.000	14225.000	2.694
	270.000						
2.970		1668.000	1748.000	1736.000	1746.000	14495.000	2.745
	550.000						
3.070		555.420	1750.000	1741.000	1750.000	15045.000	2.849
	280.000						
3.130		657.460	1752.000	1742.000	1752.000	15325.000	2.902
	310.000						
3.210		795.100	1754.000	1746.000	1754.000	15635.000	2.961
	520.000						
3.320		1330.580	1758.000	1750.000	1758.000	16155.000	3.060
	470.000						
3.400		1347.000	1762.000	1752.000	1761.000	16625.000	3.149
	400.000						
3.480		994.710	1764.000	1755.000	1764.000	17025.000	3.224
	200.000						
3.520		977.370	1766.000	1756.000	1766.000	17225.000	3.262
	420.000						
3.600		987.500	1770.000	1760.000	1770.000	17645.000	3.342
	280.000						
3.650		1011.570	1771.600	1762.000	1770.000	17925.000	3.395
	500.000						
3.750		1295.000	1776.000	1764.000	1776.000	18425.000	3.490
	170.000						
3.780		990.710	1776.000	1766.000	1775.000	18595.000	3.522
	400.000						
3.860		768.650	1780.000	1770.000	1780.000	18995.000	3.598
	520.000						
3.960		948.840	1784.000	1774.000	1784.000	19515.000	3.696
	500.000						
4.050		360.000	1788.000	1779.000	1786.800	20015.000	3.791
	250.000						
4.110		534.800	1792.000	1782.000	1790.000	20265.000	3.838
	280.000						
4.220		700.000	1796.000	1785.500	1792.400	20545.000	3.891
	150.000						
4.230		611.750	1796.000	1786.000	1794.000	20695.000	3.920
	420.000						
4.310		444.060	1798.000	1788.000	1796.500	21115.000	3.999
	510.000						
4.400		345.000	1802.000	1792.300	1801.000	21625.000	4.096
	450.000						
4.490		518.010	1806.000	1796.000	1804.500	22075.000	4.181
	365.000						
4.560		510.000	1810.000	1799.000	1808.000	22440.000	4.250
	110.000						
4.570		960.000	1810.000	1800.000	1808.000	22550.000	4.271
	105.000						
4.580		815.000	1810.000	1801.300	1808.000	22655.000	4.291
	83.000						
4.600		825.190	1812.000	1802.000	1808.000	22738.000	4.306
	280.000						
4.650		960.000	1815.500	1806.000	1810.000	23018.000	4.359
	500.000						
4.740		1199.860	1818.000	1810.000	1815.000	23518.000	4.454
	200.000						
4.780		896.310	1820.000	1813.000	1818.000	23718.000	4.492
	480.000						
4.820		1085.000	1826.000	1817.100	1824.000	24198.000	4.583
	200.000						
4.900		1020.000	1826.000	1822.000	1828.000	24398.000	4.621
	320.000						
4.960		1073.820	1828.000	1822.000	1830.000	24718.000	4.681
	365.000						
5.030		1235.000	1833.000	1826.000	1832.500	25083.000	4.751
	300.000						
5.090		1300.000	1835.000	1830.000	1836.000	25383.000	4.807
	352.000						
5.150		910.000	1839.000	1830.000	1840.000	25735.000	4.874
	310.000						
5.210		840.000	1842.000	1834.000	1842.000	26045.000	4.933
	500.000						
5.310		1240.000	1847.000	1838.000	1846.000	26545.000	5.027

	375.000						
5.380		645.000	1850.000	1841.000	1850.000	26920.000	5.098
	500.000						
5.480		1326.530	1855.000	1846.000	1856.000	27420.000	5.193
	450.000						
5.570		899.000	1859.000	1850.000	1860.000	27870.000	5.278
	345.000						
5.640		925.000	1862.000	1855.000	1862.500	28215.000	5.344
	440.000						
5.660		1110.140	1864.000	1854.000	1863.000	28655.000	5.427
	540.000						
5.760		504.930	1870.000	1862.000	1870.000	29195.000	5.529
	380.000						
5.830		750.000	1874.000	1865.500	1875.000	29575.000	5.601
	400.000						
5.920		630.370	1877.000	1870.000	1878.000	29975.000	5.677
	490.000						
6.010		830.000	1883.000	1875.500	1886.000	30465.000	5.770
	445.000						
6.090		705.000	1886.000	1879.500	1888.000	30910.000	5.854
	360.000						
6.160		593.670	1892.500	1883.000	1893.080	31270.000	5.922
	460.000						
6.250		657.990	1898.000	1888.000	1898.000	31730.000	6.009
	390.000						
6.320		460.860	1900.000	1890.000	1900.000	32120.000	6.083
	450.000						
6.430		630.000	1906.000	1896.500	1906.000	32570.000	6.169
	345.000						
6.500		550.610	1910.000	1899.000	1910.000	32915.000	6.234
	430.000						
6.580		385.280	1912.000	1902.000	1912.000	33345.000	6.315
	290.000						
6.630		341.580	1916.000	1905.000	1916.000	33635.000	6.370
	390.000						
6.710		255.000	1918.000	1907.500	1918.000	34025.000	6.444
	495.000						
6.800		380.000	1924.000	1914.000	1923.700	34520.000	6.538
	529.000						
6.900		428.100	1930.000	1920.000	1930.000	35049.000	6.638
	437.000						
6.980		377.630	1934.000	1924.000	1934.000	35486.000	6.721
	500.000						
7.080		164.890	1940.000	1929.000	1940.000	35986.000	6.816
	500.000						
7.170		147.990	1944.000	1934.000	1944.000	36486.000	6.910
	554.000						
7.280		337.200	1950.000	1940.800	1950.000	37040.000	7.015
	446.000						
7.360		321.860	1954.000	1944.500	1954.000	37486.000	7.100
	500.000						
7.460		312.350	1960.000	1951.500	1960.000	37986.000	7.194
	500.000						
7.550		415.720	1968.000	1956.700	1968.000	38486.000	7.289
	500.000						
7.650		378.000	1970.000	1961.800	1971.000	38986.000	7.384
	500.000						
7.740		405.000	1978.000	1969.100	1978.000	39486.000	7.478
	500.000						
7.840		474.000	1984.000	1974.400	1983.000	39986.000	7.573
	300.000						
7.890		500.000	1986.000	1977.000	1985.500	40286.000	7.630
	465.000						
7.980		627.000	1992.000	1981.800	1992.000	40751.000	7.718
	235.000						
8.020		515.000	1996.000	1985.100	1996.000	40986.000	7.763

BED MATERIAL GRADATION

SECNO	SAE	DMAX (ft)	DXPI (ft)	XPI	TOTAL BED	BED MATERIAL FRACTIONS per grain size							
0.200	1.000	0.500	0.500	1.000	1.000	VF SAND	0.009	VF GRVL	0.073	S	COBL	0.124	
						F SAND	0.018	F GRVL	0.107	L	COBL	0.052	
						M SAND	0.045	M GRVL	0.157	S	BLDR	0.000	
						C SAND	0.047	C GRVL	0.149	M	BLDR	0.000	
						VC SAND	0.052	VC GRVL	0.149				
0.330	1.000	0.500	0.500	1.000	1.000	VF SAND	0.009	VF GRVL	0.073	S	COBL	0.124	
						F SAND	0.018	F GRVL	0.107	L	COBL	0.052	
						M SAND	0.045	M GRVL	0.157	S	BLDR	0.000	
						C SAND	0.047	C GRVL	0.149	M	BLDR	0.000	
						VC SAND	0.052	VC GRVL	0.149				
0.430	1.000	0.500	0.500	1.000	1.000	VF SAND	0.009	VF GRVL	0.073	S	COBL	0.124	
						F SAND	0.018	F GRVL	0.107	L	COBL	0.052	
						M SAND	0.045	M GRVL	0.157	S	BLDR	0.000	
						C SAND	0.047	C GRVL	0.149	M	BLDR	0.000	
						VC SAND	0.052	VC GRVL	0.149				
0.540	1.000	0.500	0.500	1.000	1.000	VF SAND	0.009	VF GRVL	0.073	S	COBL	0.124	
						F SAND	0.018	F GRVL	0.107	L	COBL	0.052	
						M SAND	0.045	M GRVL	0.157	S	BLDR	0.000	
						C SAND	0.047	C GRVL	0.149	M	BLDR	0.000	
						VC SAND	0.052	VC GRVL	0.149				

0.630	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
0.710	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
0.750	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
0.840	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
0.990	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
1.090	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
1.180	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
1.270	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
1.370	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
1.470	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
1.560	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
1.600	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
1.660	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
1.750	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
1.810	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
1.850	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000

						VC	SAND	0.052	VC	GRVL	0.149				
1.880	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
2.000	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
2.080	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
2.170	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
2.240	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
2.330	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
2.400	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
2.470	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
2.520	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
2.600	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
2.730	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
2.820	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
2.870	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
2.900	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
2.920	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
2.970	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000

						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
3.070	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
3.130	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
3.210	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
3.320	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
3.400	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
3.480	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
3.520	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
3.600	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
3.650	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
3.750	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
3.780	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
3.860	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
3.960	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
4.050	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
4.110	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
4.220	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052

						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
4.230	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
4.310	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
4.400	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
4.490	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
4.560	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
4.570	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
4.580	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
4.600	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
4.650	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
4.740	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
4.780	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
4.820	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
4.900	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
4.960	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
5.030	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
5.090	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124

						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
5.150	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
5.210	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
5.310	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
5.380	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
5.480	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
5.570	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
5.640	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
5.660	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
5.760	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
5.830	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
5.920	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
6.010	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
6.090	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
6.160	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
6.250	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			

6.320	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
6.430	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
6.500	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
6.580	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
6.630	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
6.710	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
6.800	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
6.900	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
6.980	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
7.080	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
7.170	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
7.280	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
7.360	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
7.460	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
7.550	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
7.650	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			

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     7.740  1.000  0.500  0.500  1.000  1.000 | VF SAND  0.009 | VF GRVL  0.073 | S  COBL  0.124 |
                                               | F  SAND  0.018 | F  GRVL  0.107 | L  COBL  0.052 |
                                               | M  SAND  0.045 | M  GRVL  0.157 | S  BLDR  0.000 |
                                               | C  SAND  0.047 | C  GRVL  0.149 | M  BLDR  0.000 |
                                               | VC SAND  0.052 | VC GRVL  0.149 |

     7.840  1.000  0.500  0.500  1.000  1.000 | VF SAND  0.009 | VF GRVL  0.073 | S  COBL  0.124 |
                                               | F  SAND  0.018 | F  GRVL  0.107 | L  COBL  0.052 |
                                               | M  SAND  0.045 | M  GRVL  0.157 | S  BLDR  0.000 |
                                               | C  SAND  0.047 | C  GRVL  0.149 | M  BLDR  0.000 |
                                               | VC SAND  0.052 | VC GRVL  0.149 |

     7.890  1.000  0.500  0.500  1.000  1.000 | VF SAND  0.009 | VF GRVL  0.073 | S  COBL  0.124 |
                                               | F  SAND  0.018 | F  GRVL  0.107 | L  COBL  0.052 |
                                               | M  SAND  0.045 | M  GRVL  0.157 | S  BLDR  0.000 |
                                               | C  SAND  0.047 | C  GRVL  0.149 | M  BLDR  0.000 |
                                               | VC SAND  0.052 | VC GRVL  0.149 |

     7.980  1.000  0.500  0.500  1.000  1.000 | VF SAND  0.009 | VF GRVL  0.073 | S  COBL  0.124 |
                                               | F  SAND  0.018 | F  GRVL  0.107 | L  COBL  0.052 |
                                               | M  SAND  0.045 | M  GRVL  0.157 | S  BLDR  0.000 |
                                               | C  SAND  0.047 | C  GRVL  0.149 | M  BLDR  0.000 |
                                               | VC SAND  0.052 | VC GRVL  0.149 |

     8.020  1.000  0.500  0.500  1.000  1.000 | VF SAND  0.009 | VF GRVL  0.073 | S  COBL  0.124 |
                                               | F  SAND  0.018 | F  GRVL  0.107 | L  COBL  0.052 |
                                               | M  SAND  0.045 | M  GRVL  0.157 | S  BLDR  0.000 |
                                               | C  SAND  0.047 | C  GRVL  0.149 | M  BLDR  0.000 |
                                               | VC SAND  0.052 | VC GRVL  0.149 |


..LOCAL INFLOW DATA...
SEDIMENT LOAD TABLE FOR STREAM SEGMENT #   1
                 AT LOCAL INFLOW POINT #   1
          LOAD BY GRAIN SIZE CLASS (tons/day)
-------------------------------------
LQL     Q |0.100000     | 1000.00     |
          ------------ ------------
LFL   VFS |0.100000E-01|0.100000E-01|
LFL    FS |0.100000E-01|0.100000E-01|
LFL    MS |0.100000E-01|0.100000E-01|
LFL    CS |0.100000E-01|0.100000E-01|
LFL   VCS |0.100000E-01|0.100000E-01|
LFL   VFG |0.100000E-01|0.100000E-01|
LFL    FG |0.100000E-01|0.100000E-01|
LFL    MG |0.100000E-01|0.100000E-01|
LFL    CG |0.500000E-02|0.500000E-02|
LFL   VCG |0.500000E-02|0.500000E-02|
LFL    SC |0.500000E-02|0.500000E-02|
LFL    LC |0.500000E-02|0.500000E-02|
LFL    SB |0.100000E-19|0.100000E-19|
LFL    MB |0.100000E-19|0.100000E-19|
          ------------ ------------
   TOTAL |0.100000     |0.100000     |
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..LOCAL INFLOW DATA...
SEDIMENT LOAD TABLE FOR STREAM SEGMENT #   1
                 AT LOCAL INFLOW POINT #   2
          LOAD BY GRAIN SIZE CLASS (tons/day)
-------------------------------------------------------------
LQL     Q |0.100000     | 1000.00     | 3000.00     | 5000.00     |
          ------------ ------------ ------------ ------------
LFL   VFS |0.105800E-02| 87.2274     | 205.530     | 262.894     |
LFL    FS |0.443600E-02| 348.910     | 756.503     | 1052.41     |
LFL    MS |0.262670E-01| 2036.95     | 4861.83     | 5471.19     |
LFL    CS |0.147970E-01| 1174.55     | 2852.91     | 3147.22     |
LFL   VCS |0.659800E-02| 546.680     | 1354.24     | 1491.95     |
LFL   VFG |0.778100E-02| 687.121     | 1783.40     | 1956.49     |
LFL    FG |0.149000E-01| 1379.73     | 3940.53     | 4254.21     |
LFL    MG |0.224440E-01| 2291.78     | 7781.87     | 8037.63     |
LFL    CG |0.171800E-02| 2995.22     | 7836.55     | 7998.88     |
LFL   VCG |0.100000E-19| 2166.70     | 4885.21     | 5824.49     |
LFL    SB |0.100000E-19|0.100000E-19| 1453.04     | 2164.81     |
LFL    LC |0.100000E-19|0.100000E-19|0.100000E-19|0.100000E-19|
LFL    SB |0.100000E-19|0.100000E-19|0.100000E-19|0.100000E-19|
LFL    MB |0.100000E-19|0.100000E-19|0.100000E-19|0.100000E-19|
          ------------ ------------ ------------ ------------
   TOTAL |0.999990E-01| 13714.9     | 37711.6     | 41662.2     |
-------------------------------------------------------------

..LOCAL INFLOW DATA...
SEDIMENT LOAD TABLE FOR STREAM SEGMENT #   1
                 AT LOCAL INFLOW POINT #   3
          LOAD BY GRAIN SIZE CLASS (tons/day)
-----------------------------------------------------------------------
LQL     Q |0.100000     | 11.0000     | 3300.00     | 6600.00     | 9900.00     |
          ------------ ------------ ------------ ------------ ------------
LFL   VFS |0.125400E-02|0.326040     | 24.4173     | 33.9698     | 42.6855     |
LFL    FS |0.737200E-02| 1.91672     | 136.832     | 193.647     | 243.825     |
LFL    MS |0.302410E-01| 7.86266     | 566.016     | 691.392     | 942.056     |
LFL    CS |0.260280E-01| 6.76728     | 525.659     | 617.407     | 824.994     |
LFL   VCS |0.152710E-01| 3.97046     | 351.096     | 413.780     | 553.618     |
LFL   VFG |0.902700E-02| 2.34702     | 282.023     | 334.421     | 449.491     |
```

LFL	FG	0.942800E-02	2.45128	716.818	833.605	1159.23
LFL	MG	0.137900E-02	0.358540	1213.82	1346.89	1980.48
LFL	CG	0.100000E-19	0.100000E-19	1431.67	3319.93	3906.89
LFL	VCG	0.100000E-19	0.100000E-19	721.654	1810.86	2794.61
LFL	SB	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	36.9941
LFL	LC	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19
LFL	SB	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19
LFL	MB	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19
TOTAL		0.100000	26.0000	5970.00	9595.90	12934.9

..LOCAL INFLOW DATA...
SEDIMENT LOAD TABLE FOR STREAM SEGMENT # 1
AT LOCAL INFLOW POINT # 4
LOAD BY GRAIN SIZE CLASS (tons/day)

LQL	Q	0.100000	1000.00
LFL	VFS	0.100000E-01	0.100000E-01
LFL	FS	0.100000E-01	0.100000E-01
LFL	MS	0.100000E-01	0.100000E-01
LFL	CS	0.100000E-01	0.100000E-01
LFL	VCS	0.100000E-01	0.100000E-01
LFL	VFG	0.100000E-01	0.100000E-01
LFL	FG	0.100000E-01	0.100000E-01
LFL	MG	0.100000E-01	0.100000E-01
LFL	CG	0.500000E-02	0.500000E-02
LFL	VCG	0.500000E-02	0.500000E-02
LFL	SC	0.500000E-02	0.500000E-02
LFL	LC	0.500000E-02	0.500000E-02
LFL	SB	0.100000E-19	0.100000E-19
LFL	MB	0.100000E-19	0.100000E-19
TOTAL		0.100000	0.100000

..LOCAL INFLOW DATA...
SEDIMENT LOAD TABLE FOR STREAM SEGMENT # 1
AT LOCAL INFLOW POINT # 5
LOAD BY GRAIN SIZE CLASS (tons/day)

LQL	Q	0.100000	1000.00
LFL	VFS	0.100000E-01	0.100000E-01
LFL	FS	0.100000E-01	0.100000E-01
LFL	MS	0.100000E-01	0.100000E-01
LFL	CS	0.100000E-01	0.100000E-01
LFL	VCS	0.100000E-01	0.100000E-01
LFL	VFG	0.100000E-01	0.100000E-01
LFL	FG	0.100000E-01	0.100000E-01
LFL	MG	0.100000E-01	0.100000E-01
LFL	CG	0.500000E-02	0.500000E-02
LFL	VCG	0.500000E-02	0.500000E-02
LFL	SC	0.500000E-02	0.500000E-02
LFL	LC	0.500000E-02	0.500000E-02
LFL	SB	0.100000E-19	0.100000E-19
LFL	MB	0.100000E-19	0.100000E-19
TOTAL		0.100000	0.100000

BED SEDIMENT CONTROL VOLUMES

STREAM SEGMENT # 1: Cave Creek and Apache WMP

SECTION NUMBER	LENGTH (ft)	WIDTH (ft)	DEPTH (ft)	VOLUME (cu.ft)	VOLUME (cu.yd)
0.200	325.000	850.123	10.000	0.276290E+07	102330.
0.330	575.000	794.618	10.000	0.456906E+07	169224.
0.430	570.000	891.733	10.000	0.508288E+07	188255.
0.540	570.000	985.919	10.000	0.561974E+07	208139.
0.630	450.000	958.566	10.000	0.431355E+07	159761.
0.710	300.000	862.889	10.000	0.258867E+07	95876.5
0.750	320.000	957.488	10.000	0.306396E+07	113480.
0.840	670.000	1030.949	10.000	0.690736E+07	255828.
0.990	700.000	1628.736	10.000	0.114012E+08	422265.
1.090	500.000	1648.085	10.000	0.824043E+07	305201.
1.180	480.000	1189.368	10.000	0.570897E+07	211443.
1.270	480.000	1018.438	10.000	0.488850E+07	181056.
1.370	500.000	668.445	10.000	0.334223E+07	123786.
1.470	500.000	631.770	10.000	0.315885E+07	116994.
1.560	340.000	657.125	10.000	0.223423E+07	82749.1
1.600	215.000	632.372	10.000	0.135960E+07	50355.5
1.660	375.000	569.092	10.000	0.213410E+07	79040.6
1.750	400.000	553.152	10.000	0.221261E+07	81948.5
1.810	245.000	555.887	10.000	0.136192E+07	50441.6
1.850	195.000	631.696	10.000	0.123181E+07	45622.5
1.880	345.000	740.933	10.000	0.255622E+07	94674.8
2.000	465.000	824.827	10.000	0.383545E+07	142054.
2.080	480.000	769.835	10.000	0.369521E+07	136860.
2.170	450.000	650.068	10.000	0.292530E+07	108345.
2.240	415.000	437.963	10.000	0.181755E+07	67316.5
2.330	405.000	295.858	10.000	0.119822E+07	44378.7
2.400	380.000	288.149	10.000	0.109497E+07	40554.4

2.470	330.000	430.104	10.000	0.141934E+07	52568.3
2.520	345.000	639.603	10.000	0.220663E+07	81727.0
2.600	535.000	636.742	10.000	0.340657E+07	126169.
2.730	535.000	487.583	10.000	0.260857E+07	96613.6
2.820	345.000	693.716	10.000	0.239332E+07	88641.5
2.870	230.000	1013.087	10.000	0.233010E+07	86300.0
2.900	177.500	1350.714	10.000	0.239752E+07	88796.9
2.920	212.500	1705.341	10.000	0.362385E+07	134217.
2.970	410.000	1431.765	10.000	0.587024E+07	217416.
3.070	415.000	812.645	10.000	0.337248E+07	124907.
3.130	295.000	665.425	10.000	0.196300E+07	72703.8
3.210	415.000	889.791	10.000	0.369263E+07	136764.
3.320	495.000	1239.424	10.000	0.613515E+07	227228.
3.400	435.000	1290.052	10.000	0.561173E+07	207842.
3.480	300.000	1071.070	10.000	0.321321E+07	119008.
3.520	310.000	981.522	10.000	0.304272E+07	112693.
3.600	350.000	988.683	10.000	0.346039E+07	128163.
3.650	390.000	1069.252	10.000	0.417008E+07	154447.
3.750	335.000	1198.759	10.000	0.401584E+07	148735.
3.780	285.000	969.017	10.000	0.276170E+07	102285.
3.860	460.000	834.781	10.000	0.383999E+07	142222.
3.960	510.000	822.004	10.000	0.419222E+07	155267.
4.050	375.000	510.276	10.000	0.191353E+07	70871.6
4.110	265.000	536.408	10.000	0.142148E+07	52647.4
4.220	215.000	653.881	10.000	0.140584E+07	52068.3
4.230	285.000	578.304	10.000	0.164817E+07	61043.2
4.310	465.000	451.196	10.000	0.209806E+07	77706.0
4.400	480.000	389.575	10.000	0.186996E+07	69257.7
4.490	407.500	484.972	10.000	0.197626E+07	73194.8
4.560	237.500	546.789	10.000	0.129862E+07	48097.1
4.570	107.500	859.651	10.000	924125.	34226.9
4.580	94.000	843.494	10.000	792885.	29366.1
4.600	181.500	859.075	10.000	0.155922E+07	57748.9
4.650	390.000	995.121	10.000	0.388097E+07	143740.
4.740	350.000	1113.841	10.000	0.389844E+07	144387.
4.780	340.000	970.467	10.000	0.329959E+07	122207.
4.820	340.000	1034.230	10.000	0.351638E+07	130236.
4.900	260.000	1039.373	10.000	0.270237E+07	100088.
4.960	342.500	1094.067	10.000	0.374718E+07	138784.
5.030	332.500	1215.285	10.000	0.404082E+07	149660.
5.090	326.000	1219.847	10.000	0.397670E+07	147285.
5.150	331.000	968.197	10.000	0.320473E+07	118694.
5.210	405.000	931.235	10.000	0.377150E+07	139685.
5.310	437.500	1078.810	10.000	0.471979E+07	174807.
5.380	437.500	859.815	10.000	0.376169E+07	139322.
5.480	475.000	1139.459	10.000	0.541243E+07	200460.
5.570	397.500	983.427	10.000	0.390912E+07	144782.
5.640	392.500	955.782	10.000	0.375144E+07	138942.
5.660	490.000	971.271	10.000	0.475923E+07	176268.
5.760	460.000	657.082	10.000	0.302258E+07	111947.
5.830	390.000	689.753	10.000	0.269004E+07	99631.0
5.920	445.000	684.928	10.000	0.304793E+07	112886.
6.010	467.500	775.296	10.000	0.362451E+07	134241.
6.090	402.500	711.437	10.000	0.286354E+07	106057.
6.160	410.000	621.990	10.000	0.255016E+07	94450.3
6.250	425.000	616.238	10.000	0.261901E+07	97000.4
6.320	420.000	521.572	10.000	0.219060E+07	81133.4
6.430	397.500	586.603	10.000	0.233175E+07	86361.0
6.500	387.500	531.813	10.000	0.206078E+07	76325.1
6.580	360.000	412.326	10.000	0.148437E+07	54976.8
6.630	340.000	331.240	10.000	0.112622E+07	41711.7
6.710	442.500	291.023	10.000	0.128778E+07	47695.4
6.800	512.000	368.141	10.000	0.188488E+07	69810.5
6.900	483.000	411.709	10.000	0.198856E+07	73650.2
6.980	468.500	347.635	10.000	0.162867E+07	60321.2
7.080	500.000	197.530	10.000	987650.	36579.6
7.170	527.000	183.813	10.000	968695.	35877.6
7.280	500.000	299.979	10.000	0.149989E+07	55551.6
7.360	473.000	322.595	10.000	0.152588E+07	56513.9
7.460	500.000	331.163	10.000	0.165582E+07	61326.5
7.550	500.000	392.205	0.000	0.000000	0.000000
7.650	500.000	388.787	0.000	0.000000	0.000000
7.740	500.000	412.000	0.000	0.000000	0.000000
7.840	400.000	462.875	10.000	0.185150E+07	68574.1
7.890	382.500	522.333	10.000	0.199793E+07	73997.2
7.980	350.000	586.345	10.000	0.205221E+07	76007.7
8.020	117.500	552.333	10.000	648992.	24036.7

NO. OF INPUT DATA MESSAGES= 0
END OF SEDIMENT DATA

==========

$HYD
BEGIN COMPUTATIONS.

$RATING

Downstream Boundary Condition - Rating Curve

Elevation	Stage	Discharge	Elevation	Stage	Discharge
1646.000	1646.000	0.000	1657.730	1657.730	12000.000
1650.850	1650.850	2000.000	1658.430	1658.430	14000.000
1652.850	1652.850	4000.000	1658.930	1658.930	16000.000

```
   1654.340    1654.340     6000.000 |   1659.310    1659.310    18000.000
   1655.540    1655.540     8000.000 |   1659.780    1659.780    20000.000
   1657.390    1657.390    10000.000 |
==============================================================================
TIME STEP #        1
*    A  Level output at time step 1 (0.2500 day)
COMPUTING FROM TIME=      0.0000 DAYS TO TIME=      0.2500 DAYS IN     5 COMPUTATION STEPS

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15             9717.0    9716.2

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

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        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0
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*ERROR 15 10013.0 10013.0

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*ERROR 15 10013.0 10013.0

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT # 1
Cave Creek and Apache WMP
ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT

TIME DAYS	ENTRY POINT *	INFLOW	SAND OUTFLOW	TRAP EFF *
0.25	8.020 *	0.00		*
	6.090 *	0.00		*
	3.780 *	0.00		*
	2.920 *	0.00		*
	2.600 *	0.00		*
	0.200 *	0.00		*
TOTAL=	0.200 *	0.00	0.08	-77.58 *

TIME STEP # 2
* A Level output at time step 2 (0.0139 day)

*ERROR 15 10013.0 10013.0

*ERROR 15 10013.0 10013.0

*ERROR 15 10013.0 10013.0

*ERROR 15 10013.0 10013.0

*ERROR 15 10013.0 10013.0

*ERROR 15 10013.0 10013.0

*ERROR 15	10013.0	10013.0
*ERROR 15	10013.0	10013.0
*ERROR 15	10013.0	10013.0
*ERROR 15	10013.0	10013.0
*ERROR 15	10013.0	10013.0
*ERROR 15	10013.0	10013.0
*ERROR 15	10013.0	10013.0
*ERROR 15	10013.0	10013.0
*ERROR 15	10013.0	10013.0
*ERROR 15	10013.0	10013.0
*ERROR 15	10013.0	10013.0
*ERROR 15	10013.0	10013.0
*ERROR 15	10013.0	10013.0
*ERROR 15	10013.0	10013.0
*ERROR 15	10013.0	10013.0
*ERROR 15	10013.0	10013.0
*ERROR 15	10013.0	10013.0
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
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*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10133.3	10133.3
*ERROR 15	10133.3	10133.3
*ERROR 15	10133.3	10133.3

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        *ERROR 15            10133.3   10133.3

        *ERROR 15            10133.3   10133.3

        *ERROR 15            10133.3   10133.3

        *ERROR 15            10133.3   10133.3

        *ERROR 15            10133.3   10133.3

        *ERROR 15            10133.3   10133.3

        *ERROR 15            10133.3   10133.3

        *ERROR 15            10133.3   10133.3

        *ERROR 15            10133.3   10133.3

        *ERROR 15            10133.3   10133.3

        *ERROR 15            10133.3   10133.3

        *ERROR 15            10133.3   10133.3

        *ERROR 15            10133.3   10133.3
** Q ABOVE TABLE **                                                                                    **INLOAD**
**WATER DISCHARGE, WATER-SEDIMENT LOAD TABLE ENDPOINT**        3682.00        1000.00        0.010000

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME        ENTRY *              SAND            *
    DAYS        POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.26        8.020 *      0.02                    *
                6.090 *      0.00                    *
                3.780 *      0.00                    *
                2.920 *      0.00                    *
                2.600 *      0.00                    *
                0.200 *      0.00                    *
   TOTAL=       0.200 *      0.02      0.15     -7.15 *
*****************************************************

==================================================================================
TIME STEP #        3
*    A  Level output at time step 3 (0.0208 day)

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

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        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7
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        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10018.0   10018.0

        *ERROR 15            10018.0   10018.0

        *ERROR 15            10018.0   10018.0

        *ERROR 15            10018.0   10018.0

        *ERROR 15            10018.0   10018.0

        *ERROR 15            10018.0   10018.0

        *ERROR 15            10018.0   10018.0

        *ERROR 15            10018.0   10018.0

        *ERROR 15            10018.0   10018.0

        *ERROR 15            10018.0   10018.0

        *ERROR 15            10018.0   10018.0

        *ERROR 15            10133.3   10133.3

        *ERROR 15            10133.3   10133.3

        *ERROR 15            10133.3   10133.3

        *ERROR 15            10133.3   10133.3

        *ERROR 15            10133.3   10133.3

        *ERROR 15            10133.3   10133.3

        *ERROR 15            10133.3   10133.3

        *ERROR 15            10133.3   10133.3

        *ERROR 15            10133.3   10133.3

        *ERROR 15            10133.3   10133.3

        *ERROR 15            10133.3   10133.3

        *ERROR 15            10133.3   10133.3

        *ERROR 15            10133.3   10133.3
** Q ABOVE TABLE **                                                                                    **INLOAD**
**WATER DISCHARGE, WATER-SEDIMENT LOAD TABLE ENDPOINT**        1977.00        1000.00        0.010000

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME        ENTRY *              SAND              *
    DAYS        POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.28        8.020 *      0.03                     *
                6.090 *      0.00                     *
                3.780 *      0.00                     *
                2.920 *      0.00                     *
                2.600 *      0.00                     *
                0.200 *      0.00                     *
   TOTAL=       0.200 *      0.03      0.34     -8.70 *
*****************************************************

==========================================================================================
TIME STEP #        4
*    A  Level output at time step 4 (0.0208 day)

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0
```

*ERROR 15	10013.0	10013.0
*ERROR 15	10013.0	10013.0
*ERROR 15	10013.0	10013.0
*ERROR 15	10013.0	10013.0
*ERROR 15	10013.0	10013.0
*ERROR 15	10013.0	10013.0
*ERROR 15	10013.0	10013.0
*ERROR 15	10013.0	10013.0
*ERROR 15	10013.0	10013.0
*ERROR 15	10013.0	10013.0
*ERROR 15	10013.0	10013.0
*ERROR 15	10013.0	10013.0
*ERROR 15	10013.0	10013.0
*ERROR 15	10013.0	10013.0
*ERROR 15	10013.0	10013.0
*ERROR 15	10013.0	10013.0
*ERROR 15	10013.0	10013.0
*ERROR 15	10013.0	10013.0
*ERROR 15	10013.0	10013.0
*ERROR 15	10013.0	10013.0
*ERROR 15	10013.0	10013.0
*ERROR 15	10013.0	10013.0
*ERROR 15	10013.0	10013.0
*ERROR 15	10013.0	10013.0
*ERROR 15	10013.0	10013.0
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0

*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	9717.0	9716.2
*ERROR 15	10133.3	10133.3
*ERROR 15	10133.3	10133.3
*ERROR 15	10133.3	10133.3
*ERROR 15	10133.3	10133.3
*ERROR 15	10133.3	10133.3
*ERROR 15	10133.3	10133.3
*ERROR 15	10133.3	10133.3
*ERROR 15	10133.3	10133.3
*ERROR 15	10133.3	10133.3
*ERROR 15	10133.3	10133.3
*ERROR 15	10133.3	10133.3
*ERROR 15	10133.3	10133.3
*ERROR 15	10133.3	10133.3
*ERROR 15	10133.3	10133.3
*ERROR 15	10133.3	10133.3
*ERROR 15	10133.3	10133.3
*ERROR 15	9515.0	9480.0
*ERROR 15	10075.0	10075.0
*ERROR 15	9515.0	9480.0
*ERROR 15	10075.0	10075.0
*ERROR 15	9515.0	9480.0
*ERROR 15	10075.0	10075.0
*ERROR 15	10170.0	10170.0
*ERROR 15	10170.0	10170.0
*ERROR 15	10170.0	10170.0
*ERROR 15	10170.0	10170.0
*ERROR 15	10170.0	10170.0
*ERROR 15	10170.0	10170.0
*ERROR 15	10170.0	10170.0
*ERROR 15	10170.0	10170.0
*ERROR 15	10170.0	10170.0
*ERROR 15	10170.0	10170.0
*ERROR 15	10170.0	10170.0
*ERROR 15	10170.0	10170.0
*ERROR 15	10170.0	10170.0
*ERROR 15	10170.0	10170.0

```
        *ERROR 15            10170.0   10170.0

        *ERROR 15            10170.0   10170.0

        *ERROR 15             9780.0    9685.0

        *ERROR 15            10135.0   10135.0

        *ERROR 15             9780.0    9685.0

        *ERROR 15            10135.0   10135.0

        *ERROR 15             9780.0    9685.0

        *ERROR 15            10135.0   10135.0

        *ERROR 15             9780.0    9685.0

        *ERROR 15            10135.0   10135.0

        *ERROR 15             9780.0    9685.0

        *ERROR 15            10135.0   10135.0
** Q ABOVE TABLE **                                                                                    **INLOAD**
**WATER DISCHARGE, WATER-SEDIMENT LOAD TABLE ENDPOINT**        1673.00        1000.00       0.010000

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME        ENTRY *             SAND             *
    DAYS        POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.31        8.020 *      0.15                    *
                6.090 *      0.00                    *
                3.780 *      0.00                    *
                2.920 *      0.00                    *
                2.600 *      0.00                    *
                0.200 *      0.00                    *
   TOTAL=       0.200 *      0.15      1.10     -6.25 *
*****************************************************

==========================================================================================
TIME STEP #        5
*    A  Level output at time step 5 (0.0139 day)

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10018.0   10018.0

        *ERROR 15            10018.0   10018.0
```

*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	9717.0	9716.2
*ERROR 15	9717.0	9716.2
*ERROR 15	9717.0	9716.2
*ERROR 15	9717.0	9716.2
*ERROR 15	9717.0	9716.2
*ERROR 15	9717.0	9716.2
*ERROR 15	9717.0	9716.2
*ERROR 15	9717.0	9716.2
*ERROR 15	9717.0	9716.2
*ERROR 15	9717.0	9716.2
*ERROR 15	9717.0	9716.2
*ERROR 15	9717.0	9716.2
*ERROR 15	9717.0	9716.2
*ERROR 15	9717.0	9716.2
*ERROR 15	9717.0	9716.2
*ERROR 15	9717.0	9716.2
*ERROR 15	9717.0	9716.2
*ERROR 15	9717.0	9716.2
*ERROR 15	10133.3	10133.3
*ERROR 15	9590.6	9515.0
*ERROR 15	10133.3	10133.3
*ERROR 15	9590.6	9515.0
*ERROR 15	10133.3	10133.3
*ERROR 15	9590.6	9515.0
*ERROR 15	10133.3	10133.3
*ERROR 15	9590.6	9515.0
*ERROR 15	10133.3	10133.3
*ERROR 15	9590.6	9515.0
*ERROR 15	10133.3	10133.3
*ERROR 15	9590.6	9515.0
*ERROR 15	10133.3	10133.3

*ERROR 15	9590.6	9515.0
*ERROR 15	10133.3	10133.3
*ERROR 15	9590.6	9515.0
*ERROR 15	10133.3	10133.3
*ERROR 15	9590.6	9515.0
*ERROR 15	10133.3	10133.3
*ERROR 15	9590.6	9515.0
*ERROR 15	10133.3	10133.3
*ERROR 15	9590.6	9515.0
*ERROR 15	10133.3	10133.3
*ERROR 15	9590.6	9515.0
*ERROR 15	10133.3	10133.3
*ERROR 15	9590.6	9515.0
*ERROR 15	10133.3	10133.3
*ERROR 15	9590.6	9515.0
*ERROR 15	10133.3	10133.3
*ERROR 15	9590.6	9515.0
*ERROR 15	10133.3	10133.3
*ERROR 15	9590.6	9515.0
*ERROR 15	10133.3	10133.3
*ERROR 15	9590.6	9515.0
*ERROR 15	10133.3	10133.3
*ERROR 15	9590.6	9515.0
*ERROR 15	10133.3	10133.3
*ERROR 15	9515.0	9480.0
*ERROR 15	10075.0	10075.0
*ERROR 15	9515.0	9480.0
*ERROR 15	10075.0	10075.0
*ERROR 15	9515.0	9480.0
*ERROR 15	10075.0	10075.0
*ERROR 15	9515.0	9480.0
*ERROR 15	10075.0	10075.0
*ERROR 15	9515.0	9480.0
*ERROR 15	10075.0	10075.0
*ERROR 15	9515.0	9480.0
*ERROR 15	10075.0	10075.0
*ERROR 15	9515.0	9480.0
*ERROR 15	10075.0	10075.0
*ERROR 15	9515.0	9480.0
*ERROR 15	10075.0	10075.0
*ERROR 15	9515.0	9480.0
*ERROR 15	10075.0	10075.0
*ERROR 15	9515.0	9480.0
*ERROR 15	10075.0	10075.0
*ERROR 15	9515.0	9480.0
*ERROR 15	10075.0	10075.0

*ERROR 15	9515.0	9480.0
*ERROR 15	10075.0	10075.0
*ERROR 15	9515.0	9480.0
*ERROR 15	10075.0	10075.0
*ERROR 15	9515.0	9480.0
*ERROR 15	10075.0	10075.0
*ERROR 15	9515.0	9480.0
*ERROR 15	10075.0	10075.0
*ERROR 15	9515.0	9480.0
*ERROR 15	10075.0	10075.0
*ERROR 15	10170.0	10170.0
*ERROR 15	10170.0	10170.0
*ERROR 15	9945.0	9870.0
*ERROR 15	10170.0	10170.0
*ERROR 15	9945.0	9870.0
*ERROR 15	10170.0	10170.0
*ERROR 15	9945.0	9870.0
*ERROR 15	10170.0	10170.0
*ERROR 15	9945.0	9870.0
*ERROR 15	10170.0	10170.0
*ERROR 15	9945.0	9870.0
*ERROR 15	10170.0	10170.0
*ERROR 15	9945.0	9870.0
*ERROR 15	10170.0	10170.0
*ERROR 15	9945.0	9870.0
*ERROR 15	10170.0	10170.0
*ERROR 15	9945.0	9870.0
*ERROR 15	10170.0	10170.0
*ERROR 15	9945.0	9870.0
*ERROR 15	10170.0	10170.0
*ERROR 15	9945.0	9870.0
*ERROR 15	10170.0	10170.0
*ERROR 15	9945.0	9870.0
*ERROR 15	10170.0	10170.0
*ERROR 15	9945.0	9870.0
*ERROR 15	10170.0	10170.0
*ERROR 15	9945.0	9870.0
*ERROR 15	10170.0	10170.0
*ERROR 15	9945.0	9870.0
*ERROR 15	10170.0	10170.0
*ERROR 15	9945.0	9870.0
*ERROR 15	10170.0	10170.0
*ERROR 15	9945.0	9870.0
*ERROR 15	10170.0	10170.0
*ERROR 15	9780.0	9685.0
*ERROR 15	10135.0	10135.0
*ERROR 15	9780.0	9685.0

```
*ERROR 15          10135.0   10135.0
*ERROR 15           9780.0    9685.0
*ERROR 15          10135.0   10135.0
*ERROR 15           9780.0    9685.0
*ERROR 15          10135.0   10135.0
*ERROR 15           9780.0    9685.0
*ERROR 15          10135.0   10135.0
*ERROR 15           9780.0    9685.0
*ERROR 15          10135.0   10135.0
*ERROR 15           9780.0    9685.0
*ERROR 15          10135.0   10135.0
*ERROR 15           9780.0    9685.0
*ERROR 15          10135.0   10135.0
*ERROR 15           9780.0    9685.0
*ERROR 15          10135.0   10135.0
*ERROR 15           9780.0    9685.0
*ERROR 15          10135.0   10135.0
*ERROR 15           9780.0    9685.0
*ERROR 15          10135.0   10135.0
*ERROR 15           9780.0    9685.0
*ERROR 15          10135.0   10135.0
*ERROR 15           9780.0    9685.0
*ERROR 15          10135.0   10135.0
*ERROR 15           9780.0    9685.0
*ERROR 15          10135.0   10135.0
*ERROR 15           9780.0    9685.0
*ERROR 15          10135.0   10135.0
*ERROR 15           9780.0    9685.0
*ERROR 15          10135.0   10135.0
*ERROR 15           9780.0    9685.0
*ERROR 15          10135.0   10135.0
*ERROR 15           9780.0    9685.0
*ERROR 15          10135.0   10135.0
*ERROR 15           9780.0    9685.0
*ERROR 15          10135.0   10135.0
*ERROR 15           9780.0    9685.0
*ERROR 15          10135.0   10135.0
*ERROR 15           9780.0    9685.0
*ERROR 15          10135.0   10135.0
** Q ABOVE TABLE **                                                                    **INLOAD**
**WATER DISCHARGE, WATER-SEDIMENT LOAD TABLE ENDPOINT**      14261.00       7500.00     311.646770
** Q ABOVE TABLE **                                                                    **INLOAD**
**WATER DISCHARGE, WATER-SEDIMENT LOAD TABLE ENDPOINT**       1356.00       1000.00       0.010000

TABLE 5A-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME       ENTRY *             SAND              *
    DAYS       POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.32       8.020 *      0.25                    *
               6.090 *      0.00                    *
               3.780 *      0.00                    *
               2.920 *      0.01                    *
               2.600 *      0.04                    *
               0.200 *      0.00                    *
   TOTAL=      0.200 *      0.30      3.20     -9.57 *
*****************************************************

==========================================================================
TIME STEP #       6
*    A  Level output at time step 6 (0.0139 day)

         *ERROR 15          10013.0   10013.0
```

*ERROR 15	10013.0	10013.0
*ERROR 15	10013.0	10013.0
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	9717.0	9716.2
*ERROR 15	9717.0	9716.2
*ERROR 15	9717.0	9716.2
*ERROR 15	9717.0	9716.2
*ERROR 15	9717.0	9716.2
*ERROR 15	9717.0	9716.2
*ERROR 15	9717.0	9716.2
*ERROR 15	9717.0	9716.2
*ERROR 15	9717.0	9716.2
*ERROR 15	9717.0	9716.2
*ERROR 15	9717.0	9716.2
*ERROR 15	9717.0	9716.2
*ERROR 15	9717.0	9716.2
*ERROR 15	9717.0	9716.2

*ERROR 15	9717.0	9716.2
*ERROR 15	9717.0	9716.2
*ERROR 15	9717.0	9716.2
*ERROR 15	9590.6	9515.0
*ERROR 15	10133.3	10133.3
*ERROR 15	10133.3	10133.3
*ERROR 15	10133.3	10133.3
*ERROR 15	10133.3	10133.3
*ERROR 15	10133.3	10133.3
*ERROR 15	9590.6	9515.0
*ERROR 15	10133.3	10133.3
*ERROR 15	9590.6	9515.0
*ERROR 15	10133.3	10133.3
*ERROR 15	9590.6	9515.0
*ERROR 15	10133.3	10133.3
*ERROR 15	9590.6	9515.0
*ERROR 15	10133.3	10133.3
*ERROR 15	9590.6	9515.0
*ERROR 15	10133.3	10133.3
*ERROR 15	9590.6	9515.0
*ERROR 15	10133.3	10133.3
*ERROR 15	9590.6	9515.0
*ERROR 15	10133.3	10133.3
*ERROR 15	9590.6	9515.0
*ERROR 15	10133.3	10133.3
*ERROR 15	9590.6	9515.0
*ERROR 15	10133.3	10133.3
*ERROR 15	9590.6	9515.0
*ERROR 15	10133.3	10133.3
*ERROR 15	9590.6	9515.0
*ERROR 15	10133.3	10133.3
*ERROR 15	9590.6	9515.0
*ERROR 15	10133.3	10133.3
*ERROR 15	9590.6	9515.0
*ERROR 15	10133.3	10133.3
*ERROR 15	9590.6	9515.0
*ERROR 15	10133.3	10133.3
*ERROR 15	9590.6	9515.0
*ERROR 15	10133.3	10133.3
*ERROR 15	9515.0	9480.0
*ERROR 15	10075.0	10075.0
*ERROR 15	9515.0	9480.0
*ERROR 15	10075.0	10075.0
*ERROR 15	9515.0	9480.0
*ERROR 15	10075.0	10075.0
*ERROR 15	9945.0	9870.0
*ERROR 15	10170.0	10170.0

*ERROR 15	10170.0	10170.0
*ERROR 15	9945.0	9870.0
*ERROR 15	10170.0	10170.0
*ERROR 15	9945.0	9870.0
*ERROR 15	10170.0	10170.0
*ERROR 15	9945.0	9870.0
*ERROR 15	10170.0	10170.0
*ERROR 15	9945.0	9870.0
*ERROR 15	10170.0	10170.0
*ERROR 15	9945.0	9870.0
*ERROR 15	10170.0	10170.0
*ERROR 15	9945.0	9870.0
*ERROR 15	10170.0	10170.0
*ERROR 15	9945.0	9870.0
*ERROR 15	10170.0	10170.0
*ERROR 15	9945.0	9870.0
*ERROR 15	10170.0	10170.0
*ERROR 15	9945.0	9870.0
*ERROR 15	10170.0	10170.0
*ERROR 15	9945.0	9870.0
*ERROR 15	10170.0	10170.0
*ERROR 15	9945.0	9870.0
*ERROR 15	10170.0	10170.0
*ERROR 15	9945.0	9870.0
*ERROR 15	10170.0	10170.0
*ERROR 15	9945.0	9870.0
*ERROR 15	10170.0	10170.0
*ERROR 15	9945.0	9870.0
*ERROR 15	10170.0	10170.0
*ERROR 15	9780.0	9685.0
*ERROR 15	10135.0	10135.0
*ERROR 15	9780.0	9685.0
*ERROR 15	10135.0	10135.0
*ERROR 15	9780.0	9685.0
*ERROR 15	10135.0	10135.0
*ERROR 15	9780.0	9685.0
*ERROR 15	10135.0	10135.0
*ERROR 15	9780.0	9685.0
*ERROR 15	10135.0	10135.0
*ERROR 15	9780.0	9685.0
*ERROR 15	10135.0	10135.0
*ERROR 15	9780.0	9685.0
*ERROR 15	10135.0	10135.0
*ERROR 15	9780.0	9685.0
*ERROR 15	10135.0	10135.0
*ERROR 15	9780.0	9685.0
*ERROR 15	10135.0	10135.0
*ERROR 15	9780.0	9685.0

```
        *ERROR 15            10135.0   10135.0

        *ERROR 15             9780.0    9685.0

        *ERROR 15            10135.0   10135.0

        *ERROR 15             9780.0    9685.0

        *ERROR 15            10135.0   10135.0

        *ERROR 15             9780.0    9685.0

        *ERROR 15            10135.0   10135.0

        *ERROR 15             9780.0    9685.0

        *ERROR 15            10135.0   10135.0

        *ERROR 15             9780.0    9685.0

        *ERROR 15            10135.0   10135.0

        *ERROR 15             9780.0    9685.0

        *ERROR 15            10135.0   10135.0
** Q ABOVE TABLE **                                                                                **INLOAD**
**WATER DISCHARGE, WATER-SEDIMENT LOAD TABLE ENDPOINT**        8043.00        7500.00     311.646770
** Q ABOVE TABLE **                                                                                **INLOAD**
**WATER DISCHARGE, WATER-SEDIMENT LOAD TABLE ENDPOINT**        2216.00        1000.00       0.010000
** Q ABOVE TABLE **                                                                                **INLOAD**
**WATER DISCHARGE, WATER-SEDIMENT LOAD TABLE ENDPOINT**        1024.00        1000.00       0.010000

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME        ENTRY *              SAND              *
    DAYS        POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.33        8.020 *      0.36                     *
                6.090 *      0.00                     *
                3.780 *      0.00                     *
                2.920 *      0.06                     *
                2.600 *      0.14                     *
                0.200 *      0.00                     *
   TOTAL=       0.200 *      0.56      5.22     -8.35 *
*****************************************************

==============================================================================
TIME STEP #       7
*    A  Level output at time step 7 (0.0208 day)

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10018.0   10018.0

        *ERROR 15            10018.0   10018.0

        *ERROR 15            10018.0   10018.0
```

*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	9717.0	9716.2
*ERROR 15	9590.6	9515.0
*ERROR 15	10133.3	10133.3
*ERROR 15	10133.3	10133.3
*ERROR 15	10133.3	10133.3
*ERROR 15	10133.3	10133.3
*ERROR 15	10133.3	10133.3
*ERROR 15	10133.3	10133.3
*ERROR 15	10133.3	10133.3
*ERROR 15	10133.3	10133.3
*ERROR 15	10133.3	10133.3
*ERROR 15	10133.3	10133.3
*ERROR 15	10133.3	10133.3
*ERROR 15	10133.3	10133.3
*ERROR 15	10133.3	10133.3
*ERROR 15	10133.3	10133.3
*ERROR 15	10133.3	10133.3
*ERROR 15	10133.3	10133.3
*ERROR 15	10133.3	10133.3
*ERROR 15	9515.0	9480.0
*ERROR 15	10075.0	10075.0
*ERROR 15	9945.0	9870.0
*ERROR 15	10170.0	10170.0
*ERROR 15	10170.0	10170.0
*ERROR 15	10170.0	10170.0
*ERROR 15	10170.0	10170.0
*ERROR 15	10170.0	10170.0
*ERROR 15	10170.0	10170.0
*ERROR 15	10170.0	10170.0
*ERROR 15	10170.0	10170.0
*ERROR 15	10170.0	10170.0
*ERROR 15	10170.0	10170.0
*ERROR 15	10170.0	10170.0

```
        *ERROR 15            10170.0   10170.0

        *ERROR 15            10170.0   10170.0

        *ERROR 15             9780.0    9685.0

        *ERROR 15            10135.0   10135.0
** Q ABOVE TABLE **                                                                                    **INLOAD**
**WATER DISCHARGE, WATER-SEDIMENT LOAD TABLE ENDPOINT**        2075.00        1000.00        0.010000

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
**************************************************
    TIME       ENTRY *              SAND            *
    DAYS       POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.35       8.020 *      0.36                    *
               6.090 *      0.00                    *
               3.780 *      0.00                    *
               2.920 *      0.19                    *
               2.600 *      0.55                    *
               0.200 *      0.00                    *
   TOTAL=      0.200 *      1.10      8.09     -6.36 *
**************************************************

==========================================================================================
TIME STEP #        8
*    A  Level output at time step 8 (0.0208 day)

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10018.0   10018.0

        *ERROR 15            10018.0   10018.0

        *ERROR 15            10133.3   10133.3

        *ERROR 15            10170.0   10170.0

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
**************************************************
    TIME       ENTRY *              SAND            *
    DAYS       POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.37       8.020 *      0.36                    *
               6.090 *      0.00                    *
               3.780 *      0.00                    *
               2.920 *      0.31                    *
               2.600 *      0.98                    *
               0.200 *      0.00                    *
   TOTAL=      0.200 *      1.64     10.77     -5.55 *
**************************************************

==========================================================================================
TIME STEP #        9
*    A  Level output at time step 9 (0.0278 day)

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0
```

```
        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME       ENTRY *              SAND             *
    DAYS       POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.40       8.020 *      0.36                    *
               6.090 *      0.00                    *
               3.780 *      0.00                    *
               2.920 *      0.41                    *
               2.600 *      1.40                    *
               0.200 *      0.00                    *
   TOTAL=      0.200 *      2.18     12.37     -4.68 *
*****************************************************

==========================================================================================
TIME STEP #      10
*    A  Level output at time step 10 (0.0278 day)

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME       ENTRY *              SAND             *
    DAYS       POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.43       8.020 *      0.36                    *
               6.090 *      0.00                    *
               3.780 *      0.00                    *
               2.920 *      0.46                    *
               2.600 *      1.63                    *
               0.200 *      0.00                    *
   TOTAL=      0.200 *      2.45     13.09     -4.35 *
*****************************************************

==========================================================================================
TIME STEP #      11
*    A  Level output at time step 11 (0.0278 day)

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0
```

```
*ERROR 15            10013.0   10013.0

*ERROR 15            10013.0   10013.0

*ERROR 15            10013.0   10013.0

*ERROR 15            10013.0   10013.0

*ERROR 15            10013.0   10013.0

*ERROR 15            10013.0   10013.0

*ERROR 15            10013.0   10013.0

*ERROR 15            10013.0   10013.0

*ERROR 15            10013.0   10013.0

*ERROR 15            10013.0   10013.0

*ERROR 15            10013.0   10013.0

*ERROR 15            10211.7   10211.7

*ERROR 15            10018.0   10018.0

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME       ENTRY *             SAND              *
    DAYS       POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.46       8.020 *      0.37                    *
               6.090 *      0.00                    *
               3.780 *      0.00                    *
               2.920 *      0.48                    *
               2.600 *      1.73                    *
               0.200 *      0.00                    *
   TOTAL=      0.200 *      2.58     13.60     -4.27 *
*****************************************************

=================================================================================
TIME STEP #      12
*    A  Level output at time step 12 (0.0347 day)

*ERROR 15            10013.0   10013.0

*ERROR 15            10013.0   10013.0

*ERROR 15            10013.0   10013.0

*ERROR 15            10013.0   10013.0

*ERROR 15            10013.0   10013.0

*ERROR 15            10013.0   10013.0

*ERROR 15            10013.0   10013.0

*ERROR 15            10013.0   10013.0

*ERROR 15            10013.0   10013.0

*ERROR 15            10013.0   10013.0

*ERROR 15            10013.0   10013.0

*ERROR 15            10211.7   10211.7

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME       ENTRY *             SAND              *
    DAYS       POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.49       8.020 *      0.37                    *
               6.090 *      0.00                    *
               3.780 *      0.00                    *
               2.920 *      0.50                    *
               2.600 *      1.80                    *
               0.200 *      0.00                    *
   TOTAL=      0.200 *      2.68     14.05     -4.25 *
*****************************************************

=================================================================================
TIME STEP #      13
*    A  Level output at time step 13 (0.0764 day)

*ERROR 15            10013.0   10013.0

*ERROR 15            10013.0   10013.0

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
```

```
*****************************************************
    TIME        ENTRY *              SAND             *
    DAYS        POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.57        8.020 *      0.39                    *
                6.090 *      0.00                    *
                3.780 *      0.00                    *
                2.920 *      0.53                    *
                2.600 *      1.90                    *
                0.200 *      0.00                    *
   TOTAL=       0.200 *      2.81     14.64     -4.20 *
*****************************************************

==========================================================================================
TIME STEP #      14
*    A  Level output at time step 14 (0.0764 day)

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME        ENTRY *              SAND             *
    DAYS        POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.65        8.020 *      0.41                    *
                6.090 *      0.00                    *
                3.780 *      0.00                    *
                2.920 *      0.55                    *
                2.600 *      1.96                    *
                0.200 *      0.00                    *
   TOTAL=       0.200 *      2.92     15.05     -4.16 *
*****************************************************

==========================================================================================
TIME STEP #      15
*    A  Level output at time step 15 (0.1458 day)

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME        ENTRY *              SAND             *
    DAYS        POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.79        8.020 *      0.43                    *
                6.090 *      0.00                    *
                3.780 *      0.00                    *
                2.920 *      0.62                    *
                2.600 *      2.17                    *
                0.200 *      0.00                    *
   TOTAL=       0.200 *      3.22     15.98     -3.96 *
*****************************************************
```

```
==========================================================================
TIME STEP #       16
*    B  Level output at time step 16 (0.2083 day)
COMPUTING FROM TIME=      0.7916 DAYS TO TIME=      0.9999 DAYS IN    10 COMPUTATION STEPS

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0
```

*ERROR 15	10013.0	10013.0
*ERROR 15	10013.0	10013.0
*ERROR 15	10013.0	10013.0
*ERROR 15	10013.0	10013.0
*ERROR 15	10013.0	10013.0
*ERROR 15	10013.0	10013.0
*ERROR 15	10013.0	10013.0
*ERROR 15	10013.0	10013.0
*ERROR 15	10013.0	10013.0
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*ERROR 15	10013.0	10013.0
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*ERROR 15	10013.0	10013.0
*ERROR 15	10013.0	10013.0
*ERROR 15	10013.0	10013.0
*ERROR 15	10013.0	10013.0
*ERROR 15	10013.0	10013.0
*ERROR 15	10013.0	10013.0

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*ERROR 15            10013.0   10013.0
*ERROR 15            10013.0   10013.0
*ERROR 15            10013.0   10013.0
*ERROR 15            10013.0   10013.0
*ERROR 15            10013.0   10013.0
*ERROR 15            10013.0   10013.0
*ERROR 15            10013.0   10013.0
*ERROR 15            10013.0   10013.0
*ERROR 15            10013.0   10013.0
*ERROR 15            10013.0   10013.0
*ERROR 15            10013.0   10013.0
*ERROR 15            10013.0   10013.0
*ERROR 15            10013.0   10013.0
*ERROR 15            10013.0   10013.0
*ERROR 15            10013.0   10013.0
*ERROR 15            10013.0   10013.0
*ERROR 15            10013.0   10013.0
*ERROR 15            10013.0   10013.0
*ERROR 15            10013.0   10013.0
*ERROR 15            10013.0   10013.0
*ERROR 15            10013.0   10013.0
*ERROR 15            10013.0   10013.0
*ERROR 15            10013.0   10013.0
*ERROR 15            10013.0   10013.0
*ERROR 15            10013.0   10013.0
*ERROR 15            10013.0   10013.0
*ERROR 15            10013.0   10013.0
*ERROR 15            10013.0   10013.0
*ERROR 15            10013.0   10013.0
*ERROR 15            10013.0   10013.0
*ERROR 15            10013.0   10013.0
*ERROR 15            10013.0   10013.0
*ERROR 15            10013.0   10013.0
*ERROR 15            10013.0   10013.0
*ERROR 15            10013.0   10013.0
*ERROR 15            10013.0   10013.0
*ERROR 15            10013.0   10013.0
```

Cave Creek and Apache WMP
ACCUMULATED TIME (yrs).... 0.003
FLOW DURATION (days)...... 0.021

UPSTREAM BOUNDARY CONDITIONS

Stream Segment # 1 Section No. 8.020	DISCHARGE (cfs)	SEDIMENT LOAD (tons/day)	TEMPERATURE (deg F)
INFLOW	163.00	167.01	68.00

Upstream of SECTION NO. 6.090 is...

LOCAL INFLOW POINT # 5	DISCHARGE (cfs)	SEDIMENT LOAD (tons/day)	TEMPERATURE (deg F)
MAINSTEM INFLOW	163.00	167.01	68.00
LOCAL INFLOW	41.00	0.10	68.00
TOTAL	204.00	167.11	68.00

Upstream of SECTION NO. 3.780 is...

LOCAL INFLOW POINT # 4	DISCHARGE (cfs)	SEDIMENT LOAD (tons/day)	TEMPERATURE (deg F)
MAINSTEM INFLOW	204.00	167.11	68.00
LOCAL INFLOW	51.00	0.10	68.00
TOTAL	255.00	167.21	68.00

Upstream of SECTION NO. 2.920 is...

LOCAL INFLOW POINT # 3	DISCHARGE (cfs)	SEDIMENT LOAD (tons/day)	TEMPERATURE (deg F)
MAINSTEM INFLOW	255.00	167.21	68.00
LOCAL INFLOW	156.00	228.70	68.00
TOTAL	411.00	395.91	68.00

Upstream of SECTION NO. 2.600 is...

LOCAL INFLOW POINT # 2	DISCHARGE (cfs)	SEDIMENT LOAD (tons/day)	TEMPERATURE (deg F)
MAINSTEM INFLOW	411.00	395.91	68.00
LOCAL INFLOW	87.00	485.12	68.00
TOTAL	498.00	881.04	68.00

Upstream of SECTION NO. 0.200 is...

LOCAL INFLOW POINT # 1	DISCHARGE (cfs)	SEDIMENT LOAD (tons/day)	TEMPERATURE (deg F)
MAINSTEM INFLOW	498.00	881.04	68.00
LOCAL INFLOW	15.00	0.10	68.00
TOTAL	513.00	881.14	68.00

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT # 1
Cave Creek and Apache WMP
ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT

TIME DAYS	ENTRY POINT	INFLOW	SAND OUTFLOW	TRAP EFF
1.00	8.020	0.45		
	6.090	0.00		
	3.780	0.00		
	2.920	0.64		
	2.600	2.22		
	0.200	0.00		
TOTAL=	0.200	3.31	16.40	-3.95

TABLE SB-1: SEDIMENT LOAD PASSING THE BOUNDARIES OF STREAM SEGMENT # 1

SEDIMENT INFLOW at the Upstream Boundary:

GRAIN SIZE	LOAD (tons/day)	GRAIN SIZE	LOAD (tons/day)
VERY FINE SAND....	2.53	MEDIUM GRAVEL.....	35.75
FINE SAND.....	5.20	COARSE GRAVEL.....	43.92
MEDIUM SAND.....	10.43	VERY COARSE GRAVEL	3.63
COARSE SAND.....	10.87	SMALL COBBLES.....	1.45
VERY COARSE SAND..	12.00	LARGE COBBLES.....	0.02
VERY FINE GRAVEL..	16.64	SMALL BOULDERS....	0.00
FINE GRAVEL.....	24.56	MEDIUM BOULDERS...	0.00
		TOTAL =	167.01

SEDIMENT OUTFLOW from the Downstream Boundary

GRAIN SIZE	LOAD (tons/day)	GRAIN SIZE	LOAD (tons/day)
VERY FINE SAND....	373.19	MEDIUM GRAVEL.....	199.16
FINE SAND.....	396.94	COARSE GRAVEL.....	190.91
MEDIUM SAND.....	934.44	VERY COARSE GRAVEL	25.17
COARSE SAND.....	618.17	SMALL COBBLES.....	0.00
VERY COARSE SAND..	537.43	LARGE COBBLES.....	0.00
VERY FINE GRAVEL..	48.77	SMALL BOULDERS....	0.00
FINE GRAVEL.....	103.57	MEDIUM BOULDERS...	0.00
		TOTAL =	3427.74

TABLE SB-2: STATUS OF THE BED PROFILE AT TIME = 1.000 DAYS

SECTION NUMBER	BED CHANGE (ft)	WS ELEV (ft)	THALWEG (ft)	Q (cfs)	TRANSPORT RATE (tons/day) SAND
8.020	-0.83	1985.79	1984.27	163.	241.
7.980	0.03	1983.50	1981.83	163.	176.
7.890	0.02	1978.53	1977.02	163.	169.
7.840	-0.58	1975.57	1973.82	163.	365.
7.740	0.04	1970.78	1969.14	163.	337.
7.650	0.02	1963.19	1961.82	163.	318.
7.550	0.02	1958.17	1956.72	163.	310.
7.460	-0.48	1952.09	1951.02	163.	369.
7.360	0.10	1946.50	1944.60	163.	303.
7.280	0.03	1942.32	1940.83	163.	381.
7.170	-0.19	1935.05	1933.81	163.	1021.
7.080	-0.14	1930.27	1928.86	163.	1000.
6.980	-0.09	1925.51	1923.91	163.	1041.

6.900	-0.38	1921.36	1919.62	163.	1083.
6.800	-0.03	1915.29	1913.97	163.	1066.
6.710	0.21	1909.48	1907.71	163.	1041.
6.630	0.07	1906.56	1905.07	163.	1018.
6.580	0.03	1903.62	1902.03	163.	1022.
6.500	-0.03	1900.49	1898.97	163.	991.
6.430	-0.09	1897.51	1896.41	163.	1016.
6.320	0.10	1891.61	1890.10	163.	971.
6.250	-0.07	1889.03	1887.93	163.	970.
6.160	-0.11	1884.35	1882.89	163.	914.
6.090	-0.06	1880.39	1879.44	204.	863.
6.010	-0.21	1876.81	1875.29	204.	855.
5.920	-0.25	1871.60	1869.75	204.	848.
5.830	-0.22	1867.10	1865.28	204.	839.
5.760	0.08	1863.12	1862.08	204.	818.
5.660	0.10	1857.27	1854.10	204.	812.
5.640	0.00	1855.82	1855.00	204.	822.
5.570	-0.22	1851.51	1849.78	204.	967.
5.480	-0.22	1848.05	1845.78	204.	1003.
5.380	-0.05	1843.48	1840.95	204.	1017.
5.310	-0.04	1840.33	1837.96	204.	1032.
5.210	0.07	1836.28	1834.07	204.	945.
5.150	0.13	1833.31	1830.13	204.	918.
5.090	-0.05	1831.83	1829.95	204.	1054.
5.030	-0.27	1827.72	1825.73	204.	1269.
4.960	0.13	1824.85	1822.13	204.	1209.
4.900	-0.28	1822.60	1821.72	204.	1236.
4.820	-0.39	1819.37	1817.61	204.	1292.
4.780	0.07	1814.69	1813.07	204.	1341.
4.740	0.10	1812.35	1810.10	204.	1324.
4.650	0.02	1807.42	1806.02	204.	1359.
4.600	-0.21	1803.59	1801.79	204.	1403.
4.580	-0.04	1802.37	1801.26	204.	1390.
4.570	0.16	1801.48	1800.16	204.	1303.
4.560	0.18	1800.51	1799.18	204.	1260.
4.490	-0.01	1797.50	1795.99	204.	1324.
4.400	0.00	1794.61	1792.30	204.	1499.
4.310	0.09	1790.29	1788.09	204.	1761.
4.230	0.04	1788.14	1786.04	204.	1913.
4.220	-0.30	1786.90	1785.20	204.	2017.
4.110	-0.35	1783.17	1781.65	204.	2018.
4.050	0.19	1781.03	1779.19	204.	1913.
3.960	0.09	1775.89	1774.09	204.	1811.
3.860	-0.10	1771.61	1769.90	204.	1804.
3.780	-0.65	1767.94	1765.35	255.	1843.
3.750	0.26	1766.30	1764.26	255.	1627.
3.650	0.04	1763.97	1762.04	255.	1486.
3.600	-0.07	1761.57	1759.93	255.	1613.
3.520	0.02	1758.79	1756.02	255.	1577.
3.480	0.01	1757.44	1755.01	255.	1543.
3.400	0.04	1754.59	1752.04	255.	1555.
3.320	-0.04	1751.61	1749.96	255.	1576.
3.210	-0.24	1747.33	1745.76	255.	1604.
3.130	0.18	1744.76	1742.18	255.	1532.
3.070	0.10	1742.87	1741.10	255.	1511.
2.970	0.09	1737.82	1736.09	255.	1430.
2.920	0.18	1736.89	1734.18	411.	1538.
2.900	-0.18	1735.24	1733.82	411.	1528.
2.870	0.04	1733.82	1732.04	411.	1517.
2.820	0.02	1732.66	1730.02	411.	1440.
2.730	-0.35	1729.86	1727.65	411.	1422.
2.600	0.21	1726.41	1724.21	498.	1753.
2.520	0.18	1723.86	1721.18	498.	1581.
2.470	-0.10	1722.10	1719.90	498.	1493.
2.400	-0.22	1720.20	1717.78	498.	1402.
2.330	-0.35	1718.39	1716.65	498.	1356.
2.240	-0.30	1716.59	1713.70	498.	1326.
2.170	-0.15	1715.14	1713.85	498.	1398.
2.080	-0.25	1711.43	1709.75	498.	1464.
2.000	-0.23	1709.43	1708.27	498.	1746.
1.880	0.10	1704.30	1702.20	498.	1759.
1.850	0.18	1703.25	1700.18	498.	1742.
1.810	0.06	1701.63	1700.06	498.	1740.
1.750	-0.11	1700.40	1697.89	498.	1773.
1.660	-0.48	1697.54	1695.52	498.	2371.
1.600	0.20	1695.42	1692.20	498.	2331.
1.560	0.08	1694.40	1692.08	498.	2272.
1.470	-0.09	1692.19	1689.91	498.	2204.
1.370	-0.25	1689.75	1687.75	498.	2256.
1.270	0.09	1685.74	1684.09	498.	2206.
1.180	0.23	1683.30	1680.23	498.	2108.
1.090	-0.01	1682.12	1679.99	498.	2234.
0.990	-0.14	1678.79	1677.86	498.	2170.
0.840	-0.09	1671.80	1669.91	498.	2739.
0.750	0.26	1668.00	1666.26	498.	2706.
0.710	0.16	1667.11	1664.16	498.	2690.
0.630	-0.22	1665.45	1663.78	498.	2716.
0.540	-0.26	1661.44	1659.74	498.	2760.
0.430	0.06	1657.31	1655.06	498.	2625.
0.330	0.02	1653.85	1652.22	498.	2722.
0.200	-0.61	1647.24	1645.39	513.	3428.

$VOL A

STREAM SEGMENT # 1: Cave Creek and Apache WMP

SUMMARY TABLE: MASS AND VOLUME OF SEDIMENT

SECTION	SEDIMENT THROUGH SECTION (tons) TOTAL	SAND	SILT	CLAY	SEDIMENT DEPOSITED IN REACH in cu. yds TOTAL	CUMULATIVE	SAND	SILT	CLAY
INFLOW	913.	913.	0.	0.	727.				
8.020	1564.	1564.	0.	0.	-518.	-518.	-518.	0.	0.
7.980	1692.	1692.	0.	0.	-102.	-620.	-102.	0.	0.
7.890	1661.	1661.	0.	0.	25.	-596.	25.	0.	0.
7.840	5166.	5166.	0.	0.	-2792.	-3387.	-2792.	0.	0.
7.740	4792.	4792.	0.	0.	297.	-3090.	297.	0.	0.
7.650	4701.	4701.	0.	0.	73.	-3017.	73.	0.	0.
7.550	4619.	4619.	0.	0.	65.	-2952.	65.	0.	0.
7.460	7492.	7492.	0.	0.	-2288.	-5240.	-2288.	0.	0.
7.360	6928.	6928.	0.	0.	449.	-4791.	449.	0.	0.
7.280	6469.	6469.	0.	0.	365.	-4426.	365.	0.	0.
7.170	7084.	7084.	0.	0.	-489.	-4915.	-489.	0.	0.
7.080	7781.	7781.	0.	0.	-555.	-5470.	-555.	0.	0.
6.980	8607.	8607.	0.	0.	-658.	-6128.	-658.	0.	0.
6.900	10515.	10515.	0.	0.	-1520.	-7648.	-1520.	0.	0.
6.800	10461.	10461.	0.	0.	43.	-7605.	43.	0.	0.
6.710	10209.	10209.	0.	0.	200.	-7404.	200.	0.	0.
6.630	10007.	10007.	0.	0.	161.	-7244.	161.	0.	0.
6.580	9859.	9859.	0.	0.	118.	-7125.	118.	0.	0.
6.500	10193.	10193.	0.	0.	-266.	-7392.	-266.	0.	0.
6.430	10742.	10742.	0.	0.	-437.	-7829.	-437.	0.	0.
6.320	10380.	10380.	0.	0.	288.	-7541.	288.	0.	0.
6.250	11067.	11067.	0.	0.	-547.	-8088.	-547.	0.	0.
6.160	11430.	11430.	0.	0.	-289.	-8377.	-289.	0.	0.
LOCAL	0.	0.	0.	0.	0.				
6.090	11559.	11559.	0.	0.	-103.	-8480.	-103.	0.	0.
6.010	12251.	12251.	0.	0.	-551.	-9030.	-551.	0.	0.
5.920	13837.	13837.	0.	0.	-1264.	-10294.	-1264.	0.	0.
5.830	14738.	14738.	0.	0.	-717.	-11011.	-717.	0.	0.
5.760	14342.	14342.	0.	0.	315.	-10696.	315.	0.	0.
5.660	13302.	13302.	0.	0.	829.	-9868.	829.	0.	0.
5.640	13015.	13015.	0.	0.	229.	-9639.	229.	0.	0.
5.570	13364.	13364.	0.	0.	-278.	-9917.	-278.	0.	0.
5.480	14117.	14117.	0.	0.	-599.	-10517.	-599.	0.	0.
5.380	14358.	14358.	0.	0.	-192.	-10709.	-192.	0.	0.
5.310	15055.	15055.	0.	0.	-556.	-11264.	-556.	0.	0.
5.210	15152.	15152.	0.	0.	-77.	-11341.	-77.	0.	0.
5.150	14775.	14775.	0.	0.	300.	-11041.	300.	0.	0.
5.090	14815.	14815.	0.	0.	-32.	-11073.	-32.	0.	0.
5.030	14702.	14702.	0.	0.	90.	-10983.	90.	0.	0.
4.960	14709.	14709.	0.	0.	-6.	-10988.	-6.	0.	0.
4.900	16020.	16020.	0.	0.	-1045.	-12033.	-1045.	0.	0.
4.820	16612.	16612.	0.	0.	-471.	-12504.	-471.	0.	0.
4.780	16371.	16371.	0.	0.	191.	-12312.	191.	0.	0.
4.740	16079.	16079.	0.	0.	232.	-12080.	232.	0.	0.
4.650	14953.	14953.	0.	0.	897.	-11183.	897.	0.	0.
4.600	13408.	13408.	0.	0.	1231.	-9952.	1231.	0.	0.
4.580	12729.	12729.	0.	0.	540.	-9412.	540.	0.	0.
4.570	12852.	12852.	0.	0.	-98.	-9509.	-98.	0.	0.
4.560	13159.	13159.	0.	0.	-245.	-9754.	-245.	0.	0.
4.490	13943.	13943.	0.	0.	-624.	-10378.	-624.	0.	0.
4.400	13960.	13960.	0.	0.	-14.	-10392.	-14.	0.	0.
4.310	13817.	13817.	0.	0.	114.	-10278.	114.	0.	0.
4.230	14041.	14041.	0.	0.	-178.	-10456.	-178.	0.	0.
4.220	14852.	14852.	0.	0.	-646.	-11102.	-646.	0.	0.
4.110	16181.	16181.	0.	0.	-1058.	-12161.	-1058.	0.	0.
4.050	15899.	15899.	0.	0.	225.	-11936.	225.	0.	0.
3.960	15847.	15847.	0.	0.	41.	-11895.	41.	0.	0.
3.860	15959.	15959.	0.	0.	-89.	-11984.	-89.	0.	0.
LOCAL	0.	0.	0.	0.	0.				
3.780	16311.	16311.	0.	0.	-280.	-12264.	-280.	0.	0.
3.750	15699.	15699.	0.	0.	488.	-11777.	488.	0.	0.
3.650	15375.	15375.	0.	0.	258.	-11519.	258.	0.	0.
3.600	15562.	15562.	0.	0.	-149.	-11668.	-149.	0.	0.
3.520	15320.	15320.	0.	0.	193.	-11475.	193.	0.	0.
3.480	15136.	15136.	0.	0.	147.	-11328.	147.	0.	0.
3.400	15094.	15094.	0.	0.	33.	-11295.	33.	0.	0.
3.320	15557.	15557.	0.	0.	-369.	-11664.	-369.	0.	0.
3.210	16116.	16116.	0.	0.	-445.	-12109.	-445.	0.	0.
3.130	15620.	15620.	0.	0.	395.	-11714.	395.	0.	0.
3.070	14859.	14859.	0.	0.	606.	-11108.	606.	0.	0.
2.970	12819.	12819.	0.	0.	1625.	-9483.	1625.	0.	0.
LOCAL	1297.	1297.	0.	0.	1033.				
2.920	12129.	12129.	0.	0.	1582.	-7901.	1582.	0.	0.
2.900	12319.	12319.	0.	0.	-151.	-8052.	-151.	0.	0.
2.870	11592.	11592.	0.	0.	579.	-7473.	579.	0.	0.
2.820	11549.	11549.	0.	0.	34.	-7438.	34.	0.	0.
2.730	14362.	14362.	0.	0.	-2241.	-9679.	-2241.	0.	0.
LOCAL	4504.	4504.	0.	0.	3587.				

2.600	18369.	18369.	0.	0.	396.	-9283.	396.	0.	0.
2.520	17905.	17905.	0.	0.	370.	-8913.	370.	0.	0.
2.470	18730.	18730.	0.	0.	-657.	-9571.	-657.	0.	0.
2.400	19777.	19777.	0.	0.	-834.	-10405.	-834.	0.	0.
2.330	21416.	21416.	0.	0.	-1305.	-11710.	-1305.	0.	0.
2.240	23660.	23660.	0.	0.	-1788.	-13498.	-1788.	0.	0.
2.170	25269.	25269.	0.	0.	-1281.	-14779.	-1281.	0.	0.
2.080	27958.	27958.	0.	0.	-2142.	-16921.	-2142.	0.	0.
2.000	30988.	30988.	0.	0.	-2413.	-19334.	-2413.	0.	0.
1.880	30050.	30050.	0.	0.	747.	-18587.	747.	0.	0.
1.850	29167.	29167.	0.	0.	704.	-17883.	704.	0.	0.
1.810	28796.	28796.	0.	0.	295.	-17588.	295.	0.	0.
1.750	29139.	29139.	0.	0.	-273.	-17861.	-273.	0.	0.
1.660	30260.	30260.	0.	0.	-893.	-18754.	-893.	0.	0.
1.600	29807.	29807.	0.	0.	361.	-18394.	361.	0.	0.
1.560	29674.	29674.	0.	0.	106.	-18288.	106.	0.	0.
1.470	30598.	30598.	0.	0.	-736.	-19023.	-736.	0.	0.
1.370	32781.	32781.	0.	0.	-1739.	-20762.	-1739.	0.	0.
1.270	32075.	32075.	0.	0.	562.	-20200.	562.	0.	0.
1.180	30836.	30836.	0.	0.	987.	-19213.	987.	0.	0.
1.090	31252.	31252.	0.	0.	-332.	-19545.	-332.	0.	0.
0.990	32919.	32919.	0.	0.	-1327.	-20872.	-1327.	0.	0.
0.840	33218.	33218.	0.	0.	-239.	-21111.	-239.	0.	0.
0.750	32306.	32306.	0.	0.	726.	-20384.	726.	0.	0.
0.710	32192.	32192.	0.	0.	91.	-20293.	91.	0.	0.
0.630	34302.	34302.	0.	0.	-1680.	-21974.	-1680.	0.	0.
0.540	35268.	35268.	0.	0.	-770.	-22743.	-770.	0.	0.
0.430	34433.	34433.	0.	0.	665.	-22078.	665.	0.	0.
0.330	33519.	33519.	0.	0.	729.	-21350.	729.	0.	0.
LOCAL	0.	0.	0.	0.	0.				
0.200	33224.	33224.	0.	0.	235.	-21115.	235.	0.	0.

TOTAL SEDIMENT - per grain size - THROUGH EACH CROSS SECTION (tons)

UPSTREAM INFLOW						
VF SAND	17.	VF GRVL	95.	S	COBL	12.
F SAND	30.	F GRVL	140.	L	COBL	1.
M SAND	60.	M GRVL	202.	S	BLDR	0.
C SAND	62.	C GRVL	203.	M	BLDR	0.
VC SAND	69.	VC GRVL	25.			
SECTION NO.	8.020					
VF SAND	64.	VF GRVL	44.	S	COBL	272.
F SAND	63.	F GRVL	83.	L	COBL	153.
M SAND	109.	M GRVL	163.	S	BLDR	0.
C SAND	94.	C GRVL	210.	M	BLDR	0.
VC SAND	95.	VC GRVL	215.			
SECTION NO.	7.980					
VF SAND	64.	VF GRVL	34.	S	COBL	339.
F SAND	64.	F GRVL	75.	L	COBL	184.
M SAND	111.	M GRVL	156.	S	BLDR	0.
C SAND	97.	C GRVL	203.	M	BLDR	0.
VC SAND	100.	VC GRVL	266.			
SECTION NO.	7.890					
VF SAND	65.	VF GRVL	31.	S	COBL	333.
F SAND	64.	F GRVL	70.	L	COBL	176.
M SAND	112.	M GRVL	148.	S	BLDR	0.
C SAND	106.	C GRVL	188.	M	BLDR	0.
VC SAND	111.	VC GRVL	258.			
SECTION NO.	7.840					
VF SAND	599.	VF GRVL	38.	S	COBL	374.
F SAND	827.	F GRVL	84.	L	COBL	197.
M SAND	1129.	M GRVL	174.	S	BLDR	0.
C SAND	688.	C GRVL	212.	M	BLDR	0.
VC SAND	554.	VC GRVL	291.			
SECTION NO.	7.740					
VF SAND	599.	VF GRVL	22.	S	COBL	298.
F SAND	827.	F GRVL	52.	L	COBL	165.
M SAND	1129.	M GRVL	113.	S	BLDR	0.
C SAND	689.	C GRVL	145.	M	BLDR	0.
VC SAND	548.	VC GRVL	207.			
SECTION NO.	7.650					
VF SAND	599.	VF GRVL	19.	S	COBL	283.
F SAND	827.	F GRVL	46.	L	COBL	159.
M SAND	1107.	M GRVL	100.	S	BLDR	0.
C SAND	689.	C GRVL	132.	M	BLDR	0.
VC SAND	548.	VC GRVL	192.			
SECTION NO.	7.550					
VF SAND	599.	VF GRVL	16.	S	COBL	272.
F SAND	827.	F GRVL	40.	L	COBL	154.
M SAND	1087.	M GRVL	89.	S	BLDR	0.
C SAND	689.	C GRVL	118.	M	BLDR	0.
VC SAND	548.	VC GRVL	180.			
SECTION NO.	7.460					
VF SAND	741.	VF GRVL	38.	S	COBL	345.
F SAND	1119.	F GRVL	84.	L	COBL	185.
M SAND	1874.	M GRVL	166.	S	BLDR	0.
C SAND	1380.	C GRVL	190.	M	BLDR	0.
VC SAND	1102.	VC GRVL	268.			
SECTION NO.	7.360					
VF SAND	741.	VF GRVL	23.	S	COBL	197.
F SAND	1120.	F GRVL	52.	L	COBL	77.
M SAND	1886.	M GRVL	106.	S	BLDR	0.

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      C  SAND      1365.   C  GRVL       117.   M  BLDR        0.
      VC SAND      1079.   VC GRVL       164.
SECTION NO.      7.280
      VF SAND       741.   VF GRVL        20.   S  COBL      109.
      F  SAND      1122.   F  GRVL        44.   L  COBL       22.
      M  SAND      1869.   M  GRVL        88.   S  BLDR        0.
      C  SAND      1267.   C  GRVL        91.   M  BLDR        0.
      VC SAND       990.   VC GRVL       105.
SECTION NO.      7.170
      VF SAND       968.   VF GRVL        27.   S  COBL      179.
      F  SAND      1233.   F  GRVL        57.   L  COBL       71.
      M  SAND      1900.   M  GRVL       112.   S  BLDR        0.
      C  SAND      1269.   C  GRVL       121.   M  BLDR        0.
      VC SAND       997.   VC GRVL       150.
SECTION NO.      7.080
      VF SAND      1237.   VF GRVL        25.   S  COBL      223.
      F  SAND      1392.   F  GRVL        55.   L  COBL      117.
      M  SAND      1986.   M  GRVL       111.   S  BLDR        0.
      C  SAND      1315.   C  GRVL       128.   M  BLDR        0.
      VC SAND      1020.   VC GRVL       172.
SECTION NO.      6.980
      VF SAND      1559.   VF GRVL        23.   S  COBL      274.
      F  SAND      1581.   F  GRVL        53.   L  COBL      158.
      M  SAND      2089.   M  GRVL       115.   S  BLDR        0.
      C  SAND      1364.   C  GRVL       146.   M  BLDR        0.
      VC SAND      1042.   VC GRVL       204.
SECTION NO.      6.900
      VF SAND      1896.   VF GRVL        28.   S  COBL      323.
      F  SAND      2022.   F  GRVL        64.   L  COBL      198.
      M  SAND      2593.   M  GRVL       141.   S  BLDR        0.
      C  SAND      1608.   C  GRVL       190.   M  BLDR        0.
      VC SAND      1201.   VC GRVL       250.
SECTION NO.      6.800
      VF SAND      1950.   VF GRVL        26.   S  COBL      268.
      F  SAND      2042.   F  GRVL        59.   L  COBL      169.
      M  SAND      2610.   M  GRVL       129.   S  BLDR        0.
      C  SAND      1617.   C  GRVL       172.   M  BLDR        0.
      VC SAND      1201.   VC GRVL       218.
SECTION NO.      6.710
      VF SAND      1950.   VF GRVL        17.   S  COBL      203.
      F  SAND      2044.   F  GRVL        41.   L  COBL      128.
      M  SAND      2612.   M  GRVL        92.   S  BLDR        0.
      C  SAND      1628.   C  GRVL       122.   M  BLDR        0.
      VC SAND      1221.   VC GRVL       151.
SECTION NO.      6.630
      VF SAND      1951.   VF GRVL        17.   S  COBL      161.
      F  SAND      2046.   F  GRVL        39.   L  COBL       88.
      M  SAND      2627.   M  GRVL        84.   S  BLDR        0.
      C  SAND      1599.   C  GRVL       104.   M  BLDR        0.
      VC SAND      1167.   VC GRVL       125.
SECTION NO.      6.580
      VF SAND      1951.   VF GRVL        18.   S  COBL      161.
      F  SAND      2058.   F  GRVL        42.   L  COBL       65.
      M  SAND      2598.   M  GRVL        89.   S  BLDR        0.
      C  SAND      1528.   C  GRVL       109.   M  BLDR        0.
      VC SAND      1106.   VC GRVL       134.
SECTION NO.      6.500
      VF SAND      1951.   VF GRVL        25.   S  COBL      274.
      F  SAND      2071.   F  GRVL        58.   L  COBL      105.
      M  SAND      2615.   M  GRVL       125.   S  BLDR        0.
      C  SAND      1496.   C  GRVL       159.   M  BLDR        0.
      VC SAND      1085.   VC GRVL       229.
SECTION NO.      6.430
      VF SAND      2246.   VF GRVL        25.   S  COBL      246.
      F  SAND      2250.   F  GRVL        57.   L  COBL      103.
      M  SAND      2702.   M  GRVL       120.   S  BLDR        0.
      C  SAND      1529.   C  GRVL       149.   M  BLDR        0.
      VC SAND      1111.   VC GRVL       203.
SECTION NO.      6.320
      VF SAND      2247.   VF GRVL        17.   S  COBL      131.
      F  SAND      2252.   F  GRVL        38.   L  COBL       48.
      M  SAND      2718.   M  GRVL        78.   S  BLDR        0.
      C  SAND      1528.   C  GRVL        90.   M  BLDR        0.
      VC SAND      1120.   VC GRVL       114.
SECTION NO.      6.250
      VF SAND      2391.   VF GRVL        23.   S  COBL      207.
      F  SAND      2320.   F  GRVL        51.   L  COBL       89.
      M  SAND      2809.   M  GRVL       105.   S  BLDR        0.
      C  SAND      1590.   C  GRVL       126.   M  BLDR        0.
      VC SAND      1185.   VC GRVL       171.
SECTION NO.      6.160
      VF SAND      2402.   VF GRVL        32.   S  COBL      297.
      F  SAND      2336.   F  GRVL        71.   L  COBL      126.
      M  SAND      2842.   M  GRVL       147.   S  BLDR        0.
      C  SAND      1589.   C  GRVL       176.   M  BLDR        0.
      VC SAND      1168.   VC GRVL       243.

LOCAL INFLOW
      VF SAND         0.   VF GRVL         0.   S  COBL        0.
      F  SAND         0.   F  GRVL         0.   L  COBL        0.
      M  SAND         0.   M  GRVL         0.   S  BLDR        0.
      C  SAND         0.   C  GRVL         0.   M  BLDR        0.
      VC SAND         0.   VC GRVL         0.

SECTION NO.      6.090
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VF	SAND	2424.	VF	GRVL	38.	S	COBL	289.
F	SAND	2365.	F	GRVL	84.	L	COBL	87.
M	SAND	2887.	M	GRVL	168.	S	BLDR	0.
C	SAND	1589.	C	GRVL	195.	M	BLDR	0.
VC	SAND	1171.	VC	GRVL	262.			
SECTION NO.		6.010						
VF	SAND	2490.	VF	GRVL	45.	S	COBL	406.
F	SAND	2448.	F	GRVL	100.	L	COBL	139.
M	SAND	2978.	M	GRVL	207.	S	BLDR	0.
C	SAND	1615.	C	GRVL	256.	M	BLDR	0.
VC	SAND	1206.	VC	GRVL	360.			
SECTION NO.		5.920						
VF	SAND	2939.	VF	GRVL	45.	S	COBL	457.
F	SAND	2860.	F	GRVL	102.	L	COBL	193.
M	SAND	3298.	M	GRVL	215.	S	BLDR	0.
C	SAND	1759.	C	GRVL	271.	M	BLDR	0.
VC	SAND	1315.	VC	GRVL	381.			
SECTION NO.		5.830						
VF	SAND	3297.	VF	GRVL	46.	S	COBL	434.
F	SAND	3094.	F	GRVL	105.	L	COBL	202.
M	SAND	3471.	M	GRVL	220.	S	BLDR	0.
C	SAND	1849.	C	GRVL	273.	M	BLDR	0.
VC	SAND	1389.	VC	GRVL	359.			
SECTION NO.		5.760						
VF	SAND	3299.	VF	GRVL	31.	S	COBL	303.
F	SAND	3099.	F	GRVL	73.	L	COBL	133.
M	SAND	3490.	M	GRVL	159.	S	BLDR	0.
C	SAND	1878.	C	GRVL	205.	M	BLDR	0.
VC	SAND	1414.	VC	GRVL	258.			
SECTION NO.		5.660						
VF	SAND	3308.	VF	GRVL	17.	S	COBL	114.
F	SAND	3099.	F	GRVL	41.	L	COBL	15.
M	SAND	3366.	M	GRVL	87.	S	BLDR	0.
C	SAND	1744.	C	GRVL	105.	M	BLDR	0.
VC	SAND	1283.	VC	GRVL	124.			
SECTION NO.		5.640						
VF	SAND	3320.	VF	GRVL	19.	S	COBL	87.
F	SAND	3092.	F	GRVL	43.	L	COBL	1.
M	SAND	3295.	M	GRVL	87.	S	BLDR	0.
C	SAND	1664.	C	GRVL	93.	M	BLDR	0.
VC	SAND	1206.	VC	GRVL	107.			
SECTION NO.		5.570						
VF	SAND	3328.	VF	GRVL	34.	S	COBL	283.
F	SAND	3058.	F	GRVL	79.	L	COBL	116.
M	SAND	3142.	M	GRVL	168.	S	BLDR	0.
C	SAND	1558.	C	GRVL	209.	M	BLDR	0.
VC	SAND	1139.	VC	GRVL	251.			
SECTION NO.		5.480						
VF	SAND	3589.	VF	GRVL	38.	S	COBL	325.
F	SAND	3126.	F	GRVL	87.	L	COBL	148.
M	SAND	3217.	M	GRVL	190.	S	BLDR	0.
C	SAND	1641.	C	GRVL	248.	M	BLDR	0.
VC	SAND	1215.	VC	GRVL	293.			
SECTION NO.		5.380						
VF	SAND	3855.	VF	GRVL	34.	S	COBL	253.
F	SAND	3176.	F	GRVL	80.	L	COBL	94.
M	SAND	3264.	M	GRVL	177.	S	BLDR	0.
C	SAND	1678.	C	GRVL	233.	M	BLDR	0.
VC	SAND	1248.	VC	GRVL	267.			
SECTION NO.		5.310						
VF	SAND	4069.	VF	GRVL	36.	S	COBL	342.
F	SAND	3212.	F	GRVL	87.	L	COBL	140.
M	SAND	3299.	M	GRVL	196.	S	BLDR	0.
C	SAND	1737.	C	GRVL	268.	M	BLDR	0.
VC	SAND	1339.	VC	GRVL	332.			
SECTION NO.		5.210						
VF	SAND	4114.	VF	GRVL	32.	S	COBL	357.
F	SAND	3225.	F	GRVL	76.	L	COBL	167.
M	SAND	3317.	M	GRVL	171.	S	BLDR	0.
C	SAND	1759.	C	GRVL	239.	M	BLDR	0.
VC	SAND	1381.	VC	GRVL	315.			
SECTION NO.		5.150						
VF	SAND	4120.	VF	GRVL	22.	S	COBL	203.
F	SAND	3244.	F	GRVL	52.	L	COBL	71.
M	SAND	3356.	M	GRVL	116.	S	BLDR	0.
C	SAND	1815.	C	GRVL	155.	M	BLDR	0.
VC	SAND	1432.	VC	GRVL	189.			
SECTION NO.		5.090						
VF	SAND	4123.	VF	GRVL	31.	S	COBL	187.
F	SAND	3258.	F	GRVL	72.	L	COBL	20.
M	SAND	3368.	M	GRVL	157.	S	BLDR	0.
C	SAND	1794.	C	GRVL	202.	M	BLDR	0.
VC	SAND	1377.	VC	GRVL	225.			
SECTION NO.		5.030						
VF	SAND	4159.	VF	GRVL	32.	S	COBL	178.
F	SAND	3298.	F	GRVL	75.	L	COBL	0.
M	SAND	3323.	M	GRVL	166.	S	BLDR	0.
C	SAND	1713.	C	GRVL	218.	M	BLDR	0.
VC	SAND	1298.	VC	GRVL	241.			
SECTION NO.		4.960						
VF	SAND	4179.	VF	GRVL	32.	S	COBL	229.
F	SAND	3292.	F	GRVL	78.	L	COBL	6.
M	SAND	3255.	M	GRVL	174.	S	BLDR	0.
C	SAND	1682.	C	GRVL	233.	M	BLDR	0.
VC	SAND	1278.	VC	GRVL	269.			

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SECTION NO.      4.900
      VF SAND     4445.   VF GRVL      49.   S  COBL      373.
      F  SAND     3422.   F  GRVL     112.   L  COBL       87.
      M  SAND     3440.   M  GRVL     241.   S  BLDR        0.
      C  SAND     1796.   C  GRVL     313.   M  BLDR        0.
      VC SAND     1367.   VC GRVL     375.
SECTION NO.      4.820
      VF SAND     4682.   VF GRVL      52.   S  COBL      307.
      F  SAND     3544.   F  GRVL     118.   L  COBL       69.
      M  SAND     3571.   M  GRVL     254.   S  BLDR        0.
      C  SAND     1877.   C  GRVL     328.   M  BLDR        0.
      VC SAND     1429.   VC GRVL     382.
SECTION NO.      4.780
      VF SAND     4682.   VF GRVL      44.   S  COBL      296.
      F  SAND     3521.   F  GRVL     104.   L  COBL       31.
      M  SAND     3510.   M  GRVL     234.   S  BLDR        0.
      C  SAND     1847.   C  GRVL     316.   M  BLDR        0.
      VC SAND     1410.   VC GRVL     375.
SECTION NO.      4.740
      VF SAND     4683.   VF GRVL      40.   S  COBL      284.
      F  SAND     3491.   F  GRVL      95.   L  COBL       16.
      M  SAND     3446.   M  GRVL     212.   S  BLDR        0.
      C  SAND     1816.   C  GRVL     286.   M  BLDR        0.
      VC SAND     1381.   VC GRVL     332.
SECTION NO.      4.650
      VF SAND     4671.   VF GRVL      31.   S  COBL       97.
      F  SAND     3401.   F  GRVL      72.   L  COBL        0.
      M  SAND     3268.   M  GRVL     154.   S  BLDR        0.
      C  SAND     1666.   C  GRVL     188.   M  BLDR        0.
      VC SAND     1243.   VC GRVL     164.
SECTION NO.      4.600
      VF SAND     4637.   VF GRVL      27.   S  COBL        2.
      F  SAND     3218.   F  GRVL      60.   L  COBL        0.
      M  SAND     2783.   M  GRVL     123.   S  BLDR        0.
      C  SAND     1347.   C  GRVL     137.   M  BLDR        0.
      VC SAND      992.   VC GRVL      82.
SECTION NO.      4.580
      VF SAND     4598.   VF GRVL      27.   S  COBL        5.
      F  SAND     3103.   F  GRVL      60.   L  COBL        0.
      M  SAND     2520.   M  GRVL     121.   S  BLDR        0.
      C  SAND     1191.   C  GRVL     134.   M  BLDR        0.
      VC SAND      880.   VC GRVL      89.
SECTION NO.      4.570
      VF SAND     4628.   VF GRVL      25.   S  COBL       20.
      F  SAND     3114.   F  GRVL      57.   L  COBL        0.
      M  SAND     2555.   M  GRVL     118.   S  BLDR        0.
      C  SAND     1215.   C  GRVL     132.   M  BLDR        0.
      VC SAND      898.   VC GRVL      89.
SECTION NO.      4.560
      VF SAND     4715.   VF GRVL      22.   S  COBL       76.
      F  SAND     3157.   F  GRVL      50.   L  COBL       23.
      M  SAND     2640.   M  GRVL     102.   S  BLDR        0.
      C  SAND     1263.   C  GRVL     102.   M  BLDR        0.
      VC SAND      932.   VC GRVL      78.
SECTION NO.      4.490
      VF SAND     4719.   VF GRVL      26.   S  COBL      259.
      F  SAND     3166.   F  GRVL      60.   L  COBL      116.
      M  SAND     2704.   M  GRVL     130.   S  BLDR        0.
      C  SAND     1355.   C  GRVL     159.   M  BLDR        0.
      VC SAND     1026.   VC GRVL     222.
SECTION NO.      4.400
      VF SAND     4721.   VF GRVL      22.   S  COBL      238.
      F  SAND     3164.   F  GRVL      52.   L  COBL      102.
      M  SAND     2752.   M  GRVL     115.   S  BLDR        0.
      C  SAND     1394.   C  GRVL     151.   M  BLDR        0.
      VC SAND     1055.   VC GRVL     196.
SECTION NO.      4.310
      VF SAND     4782.   VF GRVL      18.   S  COBL      157.
      F  SAND     3169.   F  GRVL      42.   L  COBL       56.
      M  SAND     2787.   M  GRVL      94.   S  BLDR        0.
      C  SAND     1402.   C  GRVL     122.   M  BLDR        0.
      VC SAND     1048.   VC GRVL     140.
SECTION NO.      4.230
      VF SAND     4850.   VF GRVL      20.   S  COBL      159.
      F  SAND     3192.   F  GRVL      48.   L  COBL       47.
      M  SAND     2846.   M  GRVL     104.   S  BLDR        0.
      C  SAND     1421.   C  GRVL     135.   M  BLDR        0.
      VC SAND     1064.   VC GRVL     156.
SECTION NO.      4.220
      VF SAND     4860.   VF GRVL      36.   S  COBL      309.
      F  SAND     3190.   F  GRVL      84.   L  COBL       94.
      M  SAND     2888.   M  GRVL     187.   S  BLDR        0.
      C  SAND     1497.   C  GRVL     251.   M  BLDR        0.
      VC SAND     1149.   VC GRVL     308.
SECTION NO.      4.110
      VF SAND     5028.   VF GRVL      41.   S  COBL      388.
      F  SAND     3322.   F  GRVL      95.   L  COBL      149.
      M  SAND     3251.   M  GRVL     210.   S  BLDR        0.
      C  SAND     1735.   C  GRVL     283.   M  BLDR        0.
      VC SAND     1319.   VC GRVL     359.
SECTION NO.      4.050
      VF SAND     5029.   VF GRVL      32.   S  COBL      330.
      F  SAND     3323.   F  GRVL      76.   L  COBL      133.
      M  SAND     3241.   M  GRVL     170.   S  BLDR        0.
      C  SAND     1720.   C  GRVL     230.   M  BLDR        0.
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      VC SAND      1323.   VC GRVL      291.
SECTION NO.      3.960
      VF SAND      5031.   VF GRVL       27.   S  COBL      295.
      F  SAND      3335.   F  GRVL       65.   L  COBL      109.
      M  SAND      3282.   M  GRVL      148.   S  BLDR        0.
      C  SAND      1751.   C  GRVL      203.   M  BLDR        0.
      VC SAND      1340.   VC GRVL      261.
SECTION NO.      3.860
      VF SAND      5038.   VF GRVL       31.   S  COBL      266.
      F  SAND      3362.   F  GRVL       72.   L  COBL      104.
      M  SAND      3346.   M  GRVL      161.   S  BLDR        0.
      C  SAND      1771.   C  GRVL      217.   M  BLDR        0.
      VC SAND      1334.   VC GRVL      257.

LOCAL INFLOW
      VF SAND         0.   VF GRVL        0.   S  COBL        0.
      F  SAND         0.   F  GRVL        0.   L  COBL        0.
      M  SAND         0.   M  GRVL        0.   S  BLDR        0.
      C  SAND         0.   C  GRVL        0.   M  BLDR        0.
      VC SAND         0.   VC GRVL        0.

SECTION NO.      3.780
      VF SAND      5133.   VF GRVL       41.   S  COBL      182.
      F  SAND      3440.   F  GRVL       93.   L  COBL       66.
      M  SAND      3444.   M  GRVL      195.   S  BLDR        0.
      C  SAND      1827.   C  GRVL      244.   M  BLDR        0.
      VC SAND      1386.   VC GRVL      259.
SECTION NO.      3.750
      VF SAND      5134.   VF GRVL       23.   S  COBL      118.
      F  SAND      3442.   F  GRVL       55.   L  COBL       32.
      M  SAND      3413.   M  GRVL      121.   S  BLDR        0.
      C  SAND      1742.   C  GRVL      156.   M  BLDR        0.
      VC SAND      1306.   VC GRVL      159.
SECTION NO.      3.650
      VF SAND      5130.   VF GRVL       22.   S  COBL      164.
      F  SAND      3419.   F  GRVL       54.   L  COBL       53.
      M  SAND      3225.   M  GRVL      120.   S  BLDR        0.
      C  SAND      1626.   C  GRVL      156.   M  BLDR        0.
      VC SAND      1233.   VC GRVL      173.
SECTION NO.      3.600
      VF SAND      5132.   VF GRVL       26.   S  COBL      227.
      F  SAND      3410.   F  GRVL       62.   L  COBL       85.
      M  SAND      3183.   M  GRVL      142.   S  BLDR        0.
      C  SAND      1629.   C  GRVL      189.   M  BLDR        0.
      VC SAND      1256.   VC GRVL      221.
SECTION NO.      3.520
      VF SAND      5133.   VF GRVL       23.   S  COBL      216.
      F  SAND      3381.   F  GRVL       57.   L  COBL       87.
      M  SAND      3125.   M  GRVL      129.   S  BLDR        0.
      C  SAND      1576.   C  GRVL      174.   M  BLDR        0.
      VC SAND      1211.   VC GRVL      207.
SECTION NO.      3.480
      VF SAND      5128.   VF GRVL       24.   S  COBL      198.
      F  SAND      3358.   F  GRVL       57.   L  COBL       68.
      M  SAND      3075.   M  GRVL      129.   S  BLDR        0.
      C  SAND      1537.   C  GRVL      174.   M  BLDR        0.
      VC SAND      1185.   VC GRVL      204.
SECTION NO.      3.400
      VF SAND      5124.   VF GRVL       25.   S  COBL      192.
      F  SAND      3347.   F  GRVL       59.   L  COBL       40.
      M  SAND      3052.   M  GRVL      134.   S  BLDR        0.
      C  SAND      1540.   C  GRVL      177.   M  BLDR        0.
      VC SAND      1201.   VC GRVL      204.
SECTION NO.      3.320
      VF SAND      5121.   VF GRVL       35.   S  COBL      313.
      F  SAND      3336.   F  GRVL       82.   L  COBL       98.
      M  SAND      3051.   M  GRVL      183.   S  BLDR        0.
      C  SAND      1565.   C  GRVL      243.   M  BLDR        0.
      VC SAND      1233.   VC GRVL      298.
SECTION NO.      3.210
      VF SAND      5257.   VF GRVL       36.   S  COBL      355.
      F  SAND      3392.   F  GRVL       86.   L  COBL      142.
      M  SAND      3154.   M  GRVL      192.   S  BLDR        0.
      C  SAND      1639.   C  GRVL      259.   M  BLDR        0.
      VC SAND      1280.   VC GRVL      323.
SECTION NO.      3.130
      VF SAND      5256.   VF GRVL       26.   S  COBL      250.
      F  SAND      3371.   F  GRVL       62.   L  COBL       82.
      M  SAND      3121.   M  GRVL      142.   S  BLDR        0.
      C  SAND      1614.   C  GRVL      194.   M  BLDR        0.
      VC SAND      1263.   VC GRVL      238.
SECTION NO.      3.070
      VF SAND      5248.   VF GRVL       17.   S  COBL       83.
      F  SAND      3333.   F  GRVL       41.   L  COBL        0.
      M  SAND      3045.   M  GRVL       89.   S  BLDR        0.
      C  SAND      1569.   C  GRVL      105.   M  BLDR        0.
      VC SAND      1219.   VC GRVL      112.
SECTION NO.      2.970
      VF SAND      5163.   VF GRVL        6.   S  COBL        0.
      F  SAND      3019.   F  GRVL       12.   L  COBL        0.
      M  SAND      2525.   M  GRVL       20.   S  BLDR        0.
      C  SAND      1182.   C  GRVL       12.   M  BLDR        0.
      VC SAND       879.   VC GRVL        2.

LOCAL INFLOW
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VF SAND	7.	VF GRVL	72.	S	COBL	0.
F SAND	39.	F GRVL	161.	L	COBL	0.
M SAND	157.	M GRVL	212.	S	BLDR	0.
C SAND	142.	C GRVL	256.	M	BLDR	0.
VC SAND	93.	VC GRVL	157.			

SECTION NO. 2.920

VF SAND	5097.	VF GRVL	7.	S	COBL	0.
F SAND	2844.	F GRVL	16.	L	COBL	0.
M SAND	2280.	M GRVL	15.	S	BLDR	0.
C SAND	1078.	C GRVL	0.	M	BLDR	0.
VC SAND	793.	VC GRVL	0.			

SECTION NO. 2.900

VF SAND	5121.	VF GRVL	15.	S	COBL	0.
F SAND	2851.	F GRVL	31.	L	COBL	0.
M SAND	2287.	M GRVL	48.	S	BLDR	0.
C SAND	1100.	C GRVL	21.	M	BLDR	0.
VC SAND	846.	VC GRVL	0.			

SECTION NO. 2.870

VF SAND	5120.	VF GRVL	9.	S	COBL	0.
F SAND	2709.	F GRVL	19.	L	COBL	0.
M SAND	2015.	M GRVL	26.	S	BLDR	0.
C SAND	954.	C GRVL	3.	M	BLDR	0.
VC SAND	737.	VC GRVL	0.			

SECTION NO. 2.820

VF SAND	5159.	VF GRVL	11.	S	COBL	0.
F SAND	2723.	F GRVL	25.	L	COBL	0.
M SAND	1923.	M GRVL	45.	S	BLDR	0.
C SAND	905.	C GRVL	35.	M	BLDR	0.
VC SAND	716.	VC GRVL	8.			

SECTION NO. 2.730

VF SAND	5270.	VF GRVL	37.	S	COBL	304.
F SAND	2840.	F GRVL	89.	L	COBL	47.
M SAND	2382.	M GRVL	198.	S	BLDR	0.
C SAND	1391.	C GRVL	264.	M	BLDR	0.
VC SAND	1206.	VC GRVL	335.			

LOCAL INFLOW

VF SAND	30.	VF GRVL	237.	S	COBL	83.
F SAND	118.	F GRVL	498.	L	COBL	0.
M SAND	683.	M GRVL	893.	S	BLDR	0.
C SAND	395.	C GRVL	918.	M	BLDR	0.
VC SAND	185.	VC GRVL	465.			

SECTION NO. 2.600

VF SAND	5512.	VF GRVL	59.	S	COBL	581.
F SAND	3286.	F GRVL	154.	L	COBL	215.
M SAND	3504.	M GRVL	363.	S	BLDR	0.
C SAND	2024.	C GRVL	499.	M	BLDR	0.
VC SAND	1576.	VC GRVL	596.			

SECTION NO. 2.520

VF SAND	5527.	VF GRVL	42.	S	COBL	482.
F SAND	3299.	F GRVL	111.	L	COBL	127.
M SAND	3510.	M GRVL	272.	S	BLDR	0.
C SAND	2039.	C GRVL	394.	M	BLDR	0.
VC SAND	1601.	VC GRVL	502.			

SECTION NO. 2.470

VF SAND	5794.	VF GRVL	41.	S	COBL	493.
F SAND	3446.	F GRVL	104.	L	COBL	119.
M SAND	3710.	M GRVL	253.	S	BLDR	0.
C SAND	2171.	C GRVL	371.	M	BLDR	0.
VC SAND	1731.	VC GRVL	496.			

SECTION NO. 2.400

VF SAND	6006.	VF GRVL	43.	S	COBL	498.
F SAND	3626.	F GRVL	107.	L	COBL	129.
M SAND	3999.	M GRVL	253.	S	BLDR	0.
C SAND	2359.	C GRVL	362.	M	BLDR	0.
VC SAND	1913.	VC GRVL	482.			

SECTION NO. 2.330

VF SAND	6273.	VF GRVL	48.	S	COBL	496.
F SAND	3936.	F GRVL	118.	L	COBL	143.
M SAND	4474.	M GRVL	272.	S	BLDR	0.
C SAND	2641.	C GRVL	377.	M	BLDR	0.
VC SAND	2157.	VC GRVL	481.			

SECTION NO. 2.240

VF SAND	6693.	VF GRVL	52.	S	COBL	518.
F SAND	4408.	F GRVL	127.	L	COBL	132.
M SAND	5113.	M GRVL	290.	S	BLDR	0.
C SAND	2990.	C GRVL	396.	M	BLDR	0.
VC SAND	2429.	VC GRVL	512.			

SECTION NO. 2.170

VF SAND	7104.	VF GRVL	67.	S	COBL	545.
F SAND	4700.	F GRVL	161.	L	COBL	86.
M SAND	5402.	M GRVL	362.	S	BLDR	0.
C SAND	3159.	C GRVL	489.	M	BLDR	0.
VC SAND	2591.	VC GRVL	604.			

SECTION NO. 2.080

VF SAND	7514.	VF GRVL	94.	S	COBL	761.
F SAND	5048.	F GRVL	227.	L	COBL	175.
M SAND	5818.	M GRVL	512.	S	BLDR	0.
C SAND	3429.	C GRVL	690.	M	BLDR	0.
VC SAND	2840.	VC GRVL	849.			

SECTION NO. 2.000

VF SAND	8216.	VF GRVL	102.	S	COBL	933.
F SAND	5687.	F GRVL	244.	L	COBL	313.

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      M  SAND      6464.   M  GRVL      547.   S  BLDR        0.
      C  SAND      3752.   C  GRVL      736.   M  BLDR        0.
      VC SAND      3061.   VC GRVL      932.
SECTION NO.      1.880
      VF SAND      8217.   VF GRVL       66.   S  COBL      729.
      F  SAND      5691.   F  GRVL      165.   L  COBL      208.
      M  SAND      6478.   M  GRVL      387.   S  BLDR        0.
      C  SAND      3770.   C  GRVL      544.   M  BLDR        0.
      VC SAND      3085.   VC GRVL      710.
SECTION NO.      1.850
      VF SAND      8219.   VF GRVL       45.   S  COBL      523.
      F  SAND      5689.   F  GRVL      116.   L  COBL       86.
      M  SAND      6457.   M  GRVL      283.   S  BLDR        0.
      C  SAND      3748.   C  GRVL      412.   M  BLDR        0.
      VC SAND      3049.   VC GRVL      539.
SECTION NO.      1.810
      VF SAND      8220.   VF GRVL       42.   S  COBL      440.
      F  SAND      5691.   F  GRVL      107.   L  COBL       34.
      M  SAND      6440.   M  GRVL      258.   S  BLDR        0.
      C  SAND      3709.   C  GRVL      372.   M  BLDR        0.
      VC SAND      3004.   VC GRVL      478.
SECTION NO.      1.750
      VF SAND      8240.   VF GRVL       55.   S  COBL      528.
      F  SAND      5706.   F  GRVL      135.   L  COBL      101.
      M  SAND      6412.   M  GRVL      315.   S  BLDR        0.
      C  SAND      3665.   C  GRVL      444.   M  BLDR        0.
      VC SAND      2964.   VC GRVL      575.
SECTION NO.      1.660
      VF SAND      8495.   VF GRVL       55.   S  COBL      578.
      F  SAND      5927.   F  GRVL      135.   L  COBL      165.
      M  SAND      6651.   M  GRVL      318.   S  BLDR        0.
      C  SAND      3800.   C  GRVL      459.   M  BLDR        0.
      VC SAND      3064.   VC GRVL      614.
SECTION NO.      1.600
      VF SAND      8500.   VF GRVL       39.   S  COBL      516.
      F  SAND      5926.   F  GRVL      101.   L  COBL      176.
      M  SAND      6613.   M  GRVL      248.   S  BLDR        0.
      C  SAND      3760.   C  GRVL      376.   M  BLDR        0.
      VC SAND      3028.   VC GRVL      524.
SECTION NO.      1.560
      VF SAND      8504.   VF GRVL       38.   S  COBL      519.
      F  SAND      5935.   F  GRVL       97.   L  COBL      190.
      M  SAND      6535.   M  GRVL      238.   S  BLDR        0.
      C  SAND      3724.   C  GRVL      362.   M  BLDR        0.
      VC SAND      3014.   VC GRVL      518.
SECTION NO.      1.470
      VF SAND      8824.   VF GRVL       45.   S  COBL      553.
      F  SAND      6076.   F  GRVL      111.   L  COBL      185.
      M  SAND      6680.   M  GRVL      263.   S  BLDR        0.
      C  SAND      3824.   C  GRVL      386.   M  BLDR        0.
      VC SAND      3111.   VC GRVL      542.
SECTION NO.      1.370
      VF SAND      9289.   VF GRVL       59.   S  COBL      615.
      F  SAND      6471.   F  GRVL      143.   L  COBL      199.
      M  SAND      7171.   M  GRVL      331.   S  BLDR        0.
      C  SAND      4100.   C  GRVL      468.   M  BLDR        0.
      VC SAND      3309.   VC GRVL      626.
SECTION NO.      1.270
      VF SAND      9292.   VF GRVL       50.   S  COBL      487.
      F  SAND      6454.   F  GRVL      123.   L  COBL      112.
      M  SAND      7090.   M  GRVL      289.   S  BLDR        0.
      C  SAND      4024.   C  GRVL      407.   M  BLDR        0.
      VC SAND      3225.   VC GRVL      522.
SECTION NO.      1.180
      VF SAND      9335.   VF GRVL       29.   S  COBL      281.
      F  SAND      6418.   F  GRVL       74.   L  COBL        7.
      M  SAND      6953.   M  GRVL      178.   S  BLDR        0.
      C  SAND      3898.   C  GRVL      256.   M  BLDR        0.
      VC SAND      3089.   VC GRVL      316.
SECTION NO.      1.090
      VF SAND      9370.   VF GRVL       43.   S  COBL      278.
      F  SAND      6460.   F  GRVL      103.   L  COBL        0.
      M  SAND      7021.   M  GRVL      233.   S  BLDR        0.
      C  SAND      3947.   C  GRVL      313.   M  BLDR        0.
      VC SAND      3120.   VC GRVL      365.
SECTION NO.      0.990
      VF SAND      9505.   VF GRVL       81.   S  COBL      546.
      F  SAND      6582.   F  GRVL      194.   L  COBL       29.
      M  SAND      7138.   M  GRVL      434.   S  BLDR        0.
      C  SAND      3991.   C  GRVL      576.   M  BLDR        0.
      VC SAND      3155.   VC GRVL      687.
SECTION NO.      0.840
      VF SAND      9611.   VF GRVL       76.   S  COBL      688.
      F  SAND      6630.   F  GRVL      186.   L  COBL      109.
      M  SAND      7106.   M  GRVL      432.   S  BLDR        0.
      C  SAND      3921.   C  GRVL      604.   M  BLDR        0.
      VC SAND      3078.   VC GRVL      777.
SECTION NO.      0.750
      VF SAND      9618.   VF GRVL       43.   S  COBL      489.
      F  SAND      6639.   F  GRVL      111.   L  COBL       84.
      M  SAND      7123.   M  GRVL      273.   S  BLDR        0.
      C  SAND      3926.   C  GRVL      408.   M  BLDR        0.
      VC SAND      3053.   VC GRVL      540.
SECTION NO.      0.710
      VF SAND      9638.   VF GRVL       38.   S  COBL      493.
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        F  SAND      6654.   F  GRVL       98.   L  COBL       130.
        M  SAND      7123.   M  GRVL      241.   S  BLDR         0.
        C  SAND      3888.   C  GRVL      363.   M  BLDR         0.
        VC SAND      3028.   VC GRVL      498.
  SECTION NO.      0.630
        VF SAND     10011.   VF GRVL       56.   S  COBL       724.
        F  SAND      6902.   F  GRVL      139.   L  COBL       270.
        M  SAND      7420.   M  GRVL      327.   S  BLDR         0.
        C  SAND      4082.   C  GRVL      480.   M  BLDR         0.
        VC SAND      3210.   VC GRVL      682.
  SECTION NO.      0.540
        VF SAND     10305.   VF GRVL       69.   S  COBL       792.
        F  SAND      7018.   F  GRVL      170.   L  COBL       251.
        M  SAND      7509.   M  GRVL      399.   S  BLDR         0.
        C  SAND      4122.   C  GRVL      578.   M  BLDR         0.
        VC SAND      3253.   VC GRVL      801.
  SECTION NO.      0.430
        VF SAND     10313.   VF GRVL       61.   S  COBL       628.
        F  SAND      6994.   F  GRVL      153.   L  COBL        99.
        M  SAND      7381.   M  GRVL      366.   S  BLDR         0.
        C  SAND      4008.   C  GRVL      537.   M  BLDR         0.
        VC SAND      3156.   VC GRVL      735.
  SECTION NO.      0.330
        VF SAND     10320.   VF GRVL       55.   S  COBL       448.
        F  SAND      6939.   F  GRVL      136.   L  COBL        43.
        M  SAND      7236.   M  GRVL      326.   S  BLDR         0.
        C  SAND      3882.   C  GRVL      475.   M  BLDR         0.
        VC SAND      3043.   VC GRVL      615.

  LOCAL INFLOW
        VF SAND         0.   VF GRVL        0.   S  COBL         0.
        F  SAND         0.   F  GRVL        0.   L  COBL         0.
        M  SAND         0.   M  GRVL        0.   S  BLDR         0.
        C  SAND         0.   C  GRVL        0.   M  BLDR         0.
        VC SAND         0.   VC GRVL        0.

  SECTION NO.      0.200
        VF SAND     10343.   VF GRVL       75.   S  COBL       518.
        F  SAND      6891.   F  GRVL      165.   L  COBL        66.
        M  SAND      7021.   M  GRVL      362.   S  BLDR         0.
        C  SAND      3678.   C  GRVL      556.   M  BLDR         0.
        VC SAND      2851.   VC GRVL      698.
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$$END

      0   DATA ERRORS DETECTED.

TOTAL NO. OF TIME STEPS READ =        16
TOTAL NO. OF WS PROFILES =            29
ITERATIONS IN EXNER EQ =           30160

COMPUTATIONS COMPLETED
RUN TIME =  0 HOURS,  0 MINUTES &  5.00 SECONDS
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APPENDIX H.7

Apache Wash Main Channel Model, 100-year Flood, Future Condition

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T1      Cave Creek and Apache WMP
T2      by Stantec:  Proj. No. 82000077                    File: AW-F100C.DAT
T3      for Flood Control District of Maricopa County      Date: 07-28-99   srg

NC 0.055   0.055    0.03     0.1     0.3
X1   0.2      12 9967.74 10039.4
GR  1660 9288.16    1658 9525.13    1658 9606.89    1656 9642.09    1656 9827.21
GR  1654 9904.07    1650 9967.74    1646  9981.5    1646 10015.7    1656 10039.4
GR  165610160.82    166010191.81
HD   0.2    10.0

QT

X1  0.33      16 9945.78   10090     350     700     650
GR  1663 9631.93    1662    9645    1660    9722    1660    9820    1661    9900
GR  1658 9945.78  1652.2    9980  1652.2   10020    1658   10090    1658   10135
GR1652.6   10150    1656   10170    1658   10220    1660   10250    1662   10305
GR  1664   10375
HD  0.33    10.0

X1  0.43      17    9940   10050     505     440     500
GR  1666    9730    1664    9900    1662    9940    1655    9985    1655   10015
GR1661.8   10050  1661.8   10120    1660   10190    1658   10240    1660   10270
GR  1662   10290    1662   10350    1660   10405    1660   10430    1662   10500
GR  1664   10535    1666   10620
HD  0.43    10.0

X1  0.54      17    996510027.02     800     400     640
GR  1670    9600    1668    9840    1664    9875    1664    9965    1660 9975.73
GR  166010018.71    166410027.02    166410027.05    166410027.06    166610068.43
GR  166610068.89    166610360.71    166410418.56    166410470.56    166610510.35
GR  166810530.78    167010614.05
HD  0.54    10.0

X1  0.63      23 9967.2710044.06     300     600     500
GR  1673 9246.69    1672    9300    1672 9467.58    1672 9467.59    1670 9524.47
GR  1670 9524.59    1670 9661.89    1670 9662.28    1668 9798.92    1668 9967.22
GR  1668 9967.27    1666 9971.89    1666 9971.91    1664 9976.44    1664 9976.56
GR  166410025.48    166610033.05    166610033.09    166810044.06    166810044.68
GR  166810151.63    1672   10188 1673.0410227.11
HD  0.63    10.0

X1  0.71      29 9973.9410029.59     370     440     400
GR  1676 9410.74    1674 9517.84    1672 9806.35    1672 9806.66    1670 9929.72
GR  1670 9930.71    1668 9973.93    1668 9973.94    1666 9979.82    1666  9979.9
GR  1664 9985.76    1664  9985.8    166410015.71    1664 10015.9    166610024.34
GR  166610024.46    166810029.59    166810030.23    166810045.83    166810045.97
GR  166610052.42    166610052.62    166610063.21    1666 10063.3    166810070.56
GR  166810070.63    1670 10092.7    167610201.55    167610201.61
HD  0.71    10.0

X1  0.75      32 9943.8210027.72     180     210     200
GR  1676 9452.11    1674 9623.97    1674 9849.05    1674 9850.71    1672 9883.74
GR  1672 9884.15    1670 9943.61    1670 9943.82    1668 9967.12    1668 9967.18
GR  1666 9978.88    166610014.77    167010027.72    167010080.45    167010080.56
GR  167210093.84    1672   10094    167210119.59    167210119.71    167010128.45
GR  1670 10128.5    1670 10145.7    167010145.78    1672 10173.1    167210173.36
GR  167410214.32    1674 10214.6    167410391.18    167410391.21    167610479.43
GR  167610479.48    167610512.05
HD  0.75    10.0

NC 0.055   0.055    0.03     0.3     0.5

X1  0.84      17    9975   10030     420     430     440
GR  1679 9854.82    1676    9910    1672    9975    1670 9980.41    167010019.82
GR  1672   10030  1673.8   10080    1672   10110    1670   10125    1674   10150
GR  1674   10230    1678   10290    1678   10320    1676   10380    1676   10400
GR  1678   10460    1680   10590
HD  0.84    10.0

X1  0.99      18 9969.6610026.04     890     550     900
GR  1686 9925.53    1682 9950.02    1680 9969.66    1678 9977.26    167810017.26
GR  168010026.04    168210147.08    1682 10189.7    168010277.01    167810326.93
GR  167810418.53    168010542.32    168210764.47    168210913.43    168210917.62
GR  1684   11420    1684   11790 1685.9911823.04
HD  0.99    10.0

NC 0.055   0.055    0.03     0.1     0.3

X1  1.09      18    9968   10034     500     460     500
GR  1690    9920    1688    9926    1686    9932    1684    9938    1682    9968
GR  1680    9974    1680   10026    1682   10034    1682   10098    1684   10120
GR  1686   10185    1684   10335    1684   10362    1686   10582    1685   10770
GR  1686   10920    1688   11621    1690   11652
HD  1.09    10.0

NC 0.055   0.055    0.03     0.3     0.5

X1  1.18      21 9937.4210028.94     500     350     500
GR  1694    9840    1692    9875    1690    9902    1688    9920    1686    9936
GR  1684    9947    1682    9957    1680   10015    1680   10020    1682   10025
GR  1684   10030    1686   10061    1688   10102    1690   10180    1690   10270
GR  1689   10390  1689.9   10460  1688.2   10600    1690   10670    1692   10863
GR1693.5   10903
HD  1.18    10.0
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X1  1.27      16    9917   10020     450     500     460
GR  1698    9673    1696    9745    1694    9795    1692    9817    1690    9842
GR  1688    9917    1686    9925    1684    9950    1684    9975    1686   10020
GR  1688   10077    1690   10163    1692   10260    1694   10395    1696   10505
GR  1698   10800
HD  1.27    10.0

NC 0.055   0.055    0.03     0.1     0.3

X1  1.37      10 9932.08 10030.2     400     440     500
GR  1698 9493.05    1696 9549.07    1694 9580.08    1692 9932.08    1690 9963.31
GR  1688 9978.48    1688 10013.4    169010022.33    1692 10030.2    169810053.61
HD  1.37    10.0

X1  1.47      12 9964.3710032.41     490     520     500
GR  1702 9462.33    1700 9530.85    1698 9560.22    1698 9800.63    1696 9911.62
GR  1694 9964.37    1690 9980.91    169010017.61    169410032.41    169810056.56
GR  170010067.04    170210103.76
HD  1.47    10.0

X1  1.56      13 9951.3710028.61     400     540     500
GR  1706 9426.84    1704 9453.43    1702 9496.71    1700 9564.46    1700 9690.11
GR  1698 9951.37    1696 9973.37    1692 9983.09    169210014.85    169810028.61
GR  170210039.18    170410058.37    170610091.18
HD  1.56    10.0

X1   1.6      13 9959.7310016.94     190     180     180
GR  1706 9416.18    1704 9448.11    1702 9518.79    1700 9799.12    1698 9907.12
GR  1696 9959.73    1694 9980.66    1692  9995.9    1692 10008.9    169410012.95
GR  169610016.94    170410031.18    170610062.39
HD   1.6    10.0

X1  1.66      14 9952.11   10034     300     240     250
GR  1708 9744.33    1704 9829.76    1702 9931.63    1700 9952.11    1698 9967.65
GR  1696 9993.88    169610014.03    169810029.43    1700   10034 1700.0110204.97
GR  170210212.95    170410237.12    170610277.66    170810306.08
HD  1.66    10.0

X1  1.75      12 9970.0510072.31     480     520     500
GR  1710 9951.17    1704 9965.64    1702 9970.05    1700 9974.47    1698 9978.76
GR  169810016.76    170010034.19    170210072.31    170410151.35    170610320.71
GR  170810429.93    171010503.73
HD  1.75    10.0

X1  1.81      14 9971.05   10031     300     240     300
GR  1712 9944.51    1704 9965.71    1702 9971.05    1700 9975.82    170010012.24
GR  1702   10031    170410060.69    170610188.05    170610206.68    170410298.14
GR  170410327.71    170610350.59    170810431.76    171210486.49
HD  1.81    10.0

X1  1.85      16 9954.9910041.54     210     150     190
GR  1712 9819.07    1710 9828.06    1708 9836.36    1706 9915.83    1704 9954.99
GR  170010002.05    170010011.48    170410041.54    170610064.87    170810129.94
GR  170810187.04    170610294.81    170610368.04    170810414.01    171010424.61
GR  171210451.94
HD  1.85    10.0

X1  1.88      16    9950   10040     190     230     200
GR  1713 9767.17    1708    9790    1708    9890    1706    9950    1704    9975
GR1702.1    9990  1702.1   10010    1706   10040    1710   10085    1710   10210
GR  1708   10300    1706   10340    1706   10370    1708   10390    1710   10455
GR1713.110479.52
HD  1.88    10.0

X1     2      14    9980   10115     550     230     490
GR1715.9 9964.46    1710    9980  1708.5    9985  1708.5   10020    1710   10115
GR  1712   10150  1713.8   10360    1712   10535    1710   10590  1708.5   10610
GR1708.5   10675    1710   10700    1714   10805    1716   10830
HD     2    10.0

X1  2.08      16 9971.0310080.47     440     270     440
GR  1718 9967.02    1716 9971.03    1710 9983.46    171010015.75    1714 10034.4
GR  171610080.47    171710200.63    1716   10300    1714   10360    1712   10450
GR  1710   10490    1710   10510    1712   10545    1714   10580    1716   10700
GR  1718   10745
HD  2.08    10.0

X1  2.17      12 9948.1610055.88     500     350     520
GR  1722 9809.96    1720 9833.72    1716 9889.63    1716 9892.16    1716 9948.16
GR  1714 9962.44    171410027.88    171610055.88    1716 10199.6    171810234.24
GR  172010416.55    172210468.74
HD  2.17    10.0

X1  2.24      10 9939.5710055.42     380     390     380
GR  1726 9781.96    1724 9796.25    1720 9855.35    1718 9939.57    1714 9973.56
GR  171410001.06    171810055.42    172010148.55    172410188.25    172610215.72
HD  2.24    10.0

X1  2.33      10    9945   10030     450     450     450
GR  1730    9778    1724    9840    1722    9870    1720    9890    1720    9945
GR  1718    9960    1717   10000    1718   10028    1720   10030    1730   10045
HD  2.33    10.0

X1   2.4       8    9940 10024.1     300     370     360
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GR  1732    9795    1730    9800    1724    9840    1720    9940    1718    9980
GR  1718   10020 1719.97 10024.1 1732.0310048.34
HD   2.4    10.0

NC 0.055   0.055    0.03     0.3     0.5

X1  2.47      12 9962.2610027.81     340     450     400
GR  1734 9920.54    1732 9942.57    1724 9962.26    1720  9972.1    1720 9990.76
GR  172210013.06    172410027.81    1726 10090.1    172610200.41    172810300.68
GR  1730   10340    1734   10360
HD  2.47    10.0

NC 0.055   0.055    0.03     0.1     0.3

X1  2.52      14 9957.5910028.76     270     250     260
GR  1736 9805.03    1734 9840.17    1732 9866.23    1728 9886.43    1726 9957.59
GR  1722 9970.16    172110021.48    172610028.76    172810120.86    172810316.87
GR  173010363.84    173210395.26    173410419.34    173610459.58
HD  2.52    10.0

X1   2.6      11    994510028.92     390     450     430
GR  1736    9750    1732    9820    1732    9935    1730    9945    1724    9960
GR  1724    9965    1726   10020  1729.510028.92    1732   10265    173210415.66
GR1736.110462.65
HD  2.52    10.0

NC 0.055   0.055    0.03     0.3     0.5

QT

X1  2.73      10 9971.8710036.42     250     900     640
GR  1740 9756.45    1738 9787.82    1736 9811.88    1732 9971.87    1728 9986.23
GR  172810019.94    173210036.42    173410071.17    173810101.17 1740.0510127.41
HD  2.73    10.0

NC 0.055   0.055   0.043     0.3     0.5

X1  2.82      26    9978   10294     250     470     430
GR  1744    9654    1742    9680    1740    9705    1738    9724    1736    9764
GR1735.5    9884    1736    9934    1736    9978    1734    9982    1731    9994
GR  1731   10006    1734   10024    1736   10034    1736   10140    1736   10210
GR  1734   10248    1732   10254    1730   10260    1730   10282    1732   10288
GR  1734   10294    1736   10324    1738   10340    1740   10355    1742   10370
GR  1744   10387
HD  2.82    10.0

NC 0.055   0.055   0.036     0.1     0.3

X1  2.87      28    9979   10485     240     250     260
GR  1746    9679    1744    9706    1742    9737    1740    9771    1738    9979
GR  1736    9983    1734    9987    1734   10013    1736   10019    1738   10031
GR1738.5   10099    1738   10191    1736   10259    1734   10269    1732   10277
GR  1732   10314    1734   10320    1736   10327    1736   10387    1734   10417
GR  1732   10427    1732   10439    1734   10452    1736   10485    1738   10560
GR  1740   10627    1742   10666    1744   10698
HD  2.87    10.0

NC 0.055   0.055   0.037     0.1     0.3

X1   2.9      32    9978   10469     140     300     200
GR  1746    9726    1744    9756    1742    9794    1740    9826    1738    9978
GR  1736    9984    1734    9990    1734   10010    1736   10016    1738   10022
GR  1740   10100  1740.5   10141    1740   10186    1738   10301    1736   10307
GR  1734   10313    1734   10341    1736   10351    1738   10469    1740   10481
GR  1742   10494    1744   10502    1746   10513    1746   10530    1744   10536
GR  1742   10544    1740   10558    1738   10571    1738   10871    1740   10961
GR  1742   11016    1744   11076
HD   2.9    10.0

NC 0.055   0.055   0.048     0.1     0.3

X1  2.92      30    9970   10660     155     145     155
GR  1748    9820    1746    9845    1744    9870    1742    9910    1740    9970
GR  1738    9980    1735    9990    1735   10010    1738   10014    1740   10022
GR1741.5   10157    1740   10412    1738   10537    1736   10543    1734   10549
GR  1734   10565    1736   10585    1738   10596    1738   10660    1740   10671
GR  1742   10686    1742   10707    1740   10713    1738   10717    1738   10751
GR  1740   11007    1742   11187    1742   11377    1744   11482    1746   11602
HD  2.92    10.0

NC 0.055   0.055   0.049     0.1     0.3

QT

X1  2.97      27    9980   11098     270     280     270
GR  1748    9934    1746    9959    1744    9974    1742    9980    1740    9984
GR  1738    9988    1738   10012    1740   10020    1742   10052    1742   10134
GR1743.5   10314    1742   10552    1740   10718  1738.5   10764    1740   10822
GR  1738   10826    1736   10830    1736   10860    1738   10864    1740   10870
GR  1740   10927    1739   10974    1740   11044    1740   11098    1742   11354
GR  1744   11484    1746   11602
HD  2.97    10.0

NC 0.055   0.055    0.03     0.3     0.5
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X1  3.07      11 9979.9510028.11     570     500     550
GR  1750    9625    1748    9640    1746    9665    1746 9912.66    1744 9979.95
GR  1742 9989.15    174110019.02    174410028.11    174610080.68    174810180.41
GR  175010180.42
HD  3.07    10.0

NC 0.055   0.055    0.03     0.1     0.3

X1  3.13      10 9978.4110027.88     200     300     280
GR  1752 9442.64    1748 9512.79    1748 9870.47    1746 9978.41    1742 9996.99
GR  174210009.71    174810027.88    175010067.68  1750.2   10100    1752 10100.1
HD  3.13    10.0

X1  3.21      14    996510029.09     250     350     310
GR  1754    9595    1752    9630    1750    9660    1749    9680    1750    9710
GR  1751    9900    1750    9965    1746 9990.25    174610009.88 1749.9810029.09
GR  1750   10130    1752   10315  1752.1   10390    1754 10390.1
HD  3.21    10.0

X1  3.32      16 9955.2210020.21     520     520     520
GR  1758 9599.26    1758 9599.45    1756 9630.94    1756 9632.14    1754 9725.16
GR  1754 9955.22    1752 9974.26    1750 9981.64    175010008.82    175410020.21
GR  175410242.15  1756.7   10490  1756.2   10560  1756.2   10725  1756.5   10790
GR  175810929.84
HD  3.32    10.0

X1   3.4      14    9984   10031     480     440     470
GR  1762    9462    1760    9493    1758    9714    1758    9869    1756    9914
GR  1756    9979    1754    9984    1752   10000    1754   10016    1756   10031
GR  1758   10057    1758   10212    1760   10464    1761   10809
HD   3.4    10.0

X1  3.48      11 9985.3910018.81     400     400     400
GR  1764 9620.29    1762  9671.6    1762 9965.97    1760 9985.39    1758  9988.6
GR  1756 9993.36    175510009.59    175810018.81    1760 10110.6    176210298.95
GR  1764   10615
HD  3.48    10.0

X1  3.52      14 9981.9610017.06     200     200     200
GR  1766 9669.22    1764 9704.26    1764 9883.69    1762 9945.91    1762 9977.47
GR  1762 9977.93    1760 9981.96    1758 9986.06    175610002.04    175610006.86
GR  176010017.06    176210100.32    176410273.56    176610646.59
HD  3.52    10.0

X1   3.6       9 9979.8510013.99     400     450     420
GR  1770 9378.25    1768 9475.66    1766 9891.47    1764 9979.85    1760 9990.66
GR  176010010.55    176210013.99    176810247.91    177010365.75
HD   3.6    10.0

X1  3.65       9    9970   10015     250     260     280
GR1771.6 9358.43    1768    9470    1770    9580    1770    9830    1764    9970
GR  1762 9990.15    176210009.75    1764   10015    1770   10370
HD  3.65    10.0

X1  3.75      14 9982.65   10020     500     500     500
GR  1776    9590    1774    9655    1772    9710    1772    9725    1774    9780
GR  1774    9945    1772    9975    1768 9982.65    1764 9991.06    1764   10010
GR  1768   10020    1772   10310    1772   10840    1776   10885
HD  3.75    10.0

NC 0.055   0.055    0.03     0.3     0.5

X1  3.78      17  9978.410060.68     170     170     170
GR  1776 9660.11  1774.1    9740    1774  9978.4    1770 9983.58    1766 9992.92
GR  1766 9993.96    177010036.94    177210060.68    177210120.11    177010142.25
GR  176810151.27    176810155.15    177010163.26    177210225.58    177410348.04
GR  177410545.54    177510650.82
HD  3.78    10.0

NC 0.055   0.055    0.03     0.1     0.3

QT

X1  3.86      15 9980.73 10048.5     360     490     400
GR  1780 9728.15    1778 9811.03    1776 9980.73    1770 9992.41    177010006.32
GR  177210015.17    1774 10048.5    1774 10108.2    177610125.25    1778 10163.1
GR  177810205.78    177410274.92    177410300.77    177810373.74    1780 10496.8
HD  3.86    10.0

X1  3.96      16 9882.8510057.49     490     460     520
GR  1784 9852.78    1782 9882.85    1780 9912.96    1778 9952.91    1776 9978.94
GR  1774 9989.34    177410006.21    178010028.53    178210057.49    178210179.95
GR  178010409.79    177810418.05    1778 10422.6    178010433.36    178210548.23
GR  178410801.62
HD  3.96    10.0

NC 0.055   0.055    0.03     0.3     0.5

X1  4.05       9 9981.93   10025     400     285     500
GR  1788    9960    1782 9981.93    1780    9990    1779   10000    1780   10015
GR  1782   10025    1782   10200    1786   10270  1786.8   10320
HD  4.05    10.0

NC 0.055   0.055    0.03     0.1     0.3
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X1  4.11      11 9978.48 10107.8     240     300     250
GR  1792 9954.62    1790 9972.66    1786 9978.48    1784 9982.42    1782 9988.23
GR  178210014.08    1784 10019.7    1786 10107.8    1788 10273.4    179010355.58
GR  179010489.42
HD  4.11    10.0

X1  4.22      13    9975   10030     280     260     280
GR  1796    9435    1794    9530    1792    9595    1790    9650    1788    9780
GR  1788    9885    1790    9975    1786    9990  1785.5 9999.81    1786   10010
GR  1790   10030    1792   10085  1792.4   10135
HD  4.22    10.0

X1  4.23      13 9980.1610030.19     140     150     150
GR  1796 9520.61    1794 9614.39    1790 9762.38    1788 9933.91    1790 9961.17
GR  1790 9980.16    1788 9985.61    1786 9991.04    178610007.85    178810015.65
GR  179010030.19    179210081.29    179410132.36
HD  4.23    10.0

X1  4.31      12 9980.5410019.75     410     410     420
GR  1798 9706.51    1796  9770.7    1794 9896.31    1792 9980.54    1790  9986.9
GR  178810005.88    178810009.89    179010014.81    179210019.75    179410055.21
GR  179610110.95  1796.510150.57
HD  4.31    10.0

X1   4.4      14    9990   10030     475     490     510
GR  1802    9925    1800    9940    1798    9970    1796    9990    1794    9995
GR1792.3   10005    1794   10020    1796   10030    1796   10080  1794.3   10090
GR  1796   10110    1798   10175    1800   10210    1801   10270
HD   4.4    10.0

X1  4.49      12  9954.910053.62     490     450     450
GR  1806 9821.99    1804 9901.91    1802 9916.74    1800  9954.9    1798 9973.89
GR  1796 9983.53    1796 10011.1    179810018.97    180010053.62    180210105.02
GR  180410240.68  1804.5   10340
HD  4.49    10.0

X1  4.56       9    9975   10115     365     350     365
GR  1810    9730    1808    9915    1806    9945    1802    9975    1799   10000
GR  1802   10115    1804   10150    1806   10215    1808   10240
HD  4.56    10.0

NC 0.055   0.055    0.03     0.3     0.5

X1  4.57       9  9980.5 10011.5     110     100     110
X3     0                   9980    1808   10011    1808
GR  1810    9540    1808    9760    1806    9950    1806  9980.5    1800  9980.5
GR  1800 10011.5    1806 10011.5    1806   10220    1806   10500
HD  4.57    10.0

NC 0.055   0.055    0.03     0.1     0.3

X1  4.58      10    9982   10013     105     105     105
X3                        9982    1807   10013    1807
GR  1810    9685    1808    9790    1806    9945    1804    9982  1801.3    9982
GR1801.3   10013    1804   10013    1804   10250    1806   10320    1808   10500
HD  4.58    10.0

X1   4.6      18  9971.410015.98      83      83      83
GR  1812    9675    1810 9812.65    1810 9836.34    1808 9875.78    1808 9883.17
GR  1806 9966.89    1806  9971.4    1802  9987.4    1802 9998.69    1802 9998.98
GR  180610015.98    180610022.46    1806   10123    180410130.11    180410281.42
GR  180610322.77    180610440.24    180810500.19
HD   4.6    10.0

X1  4.65      14 9982.4710093.98     260     260     280
GR1815.5    9400    1814    9600    1810 9830.73    1808 9982.47    1806 9997.03
GR  180610002.86    180810014.29    180810049.57    180610059.42    180610060.51
GR  180810093.98    180810250.89    1810   10270    1810   10360
HD  4.65    10.0

X1  4.74      22 9960.2910029.03     400     500     500
GR  1818 9500.14    1816 9960.29    1814 9979.29    1812 9986.69    1810    9994
GR  1810 9994.01    1810 9999.53    1810 9999.55    181210010.02    181410029.03
GR  181410029.36    181410136.55    1813   10140    1814   10160    1814   10380
GR  1811   10400    1814   10425    1814   10440    1813   10485    1814   10530
GR  1815   10590    1815   10700
HD  4.74    10.0

X1  4.78      17 9964.8710021.41     300     100     200
X3                        9964.87    181810211.72    1816
GR  1820 9743.69    1818 9905.26    1818 9905.48    1818 9964.87    1818 9964.88
GR  1816 9983.35    1813 9995.72    181310010.03    181610021.41    181610211.72
GR  181610230.89    181410317.17    181310376.07    1814 10488.8    1814 10508.5
GR  1816   10540    1818   10640
HD  4.78    10.0

X1  4.82      28    997510009.43     480     480     480
X3    10
GR  1826    9480    1824 9740.85    1822 9830.85    1820 9875.16    1818 9888.17
GR  1818 9903.71    1820 9930.33    1820 9930.34    1820 9974.99    1820    9975
GR  1818 9990.22    181810005.12    182010009.43    1822 10013.6    182210024.29
GR  182010070.59    1818   10100    182010126.15    182010181.41    181810189.94
GR1817.1   10200    181810207.92    182010217.21    182010264.85    1818   10280
GR  1820   10315    1822   10435    1824   10565
HD  4.82    10.0
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X1   4.9      14    9940   10018     220     160     200
X3                        9940    1824   10018    1824
GR  1826    9730    1824    9825    1824    9940    1822  9961.4    182210007.63
GR  1824   10018    1824   10030    1822   10155    1822   10290    1822   10310
GR  1822   10330    1824   10405    1826   10560    1828   10750
HD   4.9    10.0

X1  4.96      17 9974.1910011.03     400     200     320
X3                                 10156.63    1826
GR  1828 9716.18    1828 9717.02    1826 9800.79    1826 9974.19    1822 9995.82
GR  182210000.05    182610011.03    182610011.04    182610156.72    182610156.73
GR  1824   10310    182410344.97    182610425.12    182710592.76    182710594.98
GR  1828   10670    1830   10790
HD  4.96    10.0

X1  5.03      13 9975.1210012.26     345     340     365
X3                                 10133.33    1830
GR  1833    9515    1832 9590.59    1830 9640.88    1830 9975.12    1826 9992.06
GR  182610001.75    183010012.26    1830 10053.1    183010133.33    182810188.37
GR  182810281.59    1832   10620  1832.5   10750
HD  5.03    10.0

X1  5.09      14    9970   10025     300     310     300
X3                                        10075    1834
GR  1835    9480    1834    9515    1832    9550    1832    9970    1830    9985
GR  1831   10000    1832   10025    1834   10075    1830   10120    1832   10145
GR  1832   10255    1834   10320    1834   10435    1836   10780
HD  5.09    10.0

X1  5.15      14    9978   10025     350     355     352
X3                                        10170    1836
GR  1839    9870    1838    9945    1836    9978    1834    9988    1830   10000
GR  1830   10010    1834   10025    1834   10130    1836   10170    1836   10200
GR  1835   10320    1836   10495    1838   10522    1840   10780
HD  5.15    10.0

X1  5.21      21    9970   10030     330     300     310
X3                                        10135    1840
GR  1842    9685    1840    9780    1838    9860    1836    9885    1836    9890
GR  1838    9915    1838    9970    1836    9985    1834   10000    1836   10015
GR  1838   10030    1838   10085    1837   10110    1838   10120    1840   10135
GR  1840   10150    1838   10245    1838   10310    1840   10355    1840   10400
GR  1842   10525
HD  5.21    10.0

NC 0.055   0.055    0.03     0.3     0.5

X1  5.31      19 9988.2310044.49     500     480     500
GR  1847    9325    1846 9444.34    1844 9557.15    1844 9887.76    1840 9911.33
GR  1840 9919.33    1840 9919.34    1842 9933.33    1842 9933.43    1842 9988.23
GR  1842 9988.24    1838 9997.67    183810005.97    1842 10024.7    184410044.49
GR  1844 10044.5    184410061.08    184410218.05    1846   10565
HD  5.31    10.0

X1  5.38      11    9965   10015     350     425     375
GR  1850    9815    1848    9880    1846    9900    1844    9910    1844    9985
GR  1841   10000    1844   10015    1846   10030    1846   10110    1848   10255
GR  1850   10460
HD  5.38    10.0

NC 0.055   0.055    0.03     0.1     0.3

X1  5.48      15 9978.4110044.06     530     500     500
GR  1855    9300    1854    9440    1854    9750    1852    9790    1852    9895
GR  1850 9929.89    1850 9978.41    184610000.42    1846 10004.4    185010044.06
GR  185210141.09    185210147.22    185210418.73    185410547.75    185610626.53
HD  5.48    10.0

X1  5.57      16    9977   10035     400     450     450
GR  1859    9400    1858    9520    1856    9700    1858    9731    1858    9800
GR  1856    9812    1854    9824    1854    9977    1852    9985    1850    9993
GR  1850   10005    1852   10014    1854   10024    1856   10035    1858   10170
GR  1860   10299
HD  5.57    10.0

X1  5.64       9    9955   10170     370     320     345
GR  1862    9650    1860    9775    1858    9870    1856    9955    185510037.94
GR  1856   10170    1858   10275    1860   10365  1862.5   10575
HD  5.64    10.0

X1  5.66      23 9980.02   10030     460     320     440
GR  1864 9504.86    1864 9505.03    1862  9622.9    1862 9622.94    1862 9802.24
GR  1862 9802.28    1862 9805.57    1862 9805.58    1860 9814.49    1858 9838.73
GR  1858 9838.74    1858 9839.05    1860 9857.77    1860 9980.02    1854 9995.33
GR  1854 10003.7    185810014.57    1859   10030    1860 10136.3    186010136.31
GR  186210169.16  1862.5   10210    1863   10615
HD  5.66    10.0

X1  5.76      15 9968.5810043.06     470     570     540
GR  1870    9640    1868 9674.85    1866 9704.99    1864 9712.43    1866 9741.92
GR  1866    9835    1866    9865    1864 9968.58    1862 9985.72    186210014.25
GR  186410043.06    186610096.64    1868 10124.8    187010142.86    187010144.93
HD  5.76    10.0
```

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X1  5.83      16    9960   10030     375     380     380
GR  1874    9500    1872    9550    1872    9650   1872    9710    1870    9735
GR  1870    9890    1868    9960    1866    9990  1865.5   10000    1866   10005
GR  1868   10030    1868   10105    1870   10120    1872   10140    1874   10155
GR  1875   10250
HD  5.83    10.0

X1  5.92      19 9948.3410024.34     375     375     400
GR  1877    9720    1876 9854.04    1874 9948.34   1872 9975.43  1870.2   10000
GR  187210006.77    187410015.55    187610024.34   187610034.96   187410094.25
GR  187210130.93    1870 10149.3    187010150.59   187210177.58   187410238.14
GR  187410251.91    187410318.15    187610335.66   187810350.37
HD  5.92    10.0

X1  6.01      17    9920   10035     485     510     490
GR  1883    9750    1882    9870    1880    9920   1878    9955    1876    9980
GR1875.5   10000    1876   10010    1878   10020   1880   10035    1880   10075
GR  1878   10160    1877   10175    1878   10190   1880   10260    1882   10280
GR  1884   10400    1886   10580
HD  6.01    10.0

X1  6.09      10    9935   10070     470     435     445
GR  1886    9815    1884    9890    1882    9935   1880    9970  1879.5   10010
GR  1880   10050    1882   10070    1884   10345   1886   10380    1888   10520
HD  6.09    10.0

QT

X1  6.16      20 9977.6510050.58     270     450     360
GR1892.5    9875    1892 9961.21    1890  9972.1   1888 9977.65    1886  9983.3
GR  1884 9989.16    1883 9996.77    1883 9997.18   188410022.78    188610039.58
GR  188810050.58    188810110.58    188610208.91   188610225.08    188810318.94
GR  189010345.72    1892 10414.9    189210424.02   189210428.81 1893.0810468.67
HD  6.16    10.0

X1  6.25      14 9961.8410045.42     490     430     460
GR  1898 9911.34    1896 9931.58    1894 9947.24   1892 9961.84    1890 9976.08
GR  1888    9990    1888   10015    1890 10030.1   189210045.42    189210069.44
GR  189210268.14    189410454.21    189610476.27   189810569.33
HD  6.25    10.0

X1  6.32      14 9970.9910020.18     410     350     390
GR  1900 9951.16    1898  9957.9    1896 9964.52   1894 9970.99    1892 9977.55
GR  1890 9984.06    189010006.52    189210013.72   189410020.18    189610100.18
GR  189810266.52    189810293.42    189810347.28   190010412.02
HD  6.32    10.0

X1  6.43      13    9925   10030     475     360     450
GR  1906    9655    1904    9665    1902    9680   1900    9690    1900    9925
GR  1898    9970  1896.5    9990  1896.5   10010   1898   10020    1900   10030
GR  1902   10040    1904   10120    1906   10285
HD  6.43    10.0

X1   6.5      16 9947.4510071.54     310     355     345
GR  1910 9636.39    1908 9702.53    1906 9718.78   1904 9747.02    1904  9794.4
GR  1904 9947.45    1902 9967.32    1900 9987.47   1899    9995    1899   10010
GR  190010019.82    190210042.69    190410071.54   190610099.13    1908 10152.4
GR  1910   10187
HD   6.5    10.0

X1  6.58      12  9965.110022.84     430     430     430
GR  1912 9897.27    1910 9926.14    1908 9950.13   1906  9965.1    1904 9980.22
GR  1902 9998.11    190210006.79    190410014.85   190610022.84    190810088.23
GR  191010249.56    191210282.55
HD  6.58    10.0

X1  6.63      14 9985.9110021.82     300     290     290
GR  1916 9976.91    1914 9982.13    1912 9983.41   1910 9984.66    1908 9985.91
GR  1906 9987.08    1905    9995    1905   10005   190610015.13    190810021.82
GR  191010050.15    191210131.79    191410273.67   191610318.49
HD  6.63    10.0

X1  6.71      10 9981.63   10025     425     350     390
GR  1918    9970 1914.04 9977.71 1912.03 9981.63   1908    9990  1907.5   10000
GR  1908   10010    1912   10025    1914   10045   1916   10090    1918   10225
HD  6.71    10.0

X1   6.8      23 9976.6310016.52     500     400     495
GR  1924    9660    1920    9705    1919    9725   1920    9755    1920    9800
GR  1920 9880.75    1920 9901.03    1918 9976.63   1918 9976.81    1916 9982.58
GR  1916 9982.91    1914  9988.6    1914 9988.73   191410004.27    191410004.41
GR  191610010.43    191610010.46    1918 10016.4   191810016.52    192010022.44
GR  192010022.57    192210028.44  1923.7   10040
HD   6.8    10.0

X1   6.9      16 9954.1710017.39     490     560     529
GR  1930 9598.79    1926    9625    1926    9705   1928    9770    1928    9800
GR  1928 9822.48    1926 9857.37    1924 9954.17   1922 9987.42    192010000.76
GR  192010011.02    192210014.22    192410017.39   192610020.56    192810023.72
GR  193010026.89
HD   6.9    10.0

NC 0.055   0.055    0.03     0.3     0.5

X1  6.98      14 9975.9710031.62     400     470     437
```

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GR  1934 9723.34    1932    9740    1932    9900    1932    9935    1930 9944.17
GR  1928 9975.97    1926  9985.4    1924 9994.24    192410004.06    192610020.09
GR  192810031.62    193010071.11    193210085.11    193410100.97
HD  6.98    10.0

NC 0.055   0.055    0.03     0.1     0.3

X1  7.08      13 9953.0710021.87     485     500     500
GR  1940 9917.61    1938 9925.72    1936 9934.65    1934 9943.58    1932 9953.07
GR  1930 9965.94    1929    9987    193010007.17    193210021.87    193410036.31
GR  1936 10051.7    1938 10067.1    1940 10082.5
HD  7.08    10.0

X1  7.17      13 9978.7610024.18     500     520     500
GR  1944 9950.59    1942 9955.33    1940 9960.08    1938 9967.15    1936 9978.76
GR  1934  9991.7  1934.3   10000    193410014.37    193610024.18    1938   10034
GR  194010043.85    194210082.22    194410098.58
HD  7.17    10.0

NC 0.055   0.055    0.03     0.3     0.5

X1  7.28      14 9988.7110010.16     475     410     554
GR  1950    9710    1944    9760    1942    9800    1942 9836.63  1941.8 9849.74
GR1941.8 9874.17    1942 9924.41    1942 9988.71  1940.8    9998    194210010.16
GR  194410021.65    194610030.54    1948 10038.9    1950 10047.2
HD  7.28    10.0

NC 0.055   0.055    0.03     0.1     0.3

X1  7.36      12 9949.3210023.48     420     470     446
GR  1954    9725    1952    9740    1950    9800    1950 9835.52    1948 9949.32
GR  1946 9977.98  1944.5    9998    194610011.65    194810023.48    195010033.89
GR  195210040.39    195410046.86
HD  7.36    10.0

X1  7.46      13 9969.4710051.31     490     510     500
GR  1960 9830.45    1958 9861.07    1956 9923.22    1954 9969.47    1952 9976.86
GR1951.5    9990    1952 10000.7    195210032.17    195310051.31    195410081.59
GR  1956 10119.3    195810130.99    1960 10142.8
HD  7.46    10.0

X1  7.55      14 9970.0710028.16     510     480     500
GR  1968 9877.72    1966 9895.81    1964 9913.89    1962 9929.39    1960 9970.07
GR  1958 9981.49  1956.7   10000    195810024.51    196010028.16    196010145.16
GR  196210158.57    196410173.58    1966 10182.6    196810293.44
HD  7.55

X1  7.65      13 9977.3710022.56     520     470     500
GR  1970    9787    1966    9805  1965.5    9882    1964    9917    1964 9977.37
GR  1962 9986.15  1961.8   10000    196210010.39    196410016.47    196610022.56
GR  196810109.69    197010128.52    1971   10165
HD  7.65

X1  7.74      22 9983.7410035.24     425     475     500
GR  1978    9733    1976    9744    1974    9754    1972    9765    1972    9800
GR1972.3    9836    1972    9888    1972    9915  1972.4    9968    1972    9981
GR1970.9 9983.74    1970    9987  1969.1   10000    1970   10010    197110035.24
GR  1972   10062  1972.3   10086    1972   10097    1972   10123    1974   10127
GR  1976   10133    1978   10138
HD  7.74

X1  7.84      16    9984   10025     575     425     500
GR  1984    9793    1982    9828    1980    9841    1978    9908    1976    9916
GR  1976    9918    1976    9941    1976    9975    1976    9984  1974.4   10000
GR  1976   10025    1978   10036    1978   10073    1980   10206    1982   10222
GR  1983   10267
HD  7.84    10.0

X1  7.89      18    9983   10054     300     220     300
GR  1986    9756    1984    9764    1984    9845    1984    9878    1982    9978
GR  1982    9983    1980    9987    1978    9992    1977   10000    1978   10020
GR  1980   10054    1980   10082  1981.8   10149    1982   10170    1982   10189
GR  1982   10219    1984   10224  1985.5   10256
HD  7.89    10.0

X1  7.98      20    9975   10039     280     520     465
GR  1992    9500    1990    9570    1988    9630    1986    9740    1986    9773
GR  1986    9859  1986.4    9898    1986    9927    1986    9950    1986    9975
GR  1984    9982    1982    9991  1981.8   10000    1982   10005    1984   10017
GR  1986   10039    1988   10075  1988.2   10097    1990   10116    1992   10127
HD  7.98    10.0

X1  8.02      16    9977   10037     215     245     235
GR  1996    9610    1992    9700  1991.9    9765    1990    9862    1988    9894
GR  1988    9897  1989.2    9951    1988    9977    1986    9989  1985.1   10000
GR  1986   10020    1988   10037    1990   10077    1992   10109    1994   10116
GR  1996   10125
HD  8.02    10.0
EJ

T4  Project: Upper Cave Creek Watercourse Master Plan Studies
T5  Client : Flood Control District of Maricopa County (FCDMC)
T6  Date:    August 3, 1999
T7  Firm:    Stantec Consulting, Inc.
T8  ******************************************************
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```
I1            10
I4   SAND     10       1      14       0       0       0       0       0
I5           0.5     0.5    0.25     0.5    0.25       0     1.0
LQ     Q       1    2500    5000    7500
LT    QS     0.1    8916   11552   15559
LF   VFS 0.01512 0.01512 0.01902 0.02003
LF    FS 0.03115 0.03115 0.03238 0.03321
LF    MS 0.06244 0.06244 0.06561 0.06750
LF    CS 0.06509 0.06509 0.06832 0.07001
LF   VCS 0.07187 0.07187 0.07556 0.07736
LF   VFG 0.09965 0.09965 0.10454 0.10682
LF    FG 0.14704 0.14704 0.15381 0.15628
LF    MG 0.21408 0.21408 0.22359 0.22410
LF    CG 0.26298 0.26298 0.20829 0.20071
LF   VCG 0.02175 0.02175 0.03432 0.02736
LF    SC 0.00870 0.00870 0.01298 0.01582
LF    LC 0.00014 0.00014 0.00158 0.00079
LF    SB       0       0       0       0
LF    MB       0       0       0       0
PF           0.2     1.0     372     186    95.4    88.6    88.7    47.1    79.6
PFC 23.7    66.6    11.8    51.2     6.1    42.6     3.0    31.6    1.19    20.5
PFC 0.59    7.75    0.42    4.25     0.3     2.5   0.149     1.5   0.074     1.1

$LOCAL
        Trib at RS 0.33
LQL    Q      0.1    1000
LTL   QS     0.10    0.10
LFL  VFS     0.10    0.10
LFL   FS     0.10    0.10
LFL   MS     0.10    0.10
LFL   CS     0.10    0.10
LFL  VCS     0.10    0.10
LFL  VFG     0.10    0.10
LFL   FG     0.10    0.10
LFL   MG     0.10    0.10
LFL   CG     0.05    0.05
LFL  VCG     0.05    0.05
LFL   SC     0.05    0.05
LFL   LC     0.05    0.05
LFL   SB     0.00    0.00
LFL   MB     0.00    0.00

        Paradise Wash
LQL    Q      0.1    1000    3000    5000
LTL   Qs      0.1   13715   37712   41663
LFL  VFS 0.01058 0.00636 0.00545 0.00631
LFL   FS 0.04436 0.02544 0.02006 0.02526
LFL   MS 0.26267 0.14852 0.12892 0.13132
LFL   CS 0.14797 0.08564 0.07565 0.07554
LFL  VCS 0.06598 0.03986 0.03591 0.03581
LFL  VFG 0.07781 0.05010 0.04729 0.04696
LFL   FG 0.14900 0.10060 0.10449 0.10211
LFL   MG 0.22444 0.16710 0.20635 0.19292
LFL   CG 0.01718 0.21839 0.20780 0.19199
LFL  VCG       0 0.15798 0.12954 0.13980
LFL   SB       0       0 0.03853 0.05196
LFL   LC       0       0       0       0
LFL   SB       0       0       0       0
LFL   MB       0       0       0       0

     Desert Hills Wash
LQL    Q      0.1      11    3300    6600    9900
LTL   Qs      0.1      26    5970    9596   12935
LFL  VFS 0.01254 0.01254 0.00409 0.00354 0.00330
LFL   FS 0.07372 0.07372 0.02292 0.02018 0.01885
LFL   MS 0.30241 0.30241 0.09481 0.07205 0.07283
LFL   CS 0.26028 0.26028 0.08805 0.06434 0.06378
LFL  VCS 0.15271 0.15271 0.05881 0.04312 0.04280
LFL  VFG 0.09027 0.09027 0.04724 0.03485 0.03475
LFL   FG 0.09428 0.09428 0.12007 0.08687 0.08962
LFL   MG 0.01379 0.01379 0.20332 0.14036 0.15311
LFL   CG 0.00000 0.00000 0.23981 0.34597 0.30204
LFL  VCG 0.00000 0.00000 0.12088 0.18871 0.21605
LFL   SB 0.00000 0.00000 0.00000 0.00000 0.00286
LFL   LC 0.00000 0.00000 0.00000 0.00000 0.00000
LFL   SB       0       0       0       0       0
LFL   MB       0       0       0       0       0

        Trib near RS 3.86
LQL    Q      0.1    1000
LTL   QS     0.10    0.10
LFL  VFS     0.10    0.10
LFL   FS     0.10    0.10
LFL   MS     0.10    0.10
LFL   CS     0.10    0.10
LFL  VCS     0.10    0.10
LFL  VFG     0.10    0.10
LFL   FG     0.10    0.10
LFL   MG     0.10    0.10
LFL   CG     0.05    0.05
LFL  VCG     0.05    0.05
LFL   SC     0.05    0.05
LFL   LC     0.05    0.05
LFL   SB     0.00    0.00
LFL   MB     0.00    0.00
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        Trib near RS 6.09
LQL    Q      0.1     1000
LTL   QS     0.10     0.10
LFL  VFS     0.10     0.10
LFL   FS     0.10     0.10
LFL   MS     0.10     0.10
LFL   CS     0.10     0.10
LFL  VCS     0.10     0.10
LFL  VFG     0.10     0.10
LFL   FG     0.10     0.10
LFL   MG     0.10     0.10
LFL   CG     0.05     0.05
LFL  VCG     0.05     0.05
LFL   SC     0.05     0.05
LFL   LC     0.05     0.05
LFL   SB     0.00     0.00
LFL   MB     0.00     0.00

$HYD
$RATING
RC            11     2000        0        0 1646.00 1650.85 1652.85 1654.34 1655.54
RC       1657.39 1657.73 1658.43 1658.93 1659.31 1659.78

*    A  Level output at time step 1 (0.25 days)
Q    199    169        3       11        4        0
T     68     68       68       68       68       68
X            0.05   0.250
*    A  Level output at time step 2 (0.0139 day)
Q   4921   3731       11       31       39        0
W 0.0139
*    A  Level output at time step 3 (0.0208 day)
Q   3290   2064       15       39      437        9
W 0.0208
*    A  Level output at time step 4 (0.0208 day)
Q   9407   1732       91       87      563      384
W 0.0208
*    A  Level output at time step 5 (0.0139 day)
Q  19145   1391      636     1246      468        0
W 0.0139
*    A  Level output at time step 6 (0.0139 day)
Q  17810   1046     1162     5179        0      261
W 0.0139
*    A  Level output at time step 7 (0.0208 day)
Q  17309    733     4610     9881      286      417
W 0.0208
*    A  Level output at time step 8 (0.0208 day)
Q  14900    497     4921     9060      414        0
W 0.0208
*    A  Level output at time step 9 (0.0278 day)
Q   8650    344     2570     5129      474      127
W 0.0278
*    A  Level output at time step 10 (0.0278 day)
Q   4620    265     1245     2584      351      166
W 0.0278
*    A  Level output at time step 11 (0.0278 day)
Q   3121    207      712     1491      245      123
W 0.0278
*    A  Level output at time step 12 (0.0347 day)
Q   2264    173      457      955      162       80
W 0.0347
*    A  Level output at time step 13 (0.0764 day)
Q   1616    148      307      643       90       44
W 0.0764
*    A  Level output at time step 14 (0.0764 day)
Q   1440    268      235      487       67       24
W 0.0764
*    A  Level output at time step 15 (0.1458 day)
Q   1717    124      357      751       54       33
W 0.1458
*    A  Level output at time step 16 (0.2083 day)
Q    516     15       87      157       51       29
X        0.02083  0.2083
$VOL
$$END
```

```
*************************************************     ********************************
*  SCOUR AND DEPOSITION IN RIVERS AND RESERVOIRS  *     *  U.S. ARMY CORPS OF ENGINEERS   *
*       Version: 4.1.00 -  OCTOBER 1993           *     *  HYDROLOGIC ENGINEERING CENTER  *
*  INPUT FILE:  AW-F100C.DAT                      *     *  609 SECOND STREET              *
*  OUTPUT FILE: AW-F100C.OUT                      *     *  DAVIS, CALIFORNIA 95616-4687   *
*  RUN DATE: 10 OCT 00    RUN TIME: 07:46:18      *     *  (916) 756-1104                 *
*************************************************     ********************************

                      X     X  XXXXXXX   XXXXX           XXXXX
                      X     X  X        X     X         X     X
                      X     X  X        X               X
                      XXXXXXX  XXXX     X        XXXXX  XXXXXX
                      X     X  X        X               X     X
                      X     X  X        X     X         X     X
                      X     X  XXXXXXX   XXXXX           XXXXX

         ******************************************************************
         *  MAXIMUM LIMITS FOR THIS VERSION ARE:                          *
         *       10  Stream Segments (Main Stem + Tributaries)            *
         *      500  Cross Sections                                       *
         *      200  Elevation/Station Points per Cross Section           *
         *       20  Grain Sizes                                          *
         *       10  Control Points                                       *
         ******************************************************************

T1       Cave Creek and Apache WMP
T2       by Stantec:  Proj. No. 82000077                    File: AW-F100C.DAT
T3       for Flood Control District of Maricopa County      Date: 07-28-99   srg

N values...  Left   Channel   Right    Contraction    Expansion
           0.0550   0.0300   0.0550       1.1000     0.7000

SECTION NO.     0.200
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

LOCAL INFLOW POINT  1 occurs upstream from Section No.       0.200

SECTION NO.     0.330
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     0.430
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     0.540
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     0.630
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     0.710
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     0.750
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
           0.0550   0.0300   0.0550       1.3000     0.5000

SECTION NO.     0.840
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     0.990
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
           0.0550   0.0300   0.0550       1.1000     0.7000

SECTION NO.     1.090
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
           0.0550   0.0300   0.0550       1.3000     0.5000

SECTION NO.     1.180
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     1.270
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
           0.0550   0.0300   0.0550       1.1000     0.7000

SECTION NO.     1.370
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     1.470
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     1.560
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     1.600
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     1.660
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...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     1.750
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     1.810
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     1.850
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     1.880
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     2.000
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     2.080
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     2.170
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     2.240
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     2.330
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     2.400
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
           0.0550   0.0300   0.0550       1.3000      0.5000

SECTION NO.     2.470
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
           0.0550   0.0300   0.0550       1.1000      0.7000

SECTION NO.     2.520
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     2.600
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
           0.0550   0.0300   0.0550       1.3000      0.5000

LOCAL INFLOW POINT  2 occurs upstream from Section No.       2.600

SECTION NO.     2.730
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
           0.0550   0.0430   0.0550       1.3000      0.5000

SECTION NO.     2.820
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
           0.0550   0.0360   0.0550       1.1000      0.7000

SECTION NO.     2.870
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
           0.0550   0.0370   0.0550       1.1000      0.7000

SECTION NO.     2.900
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
           0.0550   0.0480   0.0550       1.1000      0.7000

SECTION NO.     2.920
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
           0.0550   0.0490   0.0550       1.1000      0.7000

LOCAL INFLOW POINT  3 occurs upstream from Section No.       2.920

SECTION NO.     2.970
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
           0.0550   0.0300   0.0550       1.3000      0.5000

SECTION NO.     3.070
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
           0.0550   0.0300   0.0550       1.1000      0.7000
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SECTION NO.     3.130
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     3.210
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     3.320
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     3.400
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     3.480
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     3.520
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     3.600
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     3.650
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     3.750
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
           0.0550   0.0300   0.0550       1.3000      0.5000

SECTION NO.     3.780
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
           0.0550   0.0300   0.0550       1.1000      0.7000

LOCAL INFLOW POINT  4 occurs upstream from Section No.       3.780

SECTION NO.     3.860
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     3.960
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
           0.0550   0.0300   0.0550       1.3000      0.5000

SECTION NO.     4.050
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
           0.0550   0.0300   0.0550       1.1000      0.7000

SECTION NO.     4.110
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     4.220
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     4.230
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     4.310
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     4.400
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     4.490
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     4.560
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
           0.0550   0.0300   0.0550       1.3000      0.5000

SECTION NO.     4.570
...Left Encroachment defined at station  9980.000 at elevation  1808.000
...Right Encroachment defined at station 10011.000 at elevation  1808.000
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
           0.0550   0.0300   0.0550       1.1000      0.7000

SECTION NO.     4.580
...Left Encroachment defined at station  9982.000 at elevation  1807.000
...Right Encroachment defined at station 10013.000 at elevation  1807.000
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     4.600
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     4.650
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...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     4.740
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     4.780
...Left Encroachment defined at station  9964.870 at elevation  1818.000
...Right Encroachment defined at station 10211.720 at elevation  1816.000
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     4.820
...Ineffective Flow Area - Method 1 - Left Overbank  Right Overbank
          Natural Levees at Station       9975.000      10009.430
              Ineffective Elevation       1820.000       1820.000
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     4.900
...Left Encroachment defined at station  9940.000 at elevation  1824.000
...Right Encroachment defined at station 10018.000 at elevation  1824.000
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     4.960
...Right Encroachment defined at station 10156.630 at elevation  1826.000
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     5.030
...Right Encroachment defined at station 10133.330 at elevation  1830.000
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     5.090
...Right Encroachment defined at station 10075.000 at elevation  1834.000
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     5.150
...Right Encroachment defined at station 10170.000 at elevation  1836.000
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     5.210
...Right Encroachment defined at station 10135.000 at elevation  1840.000
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
           0.0550   0.0300   0.0550       1.3000      0.5000

SECTION NO.     5.310
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     5.380
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
           0.0550   0.0300   0.0550       1.1000      0.7000

SECTION NO.     5.480
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     5.570
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     5.640
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     5.660
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     5.760
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     5.830
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     5.920
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     6.010
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     6.090
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

LOCAL INFLOW POINT  5 occurs upstream from Section No.       6.090

SECTION NO.     6.160
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     6.250
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     6.320
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     6.430
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     6.500
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...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     6.580
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     6.630
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     6.710
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     6.800
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     6.900
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
           0.0550   0.0300   0.0550       1.3000      0.5000

SECTION NO.     6.980
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
           0.0550   0.0300   0.0550       1.1000      0.7000

SECTION NO.     7.080
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     7.170
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
           0.0550   0.0300   0.0550       1.3000      0.5000

SECTION NO.     7.280
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
           0.0550   0.0300   0.0550       1.1000      0.7000

SECTION NO.     7.360
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     7.460
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     7.550
...DEPTH of the Bed Sediment Control Volume =    0.00 ft.

SECTION NO.     7.650
...DEPTH of the Bed Sediment Control Volume =    0.00 ft.

SECTION NO.     7.740
...DEPTH of the Bed Sediment Control Volume =    0.00 ft.

SECTION NO.     7.840
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     7.890
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     7.980
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     8.020
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

NO. OF CROSS SECTIONS IN STREAM SEGMENT=104
NO. OF INPUT DATA MESSAGES =   0

TOTAL NO. OF CROSS SECTIONS IN THE NETWORK = 104
TOTAL NO. OF STREAM SEGMENTS IN THE NETWORK=   1
END OF GEOMETRIC DATA

==========================================================================================

T4  Project: Upper Cave Creek Watercourse Master Plan Studies
T5  Client : Flood Control District of Maricopa County (FCDMC)
T6  Date:    August 3, 1999
T7  Firm:    Stantec Consulting, Inc.
T8  ******************************************************

        Cave Creek and Apache WMP
        by Stantec:  Proj. No. 82000077                    File: AW-F100C.DAT
        for Flood Control District of Maricopa County      Date: 07-28-99   srg

- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
SEDIMENT PROPERITES AND PARAMETERS

       SPI      IBG     MNQ      SPGF      ACGR      NFALL     IBSHER
I1     10.        0       1     1.000    32.174         2          1
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 SANDS - BOULDERS ARE PRESENT
```

	MTC	IASA	LASA	SPGS	GSF	BSAE	PSI	UWDLB
I4	10	1	14	2.650	0.667	0.500	30.000	93.000

USING TRANSPORT CAPACITY RELATIONSHIP # 10, MPM(1948)
GRAIN SIZES UTILIZED (mean diameter - mm)

VERY FINE SAND....	0.088	MEDIUM GRAVEL.....	11.314
FINE SAND.....	0.177	COARSE GRAVEL.....	22.627
MEDIUM SAND.....	0.354	VERY COARSE GRAVEL	45.255
COARSE SAND.....	0.707	SMALL COBBLES.....	90.510
VERY COARSE SAND..	1.414	LARGE COBBLES.....	181.019
VERY FINE GRAVEL..	2.828	SMALL BOULDERS....	362.039
FINE GRAVEL.....	5.657	MEDIUM BOULDERS...	724.077

COEFFICIENTS FOR COMPUTATION SCHEME WERE SPECIFIED

	DBI	DBN	XID	XIN	XIU	UBI	UBN	JSL
I5	0.500	0.500	0.250	0.500	0.250	0.000	1.000	1

SEDIMENT LOAD TABLE FOR STREAM SEGMENT # 1
LOAD BY GRAIN SIZE CLASS (tons/day)

LQ	Q	1.00000	2500.00	5000.00	7500.00
LF	VFS	0.151200E-02	134.810	219.719	311.647
LF	FS	0.311500E-02	277.733	374.054	516.714
LF	MS	0.624400E-02	556.715	757.927	1050.23
LF	CS	0.650900E-02	580.342	789.233	1089.29
LF	VCS	0.718700E-02	640.793	872.869	1203.64
LF	VFG	0.996500E-02	888.479	1207.65	1662.01
LF	FG	0.147040E-01	1311.01	1776.81	2431.56
LF	MG	0.214080E-01	1908.74	2582.91	3486.77
LF	CG	0.262980E-01	2344.73	2406.17	3122.85
LF	VCG	0.217500E-02	193.923	396.465	425.694
LF	SC	0.870000E-03	77.5692	149.945	246.143
LF	LC	0.140000E-04	1.24824	18.2522	12.2916
LF	SB	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19
LF	MB	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19
	TOTAL	0.100001	8916.09	11552.0	15558.8

REACH GEOMETRY FOR STREAM SEGMENT 1

CROSS SECTION NO.	REACH LENGTH (ft)	MOVABLE BED WIDTH	INITIAL BED-ELEVATIONS LEFT SIDE (ft)	THALWEG (ft)	RIGHT SIDE (ft)	ACCUMULATED CHANNEL DISTANCE FROM DOWNSTREAM (ft)	(miles)
	0.000						
0.200		903.650	1660.000	1646.000	1660.000	0.000	0.000
	650.000						
0.330		743.070	1663.000	1652.200	1664.000	650.000	0.123
	500.000						
0.430		890.000	1666.000	1655.000	1666.000	1150.000	0.218
	640.000						
0.540		1014.050	1670.000	1660.000	1670.000	1790.000	0.339
	500.000						
0.630		980.420	1673.000	1664.000	1673.040	2290.000	0.434
	400.000						
0.710		790.870	1676.000	1664.000	1676.000	2690.000	0.509
	200.000						
0.750		1059.940	1676.000	1666.000	1676.000	2890.000	0.547
	440.000						
0.840		735.180	1679.000	1670.000	1680.000	3330.000	0.631
	900.000						
0.990		1897.510	1686.000	1678.000	1685.990	4230.000	0.801
	500.000						
1.090		1732.000	1690.000	1680.000	1690.000	4730.000	0.896
	500.000						
1.180		1063.000	1694.000	1680.000	1693.500	5230.000	0.991
	460.000						
1.270		1127.000	1698.000	1684.000	1698.000	5690.000	1.078
	500.000						
1.370		560.560	1698.000	1688.000	1698.000	6190.000	1.172
	500.000						
1.470		641.430	1702.000	1690.000	1702.000	6690.000	1.267
	500.000						
1.560		664.340	1706.000	1692.000	1706.000	7190.000	1.362
	180.000						
1.600		646.210	1706.000	1692.000	1706.000	7370.000	1.396
	250.000						
1.660		561.750	1708.000	1696.000	1708.000	7620.000	1.443
	500.000						
1.750		552.560	1710.000	1698.000	1710.000	8120.000	1.538
	300.000						
1.810		541.980	1712.000	1700.000	1712.000	8420.000	1.595
	190.000						
1.850		632.870	1712.000	1700.000	1712.000	8610.000	1.631
	200.000						
1.880		712.350	1713.000	1702.100	1713.100	8810.000	1.669
	490.000						
2.000		865.540	1715.900	1708.500	1716.000	9300.000	1.761
	440.000						
2.080		777.980	1718.000	1710.000	1718.000	9740.000	1.845
	520.000						

2.170		658.780	1722.000	1714.000	1722.000	10260.000	1.943
	380.000						
2.240		433.760	1726.000	1714.000	1726.000	10640.000	2.015
	450.000						
2.330		267.000	1730.000	1717.000	1730.000	11090.000	2.100
	360.000						
2.400		253.340	1732.000	1718.000	1732.030	11450.000	2.169
	400.000						
2.470		439.460	1734.000	1720.000	1734.000	11850.000	2.244
	260.000						
2.520		654.550	1736.000	1721.000	1736.000	12110.000	2.294
	430.000						
2.600		712.650	1736.000	1724.000	1736.100	12540.000	2.375
	640.000						
2.730		370.960	1740.000	1728.000	1740.050	13180.000	2.496
	430.000						
2.820		733.000	1744.000	1730.000	1744.000	13610.000	2.578
	260.000						
2.870		1019.000	1746.000	1732.000	1744.000	13870.000	2.627
	200.000						
2.900		1350.000	1746.000	1734.000	1744.000	14070.000	2.665
	155.000						
2.920		1782.000	1748.000	1734.000	1746.000	14225.000	2.694
	270.000						
2.970		1668.000	1748.000	1736.000	1746.000	14495.000	2.745
	550.000						
3.070		555.420	1750.000	1741.000	1750.000	15045.000	2.849
	280.000						
3.130		657.460	1752.000	1742.000	1752.000	15325.000	2.902
	310.000						
3.210		795.100	1754.000	1746.000	1754.000	15635.000	2.961
	520.000						
3.320		1330.580	1758.000	1750.000	1758.000	16155.000	3.060
	470.000						
3.400		1347.000	1762.000	1752.000	1761.000	16625.000	3.149
	400.000						
3.480		994.710	1764.000	1755.000	1764.000	17025.000	3.224
	200.000						
3.520		977.370	1766.000	1756.000	1766.000	17225.000	3.262
	420.000						
3.600		967.500	1770.000	1760.000	1770.000	17645.000	3.342
	280.000						
3.650		1011.570	1771.600	1762.000	1770.000	17925.000	3.395
	500.000						
3.750		1295.000	1776.000	1764.000	1776.000	18425.000	3.490
	170.000						
3.780		990.710	1776.000	1766.000	1775.000	18595.000	3.522
	400.000						
3.860		768.650	1780.000	1770.000	1780.000	18995.000	3.598
	520.000						
3.960		948.840	1784.000	1774.000	1784.000	19515.000	3.696
	500.000						
4.050		360.000	1788.000	1779.000	1786.800	20015.000	3.791
	250.000						
4.110		534.800	1792.000	1782.000	1790.000	20265.000	3.838
	280.000						
4.220		700.000	1796.000	1785.500	1792.400	20545.000	3.891
	150.000						
4.230		611.750	1796.000	1786.000	1794.000	20695.000	3.920
	420.000						
4.310		444.060	1798.000	1788.000	1796.500	21115.000	3.999
	510.000						
4.400		345.000	1802.000	1792.300	1801.000	21625.000	4.096
	450.000						
4.490		518.010	1806.000	1796.000	1804.500	22075.000	4.181
	365.000						
4.560		510.000	1810.000	1799.000	1808.000	22440.000	4.250
	110.000						
4.570		960.000	1810.000	1800.000	1808.000	22550.000	4.271
	105.000						
4.580		815.000	1810.000	1801.300	1808.000	22655.000	4.291
	83.000						
4.600		825.190	1812.000	1802.000	1808.000	22738.000	4.306
	280.000						
4.650		960.000	1815.500	1806.000	1810.000	23018.000	4.359
	500.000						
4.740		1199.860	1818.000	1810.000	1815.000	23518.000	4.454
	200.000						
4.780		896.310	1820.000	1813.000	1818.000	23718.000	4.492
	480.000						
4.820		1085.000	1826.000	1817.100	1824.000	24198.000	4.583
	200.000						
4.900		1020.000	1826.000	1822.000	1828.000	24398.000	4.621
	320.000						
4.960		1073.820	1828.000	1822.000	1830.000	24718.000	4.681
	365.000						
5.030		1235.000	1833.000	1826.000	1832.500	25083.000	4.751
	300.000						
5.090		1300.000	1835.000	1830.000	1836.000	25383.000	4.807
	352.000						
5.150		910.000	1839.000	1830.000	1840.000	25735.000	4.874
	310.000						
5.210		840.000	1842.000	1834.000	1842.000	26045.000	4.933
	500.000						
5.310		1240.000	1847.000	1838.000	1846.000	26545.000	5.027

	375.000						
5.380		645.000	1850.000	1841.000	1850.000	26920.000	5.098
	500.000						
5.480		1326.530	1855.000	1846.000	1856.000	27420.000	5.193
	450.000						
5.570		899.000	1859.000	1850.000	1860.000	27870.000	5.278
	345.000						
5.640		925.000	1862.000	1855.000	1862.500	28215.000	5.344
	440.000						
5.660		1110.140	1864.000	1854.000	1863.000	28655.000	5.427
	540.000						
5.760		504.930	1870.000	1862.000	1870.000	29195.000	5.529
	380.000						
5.830		750.000	1874.000	1865.500	1875.000	29575.000	5.601
	400.000						
5.920		630.370	1877.000	1870.000	1878.000	29975.000	5.677
	490.000						
6.010		830.000	1883.000	1875.500	1886.000	30465.000	5.770
	445.000						
6.090		705.000	1886.000	1879.500	1888.000	30910.000	5.854
	360.000						
6.160		593.670	1892.500	1883.000	1893.080	31270.000	5.922
	460.000						
6.250		657.990	1898.000	1888.000	1898.000	31730.000	6.009
	390.000						
6.320		460.860	1900.000	1890.000	1900.000	32120.000	6.083
	450.000						
6.430		630.000	1906.000	1896.500	1906.000	32570.000	6.169
	345.000						
6.500		550.610	1910.000	1899.000	1910.000	32915.000	6.234
	430.000						
6.580		385.280	1912.000	1902.000	1912.000	33345.000	6.315
	290.000						
6.630		341.580	1916.000	1905.000	1916.000	33635.000	6.370
	390.000						
6.710		255.000	1918.000	1907.500	1918.000	34025.000	6.444
	495.000						
6.800		380.000	1924.000	1914.000	1923.700	34520.000	6.538
	529.000						
6.900		428.100	1930.000	1920.000	1930.000	35049.000	6.638
	437.000						
6.980		377.630	1934.000	1924.000	1934.000	35486.000	6.721
	500.000						
7.080		164.890	1940.000	1929.000	1940.000	35986.000	6.816
	500.000						
7.170		147.990	1944.000	1934.000	1944.000	36486.000	6.910
	554.000						
7.280		337.200	1950.000	1940.800	1950.000	37040.000	7.015
	446.000						
7.360		321.860	1954.000	1944.500	1954.000	37486.000	7.100
	500.000						
7.460		312.350	1960.000	1951.500	1960.000	37986.000	7.194
	500.000						
7.550		415.720	1968.000	1956.700	1968.000	38486.000	7.289
	500.000						
7.650		378.000	1970.000	1961.800	1971.000	38986.000	7.384
	500.000						
7.740		405.000	1978.000	1969.100	1978.000	39486.000	7.478
	500.000						
7.840		474.000	1984.000	1974.400	1983.000	39986.000	7.573
	300.000						
7.890		500.000	1986.000	1977.000	1985.500	40286.000	7.630
	465.000						
7.980		627.000	1992.000	1981.800	1992.000	40751.000	7.718
	235.000						
8.020		515.000	1996.000	1985.100	1996.000	40986.000	7.763

BED MATERIAL GRADATION

SECNO	SAE	DMAX (ft)	DXPI (ft)	XPI	TOTAL BED	BED MATERIAL FRACTIONS per grain size								
0.200	1.000	1.220	1.220	1.000	1.000	VF SAND	0.003	VF GRVL	0.093	S	COBL	0.080
						F SAND	0.008	F GRVL	0.101	L	COBL	0.055
						M SAND	0.038	M GRVL	0.118	S	BLDR	0.025
						C SAND	0.113	C GRVL	0.144	M	BLDR	0.000
						VC SAND	0.094	VC GRVL	0.117			
0.330	1.000	1.220	1.220	1.000	1.000	VF SAND	0.003	VF GRVL	0.093	S	COBL	0.080
						F SAND	0.008	F GRVL	0.101	L	COBL	0.055
						M SAND	0.038	M GRVL	0.118	S	BLDR	0.025
						C SAND	0.113	C GRVL	0.144	M	BLDR	0.000
						VC SAND	0.094	VC GRVL	0.117			
0.430	1.000	1.220	1.220	1.000	1.000	VF SAND	0.003	VF GRVL	0.093	S	COBL	0.080
						F SAND	0.008	F GRVL	0.101	L	COBL	0.055
						M SAND	0.038	M GRVL	0.118	S	BLDR	0.025
						C SAND	0.113	C GRVL	0.144	M	BLDR	0.000
						VC SAND	0.094	VC GRVL	0.117			
0.540	1.000	1.220	1.220	1.000	1.000	VF SAND	0.003	VF GRVL	0.093	S	COBL	0.080
						F SAND	0.008	F GRVL	0.101	L	COBL	0.055
						M SAND	0.038	M GRVL	0.118	S	BLDR	0.025
						C SAND	0.113	C GRVL	0.144	M	BLDR	0.000
						VC SAND	0.094	VC GRVL	0.117			

0.630	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
0.710	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
0.750	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
0.840	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
0.990	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
1.090	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
1.180	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
1.270	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
1.370	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
1.470	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
1.560	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
1.600	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
1.660	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
1.750	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
1.810	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
1.850	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000

						VC	SAND	0.094	VC	GRVL	0.117					
1.880	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
2.000	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
2.080	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
2.170	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
2.240	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
2.330	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
2.400	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
2.470	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
2.520	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
2.600	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
2.730	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
2.820	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
2.870	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
2.900	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
2.920	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
2.970	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025

							C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
							VC	SAND	0.094	VC	GRVL	0.117			
3.070	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
3.130	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
3.210	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
3.320	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
3.400	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
3.480	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
3.520	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
3.600	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
3.650	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
3.750	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
3.780	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
3.860	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
3.960	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
4.050	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
4.110	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
4.220	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055

						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
4.230	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
4.310	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
4.400	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
4.490	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
4.560	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
4.570	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
4.580	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
4.600	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
4.650	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
4.740	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
4.780	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
4.820	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
4.900	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
4.960	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
5.030	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
5.090	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080

						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
5.150	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
5.210	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
5.310	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
5.380	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
5.480	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
5.570	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
5.640	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
5.660	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
5.760	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
5.830	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
5.920	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
6.010	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
6.090	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
6.160	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
6.250	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			

6.320	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
6.430	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
6.500	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
6.580	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
6.630	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
6.710	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
6.800	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
6.900	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
6.980	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
7.080	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
7.170	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
7.280	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
7.360	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
7.460	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
7.550	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			
7.650	1.000	1.220	1.220	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.093	S	COBL	0.080
						F	SAND	0.008	F	GRVL	0.101	L	COBL	0.055
						M	SAND	0.038	M	GRVL	0.118	S	BLDR	0.025
						C	SAND	0.113	C	GRVL	0.144	M	BLDR	0.000
						VC	SAND	0.094	VC	GRVL	0.117			

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     7.740  1.000  1.220  1.220  1.000  1.000 | VF SAND  0.003 | VF GRVL  0.093 | S  COBL  0.080 |
                                               | F  SAND  0.008 | F  GRVL  0.101 | L  COBL  0.055 |
                                               | M  SAND  0.038 | M  GRVL  0.118 | S  BLDR  0.025 |
                                               | C  SAND  0.113 | C  GRVL  0.144 | M  BLDR  0.000 |
                                               | VC SAND  0.094 | VC GRVL  0.117 |

     7.840  1.000  1.220  1.220  1.000  1.000 | VF SAND  0.003 | VF GRVL  0.093 | S  COBL  0.080 |
                                               | F  SAND  0.008 | F  GRVL  0.101 | L  COBL  0.055 |
                                               | M  SAND  0.038 | M  GRVL  0.118 | S  BLDR  0.025 |
                                               | C  SAND  0.113 | C  GRVL  0.144 | M  BLDR  0.000 |
                                               | VC SAND  0.094 | VC GRVL  0.117 |

     7.890  1.000  1.220  1.220  1.000  1.000 | VF SAND  0.003 | VF GRVL  0.093 | S  COBL  0.080 |
                                               | F  SAND  0.008 | F  GRVL  0.101 | L  COBL  0.055 |
                                               | M  SAND  0.038 | M  GRVL  0.118 | S  BLDR  0.025 |
                                               | C  SAND  0.113 | C  GRVL  0.144 | M  BLDR  0.000 |
                                               | VC SAND  0.094 | VC GRVL  0.117 |

     7.980  1.000  1.220  1.220  1.000  1.000 | VF SAND  0.003 | VF GRVL  0.093 | S  COBL  0.080 |
                                               | F  SAND  0.008 | F  GRVL  0.101 | L  COBL  0.055 |
                                               | M  SAND  0.038 | M  GRVL  0.118 | S  BLDR  0.025 |
                                               | C  SAND  0.113 | C  GRVL  0.144 | M  BLDR  0.000 |
                                               | VC SAND  0.094 | VC GRVL  0.117 |

     8.020  1.000  1.220  1.220  1.000  1.000 | VF SAND  0.003 | VF GRVL  0.093 | S  COBL  0.080 |
                                               | F  SAND  0.008 | F  GRVL  0.101 | L  COBL  0.055 |
                                               | M  SAND  0.038 | M  GRVL  0.118 | S  BLDR  0.025 |
                                               | C  SAND  0.113 | C  GRVL  0.144 | M  BLDR  0.000 |
                                               | VC SAND  0.094 | VC GRVL  0.117 |


..LOCAL INFLOW DATA...
SEDIMENT LOAD TABLE FOR STREAM SEGMENT #   1
                 AT LOCAL INFLOW POINT #   1
          LOAD BY GRAIN SIZE CLASS (tons/day)
-----------------------------------
LQL     Q |0.100000     | 1000.00     |
          ------------ ------------
LFL   VFS |0.100000E-01|0.100000E-01|
LFL    FS |0.100000E-01|0.100000E-01|
LFL    MS |0.100000E-01|0.100000E-01|
LFL    CS |0.100000E-01|0.100000E-01|
LFL   VCS |0.100000E-01|0.100000E-01|
LFL   VFG |0.100000E-01|0.100000E-01|
LFL    FG |0.100000E-01|0.100000E-01|
LFL    MG |0.100000E-01|0.100000E-01|
LFL    CG |0.500000E-02|0.500000E-02|
LFL   VCG |0.500000E-02|0.500000E-02|
LFL    SC |0.500000E-02|0.500000E-02|
LFL    LC |0.500000E-02|0.500000E-02|
LFL    SB |0.100000E-19|0.100000E-19|
LFL    MB |0.100000E-19|0.100000E-19|
          ------------ ------------
   TOTAL |0.100000     |0.100000     |
-----------------------------------

..LOCAL INFLOW DATA...
SEDIMENT LOAD TABLE FOR STREAM SEGMENT #   1
                 AT LOCAL INFLOW POINT #   2
          LOAD BY GRAIN SIZE CLASS (tons/day)
-------------------------------------------------------------
LQL     Q |0.100000     | 1000.00     | 3000.00     | 5000.00     |
          ------------ ------------ ------------ ------------
LFL   VFS |0.105800E-02| 87.2274     | 205.530     | 262.894     |
LFL    FS |0.443600E-02| 348.910     | 756.503     | 1052.41     |
LFL    MS |0.262670E-01| 2036.95     | 4861.83     | 5471.19     |
LFL    CS |0.147970E-01| 1174.55     | 2852.91     | 3147.22     |
LFL   VCS |0.659800E-02| 546.680     | 1354.24     | 1491.95     |
LFL   VFG |0.778100E-02| 687.121     | 1783.40     | 1956.49     |
LFL    FG |0.149000E-01| 1379.73     | 3940.53     | 4254.21     |
LFL    MG |0.224440E-01| 2291.78     | 7781.87     | 8037.63     |
LFL    CG |0.171800E-02| 2995.22     | 7836.55     | 7998.88     |
LFL   VCG |0.100000E-19| 2166.70     | 4885.21     | 5824.49     |
LFL    SB |0.100000E-19|0.100000E-19| 1453.04     | 2164.81     |
LFL    LC |0.100000E-19|0.100000E-19|0.100000E-19|0.100000E-19|
LFL    SB |0.100000E-19|0.100000E-19|0.100000E-19|0.100000E-19|
LFL    MB |0.100000E-19|0.100000E-19|0.100000E-19|0.100000E-19|
          ------------ ------------ ------------ ------------
   TOTAL |0.999990E-01| 13714.9     | 37711.6     | 41662.2     |
-------------------------------------------------------------

..LOCAL INFLOW DATA...
SEDIMENT LOAD TABLE FOR STREAM SEGMENT #   1
                 AT LOCAL INFLOW POINT #   3
          LOAD BY GRAIN SIZE CLASS (tons/day)
-----------------------------------------------------------------------
LQL     Q |0.100000     | 11.0000     | 3300.00     | 6600.00     | 9900.00     |
          ------------ ------------ ------------ ------------ ------------
LFL   VFS |0.125400E-02|0.326040     | 24.4173     | 33.9698     | 42.6855     |
LFL    FS |0.737200E-02| 1.91672     | 136.832     | 193.647     | 243.825     |
LFL    MS |0.302410E-01| 7.86266     | 566.016     | 691.392     | 942.056     |
LFL    CS |0.260280E-01| 6.76728     | 525.659     | 617.407     | 824.994     |
LFL   VCS |0.152710E-01| 3.97046     | 351.096     | 413.780     | 553.618     |
LFL   VFG |0.902700E-02| 2.34702     | 282.023     | 334.421     | 449.491     |
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LFL	FG	0.942800E-02	2.45128	716.816	833.605	1159.23
LFL	MG	0.137900E-02	0.358540	1213.82	1346.89	1980.48
LFL	CG	0.100000E-19	0.100000E-19	1431.67	3319.93	3906.89
LFL	VCG	0.100000E-19	0.100000E-19	721.654	1810.86	2794.61
LFL	SB	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	36.9941
LFL	LC	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19
LFL	SB	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19
LFL	MB	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19
TOTAL		0.100000	26.0000	5970.00	9595.90	12934.9

..LOCAL INFLOW DATA...
SEDIMENT LOAD TABLE FOR STREAM SEGMENT # 1
AT LOCAL INFLOW POINT # 4
LOAD BY GRAIN SIZE CLASS (tons/day)

LQL	Q	0.100000	1000.00
LFL	VFS	0.100000E-01	0.100000E-01
LFL	FS	0.100000E-01	0.100000E-01
LFL	MS	0.100000E-01	0.100000E-01
LFL	CS	0.100000E-01	0.100000E-01
LFL	VCS	0.100000E-01	0.100000E-01
LFL	VFG	0.100000E-01	0.100000E-01
LFL	FG	0.100000E-01	0.100000E-01
LFL	MG	0.100000E-01	0.100000E-01
LFL	CG	0.500000E-02	0.500000E-02
LFL	VCG	0.500000E-02	0.500000E-02
LFL	SC	0.500000E-02	0.500000E-02
LFL	LC	0.500000E-02	0.500000E-02
LFL	SB	0.100000E-19	0.100000E-19
LFL	MB	0.100000E-19	0.100000E-19
TOTAL		0.100000	0.100000

..LOCAL INFLOW DATA...
SEDIMENT LOAD TABLE FOR STREAM SEGMENT # 1
AT LOCAL INFLOW POINT # 5
LOAD BY GRAIN SIZE CLASS (tons/day)

LQL	Q	0.100000	1000.00
LFL	VFS	0.100000E-01	0.100000E-01
LFL	FS	0.100000E-01	0.100000E-01
LFL	MS	0.100000E-01	0.100000E-01
LFL	CS	0.100000E-01	0.100000E-01
LFL	VCS	0.100000E-01	0.100000E-01
LFL	VFG	0.100000E-01	0.100000E-01
LFL	FG	0.100000E-01	0.100000E-01
LFL	MG	0.100000E-01	0.100000E-01
LFL	CG	0.500000E-02	0.500000E-02
LFL	VCG	0.500000E-02	0.500000E-02
LFL	SC	0.500000E-02	0.500000E-02
LFL	LC	0.500000E-02	0.500000E-02
LFL	SB	0.100000E-19	0.100000E-19
LFL	MB	0.100000E-19	0.100000E-19
TOTAL		0.100000	0.100000

BED SEDIMENT CONTROL VOLUMES

STREAM SEGMENT # 1: Cave Creek and Apache WMP

SECTION NUMBER	LENGTH (ft)	WIDTH (ft)	DEPTH (ft)	VOLUME (cu.ft)	VOLUME (cu.yd)
0.200	325.000	850.123	10.000	0.276290E+07	102330.
0.330	575.000	794.618	10.000	0.456906E+07	169224.
0.430	570.000	891.733	10.000	0.508288E+07	188255.
0.540	570.000	985.919	10.000	0.561974E+07	208139.
0.630	450.000	958.566	10.000	0.431355E+07	159761.
0.710	300.000	862.889	10.000	0.258867E+07	95876.5
0.750	320.000	957.488	10.000	0.306396E+07	113480.
0.840	670.000	1030.949	10.000	0.690736E+07	255828.
0.990	700.000	1628.736	10.000	0.114012E+08	422265.
1.090	500.000	1648.085	10.000	0.824043E+07	305201.
1.180	480.000	1189.368	10.000	0.570897E+07	211443.
1.270	480.000	1018.438	10.000	0.488850E+07	181056.
1.370	500.000	668.445	10.000	0.334223E+07	123786.
1.470	500.000	631.770	10.000	0.315885E+07	116994.
1.560	340.000	657.125	10.000	0.223423E+07	82749.1
1.600	215.000	632.372	10.000	0.135960E+07	50355.5
1.660	375.000	569.092	10.000	0.213410E+07	79040.6
1.750	400.000	553.152	10.000	0.221261E+07	81948.5
1.810	245.000	555.887	10.000	0.136192E+07	50441.6
1.850	195.000	631.696	10.000	0.123181E+07	45622.5
1.880	345.000	740.933	10.000	0.255622E+07	94674.8
2.000	465.000	824.827	10.000	0.383545E+07	142054.
2.080	480.000	769.835	10.000	0.369521E+07	136860.
2.170	450.000	650.068	10.000	0.292530E+07	108345.
2.240	415.000	437.963	10.000	0.181755E+07	67316.5
2.330	405.000	295.858	10.000	0.119822E+07	44378.7
2.400	380.000	288.149	10.000	0.109497E+07	40554.4

2.470	330.000	430.104	10.000	0.141934E+07	52568.3
2.520	345.000	639.603	10.000	0.220663E+07	81727.0
2.600	535.000	636.742	10.000	0.340657E+07	126169.
2.730	535.000	487.583	10.000	0.260857E+07	96613.6
2.820	345.000	693.716	10.000	0.239332E+07	88641.5
2.870	230.000	1013.087	10.000	0.233010E+07	86300.0
2.900	177.500	1350.714	10.000	0.239752E+07	88796.9
2.920	212.500	1705.341	10.000	0.362385E+07	134217.
2.970	410.000	1431.765	10.000	0.587024E+07	217416.
3.070	415.000	812.645	10.000	0.337248E+07	124907.
3.130	295.000	665.425	10.000	0.196300E+07	72703.8
3.210	415.000	889.791	10.000	0.369263E+07	136764.
3.320	495.000	1239.424	10.000	0.613515E+07	227228.
3.400	435.000	1290.052	10.000	0.561173E+07	207842.
3.480	300.000	1071.070	10.000	0.321321E+07	119008.
3.520	310.000	981.522	10.000	0.304272E+07	112693.
3.600	350.000	988.683	10.000	0.346039E+07	128163.
3.650	390.000	1069.252	10.000	0.417008E+07	154447.
3.750	335.000	1198.759	10.000	0.401584E+07	148735.
3.780	285.000	969.017	10.000	0.276170E+07	102285.
3.860	460.000	834.781	10.000	0.383999E+07	142222.
3.960	510.000	822.004	10.000	0.419222E+07	155267.
4.050	375.000	510.276	10.000	0.191353E+07	70871.6
4.110	265.000	536.408	10.000	0.142148E+07	52647.4
4.220	215.000	653.881	10.000	0.140584E+07	52068.3
4.230	285.000	578.304	10.000	0.164817E+07	61043.2
4.310	465.000	451.196	10.000	0.209806E+07	77706.0
4.400	480.000	389.575	10.000	0.186996E+07	69257.7
4.490	407.500	484.972	10.000	0.197626E+07	73194.8
4.560	237.500	546.789	10.000	0.129862E+07	48097.1
4.570	107.500	859.651	10.000	924125.	34226.9
4.580	94.000	843.494	10.000	792885.	29366.1
4.600	181.500	859.075	10.000	0.155922E+07	57748.9
4.650	390.000	995.121	10.000	0.388097E+07	143740.
4.740	350.000	1113.841	10.000	0.389844E+07	144387.
4.780	340.000	970.467	10.000	0.329959E+07	122207.
4.820	340.000	1034.230	10.000	0.351638E+07	130236.
4.900	260.000	1039.373	10.000	0.270237E+07	100088.
4.960	342.500	1094.067	10.000	0.374718E+07	138784.
5.030	332.500	1215.285	10.000	0.404082E+07	149660.
5.090	326.000	1219.847	10.000	0.397670E+07	147285.
5.150	331.000	968.197	10.000	0.320473E+07	118694.
5.210	405.000	931.235	10.000	0.377150E+07	139685.
5.310	437.500	1078.810	10.000	0.471979E+07	174807.
5.380	437.500	859.815	10.000	0.376169E+07	139322.
5.480	475.000	1139.459	10.000	0.541243E+07	200460.
5.570	397.500	983.427	10.000	0.390912E+07	144782.
5.640	392.500	955.782	10.000	0.375144E+07	138942.
5.660	490.000	971.271	10.000	0.475923E+07	176268.
5.760	460.000	657.082	10.000	0.302258E+07	111947.
5.830	390.000	689.753	10.000	0.269004E+07	99631.0
5.920	445.000	684.928	10.000	0.304793E+07	112886.
6.010	467.500	775.296	10.000	0.362451E+07	134241.
6.090	402.500	711.437	10.000	0.286354E+07	106057.
6.160	410.000	621.990	10.000	0.255016E+07	94450.3
6.250	425.000	616.238	10.000	0.261901E+07	97000.4
6.320	420.000	521.572	10.000	0.219060E+07	81133.4
6.430	397.500	586.603	10.000	0.233175E+07	86361.0
6.500	387.500	531.813	10.000	0.206078E+07	76325.1
6.580	360.000	412.326	10.000	0.148437E+07	54976.8
6.630	340.000	331.240	10.000	0.112622E+07	41711.7
6.710	442.500	291.023	10.000	0.128778E+07	47695.4
6.800	512.000	368.141	10.000	0.188488E+07	69810.5
6.900	483.000	411.709	10.000	0.198856E+07	73650.2
6.980	468.500	347.635	10.000	0.162867E+07	60321.2
7.080	500.000	197.530	10.000	987650.	36579.6
7.170	527.000	183.813	10.000	968695.	35877.6
7.280	500.000	299.979	10.000	0.149989E+07	55551.6
7.360	473.000	322.595	10.000	0.152588E+07	56513.9
7.460	500.000	331.163	10.000	0.165582E+07	61326.5
7.550	500.000	392.205	0.000	0.000000	0.000000
7.650	500.000	388.787	0.000	0.000000	0.000000
7.740	500.000	412.000	0.000	0.000000	0.000000
7.840	400.000	462.875	10.000	0.185150E+07	68574.1
7.890	382.500	522.333	10.000	0.199793E+07	73997.2
7.980	350.000	586.345	10.000	0.205221E+07	76007.7
8.020	117.500	552.333	10.000	648992.	24036.7

NO. OF INPUT DATA MESSAGES= 0
END OF SEDIMENT DATA

$HYD
BEGIN COMPUTATIONS.

$RATING

Downstream Boundary Condition - Rating Curve

Elevation	Stage	Discharge	Elevation	Stage	Discharge
1646.000	1646.000	0.000	1657.730	1657.730	12000.000
1650.850	1650.850	2000.000	1658.430	1658.430	14000.000
1652.850	1652.850	4000.000	1658.930	1658.930	16000.000

```
   1654.340    1654.340     6000.000 |   1659.310    1659.310    18000.000
   1655.540    1655.540     8000.000 |   1659.780    1659.780    20000.000
   1657.390    1657.390    10000.000 |
==================================================================================
TIME STEP #        1
*    A  Level output at time step 1 (0.25 days)
COMPUTING FROM TIME=      0.0000 DAYS TO TIME=      0.2500 DAYS IN     5 COMPUTATION STEPS

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15             9717.0    9716.2

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0
```

```
*ERROR 15               10013.0   10013.0

*ERROR 15               10013.0   10013.0

*ERROR 15               10013.0   10013.0

*ERROR 15               10013.0   10013.0

*ERROR 15               10013.0   10013.0

*ERROR 15               10013.0   10013.0

*ERROR 15               10013.0   10013.0

*ERROR 15               10013.0   10013.0

*ERROR 15               10013.0   10013.0

*ERROR 15               10013.0   10013.0

*ERROR 15               10013.0   10013.0

*ERROR 15               10013.0   10013.0

*ERROR 15               10013.0   10013.0

*ERROR 15               10013.0   10013.0

*ERROR 15               10013.0   10013.0

*ERROR 15               10013.0   10013.0

*ERROR 15               10013.0   10013.0

*ERROR 15               10013.0   10013.0

*ERROR 15               10013.0   10013.0

*ERROR 15               10013.0   10013.0

*ERROR 15               10013.0   10013.0

*ERROR 15               10013.0   10013.0

*ERROR 15               10013.0   10013.0

*ERROR 15               10013.0   10013.0

*ERROR 15               10013.0   10013.0

*ERROR 15               10013.0   10013.0

*ERROR 15               10013.0   10013.0

*ERROR 15               10013.0   10013.0
TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME       ENTRY *            SAND              *
    DAYS       POINT *   INFLOW   OUTFLOW  TRAP EFF *
    0.25       8.020 *    0.00                      *
               6.090 *    0.00                      *
               3.780 *    0.00                      *
               2;920 *    0.00                      *
               2.600 *    0.00                      *
               0.200 *    0.00                      *
   TOTAL=      0.200 *    0.00       0.50   -108.77 *
*****************************************************

==========================================================================================
TIME STEP #        2
*    A  Level output at time step 2 (0.0139 day)

*ERROR 15               10013.0   10013.0

*ERROR 15               10013.0   10013.0

*ERROR 15               10013.0   10013.0

*ERROR 15               10013.0   10013.0

*ERROR 15               10013.0   10013.0

*ERROR 15               10013.0   10013.0

*ERROR 15               10013.0   10013.0

*ERROR 15               10013.0   10013.0

*ERROR 15               10013.0   10013.0

*ERROR 15               10013.0   10013.0
```

*ERROR 15	10013.0	10013.0
*ERROR 15	10013.0	10013.0
*ERROR 15	10013.0	10013.0
*ERROR 15	10013.0	10013.0
*ERROR 15	10013.0	10013.0
*ERROR 15	10013.0	10013.0
*ERROR 15	10013.0	10013.0
*ERROR 15	10013.0	10013.0
*ERROR 15	10013.0	10013.0
*ERROR 15	10013.0	10013.0
*ERROR 15	10013.0	10013.0
*ERROR 15	10013.0	10013.0
*ERROR 15	10013.0	10013.0
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10133.3	10133.3
*ERROR 15	10133.3	10133.3
*ERROR 15	10133.3	10133.3
*ERROR 15	10133.3	10133.3
*ERROR 15	10133.3	10133.3
*ERROR 15	10133.3	10133.3

```
        *ERROR 15            10133.3   10133.3

        *ERROR 15            10133.3   10133.3

        *ERROR 15            10133.3   10133.3

        *ERROR 15            10133.3   10133.3

        *ERROR 15            10133.3   10133.3

        *ERROR 15            10133.3   10133.3

        *ERROR 15            10133.3   10133.3

        *ERROR 15            10133.3   10133.3

        *ERROR 15            10133.3   10133.3

        *ERROR 15            10133.3   10133.3

        *ERROR 15            10133.3   10133.3
** Q ABOVE TABLE **                                                                                    **INLOAD**
**WATER DISCHARGE, WATER-SEDIMENT LOAD TABLE ENDPOINT**        3731.00        1000.00        0.010000

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME       ENTRY *             SAND              *
    DAYS       POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.26       8.020 *      0.02                    *
               6.090 *      0.00                    *
               3.780 *      0.00                    *
               2.920 *      0.00                    *
               2.600 *      0.00                    *
               0.200 *      0.00                    *
   TOTAL=      0.200 *      0.02      0.55    -22.16 *
*****************************************************

==========================================================================================
TIME STEP #       3
*    A  Level output at time step 3 (0.0208 day)

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7
```

```
        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10018.0   10018.0

        *ERROR 15            10018.0   10018.0

        *ERROR 15            10018.0   10018.0

        *ERROR 15            10133.3   10133.3

        *ERROR 15            10133.3   10133.3

        *ERROR 15            10133.3   10133.3

        *ERROR 15            10133.3   10133.3

        *ERROR 15            10133.3   10133.3

        *ERROR 15            10133.3   10133.3

        *ERROR 15            10133.3   10133.3

        *ERROR 15            10133.3   10133.3

        *ERROR 15            10133.3   10133.3

        *ERROR 15            10133.3   10133.3

        *ERROR 15            10133.3   10133.3

        *ERROR 15            10133.3   10133.3

        *ERROR 15            10133.3   10133.3

        *ERROR 15            10133.3   10133.3

        *ERROR 15            10133.3   10133.3

** Q ABOVE TABLE **                                                                                    **INLOAD**
**WATER DISCHARGE, WATER-SEDIMENT LOAD TABLE ENDPOINT**        2064.00        1000.00        0.010000

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME        ENTRY *             SAND              *
    DAYS        POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.28        8.020 *      0.03                    *
                6.090 *      0.00                    *
                3.780 *      0.00                    *
                2.920 *      0.00                    *
                2.600 *      0.00                    *
                0.200 *      0.00                    *
   TOTAL=       0.200 *      0.04      0.69    -16.11 *
*****************************************************

==========================================================================================
TIME STEP #        4
*    A  Level output at time step 4 (0.0208 day)

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0
```

*ERROR 15	10013.0	10013.0
*ERROR 15	10013.0	10013.0
*ERROR 15	10013.0	10013.0
*ERROR 15	10013.0	10013.0
*ERROR 15	10013.0	10013.0
*ERROR 15	10013.0	10013.0
*ERROR 15	10013.0	10013.0
*ERROR 15	10013.0	10013.0
*ERROR 15	10013.0	10013.0
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	9717.0	9716.2
*ERROR 15	9717.0	9716.2
*ERROR 15	9717.0	9716.2
*ERROR 15	9717.0	9716.2
*ERROR 15	9717.0	9716.2
*ERROR 15	10133.3	10133.3
*ERROR 15	10133.3	10133.3
*ERROR 15	10133.3	10133.3
*ERROR 15	10133.3	10133.3

*ERROR 15	9590.6	9515.0
*ERROR 15	10133.3	10133.3
*ERROR 15	9590.6	9515.0
*ERROR 15	10133.3	10133.3
*ERROR 15	9590.6	9515.0
*ERROR 15	10133.3	10133.3
*ERROR 15	10133.3	10133.3
*ERROR 15	10133.3	10133.3
*ERROR 15	10133.3	10133.3
*ERROR 15	9590.6	9515.0
*ERROR 15	10133.3	10133.3
*ERROR 15	9590.6	9515.0
*ERROR 15	10133.3	10133.3
*ERROR 15	10133.3	10133.3
*ERROR 15	10133.3	10133.3
*ERROR 15	10133.3	10133.3
*ERROR 15	9590.6	9515.0
*ERROR 15	10133.3	10133.3
*ERROR 15	9515.0	9480.0
*ERROR 15	10075.0	10075.0
*ERROR 15	9515.0	9480.0
*ERROR 15	10075.0	10075.0
*ERROR 15	9515.0	9480.0
*ERROR 15	10075.0	10075.0
*ERROR 15	9515.0	9480.0
*ERROR 15	10075.0	10075.0
*ERROR 15	9515.0	9480.0
*ERROR 15	10075.0	10075.0
*ERROR 15	9515.0	9480.0
*ERROR 15	10075.0	10075.0
*ERROR 15	9515.0	9480.0
*ERROR 15	10075.0	10075.0
*ERROR 15	9515.0	9480.0
*ERROR 15	10075.0	10075.0
*ERROR 15	9515.0	9480.0
*ERROR 15	10075.0	10075.0
*ERROR 15	9515.0	9480.0
*ERROR 15	10075.0	10075.0
*ERROR 15	10170.0	10170.0
*ERROR 15	10170.0	10170.0
*ERROR 15	10170.0	10170.0
*ERROR 15	10170.0	10170.0
*ERROR 15	9945.0	9870.0
*ERROR 15	10170.0	10170.0
*ERROR 15	9945.0	9870.0
*ERROR 15	10170.0	10170.0

*ERROR 15	10170.0	10170.0
*ERROR 15	10170.0	10170.0
*ERROR 15	10170.0	10170.0
*ERROR 15	10170.0	10170.0
*ERROR 15	10170.0	10170.0
*ERROR 15	10170.0	10170.0
*ERROR 15	10170.0	10170.0
*ERROR 15	10170.0	10170.0
*ERROR 15	10170.0	10170.0
*ERROR 15	10170.0	10170.0
*ERROR 15	10170.0	10170.0
*ERROR 15	10170.0	10170.0
*ERROR 15	10170.0	10170.0
*ERROR 15	9780.0	9685.0
*ERROR 15	10135.0	10135.0
*ERROR 15	9780.0	9685.0
*ERROR 15	10135.0	10135.0
*ERROR 15	9780.0	9685.0
*ERROR 15	10135.0	10135.0
*ERROR 15	9780.0	9685.0
*ERROR 15	10135.0	10135.0
*ERROR 15	9780.0	9685.0
*ERROR 15	10135.0	10135.0
*ERROR 15	9780.0	9685.0
*ERROR 15	10135.0	10135.0
*ERROR 15	9780.0	9685.0
*ERROR 15	10135.0	10135.0
*ERROR 15	9780.0	9685.0
*ERROR 15	10135.0	10135.0
*ERROR 15	9780.0	9685.0
*ERROR 15	10135.0	10135.0
*ERROR 15	9780.0	9685.0
*ERROR 15	10135.0	10135.0
*ERROR 15	9780.0	9685.0
*ERROR 15	10135.0	10135.0
*ERROR 15	9780.0	9685.0
*ERROR 15	10135.0	10135.0
*ERROR 15	9780.0	9685.0
*ERROR 15	10135.0	10135.0
*ERROR 15	9780.0	9685.0
*ERROR 15	10135.0	10135.0
*ERROR 15	9780.0	9685.0
*ERROR 15	10135.0	10135.0
*ERROR 15	9780.0	9685.0
*ERROR 15	10135.0	10135.0

** Q ABOVE TABLE ** **INLOAD**

WATER DISCHARGE, WATER-SEDIMENT LOAD TABLE ENDPOINT 1732.00 1000.00 0.010000

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT # 1
Cave Creek and Apache WMP

ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT

TIME DAYS	ENTRY POINT	INFLOW	SAND OUTFLOW	TRAP EFF
0.31	8.020	0.18		
	6.090	0.00		
	3.780	0.00		
	2.920	0.01		
	2.600	0.01		
	0.200	0.00		
TOTAL=	0.200	0.19	0.96	-4.02

TIME STEP # 5

* A Level output at time step 5 (0.0139 day)

*ERROR 15	10013.0	10013.0
*ERROR 15	10013.0	10013.0
*ERROR 15	10013.0	10013.0
*ERROR 15	10013.0	10013.0
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	9717.0	9716.2
*ERROR 15	9717.0	9716.2
*ERROR 15	9717.0	9716.2

*ERROR 15	9717.0	9716.2
*ERROR 15	9717.0	9716.2
*ERROR 15	9717.0	9716.2
*ERROR 15	9717.0	9716.2
*ERROR 15	9717.0	9716.2
*ERROR 15	9717.0	9716.2
*ERROR 15	9717.0	9716.2
*ERROR 15	9717.0	9716.2
*ERROR 15	9717.0	9716.2
*ERROR 15	9717.0	9716.2
*ERROR 15	9717.0	9716.2
*ERROR 15	9590.6	9515.0
*ERROR 15	10133.3	10133.3
*ERROR 15	9590.6	9515.0
*ERROR 15	10133.3	10133.3
*ERROR 15	9590.6	9515.0
*ERROR 15	10133.3	10133.3
*ERROR 15	9590.6	9515.0
*ERROR 15	10133.3	10133.3
*ERROR 15	9590.6	9515.0
*ERROR 15	10133.3	10133.3
*ERROR 15	9590.6	9515.0
*ERROR 15	10133.3	10133.3
*ERROR 15	9590.6	9515.0
*ERROR 15	10133.3	10133.3
*ERROR 15	9590.6	9515.0
*ERROR 15	10133.3	10133.3
*ERROR 15	9590.6	9515.0
*ERROR 15	10133.3	10133.3
*ERROR 15	9590.6	9515.0
*ERROR 15	10133.3	10133.3
*ERROR 15	9590.6	9515.0
*ERROR 15	10133.3	10133.3
*ERROR 15	9590.6	9515.0
*ERROR 15	10133.3	10133.3
*ERROR 15	9590.6	9515.0
*ERROR 15	10133.3	10133.3
*ERROR 15	9515.0	9480.0
*ERROR 15	10075.0	10075.0
*ERROR 15	9515.0	9480.0
*ERROR 15	10075.0	10075.0
*ERROR 15	9515.0	9480.0
*ERROR 15	10075.0	10075.0
*ERROR 15	9515.0	9480.0
*ERROR 15	10075.0	10075.0
*ERROR 15	9515.0	9480.0

*ERROR 15	10075.0	10075.0
*ERROR 15	9515.0	9480.0
*ERROR 15	10075.0	10075.0
*ERROR 15	9515.0	9480.0
*ERROR 15	10075.0	10075.0
*ERROR 15	9515.0	9480.0
*ERROR 15	10075.0	10075.0
*ERROR 15	9515.0	9480.0
*ERROR 15	10075.0	10075.0
*ERROR 15	9515.0	9480.0
*ERROR 15	10075.0	10075.0
*ERROR 15	9515.0	9480.0
*ERROR 15	10075.0	10075.0
*ERROR 15	9515.0	9480.0
*ERROR 15	10075.0	10075.0
*ERROR 15	9515.0	9480.0
*ERROR 15	10075.0	10075.0
*ERROR 15	9515.0	9480.0
*ERROR 15	10075.0	10075.0
*ERROR 15	9515.0	9480.0
*ERROR 15	10075.0	10075.0
*ERROR 15	10170.0	10170.0
*ERROR 15	9945.0	9870.0
*ERROR 15	10170.0	10170.0
*ERROR 15	9945.0	9870.0
*ERROR 15	10170.0	10170.0
*ERROR 15	9945.0	9870.0
*ERROR 15	10170.0	10170.0
*ERROR 15	9945.0	9870.0
*ERROR 15	10170.0	10170.0
*ERROR 15	9945.0	9870.0
*ERROR 15	10170.0	10170.0
*ERROR 15	9945.0	9870.0
*ERROR 15	10170.0	10170.0
*ERROR 15	9945.0	9870.0
*ERROR 15	10170.0	10170.0
*ERROR 15	9945.0	9870.0
*ERROR 15	10170.0	10170.0
*ERROR 15	9945.0	9870.0
*ERROR 15	10170.0	10170.0
*ERROR 15	9945.0	9870.0
*ERROR 15	10170.0	10170.0
*ERROR 15	9945.0	9870.0
*ERROR 15	10170.0	10170.0
*ERROR 15	9945.0	9870.0

```
*ERROR 15          10170.0   10170.0
*ERROR 15           9780.0    9685.0
*ERROR 15          10135.0   10135.0
*ERROR 15           9780.0    9685.0
*ERROR 15          10135.0   10135.0
*ERROR 15           9780.0    9685.0
*ERROR 15          10135.0   10135.0
*ERROR 15           9780.0    9685.0
*ERROR 15          10135.0   10135.0
*ERROR 15           9780.0    9685.0
*ERROR 15          10135.0   10135.0
*ERROR 15           9780.0    9685.0
*ERROR 15          10135.0   10135.0
*ERROR 15           9780.0    9685.0
*ERROR 15          10135.0   10135.0
*ERROR 15           9780.0    9685.0
*ERROR 15          10135.0   10135.0
*ERROR 15           9780.0    9685.0
*ERROR 15          10135.0   10135.0
*ERROR 15           9780.0    9685.0
*ERROR 15          10135.0   10135.0
*ERROR 15           9780.0    9685.0
*ERROR 15          10135.0   10135.0
*ERROR 15           9780.0    9685.0
*ERROR 15          10135.0   10135.0
*ERROR 15           9780.0    9685.0
*ERROR 15          10135.0   10135.0
*ERROR 15           9780.0    9685.0
*ERROR 15          10135.0   10135.0
*ERROR 15           9780.0    9685.0
*ERROR 15          10135.0   10135.0
*ERROR 15           9780.0    9685.0
*ERROR 15          10135.0   10135.0
*ERROR 15           9780.0    9685.0
*ERROR 15          10135.0   10135.0
** Q ABOVE TABLE **                                                                    **INLOAD**
**WATER DISCHARGE, WATER-SEDIMENT LOAD TABLE ENDPOINT**      15404.00       7500.00     311.646770
** Q ABOVE TABLE **                                                                    **INLOAD**
**WATER DISCHARGE, WATER-SEDIMENT LOAD TABLE ENDPOINT**       1391.00       1000.00       0.010000

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME       ENTRY *             SAND              *
    DAYS       POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.32       8.020 *      0.29                    *
               6.090 *      0.00                    *
               3.780 *      0.00                    *
               2.920 *      0.02                    *
               2.600 *      0.05                    *
               0.200 *      0.00                    *
   TOTAL=      0.200 *      0.35      1.40     -2.98 *
*****************************************************

==========================================================================================
TIME STEP #        6
*    A  Level output at time step 6 (0.0139 day)

         *ERROR 15          10013.0   10013.0
         *ERROR 15          10013.0   10013.0
         *ERROR 15          10013.0   10013.0
```

*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	9717.0	9716.2
*ERROR 15	9717.0	9716.2
*ERROR 15	9717.0	9716.2
*ERROR 15	9717.0	9716.2
*ERROR 15	9717.0	9716.2
*ERROR 15	9717.0	9716.2
*ERROR 15	9717.0	9716.2
*ERROR 15	9717.0	9716.2
*ERROR 15	9717.0	9716.2
*ERROR 15	9717.0	9716.2
*ERROR 15	9717.0	9716.2
*ERROR 15	9717.0	9716.2
*ERROR 15	9590.6	9515.0
*ERROR 15	10133.3	10133.3

*ERROR 15	10133.3	10133.3
*ERROR 15	10133.3	10133.3
*ERROR 15	10133.3	10133.3
*ERROR 15	10133.3	10133.3
*ERROR 15	9590.6	9515.0
*ERROR 15	10133.3	10133.3
*ERROR 15	9590.6	9515.0
*ERROR 15	10133.3	10133.3
*ERROR 15	9590.6	9515.0
*ERROR 15	10133.3	10133.3
*ERROR 15	9590.6	9515.0
*ERROR 15	10133.3	10133.3
*ERROR 15	9590.6	9515.0
*ERROR 15	10133.3	10133.3
*ERROR 15	9590.6	9515.0
*ERROR 15	10133.3	10133.3
*ERROR 15	9590.6	9515.0
*ERROR 15	10133.3	10133.3
*ERROR 15	9590.6	9515.0
*ERROR 15	10133.3	10133.3
*ERROR 15	9590.6	9515.0
*ERROR 15	10133.3	10133.3
*ERROR 15	9590.6	9515.0
*ERROR 15	10133.3	10133.3
*ERROR 15	9590.6	9515.0
*ERROR 15	10133.3	10133.3
*ERROR 15	9590.6	9515.0
*ERROR 15	10133.3	10133.3
*ERROR 15	9590.6	9515.0
*ERROR 15	10133.3	10133.3
*ERROR 15	9515.0	9480.0
*ERROR 15	10075.0	10075.0
*ERROR 15	9515.0	9480.0
*ERROR 15	10075.0	10075.0
*ERROR 15	9515.0	9480.0
*ERROR 15	10075.0	10075.0
*ERROR 15	9515.0	9480.0
*ERROR 15	10075.0	10075.0
*ERROR 15	9945.0	9870.0
*ERROR 15	10170.0	10170.0
*ERROR 15	10170.0	10170.0
*ERROR 15	9945.0	9870.0
*ERROR 15	10170.0	10170.0
*ERROR 15	9945.0	9870.0
*ERROR 15	10170.0	10170.0

*ERROR 15	9945.0	9870.0
*ERROR 15	10170.0	10170.0
*ERROR 15	9945.0	9870.0
*ERROR 15	10170.0	10170.0
*ERROR 15	9945.0	9870.0
*ERROR 15	10170.0	10170.0
*ERROR 15	9945.0	9870.0
*ERROR 15	10170.0	10170.0
*ERROR 15	9945.0	9870.0
*ERROR 15	10170.0	10170.0
*ERROR 15	9945.0	9870.0
*ERROR 15	10170.0	10170.0
*ERROR 15	9945.0	9870.0
*ERROR 15	10170.0	10170.0
*ERROR 15	9945.0	9870.0
*ERROR 15	10170.0	10170.0
*ERROR 15	9945.0	9870.0
*ERROR 15	10170.0	10170.0
*ERROR 15	9945.0	9870.0
*ERROR 15	10170.0	10170.0
*ERROR 15	9945.0	9870.0
*ERROR 15	10170.0	10170.0
*ERROR 15	9780.0	9685.0
*ERROR 15	10135.0	10135.0
*ERROR 15	9780.0	9685.0
*ERROR 15	10135.0	10135.0
*ERROR 15	9780.0	9685.0
*ERROR 15	10135.0	10135.0
*ERROR 15	9780.0	9685.0
*ERROR 15	10135.0	10135.0
*ERROR 15	9780.0	9685.0
*ERROR 15	10135.0	10135.0
*ERROR 15	9780.0	9685.0
*ERROR 15	10135.0	10135.0
*ERROR 15	9780.0	9685.0
*ERROR 15	10135.0	10135.0
*ERROR 15	9780.0	9685.0
*ERROR 15	10135.0	10135.0
*ERROR 15	9780.0	9685.0
*ERROR 15	10135.0	10135.0
*ERROR 15	9780.0	9685.0
*ERROR 15	10135.0	10135.0
*ERROR 15	9780.0	9685.0
*ERROR 15	10135.0	10135.0
*ERROR 15	9780.0	9685.0
*ERROR 15	10135.0	10135.0

```
        *ERROR 15            9780.0    9685.0

        *ERROR 15           10135.0   10135.0

        *ERROR 15            9780.0    9685.0

        *ERROR 15           10135.0   10135.0

        *ERROR 15            9780.0    9685.0

        *ERROR 15           10135.0   10135.0
** Q ABOVE TABLE **                                                                                  **INLOAD**
**WATER DISCHARGE, WATER-SEDIMENT LOAD TABLE ENDPOINT**       10162.00        7500.00     311.646770
** Q ABOVE TABLE **                                                                                  **INLOAD**
**WATER DISCHARGE, WATER-SEDIMENT LOAD TABLE ENDPOINT**        1046.00        1000.00       0.010000

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME       ENTRY *             SAND            *
    DAYS       POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.33       8.020 *      0.39                    *
               6.090 *      0.00                    *
               3.780 *      0.00                    *
               2.920 *      0.07                    *
               2.600 *      0.16                    *
               0.200 *      0.00                    *
   TOTAL=      0.200 *      0.62      1.83     -1.94 *
*****************************************************

==============================================================================
TIME STEP #        7
*    A  Level output at time step 7 (0.0208 day)

        *ERROR 15           10013.0   10013.0

        *ERROR 15           10013.0   10013.0

        *ERROR 15           10013.0   10013.0

        *ERROR 15           10013.0   10013.0

        *ERROR 15           10013.0   10013.0

        *ERROR 15           10013.0   10013.0

        *ERROR 15           10013.0   10013.0

        *ERROR 15           10013.0   10013.0

        *ERROR 15           10013.0   10013.0

        *ERROR 15           10013.0   10013.0

        *ERROR 15           10013.0   10013.0

        *ERROR 15           10013.0   10013.0

        *ERROR 15           10013.0   10013.0

        *ERROR 15           10013.0   10013.0

        *ERROR 15           10013.0   10013.0

        *ERROR 15           10013.0   10013.0

        *ERROR 15           10013.0   10013.0

        *ERROR 15           10211.7   10211.7

        *ERROR 15           10211.7   10211.7

        *ERROR 15           10211.7   10211.7

        *ERROR 15           10211.7   10211.7

        *ERROR 15           10211.7   10211.7

        *ERROR 15           10211.7   10211.7

        *ERROR 15           10211.7   10211.7

        *ERROR 15           10211.7   10211.7

        *ERROR 15           10211.7   10211.7

        *ERROR 15           10211.7   10211.7

        *ERROR 15           10211.7   10211.7

        *ERROR 15           10211.7   10211.7

        *ERROR 15           10211.7   10211.7
```

*ERROR 15	10211.7	10211.7
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	9717.0	9716.2
*ERROR 15	9590.6	9515.0
*ERROR 15	10133.3	10133.3
*ERROR 15	10133.3	10133.3
*ERROR 15	10133.3	10133.3
*ERROR 15	10133.3	10133.3
*ERROR 15	10133.3	10133.3
*ERROR 15	10133.3	10133.3
*ERROR 15	10133.3	10133.3
*ERROR 15	10133.3	10133.3
*ERROR 15	10133.3	10133.3
*ERROR 15	10133.3	10133.3
*ERROR 15	10133.3	10133.3
*ERROR 15	10133.3	10133.3
*ERROR 15	10133.3	10133.3
*ERROR 15	10133.3	10133.3
*ERROR 15	10133.3	10133.3
*ERROR 15	10133.3	10133.3
*ERROR 15	10133.3	10133.3
*ERROR 15	9515.0	9480.0
*ERROR 15	10075.0	10075.0
*ERROR 15	9945.0	9870.0
*ERROR 15	10170.0	10170.0
*ERROR 15	9780.0	9685.0
*ERROR 15	10135.0	10135.0

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT # 1
Cave Creek and Apache WMP
ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT

TIME DAYS	ENTRY POINT	SAND INFLOW	SAND OUTFLOW	TRAP EFF
0.35	8.020	0.43		
	6.090	0.00		
	3.780	0.00		
	2.920	0.20		

```
              2.600 *      0.58                    *
              0.200 *      0.00                    *
   TOTAL=     0.200 *      1.21      2.45     -1.02 *
*************************************************

==========================================================================================
TIME STEP #       8
*    A  Level output at time step 8 (0.0208 day)

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10211.7   10211.7

         *ERROR 15            10018.0   10018.0

         *ERROR 15            10133.3   10133.3

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*************************************************
    TIME       ENTRY *              SAND              *
    DAYS       POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.37       8.020 *      0.43                     *
               6.090 *      0.00                     *
               3.780 *      0.00                     *
               2.920 *      0.33                     *
               2.600 *      1.01                     *
               0.200 *      0.00                     *
   TOTAL=      0.200 *      1.76      2.97     -0.68 *
*************************************************

==========================================================================================
TIME STEP #       9
*    A  Level output at time step 9 (0.0278 day)

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*************************************************
    TIME       ENTRY *              SAND              *
    DAYS       POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.40       8.020 *      0.43                     *
```

```
              6.090 *      0.00                    *
              3.780 *      0.00                    *
              2.920 *      0.44                    *
              2.600 *      1.44                    *
              0.200 *      0.00                    *
   TOTAL=     0.200 *      2.31      3.37     -0.46 *
*****************************************************

==========================================================================================
TIME STEP #      10
*    A  Level output at time step 10 (0.0278 day)

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME       ENTRY *             SAND              *
    DAYS       POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.43       8.020 *      0.43                    *
               6.090 *      0.00                    *
               3.780 *      0.00                    *
               2.920 *      0.48                    *
               2.600 *      1.67                    *
               0.200 *      0.00                    *
   TOTAL=      0.200 *      2.58      3.78     -0.46 *
*****************************************************

==========================================================================================
TIME STEP #      11
*    A  Level output at time step 11 (0.0278 day)

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10211.7   10211.7
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*ERROR 15            10211.7   10211.7

*ERROR 15            10211.7   10211.7

*ERROR 15            10211.7   10211.7

*ERROR 15            10211.7   10211.7

*ERROR 15            10211.7   10211.7

*ERROR 15            10211.7   10211.7

*ERROR 15            10211.7   10211.7

*ERROR 15            10211.7   10211.7

*ERROR 15            10211.7   10211.7

*ERROR 15            10211.7   10211.7

*ERROR 15            10211.7   10211.7

*ERROR 15            10211.7   10211.7

*ERROR 15            10211.7   10211.7

*ERROR 15            10211.7   10211.7

*ERROR 15            10211.7   10211.7

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME       ENTRY *             SAND              *
    DAYS       POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.46       8.020 *      0.44                    *
               6.090 *      0.00                    *
               3.780 *      0.00                    *
               2.920 *      0.50                    *
               2.600 *      1.77                    *
               0.200 *      0.00                    *
   TOTAL=      0.200 *      2.72      4.09     -0.51 *
*****************************************************

==========================================================================================
TIME STEP #      12
*    A  Level output at time step 12 (0.0347 day)

*ERROR 15            10013.0   10013.0

*ERROR 15            10013.0   10013.0

*ERROR 15            10013.0   10013.0

*ERROR 15            10013.0   10013.0

*ERROR 15            10013.0   10013.0

*ERROR 15            10013.0   10013.0

*ERROR 15            10013.0   10013.0

*ERROR 15            10013.0   10013.0

*ERROR 15            10013.0   10013.0

*ERROR 15            10013.0   10013.0

*ERROR 15            10013.0   10013.0

*ERROR 15            10013.0   10013.0

*ERROR 15            10013.0   10013.0

*ERROR 15            10013.0   10013.0

*ERROR 15            10013.0   10013.0

*ERROR 15            10211.7   10211.7

*ERROR 15            10211.7   10211.7

*ERROR 15            10211.7   10211.7

*ERROR 15            10211.7   10211.7

*ERROR 15            10211.7   10211.7

*ERROR 15            10211.7   10211.7

*ERROR 15            10211.7   10211.7

*ERROR 15            10211.7   10211.7

*ERROR 15            10211.7   10211.7
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*ERROR 15            10211.7   10211.7

*ERROR 15            10211.7   10211.7

*ERROR 15            10211.7   10211.7

*ERROR 15            10211.7   10211.7

*ERROR 15            10211.7   10211.7

*ERROR 15            10211.7   10211.7
```

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT # 1
Cave Creek and Apache WMP
ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT

TIME DAYS	ENTRY POINT	INFLOW	SAND OUTFLOW	TRAP EFF
0.49	8.020	0.45		
	6.090	0.00		
	3.780	0.00		
	2.920	0.52		
	2.600	1.84		
	0.200	0.00		
TOTAL=	0.200	2.82	4.39	-0.56

==========

TIME STEP # 13
* A Level output at time step 13 (0.0764 day)

```
*ERROR 15            10013.0   10013.0

*ERROR 15            10013.0   10013.0

*ERROR 15            10013.0   10013.0

*ERROR 15            10013.0   10013.0

*ERROR 15            10013.0   10013.0

*ERROR 15            10013.0   10013.0

*ERROR 15            10013.0   10013.0

*ERROR 15            10013.0   10013.0

*ERROR 15            10013.0   10013.0

*ERROR 15            10013.0   10013.0

*ERROR 15            10013.0   10013.0

*ERROR 15            10013.0   10013.0

*ERROR 15            10013.0   10013.0

*ERROR 15            10013.0   10013.0

*ERROR 15            10013.0   10013.0

*ERROR 15            10013.0   10013.0

*ERROR 15            10013.0   10013.0

*ERROR 15            10211.7   10211.7

*ERROR 15            10211.7   10211.7

*ERROR 15            10211.7   10211.7

*ERROR 15            10211.7   10211.7

*ERROR 15            10211.7   10211.7

*ERROR 15            10211.7   10211.7

*ERROR 15            10211.7   10211.7

*ERROR 15            10211.7   10211.7

*ERROR 15            10211.7   10211.7

*ERROR 15            10211.7   10211.7

*ERROR 15            10211.7   10211.7

*ERROR 15            10211.7   10211.7

*ERROR 15            10211.7   10211.7

*ERROR 15            10211.7   10211.7
```

```
TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME        ENTRY *              SAND            *
    DAYS        POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.57        8.020 *      0.47                    *
                6.090 *      0.00                    *
                3.780 *      0.00                    *
                2.920 *      0.55                    *
                2.600 *      1.94                    *
                0.200 *      0.00                    *
   TOTAL=       0.200 *      2.96      4.99     -0.68 *
*****************************************************

==========================================================================================
TIME STEP #      14
*    A  Level output at time step 14 (0.0764 day)

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10211.7   10211.7

         *ERROR 15            10211.7   10211.7

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME        ENTRY *              SAND            *
    DAYS        POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.65        8.020 *      0.49                    *
                6.090 *      0.00                    *
                3.780 *      0.00                    *
                2.920 *      0.58                    *
                2.600 *      2.00                    *
                0.200 *      0.00                    *
   TOTAL=       0.200 *      3.07      5.46     -0.78 *
*****************************************************

==========================================================================================
TIME STEP #      15
*    A  Level output at time step 15 (0.1458 day)

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0
```

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*ERROR 15          10013.0   10013.0

*ERROR 15          10211.7   10211.7

*ERROR 15          10211.7   10211.7

*ERROR 15          10211.7   10211.7

*ERROR 15          10211.7   10211.7

*ERROR 15          10211.7   10211.7

*ERROR 15          10211.7   10211.7

*ERROR 15          10211.7   10211.7

*ERROR 15          10211.7   10211.7

*ERROR 15          10211.7   10211.7

*ERROR 15          10211.7   10211.7

*ERROR 15          10211.7   10211.7

*ERROR 15          10211.7   10211.7

*ERROR 15          10211.7   10211.7

*ERROR 15          10211.7   10211.7

*ERROR 15          10211.7   10211.7
```

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT # 1
Cave Creek and Apache WMP
ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT

TIME DAYS	ENTRY POINT	INFLOW	SAND OUTFLOW	TRAP EFF
0.79	8.020	0.54		
	6.090	0.00		
	3.780	0.00		
	2.920	0.64		
	2.600	2.22		
	0.200	0.00		
TOTAL=	0.200	3.40	6.48	-0.91

```
==========================================================================================
TIME STEP #      16
*    B  Level output at time step 16 (0.2083 day)
COMPUTING FROM TIME=      0.7916 DAYS TO TIME=      0.9999 DAYS IN    10 COMPUTATION STEPS

*ERROR 15          10013.0   10013.0

*ERROR 15          10013.0   10013.0

*ERROR 15          10013.0   10013.0

*ERROR 15          10211.7   10211.7

*ERROR 15          10013.0   10013.0

*ERROR 15          10013.0   10013.0

*ERROR 15          10013.0   10013.0

*ERROR 15          10013.0   10013.0

*ERROR 15          10013.0   10013.0

*ERROR 15          10013.0   10013.0

*ERROR 15          10013.0   10013.0

*ERROR 15          10013.0   10013.0

*ERROR 15          10013.0   10013.0

*ERROR 15          10013.0   10013.0

*ERROR 15          10013.0   10013.0

*ERROR 15          10013.0   10013.0

*ERROR 15          10013.0   10013.0

*ERROR 15          10013.0   10013.0

*ERROR 15          10013.0   10013.0

*ERROR 15          10013.0   10013.0
```

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*ERROR 15          10013.0   10013.0
*ERROR 15          10013.0   10013.0
*ERROR 15          10013.0   10013.0
*ERROR 15          10013.0   10013.0
*ERROR 15          10013.0   10013.0
*ERROR 15          10013.0   10013.0
*ERROR 15          10013.0   10013.0
*ERROR 15          10013.0   10013.0
*ERROR 15          10013.0   10013.0
*ERROR 15          10013.0   10013.0
*ERROR 15          10013.0   10013.0
*ERROR 15          10013.0   10013.0
*ERROR 15          10013.0   10013.0
*ERROR 15          10013.0   10013.0
*ERROR 15          10013.0   10013.0
*ERROR 15          10013.0   10013.0
*ERROR 15          10013.0   10013.0
*ERROR 15          10013.0   10013.0
*ERROR 15          10013.0   10013.0
*ERROR 15          10013.0   10013.0
*ERROR 15          10013.0   10013.0
*ERROR 15          10013.0   10013.0
```

Cave Creek and Apache WMP
ACCUMULATED TIME (yrs).... 0.003
FLOW DURATION (days)...... 0.021

UPSTREAM BOUNDARY CONDITIONS

Stream Segment # 1 Section No. 8.020	DISCHARGE (cfs)	SEDIMENT LOAD (tons/day)	TEMPERATURE (deg F)
INFLOW	177.00	188.32	68.00

Upstream of SECTION NO. 6.090 is...

LOCAL INFLOW POINT # 5	DISCHARGE (cfs)	SEDIMENT LOAD (tons/day)	TEMPERATURE (deg F)
MAINSTEM INFLOW	177.00	188.32	68.00
LOCAL INFLOW	29.00	0.10	68.00
TOTAL	206.00	188.42	68.00

Upstream of SECTION NO. 3.780 is...

LOCAL INFLOW POINT # 4	DISCHARGE (cfs)	SEDIMENT LOAD (tons/day)	TEMPERATURE (deg F)
MAINSTEM INFLOW	206.00	188.42	68.00
LOCAL INFLOW	51.00	0.10	68.00
TOTAL	257.00	188.52	68.00

Upstream of SECTION NO. 2.920 is...

LOCAL INFLOW POINT # 3	DISCHARGE (cfs)	SEDIMENT LOAD (tons/day)	TEMPERATURE (deg F)
MAINSTEM INFLOW	257.00	188.52	68.00
LOCAL INFLOW	157.00	229.95	68.00
TOTAL	414.00	418.46	68.00

Upstream of SECTION NO. 2.600 is...

LOCAL INFLOW POINT # 2	DISCHARGE (cfs)	SEDIMENT LOAD (tons/day)	TEMPERATURE (deg F)
MAINSTEM INFLOW	414.00	418.46	68.00
LOCAL INFLOW	87.00	485.12	68.00
TOTAL	501.00	903.59	68.00

Upstream of SECTION NO. 0.200 is...

LOCAL INFLOW POINT # 1	DISCHARGE (cfs)	SEDIMENT LOAD (tons/day)	TEMPERATURE (deg F)

MAINSTEM	INFLOW	501.00	903.59	68.00
LOCAL	INFLOW	15.00	0.10	68.00
	TOTAL	516.00	903.69	68.00

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT # 1
Cave Creek and Apache WMP
ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT

TIME DAYS	ENTRY POINT	INFLOW	SAND OUTFLOW	TRAP EFF
1.00	8.020	0.56		
	6.090	0.00		
	3.780	0.00		
	2.920	0.67		
	2.600	2.27		
	0.200	0.00		
TOTAL=	0.200	3.49	7.08	-1.03

TABLE SB-1: SEDIMENT LOAD PASSING THE BOUNDARIES OF STREAM SEGMENT # 1

SEDIMENT INFLOW at the Upstream Boundary:

GRAIN SIZE	LOAD (tons/day)	GRAIN SIZE	LOAD (tons/day)
VERY FINE SAND....	2.85	MEDIUM GRAVEL.....	40.31
FINE SAND.....	5.87	COARSE GRAVEL.....	49.52
MEDIUM SAND.....	11.76	VERY COARSE GRAVEL	4.10
COARSE SAND.....	12.26	SMALL COBBLES.....	1.64
VERY COARSE SAND..	13.53	LARGE COBBLES.....	0.03
VERY FINE GRAVEL..	18.77	SMALL BOULDERS....	0.00
FINE GRAVEL.....	27.69	MEDIUM BOULDERS...	0.00
		TOTAL =	188.32

SEDIMENT OUTFLOW from the Downstream Boundary

GRAIN SIZE	LOAD (tons/day)	GRAIN SIZE	LOAD (tons/day)
VERY FINE SAND....	32.93	MEDIUM GRAVEL.....	791.56
FINE SAND.....	90.31	COARSE GRAVEL.....	568.94
MEDIUM SAND.....	379.25	VERY COARSE GRAVEL	0.00
COARSE SAND.....	1109.03	SMALL COBBLES.....	0.00
VERY COARSE SAND..	901.12	LARGE COBBLES.....	0.00
VERY FINE GRAVEL..	852.70	SMALL BOULDERS....	0.00
FINE GRAVEL.....	834.38	MEDIUM BOULDERS...	0.00
		TOTAL =	5560.21

TABLE SB-2: STATUS OF THE BED PROFILE AT TIME = 1.000 DAYS

SECTION NUMBER	BED CHANGE (ft)	WS ELEV (ft)	THALWEG (ft)	Q (cfs)	TRANSPORT RATE (tons/day) SAND
8.020	-3.73	1983.82	1981.37	177.	305.
7.980	-1.65	1981.78	1980.15	177.	1286.
7.890	-0.73	1978.16	1976.27	177.	1132.
7.840	-0.16	1975.98	1974.24	177.	1669.
7.740	0.05	1970.84	1969.15	177.	1703.
7.650	0.25	1963.40	1962.05	177.	1687.
7.550	0.28	1958.48	1956.98	177.	1214.
7.460	-2.28	1951.04	1949.22	177.	2221.
7.360	2.25	1948.37	1946.75	177.	2151.
7.280	0.04	1942.55	1940.84	177.	3331.
7.170	-1.24	1934.40	1932.76	177.	3289.
7.080	0.87	1931.05	1929.87	177.	1331.
6.980	-1.32	1924.92	1922.68	177.	1687.
6.900	0.52	1922.20	1920.52	177.	1552.
6.800	-1.26	1914.95	1912.74	177.	1891.
6.710	3.06	1912.05	1910.56	177.	1536.
6.630	-1.53	1906.29	1903.47	177.	1805.
6.580	1.59	1905.11	1903.59	177.	1200.
6.500	-0.64	1899.69	1898.36	177.	2392.
6.430	-1.50	1896.52	1895.00	177.	2561.
6.320	1.89	1893.09	1891.89	177.	2232.
6.250	-1.88	1887.23	1886.12	177.	3054.
6.160	-0.88	1883.99	1882.12	177.	2823.
6.090	1.51	1881.81	1881.01	206.	1680.
6.010	-0.82	1876.62	1874.68	206.	2195.
5.920	1.08	1872.49	1871.08	206.	1222.
5.830	-1.56	1866.43	1863.94	206.	1723.
5.760	1.39	1864.39	1863.39	206.	1583.
5.660	-0.43	1856.99	1853.57	206.	1763.
5.640	-0.20	1855.67	1854.80	206.	1781.
5.570	-1.01	1851.94	1848.99	206.	2025.
5.480	2.66	1850.05	1848.66	206.	1260.
5.380	-1.17	1843.37	1839.83	206.	2158.
5.310	1.18	1841.13	1839.18	206.	1572.
5.210	-0.98	1835.59	1833.02	206.	1832.
5.150	1.70	1833.88	1831.70	206.	1027.
5.090	-0.97	1831.10	1829.03	206.	1578.
5.030	0.23	1828.44	1826.23	206.	1482.
4.960	0.80	1825.00	1822.80	206.	1999.
4.900	-1.73	1821.20	1820.27	206.	2200.
4.820	-0.25	1819.61	1817.75	206.	2542.
4.780	0.89	1815.52	1813.89	206.	2945.
4.740	-1.54	1811.34	1808.46	206.	3815.

4.650	1.37	1808.63	1807.37	206.	1872.
4.600	-1.36	1803.74	1800.64	206.	1676.
4.580	0.63	1803.06	1801.93	206.	455.
4.570	-5.62	1803.38	1794.38	206.	397.
4.560	3.34	1803.08	1802.34	206.	1459.
4.490	0.02	1797.26	1796.02	206.	1738.
4.400	-0.34	1794.66	1791.96	206.	2039.
4.310	1.09	1791.17	1789.09	206.	1334.
4.230	-0.97	1787.17	1785.03	206.	1701.
4.220	-1.55	1785.94	1783.95	206.	1998.
4.110	-1.12	1783.51	1780.88	206.	1995.
4.050	1.79	1782.40	1780.79	206.	1399.
3.960	-1.10	1775.32	1772.90	206.	1827.
3.860	0.86	1772.45	1770.86	206.	1466.
3.780	-1.09	1768.10	1764.91	257.	1645.
3.750	1.11	1767.28	1765.11	257.	1267.
3.650	-0.03	1763.52	1761.97	257.	1971.
3.600	-0.71	1761.78	1759.29	257.	2147.
3.520	1.06	1759.33	1757.06	257.	1991.
3.480	-1.18	1757.36	1753.82	257.	2100.
3.400	1.20	1755.58	1753.20	257.	1726.
3.320	-1.34	1750.23	1748.66	257.	1951.
3.210	-0.37	1747.85	1745.63	257.	1916.
3.130	1.87	1745.70	1743.87	257.	2167.
3.070	-1.25	1741.99	1739.75	257.	2462.
2.970	1.39	1738.85	1737.39	257.	1442.
2.920	0.37	1736.60	1734.37	414.	1656.
2.900	-0.63	1735.28	1733.37	414.	1681.
2.870	0.44	1733.91	1732.44	414.	1429.
2.820	-0.36	1731.99	1729.64	414.	1710.
2.730	-1.23	1729.35	1726.77	414.	1775.
2.600	0.27	1726.51	1724.27	501.	2434.
2.520	0.06	1723.32	1721.06	501.	2583.
2.470	-1.19	1721.03	1718.81	501.	2815.
2.400	-0.79	1720.13	1717.21	501.	2972.
2.330	0.13	1718.88	1717.13	501.	1548.
2.240	0.34	1717.10	1714.34	501.	2194.
2.170	0.02	1715.21	1714.02	501.	2494.
2.080	-0.68	1711.45	1709.32	501.	3324.
2.000	-0.13	1709.28	1708.37	501.	3148.
1.880	0.27	1705.00	1702.37	501.	3863.
1.850	1.05	1703.40	1701.05	501.	3487.
1.810	-1.07	1702.97	1698.93	501.	3674.
1.750	2.37	1702.00	1700.37	501.	2132.
1.660	-1.68	1697.29	1694.32	501.	3339.
1.600	1.10	1695.69	1693.10	501.	3278.
1.560	-1.48	1694.62	1690.52	501.	3632.
1.470	1.25	1692.90	1691.25	501.	1999.
1.370	-1.16	1689.43	1686.84	501.	2567.
1.270	1.24	1686.96	1685.24	501.	2614.
1.180	1.08	1683.43	1681.08	501.	2054.
1.090	-0.43	1681.90	1679.57	501.	2827.
0.990	0.12	1678.93	1678.12	501.	2308.
0.840	-0.65	1671.66	1669.35	501.	4145.
0.750	1.18	1668.89	1667.18	501.	3690.
0.710	0.75	1667.14	1664.75	501.	3829.
0.630	-1.33	1664.18	1662.67	501.	4310.
0.540	-0.66	1661.65	1659.34	501.	4340.
0.430	0.85	1657.67	1655.85	501.	3357.
0.330	-0.97	1653.29	1651.23	501.	5332.
0.200	0.57	1648.39	1646.57	516.	5560.

$VOL

STREAM SEGMENT # 1: Cave Creek and Apache WMP

SUMMARY TABLE: MASS AND VOLUME OF SEDIMENT

SECTION	SEDIMENT THROUGH SECTION (tons)				SEDIMENT DEPOSITED IN REACH in cu. yds				
	TOTAL	SAND	SILT	CLAY	TOTAL	CUMULATIVE	SAND	SILT	CLAY
INFLOW	1125.	1125.	0.	0.	896.				
8.020	4589.	4589.	0.	0.	-2759.	-2759.	-2759.	0.	0.
7.980	7955.	7955.	0.	0.	-2681.	-5440.	-2681.	0.	0.
7.890	9293.	9293.	0.	0.	-1065.	-6506.	-1065.	0.	0.
7.840	8990.	8990.	0.	0.	241.	-6265.	241.	0.	0.
7.740	7656.	7656.	0.	0.	1062.	-5202.	1062.	0.	0.
7.650	7264.	7264.	0.	0.	312.	-4890.	312.	0.	0.
7.550	6827.	6827.	0.	0.	348.	-4542.	348.	0.	0.
7.460	16264.	16264.	0.	0.	-7516.	-12058.	-7516.	0.	0.
7.360	6684.	6684.	0.	0.	7630.	-4428.	7630.	0.	0.
7.280	5200.	5200.	0.	0.	1182.	-3246.	1182.	0.	0.
7.170	8419.	8419.	0.	0.	-2564.	-5810.	-2564.	0.	0.
7.080	9835.	9835.	0.	0.	-1127.	-6938.	-1127.	0.	0.
6.980	13275.	13275.	0.	0.	-2740.	-9677.	-2740.	0.	0.
6.900	12233.	12233.	0.	0.	830.	-8847.	830.	0.	0.
6.800	12800.	12800.	0.	0.	-452.	-9299.	-452.	0.	0.
6.710	7123.	7123.	0.	0.	4522.	-4777.	4522.	0.	0.
6.630	10139.	10139.	0.	0.	-2402.	-7179.	-2402.	0.	0.
6.580	7391.	7391.	0.	0.	2188.	-4991.	2188.	0.	0.
6.500	7856.	7856.	0.	0.	-370.	-5361.	-370.	0.	0.
6.430	12024.	12024.	0.	0.	-3320.	-8681.	-3320.	0.	0.
6.320	6529.	6529.	0.	0.	4376.	-4305.	4376.	0.	0.

6.250	12910.	12910.	0.	0.	-5082.	-9387.	-5082.	0.	0.
6.160	14924.	14924.	0.	0.	-1604.	-10991.	-1604.	0.	0.
LOCAL	0.	0.	0.	0.	0.				
6.090	8353.	8353.	0.	0.	5234.	-5757.	5234.	0.	0.
6.010	11381.	11381.	0.	0.	-2412.	-8169.	-2412.	0.	0.
5.920	8751.	8751.	0.	0.	2095.	-6074.	2095.	0.	0.
5.830	15066.	15066.	0.	0.	-5030.	-11104.	-5030.	0.	0.
5.760	7297.	7297.	0.	0.	6188.	-4916.	6188.	0.	0.
5.660	6947.	6947.	0.	0.	279.	-4637.	279.	0.	0.
5.640	7109.	7109.	0.	0.	-129.	-4767.	-129.	0.	0.
5.570	10893.	10893.	0.	0.	-3014.	-7780.	-3014.	0.	0.
5.480	5622.	5622.	0.	0.	4198.	-3582.	4198.	0.	0.
5.380	9239.	9239.	0.	0.	-2881.	-6463.	-2881.	0.	0.
5.310	5544.	5544.	0.	0.	2943.	-3520.	2943.	0.	0.
5.210	8783.	8783.	0.	0.	-2580.	-6100.	-2580.	0.	0.
5.150	4339.	4339.	0.	0.	3540.	-2560.	3540.	0.	0.
5.090	5870.	5870.	0.	0.	-1220.	-3780.	-1220.	0.	0.
5.030	5122.	5122.	0.	0.	596.	-3184.	596.	0.	0.
4.960	4201.	4201.	0.	0.	734.	-2450.	734.	0.	0.
4.900	9296.	9296.	0.	0.	-4058.	-6508.	-4058.	0.	0.
4.820	8603.	8603.	0.	0.	552.	-5957.	552.	0.	0.
4.780	5637.	5637.	0.	0.	2363.	-3594.	2363.	0.	0.
4.740	12372.	12372.	0.	0.	-5364.	-8958.	-5364.	0.	0.
4.650	6002.	6002.	0.	0.	5073.	-3885.	5073.	0.	0.
4.600	5771.	5771.	0.	0.	184.	-3701.	184.	0.	0.
4.580	5595.	5595.	0.	0.	141.	-3560.	141.	0.	0.
4.570	8349.	8349.	0.	0.	-2194.	-5754.	-2194.	0.	0.
4.560	7438.	7438.	0.	0.	726.	-5028.	726.	0.	0.
4.490	6148.	6148.	0.	0.	1028.	-4001.	1028.	0.	0.
4.400	6146.	6146.	0.	0.	1.	-3999.	1.	0.	0.
4.310	3784.	3784.	0.	0.	1881.	-2118.	1881.	0.	0.
4.230	4750.	4750.	0.	0.	-769.	-2887.	-769.	0.	0.
4.220	7775.	7775.	0.	0.	-2410.	-5297.	-2410.	0.	0.
4.110	11685.	11685.	0.	0.	-3114.	-8411.	-3114.	0.	0.
4.050	7340.	7340.	0.	0.	3461.	-4950.	3461.	0.	0.
3.960	12438.	12438.	0.	0.	-4061.	-9011.	-4061.	0.	0.
3.860	12696.	12696.	0.	0.	-205.	-9216.	-205.	0.	0.
LOCAL	0.	0.	0.	0.	0.				
3.780	12009.	12009.	0.	0.	548.	-8669.	548.	0.	0.
3.750	5504.	5504.	0.	0.	5181.	-3488.	5181.	0.	0.
3.650	4293.	4293.	0.	0.	964.	-2523.	964.	0.	0.
3.600	6653.	6653.	0.	0.	-1880.	-4403.	-1880.	0.	0.
3.520	4730.	4730.	0.	0.	1532.	-2871.	1532.	0.	0.
3.480	6458.	6458.	0.	0.	-1377.	-4248.	-1377.	0.	0.
3.400	4684.	4684.	0.	0.	1413.	-2835.	1413.	0.	0.
3.320	7464.	7464.	0.	0.	-2214.	-5049.	-2214.	0.	0.
3.210	8276.	8276.	0.	0.	-647.	-5696.	-647.	0.	0.
3.130	5493.	5493.	0.	0.	2217.	-3479.	2217.	0.	0.
3.070	12581.	12581.	0.	0.	-5646.	-9125.	-5646.	0.	0.
2.970	3257.	3257.	0.	0.	7427.	-1698.	7427.	0.	0.
LOCAL	1350.	1350.	0.	0.	1075.				
2.920	2157.	2157.	0.	0.	1951.	253.	1951.	0.	0.
2.900	3559.	3559.	0.	0.	-1116.	-863.	-1116.	0.	0.
2.870	2358.	2358.	0.	0.	956.	93.	956.	0.	0.
2.820	4080.	4080.	0.	0.	-1372.	-1278.	-1372.	0.	0.
2.730	12121.	12121.	0.	0.	-6405.	-7683.	-6405.	0.	0.
LOCAL	4596.	4596.	0.	0.	3661.				
2.600	14987.	14987.	0.	0.	1378.	-6305.	1378.	0.	0.
2.520	11386.	11386.	0.	0.	2868.	-3437.	2868.	0.	0.
2.470	12688.	12688.	0.	0.	-1037.	-4474.	-1037.	0.	0.
2.400	16295.	16295.	0.	0.	-2873.	-7347.	-2873.	0.	0.
2.330	17147.	17147.	0.	0.	-679.	-8026.	-679.	0.	0.
2.240	14880.	14880.	0.	0.	1805.	-6220.	1805.	0.	0.
2.170	13441.	13441.	0.	0.	1147.	-5073.	1147.	0.	0.
2.080	18984.	18984.	0.	0.	-4415.	-9489.	-4415.	0.	0.
2.000	22987.	22987.	0.	0.	-3189.	-12677.	-3189.	0.	0.
1.880	19207.	19207.	0.	0.	3011.	-9667.	3011.	0.	0.
1.850	15821.	15821.	0.	0.	2697.	-6969.	2697.	0.	0.
1.810	19902.	19902.	0.	0.	-3250.	-10220.	-3250.	0.	0.
1.750	9711.	9711.	0.	0.	8117.	-2103.	8117.	0.	0.
1.660	15751.	15751.	0.	0.	-4811.	-6914.	-4811.	0.	0.
1.600	12293.	12293.	0.	0.	2754.	-4160.	2754.	0.	0.
1.560	15736.	15736.	0.	0.	-2742.	-6901.	-2742.	0.	0.
1.470	18838.	18838.	0.	0.	-2471.	-9372.	-2471.	0.	0.
1.370	23524.	23524.	0.	0.	-3733.	-13105.	-3733.	0.	0.
1.270	14178.	14178.	0.	0.	7444.	-5661.	7444.	0.	0.
1.180	8656.	8656.	0.	0.	4398.	-1263.	4398.	0.	0.
1.090	11670.	11670.	0.	0.	-2400.	-3663.	-2400.	0.	0.
0.990	9887.	9887.	0.	0.	1420.	-2243.	1420.	0.	0.
0.840	14395.	14395.	0.	0.	-3590.	-5833.	-3590.	0.	0.
0.750	10785.	10785.	0.	0.	2875.	-2958.	2875.	0.	0.
0.710	10272.	10272.	0.	0.	409.	-2550.	409.	0.	0.
0.630	19937.	19937.	0.	0.	-7698.	-10248.	-7698.	0.	0.
0.540	19992.	19992.	0.	0.	-43.	-10291.	-43.	0.	0.
0.430	14935.	14935.	0.	0.	4027.	-6264.	4027.	0.	0.
0.330	18423.	18423.	0.	0.	-2778.	-9042.	-2778.	0.	0.

```
     LOCAL          0.         0.         0.         0.         0.

     0.200      14332.     14332.         0.         0.      3259.     -5783.      3259.         0.         0.

-----------------------------------------------------------------------------------------------------------
$$END

       0   DATA ERRORS DETECTED.

TOTAL NO. OF TIME STEPS READ =         16
TOTAL NO. OF WS PROFILES =             29
ITERATIONS IN EXNER EQ =            30160

COMPUTATIONS COMPLETED
RUN TIME =  0 HOURS,  0 MINUTES &  5.00 SECONDS
```

APPENDIX H.8

Apache Wash Overbank Model, 100-year Flood, Future Conditions

```
T1      Cave Creek and Apache WMP
T2      by Stantec:  Proj. No. 82000077                    File: AW-F100F.DAT
T3      for Flood Control District of Maricopa County      Date: 07-28-99   srg

NC 0.055   0.055    0.03     0.1     0.3
X1   0.2      12 9967.74 10039.4
GR  1660 9288.16    1658 9525.13    1658 9606.89    1656 9642.09    1656 9827.21
GR  1654 9904.07    1650 9967.74    1646  9981.5    1646 10015.7    1656 10039.4
GR  165610160.82    166010191.81
HD   0.2    10.0

QT

X1  0.33      16 9945.78   10090     350     700     650
GR  1663 9631.93    1662    9645    1660    9722    1660    9820    1661    9900
GR  1658 9945.78  1652.2    9980  1652.2   10020    1658   10090    1658   10135
GR1652.6   10150    1656   10170    1658   10220    1660   10250    1662   10305
GR  1664   10375
HD  0.33    10.0

X1  0.43      17    9940   10050     505     440     500
GR  1666    9730    1664    9900    1662    9940    1655    9985    1655   10015
GR1661.8   10050  1661.8   10120    1660   10190    1658   10240    1660   10270
GR  1662   10290    1662   10350    1660   10405    1660   10430    1662   10500
GR  1664   10535    1666   10620
HD  0.43    10.0

X1  0.54      17    996510027.02     800     400     640
GR  1670    9600    1668    9840    1664    9875    1664    9965    1660 9975.73
GR  166010018.71    166410027.02    166410027.05    166410027.06    166610068.43
GR  166610068.89    166610360.71    166410418.56    166410470.56    166610510.35
GR  166810530.78    167010614.05
HD  0.54    10.0

X1  0.63      23 9967.2710044.06     300     600     500
GR  1673 9246.69    1672    9300    1672 9467.58    1672 9467.59    1670 9524.47
GR  1670 9524.59    1670 9661.89    1670 9662.28    1668 9798.92    1668 9967.22
GR  1668 9967.27    1666 9971.89    1666 9971.91    1664 9976.44    1664 9976.56
GR  166410025.48    166610033.05    166610033.09    166810044.06    166810044.68
GR  166810151.63    1672   10188 1673.0410227.11
HD  0.63    10.0

X1  0.71      29 9973.9410029.59     370     440     400
GR  1676 9410.74    1674 9517.84    1672 9806.35    1672 9806.66    1670 9929.72
GR  1670 9930.71    1668 9973.93    1668 9973.94    1666 9979.82    1666  9979.9
GR  1664 9985.76    1664  9985.8    166410015.71    1664 10015.9    166610024.34
GR  166610024.46    166810029.59    166810030.23    166810045.83    166810045.97
GR  166610052.42    166610052.62    166610063.21    1666 10063.3    166810070.56
GR  166810070.63    1670 10092.7    167610201.55    167610201.61
HD  0.71    10.0

X1  0.75      32 9943.8210027.72     180     210     200
GR  1676 9452.11    1674 9623.97    1674 9849.05    1674 9850.71    1672 9883.74
GR  1672 9884.15    1670 9943.61    1670 9943.82    1668 9967.12    1668 9967.18
GR  1666 9978.68    166610014.77    167010027.72    167010080.45    167010080.56
GR  167210093.84    1672   10094    167210119.59    167210119.71    167010128.45
GR  1670 10128.5    1670 10145.7    167010145.78    1672 10173.1    167210173.36
GR  167410214.32    1674 10214.6    167410391.18    167410391.21    167610479.43
GR  167610479.48    167610512.05
HD  0.75    10.0

NC 0.055   0.055    0.03     0.3     0.5

X1  0.84      17    9975   10030     420     430     440
GR  1679 9854.82    1676    9910    1672    9975    1670 9980.41    167010019.82
GR  1672   10030  1673.8   10080    1672   10110    1670   10125    1674   10150
GR  1674   10230    1678   10290    1678   10320    1676   10380    1676   10400
GR  1678   10460    1680   10590
HD  0.84    10.0

X1  0.99      18 9969.6610026.04     890     550     900
GR  1686 9925.53    1682 9950.02    1680 9969.66    1678 9977.26    167810017.26
GR  168010026.04    168210147.08    1682 10189.7    168010277.01    167810326.93
GR  167810418.53    168010542.32    168210764.47    168210913.43    168210917.62
GR  1684   11420    1684   11790 1685.9911823.04
HD  0.99    10.0

NC 0.055   0.055    0.03     0.1     0.3

X1  1.09      18    9968   10034     500     460     500
GR  1690    9920    1688    9926    1686    9932    1684    9938    1682    9968
GR  1680    9974    1680   10026    1682   10034    1682   10098    1684   10120
GR  1686   10185    1684   10335    1684   10362    1686   10582    1685   10770
GR  1686   10920    1688   11621    1690   11652
HD  1.09    10.0

NC 0.055   0.055    0.03     0.3     0.5

X1  1.18      21 9937.4210028.94     500     350     500
GR  1694    9840    1692    9875    1690    9902    1688    9920    1686    9936
GR  1684    9947    1682    9957    1680   10015    1680   10020    1682   10025
GR  1684   10030    1686   10061    1688   10102    1690   10180    1690   10270
GR  1689   10390  1689.9   10460  1688.2   10600    1690   10670    1692   10863
GR1693.5   10903
HD  1.18    10.0
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X1  1.27      16    9917   10020     450     500     460
GR  1698    9673    1696    9745    1694    9795    1692    9817    1690    9842
GR  1688    9917    1686    9925    1684    9950    1684    9975    1686   10020
GR  1688   10077    1690   10163    1692   10260    1694   10395    1696   10505
GR  1698   10800
HD  1.27    10.0

NC 0.055   0.055    0.03     0.1     0.3

X1  1.37      10 9932.08 10030.2     400     440     500
GR  1698 9493.05    1696 9549.07    1694 9580.08    1692 9932.08    1690 9963.31
GR  1688 9978.48    1688 10013.4    169010022.33    1692 10030.2    169810053.61
HD  1.37    10.0

X1  1.47      12 9964.3710032.41     490     520     500
GR  1702 9462.33    1700 9530.85    1698 9560.22    1698 9800.63    1696 9911.62
GR  1694 9964.37    1690 9980.91    169010017.61    169410032.41    169810056.56
GR  170010067.04    170210103.76
HD  1.47    10.0

X1  1.56      13 9951.3710028.61     400     540     500
GR  1706 9426.84    1704 9453.43    1702 9496.71    1700 9564.46    1700 9690.11
GR  1698 9951.37    1696 9973.37    1692 9983.09    169210014.85    169810028.61
GR  170210039.18    170410058.37    170610091.18
HD  1.56    10.0

X1   1.6      13 9959.7310016.94     190     180     180
GR  1706 9416.18    1704 9448.11    1702 9518.79    1700 9799.12    1698 9907.12
GR  1696 9959.73    1694 9980.66    1692  9995.9    1692 10008.9    169410012.95
GR  169610016.94    170410031.18    170610062.39
HD   1.6    10.0

X1  1.66      14 9952.11   10034     300     240     250
GR  1708 9744.33    1704 9829.76    1702 9931.63    1700 9952.11    1698 9967.65
GR  1696 9993.88    169610014.03    169810029.43    1700   10034 1700.0110204.97
GR  170210212.95    170410237.12    170610277.66    170810306.08
HD  1.66    10.0

X1  1.75      12 9970.0510072.31     480     520     500
GR  1710 9951.17    1704 9965.64    1702 9970.05    1700 9974.47    1698 9978.76
GR  169810016.76    170010034.19    170210072.31    170410151.35    170610320.71
GR  170810429.93    171010503.73
HD  1.75    10.0

X1  1.81      14 9971.05   10031     300     240     300
GR  1712 9944.51    1704 9965.71    1702 9971.05    1700 9975.82    170010012.24
GR  1702   10031    170410060.69    170610188.05    170610206.68    170410298.14
GR  170410327.71    170610350.59    170810431.76    171210486.49
HD  1.81    10.0

X1  1.85      16 9954.9910041.54     210     150     190
GR  1712 9819.07    1710 9828.06    1708 9836.36    1706 9915.83    1704 9954.99
GR  170010002.05    170010011.48    170410041.54    170610064.87    170810129.94
GR  170810187.04    170610294.81    170610368.04    170810414.01    171010424.61
GR  171210451.94
HD  1.85    10.0

X1  1.88      16    9950   10040     190     230     200
GR  1713 9767.17    1708    9790    1708    9890    1706    9950    1704    9975
GR1702.1    9990  1702.1   10010    1706   10040    1710   10085    1710   10210
GR  1708   10300    1706   10340    1706   10370    1708   10390    1710   10455
GR1713.110479.52
HD  1.88    10.0

X1     2      14    9980   10115     550     230     490
GR1715.9 9964.46    1710    9980  1708.5    9985  1708.5   10020    1710   10115
GR  1712   10150  1713.8   10360    1712   10535    1710   10590  1708.5   10610
GR1708.5   10675    1710   10700    1714   10805    1716   10830
HD     2    10.0

X1  2.08      16 9971.0310080.47     440     270     440
GR  1718 9967.02    1716 9971.03    1710 9983.46    171010015.75    1714 10034.4
GR  171610080.47    171710200.63    1716   10300    1714   10360    1712   10450
GR  1710   10490    1710   10510    1712   10545    1714   10580    1716   10700
GR  1718   10745
HD  2.08    10.0

X1  2.17      12 9948.1610055.88     500     350     520
GR  1722 9809.96    1720 9833.72    1716 9889.63    1716 9892.16    1716 9948.16
GR  1714 9962.44    171410027.88    171610055.88    1716 10199.6    171810234.24
GR  172010416.55    172210468.74
HD  2.17    10.0

X1  2.24      10 9939.5710055.42     380     390     380
GR  1726 9781.96    1724 9796.25    1720 9855.35    1718 9939.57    1714 9973.56
GR  171410001.06    171810055.42    172010148.55    172410188.25    172610215.72
HD  2.24    10.0

X1  2.33      10    9945   10030     450     450     450
GR  1730    9778    1724    9840    1722    9870    1720    9890    1720    9945
GR  1718    9960    1717   10000    1718   10028    1720   10030    1730   10045
HD  2.33    10.0

X1   2.4       8    9940 10024.1     300     370     360
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GR  1732    9795    1730    9800    1724    9840    1720    9940    1718    9980
GR  1718   10020 1719.97 10024.1 1732.0310048.34
HD   2.4    10.0

NC 0.055   0.055    0.03     0.3     0.5

X1  2.47      12 9962.2610027.81     340     450     400
GR  1734 9920.54    1732 9942.57    1724 9962.26    1720  9972.1    1720 9990.76
GR  172210013.06    172410027.81    1726 10090.1    172610200.41    172810300.68
GR  1730   10340    1734   10360
HD  2.47    10.0

NC 0.055   0.055    0.03     0.1     0.3

X1  2.52      14 9957.5910028.76     270     250     260
GR  1736 9805.03    1734 9840.17    1732 9866.23    1728 9886.43    1726 9957.59
GR  1722 9970.16    172110021.48    172610028.76    172810120.86    172810316.87
GR  173010363.84    173210395.26    173410419.34    173610459.58
HD  2.52    10.0

X1   2.6      11    994510028.92     390     450     430
GR  1736    9750    1732    9820    1732    9935    1730    9945    1724    9960
GR  1724    9965    1726   10020  1729.510028.92    1732   10265    173210415.66
GR1736.110462.65
HD  2.52    10.0

NC 0.055   0.055    0.03     0.3     0.5

QT

X1  2.73      10 9971.8710036.42     250     900     640
GR  1740 9756.45    1738 9787.82    1736 9811.88    1732 9971.87    1728 9986.23
GR  172810019.94    173210036.42    173410071.17    173810101.17 1740.0510127.41
HD  2.73    10.0

NC 0.055   0.055   0.043     0.3     0.5

X1  2.82      26    9978   10294     250     470     430
GR  1744    9654    1742    9680    1740    9705    1738    9724    1736    9764
GR1735.5    9884    1736    9934    1736    9978    1734    9982    1731    9994
GR  1731   10006    1734   10024    1736   10034    1736   10140    1736   10210
GR  1734   10248    1732   10254    1730   10260    1730   10282    1732   10288
GR  1734   10294    1736   10324    1738   10340    1740   10355    1742   10370
GR  1744   10387
HD  2.82    10.0

NC 0.055   0.055   0.036     0.1     0.3

X1  2.87      28    9979   10485     240     250     260
GR  1746    9679    1744    9706    1742    9737    1740    9771    1738    9979
GR  1736    9983    1734    9987    1734   10013    1736   10019    1738   10031
GR1738.5   10099    1738   10191    1736   10259    1734   10269    1732   10277
GR  1732   10314    1734   10320    1736   10327    1736   10387    1734   10417
GR  1732   10427    1732   10439    1734   10452    1736   10485    1738   10560
GR  1740   10627    1742   10666    1744   10698
HD  2.87    10.0

NC 0.055   0.055   0.037     0.1     0.3

X1   2.9      32    9978   10469     140     300     200
GR  1746    9726    1744    9756    1742    9794    1740    9826    1738    9978
GR  1736    9984    1734    9990    1734   10010    1736   10016    1738   10022
GR  1740   10100  1740.5   10141    1740   10186    1738   10301    1736   10307
GR  1734   10313    1734   10341    1736   10351    1738   10469    1740   10481
GR  1742   10494    1744   10502    1746   10513    1746   10530    1744   10536
GR  1742   10544    1740   10558    1738   10571    1738   10871    1740   10961
GR  1742   11016    1744   11076
HD   2.9    10.0

NC 0.055   0.055   0.048     0.1     0.3

X1  2.92      30    9970   10660     155     145     155
GR  1748    9820    1746    9845    1744    9870    1742    9910    1740    9970
GR  1738    9980    1735    9990    1735   10010    1738   10014    1740   10022
GR1741.5   10157    1740   10412    1738   10537    1736   10543    1734   10549
GR  1734   10565    1736   10585    1738   10596    1738   10660    1740   10671
GR  1742   10686    1742   10707    1740   10713    1738   10717    1738   10751
GR  1740   11007    1742   11187    1742   11377    1744   11482    1746   11602
HD  2.92    10.0

NC 0.055   0.055   0.049     0.1     0.3

QT

X1  2.97      27    9980   11098     270     280     270
GR  1748    9934    1746    9959    1744    9974    1742    9980    1740    9984
GR  1738    9988    1738   10012    1740   10020    1742   10052    1742   10134
GR1743.5   10314    1742   10552    1740   10718  1738.5   10764    1740   10822
GR  1738   10826    1736   10830    1736   10860    1738   10864    1740   10870
GR  1740   10927    1739   10974    1740   11044    1740   11098    1742   11354
GR  1744   11484    1746   11602
HD  2.97    10.0

NC 0.055   0.055    0.03     0.3     0.5
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X1  3.07      11 9979.9510028.11     570     500     550
GR  1750    9625    1748    9640    1746    9665    1746 9912.66    1744 9979.95
GR  1742 9989.15    174110019.02    174410028.11    174610080.68    174810180.41
GR  175010180.42
HD  3.07    10.0

NC 0.055   0.055    0.03     0.1     0.3

X1  3.13      10 9978.4110027.88     200     300     280
GR  1752 9442.64    1748 9512.79    1748 9870.47    1746 9978.41    1742 9996.99
GR  174210009.71    174810027.88    175010067.68  1750.2   10100    1752 10100.1
HD  3.13    10.0

X1  3.21      14    996510029.09     250     350     310
GR  1754    9595    1752    9630    1750    9660    1749    9680    1750    9710
GR  1751    9900    1750    9965    1746 9990.25    174610009.88 1749.9810029.09
GR  1750   10130    1752   10315  1752.1   10390    1754 10390.1
HD  3.21    10.0

X1  3.32      16 9955.2210020.21     520     520     520
GR  1758 9599.26    1758 9599.45    1756 9630.94    1756 9632.14    1754 9725.16
GR  1754 9955.22    1752 9974.26    1750 9981.64    175010008.82    175410020.21
GR  175410242.15  1756.7   10490  1756.2   10560  1756.2   10725  1756.5   10790
GR  175810929.84
HD  3.32    10.0

X1   3.4      14    9984   10031     480     440     470
GR  1762    9462    1760    9493    1758    9714    1758    9869    1756    9914
GR  1756    9979    1754    9984    1752   10000    1754   10016    1756   10031
GR  1758   10057    1758   10212    1760   10464    1761   10809
HD   3.4    10.0

X1  3.48      11 9985.3910018.81     400     400     400
GR  1764 9620.29    1762  9671.6    1762 9965.97    1760 9985.39    1758  9988.6
GR  1756 9993.36    175510009.59    175810018.81    1760 10110.6    176210298.95
GR  1764   10615
HD  3.48    10.0

X1  3.52      14 9981.9610017.06     200     200     200
GR  1766 9669.22    1764 9704.26    1764 9883.69    1762 9945.91    1762 9977.47
GR  1762 9977.93    1760 9981.96    1758 9986.06    175610002.04    175610006.86
GR  176010017.06    176210100.32    176410273.56    176610646.59
HD  3.52    10.0

X1   3.6       9 9979.8510013.99     400     450     420
GR  1770 9378.25    1768 9475.66    1766 9891.47    1764 9979.85    1760 9990.66
GR  176010010.55    176210013.99    176810247.91    177010365.75
HD   3.6    10.0

X1  3.65       9    9970   10015     250     260     280
GR1771.6 9358.43    1768    9470    1770    9580    1770    9830    1764    9970
GR  1762 9990.15    176210009.75    1764   10015    1770   10370
HD  3.65    10.0

X1  3.75      14 9982.65   10020     500     500     500
GR  1776    9590    1774    9655    1772    9710    1772    9725    1774    9780
GR  1774    9945    1772    9975    1768 9982.65    1764 9991.06    1764   10010
GR  1768   10020    1772   10310    1772   10840    1776   10885
HD  3.75    10.0

NC 0.055   0.055    0.03     0.3     0.5

X1  3.78      17  9978.410060.68     170     170     170
GR  1776 9660.11  1774.1    9740    1774  9978.4    1770 9983.58    1766 9992.92
GR  1766 9993.96    177010036.94    177210060.68    177210120.11    177010142.25
GR  176810151.27    176810155.15    177010163.26    177210225.58    177410348.04
GR  177410545.54    177510650.82
HD  3.78    10.0

NC 0.055   0.055    0.03     0.1     0.3

QT

X1  3.86      15 9980.73 10048.5     360     490     400
GR  1780 9728.15    1778 9811.03    1776 9980.73    1770 9992.41    177010006.32
GR  177210015.17    1774 10048.5    1774 10108.2    177610125.25    1778 10163.1
GR  177810205.78    177410274.92    177410300.77    177810373.74    1780 10496.8
HD  3.86    10.0

X1  3.96      16 9882.8510057.49     490     460     520
GR  1784 9852.78    1782 9882.85    1780 9912.96    1778 9952.91    1776 9978.94
GR  1774 9989.34    177410006.21    178010028.53    178210057.49    178210179.95
GR  178010409.79    177810418.05    1778 10422.6    178010433.36    178210548.23
GR  178410801.62
HD  3.96    10.0

NC 0.055   0.055    0.03     0.3     0.5

X1  4.05       9 9981.93   10025     400     285     500
GR  1788    9960    1782 9981.93    1780    9990    1779   10000    1780   10015
GR  1782   10025    1782   10200    1786   10270  1786.8   10320
HD  4.05    10.0

NC 0.055   0.055    0.03     0.1     0.3
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X1  4.11      11 9978.48 10107.8     240     300     250
GR  1792 9954.62    1790 9972.66    1786 9978.48    1784 9982.42    1782 9988.23
GR  178210014.08    1784 10019.7    1786 10107.8    1788 10273.4    179010355.58
GR  179010489.42
HD  4.11    10.0

X1  4.22      13    9975   10030     280     260     280
GR  1796    9435    1794    9530    1792    9595    1790    9650    1788    9780
GR  1788    9885    1790    9975    1786    9990  1785.5 9999.81    1786   10010
GR  1790   10030    1792   10085  1792.4   10135
HD  4.22    10.0

X1  4.23      13 9980.1610030.19     140     150     150
GR  1796 9520.61    1794 9614.39    1790 9762.38    1788 9933.91    1790 9961.17
GR  1790 9980.16    1788 9985.61    1786 9991.04    178610007.85    178810015.65
GR  179010030.19    179210081.29    179410132.36
HD  4.23    10.0

X1  4.31      12 9980.5410019.75     410     410     420
GR  1798 9706.51    1796  9770.7    1794 9896.31    1792 9980.54    1790  9986.9
GR  178810005.88    178810009.89    179010014.81    179210019.75    179410055.21
GR  179610110.95  1796.510150.57
HD  4.31    10.0

X1   4.4      14    9990   10030     475     490     510
GR  1802    9925    1800    9940    1798    9970    1796    9990    1794    9995
GR1792.3   10005    1794   10020    1796   10030    1796   10080  1794.3   10090
GR  1796   10110    1798   10175    1800   10210    1801   10270
HD   4.4    10.0

X1  4.49      12  9954.910053.62     490     450     450
GR  1806 9821.99    1804 9901.91    1802 9916.74    1800  9954.9    1798 9973.89
GR  1796 9983.53    1796 10011.1    179810018.97    180010053.62    180210105.02
GR  180410240.68  1804.5   10340
HD  4.49    10.0

X1  4.56       9    9975   10115     365     350     365
GR  1810    9730    1808    9915    1806    9945    1802    9975    1799   10000
GR  1802   10115    1804   10150    1806   10215    1808   10240
HD  4.56    10.0

NC 0.055   0.055    0.03     0.3     0.5

X1  4.57       9  9980.5 10011.5     110     100     110
X3     0                    9980    1808   10011    1808
GR  1810    9540    1808    9760    1806    9950    1806  9980.5    1800  9980.5
GR  1800 10011.5    1806 10011.5    1806   10220    1806   10500
HD  4.57    10.0

NC 0.055   0.055    0.03     0.1     0.3

X1  4.58      10    9982   10013     105     105     105
X3                       9982    1807   10013    1807
GR  1810    9685    1808    9790    1806    9945    1804    9982  1801.3    9982
GR1801.3   10013    1804   10013    1804   10250    1806   10320    1808   10500
HD  4.58    10.0

X1   4.6      18  9971.410015.98      83      83      83
GR  1812    9675    1810 9812.65    1810 9836.34    1808 9875.78    1808 9883.17
GR  1806 9966.89    1806  9971.4    1802  9987.4    1802 9998.69    1802 9998.98
GR  180610015.98    180610022.46    1806   10123    180410130.11    180410281.42
GR  180610322.77    180610440.24    180810500.19
HD   4.6    10.0

X1  4.65      14 9982.4710093.98     260     260     280
GR1815.5    9400    1814    9600    1810 9830.73    1808 9982.47    1806 9997.03
GR  180610002.86    180810014.29    180810049.57    180610059.42    180610060.51
GR  180810093.98    180810250.89    1810   10270    1810   10360
HD  4.65    10.0

X1  4.74      22 9960.2910029.03     400     500     500
GR  1818 9500.14    1816 9960.29    1814 9979.29    1812 9986.69    1810    9994
GR  1810 9994.01    1810 9999.53    1810 9999.55    181210010.02    181410029.03
GR  181410029.36    181410136.55    1813   10140    1814   10160    1814   10380
GR  1811   10400    1814   10425    1814   10440    1813   10485    1814   10530
GR  1815   10590    1815   10700
HD  4.74    10.0

X1  4.78      17 9964.8710021.41     300     100     200
X3                       9964.87    181810211.72    1816
GR  1820 9743.69    1818 9905.26    1818 9905.48    1818 9964.87    1818 9964.88
GR  1816 9983.35    1813 9995.72    181310010.03    181610021.41    181610211.72
GR  181610230.89    181410317.17    181310376.07    1814 10488.8    1814 10508.5
GR  1816   10540    1818   10640
HD  4.78    10.0

X1  4.82      28    997510009.43     480     480     480
X3    10
GR  1826    9480    1824 9740.85    1822 9830.85    1820 9875.16    1818 9888.17
GR  1818 9903.71    1820 9930.33    1820 9930.34    1820 9974.99    1820    9975
GR  1818 9990.22    181810005.12    182010009.43    1822 10013.6    182210024.29
GR  182010070.59    1818   10100    182010126.15    182010181.41    181810189.94
GR1817.1   10200    181810207.92    182010217.21    182010264.85    1818   10280
GR  1820   10315    1822   10435    1824   10565
HD  4.82    10.0
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X1   4.9      14    9940   10018     220     160     200
X3                        9940    1824   10018    1824
GR  1826    9730    1824    9825    1824    9940    1822  9961.4    182210007.63
GR  1824   10018    1824   10030    1822   10155    1822   10290    1822   10310
GR  1822   10330    1824   10405    1826   10560    1828   10750
HD   4.9    10.0

X1  4.96      17 9974.1910011.03     400     200     320
X3                                 10156.63    1826
GR  1828 9716.18    1828 9717.02    1826 9800.79    1826 9974.19    1822 9995.82
GR  182210000.05    182610011.03    182610011.04    182610156.72    182610156.73
GR  1824   10310    182410344.97    182610425.12    182710592.76    182710594.98
GR  1828   10670    1830   10790
HD  4.96    10.0

X1  5.03      13 9975.1210012.26     345     340     365
X3                                 10133.33    1830
GR  1833    9515    1832 9590.59    1830 9640.88    1830 9975.12    1826 9992.06
GR  182610001.75    183010012.26    1830 10053.1    183010133.33    182810188.37
GR  182810281.59    1832   10620  1832.5   10750
HD  5.03    10.0

X1  5.09      14    9970   10025     300     310     300
X3                                    10075    1834
GR  1835    9480    1834    9515    1832    9550    1832    9970    1830    9985
GR  1831   10000    1832   10025    1834   10075    1830   10120    1832   10145
GR  1832   10255    1834   10320    1834   10435    1836   10780
HD  5.09    10.0

X1  5.15      14    9978   10025     350     355     352
X3                                    10170    1836
GR  1839    9870    1838    9945    1836    9978    1834    9988    1830   10000
GR  1830   10010    1834   10025    1834   10130    1836   10170    1836   10200
GR  1835   10320    1836   10495    1838   10522    1840   10780
HD  5.15    10.0

X1  5.21      21    9970   10030     330     300     310
X3                                    10135    1840
GR  1842    9685    1840    9780    1838    9860    1836    9885    1836    9890
GR  1838    9915    1838    9970    1836    9985    1834   10000    1836   10015
GR  1838   10030    1838   10085    1837   10110    1838   10120    1840   10135
GR  1840   10150    1838   10245    1838   10310    1840   10355    1840   10400
GR  1842   10525
HD  5.21    10.0

NC 0.055   0.055    0.03     0.3     0.5

X1  5.31      19 9988.2310044.49     500     480     500
GR  1847    9325    1846 9444.34    1844 9557.15    1844 9887.76    1840 9911.33
GR  1840 9919.33    1840 9919.34    1842 9933.33    1842 9933.43    1842 9988.23
GR  1842 9988.24    1838 9997.67    183810005.97    1842 10024.7    184410044.49
GR  1844 10044.5    184410061.08    184410218.05    1846   10565
HD  5.31    10.0

X1  5.38      11    9985   10015     350     425     375
GR  1850    9815    1848    9880    1846    9900    1844    9910    1844    9985
GR  1841   10000    1844   10015    1846   10030    1846   10110    1848   10255
GR  1850   10460
HD  5.38    10.0

NC 0.055   0.055    0.03     0.1     0.3

X1  5.48      15 9978.4110044.06     530     500     500
GR  1855    9300    1854    9440    1854    9750    1852    9790    1852    9895
GR  1850 9929.89    1850 9978.41    184610000.42    1846 10004.4    185010044.06
GR  185210141.09    185210147.22    185210418.73    185410547.75    185610626.53
HD  5.48    10.0

X1  5.57      16    9977   10035     400     450     450
GR  1859    9400    1858    9520    1856    9700    1858    9731    1858    9800
GR  1856    9812    1854    9824    1854    9977    1852    9985    1850    9993
GR  1850   10005    1852   10014    1854   10024    1856   10035    1858   10170
GR  1860   10299
HD  5.57    10.0

X1  5.64       9    9955   10170     370     320     345
GR  1862    9650    1860    9775    1858    9870    1856    9955    185510037.94
GR  1856   10170    1858   10275    1860   10365  1862.5   10575
HD  5.64    10.0

X1  5.66      23 9980.02   10030     460     320     440
GR  1864 9504.86    1864 9505.03    1862  9622.9    1862 9622.94    1862 9802.24
GR  1862 9802.28    1862 9805.57    1862 9805.58    1860 9814.49    1858 9838.73
GR  1858 9838.74    1858 9839.05    1860 9857.77    1860 9980.02    1854 9995.33
GR  1854 10003.7    185810014.57    1859   10030    1860 10136.3    186010136.31
GR  186210169.16  1862.5   10210    1863   10615
HD  5.66    10.0

X1  5.76      15 9968.5810043.06     470     570     540
GR  1870    9640    1868 9674.85    1866 9704.99    1864 9712.43    1866 9741.92
GR  1866    9835    1866    9865    1864 9968.58    1862 9985.72    186210014.25
GR  186410043.06    186610096.64    1868 10124.8    187010142.86    187010144.93
HD  5.76    10.0
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X1  5.83      16    9960   10030     375     380     380
GR  1874    9500    1872    9550    1872    9650   1872    9710    1870    9735
GR  1870    9890    1868    9960    1866    9990  1865.5   10000    1866   10005
GR  1868   10030    1868   10105    1870   10120    1872   10140    1874   10155
GR  1875   10250
HD  5.83    10.0

X1  5.92      19 9948.3410024.34     375     375     400
GR  1877    9720    1876 9854.04    1874 9948.34    1872 9975.43  1870.2   10000
GR  187210006.77    187410015.55    187610024.34    187610034.96    187410094.25
GR  187210130.93    1870 10149.3    187010150.59    187210177.58    187410238.14
GR  187410251.91    187410318.15    187610335.66    187810350.37
HD  5.92    10.0

X1  6.01      17    9920   10035     485     510     490
GR  1883    9750    1882    9870    1880    9920    1878    9955    1876    9980
GR1875.5   10000    1876   10010    1878   10020    1880   10035    1880   10075
GR  1878   10160    1877   10175    1878   10190    1880   10260    1882   10280
GR  1884   10400    1886   10580
HD  6.01    10.0

X1  6.09      10    9935   10070     470     435     445
GR  1886    9815    1884    9890    1882    9935    1880    9970  1879.5   10010
GR  1880   10050    1882   10070    1884   10345    1886   10380    1888   10520
HD  6.09    10.0

QT

X1  6.16      20 9977.6510050.58     270     450     360
GR1892.5    9875    1892 9961.21    1890  9972.1    1888 9977.65    1886  9983.3
GR  1884 9989.16    1883 9996.77    1883 9997.18    188410022.78    188610039.58
GR  188810050.58    188810110.58    188610208.91    188610225.08    188810318.94
GR  189010345.72    1892 10414.9    189210424.02    189210428.81 1893.0810468.67
HD  6.16    10.0

X1  6.25      14 9961.8410045.42     490     430     460
GR  1898 9911.34    1896 9931.58    1894 9947.24    1892 9961.84    1890 9976.08
GR  1888    9990    1888   10015    1890 10030.1    189210045.42    189210069.44
GR  189210268.14    189410454.21    189610476.27    189810569.33
HD  6.25    10.0

X1  6.32      14 9970.9910020.18     410     350     390
GR  1900 9951.16    1898  9957.9    1896 9964.52    1894 9970.99    1892 9977.55
GR  1890 9984.06    189010006.52    189210013.72    189410020.18    189610100.18
GR  189810266.52    189810293.42    189810347.28    190010412.02
HD  6.32    10.0

X1  6.43      13    9925   10030     475     360     450
GR  1906    9655    1904    9665    1902    9680    1900    9690    1900    9925
GR  1898    9970  1896.5    9990  1896.5   10010    1898   10020    1900   10030
GR  1902   10040    1904   10120    1906   10285
HD  6.43    10.0

X1   6.5      16 9947.4510071.54     310     355     345
GR  1910 9636.39    1908 9702.53    1906 9718.78    1904 9747.02    1904  9794.4
GR  1904 9947.45    1902 9967.32    1900 9987.47    1899    9995    1899   10010
GR  190010019.82    190210042.69    190410071.54    190610099.13    1908 10152.4
GR  1910   10187
HD   6.5    10.0

X1  6.58      12  9965.110022.84     430     430     430
GR  1912 9897.27    1910 9926.14    1908 9950.13    1906  9965.1    1904 9980.22
GR  1902 9998.11    190210006.79    190410014.85    190610022.84    190810088.23
GR  191010249.56    191210282.55
HD  6.58    10.0

X1  6.63      14 9985.9110021.82     300     290     290
GR  1916 9976.91    1914 9982.13    1912 9983.41    1910 9984.66    1908 9985.91
GR  1906 9987.08    1905    9995    1905   10005    190610015.13    190810021.82
GR  191010050.15    191210131.79    191410273.67    191610318.49
HD  6.63    10.0

X1  6.71      10 9981.63   10025     425     350     390
GR  1918    9970 1914.04 9977.71 1912.03 9981.63    1908    9990  1907.5   10000
GR  1908   10010    1912   10025    1914   10045    1916   10090    1918   10225
HD  6.71    10.0

X1   6.8      23 9976.6310016.52     500     400     495
GR  1924    9660    1920    9705    1919    9725    1920    9755    1920    9800
GR  1920 9880.75    1920 9901.03    1918 9976.63    1918 9976.81    1916 9982.58
GR  1916 9982.91    1914  9988.6    1914 9988.73    191410004.27    191410004.41
GR  191610010.43    191610010.46    1918 10016.4    191810016.52    192010022.44
GR  192010022.57    192210028.44  1923.7   10040
HD   6.8    10.0

X1   6.9      16 9954.1710017.39     490     560     529
GR  1930 9598.79    1926    9625    1926    9705    1928    9770    1928    9800
GR  1928 9822.48    1926 9857.37    1924 9954.17    1922 9987.42    192010000.76
GR  192010011.02    192210014.22    192410017.39    192610020.56    192810023.72
GR  193010026.89
HD   6.9    10.0

NC 0.055   0.055    0.03     0.3     0.5

X1  6.98      14 9975.9710031.62     400     470     437
```

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GR  1934 9723.34    1932    9740    1932    9900    1932    9935    1930 9944.17
GR  1928 9975.97    1926  9985.4    1924 9994.24    192410004.06    192610020.09
GR  192810031.62    193010071.11    193210085.11    193410100.97
HD  6.98    10.0

NC 0.055   0.055    0.03     0.1     0.3

X1  7.08      13 9953.0710021.87     485     500     500
GR  1940 9917.61    1938 9925.72    1936 9934.65    1934 9943.58    1932 9953.07
GR  1930 9965.94    1929    9987    193010007.17    193210021.87    193410036.31
GR  1936 10051.7    1938 10067.1    1940 10082.5
HD  7.08    10.0

X1  7.17      13 9978.7610024.18     500     520     500
GR  1944 9950.59    1942 9955.33    1940 9960.08    1938 9967.15    1936 9978.76
GR  1934  9991.7  1934.3   10000    193410014.37    193610024.18    1938   10034
GR  194010043.85    194210082.22    194410098.58
HD  7.17    10.0

NC 0.055   0.055    0.03     0.3     0.5

X1  7.28      14 9988.7110010.16     475     410     554
GR  1950    9710    1944    9760    1942    9800    1942 9836.63  1941.8 9849.74
GR1941.8 9874.17    1942 9924.41    1942 9988.71  1940.8    9998    194210010.16
GR  194410021.65    194610030.54    1948 10038.9    1950 10047.2
HD  7.28    10.0

NC 0.055   0.055    0.03     0.1     0.3

X1  7.36      12 9949.3210023.48     420     470     446
GR  1954    9725    1952    9740    1950    9800    1950 9835.52    1948 9949.32
GR  1946 9977.98  1944.5    9998    194610011.65    194810023.48    195010033.89
GR  195210040.39    195410046.86
HD  7.36    10.0

X1  7.46      13 9969.4710051.31     490     510     500
GR  1960 9830.45    1958 9861.07    1956 9923.22    1954 9969.47    1952 9976.86
GR1951.5    9990    1952 10000.7    195210032.17    195310051.31    195410081.59
GR  1956 10119.3    195810130.99    1960 10142.8
HD  7.46    10.0

X1  7.55      14 9970.0710028.16     510     480     500
GR  1968 9877.72    1966 9895.81    1964 9913.89    1962 9929.39    1960 9970.07
GR  1958 9981.49  1956.7   10000    195810024.51    196010028.16    196010145.16
GR  196210158.57    196410173.58    1966 10182.6    196810293.44
HD  7.55

X1  7.65      13 9977.3710022.56     520     470     500
GR  1970    9787    1966    9805  1965.5    9882    1964    9917    1964 9977.37
GR  1962 9986.15  1961.8   10000    196210010.39    196410016.47    196610022.56
GR  196610109.69    197010128.52    1971   10165
HD  7.65

X1  7.74      22 9983.7410035.24     425     475     500
GR  1978    9733    1976    9744    1974    9754    1972    9765    1972    9800
GR1972.3    9836    1972    9688    1972    9915  1972.4    9968    1972    9981
GR1970.9 9983.74    1970    9987  1969.1   10000    1970   10010    197110035.24
GR  1972   10062  1972.3   10086    1972   10097    1972   10123    1974   10127
GR  1976   10133    1978   10138
HD  7.74

X1  7.84      16    9984   10025     575     425     500
GR  1984    9793    1982    9828    1980    9841    1978    9908    1976    9916
GR  1976    9918    1976    9941    1976    9975    1976    9984  1974.4   10000
GR  1976   10025    1976   10036    1978   10073    1980   10206    1982   10222
GR  1983   10267
HD  7.84    10.0

X1  7.89      18    9983   10054     300     220     300
GR  1986    9756    1984    9764    1984    9845    1984    9878    1982    9978
GR  1982    9983    1980    9987    1978    9992    1977   10000    1978   10020
GR  1980   10054    1980   10082  1981.8   10149    1982   10170    1982   10189
GR  1982   10219    1984   10224  1985.5   10256
HD  7.89    10.0

X1  7.98      20    9975   10039     280     520     465
GR  1992    9500    1990    9570    1988    9630    1986    9740    1986    9773
GR  1986    9859  1986.4    9898    1986    9927    1986    9950    1986    9975
GR  1984    9982    1982    9991  1981.8   10000    1982   10005    1984   10017
GR  1986   10039    1988   10075  1988.2   10097    1990   10116    1992   10127
HD  7.98    10.0

X1  8.02      16    9977   10037     215     245     235
GR  1996    9610    1992    9700  1991.9    9765    1990    9862    1988    9894
GR  1988    9897  1989.2    9951    1988    9977    1986    9989  1985.1   10000
GR  1986   10020    1988   10037    1990   10077    1992   10109    1994   10116
GR  1996   10125
HD  8.02    10.0
EJ

T4  Project: Upper Cave Creek Watercourse Master Plan Studies
T5  Client : Flood Control District of Maricopa County (FCDMC)
T6  Date:    August 3, 1999
T7  Firm:    Stantec Consulting, Inc.
T8  ********************************************************
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```
I1            10
I4  SAND       4       1      14       0       0       0       0       0
I5           0.5     0.5    0.25     0.5    0.25       0     1.0
LQ     Q       1    2500    5000    7500
LT    QS     0.1    8916   11552   15559
LF   VFS 0.01512 0.01512 0.01902 0.02003
LF    FS 0.03115 0.03115 0.03238 0.03321
LF    MS 0.06244 0.06244 0.06561 0.06750
LF    CS 0.06509 0.06509 0.06832 0.07001
LF   VCS 0.07187 0.07187 0.07556 0.07736
LF   VFG 0.09965 0.09965 0.10454 0.10682
LF    FG 0.14704 0.14704 0.15381 0.15628
LF    MG 0.21408 0.21408 0.22359 0.22410
LF    CG 0.26298 0.26298 0.20829 0.20071
LF   VCG 0.02175 0.02175 0.03432 0.02736
LF    SC 0.00870 0.00870 0.01298 0.01582
LF    LC 0.00014 0.00014 0.00158 0.00079
LF    SB       0       0       0       0
LF    MB       0       0       0       0
PF          8.02     1.0   152.4   101.6      88    76.2      85    50.8      79
PFC 38.1      71    25.4      63   19.05      57    12.7      47   9.525      40
PFC 6.35      33    4.75      28    2.38      21       2      19    1.19      15
PFC 0.59      10    0.42       8     0.3       5   0.149       3   0.074     1.8

$LOCAL
        Trib at RS 0.33
LQL    Q      0.1    1000
LTL   QS     0.10    0.10
LFL  VFS     0.10    0.10
LFL   FS     0.10    0.10
LFL   MS     0.10    0.10
LFL   CS     0.10    0.10
LFL  VCS     0.10    0.10
LFL  VFG     0.10    0.10
LFL   FG     0.10    0.10
LFL   MG     0.10    0.10
LFL   CG     0.05    0.05
LFL  VCG     0.05    0.05
LFL   SC     0.05    0.05
LFL   LC     0.05    0.05
LFL   SB     0.00    0.00
LFL   MB     0.00    0.00

        Paradise Wash
LQL    Q      0.1    1000    3000    5000
LTL   Qs      0.1   13715   37712   41663
LFL  VFS 0.01058 0.00636 0.00545 0.00631
LFL   FS 0.04436 0.02544 0.02006 0.02526
LFL   MS 0.26267 0.14852 0.12892 0.13132
LFL   CS 0.14797 0.08564 0.07565 0.07554
LFL  VCS 0.06598 0.03986 0.03591 0.03581
LFL  VFG 0.07781 0.05010 0.04729 0.04696
LFL   FG 0.14900 0.10060 0.10449 0.10211
LFL   MG 0.22444 0.16710 0.20635 0.19292
LFL   CG 0.01718 0.21839 0.20780 0.19199
LFL  VCG       0 0.15798 0.12954 0.13980
LFL   SB       0       0 0.03853 0.05196
LFL   LC       0       0       0       0
LFL   SB       0       0       0       0
LFL   MB       0       0       0       0

        Desert Hills Wash
LQL    Q      0.1      11    3300    6600    9900
LTL   Qs      0.1      26    5970    9596   12935
LFL  VFS 0.01254 0.01254 0.00409 0.00354 0.00330
LFL   FS 0.07372 0.07372 0.02292 0.02018 0.01885
LFL   MS 0.30241 0.30241 0.09481 0.07205 0.07283
LFL   CS 0.26028 0.26028 0.08805 0.06434 0.06378
LFL  VCS 0.15271 0.15271 0.05881 0.04312 0.04280
LFL  VFG 0.09027 0.09027 0.04724 0.03485 0.03475
LFL   FG 0.09428 0.09428 0.12007 0.08687 0.08962
LFL   MG 0.01379 0.01379 0.20332 0.14036 0.15311
LFL   CG 0.00000 0.00000 0.23981 0.34597 0.30204
LFL  VCG 0.00000 0.00000 0.12088 0.18871 0.21605
LFL   SB 0.00000 0.00000 0.00000 0.00000 0.00286
LFL   LC 0.00000 0.00000 0.00000 0.00000 0.00000
LFL   SB       0       0       0       0       0
LFL   MB       0       0       0       0       0

        Trib near RS 3.86
LQL    Q      0.1    1000
LTL   QS     0.10    0.10
LFL  VFS     0.10    0.10
LFL   FS     0.10    0.10
LFL   MS     0.10    0.10
LFL   CS     0.10    0.10
LFL  VCS     0.10    0.10
LFL  VFG     0.10    0.10
LFL   FG     0.10    0.10
LFL   MG     0.10    0.10
LFL   CG     0.05    0.05
LFL  VCG     0.05    0.05
LFL   SC     0.05    0.05
LFL   LC     0.05    0.05
LFL   SB     0.00    0.00
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LFL   MB    0.00    0.00

        Trib near RS 6.09
LQL    Q     0.1    1000
LTL   QS    0.10    0.10
LFL  VFS    0.10    0.10
LFL   FS    0.10    0.10
LFL   MS    0.10    0.10
LFL   CS    0.10    0.10
LFL  VCS    0.10    0.10
LFL  VFG    0.10    0.10
LFL   FG    0.10    0.10
LFL   MG    0.10    0.10
LFL   CG    0.05    0.05
LFL  VCG    0.05    0.05
LFL   SC    0.05    0.05
LFL   LC    0.05    0.05
LFL   SB    0.00    0.00
LFL   MB    0.00    0.00

$HYD
$RATING
RC            11    2000       0       0 1646.00 1650.85 1652.85 1654.34 1655.54
RC       1657.39 1657.73 1658.43 1658.93 1659.31 1659.78

*    A  Level output at time step 1 (0.25 days)
Q    199    169        3      11       4       0
T     68     68       68      68      68      68
X           0.05   0.250
*    A  Level output at time step 2 (0.0139 day)
Q   4921   3731       11      31      39       0
W 0.0139
*    A  Level output at time step 3 (0.0208 day)
Q   3290   2064       15      39     437       9
W 0.0208
*    A  Level output at time step 4 (0.0208 day)
Q   9407   1732       91      87     563     384
W 0.0208
*    A  Level output at time step 5 (0.0139 day)
Q  19145   1391      636    1246     468       0
W 0.0139
*    A  Level output at time step 6 (0.0139 day)
Q  17810   1046     1162    5179       0     261
W 0.0139
*    A  Level output at time step 7 (0.0208 day)
Q  17309    733     4610    9881     286     417
W 0.0208
*    A  Level output at time step 8 (0.0208 day)
Q  14900    497     4921    9060     414       0
W 0.0208
*    A  Level output at time step 9 (0.0278 day)
Q   8650    344     2570    5129     474     127
W 0.0278
*    A  Level output at time step 10 (0.0278 day)
Q   4620    265     1245    2584     351     166
W 0.0278
*    A  Level output at time step 11 (0.0278 day)
Q   3121    207      712    1491     245     123
W 0.0278
*    A  Level output at time step 12 (0.0347 day)
Q   2264    173      457     955     162      80
W 0.0347
*    A  Level output at time step 13 (0.0764 day)
Q   1616    148      307     643      90      44
W 0.0764
*    A  Level output at time step 14 (0.0764 day)
Q   1440    268      235     487      67      24
W 0.0764
*    A  Level output at time step 15 (0.1458 day)
Q   1717    124      357     751      54      33
W 0.1458
*    A  Level output at time step 16 (0.2083 day)
Q    516     15       87     157      51      29
X        0.02083  0.2083
$VOL
$$END
```

```
*************************************************     ***********************************
*  SCOUR AND DEPOSITION IN RIVERS AND RESERVOIRS  *     *  U.S. ARMY CORPS OF ENGINEERS   *
*        Version: 4.1.00 -  OCTOBER 1993          *     *  HYDROLOGIC ENGINEERING CENTER  *
*  INPUT FILE:  AW-F100F.DAT                      *     *  609 SECOND STREET              *
*  OUTPUT FILE: AW-F100F.OUT                      *     *  DAVIS, CALIFORNIA 95616-4687   *
*  RUN DATE: 10 OCT 00    RUN TIME: 07:48:51      *     *  (916) 756-1104                 *
*************************************************     ***********************************

                      X     X  XXXXXXX   XXXXX           XXXXX
                      X     X  X        X     X         X     X
                      X     X  X        X               X
                      XXXXXXX  XXXX     X        XXXXX  XXXXXX
                      X     X  X        X               X     X
                      X     X  X        X     X         X     X
                      X     X  XXXXXXX   XXXXX           XXXXX

         ****************************************************************
         *  MAXIMUM LIMITS FOR THIS VERSION ARE:                        *
         *       10  Stream Segments (Main Stem + Tributaries)          *
         *      500  Cross Sections                                     *
         *      200  Elevation/Station Points per Cross Section         *
         *       20  Grain Sizes                                        *
         *       10  Control Points                                     *
         ****************************************************************

T1       Cave Creek and Apache WMP
T2       by Stantec:  Proj. No. 82000077                    File: AW-F100F.DAT
T3       for Flood Control District of Maricopa County      Date: 07-28-99   srg

N values...  Left   Channel   Right    Contraction    Expansion
           0.0550   0.0300   0.0550       1.1000      0.7000

SECTION NO.      0.200
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

LOCAL INFLOW POINT  1 occurs upstream from Section No.       0.200

SECTION NO.      0.330
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.      0.430
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.      0.540
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.      0.630
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.      0.710
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.      0.750
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
           0.0550   0.0300   0.0550       1.3000      0.5000

SECTION NO.      0.840
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.      0.990
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
           0.0550   0.0300   0.0550       1.1000      0.7000

SECTION NO.      1.090
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
           0.0550   0.0300   0.0550       1.3000      0.5000

SECTION NO.      1.180
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.      1.270
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
           0.0550   0.0300   0.0550       1.1000      0.7000

SECTION NO.      1.370
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.      1.470
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.      1.560
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.      1.600
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.      1.660
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...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     1.750
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     1.810
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     1.850
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     1.880
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     2.000
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     2.080
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     2.170
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     2.240
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     2.330
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     2.400
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
           0.0550   0.0300   0.0550       1.3000      0.5000

SECTION NO.     2.470
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
           0.0550   0.0300   0.0550       1.1000      0.7000

SECTION NO.     2.520
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     2.600
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
           0.0550   0.0300   0.0550       1.3000      0.5000

LOCAL INFLOW POINT  2 occurs upstream from Section No.       2.600

SECTION NO.     2.730
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
           0.0550   0.0430   0.0550       1.3000      0.5000

SECTION NO.     2.820
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
           0.0550   0.0360   0.0550       1.1000      0.7000

SECTION NO.     2.870
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
           0.0550   0.0370   0.0550       1.1000      0.7000

SECTION NO.     2.900
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
           0.0550   0.0480   0.0550       1.1000      0.7000

SECTION NO.     2.920
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
           0.0550   0.0490   0.0550       1.1000      0.7000

LOCAL INFLOW POINT  3 occurs upstream from Section No.       2.920

SECTION NO.     2.970
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
           0.0550   0.0300   0.0550       1.3000      0.5000

SECTION NO.     3.070
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
           0.0550   0.0300   0.0550       1.1000      0.7000
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SECTION NO.      3.130
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.      3.210
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.      3.320
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.      3.400
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.      3.480
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.      3.520
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.      3.600
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.      3.650
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.      3.750
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left    Channel   Right    Contraction    Expansion
           0.0550   0.0300   0.0550       1.3000      0.5000

SECTION NO.      3.780
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left    Channel   Right    Contraction    Expansion
           0.0550   0.0300   0.0550       1.1000      0.7000

LOCAL INFLOW POINT  4 occurs upstream from Section No.       3.780

SECTION NO.      3.860
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.      3.960
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left    Channel   Right    Contraction    Expansion
           0.0550   0.0300   0.0550       1.3000      0.5000

SECTION NO.      4.050
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left    Channel   Right    Contraction    Expansion
           0.0550   0.0300   0.0550       1.1000      0.7000

SECTION NO.      4.110
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.      4.220
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.      4.230
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.      4.310
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.      4.400
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.      4.490
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.      4.560
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left    Channel   Right    Contraction    Expansion
           0.0550   0.0300   0.0550       1.3000      0.5000

SECTION NO.      4.570
...Left Encroachment defined at station  9980.000 at elevation  1808.000
...Right Encroachment defined at station 10011.000 at elevation  1808.000
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left    Channel   Right    Contraction    Expansion
           0.0550   0.0300   0.0550       1.1000      0.7000

SECTION NO.      4.580
...Left Encroachment defined at station  9982.000 at elevation  1807.000
...Right Encroachment defined at station 10013.000 at elevation  1807.000
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.      4.600
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.      4.650
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...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     4.740
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     4.780
...Left Encroachment defined at station  9964.870 at elevation  1818.000
...Right Encroachment defined at station 10211.720 at elevation  1816.000
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     4.820
...Ineffective Flow Area - Method 1 - Left Overbank  Right Overbank
          Natural Levees at Station       9975.000      10009.430
              Ineffective Elevation       1820.000       1820.000
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     4.900
...Left Encroachment defined at station  9940.000 at elevation  1824.000
...Right Encroachment defined at station 10018.000 at elevation  1824.000
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     4.960
...Right Encroachment defined at station 10156.630 at elevation  1826.000
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     5.030
...Right Encroachment defined at station 10133.330 at elevation  1830.000
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     5.090
...Right Encroachment defined at station 10075.000 at elevation  1834.000
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     5.150
...Right Encroachment defined at station 10170.000 at elevation  1836.000
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     5.210
...Right Encroachment defined at station 10135.000 at elevation  1840.000
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
           0.0550   0.0300   0.0550       1.3000      0.5000

SECTION NO.     5.310
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     5.380
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
           0.0550   0.0300   0.0550       1.1000      0.7000

SECTION NO.     5.480
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     5.570
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     5.640
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     5.660
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     5.760
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     5.830
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     5.920
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     6.010
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     6.090
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

LOCAL INFLOW POINT  5 occurs upstream from Section No.       6.090

SECTION NO.     6.160
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     6.250
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     6.320
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     6.430
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     6.500
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...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.      6.580
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.      6.630
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.      6.710
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.      6.800
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.      6.900
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left    Channel   Right    Contraction    Expansion
           0.0550   0.0300   0.0550       1.3000      0.5000

SECTION NO.      6.980
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left    Channel   Right    Contraction    Expansion
           0.0550   0.0300   0.0550       1.1000      0.7000

SECTION NO.      7.080
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.      7.170
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left    Channel   Right    Contraction    Expansion
           0.0550   0.0300   0.0550       1.3000      0.5000

SECTION NO.      7.260
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left    Channel   Right    Contraction    Expansion
           0.0550   0.0300   0.0550       1.1000      0.7000

SECTION NO.      7.360
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.      7.460
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.      7.550
...DEPTH of the Bed Sediment Control Volume =    0.00 ft.

SECTION NO.      7.650
...DEPTH of the Bed Sediment Control Volume =    0.00 ft.

SECTION NO.      7.740
...DEPTH of the Bed Sediment Control Volume =    0.00 ft.

SECTION NO.      7.840
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.      7.890
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.      7.980
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.      8.020
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

NO. OF CROSS SECTIONS IN STREAM SEGMENT=104
NO. OF INPUT DATA MESSAGES =   0

TOTAL NO. OF CROSS SECTIONS IN THE NETWORK = 104
TOTAL NO. OF STREAM SEGMENTS IN THE NETWORK=   1
END OF GEOMETRIC DATA

==========================================================================================

T4  Project: Upper Cave Creek Watercourse Master Plan Studies
T5  Client : Flood Control District of Maricopa County (FCDMC)
T6  Date:    August 3, 1999
T7  Firm:    Stantec Consulting, Inc.
T8  ****************************************************

        Cave Creek and Apache WMP
        by Stantec:  Proj. No. 82000077                    File: AW-F100F.DAT
        for Flood Control District of Maricopa County      Date: 07-28-99   srg

- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
SEDIMENT PROPERITES AND PARAMETERS

       SPI      IBG     MNQ      SPGF      ACGR      NFALL     IBSHER
I1     10.        0       1     1.000    32.174         2          1
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 SANDS - BOULDERS ARE PRESENT
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	MTC	IASA	LASA	SPGS	GSF	BSAE	PSI	UWDLB
I4	4	1	14	2.650	0.667	0.500	30.000	93.000

USING TRANSPORT CAPACITY RELATIONSHIP # 4, YANG
GRAIN SIZES UTILIZED (mean diameter - mm)

VERY FINE SAND....	0.088	MEDIUM GRAVEL.....	11.314
FINE SAND.....	0.177	COARSE GRAVEL.....	22.627
MEDIUM SAND.....	0.354	VERY COARSE GRAVEL	45.255
COARSE SAND.....	0.707	SMALL COBBLES.....	90.510
VERY COARSE SAND..	1.414	LARGE COBBLES.....	181.019
VERY FINE GRAVEL..	2.828	SMALL BOULDERS....	362.039
FINE GRAVEL.....	5.657	MEDIUM BOULDERS...	724.077

COEFFICIENTS FOR COMPUTATION SCHEME WERE SPECIFIED

	DBI	DBN	XID	XIN	XIU	UBI	UBN	JSL
I5	0.500	0.500	0.250	0.500	0.250	0.000	1.000	1

SEDIMENT LOAD TABLE FOR STREAM SEGMENT # 1
LOAD BY GRAIN SIZE CLASS (tons/day)

LQ	Q	1.00000	2500.00	5000.00	7500.00
LF	VFS	0.151200E-02	134.810	219.719	311.647
LF	FS	0.311500E-02	277.733	374.054	516.714
LF	MS	0.624400E-02	556.715	757.927	1050.23
LF	CS	0.650900E-02	580.342	789.233	1089.29
LF	VCS	0.718700E-02	640.793	872.869	1203.64
LF	VFG	0.996500E-02	888.479	1207.65	1662.01
LF	FG	0.147040E-01	1311.01	1776.81	2431.56
LF	MG	0.214080E-01	1908.74	2582.91	3486.77
LF	CG	0.262980E-01	2344.73	2406.17	3122.85
LF	VCG	0.217500E-02	193.923	396.465	425.694
LF	SC	0.870000E-03	77.5692	149.945	246.143
LF	LC	0.140000E-04	1.24824	18.2522	12.2916
LF	SB	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19
LF	MB	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19
	TOTAL	0.100001	8916.09	11552.0	15558.8

REACH GEOMETRY FOR STREAM SEGMENT 1

CROSS SECTION NO.	REACH LENGTH (ft)	MOVABLE BED WIDTH	INITIAL BED-ELEVATIONS LEFT SIDE (ft)	THALWEG (ft)	RIGHT SIDE (ft)	ACCUMULATED CHANNEL DISTANCE FROM DOWNSTREAM (ft)	(miles)
	0.000						
0.200		903.650	1660.000	1646.000	1660.000	0.000	0.000
	650.000						
0.330		743.070	1663.000	1652.200	1664.000	650.000	0.123
	500.000						
0.430		890.000	1666.000	1655.000	1666.000	1150.000	0.218
	640.000						
0.540		1014.050	1670.000	1660.000	1670.000	1790.000	0.339
	500.000						
0.630		980.420	1673.000	1664.000	1673.040	2290.000	0.434
	400.000						
0.710		790.870	1676.000	1664.000	1676.000	2690.000	0.509
	200.000						
0.750		1059.940	1676.000	1666.000	1676.000	2890.000	0.547
	440.000						
0.840		735.180	1679.000	1670.000	1680.000	3330.000	0.631
	900.000						
0.990		1897.510	1686.000	1678.000	1685.990	4230.000	0.801
	500.000						
1.090		1732.000	1690.000	1680.000	1690.000	4730.000	0.896
	500.000						
1.180		1063.000	1694.000	1680.000	1693.500	5230.000	0.991
	460.000						
1.270		1127.000	1698.000	1684.000	1698.000	5690.000	1.078
	500.000						
1.370		560.560	1698.000	1688.000	1698.000	6190.000	1.172
	500.000						
1.470		641.430	1702.000	1690.000	1702.000	6690.000	1.267
	500.000						
1.560		664.340	1706.000	1692.000	1706.000	7190.000	1.362
	180.000						
1.600		646.210	1706.000	1692.000	1706.000	7370.000	1.396
	250.000						
1.660		561.750	1708.000	1696.000	1708.000	7620.000	1.443
	500.000						
1.750		552.560	1710.000	1698.000	1710.000	8120.000	1.538
	300.000						
1.810		541.980	1712.000	1700.000	1712.000	8420.000	1.595
	190.000						
1.850		632.870	1712.000	1700.000	1712.000	8610.000	1.631
	200.000						
1.880		712.350	1713.000	1702.100	1713.100	8810.000	1.669
	490.000						
2.000		865.540	1715.900	1708.500	1716.000	9300.000	1.761
	440.000						
2.080		777.980	1718.000	1710.000	1718.000	9740.000	1.845
	520.000						

2.170		658.780	1722.000	1714.000	1722.000	10260.000	1.943
	380.000						
2.240		433.760	1726.000	1714.000	1726.000	10640.000	2.015
	450.000						
2.330		267.000	1730.000	1717.000	1730.000	11090.000	2.100
	360.000						
2.400		253.340	1732.000	1718.000	1732.030	11450.000	2.169
	400.000						
2.470		439.460	1734.000	1720.000	1734.000	11850.000	2.244
	260.000						
2.520		654.550	1736.000	1721.000	1736.000	12110.000	2.294
	430.000						
2.600		712.650	1736.000	1724.000	1736.100	12540.000	2.375
	640.000						
2.730		370.960	1740.000	1728.000	1740.050	13180.000	2.496
	430.000						
2.820		733.000	1744.000	1730.000	1744.000	13610.000	2.578
	260.000						
2.870		1019.000	1746.000	1732.000	1744.000	13870.000	2.627
	200.000						
2.900		1350.000	1746.000	1734.000	1744.000	14070.000	2.665
	155.000						
2.920		1782.000	1748.000	1734.000	1746.000	14225.000	2.694
	270.000						
2.970		1668.000	1748.000	1736.000	1746.000	14495.000	2.745
	550.000						
3.070		555.420	1750.000	1741.000	1750.000	15045.000	2.849
	280.000						
3.130		657.460	1752.000	1742.000	1752.000	15325.000	2.902
	310.000						
3.210		795.100	1754.000	1746.000	1754.000	15635.000	2.961
	520.000						
3.320		1330.580	1758.000	1750.000	1758.000	16155.000	3.060
	470.000						
3.400		1347.000	1762.000	1752.000	1761.000	16625.000	3.149
	400.000						
3.480		994.710	1764.000	1755.000	1764.000	17025.000	3.224
	200.000						
3.520		977.370	1766.000	1756.000	1766.000	17225.000	3.262
	420.000						
3.600		987.500	1770.000	1760.000	1770.000	17645.000	3.342
	280.000						
3.650		1011.570	1771.600	1762.000	1770.000	17925.000	3.395
	500.000						
3.750		1295.000	1776.000	1764.000	1776.000	18425.000	3.490
	170.000						
3.780		990.710	1776.000	1766.000	1775.000	18595.000	3.522
	400.000						
3.860		768.650	1780.000	1770.000	1780.000	18995.000	3.598
	520.000						
3.960		948.840	1784.000	1774.000	1784.000	19515.000	3.696
	500.000						
4.050		360.000	1788.000	1779.000	1786.800	20015.000	3.791
	250.000						
4.110		534.800	1792.000	1782.000	1790.000	20265.000	3.838
	280.000						
4.220		700.000	1796.000	1785.500	1792.400	20545.000	3.891
	150.000						
4.230		611.750	1796.000	1786.000	1794.000	20695.000	3.920
	420.000						
4.310		444.060	1798.000	1788.000	1796.500	21115.000	3.999
	510.000						
4.400		345.000	1802.000	1792.300	1801.000	21625.000	4.096
	450.000						
4.490		518.010	1806.000	1796.000	1804.500	22075.000	4.181
	365.000						
4.560		510.000	1810.000	1799.000	1808.000	22440.000	4.250
	110.000						
4.570		960.000	1810.000	1800.000	1808.000	22550.000	4.271
	105.000						
4.580		815.000	1810.000	1801.300	1808.000	22655.000	4.291
	83.000						
4.600		825.190	1812.000	1802.000	1808.000	22738.000	4.306
	280.000						
4.650		960.000	1815.500	1806.000	1810.000	23018.000	4.359
	500.000						
4.740		1199.860	1818.000	1810.000	1815.000	23518.000	4.454
	200.000						
4.780		896.310	1820.000	1813.000	1818.000	23718.000	4.492
	480.000						
4.820		1085.000	1826.000	1817.100	1824.000	24198.000	4.583
	200.000						
4.900		1020.000	1826.000	1822.000	1828.000	24398.000	4.621
	320.000						
4.960		1073.820	1828.000	1822.000	1830.000	24718.000	4.681
	365.000						
5.030		1235.000	1833.000	1826.000	1832.500	25083.000	4.751
	300.000						
5.090		1300.000	1835.000	1830.000	1836.000	25383.000	4.807
	352.000						
5.150		910.000	1839.000	1830.000	1840.000	25735.000	4.874
	310.000						
5.210		840.000	1842.000	1834.000	1842.000	26045.000	4.933
	500.000						
5.310		1240.000	1847.000	1838.000	1846.000	26545.000	5.027

	375.000						
5.380		645.000	1850.000	1841.000	1850.000	26920.000	5.098
	500.000						
5.480		1326.530	1855.000	1846.000	1856.000	27420.000	5.193
	450.000						
5.570		899.000	1859.000	1850.000	1860.000	27870.000	5.278
	345.000						
5.640		925.000	1862.000	1855.000	1862.500	28215.000	5.344
	440.000						
5.660		1110.140	1864.000	1854.000	1863.000	28655.000	5.427
	540.000						
5.760		504.930	1870.000	1862.000	1870.000	29195.000	5.529
	380.000						
5.830		750.000	1874.000	1865.500	1875.000	29575.000	5.601
	400.000						
5.920		630.370	1877.000	1870.000	1878.000	29975.000	5.677
	490.000						
6.010		830.000	1883.000	1875.500	1886.000	30465.000	5.770
	445.000						
6.090		705.000	1886.000	1879.500	1888.000	30910.000	5.854
	360.000						
6.160		593.670	1892.500	1883.000	1893.080	31270.000	5.922
	460.000						
6.250		657.990	1898.000	1888.000	1898.000	31730.000	6.009
	390.000						
6.320		460.860	1900.000	1890.000	1900.000	32120.000	6.083
	450.000						
6.430		630.000	1906.000	1896.500	1906.000	32570.000	6.169
	345.000						
6.500		550.610	1910.000	1899.000	1910.000	32915.000	6.234
	430.000						
6.580		385.280	1912.000	1902.000	1912.000	33345.000	6.315
	290.000						
6.630		341.580	1916.000	1905.000	1916.000	33635.000	6.370
	390.000						
6.710		255.000	1918.000	1907.500	1918.000	34025.000	6.444
	495.000						
6.800		380.000	1924.000	1914.000	1923.700	34520.000	6.538
	529.000						
6.900		428.100	1930.000	1920.000	1930.000	35049.000	6.638
	437.000						
6.980		377.630	1934.000	1924.000	1934.000	35486.000	6.721
	500.000						
7.080		164.890	1940.000	1929.000	1940.000	35986.000	6.816
	500.000						
7.170		147.990	1944.000	1934.000	1944.000	36486.000	6.910
	554.000						
7.280		337.200	1950.000	1940.800	1950.000	37040.000	7.015
	446.000						
7.360		321.860	1954.000	1944.500	1954.000	37486.000	7.100
	500.000						
7.460		312.350	1960.000	1951.500	1960.000	37986.000	7.194
	500.000						
7.550		415.720	1968.000	1956.700	1968.000	38486.000	7.289
	500.000						
7.650		378.000	1970.000	1961.800	1971.000	38986.000	7.384
	500.000						
7.740		405.000	1978.000	1969.100	1978.000	39486.000	7.478
	500.000						
7.840		474.000	1984.000	1974.400	1983.000	39986.000	7.573
	300.000						
7.890		500.000	1986.000	1977.000	1985.500	40286.000	7.630
	465.000						
7.980		627.000	1992.000	1981.800	1992.000	40751.000	7.718
	235.000						
8.020		515.000	1996.000	1985.100	1996.000	40986.000	7.763

BED MATERIAL GRADATION

SECNO	SAE	DMAX (ft)	DXPI (ft)	XPI	TOTAL BED	BED MATERIAL FRACTIONS per grain size							
0.200	1.000	0.500	0.500	1.000	1.000	VF SAND	0.009	VF GRVL	0.073	S COBL	0.124		
						F SAND	0.018	F GRVL	0.107	L COBL	0.052		
						M SAND	0.045	M GRVL	0.157	S BLDR	0.000		
						C SAND	0.047	C GRVL	0.149	M BLDR	0.000		
						VC SAND	0.052	VC GRVL	0.149				
0.330	1.000	0.500	0.500	1.000	1.000	VF SAND	0.009	VF GRVL	0.073	S COBL	0.124		
						F SAND	0.018	F GRVL	0.107	L COBL	0.052		
						M SAND	0.045	M GRVL	0.157	S BLDR	0.000		
						C SAND	0.047	C GRVL	0.149	M BLDR	0.000		
						VC SAND	0.052	VC GRVL	0.149				
0.430	1.000	0.500	0.500	1.000	1.000	VF SAND	0.009	VF GRVL	0.073	S COBL	0.124		
						F SAND	0.018	F GRVL	0.107	L COBL	0.052		
						M SAND	0.045	M GRVL	0.157	S BLDR	0.000		
						C SAND	0.047	C GRVL	0.149	M BLDR	0.000		
						VC SAND	0.052	VC GRVL	0.149				
0.540	1.000	0.500	0.500	1.000	1.000	VF SAND	0.009	VF GRVL	0.073	S COBL	0.124		
						F SAND	0.018	F GRVL	0.107	L COBL	0.052		
						M SAND	0.045	M GRVL	0.157	S BLDR	0.000		
						C SAND	0.047	C GRVL	0.149	M BLDR	0.000		
						VC SAND	0.052	VC GRVL	0.149				

0.630	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
0.710	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
0.750	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
0.840	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
0.990	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
1.090	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
1.180	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
1.270	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
1.370	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
1.470	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
1.560	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
1.600	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
1.660	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
1.750	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
1.810	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
1.850	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000

						VC	SAND	0.052	VC	GRVL	0.149				
1.880	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124	
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052	
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000	
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000	
						VC	SAND	0.052	VC	GRVL	0.149				
2.000	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124	
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052	
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000	
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000	
						VC	SAND	0.052	VC	GRVL	0.149				
2.080	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124	
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052	
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000	
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000	
						VC	SAND	0.052	VC	GRVL	0.149				
2.170	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124	
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052	
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000	
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000	
						VC	SAND	0.052	VC	GRVL	0.149				
2.240	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124	
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052	
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000	
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000	
						VC	SAND	0.052	VC	GRVL	0.149				
2.330	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124	
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052	
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000	
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000	
						VC	SAND	0.052	VC	GRVL	0.149				
2.400	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124	
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052	
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000	
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000	
						VC	SAND	0.052	VC	GRVL	0.149				
2.470	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124	
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052	
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000	
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000	
						VC	SAND	0.052	VC	GRVL	0.149				
2.520	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124	
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052	
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000	
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000	
						VC	SAND	0.052	VC	GRVL	0.149				
2.600	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124	
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052	
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000	
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000	
						VC	SAND	0.052	VC	GRVL	0.149				
2.730	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124	
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052	
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000	
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000	
						VC	SAND	0.052	VC	GRVL	0.149				
2.820	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124	
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052	
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000	
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000	
						VC	SAND	0.052	VC	GRVL	0.149				
2.870	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124	
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052	
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000	
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000	
						VC	SAND	0.052	VC	GRVL	0.149				
2.900	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124	
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052	
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000	
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000	
						VC	SAND	0.052	VC	GRVL	0.149				
2.920	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124	
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052	
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000	
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000	
						VC	SAND	0.052	VC	GRVL	0.149				
2.970	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124	
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052	
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000	

						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
3.070	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
3.130	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
3.210	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
3.320	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
3.400	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
3.480	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
3.520	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
3.600	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
3.650	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
3.750	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
3.780	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
3.860	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
3.960	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
4.050	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
4.110	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
4.220	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052

						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
4.230	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
4.310	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
4.400	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
4.490	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
4.560	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
4.570	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
4.580	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
4.600	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
4.650	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
4.740	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
4.780	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
4.820	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
4.900	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
4.960	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
5.030	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
5.090	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124

						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
5.150	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
5.210	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
5.310	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
5.380	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
5.480	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
5.570	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
5.640	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
5.660	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
5.760	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
5.830	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
5.920	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
6.010	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
6.090	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
6.160	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
6.250	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			

6.320	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
6.430	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
6.500	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
6.580	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
6.630	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
6.710	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
6.800	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
6.900	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
6.980	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
7.080	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
7.170	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
7.280	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
7.360	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
7.460	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
7.550	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
7.650	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			

7.740	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
7.840	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
7.890	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
7.980	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			
8.020	1.000	0.500	0.500	1.000	1.000	VF	SAND	0.009	VF	GRVL	0.073	S	COBL	0.124
						F	SAND	0.018	F	GRVL	0.107	L	COBL	0.052
						M	SAND	0.045	M	GRVL	0.157	S	BLDR	0.000
						C	SAND	0.047	C	GRVL	0.149	M	BLDR	0.000
						VC	SAND	0.052	VC	GRVL	0.149			

..LOCAL INFLOW DATA...
SEDIMENT LOAD TABLE FOR STREAM SEGMENT # 1
AT LOCAL INFLOW POINT # 1
LOAD BY GRAIN SIZE CLASS (tons/day)

LQL	Q	0.100000	1000.00
LFL	VFS	0.100000E-01	0.100000E-01
LFL	FS	0.100000E-01	0.100000E-01
LFL	MS	0.100000E-01	0.100000E-01
LFL	CS	0.100000E-01	0.100000E-01
LFL	VCS	0.100000E-01	0.100000E-01
LFL	VFG	0.100000E-01	0.100000E-01
LFL	FG	0.100000E-01	0.100000E-01
LFL	MG	0.100000E-01	0.100000E-01
LFL	CG	0.500000E-02	0.500000E-02
LFL	VCG	0.500000E-02	0.500000E-02
LFL	SC	0.500000E-02	0.500000E-02
LFL	LC	0.500000E-02	0.500000E-02
LFL	SB	0.100000E-19	0.100000E-19
LFL	MB	0.100000E-19	0.100000E-19
TOTAL		0.100000	0.100000

..LOCAL INFLOW DATA...
SEDIMENT LOAD TABLE FOR STREAM SEGMENT # 1
AT LOCAL INFLOW POINT # 2
LOAD BY GRAIN SIZE CLASS (tons/day)

LQL	Q	0.100000	1000.00	3000.00	5000.00
LFL	VFS	0.105800E-02	87.2274	205.530	262.894
LFL	FS	0.443600E-02	348.910	756.503	1052.41
LFL	MS	0.262670E-01	2036.95	4861.83	5471.19
LFL	CS	0.147970E-01	1174.55	2852.91	3147.22
LFL	VCS	0.659800E-02	546.680	1354.24	1491.95
LFL	VFG	0.778100E-02	687.121	1783.40	1956.49
LFL	FG	0.149000E-01	1379.73	3940.53	4254.21
LFL	MG	0.224440E-01	2291.78	7781.87	8037.63
LFL	CG	0.171800E-02	2995.22	7836.55	7998.88
LFL	VCG	0.100000E-19	2166.70	4885.21	5824.49
LFL	SB	0.100000E-19	0.100000E-19	1453.04	2164.81
LFL	LC	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19
LFL	SB	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19
LFL	MB	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19
TOTAL		0.999990E-01	13714.9	37711.6	41662.2

..LOCAL INFLOW DATA...
SEDIMENT LOAD TABLE FOR STREAM SEGMENT # 1
AT LOCAL INFLOW POINT # 3
LOAD BY GRAIN SIZE CLASS (tons/day)

LQL	Q	0.100000	11.0000	3300.00	6600.00	9900.00
LFL	VFS	0.125400E-02	0.326040	24.4173	33.9698	42.6855
LFL	FS	0.737200E-02	1.91672	136.832	193.647	243.825
LFL	MS	0.302410E-01	7.86266	566.016	691.392	942.056
LFL	CS	0.260280E-01	6.76728	525.659	617.407	824.994
LFL	VCS	0.152710E-01	3.97046	351.096	413.780	553.618
LFL	VFG	0.902700E-02	2.34702	282.023	334.421	449.491

LFL	FG	0.942800E-02	2.45128	716.818	833.605	1159.23
LFL	MG	0.137900E-02	0.358540	1213.82	1346.89	1980.48
LFL	CG	0.100000E-19	0.100000E-19	1431.67	3319.93	3906.89
LFL	VCG	0.100000E-19	0.100000E-19	721.654	1810.86	2794.61
LFL	SB	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	36.9941
LFL	LC	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19
LFL	SB	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19
LFL	MB	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19
TOTAL		0.100000	26.0000	5970.00	9595.90	12934.9

..LOCAL INFLOW DATA...
SEDIMENT LOAD TABLE FOR STREAM SEGMENT # 1
AT LOCAL INFLOW POINT # 4
LOAD BY GRAIN SIZE CLASS (tons/day)

LQL	Q	0.100000	1000.00
LFL	VFS	0.100000E-01	0.100000E-01
LFL	FS	0.100000E-01	0.100000E-01
LFL	MS	0.100000E-01	0.100000E-01
LFL	CS	0.100000E-01	0.100000E-01
LFL	VCS	0.100000E-01	0.100000E-01
LFL	VFG	0.100000E-01	0.100000E-01
LFL	FG	0.100000E-01	0.100000E-01
LFL	MG	0.100000E-01	0.100000E-01
LFL	CG	0.500000E-02	0.500000E-02
LFL	VCG	0.500000E-02	0.500000E-02
LFL	SC	0.500000E-02	0.500000E-02
LFL	LC	0.500000E-02	0.500000E-02
LFL	SB	0.100000E-19	0.100000E-19
LFL	MB	0.100000E-19	0.100000E-19
TOTAL		0.100000	0.100000

..LOCAL INFLOW DATA...
SEDIMENT LOAD TABLE FOR STREAM SEGMENT # 1
AT LOCAL INFLOW POINT # 5
LOAD BY GRAIN SIZE CLASS (tons/day)

LQL	Q	0.100000	1000.00
LFL	VFS	0.100000E-01	0.100000E-01
LFL	FS	0.100000E-01	0.100000E-01
LFL	MS	0.100000E-01	0.100000E-01
LFL	CS	0.100000E-01	0.100000E-01
LFL	VCS	0.100000E-01	0.100000E-01
LFL	VFG	0.100000E-01	0.100000E-01
LFL	FG	0.100000E-01	0.100000E-01
LFL	MG	0.100000E-01	0.100000E-01
LFL	CG	0.500000E-02	0.500000E-02
LFL	VCG	0.500000E-02	0.500000E-02
LFL	SC	0.500000E-02	0.500000E-02
LFL	LC	0.500000E-02	0.500000E-02
LFL	SB	0.100000E-19	0.100000E-19
LFL	MB	0.100000E-19	0.100000E-19
TOTAL		0.100000	0.100000

BED SEDIMENT CONTROL VOLUMES

STREAM SEGMENT # 1: Cave Creek and Apache WMP

SECTION NUMBER	LENGTH (ft)	WIDTH (ft)	DEPTH (ft)	VOLUME (cu.ft)	VOLUME (cu.yd)
0.200	325.000	850.123	10.000	0.276290E+07	102330.
0.330	575.000	794.618	10.000	0.456906E+07	169224.
0.430	570.000	891.733	10.000	0.508288E+07	188255.
0.540	570.000	985.919	10.000	0.561974E+07	208139.
0.630	450.000	958.566	10.000	0.431355E+07	159761.
0.710	300.000	862.889	10.000	0.258867E+07	95876.5
0.750	320.000	957.488	10.000	0.306396E+07	113480.
0.840	670.000	1030.949	10.000	0.690736E+07	255828.
0.990	700.000	1628.736	10.000	0.114012E+08	422265.
1.090	500.000	1648.085	10.000	0.824043E+07	305201.
1.180	480.000	1189.368	10.000	0.570897E+07	211443.
1.270	480.000	1018.438	10.000	0.488850E+07	181056.
1.370	500.000	668.445	10.000	0.334223E+07	123786.
1.470	500.000	631.770	10.000	0.315885E+07	116994.
1.560	340.000	657.125	10.000	0.223423E+07	82749.1
1.600	215.000	632.372	10.000	0.135960E+07	50355.5
1.660	375.000	569.092	10.000	0.213410E+07	79040.6
1.750	400.000	553.152	10.000	0.221261E+07	81948.5
1.810	245.000	555.887	10.000	0.136192E+07	50441.6
1.850	195.000	631.696	10.000	0.123181E+07	45622.5
1.880	345.000	740.933	10.000	0.255622E+07	94674.8
2.000	465.000	824.827	10.000	0.383545E+07	142054.
2.080	480.000	769.835	10.000	0.369521E+07	136860.
2.170	450.000	650.068	10.000	0.292530E+07	108345.
2.240	415.000	437.963	10.000	0.181755E+07	67316.5
2.330	405.000	295.858	10.000	0.119822E+07	44378.7
2.400	380.000	288.149	10.000	0.109497E+07	40554.4

2.470	330.000	430.104	10.000	0.141934E+07	52568.3	
2.520	345.000	639.603	10.000	0.220663E+07	81727.0	
2.600	535.000	636.742	10.000	0.340657E+07	126169.	
2.730	535.000	487.583	10.000	0.260857E+07	96613.6	
2.820	345.000	693.716	10.000	0.239332E+07	88641.5	
2.870	230.000	1013.087	10.000	0.233010E+07	86300.0	
2.900	177.500	1350.714	10.000	0.239752E+07	88796.9	
2.920	212.500	1705.341	10.000	0.362385E+07	134217.	
2.970	410.000	1431.765	10.000	0.587024E+07	217416.	
3.070	415.000	812.645	10.000	0.337248E+07	124907.	
3.130	295.000	665.425	10.000	0.196300E+07	72703.8	
3.210	415.000	889.791	10.000	0.369263E+07	136764.	
3.320	495.000	1239.424	10.000	0.613515E+07	227228.	
3.400	435.000	1290.052	10.000	0.561173E+07	207842.	
3.480	300.000	1071.070	10.000	0.321321E+07	119008.	
3.520	310.000	981.522	10.000	0.304272E+07	112693.	
3.600	350.000	988.683	10.000	0.346039E+07	128163.	
3.650	390.000	1069.252	10.000	0.417008E+07	154447.	
3.750	335.000	1198.759	10.000	0.401584E+07	148735.	
3.780	285.000	969.017	10.000	0.276170E+07	102285.	
3.860	460.000	834.781	10.000	0.383999E+07	142222.	
3.960	510.000	822.004	10.000	0.419222E+07	155267.	
4.050	375.000	510.276	10.000	0.191353E+07	70871.6	
4.110	265.000	536.408	10.000	0.142148E+07	52647.4	
4.220	215.000	653.881	10.000	0.140584E+07	52068.3	
4.230	285.000	578.304	10.000	0.164817E+07	61043.2	
4.310	465.000	451.196	10.000	0.209806E+07	77706.0	
4.400	480.000	389.575	10.000	0.186996E+07	69257.7	
4.490	407.500	484.972	10.000	0.197626E+07	73194.8	
4.560	237.500	546.789	10.000	0.129862E+07	48097.1	
4.570	107.500	859.651	10.000	924125.	34226.9	
4.580	94.000	843.494	10.000	792885.	29366.1	
4.600	181.500	859.075	10.000	0.155922E+07	57748.9	
4.650	390.000	995.121	10.000	0.388097E+07	143740.	
4.740	350.000	1113.841	10.000	0.389844E+07	144387.	
4.780	340.000	970.467	10.000	0.329959E+07	122207.	
4.820	340.000	1034.230	10.000	0.351638E+07	130236.	
4.900	260.000	1039.373	10.000	0.270237E+07	100088.	
4.960	342.500	1094.067	10.000	0.374718E+07	138784.	
5.030	332.500	1215.285	10.000	0.404082E+07	149660.	
5.090	326.000	1219.847	10.000	0.397670E+07	147285.	
5.150	331.000	968.197	10.000	0.320473E+07	118694.	
5.210	405.000	931.235	10.000	0.377150E+07	139685.	
5.310	437.500	1078.810	10.000	0.471979E+07	174807.	
5.380	437.500	859.815	10.000	0.376169E+07	139322.	
5.480	475.000	1139.459	10.000	0.541243E+07	200460.	
5.570	397.500	983.427	10.000	0.390912E+07	144782.	
5.640	392.500	955.782	10.000	0.375144E+07	138942.	
5.660	490.000	971.271	10.000	0.475923E+07	176268.	
5.760	460.000	657.082	10.000	0.302258E+07	111947.	
5.830	390.000	689.753	10.000	0.269004E+07	99631.0	
5.920	445.000	684.928	10.000	0.304793E+07	112886.	
6.010	467.500	775.296	10.000	0.362451E+07	134241.	
6.090	402.500	711.437	10.000	0.286354E+07	106057.	
6.160	410.000	621.990	10.000	0.255016E+07	94450.3	
6.250	425.000	616.238	10.000	0.261901E+07	97000.4	
6.320	420.000	521.572	10.000	0.219060E+07	81133.4	
6.430	397.500	586.603	10.000	0.233175E+07	86361.0	
6.500	387.500	531.813	10.000	0.206078E+07	76325.1	
6.580	360.000	412.326	10.000	0.148437E+07	54976.8	
6.630	340.000	331.240	10.000	0.112622E+07	41711.7	
6.710	442.500	291.023	10.000	0.128778E+07	47695.4	
6.800	512.000	368.141	10.000	0.188488E+07	69810.5	
6.900	483.000	411.709	10.000	0.198856E+07	73650.2	
6.980	468.500	347.635	10.000	0.162867E+07	60321.2	
7.080	500.000	197.530	10.000	987650.	36579.6	
7.170	527.000	183.813	10.000	968695.	35877.6	
7.280	500.000	299.979	10.000	0.149989E+07	55551.6	
7.360	473.000	322.595	10.000	0.152588E+07	56513.9	
7.460	500.000	331.163	10.000	0.165582E+07	61326.5	
7.550	500.000	392.205	0.000	0.000000	0.000000	
7.650	500.000	388.787	0.000	0.000000	0.000000	
7.740	500.000	412.000	0.000	0.000000	0.000000	
7.840	400.000	462.875	10.000	0.185150E+07	68574.1	
7.890	382.500	522.333	10.000	0.199793E+07	73997.2	
7.980	350.000	586.345	10.000	0.205221E+07	76007.7	
8.020	117.500	552.333	10.000	648992.	24036.7	

NO. OF INPUT DATA MESSAGES= 0
END OF SEDIMENT DATA

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$HYD
BEGIN COMPUTATIONS.

$RATING

Downstream Boundary Condition - Rating Curve

Elevation	Stage	Discharge	Elevation	Stage	Discharge
1646.000	1646.000	0.000	1657.730	1657.730	12000.000
1650.850	1650.850	2000.000	1658.430	1658.430	14000.000
1652.850	1652.850	4000.000	1658.930	1658.930	16000.000

```
   1654.340    1654.340     6000.000 |   1659.310    1659.310    18000.000
   1655.540    1655.540     8000.000 |   1659.780    1659.780    20000.000
   1657.390    1657.390    10000.000 |
=================================================================================
TIME STEP #       1
*    A  Level output at time step 1 (0.25 days)
COMPUTING FROM TIME=      0.0000 DAYS TO TIME=      0.2500 DAYS IN     5 COMPUTATION STEPS

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15             9717.0    9716.2

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

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         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0
```

```
*ERROR 15            10013.0   10013.0
*ERROR 15            10013.0   10013.0
*ERROR 15            10013.0   10013.0
*ERROR 15            10013.0   10013.0
*ERROR 15            10013.0   10013.0
*ERROR 15            10013.0   10013.0
*ERROR 15            10013.0   10013.0
*ERROR 15            10013.0   10013.0
*ERROR 15            10013.0   10013.0
*ERROR 15            10013.0   10013.0
*ERROR 15            10013.0   10013.0
*ERROR 15            10013.0   10013.0
*ERROR 15            10013.0   10013.0
*ERROR 15            10013.0   10013.0
*ERROR 15            10013.0   10013.0
*ERROR 15            10013.0   10013.0
*ERROR 15            10013.0   10013.0
*ERROR 15            10013.0   10013.0
*ERROR 15            10013.0   10013.0
*ERROR 15            10013.0   10013.0
*ERROR 15            10013.0   10013.0
*ERROR 15            10013.0   10013.0
*ERROR 15            10013.0   10013.0
*ERROR 15            10013.0   10013.0
```

```
TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*******************************************************
    TIME       ENTRY *              SAND              *
    DAYS       POINT *    INFLOW   OUTFLOW  TRAP EFF  *
    0.25       8.020 *     0.00                       *
               6.090 *     0.00                       *
               3.780 *     0.00                       *
               2.920 *     0.00                       *
               2.600 *     0.00                       *
               0.200 *     0.00                       *
   TOTAL=      0.200 *     0.00      0.08    -17.45   *
*******************************************************

==========================================================================================
TIME STEP #        2
*    A  Level output at time step 2 (0.0139 day)
```

```
*ERROR 15            10013.0   10013.0
*ERROR 15            10013.0   10013.0
*ERROR 15            10013.0   10013.0
*ERROR 15            10013.0   10013.0
*ERROR 15            10013.0   10013.0
*ERROR 15            10013.0   10013.0
*ERROR 15            10013.0   10013.0
*ERROR 15            10013.0   10013.0
*ERROR 15            10013.0   10013.0
*ERROR 15            10013.0   10013.0
*ERROR 15            10013.0   10013.0
*ERROR 15            10013.0   10013.0
*ERROR 15            10013.0   10013.0
*ERROR 15            10013.0   10013.0
```

*ERROR 15	10013.0	10013.0
*ERROR 15	10013.0	10013.0
*ERROR 15	10013.0	10013.0
*ERROR 15	10013.0	10013.0
*ERROR 15	10013.0	10013.0
*ERROR 15	10013.0	10013.0
*ERROR 15	10013.0	10013.0
*ERROR 15	10013.0	10013.0
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10133.3	10133.3
*ERROR 15	10133.3	10133.3
*ERROR 15	10133.3	10133.3
*ERROR 15	10133.3	10133.3
*ERROR 15	10133.3	10133.3
*ERROR 15	10133.3	10133.3
*ERROR 15	10133.3	10133.3
*ERROR 15	10133.3	10133.3

```
        *ERROR 15            10133.3   10133.3

        *ERROR 15            10133.3   10133.3

        *ERROR 15            10133.3   10133.3

        *ERROR 15            10133.3   10133.3

        *ERROR 15            10133.3   10133.3

        *ERROR 15            10133.3   10133.3
** Q ABOVE TABLE **                                                                                    **INLOAD**
**WATER DISCHARGE, WATER-SEDIMENT LOAD TABLE ENDPOINT**        3731.00        1000.00       0.010000

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*************************************************
    TIME        ENTRY *              SAND          *
    DAYS        POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.26        8.020 *      0.02                    *
                6.090 *      0.00                    *
                3.780 *      0.00                    *
                2.920 *      0.00                    *
                2.600 *      0.00                    *
                0.200 *      0.00                    *
  TOTAL=        0.200 *      0.02      0.16     -5.67 *
*************************************************

==========================================================================================
TIME STEP #        3
*    A  Level output at time step 3 (0.0208 day)

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7
```

```
        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10018.0   10018.0

        *ERROR 15            10018.0   10018.0

        *ERROR 15            10018.0   10018.0

        *ERROR 15            10018.0   10018.0

        *ERROR 15            10018.0   10018.0

        *ERROR 15            10133.3   10133.3

        *ERROR 15            10133.3   10133.3

        *ERROR 15            10133.3   10133.3

        *ERROR 15            10133.3   10133.3

        *ERROR 15            10133.3   10133.3

        *ERROR 15            10133.3   10133.3

        *ERROR 15            10133.3   10133.3

        *ERROR 15            10133.3   10133.3

        *ERROR 15            10133.3   10133.3

        *ERROR 15            10133.3   10133.3

        *ERROR 15            10133.3   10133.3

        *ERROR 15            10133.3   10133.3

        *ERROR 15            10133.3   10133.3

        *ERROR 15            10133.3   10133.3

        *ERROR 15            10133.3   10133.3

** Q ABOVE TABLE **                                                                                    **INLOAD**
**WATER DISCHARGE, WATER-SEDIMENT LOAD TABLE ENDPOINT**        2064.00        1000.00        0.010000

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME        ENTRY *              SAND            *
    DAYS        POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.28        8.020 *      0.03                    *
                6.090 *      0.00                    *
                3.780 *      0.00                    *
                2.920 *      0.00                    *
                2.600 *      0.00                    *
                0.200 *      0.00                    *
   TOTAL=       0.200 *      0.04      0.37     -8.06 *
*****************************************************

==========================================================================================
TIME STEP #        4
*    A  Level output at time step 4 (0.0208 day)

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0
```

*ERROR 15	10013.0	10013.0
*ERROR 15	10013.0	10013.0
*ERROR 15	10013.0	10013.0
*ERROR 15	10013.0	10013.0
*ERROR 15	10013.0	10013.0
*ERROR 15	10013.0	10013.0
*ERROR 15	10013.0	10013.0
*ERROR 15	10013.0	10013.0
*ERROR 15	10013.0	10013.0
*ERROR 15	10013.0	10013.0
*ERROR 15	10013.0	10013.0
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	9717.0	9716.2
*ERROR 15	9717.0	9716.2
*ERROR 15	9717.0	9716.2
*ERROR 15	9717.0	9716.2
*ERROR 15	9717.0	9716.2

*ERROR 15	10133.3	10133.3
*ERROR 15	10133.3	10133.3
*ERROR 15	10133.3	10133.3
*ERROR 15	10133.3	10133.3
*ERROR 15	9590.6	9515.0
*ERROR 15	10133.3	10133.3
*ERROR 15	9590.6	9515.0
*ERROR 15	10133.3	10133.3
*ERROR 15	10133.3	10133.3
*ERROR 15	10133.3	10133.3
*ERROR 15	10133.3	10133.3
*ERROR 15	10133.3	10133.3
*ERROR 15	9590.6	9515.0
*ERROR 15	10133.3	10133.3
*ERROR 15	9590.6	9515.0
*ERROR 15	10133.3	10133.3
*ERROR 15	10133.3	10133.3
*ERROR 15	10133.3	10133.3
*ERROR 15	10133.3	10133.3
*ERROR 15	9590.6	9515.0
*ERROR 15	10133.3	10133.3
*ERROR 15	9515.0	9480.0
*ERROR 15	10075.0	10075.0
*ERROR 15	9515.0	9480.0
*ERROR 15	10075.0	10075.0
*ERROR 15	9515.0	9480.0
*ERROR 15	10075.0	10075.0
*ERROR 15	9515.0	9480.0
*ERROR 15	10075.0	10075.0
*ERROR 15	9515.0	9480.0
*ERROR 15	10075.0	10075.0
*ERROR 15	9515.0	9480.0
*ERROR 15	10075.0	10075.0
*ERROR 15	9515.0	9480.0
*ERROR 15	10075.0	10075.0
*ERROR 15	9515.0	9480.0
*ERROR 15	10075.0	10075.0
*ERROR 15	9515.0	9480.0
*ERROR 15	10075.0	10075.0
*ERROR 15	9515.0	9480.0
*ERROR 15	10075.0	10075.0
*ERROR 15	9515.0	9480.0
*ERROR 15	10075.0	10075.0
*ERROR 15	9515.0	9480.0
*ERROR 15	10075.0	10075.0
*ERROR 15	9515.0	9480.0
*ERROR 15	10075.0	10075.0
*ERROR 15	9515.0	9480.0

*ERROR 15	10075.0	10075.0
*ERROR 15	9515.0	9480.0
*ERROR 15	10075.0	10075.0
*ERROR 15	10170.0	10170.0
*ERROR 15	10170.0	10170.0
*ERROR 15	10170.0	10170.0
*ERROR 15	10170.0	10170.0
*ERROR 15	9945.0	9870.0
*ERROR 15	10170.0	10170.0
*ERROR 15	9945.0	9870.0
*ERROR 15	10170.0	10170.0
*ERROR 15	10170.0	10170.0
*ERROR 15	10170.0	10170.0
*ERROR 15	10170.0	10170.0
*ERROR 15	10170.0	10170.0
*ERROR 15	10170.0	10170.0
*ERROR 15	10170.0	10170.0
*ERROR 15	10170.0	10170.0
*ERROR 15	10170.0	10170.0
*ERROR 15	10170.0	10170.0
*ERROR 15	10170.0	10170.0
*ERROR 15	10170.0	10170.0
*ERROR 15	10170.0	10170.0
*ERROR 15	10170.0	10170.0
*ERROR 15	10170.0	10170.0
*ERROR 15	9780.0	9685.0
*ERROR 15	10135.0	10135.0
*ERROR 15	9780.0	9685.0
*ERROR 15	10135.0	10135.0
*ERROR 15	9780.0	9685.0
*ERROR 15	10135.0	10135.0
*ERROR 15	9780.0	9685.0
*ERROR 15	10135.0	10135.0
*ERROR 15	9780.0	9685.0
*ERROR 15	10135.0	10135.0
*ERROR 15	9780.0	9685.0
*ERROR 15	10135.0	10135.0
*ERROR 15	9780.0	9685.0
*ERROR 15	10135.0	10135.0
*ERROR 15	9780.0	9685.0
*ERROR 15	10135.0	10135.0
*ERROR 15	9780.0	9685.0
*ERROR 15	10135.0	10135.0
*ERROR 15	9780.0	9685.0
*ERROR 15	10135.0	10135.0
*ERROR 15	9780.0	9685.0

```
        *ERROR 15            10135.0   10135.0

        *ERROR 15             9780.0    9685.0

        *ERROR 15            10135.0   10135.0

        *ERROR 15             9780.0    9685.0

        *ERROR 15            10135.0   10135.0

        *ERROR 15             9780.0    9685.0

        *ERROR 15            10135.0   10135.0

        *ERROR 15             9780.0    9685.0

        *ERROR 15            10135.0   10135.0
** Q ABOVE TABLE **                                                                                    **INLOAD**
**WATER DISCHARGE, WATER-SEDIMENT LOAD TABLE ENDPOINT**        1732.00        1000.00       0.010000

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME        ENTRY *             SAND              *
    DAYS        POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.31        8.020 *      0.18                    *
                6.090 *      0.00                    *
                3.780 *      0.00                    *
                2.920 *      0.01                    *
                2.600 *      0.01                    *
                0.200 *      0.00                    *
   TOTAL=       0.200 *      0.19      1.33     -5.96 *
*****************************************************

==========================================================================================
TIME STEP #        5
*    A  Level output at time step 5 (0.0139 day)

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10211.7   10211.7

        *ERROR 15            10018.0   10018.0

        *ERROR 15            10018.0   10018.0

        *ERROR 15            10018.0   10018.0

        *ERROR 15            10018.0   10018.0

        *ERROR 15            10018.0   10018.0

        *ERROR 15            10018.0   10018.0

        *ERROR 15            10018.0   10018.0
```

*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	9717.0	9716.2
*ERROR 15	9717.0	9716.2
*ERROR 15	9717.0	9716.2
*ERROR 15	9717.0	9716.2
*ERROR 15	9717.0	9716.2
*ERROR 15	9717.0	9716.2
*ERROR 15	9717.0	9716.2
*ERROR 15	9717.0	9716.2
*ERROR 15	9717.0	9716.2
*ERROR 15	9717.0	9716.2
*ERROR 15	9717.0	9716.2
*ERROR 15	9717.0	9716.2
*ERROR 15	9717.0	9716.2
*ERROR 15	9717.0	9716.2
*ERROR 15	9590.6	9515.0
*ERROR 15	10133.3	10133.3
*ERROR 15	9590.6	9515.0
*ERROR 15	10133.3	10133.3
*ERROR 15	9590.6	9515.0
*ERROR 15	10133.3	10133.3
*ERROR 15	9590.6	9515.0
*ERROR 15	10133.3	10133.3
*ERROR 15	9590.6	9515.0
*ERROR 15	10133.3	10133.3
*ERROR 15	9590.6	9515.0
*ERROR 15	10133.3	10133.3
*ERROR 15	9590.6	9515.0
*ERROR 15	10133.3	10133.3
*ERROR 15	9590.6	9515.0
*ERROR 15	10133.3	10133.3
*ERROR 15	9590.6	9515.0
*ERROR 15	10133.3	10133.3
*ERROR 15	9590.6	9515.0
*ERROR 15	10133.3	10133.3
*ERROR 15	9590.6	9515.0
*ERROR 15	10133.3	10133.3
*ERROR 15	9590.6	9515.0
*ERROR 15	10133.3	10133.3

*ERROR 15	9590.6	9515.0
*ERROR 15	10133.3	10133.3
*ERROR 15	9590.6	9515.0
*ERROR 15	10133.3	10133.3
*ERROR 15	9590.6	9515.0
*ERROR 15	10133.3	10133.3
*ERROR 15	9590.6	9515.0
*ERROR 15	10133.3	10133.3
*ERROR 15	9515.0	9480.0
*ERROR 15	10075.0	10075.0
*ERROR 15	9515.0	9480.0
*ERROR 15	10075.0	10075.0
*ERROR 15	9515.0	9480.0
*ERROR 15	10075.0	10075.0
*ERROR 15	9515.0	9480.0
*ERROR 15	10075.0	10075.0
*ERROR 15	9515.0	9480.0
*ERROR 15	10075.0	10075.0
*ERROR 15	9515.0	9480.0
*ERROR 15	10075.0	10075.0
*ERROR 15	9515.0	9480.0
*ERROR 15	10075.0	10075.0
*ERROR 15	9515.0	9480.0
*ERROR 15	10075.0	10075.0
*ERROR 15	9515.0	9480.0
*ERROR 15	10075.0	10075.0
*ERROR 15	9515.0	9480.0
*ERROR 15	10075.0	10075.0
*ERROR 15	9515.0	9480.0
*ERROR 15	10075.0	10075.0
*ERROR 15	9515.0	9480.0
*ERROR 15	10075.0	10075.0
*ERROR 15	9515.0	9480.0
*ERROR 15	10075.0	10075.0
*ERROR 15	9515.0	9480.0
*ERROR 15	10075.0	10075.0
*ERROR 15	9515.0	9480.0
*ERROR 15	10075.0	10075.0
*ERROR 15	9515.0	9480.0
*ERROR 15	10075.0	10075.0
*ERROR 15	10170.0	10170.0
*ERROR 15	9945.0	9870.0
*ERROR 15	10170.0	10170.0
*ERROR 15	9945.0	9870.0
*ERROR 15	10170.0	10170.0
*ERROR 15	9945.0	9870.0
*ERROR 15	10170.0	10170.0

*ERROR 15	9945.0	9870.0
*ERROR 15	10170.0	10170.0
*ERROR 15	9945.0	9870.0
*ERROR 15	10170.0	10170.0
*ERROR 15	9945.0	9870.0
*ERROR 15	10170.0	10170.0
*ERROR 15	9945.0	9870.0
*ERROR 15	10170.0	10170.0
*ERROR 15	9945.0	9870.0
*ERROR 15	10170.0	10170.0
*ERROR 15	9945.0	9870.0
*ERROR 15	10170.0	10170.0
*ERROR 15	9945.0	9870.0
*ERROR 15	10170.0	10170.0
*ERROR 15	9945.0	9870.0
*ERROR 15	10170.0	10170.0
*ERROR 15	9945.0	9870.0
*ERROR 15	10170.0	10170.0
*ERROR 15	9945.0	9870.0
*ERROR 15	10170.0	10170.0
*ERROR 15	9945.0	9870.0
*ERROR 15	10170.0	10170.0
*ERROR 15	9945.0	9870.0
*ERROR 15	10170.0	10170.0
*ERROR 15	9945.0	9870.0
*ERROR 15	10170.0	10170.0
*ERROR 15	9945.0	9870.0
*ERROR 15	10170.0	10170.0
*ERROR 15	9780.0	9685.0
*ERROR 15	10135.0	10135.0
*ERROR 15	9780.0	9685.0
*ERROR 15	10135.0	10135.0
*ERROR 15	9780.0	9685.0
*ERROR 15	10135.0	10135.0
*ERROR 15	9780.0	9685.0
*ERROR 15	10135.0	10135.0
*ERROR 15	9780.0	9685.0
*ERROR 15	10135.0	10135.0
*ERROR 15	9780.0	9685.0
*ERROR 15	10135.0	10135.0
*ERROR 15	9780.0	9685.0
*ERROR 15	10135.0	10135.0
*ERROR 15	9780.0	9685.0
*ERROR 15	10135.0	10135.0
*ERROR 15	9780.0	9685.0
*ERROR 15	10135.0	10135.0

```
        *ERROR 15            9780.0    9685.0

        *ERROR 15           10135.0   10135.0

        *ERROR 15            9780.0    9685.0

        *ERROR 15           10135.0   10135.0

        *ERROR 15            9780.0    9685.0

        *ERROR 15           10135.0   10135.0

        *ERROR 15            9780.0    9685.0

        *ERROR 15           10135.0   10135.0

        *ERROR 15            9780.0    9685.0

        *ERROR 15           10135.0   10135.0

        *ERROR 15            9780.0    9685.0

        *ERROR 15           10135.0   10135.0
** Q ABOVE TABLE **                                                                          **INLOAD**
**WATER DISCHARGE, WATER-SEDIMENT LOAD TABLE ENDPOINT**      15404.00        7500.00     311.646770
** Q ABOVE TABLE **                                                                          **INLOAD**
**WATER DISCHARGE, WATER-SEDIMENT LOAD TABLE ENDPOINT**       1391.00        1000.00       0.010000

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*************************************************
    TIME        ENTRY *             SAND            *
    DAYS        POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.32        8.020 *      0.29                    *
                6.090 *      0.00                    *
                3.780 *      0.00                    *
                2.920 *      0.02                    *
                2.600 *      0.05                    *
                0.200 *      0.00                    *
   TOTAL=       0.200 *      0.35      3.66     -9.35 *
*************************************************

==========================================================================================
TIME STEP #        6
*    A  Level output at time step 6 (0.0139 day)

        *ERROR 15           10013.0   10013.0

        *ERROR 15           10013.0   10013.0

        *ERROR 15           10013.0   10013.0

        *ERROR 15           10211.7   10211.7

        *ERROR 15           10211.7   10211.7

        *ERROR 15           10211.7   10211.7

        *ERROR 15           10211.7   10211.7

        *ERROR 15           10211.7   10211.7

        *ERROR 15           10211.7   10211.7

        *ERROR 15           10211.7   10211.7

        *ERROR 15           10211.7   10211.7

        *ERROR 15           10211.7   10211.7

        *ERROR 15           10211.7   10211.7

        *ERROR 15           10211.7   10211.7

        *ERROR 15           10211.7   10211.7

        *ERROR 15           10211.7   10211.7

        *ERROR 15           10211.7   10211.7

        *ERROR 15           10211.7   10211.7

        *ERROR 15           10211.7   10211.7

        *ERROR 15           10018.0   10018.0

        *ERROR 15           10018.0   10018.0

        *ERROR 15           10018.0   10018.0

        *ERROR 15           10018.0   10018.0

        *ERROR 15           10018.0   10018.0
```

*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	9717.0	9716.2
*ERROR 15	9717.0	9716.2
*ERROR 15	9717.0	9716.2
*ERROR 15	9717.0	9716.2
*ERROR 15	9717.0	9716.2
*ERROR 15	9717.0	9716.2
*ERROR 15	9717.0	9716.2
*ERROR 15	9717.0	9716.2
*ERROR 15	9717.0	9716.2
*ERROR 15	9717.0	9716.2
*ERROR 15	9717.0	9716.2
*ERROR 15	9717.0	9716.2
*ERROR 15	9717.0	9716.2
*ERROR 15	9717.0	9716.2
*ERROR 15	9717.0	9716.2
*ERROR 15	9717.0	9716.2
*ERROR 15	9717.0	9716.2
*ERROR 15	9590.6	9515.0
*ERROR 15	10133.3	10133.3
*ERROR 15	10133.3	10133.3
*ERROR 15	10133.3	10133.3
*ERROR 15	10133.3	10133.3
*ERROR 15	10133.3	10133.3
*ERROR 15	9590.6	9515.0
*ERROR 15	10133.3	10133.3
*ERROR 15	9590.6	9515.0
*ERROR 15	10133.3	10133.3
*ERROR 15	9590.6	9515.0
*ERROR 15	10133.3	10133.3
*ERROR 15	9590.6	9515.0
*ERROR 15	10133.3	10133.3
*ERROR 15	9590.6	9515.0
*ERROR 15	10133.3	10133.3
*ERROR 15	9590.6	9515.0
*ERROR 15	10133.3	10133.3

*ERROR 15	9590.6	9515.0
*ERROR 15	10133.3	10133.3
*ERROR 15	9590.6	9515.0
*ERROR 15	10133.3	10133.3
*ERROR 15	9590.6	9515.0
*ERROR 15	10133.3	10133.3
*ERROR 15	9590.6	9515.0
*ERROR 15	10133.3	10133.3
*ERROR 15	9590.6	9515.0
*ERROR 15	10133.3	10133.3
*ERROR 15	9590.6	9515.0
*ERROR 15	10133.3	10133.3
*ERROR 15	9590.6	9515.0
*ERROR 15	10133.3	10133.3
*ERROR 15	9590.6	9515.0
*ERROR 15	10133.3	10133.3
*ERROR 15	9590.6	9515.0
*ERROR 15	10133.3	10133.3
*ERROR 15	9590.6	9515.0
*ERROR 15	10133.3	10133.3
*ERROR 15	9515.0	9480.0
*ERROR 15	10075.0	10075.0
*ERROR 15	9515.0	9480.0
*ERROR 15	10075.0	10075.0
*ERROR 15	9515.0	9480.0
*ERROR 15	10075.0	10075.0
*ERROR 15	9515.0	9480.0
*ERROR 15	10075.0	10075.0
*ERROR 15	9945.0	9870.0
*ERROR 15	10170.0	10170.0
*ERROR 15	10170.0	10170.0
*ERROR 15	9945.0	9870.0
*ERROR 15	10170.0	10170.0
*ERROR 15	9945.0	9870.0
*ERROR 15	10170.0	10170.0
*ERROR 15	9945.0	9870.0
*ERROR 15	10170.0	10170.0
*ERROR 15	9945.0	9870.0
*ERROR 15	10170.0	10170.0
*ERROR 15	9945.0	9870.0
*ERROR 15	10170.0	10170.0
*ERROR 15	9945.0	9870.0
*ERROR 15	10170.0	10170.0
*ERROR 15	9945.0	9870.0
*ERROR 15	10170.0	10170.0
*ERROR 15	9945.0	9870.0
*ERROR 15	10170.0	10170.0
*ERROR 15	9945.0	9870.0

```
*ERROR 15          10170.0   10170.0
*ERROR 15           9945.0    9870.0
*ERROR 15          10170.0   10170.0
*ERROR 15           9945.0    9870.0
*ERROR 15          10170.0   10170.0
*ERROR 15           9945.0    9870.0
*ERROR 15          10170.0   10170.0
*ERROR 15           9945.0    9870.0
*ERROR 15          10170.0   10170.0
*ERROR 15           9945.0    9870.0
*ERROR 15          10170.0   10170.0
*ERROR 15           9945.0    9870.0
*ERROR 15          10170.0   10170.0
*ERROR 15           9780.0    9685.0
*ERROR 15          10135.0   10135.0
*ERROR 15           9780.0    9685.0
*ERROR 15          10135.0   10135.0
*ERROR 15           9780.0    9685.0
*ERROR 15          10135.0   10135.0
*ERROR 15           9780.0    9685.0
*ERROR 15          10135.0   10135.0
*ERROR 15           9780.0    9685.0
*ERROR 15          10135.0   10135.0
*ERROR 15           9780.0    9685.0
*ERROR 15          10135.0   10135.0
*ERROR 15           9780.0    9685.0
*ERROR 15          10135.0   10135.0
*ERROR 15           9780.0    9685.0
*ERROR 15          10135.0   10135.0
*ERROR 15           9780.0    9685.0
*ERROR 15          10135.0   10135.0
*ERROR 15           9780.0    9685.0
*ERROR 15          10135.0   10135.0
*ERROR 15           9780.0    9685.0
*ERROR 15          10135.0   10135.0
*ERROR 15           9780.0    9685.0
*ERROR 15          10135.0   10135.0
*ERROR 15           9780.0    9685.0
*ERROR 15          10135.0   10135.0
*ERROR 15           9780.0    9685.0
*ERROR 15          10135.0   10135.0
*ERROR 15           9780.0    9685.0
*ERROR 15          10135.0   10135.0
** Q ABOVE TABLE **                                                          **INLOAD**
**WATER DISCHARGE, WATER-SEDIMENT LOAD TABLE ENDPOINT**     10162.00     7500.00     311.646770
** Q ABOVE TABLE **                                                          **INLOAD**
**WATER DISCHARGE, WATER-SEDIMENT LOAD TABLE ENDPOINT**      1046.00     1000.00       0.010000
```

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT # 1
Cave Creek and Apache WMP
ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT

TIME DAYS	ENTRY POINT	INFLOW	SAND OUTFLOW	TRAP EFF
0.33	8.020	0.39		
	6.090	0.00		
	3.780	0.00		
	2.920	0.07		
	2.600	0.16		
	0.200	0.00		
TOTAL=	0.200	0.62	5.77	-8.28

TIME STEP # 7
* A Level output at time step 7 (0.0208 day)

*ERROR 15	10013.0	10013.0
*ERROR 15	10013.0	10013.0
*ERROR 15	10013.0	10013.0
*ERROR 15	10013.0	10013.0
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10211.7	10211.7
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	10018.0	10018.0
*ERROR 15	9717.0	9716.2
*ERROR 15	9590.6	9515.0
*ERROR 15	10133.3	10133.3
*ERROR 15	10133.3	10133.3

```
*ERROR 15            10133.3   10133.3
*ERROR 15            10133.3   10133.3
*ERROR 15            10133.3   10133.3
*ERROR 15            10133.3   10133.3
*ERROR 15            10133.3   10133.3
*ERROR 15            10133.3   10133.3
*ERROR 15            10133.3   10133.3
*ERROR 15            10133.3   10133.3
*ERROR 15            10133.3   10133.3
*ERROR 15            10133.3   10133.3
*ERROR 15            10133.3   10133.3
*ERROR 15            10133.3   10133.3
*ERROR 15            10133.3   10133.3
*ERROR 15            10133.3   10133.3
*ERROR 15            10133.3   10133.3
*ERROR 15            10133.3   10133.3
*ERROR 15            10133.3   10133.3
*ERROR 15             9515.0    9480.0
*ERROR 15            10075.0   10075.0
*ERROR 15             9945.0    9870.0
*ERROR 15            10170.0   10170.0
*ERROR 15            10170.0   10170.0
*ERROR 15             9780.0    9685.0
*ERROR 15            10135.0   10135.0
```

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT # 1
Cave Creek and Apache WMP
ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT

TIME DAYS	ENTRY POINT	INFLOW	SAND OUTFLOW	TRAP EFF
0.35	8.020	0.43		
	6.090	0.00		
	3.780	0.00		
	2.920	0.20		
	2.600	0.58		
	0.200	0.00		
TOTAL=	0.200	1.21	8.91	-6.34

```
==============================================================================
TIME STEP #        8
*    A  Level output at time step 8 (0.0208 day)
*ERROR 15            10013.0   10013.0
*ERROR 15            10013.0   10013.0
*ERROR 15            10013.0   10013.0
*ERROR 15            10013.0   10013.0
*ERROR 15            10013.0   10013.0
*ERROR 15            10013.0   10013.0
*ERROR 15            10013.0   10013.0
*ERROR 15            10013.0   10013.0
*ERROR 15            10013.0   10013.0
*ERROR 15            10013.0   10013.0
*ERROR 15            10013.0   10013.0
*ERROR 15            10013.0   10013.0
*ERROR 15            10013.0   10013.0
*ERROR 15            10013.0   10013.0
*ERROR 15            10013.0   10013.0
```

```
        *ERROR 15            10211.7   10211.7

        *ERROR 15            10018.0   10018.0

        *ERROR 15            10133.3   10133.3

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME        ENTRY *              SAND            *
    DAYS        POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.37        8.020 *      0.43                    *
                6.090 *      0.00                    *
                3.780 *      0.00                    *
                2.920 *      0.33                    *
                2.600 *      1.01                    *
                0.200 *      0.00                    *
   TOTAL=       0.200 *      1.76     11.50     -5.51 *
*****************************************************

=============================================================================
TIME STEP #       9
*    A  Level output at time step 9 (0.0278 day)

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME        ENTRY *              SAND            *
    DAYS        POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.40        8.020 *      0.43                    *
                6.090 *      0.00                    *
                3.780 *      0.00                    *
                2.920 *      0.44                    *
                2.600 *      1.44                    *
                0.200 *      0.00                    *
   TOTAL=       0.200 *      2.31     13.06     -4.66 *
*****************************************************

=============================================================================
TIME STEP #      10
*    A  Level output at time step 10 (0.0278 day)

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0
```

```
        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME        ENTRY *             SAND              *
    DAYS        POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.43        8.020 *      0.43                    *
                6.090 *      0.00                    *
                3.780 *      0.00                    *
                2.920 *      0.48                    *
                2.600 *      1.67                    *
                0.200 *      0.00                    *
   TOTAL=       0.200 *      2.58     13.76     -4.33 *
*****************************************************

==========================================================================================
TIME STEP #       11
*    A  Level output at time step 11 (0.0278 day)

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME        ENTRY *             SAND              *
    DAYS        POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.46        8.020 *      0.44                    *
                6.090 *      0.00                    *
                3.780 *      0.00                    *
                2.920 *      0.50                    *
                2.600 *      1.77                    *
                0.200 *      0.00                    *
   TOTAL=       0.200 *      2.72     14.26     -4.25 *
*****************************************************

==========================================================================================
TIME STEP #       12
*    A  Level output at time step 12 (0.0347 day)

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0
```

```
        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10211.7   10211.7

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME        ENTRY *             SAND             *
    DAYS        POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.49        8.020 *      0.45                    *
                6.090 *      0.00                    *
                3.780 *      0.00                    *
                2.920 *      0.52                    *
                2.600 *      1.84                    *
                0.200 *      0.00                    *
   TOTAL=       0.200 *      2.82     14.69     -4.21 *
*****************************************************

=====================================================================================
TIME STEP #      13
*    A  Level output at time step 13 (0.0764 day)

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME        ENTRY *             SAND             *
    DAYS        POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.57        8.020 *      0.47                    *
                6.090 *      0.00                    *
                3.780 *      0.00                    *
                2.920 *      0.55                    *
                2.600 *      1.94                    *
                0.200 *      0.00                    *
   TOTAL=       0.200 *      2.96     15.29     -4.16 *
*****************************************************

=====================================================================================
TIME STEP #      14
*    A  Level output at time step 14 (0.0764 day)

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME        ENTRY *             SAND             *
    DAYS        POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.65        8.020 *      0.49                    *
                6.090 *      0.00                    *
                3.780 *      0.00                    *
                2.920 *      0.58                    *
                2.600 *      2.00                    *
                0.200 *      0.00                    *
   TOTAL=       0.200 *      3.07     15.72     -4.12 *
*****************************************************

=====================================================================================
TIME STEP #      15
*    A  Level output at time step 15 (0.1458 day)

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0

        *ERROR 15            10013.0   10013.0
```

```
         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME        ENTRY *              SAND              *
    DAYS        POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.79        8.020 *      0.54                     *
                6.090 *      0.00                     *
                3.780 *      0.00                     *
                2.920 *      0.64                     *
                2.600 *      2.22                     *
                0.200 *      0.00                     *
   TOTAL=       0.200 *      3.40     16.66     -3.90 *
*****************************************************

==========================================================================================
TIME STEP #       16
*    B  Level output at time step 16 (0.2083 day)
COMPUTING FROM TIME=      0.7916 DAYS TO TIME=      0.9999 DAYS IN    10 COMPUTATION STEPS

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

         *ERROR 15            10013.0   10013.0

- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
Cave Creek and Apache WMP
       ACCUMULATED TIME (yrs)....       0.003
       FLOW DURATION (days)......       0.021

UPSTREAM BOUNDARY CONDITIONS
-----------------------------------------------------------------------
Stream Segment # 1      |   DISCHARGE   | SEDIMENT LOAD | TEMPERATURE
Section No.      8.020  |     (cfs)     |  (tons/day)   |   (deg F)
-----------------------------------------------------------------------
                INFLOW  |       177.00  |       188.32  |       68.00

Upstream of SECTION NO.      6.090 is...
LOCAL INFLOW POINT # 5  |   DISCHARGE   | SEDIMENT LOAD | TEMPERATURE
                        |     (cfs)     |  (tons/day)   |   (deg F)
-----------------------------------------------------------------------
      MAINSTEM  INFLOW  |       177.00  |       188.32  |       68.00
      LOCAL     INFLOW  |        29.00  |         0.10  |       68.00
-----------------------------------------------------------------------
                 TOTAL  |       206.00  |       188.42  |       68.00

Upstream of SECTION NO.      3.780 is...
LOCAL INFLOW POINT # 4  |   DISCHARGE   | SEDIMENT LOAD | TEMPERATURE
                        |     (cfs)     |  (tons/day)   |   (deg F)
-----------------------------------------------------------------------
      MAINSTEM  INFLOW  |       206.00  |       188.42  |       68.00
      LOCAL     INFLOW  |        51.00  |         0.10  |       68.00
-----------------------------------------------------------------------
                 TOTAL  |       257.00  |       188.52  |       68.00

Upstream of SECTION NO.      2.920 is...
```

LOCAL INFLOW POINT # 3	DISCHARGE (cfs)	SEDIMENT LOAD (tons/day)	TEMPERATURE (deg F)
MAINSTEM INFLOW	257.00	188.52	68.00
LOCAL INFLOW	157.00	229.95	68.00
TOTAL	414.00	418.46	68.00

Upstream of SECTION NO. 2.600 is...

LOCAL INFLOW POINT # 2	DISCHARGE (cfs)	SEDIMENT LOAD (tons/day)	TEMPERATURE (deg F)
MAINSTEM INFLOW	414.00	418.46	68.00
LOCAL INFLOW	87.00	485.12	68.00
TOTAL	501.00	903.59	68.00

Upstream of SECTION NO. 0.200 is...

LOCAL INFLOW POINT # 1	DISCHARGE (cfs)	SEDIMENT LOAD (tons/day)	TEMPERATURE (deg F)
MAINSTEM INFLOW	501.00	903.59	68.00
LOCAL INFLOW	15.00	0.10	68.00
TOTAL	516.00	903.69	68.00

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT # 1
Cave Creek and Apache WMP
ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT

TIME DAYS	ENTRY POINT	SAND INFLOW	SAND OUTFLOW	SAND TRAP EFF
1.00	8.020	0.56		
	6.090	0.00		
	3.780	0.00		
	2.920	0.67		
	2.600	2.27		
	0.200	0.00		
TOTAL=	0.200	3.49	16.96	-3.86

TABLE SB-1: SEDIMENT LOAD PASSING THE BOUNDARIES OF STREAM SEGMENT # 1

SEDIMENT INFLOW at the Upstream Boundary:

GRAIN SIZE	LOAD (tons/day)	GRAIN SIZE	LOAD (tons/day)
VERY FINE SAND....	2.85	MEDIUM GRAVEL.....	40.31
FINE SAND.....	5.87	COARSE GRAVEL.....	49.52
MEDIUM SAND.....	11.76	VERY COARSE GRAVEL	4.10
COARSE SAND.....	12.26	SMALL COBBLES.....	1.64
VERY COARSE SAND..	13.53	LARGE COBBLES.....	0.03
VERY FINE GRAVEL..	18.77	SMALL BOULDERS....	0.00
FINE GRAVEL.....	27.69	MEDIUM BOULDERS...	0.00
		TOTAL =	188.32

SEDIMENT OUTFLOW from the Downstream Boundary

GRAIN SIZE	LOAD (tons/day)	GRAIN SIZE	LOAD (tons/day)
VERY FINE SAND....	587.07	MEDIUM GRAVEL.....	168.43
FINE SAND.....	491.96	COARSE GRAVEL.....	151.69
MEDIUM SAND.....	820.33	VERY COARSE GRAVEL	14.45
COARSE SAND.....	448.36	SMALL COBBLES.....	0.00
VERY COARSE SAND..	356.44	LARGE COBBLES.....	0.00
VERY FINE GRAVEL..	44.93	SMALL BOULDERS....	0.00
FINE GRAVEL.....	91.27	MEDIUM BOULDERS...	0.00
		TOTAL =	3174.93

TABLE SB-2: STATUS OF THE BED PROFILE AT TIME = 1.000 DAYS

SECTION NUMBER	BED CHANGE (ft)	WS ELEV (ft)	THALWEG (ft)	Q (cfs)	TRANSPORT RATE (tons/day) SAND
8.020	-0.67	1985.96	1984.43	177.	249.
7.980	-0.01	1983.49	1981.79	177.	211.
7.890	0.01	1978.66	1977.01	177.	179.
7.840	-0.68	1975.51	1973.72	177.	224.
7.740	0.04	1970.83	1969.14	177.	217.
7.650	0.04	1963.19	1961.84	177.	201.
7.550	0.05	1958.27	1956.75	177.	173.
7.460	-0.71	1951.86	1950.79	177.	384.
7.360	0.13	1946.55	1944.63	177.	378.
7.280	0.04	1942.40	1940.84	177.	479.
7.170	-0.16	1935.20	1933.84	177.	690.
7.080	-0.23	1930.14	1928.77	177.	771.
6.980	-0.17	1925.59	1923.83	177.	820.
6.900	-0.39	1921.34	1919.61	177.	898.
6.800	-0.01	1915.48	1913.99	177.	943.
6.710	0.25	1909.58	1907.75	177.	897.
6.630	0.10	1906.65	1905.10	177.	878.
6.580	0.05	1903.70	1902.05	177.	899.
6.500	-0.04	1900.54	1898.96	177.	853.
6.430	-0.12	1897.52	1896.38	177.	903.
6.320	0.11	1891.64	1890.11	177.	867.
6.250	-0.08	1889.12	1887.92	177.	844.
6.160	-0.13	1884.36	1882.87	177.	871.

6.090	0.06	1880.50	1879.56	206.	846.
6.010	-0.04	1876.95	1875.46	206.	837.
5.920	-0.14	1871.74	1869.86	206.	846.
5.830	-0.16	1867.10	1865.34	206.	855.
5.760	0.08	1863.16	1862.08	206.	779.
5.660	0.10	1857.31	1854.10	206.	682.
5.640	0.00	1855.81	1855.00	206.	679.
5.570	-0.21	1851.59	1849.79	206.	816.
5.480	-0.14	1848.07	1845.86	206.	856.
5.380	-0.03	1843.56	1840.97	206.	897.
5.310	-0.04	1840.31	1837.96	206.	925.
5.210	0.06	1836.30	1834.06	206.	812.
5.150	0.13	1833.38	1830.13	206.	699.
5.090	-0.05	1831.66	1829.95	206.	720.
5.030	-0.32	1827.70	1825.68	206.	834.
4.960	0.05	1824.83	1822.05	206.	829.
4.900	-0.29	1822.59	1821.71	206.	886.
4.820	-0.26	1819.44	1817.74	206.	969.
4.780	0.02	1814.66	1813.02	206.	946.
4.740	0.11	1812.47	1810.11	206.	863.
4.650	-0.04	1807.29	1805.96	206.	856.
4.600	-0.23	1803.59	1801.77	206.	910.
4.580	0.09	1802.66	1801.39	206.	910.
4.570	0.33	1801.61	1800.33	206.	1030.
4.560	0.13	1800.49	1799.13	206.	1155.
4.490	-0.01	1797.59	1795.99	206.	1255.
4.400	0.02	1794.63	1792.32	206.	1517.
4.310	0.10	1790.29	1788.10	206.	1830.
4.230	0.05	1788.17	1786.05	206.	1994.
4.220	-0.27	1786.95	1785.23	206.	2120.
4.110	-0.33	1783.18	1781.67	206.	2161.
4.050	0.19	1781.01	1779.19	206.	2003.
3.960	0.10	1775.89	1774.10	206.	1932.
3.860	-0.12	1771.58	1769.88	206.	1917.
3.780	-0.65	1767.95	1765.35	257.	1963.
3.750	0.25	1766.28	1764.25	257.	1793.
3.650	0.04	1763.93	1762.04	257.	1621.
3.600	-0.06	1761.61	1759.94	257.	1667.
3.520	0.02	1758.80	1756.02	257.	1632.
3.480	0.00	1757.47	1755.00	257.	1631.
3.400	0.04	1754.57	1752.04	257.	1583.
3.320	-0.03	1751.67	1749.97	257.	1578.
3.210	-0.22	1747.33	1745.78	257.	1609.
3.130	0.18	1744.79	1742.18	257.	1554.
3.070	0.11	1742.91	1741.11	257.	1530.
2.970	0.09	1737.90	1736.09	257.	1447.
2.920	0.18	1736.97	1734.18	414.	1641.
2.900	-0.17	1735.22	1733.83	414.	1672.
2.870	0.04	1733.78	1732.04	414.	1626.
2.820	0.02	1732.63	1730.02	414.	1421.
2.730	-0.38	1729.91	1727.62	414.	1424.
2.600	0.26	1726.44	1724.26	501.	1827.
2.520	0.19	1723.91	1721.19	501.	1654.
2.470	-0.06	1722.13	1719.94	501.	1594.
2.400	-0.25	1720.14	1717.75	501.	1493.
2.330	-0.41	1718.35	1716.59	501.	1375.
2.240	-0.33	1716.58	1713.67	501.	1351.
2.170	-0.17	1715.11	1713.83	501.	1470.
2.080	-0.25	1711.51	1709.75	501.	1656.
2.000	-0.21	1709.36	1708.29	501.	1814.
1.880	0.11	1704.34	1702.21	501.	1831.
1.850	0.20	1703.29	1700.20	501.	1783.
1.810	0.06	1701.65	1700.06	501.	1797.
1.750	-0.10	1700.43	1697.90	501.	1803.
1.660	-0.45	1697.59	1695.55	501.	2421.
1.600	0.22	1695.38	1692.22	501.	2401.
1.560	0.08	1694.34	1692.08	501.	2253.
1.470	-0.11	1692.15	1689.89	501.	2127.
1.370	-0.30	1689.77	1687.70	501.	2214.
1.270	0.10	1685.76	1684.10	501.	2241.
1.180	0.23	1683.33	1680.23	501.	2180.
1.090	-0.01	1682.17	1679.99	501.	2375.
0.990	-0.14	1678.74	1677.86	501.	2451.
0.840	-0.10	1671.80	1669.90	501.	2958.
0.750	0.27	1668.02	1666.27	501.	2851.
0.710	0.16	1667.16	1664.16	501.	2791.
0.630	-0.23	1665.42	1663.77	501.	2818.
0.540	-0.27	1661.45	1659.73	501.	2916.
0.430	0.07	1657.28	1655.07	501.	2760.
0.330	0.03	1653.91	1652.23	501.	2815.
0.200	-0.33	1647.52	1645.67	516.	3175.

$VOL

STREAM SEGMENT # 1: Cave Creek and Apache WMP

SUMMARY TABLE: MASS AND VOLUME OF SEDIMENT

SECTION	SEDIMENT THROUGH SECTION (tons)				SEDIMENT DEPOSITED IN REACH in cu. yds				
	TOTAL	SAND	SILT	CLAY	TOTAL	CUMULATIVE	SAND	SILT	CLAY
INFLOW	1125.	1125.	0.	0.	896.				
8.020	2113.	2113.	0.	0.	-787.	-787.	-787.	0.	0.

7.980	2378.	2378.	0.	0.	-211.	-998.	-211.	0.	0.
7.890	2321.	2321.	0.	0.	45.	-953.	45.	0.	0.
7.840	6362.	6362.	0.	0.	-3218.	-4171.	-3218.	0.	0.
7.740	5997.	5997.	0.	0.	291.	-3880.	291.	0.	0.
7.650	5776.	5776.	0.	0.	176.	-3704.	176.	0.	0.
7.550	5624.	5624.	0.	0.	121.	-3584.	121.	0.	0.
7.460	9829.	9829.	0.	0.	-3349.	-6933.	-3349.	0.	0.
7.360	9115.	9115.	0.	0.	569.	-6364.	569.	0.	0.
7.280	8537.	8537.	0.	0.	460.	-5904.	460.	0.	0.
7.170	8895.	8895.	0.	0.	-285.	-6189.	-285.	0.	0.
7.080	10014.	10014.	0.	0.	-891.	-7080.	-891.	0.	0.
6.980	11406.	11406.	0.	0.	-1109.	-8189.	-1109.	0.	0.
6.900	13063.	13063.	0.	0.	-1319.	-9509.	-1319.	0.	0.
6.800	12901.	12901.	0.	0.	129.	-9380.	129.	0.	0.
6.710	12452.	12452.	0.	0.	358.	-9022.	358.	0.	0.
6.630	12327.	12327.	0.	0.	100.	-8922.	100.	0.	0.
6.580	12224.	12224.	0.	0.	82.	-8840.	82.	0.	0.
6.500	12752.	12752.	0.	0.	-421.	-9261.	-421.	0.	0.
6.430	13447.	13447.	0.	0.	-553.	-9815.	-553.	0.	0.
6.320	13049.	13049.	0.	0.	317.	-9498.	317.	0.	0.
6.250	13708.	13708.	0.	0.	-525.	-10023.	-525.	0.	0.
6.160	14318.	14318.	0.	0.	-485.	-10508.	-485.	0.	0.
LOCAL	0.	0.	0.	0.	0.				
6.090	13847.	13847.	0.	0.	375.	-10133.	375.	0.	0.
6.010	14059.	14059.	0.	0.	-169.	-10302.	-169.	0.	0.
5.920	15344.	15344.	0.	0.	-1024.	-11326.	-1024.	0.	0.
5.830	16196.	16196.	0.	0.	-678.	-12004.	-678.	0.	0.
5.760	15816.	15816.	0.	0.	302.	-11702.	302.	0.	0.
5.660	14548.	14548.	0.	0.	1010.	-10691.	1010.	0.	0.
5.640	14087.	14087.	0.	0.	367.	-10324.	367.	0.	0.
5.570	14507.	14507.	0.	0.	-335.	-10659.	-335.	0.	0.
5.480	15143.	15143.	0.	0.	-507.	-11165.	-507.	0.	0.
5.380	15289.	15289.	0.	0.	-116.	-11282.	-116.	0.	0.
5.310	16112.	16112.	0.	0.	-655.	-11937.	-655.	0.	0.
5.210	16371.	16371.	0.	0.	-206.	-12143.	-206.	0.	0.
5.150	16041.	16041.	0.	0.	263.	-11881.	263.	0.	0.
5.090	15930.	15930.	0.	0.	88.	-11792.	88.	0.	0.
5.030	15835.	15835.	0.	0.	76.	-11716.	76.	0.	0.
4.960	15840.	15840.	0.	0.	-4.	-11720.	-4.	0.	0.
4.900	17259.	17259.	0.	0.	-1130.	-12851.	-1130.	0.	0.
4.820	18022.	18022.	0.	0.	-608.	-13459.	-608.	0.	0.
4.780	17755.	17755.	0.	0.	213.	-13246.	213.	0.	0.
4.740	17382.	17382.	0.	0.	297.	-12948.	297.	0.	0.
4.650	16433.	16433.	0.	0.	755.	-12193.	755.	0.	0.
4.600	14602.	14602.	0.	0.	1459.	-10734.	1459.	0.	0.
4.580	13977.	13977.	0.	0.	498.	-10236.	498.	0.	0.
4.570	14229.	14229.	0.	0.	-201.	-10437.	-201.	0.	0.
4.560	14773.	14773.	0.	0.	-433.	-10870.	-433.	0.	0.
4.490	15537.	15537.	0.	0.	-609.	-11479.	-609.	0.	0.
4.400	15412.	15412.	0.	0.	99.	-11380.	99.	0.	0.
4.310	15211.	15211.	0.	0.	161.	-11219.	161.	0.	0.
4.230	15438.	15438.	0.	0.	-182.	-11401.	-182.	0.	0.
4.220	16220.	16220.	0.	0.	-623.	-12023.	-623.	0.	0.
4.110	17538.	17538.	0.	0.	-1050.	-13073.	-1050.	0.	0.
4.050	17270.	17270.	0.	0.	214.	-12860.	214.	0.	0.
3.960	17055.	17055.	0.	0.	172.	-12688.	172.	0.	0.
3.860	17435.	17435.	0.	0.	-303.	-12991.	-303.	0.	0.
LOCAL	0.	0.	0.	0.	0.				
3.780	18476.	18476.	0.	0.	-829.	-13820.	-829.	0.	0.
3.750	17976.	17976.	0.	0.	398.	-13422.	398.	0.	0.
3.650	17714.	17714.	0.	0.	209.	-13213.	209.	0.	0.
3.600	17738.	17738.	0.	0.	-19.	-13232.	-19.	0.	0.
3.520	17333.	17333.	0.	0.	323.	-12910.	323.	0.	0.
3.480	17051.	17051.	0.	0.	225.	-12685.	225.	0.	0.
3.400	16942.	16942.	0.	0.	86.	-12599.	86.	0.	0.
3.320	17225.	17225.	0.	0.	-225.	-12824.	-225.	0.	0.
3.210	17567.	17567.	0.	0.	-272.	-13096.	-272.	0.	0.
3.130	16997.	16997.	0.	0.	454.	-12642.	454.	0.	0.
3.070	15935.	15935.	0.	0.	846.	-11796.	846.	0.	0.
2.970	13866.	13866.	0.	0.	1648.	-10148.	1648.	0.	0.
LOCAL	1350.	1350.	0.	0.	1075.				
2.920	13445.	13445.	0.	0.	1410.	-8738.	1410.	0.	0.
2.900	13604.	13604.	0.	0.	-127.	-8865.	-127.	0.	0.
2.870	12792.	12792.	0.	0.	647.	-8218.	647.	0.	0.
2.820	12687.	12687.	0.	0.	84.	-8134.	84.	0.	0.
2.730	15608.	15608.	0.	0.	-2327.	-10461.	-2327.	0.	0.
LOCAL	4596.	4596.	0.	0.	3661.				
2.600	19616.	19616.	0.	0.	469.	-9992.	469.	0.	0.
2.520	19091.	19091.	0.	0.	418.	-9574.	418.	0.	0.
2.470	19671.	19671.	0.	0.	-462.	-10036.	-462.	0.	0.
2.400	20807.	20807.	0.	0.	-904.	-10940.	-904.	0.	0.
2.330	22697.	22697.	0.	0.	-1505.	-12446.	-1505.	0.	0.
2.240	25141.	25141.	0.	0.	-1947.	-14392.	-1947.	0.	0.
2.170	26997.	26997.	0.	0.	-1479.	-15871.	-1479.	0.	0.
2.080	29712.	29712.	0.	0.	-2163.	-18034.	-2163.	0.	0.
2.000	32875.	32875.	0.	0.	-2519.	-20553.	-2519.	0.	0.
1.880	31936.	31936.	0.	0.	748.	-19805.	748.	0.	0.

1.850	30911.	30911.	0.	0.	816.	-18988.	816.	0.	0.
1.810	30421.	30421.	0.	0.	390.	-18598.	390.	0.	0.
1.750	30776.	30776.	0.	0.	-283.	-18881.	-283.	0.	0.
1.660	31770.	31770.	0.	0.	-792.	-19673.	-792.	0.	0.
1.600	31098.	31098.	0.	0.	536.	-19137.	536.	0.	0.
1.560	30759.	30759.	0.	0.	270.	-18868.	270.	0.	0.
1.470	32047.	32047.	0.	0.	-1025.	-19893.	-1025.	0.	0.
1.370	34693.	34693.	0.	0.	-2107.	-22000.	-2107.	0.	0.
1.270	33850.	33850.	0.	0.	671.	-21329.	671.	0.	0.
1.180	32496.	32496.	0.	0.	1078.	-20251.	1078.	0.	0.
1.090	32994.	32994.	0.	0.	-397.	-20648.	-397.	0.	0.
0.990	34723.	34723.	0.	0.	-1377.	-22025.	-1377.	0.	0.
0.840	35050.	35050.	0.	0.	-260.	-22285.	-260.	0.	0.
0.750	34031.	34031.	0.	0.	811.	-21474.	811.	0.	0.
0.710	33953.	33953.	0.	0.	62.	-21411.	62.	0.	0.
0.630	36116.	36116.	0.	0.	-1723.	-23134.	-1723.	0.	0.
0.540	37097.	37097.	0.	0.	-781.	-23916.	-781.	0.	0.
0.430	36112.	36112.	0.	0.	785.	-23131.	785.	0.	0.
0.330	35152.	35152.	0.	0.	765.	-22366.	765.	0.	0.
LOCAL	0.	0.	0.	0.	0.				
0.200	34353.	34353.	0.	0.	636.	-21730.	636.	0.	0.

$$END

0 DATA ERRORS DETECTED.

TOTAL NO. OF TIME STEPS READ = 16
TOTAL NO. OF WS PROFILES = 29
ITERATIONS IN EXNER EQ = 30160

COMPUTATIONS COMPLETED
RUN TIME = 0 HOURS, 0 MINUTES & 5.00 SECONDS

APPENDIX H.9

Paradise Wash Main Channel Model, 100-year Flood, Existing Conditions

```
T1      Cave Creek and Apache Wash WMP
T2      by Stantec: Proj. No. 82000077     File: PW-E100C.DAT
T3      for FCDMC:  FCD                    Date: 07-27-99  srg

NC 0.055   0.055    0.03     0.1     0.3

X1  0.04       11 9970.1510032.22
GR  1738    9680    1734    9765    1732    9850    1732 9946.82    1730 9970.15
GR  1726 9998.41    172610018.18    173010032.22    173210090.04    173610255.73
GR  173810279.91
HD  0.04    10.0

X1  0.13        8 9978.4110047.54     425     465     390
GR  1738 9952.71    1734 9978.41    1732 9980.5    173210019.25    173410047.54
GR  1736 10172.1    1736 10543.1    173810553.61
HD  0.13    10.0

X1  0.17       12 9974.5110022.71     225     200     225
GR  1740 9957.91    1734 9974.51    1732  9980.5    173210003.82    173410022.71
GR  173610084.24    173810128.49    173810423.55    173610511.08    173610520.92
GR  173810528.63    174010535.83
HD  0.17    10.0

X1  0.28       14    9974   10038     550     550     550
GR  1746    9761    1744    9780    1742    9817    1740    9891    1742    9974
GR  1740    9982    1738    9991    1738   10008    1740   10017    1742   10038
GR  1744   10151    1743   10229    1744   10243    1746   10289
HD  0.28    10.0

X1  0.34       13 9969.7510014.83     290     340     300
GR  1750 9749.69    1748 9772.57    1746 9799.65    1744 9969.75    1744 9988.37
GR  174410012.01    174410014.83    174610073.32    174610188.93    174410285.92
GR  174410293.88    174810324.22    1750 10351.7
HD  0.34    10.0

X1  0.44       14 9992.4610028.31     500     380     450
GR  1752 9603.04    1750 9682.28    1748 9992.46    174610001.98    1746   10007
GR  174810019.54    174910028.31    174910052.71    174810105.67    1746 10138.9
GR  174610140.02    174810149.52    175010159.12    1752 10170.1
HD  0.44    10.0

X1  0.53       10    9976   10028     475     500     495
GR  1758    9511    1756    9574    1754    9729    1752    9976    1750    9983
GR  1750   10018    1752   10028    1754   10099    1756   10115    1758   10131
HD  0.53    10.0

X1  0.62       18    9967   10031     420     460     450
GR  1762    9548    1760    9586    1758    9657  1757.5    9688    1758    9750
GR1758.5    9798    1758    9938    1756    9967    1754    9983    1754   10018
GR  1756   10031    1754   10047    1754   10056    1756   10069    1758   10085
GR  1758   10218    1760   10245    1762   10263
HD  0.62    10.0

X1  0.72       17    9978   10018     400     425     420
GR  1766    9396    1764    9427    1762    9473    1761    9526    1762    9616
GR  1760    9682  1758.5    9721    1760    9758  1760.5    9796    1760    9886
GR  1760    9978    1758    9988    1758   10012    1760   10018    1762   10066
GR  1764   10106    1766   10141
HD  0.72    10.0

X1   0.8       10 9982.1410020.71     420     330     350
GR  1768 9593.82    1766 9646.26    1766 9785.49    1764 9982.14    1762 9989.01
GR  176210010.62    176410020.71    1764 10104.6    176610291.13    1768 10321.7
HD   0.8    10.0

X1  0.89       11 9981.0110021.69     520     480     500
GR  1772 9582.26    1772 9582.35    1770 9640.11    1770 9921.21    1768 9981.01
GR  1764 9985.21    176410009.58    176610018.11    176810021.69    177010163.03
GR  177210270.58
HD  0.89    10.0

X1  0.95       13 9984.4910070.19     250     310     275
GR  1774  9590.3    1774  9590.4    1772 9688.06    1772 9688.13    1772 9982.32
GR  1770 9984.49    1768 9986.77    176610001.77    176610019.78    176810036.54
GR  177010070.19    177210159.61    177410232.27
HD  0.95    10.0

X1  1.04       13  9985.510029.11     500     300     400
GR  1778 9371.44    1778 9371.87    1774 9547.56    1774 9547.64    1774 9676.69
GR  1774 9678.18    1772 9732.85    1772  9985.5    1770 9991.67    177010013.58
GR  177210029.11    177610053.67    177810108.42
HD  1.04    10.0

X1  1.12       23 9943.4610023.31     320     470     420
GR  1782 9323.43    1782 9323.49    1780 9334.19    1780 9334.29    1778 9344.65
GR  1778 9345.18    1778    9460    1776  9546.2    1776 9547.35    1776 9660.25
GR  1776 9661.37    1778 9701.23    1778 9701.63    1780 9764.83    1780 9764.91
GR  1780 9845.43    1776 9943.46    1774 9981.99    177210002.99    177210010.59
GR  177610023.31    178010036.17    178210084.32
HD  1.12    10.0

X1  1.21       22 9983.14 10020.6     400     450     440
GR  1784    9421    1780 9440.23    1780  9538.2    1782 9595.38    1782 9618.31
GR  1780 9801.74    1780 9802.59    1780 9835.89    1780 9836.44    1782 9877.07
GR  1782 9886.63    1780 9977.68    1778 9982.64    1778 9983.14    1776 9988.45
```

```
GR  177610013.85    177810020.25    1778 10020.6    177810096.24    178010106.85
GR  178210131.31    178410206.15
HD  1.21    10.0

X1  1.27      18 9969.1210057.73     390     320     350
GR  1788 9347.73    1786 9366.76    1784 9787.72    1784 9788.51    1784 9960.27
GR  1784 9960.65    1782 9969.04    1782 9969.12    1778 9988.65    1778 9989.09
GR  177810011.61    177810012.22    178210057.73    178210058.84    178410169.81
GR  178410171.13    178810205.64    178810206.31
HD  1.27    10.0

X1  1.37      24 9958.8710020.46     570     430     500
GR  1792    9345    1790    9385    1788    9440    1788    9490 1789.51  9650.6
GR  1788 9806.04    1788 9806.97    1786 9865.72    1786 9866.07    1784  9886.2
GR  1784 9886.27    1784 9957.84    1784 9958.87    1782  9968.7    1782 9968.84
GR  1782 9990.03    178610020.46    178610055.46    178610057.12    178810069.22
GR  178810069.72    178810181.45    179010258.34    179210303.11
HD  1.37    10.0

X1  1.46      16 9973.0310038.59     260     670     500
GR  1794    9420    1792    9455    1790    9645    1790    9685    1792 9843.42
GR  1792 9885.29    1790 9920.09    1788 9973.03    1786 9983.48    178610027.78
GR  178610028.33    178810038.59    1788 10039.2    179210295.57    179210295.61
GR1793.910328.92
HD  1.46    10.0

X1  1.54      13 9986.0310020.15     400     400     400
GR  1796 9735.34    1794 9972.06    1792 9986.03    1790 9993.93    1790 10012.3
GR  179210020.15    179210029.59    179010124.43    179010160.57    179210181.54
GR  179410288.06    179410495.09    179610533.67
HD  1.54    10.0

QT

X1  1.65      11    9971   10020     600     575     600
GR  1806    9893    1804    9901    1802    9909    1800    9915    1798    9923
GR1797.8    9971    1796    9988    1796   10012    1798   10020    1800   10273
GR  1802 10273.1
HD  1.65    10.0

X1  1.75      10 9964.4410022.87     485     500     490
GR  1806 9923.03    1804 9964.44    1802 9975.68    1800  9998.4    180010003.69
GR  180410022.87    180410187.38    180210279.87    180210305.65    180610358.49
HD  1.75    10.0

X1  1.83      10 9983.6710038.99     440     450     445
GR  1812 9956.91    1810 9974.62    1808 9983.67    1806 9990.95    180610005.18
GR  180810038.99    181010189.64    181010254.89    180810359.32    181210422.67
HD  1.83    10.0

X1  1.92      11    9935   10025     460     450     455
GR  1816    9925    1814    9935    1812    9945    1810    9965    1810   10010
GR  1812   10015    1814   10025    1812   10050    1814   10100    1814   10340
GR  1816   10380
HD  1.92    10.0

X1     2      15 9983.4610022.29     390     390     400
GR  1822 9956.92    1818 9973.16    1818 9974.89    1816 9981.08    1816 9983.46
GR  1814 9989.77    1814 9993.01    181410005.51    181410007.19    181610022.29
GR  181610025.64    181810088.76    182010488.79    1820 10588.7    182210637.44
HD     2    10.0

X1  2.07       7 9969.04   10060     415     260     390
GR  1824 9955.42    1822 9969.04    1821    9980    1821   10020    1822   10060
GR  182210667.15    182410737.75
HD  2.07    10.0

X1  2.14      10 9979.0110025.81     385     380     380
GR  1828 9961.98    1826 9969.94    1824 9979.01    1824 9981.08    182410020.87
GR  182410025.81    182610218.97    182610361.55    182610637.58    182810689.74
HD  2.14    10.0

QT

X1  2.23      11 9979.4310023.07     435     445     440
GR  1834 9916.62    1832 9941.49    1830 9962.82    1828 9979.43    1826 9994.11
GR  182610007.33    182810023.07    183010034.76    1832   10373    1832   10480
GR  1834   10620
HD  2.23    10.0
EJ

T4  Project: Upper Cave Creek Watercourse Master Plan Studies
T5  Client : Flood Control District of Maricopa County (FCDMC)
T6  Date:    August 3, 1999
T7  Firm:    Stantec Consulting, Inc.
T8  ******************************************************
I1            10
I4  SAND      10       1      14       0       0       0       0       0
I5           0.5     0.5    0.25     0.5    0.25       0     1.0
LQ    Q       1    1400    4200
LT   QS       1    7358   11381
LF   VFS 0.00081 0.00080 0.00052
LF    FS 0.02651 0.02650 0.02378
LF    MS 0.11916 0.11915 0.11366
LF    CS 0.21448 0.21447 0.20535
```

```
LF   VCS 0.21791 0.21790 0.21022
LF   VFG 0.11094 0.11093 0.10880
LF    FG 0.13400 0.13402 0.13942
LF    MG 0.12236 0.12237 0.12300
LF    CG 0.04500 0.04506 0.06258
LF   VCG 0.00879 0.00879 0.01267
LF    SC       0       0       0
LF    LC       0       0       0
LF    SB       0       0       0
LF    MB       0       0       0
PF          2.23     1.0   294.6   174.9    92.9    87.4    82.7    46.6    71.1
PFC 23.8    51.7    11.9    31.3     6.1    21.4     3.0    17.7    0.59      13
PFC 0.42     7.5     0.3     3.5   0.149       2   0.074    1.65

$LOCAL
LQL    Q       1    1000
LTL   QS     0.1     0.1
LFL  VFS    0.10    0.10
LFL   FS    0.10    0.10
LFL   MS    0.10    0.10
LFL   CS    0.10    0.10
LFL  VCS    0.10    0.10
LFL  VFG    0.10    0.10
LFL   FG    0.10    0.10
LFL   MG    0.10    0.10
LFL   CG    0.10    0.10
LFL  VCG    0.05    0.05
LFL   SC    0.05    0.05
LFL   LC    0.00    0.00
LFL   SB    0.00    0.00
LFL   MB    0.00    0.00

LQL    Q       1    1000
LTL   QS     0.1     0.1
LFL  VFS    0.10    0.10
LFL   FS    0.10    0.10
LFL   MS    0.10    0.10
LFL   CS    0.10    0.10
LFL  VCS    0.10    0.10
LFL  VFG    0.10    0.10
LFL   FG    0.10    0.10
LFL   MG    0.10    0.10
LFL   CG    0.10    0.10
LFL  VCG    0.05    0.05
LFL   SC    0.05    0.05
LFL   LC    0.00    0.00
LFL   SB    0.00    0.00
LFL   MB    0.00    0.00

$HYD
$RATING
RC            13     500                0  1726.0 1728.36 1729.35 1730.07 1730.61
RC       1731.19 1731.71 1732.53 1732.92 1733.23 1733.48 1733.72 1733.98

*    A  Level output at time step 1 (0.2500 day)
Q    0.3     0.1     0.1
T     68      68      68
W 0.2500
*    A  Level output at time step 2 (0.0139 day)
Q      1     0.8     0.1
W 0.0139
*    A  Level output at time step 3 (0.0208 day)
Q      1     0.8     0.1
W 0.0208
*    A  Level output at time step 4 (0.0208 day)
Q     60    59.5     0.1
W 0.0208
*    A  Level output at time step 5 (0.0139 day)
Q    558     513      43
W 0.0139
*    A  Level output at time step 6 (0.0139 day)
Q   1044     402     358
W 0.0139
*    A  Level output at time step 7 (0.0208 day)
Q   4205    1064     493
W 0.0208
*    A  Level output at time step 8 (0.0208 day)
Q   4804      84    1161
W 0.0208
*    A  Level output at time step 9 (0.0278 day)
Q   2529     142     765
W 0.0278
*    A  Level output at time step 10 (0.0278 day)
Q   1230     203     368
W 0.0278
*    A  Level output at time step 11 (0.0278 day)
Q    705     149     200
W 0.0278
*    A  Level output at time step 12 (0.0347 day)
Q    454     107     122
W 0.0347
*    A  Level output at time step 13 (0.0764 day)
Q    304      60      75
W 0.0764
*    A  Level output at time step 14 (0.0764 day)
```

```
Q    233       43       58
W 0.0764
*    A  Level output at time step 15 (0.1458 day)
Q    354       59       87
W 0.1458
*    A  Level output at time step 16 (0.2083 day)
Q     87       29       23
X         0.02083  0.2083
$VOL  A
$$END
```

```
*************************************************     *********************************
*  SCOUR AND DEPOSITION IN RIVERS AND RESERVOIRS  *     *  U.S. ARMY CORPS OF ENGINEERS   *
*        Version: 4.1.00 -  OCTOBER 1993          *     *  HYDROLOGIC ENGINEERING CENTER  *
*  INPUT FILE:  PW-E100C.DAT                      *     *  609 SECOND STREET              *
*  OUTPUT FILE: PW-E100C.OUT                      *     *  DAVIS, CALIFORNIA 95616-4687   *
*  RUN DATE: 10 OCT 00    RUN TIME: 07:53:57      *     *  (916) 756-1104                 *
*************************************************     *********************************

                    X     X  XXXXXXX   XXXXX           XXXXX
                    X     X  X        X     X         X     X
                    X     X  X        X               X
                    XXXXXXX  XXXX     X        XXXXX  XXXXXX
                    X     X  X        X               X     X
                    X     X  X        X     X         X     X
                    X     X  XXXXXXX   XXXXX           XXXXX

         ****************************************************************
         *  MAXIMUM LIMITS FOR THIS VERSION ARE:                        *
         *       10  Stream Segments (Main Stem + Tributaries)          *
         *      500  Cross Sections                                     *
         *      200  Elevation/Station Points per Cross Section         *
         *       20  Grain Sizes                                        *
         *       10  Control Points                                     *
         ****************************************************************

T1      Cave Creek and Apache Wash WMP
T2      by Stantec: Proj. No. 82000077    File: PW-E100C.DAT
T3      for FCDMC:  FCD                   Date: 07-27-99  srg

N values...  Left   Channel   Right    Contraction    Expansion
           0.0550   0.0300   0.0550       1.1000      0.7000

SECTION NO.     0.040
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     0.130
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     0.170
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     0.280
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     0.340
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     0.440
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     0.530
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     0.620
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     0.720
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     0.800
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     0.890
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     0.950
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     1.040
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     1.120
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     1.210
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     1.270
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     1.370
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     1.460
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     1.540
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

LOCAL INFLOW POINT  1 occurs upstream from Section No.       1.540

SECTION NO.     1.650
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     1.750
```

```
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     1.830
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     1.920
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     2.000
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     2.070
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     2.140
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

LOCAL INFLOW POINT  2 occurs upstream from Section No.       2.140

SECTION NO.     2.230
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

NO. OF CROSS SECTIONS IN STREAM SEGMENT= 27
NO. OF INPUT DATA MESSAGES =   0

TOTAL NO. OF CROSS SECTIONS IN THE NETWORK =  27
TOTAL NO. OF STREAM SEGMENTS IN THE NETWORK=   1
END OF GEOMETRIC DATA

==========================================================================================

T4  Project: Upper Cave Creek Watercourse Master Plan Studies
T5  Client : Flood Control District of Maricopa County (FCDMC)
T6  Date:    August 3, 1999
T7  Firm:    Stantec Consulting, Inc.
T8  ******************************************************

        Cave Creek and Apache Wash WMP
        by Stantec: Proj. No. 82000077    File: PW-E100C.DAT
        for FCDMC:  FCD                   Date: 07-27-99  srg

- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
SEDIMENT PROPERITES AND PARAMETERS

       SPI      IBG     MNQ      SPGF      ACGR     NFALL    IBSHER
I1     10.        0       1     1.000    32.174         2         1
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 SANDS - BOULDERS ARE PRESENT

       MTC      IASA     LASA      SPGS       GSF      BSAE       PSI     UWDLB
I4     10         1       14     2.650     0.667     0.500    30.000    93.000

USING TRANSPORT CAPACITY RELATIONSHIP # 10, MPM(1948)
GRAIN SIZES UTILIZED (mean diameter - mm)
-----------------------------------------------------------------------
    VERY FINE SAND....     0.088  |  MEDIUM GRAVEL.....   11.314
    FINE SAND.........     0.177  |  COARSE GRAVEL.....   22.627
    MEDIUM SAND.......     0.354  |  VERY COARSE GRAVEL   45.255
    COARSE SAND.......     0.707  |  SMALL COBBLES.....   90.510
    VERY COARSE SAND..     1.414  |  LARGE COBBLES.....  181.019
    VERY FINE GRAVEL..     2.828  |  SMALL BOULDERS....  362.039
    FINE GRAVEL.......     5.657  |  MEDIUM BOULDERS...  724.077
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
COEFFICIENTS FOR COMPUTATION SCHEME WERE SPECIFIED
        DBI      DBN      XID      XIN      XIU      UBI      UBN      JSL
I5    0.500    0.500    0.250    0.500    0.250    0.000    1.000        1
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -

SEDIMENT LOAD TABLE FOR STREAM SEGMENT #   1
          LOAD BY GRAIN SIZE CLASS (tons/day)
-------------------------------------------------
LQ      Q | 1.00000     | 1400.00     | 4200.00     |
          ------------ ------------ ------------
LF    VFS |0.810000E-03| 5.88640     | 5.91812     |
LF     FS |0.265100E-01| 194.987     | 270.640     |
LF     MS |0.119160     | 876.706     | 1293.56     |
LF     CS |0.214480     | 1578.07     | 2337.09     |
LF    VCS |0.217910     | 1603.31     | 2392.51     |
LF    VFG |0.110940     | 816.223     | 1238.25     |
LF     FG |0.134000     | 986.119     | 1586.74     |
LF     MG |0.122360     | 900.398     | 1399.86     |
LF     CG |0.450000E-01| 331.551     | 712.223     |
LF    VCG |0.879000E-02| 64.6768     | 144.197     |
LF     SC |0.100000E-19|0.100000E-19|0.100000E-19|
LF     LC |0.100000E-19|0.100000E-19|0.100000E-19|
LF     SB |0.100000E-19|0.100000E-19|0.100000E-19|
LF     MB |0.100000E-19|0.100000E-19|0.100000E-19|
          ------------ ------------ ------------
   TOTAL |0.999960     | 7357.93     | 11381.0     |
-------------------------------------------------

REACH GEOMETRY FOR STREAM SEGMENT  1
-------------------------------------
  CROSS         REACH    MOVABLE      INITIAL BED-ELEVATIONS       ACCUMULATED CHANNEL DISTANCE
  SECTION       LENGTH     BED    LEFT SIDE  THALWEG  RIGHT SIDE        FROM DOWNSTREAM
```

NO.	(ft)	WIDTH	(ft)	(ft)	(ft)	(ft)	(miles)
	0.000						
0.040		599.910	1738.000	1726.000	1738.000	0.000	0.000
	390.000						
0.130		600.900	1738.000	1732.000	1738.000	390.000	0.074
	225.000						
0.170		577.920	1740.000	1732.000	1740.000	615.000	0.116
	550.000						
0.280		528.000	1746.000	1738.000	1746.000	1165.000	0.221
	300.000						
0.340		602.010	1750.000	1744.000	1750.000	1465.000	0.277
	450.000						
0.440		567.060	1752.000	1746.000	1752.000	1915.000	0.363
	495.000						
0.530		620.000	1758.000	1750.000	1758.000	2410.000	0.456
	450.000						
0.620		715.000	1762.000	1754.000	1762.000	2860.000	0.542
	420.000						
0.720		745.000	1766.000	1758.000	1766.000	3280.000	0.621
	350.000						
0.800		727.880	1768.000	1762.000	1768.000	3630.000	0.688
	500.000						
0.890		688.320	1772.000	1764.000	1772.000	4130.000	0.782
	275.000						
0.950		641.970	1774.000	1766.000	1774.000	4405.000	0.834
	400.000						
1.040		736.980	1778.000	1770.000	1778.000	4805.000	0.910
	420.000						
1.120		760.890	1782.000	1772.000	1782.000	5225.000	0.990
	440.000						
1.210		785.150	1784.000	1776.000	1784.000	5665.000	1.073
	350.000						
1.270		858.580	1788.000	1778.000	1788.000	6015.000	1.139
	500.000						
1.370		958.110	1792.000	1782.000	1792.000	6515.000	1.234
	500.000						
1.460		908.920	1794.000	1786.000	1793.900	7015.000	1.329
	400.000						
1.540		798.330	1796.000	1790.000	1796.000	7415.000	1.404
	600.000						
1.650		380.100	1806.000	1796.000	1802.000	8015.000	1.518
	490.000						
1.750		435.460	1806.000	1800.000	1806.000	8505.000	1.611
	445.000						
1.830		465.760	1812.000	1806.000	1812.000	8950.000	1.695
	455.000						
1.920		455.000	1816.000	1810.000	1816.000	9405.000	1.781
	400.000						
2.000		680.520	1822.000	1814.000	1822.000	9805.000	1.857
	390.000						
2.070		782.330	1824.000	1821.000	1824.000	10195.000	1.931
	380.000						
2.140		727.760	1828.000	1824.000	1828.000	10575.000	2.003
	440.000						
2.230		703.380	1834.000	1826.000	1834.000	11015.000	2.086

BED MATERIAL GRADATION

SECNO	SAE	DMAX (ft)	DXPI (ft)	XPI	TOTAL BED	BED MATERIAL FRACTIONS per grain size								
0.040	1.000	0.967	0.967	1.000	1.000	VF SAND	0.003	VF GRVL	0.027	S	COBL	0.114
						F SAND	0.012	F GRVL	0.062	L	COBL	0.098
						M SAND	0.072	M GRVL	0.146	S	BLDR	0.019
						C SAND	0.042	C GRVL	0.202	M	BLDR	0.000
						VC SAND	0.020	VC GRVL	0.167			
0.130	1.000	0.967	0.967	1.000	1.000	VF SAND	0.003	VF GRVL	0.027	S	COBL	0.114
						F SAND	0.012	F GRVL	0.062	L	COBL	0.098
						M SAND	0.072	M GRVL	0.146	S	BLDR	0.019
						C SAND	0.042	C GRVL	0.202	M	BLDR	0.000
						VC SAND	0.020	VC GRVL	0.167			
0.170	1.000	0.967	0.967	1.000	1.000	VF SAND	0.003	VF GRVL	0.027	S	COBL	0.114
						F SAND	0.012	F GRVL	0.062	L	COBL	0.098
						M SAND	0.072	M GRVL	0.146	S	BLDR	0.019
						C SAND	0.042	C GRVL	0.202	M	BLDR	0.000
						VC SAND	0.020	VC GRVL	0.167			
0.280	1.000	0.967	0.967	1.000	1.000	VF SAND	0.003	VF GRVL	0.027	S	COBL	0.114
						F SAND	0.012	F GRVL	0.062	L	COBL	0.098
						M SAND	0.072	M GRVL	0.146	S	BLDR	0.019
						C SAND	0.042	C GRVL	0.202	M	BLDR	0.000
						VC SAND	0.020	VC GRVL	0.167			
0.340	1.000	0.967	0.967	1.000	1.000	VF SAND	0.003	VF GRVL	0.027	S	COBL	0.114
						F SAND	0.012	F GRVL	0.062	L	COBL	0.098
						M SAND	0.072	M GRVL	0.146	S	BLDR	0.019
						C SAND	0.042	C GRVL	0.202	M	BLDR	0.000
						VC SAND	0.020	VC GRVL	0.167			
0.440	1.000	0.967	0.967	1.000	1.000	VF SAND	0.003	VF GRVL	0.027	S	COBL	0.114
						F SAND	0.012	F GRVL	0.062	L	COBL	0.098
						M SAND	0.072	M GRVL	0.146	S	BLDR	0.019

						C	SAND	0.042	C	GRVL	0.202	M	BLDR	0.000
						VC	SAND	0.020	VC	GRVL	0.167			
0.530	1.000	0.967	0.967	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.027	S	COBL	0.114
						F	SAND	0.012	F	GRVL	0.062	L	COBL	0.098
						M	SAND	0.072	M	GRVL	0.146	S	BLDR	0.019
						C	SAND	0.042	C	GRVL	0.202	M	BLDR	0.000
						VC	SAND	0.020	VC	GRVL	0.167			
0.620	1.000	0.967	0.967	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.027	S	COBL	0.114
						F	SAND	0.012	F	GRVL	0.062	L	COBL	0.098
						M	SAND	0.072	M	GRVL	0.146	S	BLDR	0.019
						C	SAND	0.042	C	GRVL	0.202	M	BLDR	0.000
						VC	SAND	0.020	VC	GRVL	0.167			
0.720	1.000	0.967	0.967	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.027	S	COBL	0.114
						F	SAND	0.012	F	GRVL	0.062	L	COBL	0.098
						M	SAND	0.072	M	GRVL	0.146	S	BLDR	0.019
						C	SAND	0.042	C	GRVL	0.202	M	BLDR	0.000
						VC	SAND	0.020	VC	GRVL	0.167			
0.800	1.000	0.967	0.967	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.027	S	COBL	0.114
						F	SAND	0.012	F	GRVL	0.062	L	COBL	0.098
						M	SAND	0.072	M	GRVL	0.146	S	BLDR	0.019
						C	SAND	0.042	C	GRVL	0.202	M	BLDR	0.000
						VC	SAND	0.020	VC	GRVL	0.167			
0.890	1.000	0.967	0.967	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.027	S	COBL	0.114
						F	SAND	0.012	F	GRVL	0.062	L	COBL	0.098
						M	SAND	0.072	M	GRVL	0.146	S	BLDR	0.019
						C	SAND	0.042	C	GRVL	0.202	M	BLDR	0.000
						VC	SAND	0.020	VC	GRVL	0.167			
0.950	1.000	0.967	0.967	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.027	S	COBL	0.114
						F	SAND	0.012	F	GRVL	0.062	L	COBL	0.098
						M	SAND	0.072	M	GRVL	0.146	S	BLDR	0.019
						C	SAND	0.042	C	GRVL	0.202	M	BLDR	0.000
						VC	SAND	0.020	VC	GRVL	0.167			
1.040	1.000	0.967	0.967	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.027	S	COBL	0.114
						F	SAND	0.012	F	GRVL	0.062	L	COBL	0.098
						M	SAND	0.072	M	GRVL	0.146	S	BLDR	0.019
						C	SAND	0.042	C	GRVL	0.202	M	BLDR	0.000
						VC	SAND	0.020	VC	GRVL	0.167			
1.120	1.000	0.967	0.967	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.027	S	COBL	0.114
						F	SAND	0.012	F	GRVL	0.062	L	COBL	0.098
						M	SAND	0.072	M	GRVL	0.146	S	BLDR	0.019
						C	SAND	0.042	C	GRVL	0.202	M	BLDR	0.000
						VC	SAND	0.020	VC	GRVL	0.167			
1.210	1.000	0.967	0.967	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.027	S	COBL	0.114
						F	SAND	0.012	F	GRVL	0.062	L	COBL	0.098
						M	SAND	0.072	M	GRVL	0.146	S	BLDR	0.019
						C	SAND	0.042	C	GRVL	0.202	M	BLDR	0.000
						VC	SAND	0.020	VC	GRVL	0.167			
1.270	1.000	0.967	0.967	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.027	S	COBL	0.114
						F	SAND	0.012	F	GRVL	0.062	L	COBL	0.098
						M	SAND	0.072	M	GRVL	0.146	S	BLDR	0.019
						C	SAND	0.042	C	GRVL	0.202	M	BLDR	0.000
						VC	SAND	0.020	VC	GRVL	0.167			
1.370	1.000	0.967	0.967	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.027	S	COBL	0.114
						F	SAND	0.012	F	GRVL	0.062	L	COBL	0.098
						M	SAND	0.072	M	GRVL	0.146	S	BLDR	0.019
						C	SAND	0.042	C	GRVL	0.202	M	BLDR	0.000
						VC	SAND	0.020	VC	GRVL	0.167			
1.460	1.000	0.967	0.967	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.027	S	COBL	0.114
						F	SAND	0.012	F	GRVL	0.062	L	COBL	0.098
						M	SAND	0.072	M	GRVL	0.146	S	BLDR	0.019
						C	SAND	0.042	C	GRVL	0.202	M	BLDR	0.000
						VC	SAND	0.020	VC	GRVL	0.167			
1.540	1.000	0.967	0.967	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.027	S	COBL	0.114
						F	SAND	0.012	F	GRVL	0.062	L	COBL	0.098
						M	SAND	0.072	M	GRVL	0.146	S	BLDR	0.019
						C	SAND	0.042	C	GRVL	0.202	M	BLDR	0.000
						VC	SAND	0.020	VC	GRVL	0.167			
1.650	1.000	0.967	0.967	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.027	S	COBL	0.114
						F	SAND	0.012	F	GRVL	0.062	L	COBL	0.098
						M	SAND	0.072	M	GRVL	0.146	S	BLDR	0.019
						C	SAND	0.042	C	GRVL	0.202	M	BLDR	0.000
						VC	SAND	0.020	VC	GRVL	0.167			
1.750	1.000	0.967	0.967	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.027	S	COBL	0.114
						F	SAND	0.012	F	GRVL	0.062	L	COBL	0.098
						M	SAND	0.072	M	GRVL	0.146	S	BLDR	0.019
						C	SAND	0.042	C	GRVL	0.202	M	BLDR	0.000
						VC	SAND	0.020	VC	GRVL	0.167			
1.830	1.000	0.967	0.967	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.027	S	COBL	0.114
						F	SAND	0.012	F	GRVL	0.062	L	COBL	0.098

```
                                                | M  SAND  0.072 | M  GRVL  0.146 | S  BLDR  0.019 |
                                                | C  SAND  0.042 | C  GRVL  0.202 | M  BLDR  0.000 |
                                                | VC SAND  0.020 | VC GRVL  0.167 |

     1.920  1.000  0.967  0.967  1.000  1.000 | VF SAND  0.003 | VF GRVL  0.027 | S  COBL  0.114 |
                                                | F  SAND  0.012 | F  GRVL  0.062 | L  COBL  0.098 |
                                                | M  SAND  0.072 | M  GRVL  0.146 | S  BLDR  0.019 |
                                                | C  SAND  0.042 | C  GRVL  0.202 | M  BLDR  0.000 |
                                                | VC SAND  0.020 | VC GRVL  0.167 |

     2.000  1.000  0.967  0.967  1.000  1.000 | VF SAND  0.003 | VF GRVL  0.027 | S  COBL  0.114 |
                                                | F  SAND  0.012 | F  GRVL  0.062 | L  COBL  0.098 |
                                                | M  SAND  0.072 | M  GRVL  0.146 | S  BLDR  0.019 |
                                                | C  SAND  0.042 | C  GRVL  0.202 | M  BLDR  0.000 |
                                                | VC SAND  0.020 | VC GRVL  0.167 |

     2.070  1.000  0.967  0.967  1.000  1.000 | VF SAND  0.003 | VF GRVL  0.027 | S  COBL  0.114 |
                                                | F  SAND  0.012 | F  GRVL  0.062 | L  COBL  0.098 |
                                                | M  SAND  0.072 | M  GRVL  0.146 | S  BLDR  0.019 |
                                                | C  SAND  0.042 | C  GRVL  0.202 | M  BLDR  0.000 |
                                                | VC SAND  0.020 | VC GRVL  0.167 |

     2.140  1.000  0.967  0.967  1.000  1.000 | VF SAND  0.003 | VF GRVL  0.027 | S  COBL  0.114 |
                                                | F  SAND  0.012 | F  GRVL  0.062 | L  COBL  0.098 |
                                                | M  SAND  0.072 | M  GRVL  0.146 | S  BLDR  0.019 |
                                                | C  SAND  0.042 | C  GRVL  0.202 | M  BLDR  0.000 |
                                                | VC SAND  0.020 | VC GRVL  0.167 |

     2.230  1.000  0.967  0.967  1.000  1.000 | VF SAND  0.003 | VF GRVL  0.027 | S  COBL  0.114 |
                                                | F  SAND  0.012 | F  GRVL  0.062 | L  COBL  0.098 |
                                                | M  SAND  0.072 | M  GRVL  0.146 | S  BLDR  0.019 |
                                                | C  SAND  0.042 | C  GRVL  0.202 | M  BLDR  0.000 |
                                                | VC SAND  0.020 | VC GRVL  0.167 |


..LOCAL INFLOW DATA...
SEDIMENT LOAD TABLE FOR STREAM SEGMENT #   1
                AT LOCAL INFLOW POINT #   1
          LOAD BY GRAIN SIZE CLASS (tons/day)
-----------------------------------
LQL     Q | 1.00000    | 1000.00    |
          ------------ ------------
LFL   VFS |0.100000E-01|0.100000E-01|
LFL    FS |0.100000E-01|0.100000E-01|
LFL    MS |0.100000E-01|0.100000E-01|
LFL    CS |0.100000E-01|0.100000E-01|
LFL   VCS |0.100000E-01|0.100000E-01|
LFL   VFG |0.100000E-01|0.100000E-01|
LFL    FG |0.100000E-01|0.100000E-01|
LFL    MG |0.100000E-01|0.100000E-01|
LFL    CG |0.100000E-01|0.100000E-01|
LFL   VCG |0.500000E-02|0.500000E-02|
LFL    SC |0.500000E-02|0.500000E-02|
LFL    LC |0.100000E-19|0.100000E-19|
LFL    SB |0.100000E-19|0.100000E-19|
LFL    MB |0.100000E-19|0.100000E-19|
          ------------ ------------
   TOTAL |0.100000    |0.100000    |
-----------------------------------

..LOCAL INFLOW DATA...
SEDIMENT LOAD TABLE FOR STREAM SEGMENT #   1
                AT LOCAL INFLOW POINT #   2
          LOAD BY GRAIN SIZE CLASS (tons/day)
-----------------------------------
LQL     Q | 1.00000    | 1000.00    |
          ------------ ------------
LFL   VFS |0.100000E-01|0.100000E-01|
LFL    FS |0.100000E-01|0.100000E-01|
LFL    MS |0.100000E-01|0.100000E-01|
LFL    CS |0.100000E-01|0.100000E-01|
LFL   VCS |0.100000E-01|0.100000E-01|
LFL   VFG |0.100000E-01|0.100000E-01|
LFL    FG |0.100000E-01|0.100000E-01|
LFL    MG |0.100000E-01|0.100000E-01|
LFL    CG |0.100000E-01|0.100000E-01|
LFL   VCG |0.500000E-02|0.500000E-02|
LFL    SC |0.500000E-02|0.500000E-02|
LFL    LC |0.100000E-19|0.100000E-19|
LFL    SB |0.100000E-19|0.100000E-19|
LFL    MB |0.100000E-19|0.100000E-19|
          ------------ ------------
   TOTAL |0.100000    |0.100000    |
-----------------------------------

BED SEDIMENT CONTROL VOLUMES

STREAM SEGMENT #  1: Cave Creek and Apache Wash WMP
| SECTION  |  LENGTH   |  WIDTH    |  DEPTH   |        V O L U M E        |
| NUMBER   |   (ft)    |   (ft)    |   (ft)   |   (cu.ft)    |   (cu.yd)  |
-------------------------------------------------------------------------
|    0.040 |   195.000 |   600.240 |   10.000 |0.117047E+07 | 43350.7    |
|    0.130 |   307.500 |   597.888 |   10.000 |0.183851E+07 | 68092.8    |
|    0.170 |   387.500 |   568.335 |   10.000 |0.220230E+07 | 81566.6    |
|    0.280 |   425.000 |   547.474 |   10.000 |0.232677E+07 | 86176.5    |
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0.340	375.000	585.152	10.000	0.219432E+07	81271.1	
0.440	472.500	581.851	10.000	0.274925E+07	101824.	
0.530	472.500	625.836	10.000	0.295707E+07	109521.	
0.620	435.000	703.448	10.000	0.306000E+07	113333.	
0.720	385.000	736.952	10.000	0.283726E+07	105084.	
0.800	425.000	722.473	10.000	0.307051E+07	113723.	
0.890	387.500	691.345	10.000	0.267896E+07	99220.8	
0.950	337.500	667.032	10.000	0.225123E+07	83379.0	
1.040	410.000	725.613	10.000	0.297501E+07	110186.	
1.120	430.000	761.135	10.000	0.327288E+07	121218.	
1.210	395.000	791.490	10.000	0.312639E+07	115792.	
1.270	425.000	868.017	10.000	0.368907E+07	136632.	
1.370	500.000	933.323	10.000	0.466662E+07	172838.	
1.460	450.000	901.646	10.000	0.405741E+07	150274.	
1.540	500.000	729.429	10.000	0.364715E+07	135080.	
1.650	545.000	465.135	10.000	0.253499E+07	93888.4	
1.750	467.500	430.596	10.000	0.201304E+07	74556.9	
1.830	450.000	458.953	10.000	0.206529E+07	76492.1	
1.920	427.500	492.078	10.000	0.210363E+07	77912.3	
2.000	395.000	659.211	10.000	0.260388E+07	96440.1	
2.070	385.000	756.164	10.000	0.291123E+07	107823.	
2.140	410.000	731.829	10.000	0.300050E+07	111130.	
2.230	220.000	711.507	10.000	0.156531E+07	57974.6	

```
NO. OF INPUT DATA MESSAGES=     0
END OF SEDIMENT DATA

==========================================================================================

$HYD
BEGIN COMPUTATIONS.

------------------------------------------------------------------------------------------
$RATING

Downstream Boundary Condition - Rating Curve
```

Elevation	Stage	Discharge	Elevation	Stage	Discharge
1726.000	1726.000	0.000	1732.530	1732.530	3500.000
1728.360	1728.360	500.000	1732.920	1732.920	4000.000
1729.350	1729.350	1000.000	1733.230	1733.230	4500.000
1730.070	1730.070	1500.000	1733.480	1733.480	5000.000
1730.610	1730.610	2000.000	1733.720	1733.720	5500.000
1731.190	1731.190	2500.000	1733.980	1733.980	6000.000
1731.710	1731.710	3000.000			

```
==========================================================================================
TIME STEP #        1
*    A  Level output at time step 1 (0.2500 day)
** Q BELOW TABLE **                                                                  **INLOAD**
**WATER DISCHARGE, WATER-SEDIMENT LOAD TABLE ENDPOINT**          0.10          1.00       0.000810
** Q BELOW TABLE **                                                                  **INLOAD**
**WATER DISCHARGE, WATER-SEDIMENT LOAD TABLE ENDPOINT**          0.10          1.00       0.010000
** HYPER-CONCENTRATIONS EXIST **
         AT SECTION NO. ......................      1.650
         ON STREAM SEGMENT...................          1
         TIME STEP #........................    1          DISCHARGE(Q)........................      0.200
         CONCENTRATION(PPM)..................   666001.4
         ENTRAINMENT COEFFICIENT REDUCED BY...  0.6396
** Q BELOW TABLE **                                                                  **INLOAD**
**WATER DISCHARGE, WATER-SEDIMENT LOAD TABLE ENDPOINT**          0.10          1.00       0.010000
** HYPER-CONCENTRATIONS EXIST **
         AT SECTION NO. ......................      1.120
         ON STREAM SEGMENT...................          1
         TIME STEP #........................    1          DISCHARGE(Q)........................      0.300
         CONCENTRATION(PPM)..................   515306.3
         ENTRAINMENT COEFFICIENT REDUCED BY...  0.8830
** HYPER-CONCENTRATIONS EXIST **
         AT SECTION NO. ......................      1.040
         ON STREAM SEGMENT...................          1
         TIME STEP #........................    1          DISCHARGE(Q)........................      0.300
         CONCENTRATION(PPM)..................   765829.3
         ENTRAINMENT COEFFICIENT REDUCED BY...  0.3338
** HYPER-CONCENTRATIONS EXIST **
         AT SECTION NO. ......................      0.950
         ON STREAM SEGMENT...................          1
         TIME STEP #........................    1          DISCHARGE(Q)........................      0.300
         CONCENTRATION(PPM)..................   657374.7
         ENTRAINMENT COEFFICIENT REDUCED BY...  0.6579
** HYPER-CONCENTRATIONS EXIST **
         AT SECTION NO. ......................      0.890
         ON STREAM SEGMENT...................          1
         TIME STEP #........................    1          DISCHARGE(Q)........................      0.300
         CONCENTRATION(PPM)..................   578290.0
         ENTRAINMENT COEFFICIENT REDUCED BY...  0.7977
** HYPER-CONCENTRATIONS EXIST **
         AT SECTION NO. ......................      0.800
         ON STREAM SEGMENT...................          1
         TIME STEP #........................    1          DISCHARGE(Q)........................      0.300
         CONCENTRATION(PPM)..................   430134.0
         ENTRAINMENT COEFFICIENT REDUCED BY...  0.9733
** HYPER-CONCENTRATIONS EXIST **
         AT SECTION NO. ......................      0.340
         ON STREAM SEGMENT...................          1
         TIME STEP #........................    1          DISCHARGE(Q)........................      0.300
```

```
        CONCENTRATION(PPM)..................   584142.6
        ENTRAINMENT COEFFICIENT REDUCED BY...  0.7888
** HYPER-CONCENTRATIONS EXIST **
        AT SECTION NO. .....................      0.170
        ON STREAM SEGMENT...................          1
        TIME STEP #.........................   1          DISCHARGE(Q)........................      0.300
        CONCENTRATION(PPM)..................   564618.3
        ENTRAINMENT COEFFICIENT REDUCED BY...  0.8178

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
**************************************************
    TIME       ENTRY *             SAND             *
    DAYS       POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.25       2.230 *      0.00                    *
               2.140 *      0.00                    *
               1.540 *      0.00                    *
   TOTAL=      0.040 *      0.00      0.06   -408.15 *
**************************************************

==========================================================================================
TIME STEP #       2
*    A  Level output at time step 2 (0.0139 day)
** Q BELOW TABLE **                                                                          **INLOAD**
**WATER DISCHARGE, WATER-SEDIMENT LOAD TABLE ENDPOINT**          0.10          1.00       0.000810
** Q BELOW TABLE **                                                                          **INLOAD**
**WATER DISCHARGE, WATER-SEDIMENT LOAD TABLE ENDPOINT**          0.10          1.00       0.010000
** Q BELOW TABLE **                                                                          **INLOAD**
**WATER DISCHARGE, WATER-SEDIMENT LOAD TABLE ENDPOINT**          0.80          1.00       0.010000
** HYPER-CONCENTRATIONS EXIST **
        AT SECTION NO. .....................      1.120
        ON STREAM SEGMENT...................          1
        TIME STEP #.........................   2          DISCHARGE(Q)........................      1.000
        CONCENTRATION(PPM)..................   460653.1
        ENTRAINMENT COEFFICIENT REDUCED BY...  0.9438
** HYPER-CONCENTRATIONS EXIST **
        AT SECTION NO. .....................      0.340
        ON STREAM SEGMENT...................          1
        TIME STEP #.........................   2          DISCHARGE(Q)........................      1.000
        CONCENTRATION(PPM)..................   400057.0
        ENTRAINMENT COEFFICIENT REDUCED BY...  0.9997
** HYPER-CONCENTRATIONS EXIST **
        AT SECTION NO. .....................      0.170
        ON STREAM SEGMENT...................          1
        TIME STEP #.........................   2          DISCHARGE(Q)........................      1.000
        CONCENTRATION(PPM)..................   488962.5
        ENTRAINMENT COEFFICIENT REDUCED BY...  0.9137

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
**************************************************
    TIME       ENTRY *             SAND             *
    DAYS       POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.26       2.230 *      0.00                    *
               2.140 *      0.00                    *
               1.540 *      0.00                    *
   TOTAL=      0.040 *      0.00      0.06   -387.22 *
**************************************************

==========================================================================================
TIME STEP #       3
*    A  Level output at time step 3 (0.0208 day)
** Q BELOW TABLE **                                                                          **INLOAD**
**WATER DISCHARGE, WATER-SEDIMENT LOAD TABLE ENDPOINT**          0.10          1.00       0.000810
** Q BELOW TABLE **                                                                          **INLOAD**
**WATER DISCHARGE, WATER-SEDIMENT LOAD TABLE ENDPOINT**          0.10          1.00       0.010000
** Q BELOW TABLE **                                                                          **INLOAD**
**WATER DISCHARGE, WATER-SEDIMENT LOAD TABLE ENDPOINT**          0.80          1.00       0.010000
** HYPER-CONCENTRATIONS EXIST **
        AT SECTION NO. .....................      0.170
        ON STREAM SEGMENT...................          1
        TIME STEP #.........................   3          DISCHARGE(Q)........................      1.000
        CONCENTRATION(PPM)..................   420730.4
        ENTRAINMENT COEFFICIENT REDUCED BY...  0.9819

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
**************************************************
    TIME       ENTRY *             SAND             *
    DAYS       POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.28       2.230 *      0.00                    *
               2.140 *      0.00                    *
               1.540 *      0.00                    *
   TOTAL=      0.040 *      0.00      0.06   -359.73 *
**************************************************

==========================================================================================
TIME STEP #       4
*    A  Level output at time step 4 (0.0208 day)
** Q BELOW TABLE **                                                                          **INLOAD**
**WATER DISCHARGE, WATER-SEDIMENT LOAD TABLE ENDPOINT**          0.40          1.00       0.000810
** Q BELOW TABLE **                                                                          **INLOAD**
```

```
**WATER DISCHARGE, WATER-SEDIMENT LOAD TABLE ENDPOINT**          0.10          1.00       0.010000
** HYPER-CONCENTRATIONS EXIST **
        AT SECTION NO. ......................      2.070
        ON STREAM SEGMENT....................          1
        TIME STEP #..........................   4          DISCHARGE(Q)........................      0.500
        CONCENTRATION(PPM)...................   610636.3
        ENTRAINMENT COEFFICIENT REDUCED BY...  0.7458
** HYPER-CONCENTRATIONS EXIST **
        AT SECTION NO. ......................      2.000
        ON STREAM SEGMENT....................          1
        TIME STEP #..........................   4          DISCHARGE(Q)........................      0.500
        CONCENTRATION(PPM)...................   469688.3
        ENTRAINMENT COEFFICIENT REDUCED BY...  0.9345
** HYPER-CONCENTRATIONS EXIST **
        AT SECTION NO. ......................      1.920
        ON STREAM SEGMENT....................          1
        TIME STEP #..........................   4          DISCHARGE(Q)........................      0.500
        CONCENTRATION(PPM)...................   762455.8
        ENTRAINMENT COEFFICIENT REDUCED BY...  0.3495
** HYPER-CONCENTRATIONS EXIST **
        AT SECTION NO. ......................      1.830
        ON STREAM SEGMENT....................          1
        TIME STEP #..........................   4          DISCHARGE(Q)........................      0.500
        CONCENTRATION(PPM)...................   765010.0
        ENTRAINMENT COEFFICIENT REDUCED BY...  0.3377
** HYPER-CONCENTRATIONS EXIST **
        AT SECTION NO. ......................      1.750
        ON STREAM SEGMENT....................          1
        TIME STEP #..........................   4          DISCHARGE(Q)........................      0.500
        CONCENTRATION(PPM)...................   702001.8
        ENTRAINMENT COEFFICIENT REDUCED BY...  0.5536
** HYPER-CONCENTRATIONS EXIST **
        AT SECTION NO. ......................      1.650
        ON STREAM SEGMENT....................          1
        TIME STEP #..........................   4          DISCHARGE(Q)........................      0.500
        CONCENTRATION(PPM)...................   724756.5
        ENTRAINMENT COEFFICIENT REDUCED BY...  0.4888

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*************************************************
    TIME        ENTRY *             SAND            *
    DAYS        POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.31        2.230 *      0.00                   *
                2.140 *      0.00                   *
                1.540 *      0.00                   *
   TOTAL=       0.040 *      0.00      0.10   -526.81 *
*************************************************

==========================================================================================
TIME STEP #        5
*    A  Level output at time step 5 (0.0139 day)

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*************************************************
    TIME        ENTRY *             SAND            *
    DAYS        POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.32        2.230 *      0.00                   *
                2.140 *      0.00                   *
                1.540 *      0.00                   *
   TOTAL=       0.040 *      0.00      0.13   -675.12 *
*************************************************

==========================================================================================
TIME STEP #        6
*    A  Level output at time step 6 (0.0139 day)

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*************************************************
    TIME        ENTRY *             SAND            *
    DAYS        POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.33        2.230 *      0.01                   *
                2.140 *      0.00                   *
                1.540 *      0.00                   *
   TOTAL=       0.040 *      0.01      0.22    -29.25 *
*************************************************

==========================================================================================
TIME STEP #        7
*    A  Level output at time step 7 (0.0208 day)
** Q ABOVE TABLE **                                                                          **INLOAD**
**WATER DISCHARGE, WATER-SEDIMENT LOAD TABLE ENDPOINT**       1064.00        1000.00       0.010000

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*************************************************
    TIME        ENTRY *             SAND            *
    DAYS        POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.35        2.230 *      0.10                   *
```

```
                2.140 *      0.00                      *
                1.540 *      0.00                      *
   TOTAL=       0.040 *      0.10       0.58     -4.58 *
*****************************************************

==========================================================================================
TIME STEP #        8
*    A  Level output at time step 8 (0.0208 day)
** Q ABOVE TABLE **                                                                  **INLOAD**
**WATER DISCHARGE, WATER-SEDIMENT LOAD TABLE ENDPOINT**        1161.00        1000.00        0.010000

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME        ENTRY *              SAND              *
    DAYS        POINT *    INFLOW    OUTFLOW  TRAP EFF *
    0.37        2.230 *      0.21                      *
                2.140 *      0.00                      *
                1.540 *      0.00                      *
   TOTAL=       0.040 *      0.21       0.77     -2.58 *
*****************************************************

==========================================================================================
TIME STEP #        9
*    A  Level output at time step 9 (0.0278 day)

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME        ENTRY *              SAND              *
    DAYS        POINT *    INFLOW    OUTFLOW  TRAP EFF *
    0.40        2.230 *      0.32                      *
                2.140 *      0.00                      *
                1.540 *      0.00                      *
   TOTAL=       0.040 *      0.32       1.24     -2.87 *
*****************************************************

==========================================================================================
TIME STEP #       10
*    A  Level output at time step 10 (0.0278 day)

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME        ENTRY *              SAND              *
    DAYS        POINT *    INFLOW    OUTFLOW  TRAP EFF *
    0.43        2.230 *      0.36                      *
                2.140 *      0.00                      *
                1.540 *      0.00                      *
   TOTAL=       0.040 *      0.36       1.49     -3.12 *
*****************************************************

==========================================================================================
TIME STEP #       11
*    A  Level output at time step 11 (0.0278 day)

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME        ENTRY *              SAND              *
    DAYS        POINT *    INFLOW    OUTFLOW  TRAP EFF *
    0.46        2.230 *      0.38                      *
                2.140 *      0.00                      *
                1.540 *      0.00                      *
   TOTAL=       0.040 *      0.38       1.63     -3.28 *
*****************************************************

==========================================================================================
TIME STEP #       12
*    A  Level output at time step 12 (0.0347 day)

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME        ENTRY *              SAND              *
    DAYS        POINT *    INFLOW    OUTFLOW  TRAP EFF *
    0.49        2.230 *      0.39                      *
                2.140 *      0.00                      *
                1.540 *      0.00                      *
   TOTAL=       0.040 *      0.39       1.74     -3.42 *
*****************************************************

==========================================================================================
TIME STEP #       13
*    A  Level output at time step 13 (0.0764 day)

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
```

```
    TIME        ENTRY *              SAND              *
    DAYS        POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.57        2.230 *      0.41                     *
                2.140 *      0.00                     *
                1.540 *      0.00                     *
   TOTAL=       0.040 *      0.41      1.90     -3.59 *
*****************************************************
```

```
==========================================================================================
TIME STEP #      14
*    A  Level output at time step 14 (0.0764 day)

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME        ENTRY *              SAND              *
    DAYS        POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.65        2.230 *      0.43                     *
                2.140 *      0.00                     *
                1.540 *      0.00                     *
   TOTAL=       0.040 *      0.43      2.00     -3.67 *
*****************************************************
```

```
==========================================================================================
TIME STEP #      15
*    A  Level output at time step 15 (0.1458 day)

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME        ENTRY *              SAND              *
    DAYS        POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.79        2.230 *      0.48                     *
                2.140 *      0.00                     *
                1.540 *      0.00                     *
   TOTAL=       0.040 *      0.48      2.26     -3.72 *
*****************************************************
```

```
==========================================================================================
TIME STEP #      16
*    B  Level output at time step 16 (0.2083 day)
COMPUTING FROM TIME=      0.7916 DAYS TO TIME=      0.9999 DAYS IN    10 COMPUTATION STEPS

- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
Cave Creek and Apache Wash WMP
       ACCUMULATED TIME (yrs)....       0.003
       FLOW DURATION (days)......       0.021

UPSTREAM BOUNDARY CONDITIONS
-------------------------------------------------------------------------
Stream Segment # 1      |   DISCHARGE   | SEDIMENT LOAD | TEMPERATURE
Section No.       2.230 |     (cfs)     |  (tons/day)   |   (deg F)
-------------------------------------------------------------------------
                 INFLOW |        35.00  |        79.02  |      68.00

Upstream of SECTION NO.      2.140 is...
LOCAL INFLOW POINT # 2 |   DISCHARGE   | SEDIMENT LOAD | TEMPERATURE
                       |     (cfs)     |  (tons/day)   |   (deg F)
-------------------------------------------------------------------------
      MAINSTEM  INFLOW |        35.00  |        79.02  |      68.00
      LOCAL     INFLOW |        23.00  |         0.10  |      68.00
-------------------------------------------------------------------------
                  TOTAL |        58.00  |        79.12  |      68.00

Upstream of SECTION NO.      1.540 is...
LOCAL INFLOW POINT # 1 |   DISCHARGE   | SEDIMENT LOAD | TEMPERATURE
                       |     (cfs)     |  (tons/day)   |   (deg F)
-------------------------------------------------------------------------
      MAINSTEM  INFLOW |        58.00  |        79.12  |      68.00
      LOCAL     INFLOW |        29.00  |         0.10  |      68.00
-------------------------------------------------------------------------
                  TOTAL |        87.00  |        79.22  |      68.00

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME        ENTRY *              SAND              *
    DAYS        POINT *    INFLOW   OUTFLOW  TRAP EFF *
    1.00        2.230 *      0.49                     *
                2.140 *      0.00                     *
                1.540 *      0.00                     *
   TOTAL=       0.040 *      0.49      2.38     -3.87 *
*****************************************************

TABLE SB-1:  SEDIMENT LOAD PASSING THE  BOUNDARIES OF STREAM SEGMENT #  1
-------------------------------------------------------------------------------
  SEDIMENT INFLOW at the Upstream Boundary:
      GRAIN SIZE      LOAD (tons/day) |    GRAIN SIZE      LOAD (tons/day)
  ---------------------------------------------------------------------------
    VERY FINE SAND....          0.06  |  MEDIUM GRAVEL.....          9.67
    FINE SAND.........          2.09  |  COARSE GRAVEL.....          3.56
    MEDIUM SAND.......          9.42  |  VERY COARSE GRAVEL          0.69
```

COARSE SAND.....	16.95	SMALL COBBLES.....	0.00
VERY COARSE SAND..	17.22	LARGE COBBLES.....	0.00
VERY FINE GRAVEL..	8.77	SMALL BOULDERS....	0.00
FINE GRAVEL.....	10.59	MEDIUM BOULDERS...	0.00
		TOTAL =	79.02

SEDIMENT OUTFLOW from the Downstream Boundary

GRAIN SIZE	LOAD (tons/day)	GRAIN SIZE	LOAD (tons/day)
VERY FINE SAND....	7.44	MEDIUM GRAVEL.....	209.42
FINE SAND.....	31.67	COARSE GRAVEL.....	170.44
MEDIUM SAND.....	188.54	VERY COARSE GRAVEL	0.00
COARSE SAND.....	107.45	SMALL COBBLES.....	0.00
VERY COARSE SAND..	49.00	LARGE COBBLES.....	0.00
VERY FINE GRAVEL..	59.76	SMALL BOULDERS....	0.00
FINE GRAVEL.....	119.29	MEDIUM BOULDERS...	0.00
		TOTAL =	943.01

TABLE SB-2: STATUS OF THE BED PROFILE AT TIME = 1.000 DAYS

SECTION NUMBER	BED CHANGE (ft)	WS ELEV (ft)	THALWEG (ft)	Q (cfs)	TRANSPORT RATE (tons/day) SAND
2.230	-0.62	1826.05	1825.38	35.	128.
2.140	-0.21	1824.27	1823.79	58.	436.
2.070	-0.78	1820.64	1820.22	58.	474.
2.000	-0.35	1814.60	1813.65	58.	507.
1.920	1.43	1811.86	1811.43	58.	359.
1.830	-0.75	1806.00	1805.25	58.	551.
1.750	0.19	1801.36	1800.19	58.	385.
1.650	0.42	1797.01	1796.42	58.	375.
1.540	-0.08	1790.61	1789.92	87.	664.
1.460	-0.05	1786.45	1785.95	87.	790.
1.370	-0.08	1782.98	1781.92	87.	842.
1.270	0.64	1779.34	1778.64	87.	364.
1.210	-0.41	1776.63	1775.59	87.	513.
1.120	0.38	1773.56	1772.38	87.	359.
1.040	-0.44	1770.59	1769.56	87.	493.
0.950	0.47	1767.30	1766.47	87.	354.
0.890	0.21	1765.42	1764.21	87.	381.
0.800	-0.50	1762.23	1761.50	87.	549.
0.720	-0.34	1758.64	1757.66	87.	706.
0.620	0.60	1755.12	1754.60	87.	438.
0.530	-0.06	1750.69	1749.94	87.	641.
0.440	-0.07	1747.27	1745.93	87.	799.
0.340	-0.44	1744.03	1743.56	87.	1028.
0.280	-0.42	1738.82	1737.58	87.	1260.
0.170	1.95	1734.60	1733.95	87.	704.
0.130	-1.06	1731.59	1730.94	87.	1014.
0.040	-0.47	1726.41	1725.53	87.	943.

$VOL A

STREAM SEGMENT # 1: Cave Creek and Apache Wash WMP

SUMMARY TABLE: MASS AND VOLUME OF SEDIMENT

SECTION	SEDIMENT THROUGH SECTION (tons) TOTAL	SAND	SILT	CLAY	SEDIMENT DEPOSITED IN REACH in cu. yds TOTAL	CUMULATIVE	SAND	SILT	CLAY
INFLOW	988.	988.	0.	0.	787.				
2.230	2193.	2193.	0.	0.	-960.	-960.	-960.	0.	0.
LOCAL	0.	0.	0.	0.	0.				
2.140	2960.	2960.	0.	0.	-610.	-1570.	-610.	0.	0.
2.070	6180.	6180.	0.	0.	-2565.	-4135.	-2565.	0.	0.
2.000	7173.	7173.	0.	0.	-792.	-4927.	-792.	0.	0.
1.920	4502.	4502.	0.	0.	2128.	-2799.	2128.	0.	0.
1.830	6681.	6681.	0.	0.	-1736.	-4534.	-1736.	0.	0.
1.750	5707.	5707.	0.	0.	776.	-3759.	776.	0.	0.
1.650	3559.	3559.	0.	0.	1711.	-2048.	1711.	0.	0.
LOCAL	0.	0.	0.	0.	0.				
1.540	3642.	3642.	0.	0.	-66.	-2113.	-66.	0.	0.
1.460	3672.	3672.	0.	0.	-24.	-2138.	-24.	0.	0.
1.370	3869.	3869.	0.	0.	-157.	-2294.	-157.	0.	0.
1.270	2977.	2977.	0.	0.	711.	-1584.	711.	0.	0.
1.210	3593.	3593.	0.	0.	-491.	-2075.	-491.	0.	0.
1.120	2223.	2223.	0.	0.	1091.	-983.	1091.	0.	0.
1.040	3237.	3237.	0.	0.	-808.	-1791.	-808.	0.	0.
0.950	2752.	2752.	0.	0.	386.	-1405.	386.	0.	0.
0.890	2507.	2507.	0.	0.	195.	-1210.	195.	0.	0.
0.800	3520.	3520.	0.	0.	-807.	-2016.	-807.	0.	0.
0.720	4650.	4650.	0.	0.	-900.	-2916.	-900.	0.	0.
0.620	3522.	3522.	0.	0.	898.	-2018.	898.	0.	0.
0.530	3217.	3217.	0.	0.	243.	-1775.	243.	0.	0.
0.440	3187.	3187.	0.	0.	24.	-1751.	24.	0.	0.
0.340	5391.	5391.	0.	0.	-1756.	-3507.	-1756.	0.	0.
0.280	6714.	6714.	0.	0.	-1054.	-4561.	-1054.	0.	0.
0.170	3339.	3339.	0.	0.	2688.	-1872.	2688.	0.	0.
0.130	5094.	5094.	0.	0.	-1398.	-3270.	-1398.	0.	0.

```
    0.040      4815.      4815.        0.        0.      222.    -3048.      222.        0.        0.

TOTAL SEDIMENT - per grain size - THROUGH EACH CROSS SECTION (tons)
-------------------------------------------------------------------------------
 UPSTREAM INFLOW
      VF SAND        1.   VF GRVL      109.   S  COBL        0.
      F  SAND       25.   F  GRVL      134.   L  COBL        0.
      M  SAND      116.   M  GRVL      121.   S  BLDR        0.
      C  SAND      209.   C  GRVL       50.   M  BLDR        0.
      VC SAND      213.   VC GRVL       10.

 SECTION NO.     2.230
      VF SAND        4.   VF GRVL      140.   S  COBL       78.
      F  SAND       39.   F  GRVL      221.   L  COBL        0.
      M  SAND      196.   M  GRVL      369.   S  BLDR        0.
      C  SAND      256.   C  GRVL      406.   M  BLDR        0.
      VC SAND      232.   VC GRVL      253.

 LOCAL INFLOW
      VF SAND        0.   VF GRVL        0.   S  COBL        0.
      F  SAND        0.   F  GRVL        0.   L  COBL        0.
      M  SAND        0.   M  GRVL        0.   S  BLDR        0.
      C  SAND        0.   C  GRVL        0.   M  BLDR        0.
      VC SAND        0.   VC GRVL        0.

 SECTION NO.     2.140
      VF SAND        9.   VF GRVL      169.   S  COBL       19.
      F  SAND       58.   F  GRVL      313.   L  COBL        0.
      M  SAND      320.   M  GRVL      604.   S  BLDR        0.
      C  SAND      294.   C  GRVL      655.   M  BLDR        0.
      VC SAND      223.   VC GRVL      296.
 SECTION NO.     2.070
      VF SAND       21.   VF GRVL      278.   S  COBL      175.
      F  SAND      109.   F  GRVL      578.   L  COBL        0.
      M  SAND      633.   M  GRVL     1235.   S  BLDR        0.
      C  SAND      460.   C  GRVL     1521.   M  BLDR        0.
      VC SAND      288.   VC GRVL      881.
 SECTION NO.     2.000
      VF SAND       26.   VF GRVL      313.   S  COBL      229.
      F  SAND      126.   F  GRVL      667.   L  COBL        3.
      M  SAND      737.   M  GRVL     1448.   S  BLDR        0.
      C  SAND      510.   C  GRVL     1796.   M  BLDR        0.
      VC SAND      304.   VC GRVL     1015.
 SECTION NO.     1.920
      VF SAND       22.   VF GRVL      231.   S  COBL       68.
      F  SAND      101.   F  GRVL      485.   L  COBL        2.
      M  SAND      580.   M  GRVL      974.   S  BLDR        0.
      C  SAND      380.   C  GRVL      993.   M  BLDR        0.
      VC SAND      211.   VC GRVL      454.
 SECTION NO.     1.830
      VF SAND       29.   VF GRVL      296.   S  COBL      265.
      F  SAND      132.   F  GRVL      641.   L  COBL        3.
      M  SAND      767.   M  GRVL     1344.   S  BLDR        0.
      C  SAND      482.   C  GRVL     1576.   M  BLDR        0.
      VC SAND      256.   VC GRVL      890.
 SECTION NO.     1.750
      VF SAND       28.   VF GRVL      262.   S  COBL      198.
      F  SAND      121.   F  GRVL      565.   L  COBL        3.
      M  SAND      697.   M  GRVL     1157.   S  BLDR        0.
      C  SAND      430.   C  GRVL     1341.   M  BLDR        0.
      VC SAND      222.   VC GRVL      684.
 SECTION NO.     1.650
      VF SAND       24.   VF GRVL      182.   S  COBL       57.
      F  SAND       91.   F  GRVL      383.   L  COBL        0.
      M  SAND      508.   M  GRVL      739.   S  BLDR        0.
      C  SAND      307.   C  GRVL      767.   M  BLDR        0.
      VC SAND      153.   VC GRVL      349.

 LOCAL INFLOW
      VF SAND        0.   VF GRVL        0.   S  COBL        0.
      F  SAND        0.   F  GRVL        0.   L  COBL        0.
      M  SAND        0.   M  GRVL        0.   S  BLDR        0.
      C  SAND        0.   C  GRVL        0.   M  BLDR        0.
      VC SAND        0.   VC GRVL        0.

 SECTION NO.     1.540
      VF SAND       23.   VF GRVL      181.   S  COBL       68.
      F  SAND       89.   F  GRVL      392.   L  COBL        0.
      M  SAND      499.   M  GRVL      797.   S  BLDR        0.
      C  SAND      300.   C  GRVL      807.   M  BLDR        0.
      VC SAND      150.   VC GRVL      336.
 SECTION NO.     1.460
      VF SAND       23.   VF GRVL      182.   S  COBL       55.
      F  SAND       88.   F  GRVL      399.   L  COBL        0.
      M  SAND      497.   M  GRVL      822.   S  BLDR        0.
      C  SAND      299.   C  GRVL      821.   M  BLDR        0.
      VC SAND      149.   VC GRVL      337.
 SECTION NO.     1.370
      VF SAND       24.   VF GRVL      189.   S  COBL       42.
      F  SAND       91.   F  GRVL      417.   L  COBL        0.
      M  SAND      519.   M  GRVL      873.   S  BLDR        0.
      C  SAND      311.   C  GRVL      889.   M  BLDR        0.
      VC SAND      154.   VC GRVL      360.
 SECTION NO.     1.270
      VF SAND       21.   VF GRVL      155.   S  COBL       16.
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      F  SAND        77.   F  GRVL       334.   L  COBL         0.
      M  SAND       441.   M  GRVL       669.   S  BLDR         0.
      C  SAND       260.   C  GRVL       631.   M  BLDR         0.
      VC SAND       125.   VC GRVL       249.
SECTION NO.       1.210
      VF SAND        23.   VF GRVL       177.   S  COBL        82.
      F  SAND        87.   F  GRVL       378.   L  COBL         0.
      M  SAND       508.   M  GRVL       772.   S  BLDR         0.
      C  SAND       298.   C  GRVL       787.   M  BLDR         0.
      VC SAND       142.   VC GRVL       336.
SECTION NO.       1.120
      VF SAND        20.   VF GRVL       142.   S  COBL         9.
      F  SAND        75.   F  GRVL       281.   L  COBL         8.
      M  SAND       429.   M  GRVL       482.   S  BLDR         2.
      C  SAND       249.   C  GRVL       334.   M  BLDR         0.
      VC SAND       116.   VC GRVL        74.
SECTION NO.       1.040
      VF SAND        23.   VF GRVL       168.   S  COBL        32.
      F  SAND        87.   F  GRVL       345.   L  COBL         0.
      M  SAND       501.   M  GRVL       652.   S  BLDR         0.
      C  SAND       290.   C  GRVL       658.   M  BLDR         0.
      VC SAND       136.   VC GRVL       345.
SECTION NO.       0.950
      VF SAND        21.   VF GRVL       158.   S  COBL        10.
      F  SAND        81.   F  GRVL       328.   L  COBL         0.
      M  SAND       468.   M  GRVL       605.   S  BLDR         0.
      C  SAND       270.   C  GRVL       517.   M  BLDR         0.
      VC SAND       126.   VC GRVL       167.
SECTION NO.       0.890
      VF SAND        20.   VF GRVL       147.   S  COBL         6.
      F  SAND        76.   F  GRVL       300.   L  COBL         0.
      M  SAND       438.   M  GRVL       523.   S  BLDR         0.
      C  SAND       253.   C  GRVL       387.   M  BLDR         0.
      VC SAND       118.   VC GRVL       239.
SECTION NO.       0.800
      VF SAND        22.   VF GRVL       165.   S  COBL        18.
      F  SAND        85.   F  GRVL       346.   L  COBL         0.
      M  SAND       484.   M  GRVL       753.   S  BLDR         0.
      C  SAND       280.   C  GRVL       943.   M  BLDR         0.
      VC SAND       131.   VC GRVL       294.
SECTION NO.       0.720
      VF SAND        24.   VF GRVL       199.   S  COBL        87.
      F  SAND        96.   F  GRVL       451.   L  COBL         0.
      M  SAND       559.   M  GRVL      1055.   S  BLDR         0.
      C  SAND       323.   C  GRVL      1206.   M  BLDR         0.
      VC SAND       152.   VC GRVL       496.
SECTION NO.       0.620
      VF SAND        21.   VF GRVL       169.   S  COBL        42.
      F  SAND        80.   F  GRVL       391.   L  COBL         0.
      M  SAND       467.   M  GRVL       854.   S  BLDR         0.
      C  SAND       270.   C  GRVL       788.   M  BLDR         0.
      VC SAND       128.   VC GRVL       314.
SECTION NO.       0.530
      VF SAND        20.   VF GRVL       164.   S  COBL        27.
      F  SAND        78.   F  GRVL       375.   L  COBL         0.
      M  SAND       460.   M  GRVL       759.   S  BLDR         0.
      C  SAND       266.   C  GRVL       682.   M  BLDR         0.
      VC SAND       125.   VC GRVL       260.
SECTION NO.       0.440
      VF SAND        21.   VF GRVL       169.   S  COBL        22.
      F  SAND        82.   F  GRVL       381.   L  COBL         0.
      M  SAND       483.   M  GRVL       763.   S  BLDR         0.
      C  SAND       279.   C  GRVL       653.   M  BLDR         0.
      VC SAND       131.   VC GRVL       202.
SECTION NO.       0.340
      VF SAND        29.   VF GRVL       244.   S  COBL       117.
      F  SAND       116.   F  GRVL       552.   L  COBL         0.
      M  SAND       686.   M  GRVL      1166.   S  BLDR         0.
      C  SAND       397.   C  GRVL      1246.   M  BLDR         0.
      VC SAND       187.   VC GRVL       652.
SECTION NO.       0.280
      VF SAND        33.   VF GRVL       284.   S  COBL       285.
      F  SAND       134.   F  GRVL       645.   L  COBL         0.
      M  SAND       798.   M  GRVL      1383.   S  BLDR         0.
      C  SAND       462.   C  GRVL      1574.   M  BLDR         0.
      VC SAND       218.   VC GRVL       897.
SECTION NO.       0.170
      VF SAND        26.   VF GRVL       194.   S  COBL         0.
      F  SAND        99.   F  GRVL       422.   L  COBL         0.
      M  SAND       554.   M  GRVL       804.   S  BLDR         0.
      C  SAND       321.   C  GRVL       616.   M  BLDR         0.
      VC SAND       150.   VC GRVL       152.
SECTION NO.       0.130
      VF SAND        31.   VF GRVL       243.   S  COBL       228.
      F  SAND       120.   F  GRVL       536.   L  COBL         0.
      M  SAND       685.   M  GRVL      1073.   S  BLDR         0.
      C  SAND       397.   C  GRVL      1027.   M  BLDR         0.
      VC SAND       187.   VC GRVL       567.
SECTION NO.       0.040
      VF SAND        32.   VF GRVL       234.   S  COBL        92.
      F  SAND       118.   F  GRVL       514.   L  COBL         0.
      M  SAND       663.   M  GRVL      1025.   S  BLDR         0.
      C  SAND       384.   C  GRVL      1010.   M  BLDR         0.
      VC SAND       180.   VC GRVL       563.
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$$END

       0   DATA ERRORS DETECTED.

TOTAL NO. OF TIME STEPS READ =        16
TOTAL NO. OF WS PROFILES =            25
ITERATIONS IN EXNER EQ =            6750

COMPUTATIONS COMPLETED
RUN TIME =  0 HOURS,  0 MINUTES &  1.00 SECONDS
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APPENDIX H.10

Paradise Wash Overbank Model, 100-year Flood, Existing Condition

```
T1      Cave Creek and Apache Wash WMP
T2      by Stantec: Proj. No. 82000077     File: PW-E100F.DAT
T3      for FCDMC:  FCD                    Date: 07-27-99  srg

NC 0.055   0.055    0.03     0.1     0.3

X1  0.04       11 9970.1510032.22
GR  1738    9680    1734    9765    1732    9850    1732 9946.82    1730 9970.15
GR  1726 9998.41    172610018.18    173010032.22    173210090.04    173610255.73
GR  173810279.91
HD  0.04    10.0

X1  0.13        8 9978.4110047.54     425     465     390
GR  1738 9952.71    1734 9978.41    1732 9988.85    173210019.25    173410047.54
GR  1736 10172.1    1736 10543.1    173810553.61
HD  0.13    10.0

X1  0.17       12 9974.5110022.71     225     200     225
GR  1740 9957.91    1734 9974.51    1732  9980.5    173210003.82    173410022.71
GR  173610084.24    173810128.49    173810423.55    173610511.08    173610520.92
GR  173810528.63    174010535.83
HD  0.17    10.0

X1  0.28       14    9974   10038     550     550     550
GR  1746    9761    1744    9780    1742    9817    1740    9891    1742    9974
GR  1740    9982    1738    9991    1738   10008    1740   10017    1742   10038
GR  1744   10151    1743   10229    1744   10243    1746   10289
HD  0.28    10.0

X1  0.34       13 9969.7510014.83     290     340     300
GR  1750 9749.69    1748 9772.57    1746 9799.65    1744 9969.75    1744 9988.37
GR  174410012.01    174410014.83    174610073.32    174610188.93    174410285.92
GR  174410293.88    174810324.22    1750 10351.7
HD  0.34    10.0

X1  0.44       14 9992.4610028.31     500     380     450
GR  1752 9603.04    1750 9682.28    1748 9992.46    174610001.98    1746   10007
GR  174810019.54    174910028.31    174910052.71    174810105.67    1746 10138.9
GR  174610140.02    174810149.52    175010159.12    1752 10170.1
HD  0.44    10.0

X1  0.53       10    9976   10028     475     500     495
GR  1758    9511    1756    9574    1754    9729    1752    9976    1750    9983
GR  1750   10018    1752   10028    1754   10099    1756   10115    1758   10131
HD  0.53    10.0

X1  0.62       18    9967   10031     420     460     450
GR  1762    9548    1760    9586    1758    9657  1757.5    9688    1758    9750
GR1758.5    9798    1758    9938    1756    9967    1754    9983    1754   10018
GR  1756   10031    1754   10047    1754   10056    1756   10069    1758   10085
GR  1758   10218    1760   10245    1762   10263
HD  0.62    10.0

X1  0.72       17    9978   10018     400     425     420
GR  1766    9396    1764    9427    1762    9473    1761    9526    1762    9616
GR  1760    9682  1758.5    9721    1760    9758  1760.5    9796    1760    9886
GR  1760    9978    1758    9988    1758   10012    1760   10018    1762   10066
GR  1764   10106    1766   10141
HD  0.72    10.0

X1   0.8       10 9982.1410020.71     420     330     350
GR  1768 9593.82    1766 9646.26    1766 9785.49    1764 9982.14    1762 9989.01
GR  176210010.62    176410020.71    1764 10104.6    176610291.13    1768 10321.7
HD   0.8    10.0

X1  0.89       11 9981.0110021.69     520     480     500
GR  1772 9582.26    1772 9582.35    1770 9640.11    1770 9921.21    1768 9981.01
GR  1764 9985.21    176410009.58    176610018.11    176810021.69    177010163.03
GR  177210270.58
HD  0.89    10.0

X1  0.95       13 9984.4910070.19     250     310     275
GR  1774  9590.3    1774  9590.4    1772 9688.06    1772 9688.13    1772 9982.32
GR  1770 9984.49    1768 9986.77    176610001.77    176610019.78    176810036.54
GR  177010070.19    177210159.61    177410232.27
HD  0.95    10.0

X1  1.04       13  9985.510029.11     500     300     400
GR  1778 9371.44    1778 9371.87    1774 9547.56    1774 9547.64    1774 9676.69
GR  1774 9678.18    1772 9732.85    1772  9985.5    1770 9991.67    177010013.58
GR  177210029.11    177610053.67    177810108.42
HD  1.04    10.0

X1  1.12       23 9943.4610023.31     320     470     420
GR  1782 9323.43    1782 9323.49    1780 9334.19    1780 9334.29    1778 9344.65
GR  1778 9345.18    1778    9460    1776  9546.2    1776 9547.35    1776 9660.25
GR  1776 9661.37    1778 9701.23    1778 9701.63    1780 9764.83    1780 9764.91
GR  1780 9845.43    1776 9943.46    1774 9981.99    177210002.99    177210010.59
GR  177610023.31    178010036.17    178210084.32
HD  1.12    10.0

X1  1.21       22 9983.14 10020.6     400     450     440
GR  1784    9421    1780 9440.23    1780  9538.2    1782 9595.38    1782 9618.31
GR  1780 9801.74    1780 9802.59    1780 9835.89    1780 9836.44    1782 9877.07
GR  1782 9886.63    1780 9977.68    1778 9982.64    1778 9983.14    1776 9988.45
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GR  177610013.85    177810020.25    1778 10020.6    177810096.24    178010106.85
GR  178210131.31    178410206.15
HD  1.21    10.0

X1  1.27      18 9969.1210057.73     390     320     350
GR  1788 9347.73    1786 9366.76    1784 9787.72    1784 9788.51    1784 9960.27
GR  1784 9960.65    1782 9969.04    1782 9969.12    1778 9988.65    1778 9989.09
GR  177810011.61    177810012.22    178210057.73    178210058.84    178410169.81
GR  178410171.13    178810205.64    178810206.31
HD  1.27    10.0

X1  1.37      24 9958.8710020.46     570     430     500
GR  1792    9345    1790    9385    1788    9440    1788    9490 1789.51  9650.6
GR  1788 9806.04    1788 9806.97    1786 9865.72    1786 9866.07    1784  9886.2
GR  1784 9886.27    1784 9957.84    1784 9958.87    1782  9968.7    1782 9968.84
GR  1782 9990.03    178610020.46    178610055.46    178610057.12    178810069.22
GR  178810069.72    178810181.45    179010258.34    179210303.11
HD  1.37    10.0

X1  1.46      16 9973.0310038.59     260     670     500
GR  1794    9420    1792    9455    1790    9645    1790    9685    1792 9843.42
GR  1792 9885.29    1790 9920.09    1788 9973.03    1786 9983.48    178610027.78
GR  178610028.33    178810038.59    1788 10039.2    179210295.57    179210295.61
GR1793.910328.92
HD  1.46    10.0

X1  1.54      13 9986.0310020.15     400     400     400
GR  1796 9735.34    1794 9972.06    1792 9986.03    1790 9993.93    1790 10012.3
GR  179210020.15    179210029.59    179010124.43    179010160.57    179210181.54
GR  179410288.06    179410495.09    179610533.67
HD  1.54    10.0

QT

X1  1.65      11    9971   10020     600     575     600
GR  1806    9893    1804    9901    1802    9909    1800    9915    1798    9923
GR1797.8    9971    1796    9988    1796   10012    1798   10020    1800   10273
GR  1802 10273.1
HD  1.65    10.0

X1  1.75      10 9964.4410022.87     485     500     490
GR  1806 9923.03    1804 9964.44    1802 9975.68    1800  9998.4    180010003.69
GR  180410022.87    180410187.38    180210279.87    180210305.65    180610358.49
HD  1.75    10.0

X1  1.83      10 9983.6710038.99     440     450     445
GR  1812 9956.91    1810 9974.62    1808 9983.67    1806 9990.95    180610005.18
GR  180810038.99    181010189.64    181010254.89    180810359.32    181210422.67
HD  1.83    10.0

X1  1.92      11    9935   10025     460     450     455
GR  1816    9925    1814    9935    1812    9945    1810    9965    1810   10010
GR  1812   10015    1814   10025    1812   10050    1814   10100    1814   10340
GR  1816   10380
HD  1.92    10.0

X1     2      15 9983.4610022.29     390     390     400
GR  1822 9956.92    1818 9973.16    1818 9974.89    1816 9981.08    1816 9983.46
GR  1814 9989.77    1814 9993.01    181410005.51    181410007.19    181610022.29
GR  181610025.64    181810088.76    182010488.79    1820 10588.7    182210637.44
HD     2    10.0

X1  2.07       7 9969.04   10060     415     260     390
GR  1824 9955.42    1822 9969.04    1821    9980    1821   10020    1822   10060
GR  182210667.15    182410737.75
HD  2.07    10.0

X1  2.14      10 9979.0110025.81     385     380     380
GR  1828 9961.98    1826 9969.94    1824 9979.01    1824 9981.08    182410020.87
GR  182410025.81    182610218.97    182610361.55    182610637.58    182810689.74
HD  2.14    10.0

QT

X1  2.23      11 9979.4310023.07     435     445     440
GR  1834 9916.62    1832 9941.49    1830 9962.82    1828 9979.43    1826 9994.11
GR  182610007.33    182810023.07    183010034.76    1832   10373    1832   10480
GR  1834   10620
HD  2.23    10.0
EJ

T4  Project: Upper Cave Creek Watercourse Master Plan Studies
T5  Client : Flood Control District of Maricopa County (FCDMC)
T6  Date:    August 3, 1999
T7  Firm:    Stantec Consulting, Inc.
T8  ******************************************************
I1            10
I4  SAND       4       1      14       0       0       0       0       0
I5           0.5     0.5    0.25     0.5    0.25       0     1.0
LQ    Q        1    1400    4200
LT   QS        1    7358   11381
LF   VFS 0.00081 0.00080 0.00052
LF    FS 0.02651 0.02650 0.02378
LF    MS 0.11916 0.11915 0.11366
LF    CS 0.21448 0.21447 0.20535
```

```
LF   VCS 0.21791 0.21790 0.21022
LF   VFG 0.11094 0.11093 0.10880
LF    FG 0.13400 0.13402 0.13942
LF    MG 0.12236 0.12237 0.12300
LF    CG 0.04500 0.04506 0.06258
LF   VCG 0.00879 0.00879 0.01267
LF    SC       0       0       0
LF    LC       0       0       0
LF    SB       0       0       0
LF    MB       0       0       0
PF          2.23     1.0    50.8    38.1      98    25.4      96   19.05      93
PFC 12.7      87   9.525      82    6.35      73    4.75      67    2.38      57
PFC    2      54    1.19      39    0.59      18    0.42      10     0.3       4
PFC0.149       1

$LOCAL
LQL    Q       1    1000
LTL   QS     0.1     0.1
LFL  VFS    0.10    0.10
LFL   FS    0.10    0.10
LFL   MS    0.10    0.10
LFL   CS    0.10    0.10
LFL  VCS    0.10    0.10
LFL  VFG    0.10    0.10
LFL   FG    0.10    0.10
LFL   MG    0.10    0.10
LFL   CG    0.10    0.10
LFL  VCG    0.05    0.05
LFL   SC    0.05    0.05
LFL   LC    0.00    0.00
LFL   SB    0.00    0.00
LFL   MB    0.00    0.00

LQL    Q       1    1000
LTL   QS     0.1     0.1
LFL  VFS    0.10    0.10
LFL   FS    0.10    0.10
LFL   MS    0.10    0.10
LFL   CS    0.10    0.10
LFL  VCS    0.10    0.10
LFL  VFG    0.10    0.10
LFL   FG    0.10    0.10
LFL   MG    0.10    0.10
LFL   CG    0.10    0.10
LFL  VCG    0.05    0.05
LFL   SC    0.05    0.05
LFL   LC    0.00    0.00
LFL   SB    0.00    0.00
LFL   MB    0.00    0.00

$HYD
$RATING
RC            13     500               0  1726.0 1728.36 1729.35 1730.07 1730.61
RC       1731.19 1731.71 1732.53 1732.92 1733.23 1733.48 1733.72 1733.98

*    A  Level output at time step 1 (0.2500 day)
Q    0.3     0.1     0.1
T     68      68      68
W 0.2500
*    A  Level output at time step 2 (0.0139 day)
Q      1     0.8     0.1
W 0.0139
*    A  Level output at time step 3 (0.0208 day)
Q      1     0.8     0.1
W 0.0208
*    A  Level output at time step 4 (0.0208 day)
Q     60    59.8     0.1
W 0.0208
*    A  Level output at time step 5 (0.0139 day)
Q    558     513      43
W 0.0139
*    A  Level output at time step 6 (0.0139 day)
Q   1044     402     358
W 0.0139
*    A  Level output at time step 7 (0.0208 day)
Q   4205    1064     493
W 0.0208
*    A  Level output at time step 8 (0.0208 day)
Q   4804      84    1161
W 0.0208
*    A  Level output at time step 9 (0.0278 day)
Q   2529     142     765
W 0.0278
*    A  Level output at time step 10 (0.0278 day)
Q   1230     203     368
W 0.0278
*    A  Level output at time step 11 (0.0278 day)
Q    705     149     200
W 0.0278
*    A  Level output at time step 12 (0.0347 day)
Q    454     107     122
W 0.0347
*    A  Level output at time step 13 (0.0764 day)
Q    304      60      75
W 0.0764
```

```
*************************************************     ***********************************
*  SCOUR AND DEPOSITION IN RIVERS AND RESERVOIRS  *     *  U.S. ARMY CORPS OF ENGINEERS   *
*       Version: 4.1.00 -  OCTOBER 1993           *     *  HYDROLOGIC ENGINEERING CENTER  *
*  INPUT FILE:  PW-E100F.DAT                      *     *  609 SECOND STREET              *
*  OUTPUT FILE: PW-E100F.OUT                      *     *  DAVIS, CALIFORNIA 95616-4687   *
*  RUN DATE: 10 OCT 00    RUN TIME: 07:57:00      *     *  (916) 756-1104                 *
*************************************************     ***********************************

                    X     X  XXXXXXX   XXXXX           XXXXX
                    X     X  X        X     X         X     X
                    X     X  X        X               X
                    XXXXXXX  XXXX     X        XXXXX  XXXXXX
                    X     X  X        X               X     X
                    X     X  X        X     X         X     X
                    X     X  XXXXXXX   XXXXX           XXXXX

          ******************************************************************
          *  MAXIMUM LIMITS FOR THIS VERSION ARE:                          *
          *       10  Stream Segments (Main Stem + Tributaries)            *
          *      500  Cross Sections                                       *
          *      200  Elevation/Station Points per Cross Section           *
          *       20  Grain Sizes                                          *
          *       10  Control Points                                       *
          ******************************************************************

T1      Cave Creek and Apache Wash WMP
T2      by Stantec: Proj. No. 82000077    File: PW-E100F.DAT
T3      for FCDMC:  FCD                   Date: 07-27-99  srg

N values...  Left   Channel   Right    Contraction    Expansion
           0.0550   0.0300   0.0550       1.1000      0.7000

SECTION NO.     0.040
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     0.130
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     0.170
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     0.280
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     0.340
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     0.440
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     0.530
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     0.620
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     0.720
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     0.800
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     0.890
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     0.950
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     1.040
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     1.120
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     1.210
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     1.270
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     1.370
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     1.460
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     1.540
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

LOCAL INFLOW POINT  1 occurs upstream from Section No.       1.540

SECTION NO.     1.650
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     1.750
```

```
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     1.830
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     1.920
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     2.000
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     2.070
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     2.140
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

LOCAL INFLOW POINT  2 occurs upstream from Section No.       2.140

SECTION NO.     2.230
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

NO. OF CROSS SECTIONS IN STREAM SEGMENT= 27
NO. OF INPUT DATA MESSAGES =   0

TOTAL NO. OF CROSS SECTIONS IN THE NETWORK =  27
TOTAL NO. OF STREAM SEGMENTS IN THE NETWORK=   1
END OF GEOMETRIC DATA

==========================================================================================

T4  Project: Upper Cave Creek Watercourse Master Plan Studies
T5  Client : Flood Control District of Maricopa County (FCDMC)
T6  Date:    August 3, 1999
T7  Firm:    Stantec Consulting, Inc.
T8  ******************************************************

        Cave Creek and Apache Wash WMP
        by Stantec: Proj. No. 82000077    File: PW-E100F.DAT
        for FCDMC:  FCD                   Date: 07-27-99  srg

- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
SEDIMENT PROPERITES AND PARAMETERS

       SPI     IBG    MNQ     SPGF     ACGR     NFALL    IBSHER
I1     10.      0      1     1.000    32.174      2         1
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 SANDS - BOULDERS ARE PRESENT

       MTC     IASA    LASA     SPGS      GSF      BSAE      PSI     UWDLB
I4      4       1      14      2.650     0.667     0.500    30.000    93.000

USING TRANSPORT CAPACITY RELATIONSHIP #  4, YANG
GRAIN SIZES UTILIZED (mean diameter - mm)
-----------------------------------------------------------------------
    VERY FINE SAND....     0.088  |  MEDIUM GRAVEL.....   11.314
    FINE SAND.........     0.177  |  COARSE GRAVEL.....   22.627
    MEDIUM SAND.......     0.354  |  VERY COARSE GRAVEL   45.255
    COARSE SAND.......     0.707  |  SMALL COBBLES.....   90.510
    VERY COARSE SAND..     1.414  |  LARGE COBBLES.....  181.019
    VERY FINE GRAVEL..     2.828  |  SMALL BOULDERS....  362.039
    FINE GRAVEL.......     5.657  |  MEDIUM BOULDERS...  724.077
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
COEFFICIENTS FOR COMPUTATION SCHEME WERE SPECIFIED
        DBI      DBN      XID      XIN      XIU      UBI      UBN      JSL
I5    0.500    0.500    0.250    0.500    0.250    0.000    1.000       1
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -

SEDIMENT LOAD TABLE FOR STREAM SEGMENT #   1
          LOAD BY GRAIN SIZE CLASS (tons/day)
-----------------------------------------------
LQ      Q | 1.00000    | 1400.00    | 4200.00    |
          ------------ ------------ ------------
LF    VFS |0.810000E-03| 5.88640    | 5.91812    |
LF     FS |0.265100E-01| 194.987    | 270.640    |
LF     MS |0.119160    | 876.706    | 1293.56    |
LF     CS |0.214480    | 1578.07    | 2337.09    |
LF    VCS |0.217910    | 1603.31    | 2392.51    |
LF    VFG |0.110940    | 816.223    | 1238.25    |
LF     FG |0.134000    | 986.119    | 1586.74    |
LF     MG |0.122360    | 900.398    | 1399.86    |
LF     CG |0.450000E-01| 331.551    | 712.223    |
LF    VCG |0.879000E-02| 64.6768    | 144.197    |
LF     SC |0.100000E-19|0.100000E-19|0.100000E-19|
LF     LC |0.100000E-19|0.100000E-19|0.100000E-19|
LF     SB |0.100000E-19|0.100000E-19|0.100000E-19|
LF     MB |0.100000E-19|0.100000E-19|0.100000E-19|
          ------------ ------------ ------------
   TOTAL |0.999960    | 7357.93    | 11381.0    |
-----------------------------------------------

REACH GEOMETRY FOR STREAM SEGMENT  1
-------------------------------------
  CROSS        REACH    MOVABLE      INITIAL BED-ELEVATIONS       ACCUMULATED CHANNEL DISTANCE
  SECTION      LENGTH     BED    LEFT SIDE  THALWEG  RIGHT SIDE        FROM DOWNSTREAM
```

NO.	(ft)	WIDTH	(ft)	(ft)	(ft)	(ft)	(miles)
	0.000						
0.040		599.910	1738.000	1726.000	1738.000	0.000	0.000
	390.000						
0.130		600.900	1738.000	1732.000	1738.000	390.000	0.074
	225.000						
0.170		577.920	1740.000	1732.000	1740.000	615.000	0.116
	550.000						
0.280		528.000	1746.000	1738.000	1746.000	1165.000	0.221
	300.000						
0.340		602.010	1750.000	1744.000	1750.000	1465.000	0.277
	450.000						
0.440		567.060	1752.000	1746.000	1752.000	1915.000	0.363
	495.000						
0.530		620.000	1758.000	1750.000	1758.000	2410.000	0.456
	450.000						
0.620		715.000	1762.000	1754.000	1762.000	2860.000	0.542
	420.000						
0.720		745.000	1766.000	1758.000	1766.000	3280.000	0.621
	350.000						
0.800		727.880	1768.000	1762.000	1768.000	3630.000	0.688
	500.000						
0.890		688.320	1772.000	1764.000	1772.000	4130.000	0.782
	275.000						
0.950		641.970	1774.000	1766.000	1774.000	4405.000	0.834
	400.000						
1.040		736.980	1778.000	1770.000	1778.000	4805.000	0.910
	420.000						
1.120		760.890	1782.000	1772.000	1782.000	5225.000	0.990
	440.000						
1.210		785.150	1784.000	1776.000	1784.000	5665.000	1.073
	350.000						
1.270		858.580	1788.000	1778.000	1788.000	6015.000	1.139
	500.000						
1.370		958.110	1792.000	1782.000	1792.000	6515.000	1.234
	500.000						
1.460		908.920	1794.000	1786.000	1793.900	7015.000	1.329
	400.000						
1.540		798.330	1796.000	1790.000	1796.000	7415.000	1.404
	600.000						
1.650		380.100	1806.000	1796.000	1802.000	8015.000	1.518
	490.000						
1.750		435.460	1806.000	1800.000	1806.000	8505.000	1.611
	445.000						
1.830		465.760	1812.000	1806.000	1812.000	8950.000	1.695
	455.000						
1.920		455.000	1816.000	1810.000	1816.000	9405.000	1.781
	400.000						
2.000		680.520	1822.000	1814.000	1822.000	9805.000	1.857
	390.000						
2.070		782.330	1824.000	1821.000	1824.000	10195.000	1.931
	380.000						
2.140		727.760	1828.000	1824.000	1828.000	10575.000	2.003
	440.000						
2.230		703.380	1834.000	1826.000	1834.000	11015.000	2.086

BED MATERIAL GRADATION

SECNO	SAE	DMAX (ft)	DXPI (ft)	XPI	TOTAL BED	BED MATERIAL FRACTIONS per grain size			
0.040	1.000	0.167	0.167	1.000	1.000	VF SAND 0.000	VF GRVL 0.105	S COBL 0.000	
						F SAND 0.022	F GRVL 0.136	L COBL 0.000	
						M SAND 0.109	M GRVL 0.123	S BLDR 0.000	
						C SAND 0.197	C GRVL 0.067	M BLDR 0.000	
						VC SAND 0.202	VC GRVL 0.029		
0.130	1.000	0.167	0.167	1.000	1.000	VF SAND 0.000	VF GRVL 0.105	S COBL 0.000	
						F SAND 0.022	F GRVL 0.136	L COBL 0.000	
						M SAND 0.109	M GRVL 0.123	S BLDR 0.000	
						C SAND 0.197	C GRVL 0.067	M BLDR 0.000	
						VC SAND 0.202	VC GRVL 0.029		
0.170	1.000	0.167	0.167	1.000	1.000	VF SAND 0.000	VF GRVL 0.105	S COBL 0.000	
						F SAND 0.022	F GRVL 0.136	L COBL 0.000	
						M SAND 0.109	M GRVL 0.123	S BLDR 0.000	
						C SAND 0.197	C GRVL 0.067	M BLDR 0.000	
						VC SAND 0.202	VC GRVL 0.029		
0.280	1.000	0.167	0.167	1.000	1.000	VF SAND 0.000	VF GRVL 0.105	S COBL 0.000	
						F SAND 0.022	F GRVL 0.136	L COBL 0.000	
						M SAND 0.109	M GRVL 0.123	S BLDR 0.000	
						C SAND 0.197	C GRVL 0.067	M BLDR 0.000	
						VC SAND 0.202	VC GRVL 0.029		
0.340	1.000	0.167	0.167	1.000	1.000	VF SAND 0.000	VF GRVL 0.105	S COBL 0.000	
						F SAND 0.022	F GRVL 0.136	L COBL 0.000	
						M SAND 0.109	M GRVL 0.123	S BLDR 0.000	
						C SAND 0.197	C GRVL 0.067	M BLDR 0.000	
						VC SAND 0.202	VC GRVL 0.029		
0.440	1.000	0.167	0.167	1.000	1.000	VF SAND 0.000	VF GRVL 0.105	S COBL 0.000	
						F SAND 0.022	F GRVL 0.136	L COBL 0.000	
						M SAND 0.109	M GRVL 0.123	S BLDR 0.000	

						C	SAND	0.197	C	GRVL	0.067	M	BLDR	0.000
						VC	SAND	0.202	VC	GRVL	0.029			
0.530	1.000	0.167	0.167	1.000	1.000	VF	SAND	0.000	VF	GRVL	0.105	S	COBL	0.000
						F	SAND	0.022	F	GRVL	0.136	L	COBL	0.000
						M	SAND	0.109	M	GRVL	0.123	S	BLDR	0.000
						C	SAND	0.197	C	GRVL	0.067	M	BLDR	0.000
						VC	SAND	0.202	VC	GRVL	0.029			
0.620	1.000	0.167	0.167	1.000	1.000	VF	SAND	0.000	VF	GRVL	0.105	S	COBL	0.000
						F	SAND	0.022	F	GRVL	0.136	L	COBL	0.000
						M	SAND	0.109	M	GRVL	0.123	S	BLDR	0.000
						C	SAND	0.197	C	GRVL	0.067	M	BLDR	0.000
						VC	SAND	0.202	VC	GRVL	0.029			
0.720	1.000	0.167	0.167	1.000	1.000	VF	SAND	0.000	VF	GRVL	0.105	S	COBL	0.000
						F	SAND	0.022	F	GRVL	0.136	L	COBL	0.000
						M	SAND	0.109	M	GRVL	0.123	S	BLDR	0.000
						C	SAND	0.197	C	GRVL	0.067	M	BLDR	0.000
						VC	SAND	0.202	VC	GRVL	0.029			
0.800	1.000	0.167	0.167	1.000	1.000	VF	SAND	0.000	VF	GRVL	0.105	S	COBL	0.000
						F	SAND	0.022	F	GRVL	0.136	L	COBL	0.000
						M	SAND	0.109	M	GRVL	0.123	S	BLDR	0.000
						C	SAND	0.197	C	GRVL	0.067	M	BLDR	0.000
						VC	SAND	0.202	VC	GRVL	0.029			
0.890	1.000	0.167	0.167	1.000	1.000	VF	SAND	0.000	VF	GRVL	0.105	S	COBL	0.000
						F	SAND	0.022	F	GRVL	0.136	L	COBL	0.000
						M	SAND	0.109	M	GRVL	0.123	S	BLDR	0.000
						C	SAND	0.197	C	GRVL	0.067	M	BLDR	0.000
						VC	SAND	0.202	VC	GRVL	0.029			
0.950	1.000	0.167	0.167	1.000	1.000	VF	SAND	0.000	VF	GRVL	0.105	S	COBL	0.000
						F	SAND	0.022	F	GRVL	0.136	L	COBL	0.000
						M	SAND	0.109	M	GRVL	0.123	S	BLDR	0.000
						C	SAND	0.197	C	GRVL	0.067	M	BLDR	0.000
						VC	SAND	0.202	VC	GRVL	0.029			
1.040	1.000	0.167	0.167	1.000	1.000	VF	SAND	0.000	VF	GRVL	0.105	S	COBL	0.000
						F	SAND	0.022	F	GRVL	0.136	L	COBL	0.000
						M	SAND	0.109	M	GRVL	0.123	S	BLDR	0.000
						C	SAND	0.197	C	GRVL	0.067	M	BLDR	0.000
						VC	SAND	0.202	VC	GRVL	0.029			
1.120	1.000	0.167	0.167	1.000	1.000	VF	SAND	0.000	VF	GRVL	0.105	S	COBL	0.000
						F	SAND	0.022	F	GRVL	0.136	L	COBL	0.000
						M	SAND	0.109	M	GRVL	0.123	S	BLDR	0.000
						C	SAND	0.197	C	GRVL	0.067	M	BLDR	0.000
						VC	SAND	0.202	VC	GRVL	0.029			
1.210	1.000	0.167	0.167	1.000	1.000	VF	SAND	0.000	VF	GRVL	0.105	S	COBL	0.000
						F	SAND	0.022	F	GRVL	0.136	L	COBL	0.000
						M	SAND	0.109	M	GRVL	0.123	S	BLDR	0.000
						C	SAND	0.197	C	GRVL	0.067	M	BLDR	0.000
						VC	SAND	0.202	VC	GRVL	0.029			
1.270	1.000	0.167	0.167	1.000	1.000	VF	SAND	0.000	VF	GRVL	0.105	S	COBL	0.000
						F	SAND	0.022	F	GRVL	0.136	L	COBL	0.000
						M	SAND	0.109	M	GRVL	0.123	S	BLDR	0.000
						C	SAND	0.197	C	GRVL	0.067	M	BLDR	0.000
						VC	SAND	0.202	VC	GRVL	0.029			
1.370	1.000	0.167	0.167	1.000	1.000	VF	SAND	0.000	VF	GRVL	0.105	S	COBL	0.000
						F	SAND	0.022	F	GRVL	0.136	L	COBL	0.000
						M	SAND	0.109	M	GRVL	0.123	S	BLDR	0.000
						C	SAND	0.197	C	GRVL	0.067	M	BLDR	0.000
						VC	SAND	0.202	VC	GRVL	0.029			
1.460	1.000	0.167	0.167	1.000	1.000	VF	SAND	0.000	VF	GRVL	0.105	S	COBL	0.000
						F	SAND	0.022	F	GRVL	0.136	L	COBL	0.000
						M	SAND	0.109	M	GRVL	0.123	S	BLDR	0.000
						C	SAND	0.197	C	GRVL	0.067	M	BLDR	0.000
						VC	SAND	0.202	VC	GRVL	0.029			
1.540	1.000	0.167	0.167	1.000	1.000	VF	SAND	0.000	VF	GRVL	0.105	S	COBL	0.000
						F	SAND	0.022	F	GRVL	0.136	L	COBL	0.000
						M	SAND	0.109	M	GRVL	0.123	S	BLDR	0.000
						C	SAND	0.197	C	GRVL	0.067	M	BLDR	0.000
						VC	SAND	0.202	VC	GRVL	0.029			
1.650	1.000	0.167	0.167	1.000	1.000	VF	SAND	0.000	VF	GRVL	0.105	S	COBL	0.000
						F	SAND	0.022	F	GRVL	0.136	L	COBL	0.000
						M	SAND	0.109	M	GRVL	0.123	S	BLDR	0.000
						C	SAND	0.197	C	GRVL	0.067	M	BLDR	0.000
						VC	SAND	0.202	VC	GRVL	0.029			
1.750	1.000	0.167	0.167	1.000	1.000	VF	SAND	0.000	VF	GRVL	0.105	S	COBL	0.000
						F	SAND	0.022	F	GRVL	0.136	L	COBL	0.000
						M	SAND	0.109	M	GRVL	0.123	S	BLDR	0.000
						C	SAND	0.197	C	GRVL	0.067	M	BLDR	0.000
						VC	SAND	0.202	VC	GRVL	0.029			
1.830	1.000	0.167	0.167	1.000	1.000	VF	SAND	0.000	VF	GRVL	0.105	S	COBL	0.000
						F	SAND	0.022	F	GRVL	0.136	L	COBL	0.000

```
                                                | M  SAND  0.109 | M  GRVL  0.123 | S  BLDR  0.000 |
                                                | C  SAND  0.197 | C  GRVL  0.067 | M  BLDR  0.000 |
                                                | VC SAND  0.202 | VC GRVL  0.029 |

      1.920  1.000  0.167  0.167  1.000  1.000 | VF SAND  0.000 | VF GRVL  0.105 | S  COBL  0.000 |
                                                | F  SAND  0.022 | F  GRVL  0.136 | L  COBL  0.000 |
                                                | M  SAND  0.109 | M  GRVL  0.123 | S  BLDR  0.000 |
                                                | C  SAND  0.197 | C  GRVL  0.067 | M  BLDR  0.000 |
                                                | VC SAND  0.202 | VC GRVL  0.029 |

      2.000  1.000  0.167  0.167  1.000  1.000 | VF SAND  0.000 | VF GRVL  0.105 | S  COBL  0.000 |
                                                | F  SAND  0.022 | F  GRVL  0.136 | L  COBL  0.000 |
                                                | M  SAND  0.109 | M  GRVL  0.123 | S  BLDR  0.000 |
                                                | C  SAND  0.197 | C  GRVL  0.067 | M  BLDR  0.000 |
                                                | VC SAND  0.202 | VC GRVL  0.029 |

      2.070  1.000  0.167  0.167  1.000  1.000 | VF SAND  0.000 | VF GRVL  0.105 | S  COBL  0.000 |
                                                | F  SAND  0.022 | F  GRVL  0.136 | L  COBL  0.000 |
                                                | M  SAND  0.109 | M  GRVL  0.123 | S  BLDR  0.000 |
                                                | C  SAND  0.197 | C  GRVL  0.067 | M  BLDR  0.000 |
                                                | VC SAND  0.202 | VC GRVL  0.029 |

      2.140  1.000  0.167  0.167  1.000  1.000 | VF SAND  0.000 | VF GRVL  0.105 | S  COBL  0.000 |
                                                | F  SAND  0.022 | F  GRVL  0.136 | L  COBL  0.000 |
                                                | M  SAND  0.109 | M  GRVL  0.123 | S  BLDR  0.000 |
                                                | C  SAND  0.197 | C  GRVL  0.067 | M  BLDR  0.000 |
                                                | VC SAND  0.202 | VC GRVL  0.029 |

      2.230  1.000  0.167  0.167  1.000  1.000 | VF SAND  0.000 | VF GRVL  0.105 | S  COBL  0.000 |
                                                | F  SAND  0.022 | F  GRVL  0.136 | L  COBL  0.000 |
                                                | M  SAND  0.109 | M  GRVL  0.123 | S  BLDR  0.000 |
                                                | C  SAND  0.197 | C  GRVL  0.067 | M  BLDR  0.000 |
                                                | VC SAND  0.202 | VC GRVL  0.029 |


..LOCAL INFLOW DATA...
SEDIMENT LOAD TABLE FOR STREAM SEGMENT #   1
                AT LOCAL INFLOW POINT #   1
          LOAD BY GRAIN SIZE CLASS (tons/day)
-------------------------------------
LQL     Q | 1.00000    | 1000.00    |
          ------------ ------------
LFL   VFS |0.100000E-01|0.100000E-01|
LFL    FS |0.100000E-01|0.100000E-01|
LFL    MS |0.100000E-01|0.100000E-01|
LFL    CS |0.100000E-01|0.100000E-01|
LFL   VCS |0.100000E-01|0.100000E-01|
LFL   VFG |0.100000E-01|0.100000E-01|
LFL    FG |0.100000E-01|0.100000E-01|
LFL    MG |0.100000E-01|0.100000E-01|
LFL    CG |0.100000E-01|0.100000E-01|
LFL   VCG |0.500000E-02|0.500000E-02|
LFL    SC |0.500000E-02|0.500000E-02|
LFL    LC |0.100000E-19|0.100000E-19|
LFL    SB |0.100000E-19|0.100000E-19|
LFL    MB |0.100000E-19|0.100000E-19|
          ------------ ------------
   TOTAL |0.100000    |0.100000    |
-------------------------------------

..LOCAL INFLOW DATA...
SEDIMENT LOAD TABLE FOR STREAM SEGMENT #   1
                AT LOCAL INFLOW POINT #   2
          LOAD BY GRAIN SIZE CLASS (tons/day)
-------------------------------------
LQL     Q | 1.00000    | 1000.00    |
          ------------ ------------
LFL   VFS |0.100000E-01|0.100000E-01|
LFL    FS |0.100000E-01|0.100000E-01|
LFL    MS |0.100000E-01|0.100000E-01|
LFL    CS |0.100000E-01|0.100000E-01|
LFL   VCS |0.100000E-01|0.100000E-01|
LFL   VFG |0.100000E-01|0.100000E-01|
LFL    FG |0.100000E-01|0.100000E-01|
LFL    MG |0.100000E-01|0.100000E-01|
LFL    CG |0.100000E-01|0.100000E-01|
LFL   VCG |0.500000E-02|0.500000E-02|
LFL    SC |0.500000E-02|0.500000E-02|
LFL    LC |0.100000E-19|0.100000E-19|
LFL    SB |0.100000E-19|0.100000E-19|
LFL    MB |0.100000E-19|0.100000E-19|
          ------------ ------------
   TOTAL |0.100000    |0.100000    |
-------------------------------------

BED SEDIMENT CONTROL VOLUMES

STREAM SEGMENT #  1: Cave Creek and Apache Wash WMP
|  SECTION  |   LENGTH   |   WIDTH    |  DEPTH   |          V O L U M E          |
|  NUMBER   |    (ft)    |    (ft)    |   (ft)   |   (cu.ft)    |   (cu.yd)      |
-------------------------------------------------------------------------------------
|     0.040 |    195.000 |    600.240 |   10.000 |0.117047E+07 | 43350.7         |
|     0.130 |    307.500 |    597.888 |   10.000 |0.183851E+07 | 68092.8         |
|     0.170 |    387.500 |    568.335 |   10.000 |0.220230E+07 | 81566.6         |
|     0.280 |    425.000 |    547.474 |   10.000 |0.232677E+07 | 86176.5         |
```

0.340	375.000	585.152	10.000	0.219432E+07	81271.1	
0.440	472.500	581.851	10.000	0.274925E+07	101824.	
0.530	472.500	625.836	10.000	0.295707E+07	109521.	
0.620	435.000	703.448	10.000	0.306000E+07	113333.	
0.720	385.000	736.952	10.000	0.283726E+07	105084.	
0.800	425.000	722.473	10.000	0.307051E+07	113723.	
0.890	387.500	691.345	10.000	0.267896E+07	99220.8	
0.950	337.500	667.032	10.000	0.225123E+07	83379.0	
1.040	410.000	725.613	10.000	0.297501E+07	110186.	
1.120	430.000	761.135	10.000	0.327288E+07	121218.	
1.210	395.000	791.490	10.000	0.312639E+07	115792.	
1.270	425.000	868.017	10.000	0.368907E+07	136632.	
1.370	500.000	933.323	10.000	0.466662E+07	172838.	
1.460	450.000	901.646	10.000	0.405741E+07	150274.	
1.540	500.000	729.429	10.000	0.364715E+07	135080.	
1.650	545.000	465.135	10.000	0.253499E+07	93888.4	
1.750	467.500	430.596	10.000	0.201304E+07	74556.9	
1.830	450.000	458.953	10.000	0.206529E+07	76492.1	
1.920	427.500	492.078	10.000	0.210363E+07	77912.3	
2.000	395.000	659.211	10.000	0.260388E+07	96440.1	
2.070	385.000	756.164	10.000	0.291123E+07	107823.	
2.140	410.000	731.829	10.000	0.300050E+07	111130.	
2.230	220.000	711.507	10.000	0.156531E+07	57974.6	

NO. OF INPUT DATA MESSAGES= 0
END OF SEDIMENT DATA

==========

$HYD
BEGIN COMPUTATIONS.

$RATING

Downstream Boundary Condition - Rating Curve

Elevation	Stage	Discharge	Elevation	Stage	Discharge
1726.000	1726.000	0.000	1732.530	1732.530	3500.000
1728.360	1728.360	500.000	1732.920	1732.920	4000.000
1729.350	1729.350	1000.000	1733.230	1733.230	4500.000
1730.070	1730.070	1500.000	1733.480	1733.480	5000.000
1730.610	1730.610	2000.000	1733.720	1733.720	5500.000
1731.190	1731.190	2500.000	1733.980	1733.980	6000.000
1731.710	1731.710	3000.000			

==========

```
TIME STEP #       1
*    A  Level output at time step 1 (0.2500 day)
** Q BELOW TABLE **                                                                    **INLOAD**
**WATER DISCHARGE, WATER-SEDIMENT LOAD TABLE ENDPOINT**          0.10          1.00      0.000810
** Q BELOW TABLE **                                                                    **INLOAD**
**WATER DISCHARGE, WATER-SEDIMENT LOAD TABLE ENDPOINT**          0.10          1.00      0.010000
** Q BELOW TABLE **                                                                    **INLOAD**
**WATER DISCHARGE, WATER-SEDIMENT LOAD TABLE ENDPOINT**          0.10          1.00      0.010000

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
**************************************************
    TIME       ENTRY *             SAND            *
    DAYS       POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.25       2.230 *     0.00                    *
               2.140 *     0.00                    *
               1.540 *     0.00                    *
   TOTAL=      0.040 *     0.00      0.00      1.00 *
**************************************************
```

==========

```
TIME STEP #       2
*    A  Level output at time step 2 (0.0139 day)
** Q BELOW TABLE **                                                                    **INLOAD**
**WATER DISCHARGE, WATER-SEDIMENT LOAD TABLE ENDPOINT**          0.10          1.00      0.000810
** Q BELOW TABLE **                                                                    **INLOAD**
**WATER DISCHARGE, WATER-SEDIMENT LOAD TABLE ENDPOINT**          0.10          1.00      0.010000
** Q BELOW TABLE **                                                                    **INLOAD**
**WATER DISCHARGE, WATER-SEDIMENT LOAD TABLE ENDPOINT**          0.80          1.00      0.010000

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
**************************************************
    TIME       ENTRY *             SAND            *
    DAYS       POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.26       2.230 *     0.00                    *
               2.140 *     0.00                    *
               1.540 *     0.00                    *
   TOTAL=      0.040 *     0.00      0.00      0.95 *
**************************************************
```

==========

```
TIME STEP #       3
*    A  Level output at time step 3 (0.0208 day)
** Q BELOW TABLE **                                                                    **INLOAD**
**WATER DISCHARGE, WATER-SEDIMENT LOAD TABLE ENDPOINT**          0.10          1.00      0.000810
```

```
** Q BELOW TABLE **                                                                                  **INLOAD**
**WATER DISCHARGE, WATER-SEDIMENT LOAD TABLE ENDPOINT**          0.10          1.00       0.010000
** Q BELOW TABLE **                                                                                  **INLOAD**
**WATER DISCHARGE, WATER-SEDIMENT LOAD TABLE ENDPOINT**          0.80          1.00       0.010000

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*************************************************
    TIME        ENTRY *             SAND          *
    DAYS        POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.28        2.230 *      0.00                    *
                2.140 *      0.00                    *
                1.540 *      0.00                    *
   TOTAL=       0.040 *      0.00      0.00      0.89 *
*************************************************

==========================================================================================
TIME STEP #        4
*    A  Level output at time step 4 (0.0208 day)
** Q BELOW TABLE **                                                                                  **INLOAD**
**WATER DISCHARGE, WATER-SEDIMENT LOAD TABLE ENDPOINT**          0.10          1.00       0.000810
** Q BELOW TABLE **                                                                                  **INLOAD**
**WATER DISCHARGE, WATER-SEDIMENT LOAD TABLE ENDPOINT**          0.10          1.00       0.010000

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*************************************************
    TIME        ENTRY *             SAND          *
    DAYS        POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.31        2.230 *      0.00                    *
                2.140 *      0.00                    *
                1.540 *      0.00                    *
   TOTAL=       0.040 *      0.00      0.01    -75.82 *
*************************************************

==========================================================================================
TIME STEP #        5
*    A  Level output at time step 5 (0.0139 day)

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*************************************************
    TIME        ENTRY *             SAND          *
    DAYS        POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.32        2.230 *      0.00                    *
                2.140 *      0.00                    *
                1.540 *      0.00                    *
   TOTAL=       0.040 *      0.00      0.10   -504.24 *
*************************************************

==========================================================================================
TIME STEP #        6
*    A  Level output at time step 6 (0.0139 day)

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*************************************************
    TIME        ENTRY *             SAND          *
    DAYS        POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.33        2.230 *      0.01                    *
                2.140 *      0.00                    *
                1.540 *      0.00                    *
   TOTAL=       0.040 *      0.01      0.28    -37.87 *
*************************************************

==========================================================================================
TIME STEP #        7
*    A  Level output at time step 7 (0.0208 day)
** Q ABOVE TABLE **                                                                                  **INLOAD**
**WATER DISCHARGE, WATER-SEDIMENT LOAD TABLE ENDPOINT**       1064.00       1000.00       0.010000

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*************************************************
    TIME        ENTRY *             SAND          *
    DAYS        POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.35        2.230 *      0.10                    *
                2.140 *      0.00                    *
                1.540 *      0.00                    *
   TOTAL=       0.040 *      0.10      1.30    -11.39 *
*************************************************

==========================================================================================
TIME STEP #        8
*    A  Level output at time step 8 (0.0208 day)
** Q ABOVE TABLE **                                                                                  **INLOAD**
**WATER DISCHARGE, WATER-SEDIMENT LOAD TABLE ENDPOINT**       1161.00       1000.00       0.010000

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache Wash WMP
```

```
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME        ENTRY *              SAND             *
    DAYS        POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.37        2.230 *      0.21                    *
                2.140 *      0.00                    *
                1.540 *      0.00                    *
   TOTAL=       0.040 *      0.21      2.66    -11.43 *
*****************************************************

=================================================================================
TIME STEP #        9
*    A  Level output at time step 9 (0.0278 day)

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME        ENTRY *              SAND             *
    DAYS        POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.40        2.230 *      0.32                    *
                2.140 *      0.00                    *
                1.540 *      0.00                    *
   TOTAL=       0.040 *      0.32      3.79    -10.81 *
*****************************************************

=================================================================================
TIME STEP #       10
*    A  Level output at time step 10 (0.0278 day)

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME        ENTRY *              SAND             *
    DAYS        POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.43        2.230 *      0.36                    *
                2.140 *      0.00                    *
                1.540 *      0.00                    *
   TOTAL=       0.040 *      0.36      4.30    -10.92 *
*****************************************************

=================================================================================
TIME STEP #       11
*    A  Level output at time step 11 (0.0278 day)

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME        ENTRY *              SAND             *
    DAYS        POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.46        2.230 *      0.38                    *
                2.140 *      0.00                    *
                1.540 *      0.00                    *
   TOTAL=       0.040 *      0.38      4.54    -10.95 *
*****************************************************

=================================================================================
TIME STEP #       12
*    A  Level output at time step 12 (0.0347 day)

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME        ENTRY *              SAND             *
    DAYS        POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.49        2.230 *      0.39                    *
                2.140 *      0.00                    *
                1.540 *      0.00                    *
   TOTAL=       0.040 *      0.39      4.72    -11.00 *
*****************************************************

=================================================================================
TIME STEP #       13
*    A  Level output at time step 13 (0.0764 day)

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME        ENTRY *              SAND             *
    DAYS        POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.57        2.230 *      0.41                    *
                2.140 *      0.00                    *
                1.540 *      0.00                    *
   TOTAL=       0.040 *      0.41      5.01    -11.12 *
*****************************************************

=================================================================================
TIME STEP #       14
*    A  Level output at time step 14 (0.0764 day)

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
```

```
            Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME        ENTRY *              SAND            *
    DAYS        POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.65        2.230 *      0.43                    *
                2.140 *      0.00                    *
                1.540 *      0.00                    *
   TOTAL=       0.040 *      0.43      5.13    -10.96 *
*****************************************************

==========================================================================================
TIME STEP #      15
*    A  Level output at time step 15 (0.1458 day)

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME        ENTRY *              SAND            *
    DAYS        POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.79        2.230 *      0.48                    *
                2.140 *      0.00                    *
                1.540 *      0.00                    *
   TOTAL=       0.040 *      0.48      5.58    -10.62 *
*****************************************************

==========================================================================================
TIME STEP #      16
*    B  Level output at time step 16 (0.2083 day)
COMPUTING FROM TIME=      0.7916 DAYS TO TIME=      0.9999 DAYS IN    10 COMPUTATION STEPS

- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
Cave Creek and Apache Wash WMP
       ACCUMULATED TIME (yrs)....        0.003
       FLOW DURATION (days)......        0.021

UPSTREAM BOUNDARY CONDITIONS
-----------------------------------------------------------------------
Stream Segment # 1      |   DISCHARGE   | SEDIMENT LOAD | TEMPERATURE
Section No.      2.230  |     (cfs)     |  (tons/day)   |   (deg F)
-----------------------------------------------------------------------
                INFLOW  |        35.00  |        79.02  |      68.00

Upstream of SECTION NO.      2.140 is...
LOCAL INFLOW POINT # 2  |   DISCHARGE   | SEDIMENT LOAD | TEMPERATURE
                        |     (cfs)     |  (tons/day)   |   (deg F)
-----------------------------------------------------------------------
      MAINSTEM  INFLOW  |        35.00  |        79.02  |      68.00
      LOCAL     INFLOW  |        23.00  |         0.10  |      68.00
-----------------------------------------------------------------------
                 TOTAL  |        58.00  |        79.12  |      68.00

Upstream of SECTION NO.      1.540 is...
LOCAL INFLOW POINT # 1  |   DISCHARGE   | SEDIMENT LOAD | TEMPERATURE
                        |     (cfs)     |  (tons/day)   |   (deg F)
-----------------------------------------------------------------------
      MAINSTEM  INFLOW  |        58.00  |        79.12  |      68.00
      LOCAL     INFLOW  |        29.00  |         0.10  |      68.00
-----------------------------------------------------------------------
                 TOTAL  |        87.00  |        79.22  |      68.00

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME        ENTRY *              SAND            *
    DAYS        POINT *    INFLOW   OUTFLOW  TRAP EFF *
    1.00        2.230 *      0.49                    *
                2.140 *      0.00                    *
                1.540 *      0.00                    *
   TOTAL=       0.040 *      0.49      5.72    -10.72 *
*****************************************************

TABLE SB-1:  SEDIMENT LOAD PASSING THE  BOUNDARIES OF STREAM SEGMENT #  1
-------------------------------------------------------------------------------
  SEDIMENT INFLOW at the Upstream Boundary:
      GRAIN SIZE      LOAD (tons/day) |    GRAIN SIZE      LOAD (tons/day)
  -----------------------------------------------------------------------------
    VERY FINE SAND....          0.06  |  MEDIUM GRAVEL.....          9.67
    FINE SAND.........          2.09  |  COARSE GRAVEL.....          3.56
    MEDIUM SAND.......          9.42  |  VERY COARSE GRAVEL          0.69
    COARSE SAND.......         16.95  |  SMALL COBBLES.....          0.00
    VERY COARSE SAND..         17.22  |  LARGE COBBLES.....          0.00
    VERY FINE GRAVEL..          8.77  |  SMALL BOULDERS....          0.00
    FINE GRAVEL.......         10.59  |  MEDIUM BOULDERS...          0.00
                        -------------                        -------------
                                                   TOTAL =         79.02
  SEDIMENT OUTFLOW from the Downstream Boundary
      GRAIN SIZE      LOAD (tons/day) |    GRAIN SIZE      LOAD (tons/day)
  -----------------------------------------------------------------------------
    VERY FINE SAND....          3.79  |  MEDIUM GRAVEL.....         19.11
    FINE SAND.........         53.84  |  COARSE GRAVEL.....          0.00
    MEDIUM SAND.......        232.94  |  VERY COARSE GRAVEL          0.00
    COARSE SAND.......        321.14  |  SMALL COBBLES.....          0.00
```

VERY COARSE SAND..	255.04	LARGE COBBLES.....	0.00
VERY FINE GRAVEL..	25.60	SMALL BOULDERS....	0.00
FINE GRAVEL.....	34.25	MEDIUM BOULDERS...	0.00
		TOTAL =	945.72

TABLE SB-2: STATUS OF THE BED PROFILE AT TIME = 1.000 DAYS

SECTION NUMBER	BED CHANGE (ft)	WS ELEV (ft)	THALWEG (ft)	Q (cfs)	TRANSPORT RATE (tons/day) SAND
2.230	0.03	1826.54	1826.03	35.	188.
2.140	-0.37	1824.11	1823.63	58.	143.
2.070	-0.52	1820.87	1820.48	58.	204.
2.000	-0.01	1814.60	1813.99	58.	228.
1.920	-0.06	1810.47	1809.94	58.	245.
1.830	-0.29	1806.46	1805.71	58.	370.
1.750	-0.05	1801.15	1799.95	58.	370.
1.650	-0.03	1796.59	1795.97	58.	362.
1.540	-0.09	1790.45	1789.91	87.	432.
1.460	-0.02	1786.65	1785.98	87.	518.
1.370	-0.01	1782.79	1781.99	87.	545.
1.270	0.02	1779.05	1778.02	87.	578.
1.210	-0.03	1776.71	1775.97	87.	621.
1.120	-0.02	1773.42	1771.98	87.	614.
1.040	-0.12	1770.77	1769.88	87.	608.
0.950	0.00	1766.84	1766.00	87.	588.
0.890	0.17	1765.39	1764.17	87.	708.
0.800	-0.44	1762.30	1761.56	87.	735.
0.720	-0.29	1758.53	1757.71	87.	890.
0.620	0.09	1754.67	1754.09	87.	861.
0.530	0.13	1750.84	1750.13	87.	866.
0.440	0.02	1747.34	1746.02	87.	857.
0.340	-0.37	1744.10	1743.63	87.	996.
0.280	0.02	1738.93	1738.02	87.	909.
0.170	0.22	1733.47	1732.22	87.	807.
0.130	-0.36	1732.28	1731.64	87.	885.
0.040	-0.52	1726.41	1725.48	87.	946.

$VOL A

STREAM SEGMENT # 1: Cave Creek and Apache Wash WMP

SUMMARY TABLE: MASS AND VOLUME OF SEDIMENT

SECTION	SEDIMENT THROUGH SECTION (tons) TOTAL	SAND	SILT	CLAY	SEDIMENT DEPOSITED IN REACH in cu. yds TOTAL	CUMULATIVE	SAND	SILT	CLAY
INFLOW	988.	988.	0.	0.	787.				
2.230	822.	822.	0.	0.	132.	132.	132.	0.	0.
LOCAL	0.	0.	0.	0.	0.				
2.140	3226.	3226.	0.	0.	-1915.	-1782.	-1915.	0.	0.
2.070	5122.	5122.	0.	0.	-1510.	-3293.	-1510.	0.	0.
2.000	5281.	5281.	0.	0.	-127.	-3419.	-127.	0.	0.
1.920	6179.	6179.	0.	0.	-715.	-4134.	-715.	0.	0.
1.830	7236.	7236.	0.	0.	-842.	-4976.	-842.	0.	0.
1.750	7633.	7633.	0.	0.	-317.	-5293.	-317.	0.	0.
1.650	8069.	8069.	0.	0.	-347.	-5640.	-347.	0.	0.
LOCAL	0.	0.	0.	0.	0.				
1.540	8378.	8378.	0.	0.	-246.	-5886.	-246.	0.	0.
1.460	8358.	8358.	0.	0.	16.	-5870.	16.	0.	0.
1.370	8348.	8348.	0.	0.	8.	-5862.	8.	0.	0.
1.270	8339.	8339.	0.	0.	7.	-5854.	7.	0.	0.
1.210	8487.	8487.	0.	0.	-118.	-5973.	-118.	0.	0.
1.120	8467.	8467.	0.	0.	16.	-5956.	16.	0.	0.
1.040	8285.	8285.	0.	0.	144.	-5812.	144.	0.	0.
0.950	8454.	8454.	0.	0.	-134.	-5947.	-134.	0.	0.
0.890	8574.	8574.	0.	0.	-95.	-6042.	-95.	0.	0.
0.800	9481.	9481.	0.	0.	-723.	-6765.	-723.	0.	0.
0.720	10455.	10455.	0.	0.	-775.	-7540.	-775.	0.	0.
0.620	10804.	10804.	0.	0.	-278.	-7818.	-278.	0.	0.
0.530	10375.	10375.	0.	0.	342.	-7476.	342.	0.	0.
0.440	10152.	10152.	0.	0.	177.	-7299.	177.	0.	0.
0.340	12083.	12083.	0.	0.	-1538.	-8837.	-1538.	0.	0.
0.280	12075.	12075.	0.	0.	7.	-8830.	7.	0.	0.
0.170	12195.	12195.	0.	0.	-96.	-8926.	-96.	0.	0.
0.130	12529.	12529.	0.	0.	-266.	-9192.	-266.	0.	0.
0.040	11582.	11582.	0.	0.	754.	-8438.	754.	0.	0.

TOTAL SEDIMENT - per grain size - THROUGH EACH CROSS SECTION (tons)

UPSTREAM INFLOW

VF	SAND	1.	VF	GRVL	109.	S	COBL 0.
F	SAND	25.	F	GRVL	134.	L	COBL 0.
M	SAND	116.	M	GRVL	121.	S	BLDR 0.
C	SAND	209.	C	GRVL	50.	M	BLDR 0.
VC	SAND	213.	VC	GRVL	10.		

SECTION NO. 2.230

VF	SAND	1.	VF	GRVL	32.	S	COBL 0.

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      F  SAND        27.   F  GRVL        56.   L  COBL        0.
      M  SAND       122.   M  GRVL        63.   S  BLDR        0.
      C  SAND       226.   C  GRVL        36.   M  BLDR        0.
      VC SAND       245.   VC GRVL        15.

LOCAL INFLOW
      VF SAND         0.   VF GRVL         0.   S  COBL        0.
      F  SAND         0.   F  GRVL         0.   L  COBL        0.
      M  SAND         0.   M  GRVL         0.   S  BLDR        0.
      C  SAND         0.   C  GRVL         0.   M  BLDR        0.
      VC SAND         0.   VC GRVL         0.

SECTION NO.      2.140
      VF SAND        13.   VF GRVL        47.   S  COBL        0.
      F  SAND       311.   F  GRVL        88.   L  COBL        0.
      M  SAND       786.   M  GRVL       105.   S  BLDR        0.
      C  SAND       954.   C  GRVL        67.   M  BLDR        0.
      VC SAND       825.   VC GRVL        30.
SECTION NO.      2.070
      VF SAND        27.   VF GRVL        61.   S  COBL        0.
      F  SAND       522.   F  GRVL       113.   L  COBL        0.
      M  SAND      1280.   M  GRVL       133.   S  BLDR        0.
      C  SAND      1544.   C  GRVL        86.   M  BLDR        0.
      VC SAND      1317.   VC GRVL        38.
SECTION NO.      2.000
      VF SAND        27.   VF GRVL        42.   S  COBL        0.
      F  SAND       526.   F  GRVL        80.   L  COBL        0.
      M  SAND      1325.   M  GRVL        96.   S  BLDR        0.
      C  SAND      1653.   C  GRVL        65.   M  BLDR        0.
      VC SAND      1435.   VC GRVL        31.
SECTION NO.      1.920
      VF SAND        32.   VF GRVL        39.   S  COBL        0.
      F  SAND       575.   F  GRVL        76.   L  COBL        0.
      M  SAND      1578.   M  GRVL        96.   S  BLDR        0.
      C  SAND      1967.   C  GRVL        68.   M  BLDR        0.
      VC SAND      1712.   VC GRVL        37.
SECTION NO.      1.830
      VF SAND        41.   VF GRVL        44.   S  COBL        0.
      F  SAND       709.   F  GRVL        87.   L  COBL        0.
      M  SAND      1888.   M  GRVL       111.   S  BLDR        0.
      C  SAND      2283.   C  GRVL        80.   M  BLDR        0.
      VC SAND      1951.   VC GRVL        42.
SECTION NO.      1.750
      VF SAND        43.   VF GRVL        41.   S  COBL        0.
      F  SAND       734.   F  GRVL        82.   L  COBL        0.
      M  SAND      1981.   M  GRVL       106.   S  BLDR        0.
      C  SAND      2433.   C  GRVL        78.   M  BLDR        0.
      VC SAND      2095.   VC GRVL        41.
SECTION NO.      1.650
      VF SAND        44.   VF GRVL        39.   S  COBL        0.
      F  SAND       757.   F  GRVL        76.   L  COBL        0.
      M  SAND      2091.   M  GRVL        97.   S  BLDR        0.
      C  SAND      2620.   C  GRVL        69.   M  BLDR        0.
      VC SAND      2241.   VC GRVL        36.

LOCAL INFLOW
      VF SAND         0.   VF GRVL         0.   S  COBL        0.
      F  SAND         0.   F  GRVL         0.   L  COBL        0.
      M  SAND         0.   M  GRVL         0.   S  BLDR        0.
      C  SAND         0.   C  GRVL         0.   M  BLDR        0.
      VC SAND         0.   VC GRVL         0.

SECTION NO.      1.540
      VF SAND        51.   VF GRVL        41.   S  COBL        0.
      F  SAND       842.   F  GRVL        78.   L  COBL        0.
      M  SAND      2195.   M  GRVL        94.   S  BLDR        0.
      C  SAND      2710.   C  GRVL        62.   M  BLDR        0.
      VC SAND      2273.   VC GRVL        32.
SECTION NO.      1.460
      VF SAND        51.   VF GRVL        35.   S  COBL        0.
      F  SAND       847.   F  GRVL        67.   L  COBL        0.
      M  SAND      2214.   M  GRVL        82.   S  BLDR        0.
      C  SAND      2770.   C  GRVL        54.   M  BLDR        0.
      VC SAND      2210.   VC GRVL        27.
SECTION NO.      1.370
      VF SAND        51.   VF GRVL        31.   S  COBL        0.
      F  SAND       852.   F  GRVL        61.   L  COBL        0.
      M  SAND      2273.   M  GRVL        76.   S  BLDR        0.
      C  SAND      2782.   C  GRVL        52.   M  BLDR        0.
      VC SAND      2143.   VC GRVL        26.
SECTION NO.      1.270
      VF SAND        51.   VF GRVL        26.   S  COBL        0.
      F  SAND       859.   F  GRVL        53.   L  COBL        0.
      M  SAND      2321.   M  GRVL        68.   S  BLDR        0.
      C  SAND      2772.   C  GRVL        47.   M  BLDR        0.
      VC SAND      2117.   VC GRVL        23.
SECTION NO.      1.210
      VF SAND        51.   VF GRVL        26.   S  COBL        0.
      F  SAND       868.   F  GRVL        53.   L  COBL        0.
      M  SAND      2400.   M  GRVL        68.   S  BLDR        0.
      C  SAND      2814.   C  GRVL        47.   M  BLDR        0.
      VC SAND      2139.   VC GRVL        21.
SECTION NO.      1.120
      VF SAND        51.   VF GRVL        28.   S  COBL        0.
      F  SAND       872.   F  GRVL        56.   L  COBL        0.
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      M  SAND      2421.   M  GRVL        72.   S  BLDR        0.
      C  SAND      2782.   C  GRVL        50.   M  BLDR        0.
      VC SAND      2114.   VC GRVL        22.
SECTION NO.      1.040
      VF SAND        52.   VF GRVL        29.   S  COBL        0.
      F  SAND       888.   F  GRVL        58.   L  COBL        0.
      M  SAND      2441.   M  GRVL        74.   S  BLDR        0.
      C  SAND      2668.   C  GRVL        50.   M  BLDR        0.
      VC SAND      2005.   VC GRVL        21.
SECTION NO.      0.950
      VF SAND        52.   VF GRVL        25.   S  COBL        0.
      F  SAND       902.   F  GRVL        51.   L  COBL        0.
      M  SAND      2553.   M  GRVL        65.   S  BLDR        0.
      C  SAND      2712.   C  GRVL        45.   M  BLDR        0.
      VC SAND      2031.   VC GRVL        20.
SECTION NO.      0.890
      VF SAND        52.   VF GRVL        22.   S  COBL        0.
      F  SAND       918.   F  GRVL        46.   L  COBL        0.
      M  SAND      2634.   M  GRVL        63.   S  BLDR        0.
      C  SAND      2731.   C  GRVL        48.   M  BLDR        0.
      VC SAND      2035.   VC GRVL        25.
SECTION NO.      0.800
      VF SAND        56.   VF GRVL        39.   S  COBL        0.
      F  SAND       999.   F  GRVL        78.   L  COBL        0.
      M  SAND      2840.   M  GRVL       102.   S  BLDR        0.
      C  SAND      2979.   C  GRVL        75.   M  BLDR        0.
      VC SAND      2277.   VC GRVL        36.
SECTION NO.      0.720
      VF SAND        64.   VF GRVL        46.   S  COBL        0.
      F  SAND      1128.   F  GRVL        91.   L  COBL        0.
      M  SAND      3097.   M  GRVL       116.   S  BLDR        0.
      C  SAND      3271.   C  GRVL        82.   M  BLDR        0.
      VC SAND      2523.   VC GRVL        38.
SECTION NO.      0.620
      VF SAND        64.   VF GRVL        37.   S  COBL        0.
      F  SAND      1139.   F  GRVL        74.   L  COBL        0.
      M  SAND      3258.   M  GRVL        95.   S  BLDR        0.
      C  SAND      3457.   C  GRVL        67.   M  BLDR        0.
      VC SAND      2580.   VC GRVL        34.
SECTION NO.      0.530
      VF SAND        64.   VF GRVL        28.   S  COBL        0.
      F  SAND      1158.   F  GRVL        57.   L  COBL        0.
      M  SAND      3281.   M  GRVL        74.   S  BLDR        0.
      C  SAND      3272.   C  GRVL        54.   M  BLDR        0.
      VC SAND      2357.   VC GRVL        29.
SECTION NO.      0.440
      VF SAND        65.   VF GRVL        35.   S  COBL        0.
      F  SAND      1178.   F  GRVL        71.   L  COBL        0.
      M  SAND      3239.   M  GRVL        93.   S  BLDR        0.
      C  SAND      3126.   C  GRVL        67.   M  BLDR        0.
      VC SAND      2243.   VC GRVL        35.
SECTION NO.      0.340
      VF SAND        79.   VF GRVL        61.   S  COBL        0.
      F  SAND      1481.   F  GRVL       119.   L  COBL        0.
      M  SAND      3780.   M  GRVL       150.   S  BLDR        0.
      C  SAND      3630.   C  GRVL       105.   M  BLDR        0.
      VC SAND      2625.   VC GRVL        53.
SECTION NO.      0.280
      VF SAND        79.   VF GRVL        37.   S  COBL        0.
      F  SAND      1486.   F  GRVL        73.   L  COBL        0.
      M  SAND      3803.   M  GRVL        95.   S  BLDR        0.
      C  SAND      3675.   C  GRVL        68.   M  BLDR        0.
      VC SAND      2726.   VC GRVL        34.
SECTION NO.      0.170
      VF SAND        79.   VF GRVL        21.   S  COBL        0.
      F  SAND      1514.   F  GRVL        44.   L  COBL        0.
      M  SAND      3894.   M  GRVL        59.   S  BLDR        0.
      C  SAND      3800.   C  GRVL        45.   M  BLDR        0.
      VC SAND      2715.   VC GRVL        24.
SECTION NO.      0.130
      VF SAND        80.   VF GRVL        37.   S  COBL        0.
      F  SAND      1545.   F  GRVL        72.   L  COBL        0.
      M  SAND      3973.   M  GRVL        90.   S  BLDR        0.
      C  SAND      3877.   C  GRVL        62.   M  BLDR        0.
      VC SAND      2765.   VC GRVL        29.
SECTION NO.      0.040
      VF SAND        80.   VF GRVL        51.   S  COBL        0.
      F  SAND      1541.   F  GRVL        99.   L  COBL        0.
      M  SAND      3740.   M  GRVL       123.   S  BLDR        0.
      C  SAND      3432.   C  GRVL        84.   M  BLDR        0.
      VC SAND      2394.   VC GRVL        37.

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$$END

      0   DATA ERRORS DETECTED.

TOTAL NO. OF TIME STEPS READ =        16
TOTAL NO. OF WS PROFILES =            25
ITERATIONS IN EXNER EQ =            6750

COMPUTATIONS COMPLETED
RUN TIME =  0 HOURS,  0 MINUTES &  1.00 SECONDS
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APPENDIX H.11

Paradise Wash Main Channel Model, 100-year Flood, Future Condition

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T1      Cave Creek and Apache Wash WMP
T2      by Stantec: Proj. No. 82000077                    File: PW-F100C.DAT
T3      for Flood Control District of Maricopa County     Date: 07-27-99  srg

NC 0.055   0.055    0.03     0.1     0.3

X1  0.04      11 9970.1510032.22
GR  1738    9680    1734    9765    1732    9850    1732 9946.82    1730 9970.15
GR  1726 9998.41    172610018.18    173010032.22    173210090.04    173610255.73
GR  173810279.91
HD  0.04    10.0

X1  0.13       8 9978.4110047.54     425     465     390
GR  1738 9952.71    1734 9978.41    1732 9988.85    173210019.25    173410047.54
GR  1736 10172.1    1736 10543.1    173810553.61
HD  0.13    10.0

X1  0.17      12 9974.5110022.71     225     200     225
GR  1740 9957.91    1734 9974.51    1732  9980.5    173210003.82    173410022.71
GR  173610084.24    173810128.49    173810423.55    173610511.08    173610520.92
GR  173810528.63    174010535.83
HD  0.17    10.0

X1  0.28      14    9974   10038     550     550     550
GR  1746    9761    1744    9780    1742    9817    1740    9891    1742    9974
GR  1740    9982    1738    9991    1738   10008    1740   10017    1742   10038
GR  1744   10151    1743   10229    1744   10243    1746   10289
HD  0.28    10.0

X1  0.34      13 9969.7510014.83     290     340     300
GR  1750 9749.69    1748 9772.57    1746 9799.65    1744 9969.75    1744 9988.37
GR  174410012.01    174410014.83    174610073.32    174610188.93    174410285.92
GR  174410293.88    174810324.22    1750 10351.7
HD  0.34    10.0

X1  0.44      14 9992.4610028.31     500     380     450
GR  1752 9603.04    1750 9682.28    1748 9992.46    174610001.98    1746   10007
GR  174810019.54    174910028.31    174910052.71    174810105.67    1746 10138.9
GR  174610140.02    174810149.52    175010159.12    1752 10170.1
HD  0.44    10.0

X1  0.53      10    9976   10028     475     500     495
GR  1758    9511    1756    9574    1754    9729    1752    9976    1750    9983
GR  1750   10018    1752   10028    1754   10099    1756   10115    1758   10131
HD  0.53    10.0

X1  0.62      18    9967   10031     420     460     450
GR  1762    9548    1760    9586    1758    9657  1757.5    9688    1758    9750
GR1758.5    9798    1758    9938    1756    9967    1754    9983    1754   10018
GR  1756   10031    1754   10047    1754   10056    1756   10069    1758   10085
GR  1758   10218    1760   10245    1762   10263
HD  0.62    10.0

X1  0.72      17    9978   10018     400     425     420
GR  1766    9396    1764    9427    1762    9473    1761    9526    1762    9616
GR  1760    9682  1758.5    9721    1760    9758  1760.5    9796    1760    9886
GR  1760    9978    1758    9988    1758   10012    1760   10018    1762   10066
GR  1764   10106    1766   10141
HD  0.72    10.0

X1   0.8      10 9982.1410020.71     420     330     350
GR  1768 9593.82    1766 9646.26    1766 9785.49    1764 9982.14    1762 9989.01
GR  176210010.62    176410020.71    1764 10104.6    176610291.13    1768 10321.7
HD   0.8    10.0

X1  0.89      11 9981.0110021.69     520     480     500
GR  1772 9582.26    1772 9582.35    1770 9640.11    1770 9921.21    1768 9981.01
GR  1764 9985.21    176410009.58    176610018.11    176810021.69    177010163.03
GR  177210270.58
HD  0.89    10.0

X1  0.95      13 9984.4910070.19     250     310     275
GR  1774  9590.3    1774  9590.4    1772 9688.06    1772 9688.13    1772 9982.32
GR  1770 9984.49    1768 9986.77    176610001.77    176610019.78    176810036.54
GR  177010070.19    177210159.61    177410232.27
HD  0.95    10.0

X1  1.04      13  9985.510029.11     500     300     400
GR  1778 9371.44    1778 9371.87    1774 9547.56    1774 9547.64    1774 9676.69
GR  1774 9678.18    1772 9732.85    1772  9985.5    1770 9991.67    177010013.58
GR  177210029.11    177610053.67    177810108.42
HD  1.04    10.0

X1  1.12      23 9943.4610023.31     320     470     420
GR  1782 9323.43    1782 9323.49    1780 9334.19    1780 9334.29    1778 9344.65
GR  1778 9345.18    1778    9460    1776  9546.2    1776 9547.35    1776 9660.25
GR  1776 9661.37    1778 9701.23    1778 9701.63    1780 9764.83    1780 9764.91
GR  1780 9845.43    1776 9943.46    1774 9981.99    177210002.99    177210010.59
GR  177610023.31    178010036.17    178210084.32
HD  1.12    10.0

X1  1.21      22 9983.14 10020.6     400     450     440
GR  1784    9421    1780 9440.23    1780  9538.2    1782 9595.38    1782 9618.31
GR  1780 9801.74    1780 9802.59    1780 9835.89    1780 9836.44    1782 9877.07
GR  1782 9886.63    1780 9977.68    1778 9982.64    1778 9983.14    1776 9988.45
```

```
GR  177610013.85    177810020.25    1778 10020.6    177810096.24    178010106.85
GR  178210131.31    178410206.15
HD  1.21    10.0

X1  1.27      18 9969.1210057.73     390     320     350
GR  1788 9347.73    1786 9366.76    1784 9787.72    1784 9788.51    1784 9960.27
GR  1784 9960.65    1782 9969.04    1782 9969.12    1778 9988.65    1778 9989.09
GR  177810011.61    177810012.22    178210057.73    178210058.84    178410169.81
GR  178410171.13    178810205.64    178810206.31
HD  1.27    10.0

X1  1.37      24 9958.8710020.46     570     430     500
GR  1792    9345    1790    9385    1788    9440    1788    9490 1789.51  9650.6
GR  1788 9806.04    1788 9806.97    1786 9865.72    1786 9866.07    1784  9886.2
GR  1784 9886.27    1784 9957.84    1784 9958.87    1782  9968.7    1782 9968.84
GR  1782 9990.03    178610020.46    178610055.46    178610057.12    178810069.22
GR  178810069.72    178810181.45    179010258.34    179210303.11
HD  1.37    10.0

X1  1.46      16 9973.0310038.59     260     670     500
GR  1794    9420    1792    9455    1790    9645    1790    9685    1792 9843.42
GR  1792 9885.29    1790 9920.09    1788 9973.03    1786 9983.48    178610027.78
GR  178610028.33    178810038.59    1788 10039.2    179210295.57    179210295.61
GR1793.910328.92
HD  1.46    10.0

X1  1.54      13 9986.0310020.15     400     400     400
GR  1796 9735.34    1794 9972.06    1792 9986.03    1790 9993.93    1790 10012.3
GR  179210020.15    179210029.59    179010124.43    179010160.57    179210181.54
GR  179410288.06    179410495.09    179610533.67
HD  1.54    10.0

QT

X1  1.65      11    9971   10020     600     575     600
GR  1806    9893    1804    9901    1802    9909    1800    9915    1798    9923
GR1797.8    9971    1796    9988    1796   10012    1798   10020    1800   10273
GR  1802 10273.1
HD  1.65    10.0

X1  1.75      10 9964.4410022.87     485     500     490
GR  1806 9923.03    1804 9964.44    1802 9975.68    1800  9998.4    180010003.69
GR  180410022.87    180410187.38    180210279.87    180210305.65    180610358.49
HD  1.75    10.0

X1  1.83      10 9983.6710038.99     440     450     445
GR  1812 9956.91    1810 9974.62    1808 9983.67    1806 9990.95    180610005.18
GR  180810038.99    181010189.64    181010254.89    180810359.32    181210422.67
HD  1.83    10.0

X1  1.92      11    9935   10025     460     450     455
GR  1816    9925    1814    9935    1812    9945    1810    9965    1810   10010
GR  1812   10015    1814   10025    1812   10050    1814   10100    1814   10340
GR  1816   10380
HD  1.92    10.0

X1     2      15 9983.4610022.29     390     390     400
GR  1822 9956.92    1818 9973.16    1818 9974.89    1816 9981.08    1816 9983.46
GR  1814 9989.77    1814 9993.01    181410005.51    181410007.19    181610022.29
GR  181610025.64    181810088.76    182010488.79    1820 10588.7    182210637.44
HD     2    10.0

X1  2.07       7 9969.04   10060     415     260     390
GR  1824 9955.42    1822 9969.04    1821    9980    1821   10020    1822   10060
GR  182210667.15    182410737.75
HD  2.07    10.0

X1  2.14      10 9979.0110025.81     385     380     380
GR  1828 9961.98    1826 9969.94    1824 9979.01    1824 9981.08    182410020.87
GR  182410025.81    182610218.97    182610361.55    182610637.58    182810689.74
HD  2.14    10.0

QT

X1  2.23      11 9979.4310023.07     435     445     440
GR  1834 9916.62    1832 9941.49    1830 9962.82    1828 9979.43    1826 9994.11
GR  182610007.33    182810023.07    183010034.76    1832   10373    1832   10480
GR  1834   10620
HD  2.23    10.0
EJ

T4  Project: Upper Cave Creek Watercourse Master Plan Studies
T5  Client : Flood Control District of Maricopa County (FCDMC)
T6  Date:    August 26, 1999
T7  Firm:    Stantec Consulting, Inc.
T8  ********************************************************
I1            10
I4  SAND      10       1      14       0       0       0       0       0
I5           0.5     0.5    0.25     0.5    0.25       0     1.0
LQ    Q       1    1400    5000
LT   QS       1    7358   13391
LF   VFS 0.00081 0.00080 0.00056
LF    FS 0.02651 0.02650 0.02467
LF    MS 0.11916 0.11915 0.11678
LF    CS 0.21448 0.21447 0.21070
```

```
LF   VCS 0.21791 0.21790 0.21506
LF   VFG 0.11094 0.11093 0.11062
LF    FG 0.13400 0.13402 0.13983
LF    MG 0.12236 0.12237 0.11940
LF    CG 0.04500 0.04506 0.05519
LF   VCG 0.00879 0.00879 0.00720
LF    SC       0       0       0
LF    LC       0       0       0
LF    SB       0       0       0
LF    MB       0       0       0
PF          2.23     1.0   294.6   174.9    92.9    87.4    82.7    46.6    71.1
PFC 23.8    51.7    11.9    31.3     6.1    21.4     3.0    17.7    0.59      13
PFC 0.42     7.5     0.3     3.5   0.149       2   0.074    1.65

$LOCAL
LQL    Q       1    1500
LTL   QS     0.1     0.1
LFL  VFS    0.10    0.10
LFL   FS    0.10    0.10
LFL   MS    0.10    0.10
LFL   CS    0.10    0.10
LFL  VCS    0.10    0.10
LFL  VFG    0.10    0.10
LFL   FG    0.10    0.10
LFL   MG    0.05    0.05
LFL   CG    0.05    0.05
LFL  VCG    0.05    0.05
LFL   SC    0.05    0.05
LFL   LC    0.05    0.05
LFL   SB    0.05    0.05
LFL   MB    0.00    0.00

LQL    Q       1    1500
LTL   QS     0.1     0.1
LFL  VFS    0.10    0.10
LFL   FS    0.10    0.10
LFL   MS    0.10    0.10
LFL   CS    0.10    0.10
LFL  VCS    0.10    0.10
LFL  VFG    0.10    0.10
LFL   FG    0.10    0.10
LFL   MG    0.05    0.05
LFL   CG    0.05    0.05
LFL  VCG    0.05    0.05
LFL   SC    0.05    0.05
LFL   LC    0.05    0.05
LFL   SB    0.05    0.05
LFL   MB    0.00    0.00

$HYD
$RATING
RC            13     500                0  1726.0 1728.36 1729.35 1730.07 1730.61
RC       1731.19 1731.71 1732.53 1732.92 1733.23 1733.48 1733.72 1733.98

*    A  Level output at time step 1 (0.250 day)
Q      3     0.1       1
T     68      68      68
X          0.025    0.25
*    A  Level output at time step 2 (0.0139 day)
Q     11       2       4
W 0.0139
*    A  Level output at time step 3 (0.0208 day)
Q     15       4       4
W 0.0208
*    A  Level output at time step 4 (0.0208 day)
Q     91      75       6
W 0.0208
*    A  Level output at time step 5 (0.0139 day)
Q    636     557      58
W 0.0139
*    A  Level output at time step 6 (0.0139 day)
Q   1162     431     393
W 0.0139
*    A  Level output at time step 7 (0.0208 day)
Q   4610    1226     610
W 0.0208
*    A  Level output at time step 8 (0.0208 day)
Q   4921      74    1210
W 0.0208
*    A  Level output at time step 9 (0.0278 day)
Q   2570     141     783
W 0.0278
*    A  Level output at time step 10 (0.0278 day)
Q   1245     205     373
W 0.0278
*    A  Level output at time step 11 (0.0278 day)
Q    712     151     203
W 0.0278
*    A  Level output at time step 12 (0.0347 day)
Q    457     108     123
W 0.0347
*    A  Level output at time step 13 (0.0764 day)
Q    307      61      76
W 0.0764
*    A  Level output at time step 14 (0.0764 day)
```

```
Q    235      44      59
W 0.0764
*    A  Level output at time step 15 (0.1458 day)
Q    357      60      88
W 0.1458
*    A  Level output at time step 16 (0.2083 day)
Q     87      29      23
X        0.02083  0.2083
$VOL  A
$$END
```

```
*************************************************     ********************************
*  SCOUR AND DEPOSITION IN RIVERS AND RESERVOIRS  *     *  U.S. ARMY CORPS OF ENGINEERS   *
*       Version: 4.1.00 -  OCTOBER 1993           *     *  HYDROLOGIC ENGINEERING CENTER  *
*  INPUT FILE:  PW-F100C.DAT                      *     *  609 SECOND STREET              *
*  OUTPUT FILE: PW-F100C.OUT                      *     *  DAVIS, CALIFORNIA 95616-4687   *
*  RUN DATE: 10 OCT 00    RUN TIME: 08:12:22      *     *  (916) 756-1104                 *
*************************************************     ********************************

                    X     X  XXXXXXX   XXXXX           XXXXX
                    X     X  X        X     X         X     X
                    X     X  X        X               X
                    XXXXXXX  XXXX     X        XXXXX  XXXXXX
                    X     X  X        X               X     X
                    X     X  X        X     X         X     X
                    X     X  XXXXXXX   XXXXX           XXXXX

         ******************************************************************
         *  MAXIMUM LIMITS FOR THIS VERSION ARE:                          *
         *       10  Stream Segments (Main Stem + Tributaries)            *
         *      500  Cross Sections                                       *
         *      200  Elevation/Station Points per Cross Section           *
         *       20  Grain Sizes                                          *
         *       10  Control Points                                       *
         ******************************************************************

T1      Cave Creek and Apache Wash WMP
T2      by Stantec: Proj. No. 82000077                    File: PW-F100C.DAT
T3      for Flood Control District of Maricopa County     Date: 07-27-99  srg

N values...  Left   Channel   Right    Contraction    Expansion
           0.0550   0.0300   0.0550       1.1000      0.7000

SECTION NO.     0.040
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     0.130
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     0.170
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     0.280
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     0.340
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     0.440
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     0.530
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     0.620
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     0.720
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     0.800
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     0.890
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     0.950
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     1.040
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     1.120
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     1.210
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     1.270
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     1.370
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     1.460
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     1.540
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

LOCAL INFLOW POINT  1 occurs upstream from Section No.       1.540

SECTION NO.     1.650
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     1.750
```

```
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     1.830
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     1.920
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     2.000
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     2.070
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     2.140
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

LOCAL INFLOW POINT  2 occurs upstream from Section No.       2.140

SECTION NO.     2.230
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

NO. OF CROSS SECTIONS IN STREAM SEGMENT= 27
NO. OF INPUT DATA MESSAGES =   0

TOTAL NO. OF CROSS SECTIONS IN THE NETWORK =  27
TOTAL NO. OF STREAM SEGMENTS IN THE NETWORK=   1
END OF GEOMETRIC DATA

==========================================================================================

T4  Project: Upper Cave Creek Watercourse Master Plan Studies
T5  Client : Flood Control District of Maricopa County (FCDMC)
T6  Date:    August 26, 1999
T7  Firm:    Stantec Consulting, Inc.
T8  ******************************************************

        Cave Creek and Apache Wash WMP
        by Stantec: Proj. No. 82000077                    File: PW-F100C.DAT
        for Flood Control District of Maricopa County     Date: 07-27-99  srg

- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
SEDIMENT PROPERITES AND PARAMETERS

       SPI     IBG    MNQ     SPGF     ACGR     NFALL    IBSHER
I1     10.      0      1     1.000    32.174     2         1
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 SANDS - BOULDERS ARE PRESENT

       MTC     IASA    LASA     SPGS      GSF      BSAE      PSI     UWDLB
I4     10       1      14      2.650     0.667     0.500    30.000    93.000

USING TRANSPORT CAPACITY RELATIONSHIP # 10, MPM(1948)
GRAIN SIZES UTILIZED (mean diameter - mm)
-----------------------------------------------------------------------
    VERY FINE SAND....     0.088  |  MEDIUM GRAVEL.....   11.314
    FINE SAND.........     0.177  |  COARSE GRAVEL.....   22.627
    MEDIUM SAND.......     0.354  |  VERY COARSE GRAVEL   45.255
    COARSE SAND.......     0.707  |  SMALL COBBLES.....   90.510
    VERY COARSE SAND..     1.414  |  LARGE COBBLES.....  181.019
    VERY FINE GRAVEL..     2.828  |  SMALL BOULDERS....  362.039
    FINE GRAVEL.......     5.657  |  MEDIUM BOULDERS...  724.077
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
COEFFICIENTS FOR COMPUTATION SCHEME WERE SPECIFIED
        DBI      DBN      XID      XIN      XIU      UBI      UBN      JSL
I5    0.500    0.500    0.250    0.500    0.250    0.000    1.000       1
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -

SEDIMENT LOAD TABLE FOR STREAM SEGMENT #   1
          LOAD BY GRAIN SIZE CLASS (tons/day)
-------------------------------------------------
LQ      Q | 1.00000     | 1400.00     | 5000.00     |
          ------------ ------------ ------------
LF    VFS |0.810000E-03| 5.88640     | 7.49896     |
LF     FS |0.265100E-01| 194.987     | 330.356     |
LF     MS |0.119160     | 876.706     | 1563.80     |
LF     CS |0.214480     | 1578.07     | 2821.48     |
LF    VCS |0.217910     | 1603.31     | 2879.87     |
LF    VFG |0.110940     | 816.223     | 1481.31     |
LF     FG |0.134000     | 986.119     | 1872.46     |
LF     MG |0.122360     | 900.398     | 1598.89     |
LF     CG |0.450000E-01| 331.551     | 739.049     |
LF    VCG |0.879000E-02| 64.6768     | 96.4152     |
LF     SC |0.100000E-19|0.100000E-19|0.100000E-19|
LF     LC |0.100000E-19|0.100000E-19|0.100000E-19|
LF     SB |0.100000E-19|0.100000E-19|0.100000E-19|
LF     MB |0.100000E-19|0.100000E-19|0.100000E-19|
          ------------ ------------ ------------
   TOTAL |0.999960     | 7357.93     | 13391.1     |
-------------------------------------------------

REACH GEOMETRY FOR STREAM SEGMENT  1
-------------------------------------
  CROSS         REACH    MOVABLE      INITIAL BED-ELEVATIONS       ACCUMULATED CHANNEL DISTANCE
  SECTION       LENGTH     BED    LEFT SIDE  THALWEG  RIGHT SIDE        FROM DOWNSTREAM
```

NO.	(ft)	WIDTH	(ft)	(ft)	(ft)	(ft)	(miles)
	0.000						
0.040		599.910	1738.000	1726.000	1738.000	0.000	0.000
	390.000						
0.130		600.900	1738.000	1732.000	1738.000	390.000	0.074
	225.000						
0.170		577.920	1740.000	1732.000	1740.000	615.000	0.116
	550.000						
0.280		528.000	1746.000	1738.000	1746.000	1165.000	0.221
	300.000						
0.340		602.010	1750.000	1744.000	1750.000	1465.000	0.277
	450.000						
0.440		567.060	1752.000	1746.000	1752.000	1915.000	0.363
	495.000						
0.530		620.000	1758.000	1750.000	1758.000	2410.000	0.456
	450.000						
0.620		715.000	1762.000	1754.000	1762.000	2860.000	0.542
	420.000						
0.720		745.000	1766.000	1758.000	1766.000	3280.000	0.621
	350.000						
0.800		727.880	1768.000	1762.000	1768.000	3630.000	0.688
	500.000						
0.890		688.320	1772.000	1764.000	1772.000	4130.000	0.782
	275.000						
0.950		641.970	1774.000	1766.000	1774.000	4405.000	0.834
	400.000						
1.040		736.980	1778.000	1770.000	1778.000	4805.000	0.910
	420.000						
1.120		760.890	1782.000	1772.000	1782.000	5225.000	0.990
	440.000						
1.210		785.150	1784.000	1776.000	1784.000	5665.000	1.073
	350.000						
1.270		858.580	1788.000	1778.000	1788.000	6015.000	1.139
	500.000						
1.370		958.110	1792.000	1782.000	1792.000	6515.000	1.234
	500.000						
1.460		908.920	1794.000	1786.000	1793.900	7015.000	1.329
	400.000						
1.540		798.330	1796.000	1790.000	1796.000	7415.000	1.404
	600.000						
1.650		380.100	1806.000	1796.000	1802.000	8015.000	1.518
	490.000						
1.750		435.460	1806.000	1800.000	1806.000	8505.000	1.611
	445.000						
1.830		465.760	1812.000	1806.000	1812.000	8950.000	1.695
	455.000						
1.920		455.000	1816.000	1810.000	1816.000	9405.000	1.781
	400.000						
2.000		680.520	1822.000	1814.000	1822.000	9805.000	1.857
	390.000						
2.070		782.330	1824.000	1821.000	1824.000	10195.000	1.931
	380.000						
2.140		727.760	1828.000	1824.000	1828.000	10575.000	2.003
	440.000						
2.230		703.380	1834.000	1826.000	1834.000	11015.000	2.086

BED MATERIAL GRADATION

SECNO	SAE	DMAX (ft)	DXPI (ft)	XPI	TOTAL BED	BED MATERIAL FRACTIONS per grain size									
0.040	1.000	0.967	0.967	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.027	S	COBL	0.114
						F	SAND	0.012	F	GRVL	0.062	L	COBL	0.098
						M	SAND	0.072	M	GRVL	0.146	S	BLDR	0.019
						C	SAND	0.042	C	GRVL	0.202	M	BLDR	0.000
						VC	SAND	0.020	VC	GRVL	0.167			
0.130	1.000	0.967	0.967	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.027	S	COBL	0.114
						F	SAND	0.012	F	GRVL	0.062	L	COBL	0.098
						M	SAND	0.072	M	GRVL	0.146	S	BLDR	0.019
						C	SAND	0.042	C	GRVL	0.202	M	BLDR	0.000
						VC	SAND	0.020	VC	GRVL	0.167			
0.170	1.000	0.967	0.967	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.027	S	COBL	0.114
						F	SAND	0.012	F	GRVL	0.062	L	COBL	0.098
						M	SAND	0.072	M	GRVL	0.146	S	BLDR	0.019
						C	SAND	0.042	C	GRVL	0.202	M	BLDR	0.000
						VC	SAND	0.020	VC	GRVL	0.167			
0.280	1.000	0.967	0.967	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.027	S	COBL	0.114
						F	SAND	0.012	F	GRVL	0.062	L	COBL	0.098
						M	SAND	0.072	M	GRVL	0.146	S	BLDR	0.019
						C	SAND	0.042	C	GRVL	0.202	M	BLDR	0.000
						VC	SAND	0.020	VC	GRVL	0.167			
0.340	1.000	0.967	0.967	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.027	S	COBL	0.114
						F	SAND	0.012	F	GRVL	0.062	L	COBL	0.098
						M	SAND	0.072	M	GRVL	0.146	S	BLDR	0.019
						C	SAND	0.042	C	GRVL	0.202	M	BLDR	0.000
						VC	SAND	0.020	VC	GRVL	0.167			
0.440	1.000	0.967	0.967	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.027	S	COBL	0.114
						F	SAND	0.012	F	GRVL	0.062	L	COBL	0.098
						M	SAND	0.072	M	GRVL	0.146	S	BLDR	0.019

						C	SAND	0.042	C	GRVL	0.202	M	BLDR	0.000
						VC	SAND	0.020	VC	GRVL	0.167			
0.530	1.000	0.967	0.967	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.027	S	COBL	0.114
						F	SAND	0.012	F	GRVL	0.062	L	COBL	0.098
						M	SAND	0.072	M	GRVL	0.146	S	BLDR	0.019
						C	SAND	0.042	C	GRVL	0.202	M	BLDR	0.000
						VC	SAND	0.020	VC	GRVL	0.167			
0.620	1.000	0.967	0.967	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.027	S	COBL	0.114
						F	SAND	0.012	F	GRVL	0.062	L	COBL	0.098
						M	SAND	0.072	M	GRVL	0.146	S	BLDR	0.019
						C	SAND	0.042	C	GRVL	0.202	M	BLDR	0.000
						VC	SAND	0.020	VC	GRVL	0.167			
0.720	1.000	0.967	0.967	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.027	S	COBL	0.114
						F	SAND	0.012	F	GRVL	0.062	L	COBL	0.098
						M	SAND	0.072	M	GRVL	0.146	S	BLDR	0.019
						C	SAND	0.042	C	GRVL	0.202	M	BLDR	0.000
						VC	SAND	0.020	VC	GRVL	0.167			
0.800	1.000	0.967	0.967	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.027	S	COBL	0.114
						F	SAND	0.012	F	GRVL	0.062	L	COBL	0.098
						M	SAND	0.072	M	GRVL	0.146	S	BLDR	0.019
						C	SAND	0.042	C	GRVL	0.202	M	BLDR	0.000
						VC	SAND	0.020	VC	GRVL	0.167			
0.890	1.000	0.967	0.967	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.027	S	COBL	0.114
						F	SAND	0.012	F	GRVL	0.062	L	COBL	0.098
						M	SAND	0.072	M	GRVL	0.146	S	BLDR	0.019
						C	SAND	0.042	C	GRVL	0.202	M	BLDR	0.000
						VC	SAND	0.020	VC	GRVL	0.167			
0.950	1.000	0.967	0.967	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.027	S	COBL	0.114
						F	SAND	0.012	F	GRVL	0.062	L	COBL	0.098
						M	SAND	0.072	M	GRVL	0.146	S	BLDR	0.019
						C	SAND	0.042	C	GRVL	0.202	M	BLDR	0.000
						VC	SAND	0.020	VC	GRVL	0.167			
1.040	1.000	0.967	0.967	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.027	S	COBL	0.114
						F	SAND	0.012	F	GRVL	0.062	L	COBL	0.098
						M	SAND	0.072	M	GRVL	0.146	S	BLDR	0.019
						C	SAND	0.042	C	GRVL	0.202	M	BLDR	0.000
						VC	SAND	0.020	VC	GRVL	0.167			
1.120	1.000	0.967	0.967	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.027	S	COBL	0.114
						F	SAND	0.012	F	GRVL	0.062	L	COBL	0.098
						M	SAND	0.072	M	GRVL	0.146	S	BLDR	0.019
						C	SAND	0.042	C	GRVL	0.202	M	BLDR	0.000
						VC	SAND	0.020	VC	GRVL	0.167			
1.210	1.000	0.967	0.967	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.027	S	COBL	0.114
						F	SAND	0.012	F	GRVL	0.062	L	COBL	0.098
						M	SAND	0.072	M	GRVL	0.146	S	BLDR	0.019
						C	SAND	0.042	C	GRVL	0.202	M	BLDR	0.000
						VC	SAND	0.020	VC	GRVL	0.167			
1.270	1.000	0.967	0.967	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.027	S	COBL	0.114
						F	SAND	0.012	F	GRVL	0.062	L	COBL	0.098
						M	SAND	0.072	M	GRVL	0.146	S	BLDR	0.019
						C	SAND	0.042	C	GRVL	0.202	M	BLDR	0.000
						VC	SAND	0.020	VC	GRVL	0.167			
1.370	1.000	0.967	0.967	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.027	S	COBL	0.114
						F	SAND	0.012	F	GRVL	0.062	L	COBL	0.098
						M	SAND	0.072	M	GRVL	0.146	S	BLDR	0.019
						C	SAND	0.042	C	GRVL	0.202	M	BLDR	0.000
						VC	SAND	0.020	VC	GRVL	0.167			
1.460	1.000	0.967	0.967	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.027	S	COBL	0.114
						F	SAND	0.012	F	GRVL	0.062	L	COBL	0.098
						M	SAND	0.072	M	GRVL	0.146	S	BLDR	0.019
						C	SAND	0.042	C	GRVL	0.202	M	BLDR	0.000
						VC	SAND	0.020	VC	GRVL	0.167			
1.540	1.000	0.967	0.967	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.027	S	COBL	0.114
						F	SAND	0.012	F	GRVL	0.062	L	COBL	0.098
						M	SAND	0.072	M	GRVL	0.146	S	BLDR	0.019
						C	SAND	0.042	C	GRVL	0.202	M	BLDR	0.000
						VC	SAND	0.020	VC	GRVL	0.167			
1.650	1.000	0.967	0.967	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.027	S	COBL	0.114
						F	SAND	0.012	F	GRVL	0.062	L	COBL	0.098
						M	SAND	0.072	M	GRVL	0.146	S	BLDR	0.019
						C	SAND	0.042	C	GRVL	0.202	M	BLDR	0.000
						VC	SAND	0.020	VC	GRVL	0.167			
1.750	1.000	0.967	0.967	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.027	S	COBL	0.114
						F	SAND	0.012	F	GRVL	0.062	L	COBL	0.098
						M	SAND	0.072	M	GRVL	0.146	S	BLDR	0.019
						C	SAND	0.042	C	GRVL	0.202	M	BLDR	0.000
						VC	SAND	0.020	VC	GRVL	0.167			
1.830	1.000	0.967	0.967	1.000	1.000	VF	SAND	0.003	VF	GRVL	0.027	S	COBL	0.114
						F	SAND	0.012	F	GRVL	0.062	L	COBL	0.098

```
                                                | M  SAND  0.072 | M  GRVL  0.146 | S  BLDR  0.019 |
                                                | C  SAND  0.042 | C  GRVL  0.202 | M  BLDR  0.000 |
                                                | VC SAND  0.020 | VC GRVL  0.167 |

     1.920  1.000  0.967  0.967  1.000  1.000 | VF SAND  0.003 | VF GRVL  0.027 | S  COBL  0.114 |
                                                | F  SAND  0.012 | F  GRVL  0.062 | L  COBL  0.098 |
                                                | M  SAND  0.072 | M  GRVL  0.146 | S  BLDR  0.019 |
                                                | C  SAND  0.042 | C  GRVL  0.202 | M  BLDR  0.000 |
                                                | VC SAND  0.020 | VC GRVL  0.167 |

     2.000  1.000  0.967  0.967  1.000  1.000 | VF SAND  0.003 | VF GRVL  0.027 | S  COBL  0.114 |
                                                | F  SAND  0.012 | F  GRVL  0.062 | L  COBL  0.098 |
                                                | M  SAND  0.072 | M  GRVL  0.146 | S  BLDR  0.019 |
                                                | C  SAND  0.042 | C  GRVL  0.202 | M  BLDR  0.000 |
                                                | VC SAND  0.020 | VC GRVL  0.167 |

     2.070  1.000  0.967  0.967  1.000  1.000 | VF SAND  0.003 | VF GRVL  0.027 | S  COBL  0.114 |
                                                | F  SAND  0.012 | F  GRVL  0.062 | L  COBL  0.098 |
                                                | M  SAND  0.072 | M  GRVL  0.146 | S  BLDR  0.019 |
                                                | C  SAND  0.042 | C  GRVL  0.202 | M  BLDR  0.000 |
                                                | VC SAND  0.020 | VC GRVL  0.167 |

     2.140  1.000  0.967  0.967  1.000  1.000 | VF SAND  0.003 | VF GRVL  0.027 | S  COBL  0.114 |
                                                | F  SAND  0.012 | F  GRVL  0.062 | L  COBL  0.098 |
                                                | M  SAND  0.072 | M  GRVL  0.146 | S  BLDR  0.019 |
                                                | C  SAND  0.042 | C  GRVL  0.202 | M  BLDR  0.000 |
                                                | VC SAND  0.020 | VC GRVL  0.167 |

     2.230  1.000  0.967  0.967  1.000  1.000 | VF SAND  0.003 | VF GRVL  0.027 | S  COBL  0.114 |
                                                | F  SAND  0.012 | F  GRVL  0.062 | L  COBL  0.098 |
                                                | M  SAND  0.072 | M  GRVL  0.146 | S  BLDR  0.019 |
                                                | C  SAND  0.042 | C  GRVL  0.202 | M  BLDR  0.000 |
                                                | VC SAND  0.020 | VC GRVL  0.167 |


..LOCAL INFLOW DATA...
SEDIMENT LOAD TABLE FOR STREAM SEGMENT #   1
                AT LOCAL INFLOW POINT #   1
          LOAD BY GRAIN SIZE CLASS (tons/day)
-------------------------------------
LQL     Q | 1.00000     | 1500.00     |
          ------------ ------------
LFL   VFS |0.100000E-01|0.100000E-01|
LFL    FS |0.100000E-01|0.100000E-01|
LFL    MS |0.100000E-01|0.100000E-01|
LFL    CS |0.100000E-01|0.100000E-01|
LFL   VCS |0.100000E-01|0.100000E-01|
LFL   VFG |0.100000E-01|0.100000E-01|
LFL    FG |0.100000E-01|0.100000E-01|
LFL    MG |0.500000E-02|0.500000E-02|
LFL    CG |0.500000E-02|0.500000E-02|
LFL   VCG |0.500000E-02|0.500000E-02|
LFL    SC |0.500000E-02|0.500000E-02|
LFL    LC |0.500000E-02|0.500000E-02|
LFL    SB |0.500000E-02|0.500000E-02|
LFL    MB |0.100000E-19|0.100000E-19|
          ------------ ------------
   TOTAL |0.100000     |0.100000     |
-------------------------------------

..LOCAL INFLOW DATA...
SEDIMENT LOAD TABLE FOR STREAM SEGMENT #   1
                AT LOCAL INFLOW POINT #   2
          LOAD BY GRAIN SIZE CLASS (tons/day)
-------------------------------------
LQL     Q | 1.00000     | 1500.00     |
          ------------ ------------
LFL   VFS |0.100000E-01|0.100000E-01|
LFL    FS |0.100000E-01|0.100000E-01|
LFL    MS |0.100000E-01|0.100000E-01|
LFL    CS |0.100000E-01|0.100000E-01|
LFL   VCS |0.100000E-01|0.100000E-01|
LFL   VFG |0.100000E-01|0.100000E-01|
LFL    FG |0.100000E-01|0.100000E-01|
LFL    MG |0.500000E-02|0.500000E-02|
LFL    CG |0.500000E-02|0.500000E-02|
LFL   VCG |0.500000E-02|0.500000E-02|
LFL    SC |0.500000E-02|0.500000E-02|
LFL    LC |0.500000E-02|0.500000E-02|
LFL    SB |0.500000E-02|0.500000E-02|
LFL    MB |0.100000E-19|0.100000E-19|
          ------------ ------------
   TOTAL |0.100000     |0.100000     |
-------------------------------------

BED SEDIMENT CONTROL VOLUMES

STREAM SEGMENT #  1: Cave Creek and Apache Wash WMP
|  SECTION  |   LENGTH   |   WIDTH    |  DEPTH   |        V O L U M E        |
|  NUMBER   |    (ft)    |    (ft)    |   (ft)   |   (cu.ft)   |   (cu.yd)   |
-------------------------------------------------------------------------------
|     0.040 |    195.000 |    600.240 |   10.000 |0.117047E+07 | 43350.7     |
|     0.130 |    307.500 |    597.888 |   10.000 |0.183851E+07 | 68092.8     |
|     0.170 |    387.500 |    568.335 |   10.000 |0.220230E+07 | 81566.6     |
|     0.280 |    425.000 |    547.474 |   10.000 |0.232677E+07 | 86176.5     |
```

```
|     0.340 |    375.000 |    585.152 |   10.000 |0.219432E+07 | 81271.1     |
|     0.440 |    472.500 |    581.851 |   10.000 |0.274925E+07 | 101824.     |
|     0.530 |    472.500 |    625.836 |   10.000 |0.295707E+07 | 109521.     |
|     0.620 |    435.000 |    703.448 |   10.000 |0.306000E+07 | 113333.     |
|     0.720 |    385.000 |    736.952 |   10.000 |0.283726E+07 | 105084.     |
|     0.800 |    425.000 |    722.473 |   10.000 |0.307051E+07 | 113723.     |
|     0.890 |    387.500 |    691.345 |   10.000 |0.267896E+07 | 99220.8     |
|     0.950 |    337.500 |    667.032 |   10.000 |0.225123E+07 | 83379.0     |
|     1.040 |    410.000 |    725.613 |   10.000 |0.297501E+07 | 110186.     |
|     1.120 |    430.000 |    761.135 |   10.000 |0.327288E+07 | 121218.     |
|     1.210 |    395.000 |    791.490 |   10.000 |0.312639E+07 | 115792.     |
|     1.270 |    425.000 |    868.017 |   10.000 |0.368907E+07 | 136632.     |
|     1.370 |    500.000 |    933.323 |   10.000 |0.466662E+07 | 172838.     |
|     1.460 |    450.000 |    901.646 |   10.000 |0.405741E+07 | 150274.     |
|     1.540 |    500.000 |    729.429 |   10.000 |0.364715E+07 | 135080.     |
|     1.650 |    545.000 |    465.135 |   10.000 |0.253499E+07 | 93888.4     |
|     1.750 |    467.500 |    430.596 |   10.000 |0.201304E+07 | 74556.9     |
|     1.830 |    450.000 |    458.953 |   10.000 |0.206529E+07 | 76492.1     |
|     1.920 |    427.500 |    492.078 |   10.000 |0.210363E+07 | 77912.3     |
|     2.000 |    395.000 |    659.211 |   10.000 |0.260388E+07 | 96440.1     |
|     2.070 |    385.000 |    756.164 |   10.000 |0.291123E+07 | 107823.     |
|     2.140 |    410.000 |    731.829 |   10.000 |0.300050E+07 | 111130.     |
|     2.230 |    220.000 |    711.507 |   10.000 |0.156531E+07 | 57974.6     |

NO. OF INPUT DATA MESSAGES=     0
END OF SEDIMENT DATA

==========================================================================================

$HYD
BEGIN COMPUTATIONS.

------------------------------------------------------------------------------------------
$RATING

Downstream Boundary Condition - Rating Curve
  Elevation      Stage     Discharge |  Elevation      Stage     Discharge
 ----------------------------------|-----------------------------------
   1726.000    1726.000        0.000 |  1732.530    1732.530     3500.000
   1728.360    1728.360      500.000 |  1732.920    1732.920     4000.000
   1729.350    1729.350     1000.000 |  1733.230    1733.230     4500.000
   1730.070    1730.070     1500.000 |  1733.480    1733.480     5000.000
   1730.610    1730.610     2000.000 |  1733.720    1733.720     5500.000
   1731.190    1731.190     2500.000 |  1733.980    1733.980     6000.000
   1731.710    1731.710     3000.000 |

==========================================================================================
TIME STEP #        1
*    A  Level output at time step 1 (0.250 day)
COMPUTING FROM TIME=       0.0000 DAYS TO TIME=       0.2500 DAYS IN     10 COMPUTATION STEPS
** Q BELOW TABLE **                                                                          **INLOAD**
**WATER DISCHARGE, WATER-SEDIMENT LOAD TABLE ENDPOINT**          0.10          1.00       0.010000
** Q BELOW TABLE **                                                                          **INLOAD**
**WATER DISCHARGE, WATER-SEDIMENT LOAD TABLE ENDPOINT**          0.10          1.00       0.010000
** Q BELOW TABLE **                                                                          **INLOAD**
**WATER DISCHARGE, WATER-SEDIMENT LOAD TABLE ENDPOINT**          0.10          1.00       0.010000
** Q BELOW TABLE **                                                                          **INLOAD**
**WATER DISCHARGE, WATER-SEDIMENT LOAD TABLE ENDPOINT**          0.10          1.00       0.010000
** Q BELOW TABLE **                                                                          **INLOAD**
**WATER DISCHARGE, WATER-SEDIMENT LOAD TABLE ENDPOINT**          0.10          1.00       0.010000
** Q BELOW TABLE **                                                                          **INLOAD**
**WATER DISCHARGE, WATER-SEDIMENT LOAD TABLE ENDPOINT**          0.10          1.00       0.010000
** HYPER-CONCENTRATIONS EXIST **
        AT SECTION NO. ......................      2.140
        ON STREAM SEGMENT....................          1
        TIME STEP #..........................    1        DISCHARGE(Q)........................      2.900
        CONCENTRATION(PPM)...................   524048.8
        ENTRAINMENT COEFFICIENT REDUCED BY...  0.8722
** HYPER-CONCENTRATIONS EXIST **
        AT SECTION NO. ......................      2.070
        ON STREAM SEGMENT....................          1
        TIME STEP #..........................    1        DISCHARGE(Q)........................      2.900
        CONCENTRATION(PPM)...................   457411.1
        ENTRAINMENT COEFFICIENT REDUCED BY...  0.9471
** Q BELOW TABLE **                                                                          **INLOAD**
**WATER DISCHARGE, WATER-SEDIMENT LOAD TABLE ENDPOINT**          0.10          1.00       0.010000
** Q BELOW TABLE **                                                                          **INLOAD**
**WATER DISCHARGE, WATER-SEDIMENT LOAD TABLE ENDPOINT**          0.10          1.00       0.010000
** Q BELOW TABLE **                                                                          **INLOAD**
**WATER DISCHARGE, WATER-SEDIMENT LOAD TABLE ENDPOINT**          0.10          1.00       0.010000
** Q BELOW TABLE **                                                                          **INLOAD**
**WATER DISCHARGE, WATER-SEDIMENT LOAD TABLE ENDPOINT**          0.10          1.00       0.010000

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME        ENTRY *              SAND            *
    DAYS        POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.25        2.230 *     0.00                     *
                2.140 *     0.00                     *
                1.540 *     0.00                     *
   TOTAL=       0.040 *     0.00       0.07   -248.74 *
*****************************************************
```

```
==========================================================================
TIME STEP #        2
*    A  Level output at time step 2 (0.0139 day)

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
**************************************************
    TIME        ENTRY *              SAND          *
    DAYS        POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.26        2.230 *      0.00                    *
                2.140 *      0.00                    *
                1.540 *      0.00                    *
   TOTAL=       0.040 *      0.00      0.08   -218.90 *
**************************************************

==========================================================================
TIME STEP #        3
*    A  Level output at time step 3 (0.0208 day)

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
**************************************************
    TIME        ENTRY *              SAND          *
    DAYS        POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.28        2.230 *      0.00                    *
                2.140 *      0.00                    *
                1.540 *      0.00                    *
   TOTAL=       0.040 *      0.00      0.08   -182.59 *
**************************************************

==========================================================================
TIME STEP #        4
*    A  Level output at time step 4 (0.0208 day)

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
**************************************************
    TIME        ENTRY *              SAND          *
    DAYS        POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.31        2.230 *      0.00                    *
                2.140 *      0.00                    *
                1.540 *      0.00                    *
   TOTAL=       0.040 *      0.00      0.11   -172.37 *
**************************************************

==========================================================================
TIME STEP #        5
*    A  Level output at time step 5 (0.0139 day)

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
**************************************************
    TIME        ENTRY *              SAND          *
    DAYS        POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.32        2.230 *      0.00                    *
                2.140 *      0.00                    *
                1.540 *      0.00                    *
   TOTAL=       0.040 *      0.00      0.15   -162.72 *
**************************************************

==========================================================================
TIME STEP #        6
*    A  Level output at time step 6 (0.0139 day)

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
**************************************************
    TIME        ENTRY *              SAND          *
    DAYS        POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.33        2.230 *      0.01                    *
                2.140 *      0.00                    *
                1.540 *      0.00                    *
   TOTAL=       0.040 *      0.01      0.25    -24.51 *
**************************************************

==========================================================================
TIME STEP #        7
*    A  Level output at time step 7 (0.0208 day)

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
**************************************************
    TIME        ENTRY *              SAND          *
    DAYS        POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.35        2.230 *      0.11                    *
                2.140 *      0.00                    *
                1.540 *      0.00                    *
   TOTAL=       0.040 *      0.11      0.65     -4.71 *
**************************************************
```

```
==========================================================================
TIME STEP #        8
*    A  Level output at time step 8 (0.0208 day)

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*************************************************
    TIME        ENTRY *             SAND          *
    DAYS        POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.37        2.230 *      0.23                   *
                2.140 *      0.00                   *
                1.540 *      0.00                   *
   TOTAL=       0.040 *      0.23      1.08     -3.63 *
*************************************************

==========================================================================
TIME STEP #        9
*    A  Level output at time step 9 (0.0278 day)

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*************************************************
    TIME        ENTRY *             SAND          *
    DAYS        POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.40        2.230 *      0.34                   *
                2.140 *      0.00                   *
                1.540 *      0.00                   *
   TOTAL=       0.040 *      0.34      1.56     -3.58 *
*************************************************

==========================================================================
TIME STEP #       10
*    A  Level output at time step 10 (0.0278 day)

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*************************************************
    TIME        ENTRY *             SAND          *
    DAYS        POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.43        2.230 *      0.38                   *
                2.140 *      0.00                   *
                1.540 *      0.00                   *
   TOTAL=       0.040 *      0.38      1.82     -3.77 *
*************************************************

==========================================================================
TIME STEP #       11
*    A  Level output at time step 11 (0.0278 day)

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*************************************************
    TIME        ENTRY *             SAND          *
    DAYS        POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.46        2.230 *      0.40                   *
                2.140 *      0.00                   *
                1.540 *      0.00                   *
   TOTAL=       0.040 *      0.40      1.97     -3.92 *
*************************************************

==========================================================================
TIME STEP #       12
*    A  Level output at time step 12 (0.0347 day)

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*************************************************
    TIME        ENTRY *             SAND          *
    DAYS        POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.49        2.230 *      0.41                   *
                2.140 *      0.00                   *
                1.540 *      0.00                   *
   TOTAL=       0.040 *      0.41      2.08     -4.01 *
*************************************************

==========================================================================
TIME STEP #       13
*    A  Level output at time step 13 (0.0764 day)

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*************************************************
    TIME        ENTRY *             SAND          *
    DAYS        POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.57        2.230 *      0.43                   *
                2.140 *      0.00                   *
                1.540 *      0.00                   *
   TOTAL=       0.040 *      0.43      2.23     -4.13 *
```

```
**************************************************

==========================================================================================
TIME STEP #      14
*    A  Level output at time step 14 (0.0764 day)

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
**************************************************
    TIME        ENTRY *              SAND              *
    DAYS        POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.65        2.230 *      0.45                     *
                2.140 *      0.00                     *
                1.540 *      0.00                     *
   TOTAL=       0.040 *      0.45      2.36     -4.25 *
**************************************************

==========================================================================================
TIME STEP #      15
*    A  Level output at time step 15 (0.1458 day)

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
**************************************************
    TIME        ENTRY *              SAND              *
    DAYS        POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.79        2.230 *      0.50                     *
                2.140 *      0.00                     *
                1.540 *      0.00                     *
   TOTAL=       0.040 *      0.50      2.61     -4.20 *
**************************************************

==========================================================================================
TIME STEP #      16
*    B  Level output at time step 16 (0.2083 day)
COMPUTING FROM TIME=      0.7916 DAYS TO TIME=      0.9999 DAYS IN    10 COMPUTATION STEPS

- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
Cave Creek and Apache Wash WMP
       ACCUMULATED TIME (yrs)....       0.003
       FLOW DURATION (days)......       0.021

UPSTREAM BOUNDARY CONDITIONS
-----------------------------------------------------------------------
Stream Segment # 1      |   DISCHARGE   | SEDIMENT LOAD | TEMPERATURE
Section No.      2.230  |     (cfs)     |  (tons/day)   |   (deg F)
-----------------------------------------------------------------------
                INFLOW |         35.00 |         79.02 |       68.00

Upstream of SECTION NO.      2.140 is...
LOCAL INFLOW POINT # 2 |   DISCHARGE   | SEDIMENT LOAD | TEMPERATURE
                       |     (cfs)     |  (tons/day)   |   (deg F)
-----------------------------------------------------------------------
      MAINSTEM  INFLOW |         35.00 |         79.02 |       68.00
      LOCAL     INFLOW |         23.00 |          0.10 |       68.00
-----------------------------------------------------------------------
                 TOTAL |         58.00 |         79.12 |       68.00

Upstream of SECTION NO.      1.540 is...
LOCAL INFLOW POINT # 1 |   DISCHARGE   | SEDIMENT LOAD | TEMPERATURE
                       |     (cfs)     |  (tons/day)   |   (deg F)
-----------------------------------------------------------------------
      MAINSTEM  INFLOW |         58.00 |         79.12 |       68.00
      LOCAL     INFLOW |         29.00 |          0.10 |       68.00
-----------------------------------------------------------------------
                 TOTAL |         87.00 |         79.22 |       68.00

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
**************************************************
    TIME        ENTRY *              SAND              *
    DAYS        POINT *    INFLOW   OUTFLOW  TRAP EFF *
    1.00        2.230 *      0.51                     *
                2.140 *      0.00                     *
                1.540 *      0.00                     *
   TOTAL=       0.040 *      0.51      2.75     -4.40 *
**************************************************

TABLE SB-1:  SEDIMENT LOAD PASSING THE  BOUNDARIES OF STREAM SEGMENT #  1
-------------------------------------------------------------------------------
  SEDIMENT INFLOW at the Upstream Boundary:
      GRAIN SIZE      LOAD (tons/day) |    GRAIN SIZE      LOAD (tons/day)
  ---------------------------------------------------------------------------
    VERY FINE SAND....          0.06  |  MEDIUM GRAVEL.....          9.67
    FINE SAND.........          2.09  |  COARSE GRAVEL.....          3.56
    MEDIUM SAND.......          9.42  |  VERY COARSE GRAVEL          0.69
    COARSE SAND.......         16.95  |  SMALL COBBLES.....          0.00
    VERY COARSE SAND..         17.22  |  LARGE COBBLES.....          0.00
    VERY FINE GRAVEL..          8.77  |  SMALL BOULDERS....          0.00
    FINE GRAVEL.......         10.59  |  MEDIUM BOULDERS...          0.00
                        -------------                        -------------
                                                   TOTAL =         79.02
```

SEDIMENT OUTFLOW from the Downstream Boundary

GRAIN SIZE	LOAD (tons/day)	GRAIN SIZE	LOAD (tons/day)
VERY FINE SAND....	7.69	MEDIUM GRAVEL.....	150.27
FINE SAND.....	31.28	COARSE GRAVEL.....	138.55
MEDIUM SAND.....	184.27	VERY COARSE GRAVEL	0.00
COARSE SAND.....	104.67	SMALL COBBLES.....	0.00
VERY COARSE SAND..	47.36	LARGE COBBLES.....	0.00
VERY FINE GRAVEL..	56.76	SMALL BOULDERS....	0.00
FINE GRAVEL.....	105.31	MEDIUM BOULDERS...	0.00
		TOTAL =	826.16

TABLE SB-2: STATUS OF THE BED PROFILE AT TIME = 1.000 DAYS

SECTION NUMBER	BED CHANGE (ft)	WS ELEV (ft)	THALWEG (ft)	Q (cfs)	TRANSPORT RATE (tons/day) SAND
2.230	-0.72	1825.97	1825.28	35.	136.
2.140	-0.21	1824.26	1823.79	58.	376.
2.070	-0.94	1820.48	1820.06	58.	506.
2.000	0.93	1815.62	1814.93	58.	439.
1.920	-0.52	1810.09	1809.48	58.	758.
1.830	0.59	1807.31	1806.59	58.	409.
1.750	-0.41	1800.88	1799.59	58.	665.
1.650	0.58	1797.17	1796.58	58.	380.
1.540	-0.20	1790.38	1789.80	87.	698.
1.460	0.07	1786.82	1786.07	87.	595.
1.370	0.46	1783.26	1782.46	87.	385.
1.270	-0.27	1778.91	1777.73	87.	482.
1.210	0.28	1777.01	1776.28	87.	344.
1.120	-0.24	1773.35	1771.76	87.	479.
1.040	-0.16	1770.65	1769.84	87.	564.
0.950	0.11	1767.12	1766.11	87.	480.
0.890	0.65	1765.68	1764.65	87.	304.
0.800	-0.79	1762.00	1761.21	87.	494.
0.720	-0.24	1758.64	1757.76	87.	694.
0.620	0.59	1755.16	1754.59	87.	456.
0.530	0.10	1750.78	1750.10	87.	474.
0.440	-0.01	1747.39	1745.99	87.	548.
0.340	-0.51	1743.90	1743.49	87.	955.
0.280	0.12	1738.94	1738.12	87.	1053.
0.170	0.86	1733.69	1732.86	87.	647.
0.130	-1.30	1731.29	1730.70	87.	734.
0.040	-0.47	1726.41	1725.53	87.	826.

$VOL A

STREAM SEGMENT # 1: Cave Creek and Apache Wash WMP

SUMMARY TABLE: MASS AND VOLUME OF SEDIMENT

SECTION	SEDIMENT THROUGH SECTION (tons) TOTAL	SAND	SILT	CLAY	SEDIMENT DEPOSITED IN REACH in cu. yds TOTAL	CUMULATIVE	SAND	SILT	CLAY
INFLOW	1032.	1032.	0.	0.	822.				
2.230	2340.	2340.	0.	0.	-1042.	-1042.	-1042.	0.	0.
LOCAL	0.	0.	0.	0.	0.				
2.140	2925.	2925.	0.	0.	-466.	-1508.	-466.	0.	0.
2.070	5841.	5841.	0.	0.	-2323.	-3830.	-2323.	0.	0.
2.000	5027.	5027.	0.	0.	648.	-3182.	648.	0.	0.
1.920	6705.	6705.	0.	0.	-1337.	-4519.	-1337.	0.	0.
1.830	4932.	4932.	0.	0.	1413.	-3106.	1413.	0.	0.
1.750	5912.	5912.	0.	0.	-781.	-3887.	-781.	0.	0.
1.650	3822.	3822.	0.	0.	1664.	-2223.	1664.	0.	0.
LOCAL	0.	0.	0.	0.	0.				
1.540	4180.	4180.	0.	0.	-284.	-2507.	-284.	0.	0.
1.460	3948.	3948.	0.	0.	184.	-2323.	184.	0.	0.
1.370	3004.	3004.	0.	0.	753.	-1570.	753.	0.	0.
1.270	3780.	3780.	0.	0.	-618.	-2189.	-618.	0.	0.
1.210	3277.	3277.	0.	0.	401.	-1788.	401.	0.	0.
1.120	3444.	3444.	0.	0.	-133.	-1921.	-133.	0.	0.
1.040	3334.	3334.	0.	0.	88.	-1834.	88.	0.	0.
0.950	3303.	3303.	0.	0.	25.	-1809.	25.	0.	0.
0.890	2880.	2880.	0.	0.	337.	-1472.	337.	0.	0.
0.800	4563.	4563.	0.	0.	-1340.	-2812.	-1340.	0.	0.
0.720	4820.	4820.	0.	0.	-205.	-3017.	-205.	0.	0.
0.620	3235.	3235.	0.	0.	1263.	-1754.	1263.	0.	0.
0.530	2797.	2797.	0.	0.	349.	-1406.	349.	0.	0.
0.440	2649.	2649.	0.	0.	118.	-1288.	118.	0.	0.
0.340	5134.	5134.	0.	0.	-1979.	-3267.	-1979.	0.	0.
0.280	5101.	5101.	0.	0.	26.	-3241.	26.	0.	0.
0.170	3817.	3817.	0.	0.	1023.	-2218.	1023.	0.	0.
0.130	6472.	6472.	0.	0.	-2115.	-4333.	-2115.	0.	0.
0.040	5574.	5574.	0.	0.	715.	-3618.	715.	0.	0.

TOTAL SEDIMENT - per grain size - THROUGH EACH CROSS SECTION (tons)

UPSTREAM INFLOW
VF SAND 1. VF GRVL 114. S COBL 0.

```
      F  SAND        27.   F  GRVL       140.   L  COBL         0.
      M  SAND       122.   M  GRVL       125.   S  BLDR         0.
      C  SAND       220.   C  GRVL        50.   M  BLDR         0.
      VC SAND       224.   VC GRVL         9.

SECTION NO.       2.230
      VF SAND         4.   VF GRVL       143.   S  COBL       114.
      F  SAND        39.   F  GRVL       221.   L  COBL        11.
      M  SAND       195.   M  GRVL       378.   S  BLDR         2.
      C  SAND       264.   C  GRVL       427.   M  BLDR         0.
      VC SAND       245.   VC GRVL       297.

LOCAL INFLOW
      VF SAND         0.   VF GRVL         0.   S  COBL         0.
      F  SAND         0.   F  GRVL         0.   L  COBL         0.
      M  SAND         0.   M  GRVL         0.   S  BLDR         0.
      C  SAND         0.   C  GRVL         0.   M  BLDR         0.
      VC SAND         0.   VC GRVL         0.

SECTION NO.       2.140
      VF SAND         7.   VF GRVL       151.   S  COBL        40.
      F  SAND        49.   F  GRVL       280.   L  COBL         0.
      M  SAND       265.   M  GRVL       582.   S  BLDR         0.
      C  SAND       262.   C  GRVL       698.   M  BLDR         0.
      VC SAND       209.   VC GRVL       381.
SECTION NO.       2.070
      VF SAND        17.   VF GRVL       228.   S  COBL       383.
      F  SAND        88.   F  GRVL       476.   L  COBL         0.
      M  SAND       507.   M  GRVL      1051.   S  BLDR         0.
      C  SAND       377.   C  GRVL      1363.   M  BLDR         0.
      VC SAND       245.   VC GRVL      1106.
SECTION NO.       2.000
      VF SAND        25.   VF GRVL       265.   S  COBL        20.
      F  SAND       112.   F  GRVL       579.   L  COBL         0.
      M  SAND       664.   M  GRVL      1189.   S  BLDR         0.
      C  SAND       428.   C  GRVL      1161.   M  BLDR         0.
      VC SAND       236.   VC GRVL       349.
SECTION NO.       1.920
      VF SAND        29.   VF GRVL       306.   S  COBL       265.
      F  SAND       132.   F  GRVL       675.   L  COBL         5.
      M  SAND       784.   M  GRVL      1430.   S  BLDR         0.
      C  SAND       494.   C  GRVL      1581.   M  BLDR         0.
      VC SAND       265.   VC GRVL       739.
SECTION NO.       1.830
      VF SAND        27.   VF GRVL       254.   S  COBL        85.
      F  SAND       116.   F  GRVL       552.   L  COBL         0.
      M  SAND       674.   M  GRVL      1125.   S  BLDR         0.
      C  SAND       416.   C  GRVL      1033.   M  BLDR         0.
      VC SAND       215.   VC GRVL       434.
SECTION NO.       1.750
      VF SAND        32.   VF GRVL       294.   S  COBL       136.
      F  SAND       135.   F  GRVL       637.   L  COBL         0.
      M  SAND       794.   M  GRVL      1283.   S  BLDR         0.
      C  SAND       482.   C  GRVL      1262.   M  BLDR         0.
      VC SAND       244.   VC GRVL       614.
SECTION NO.       1.650
      VF SAND        27.   VF GRVL       210.   S  COBL        67.
      F  SAND       104.   F  GRVL       436.   L  COBL         0.
      M  SAND       602.   M  GRVL       805.   S  BLDR         0.
      C  SAND       357.   C  GRVL       710.   M  BLDR         0.
      VC SAND       173.   VC GRVL       331.

LOCAL INFLOW
      VF SAND         0.   VF GRVL         0.   S  COBL         0.
      F  SAND         0.   F  GRVL         0.   L  COBL         0.
      M  SAND         0.   M  GRVL         0.   S  BLDR         0.
      C  SAND         0.   C  GRVL         0.   M  BLDR         0.
      VC SAND         0.   VC GRVL         0.

SECTION NO.       1.540
      VF SAND        27.   VF GRVL       210.   S  COBL       104.
      F  SAND       104.   F  GRVL       441.   L  COBL         0.
      M  SAND       600.   M  GRVL       862.   S  BLDR         0.
      C  SAND       354.   C  GRVL       891.   M  BLDR         0.
      VC SAND       171.   VC GRVL       416.
SECTION NO.       1.460
      VF SAND        26.   VF GRVL       196.   S  COBL        81.
      F  SAND        98.   F  GRVL       416.   L  COBL         0.
      M  SAND       561.   M  GRVL       828.   S  BLDR         0.
      C  SAND       330.   C  GRVL       852.   M  BLDR         0.
      VC SAND       159.   VC GRVL       401.
SECTION NO.       1.370
      VF SAND        24.   VF GRVL       180.   S  COBL         3.
      F  SAND        90.   F  GRVL       379.   L  COBL         0.
      M  SAND       519.   M  GRVL       688.   S  BLDR         0.
      C  SAND       303.   C  GRVL       519.   M  BLDR         0.
      VC SAND       144.   VC GRVL       153.
SECTION NO.       1.270
      VF SAND        27.   VF GRVL       215.   S  COBL        29.
      F  SAND       105.   F  GRVL       457.   L  COBL         0.
      M  SAND       614.   M  GRVL       846.   S  BLDR         0.
      C  SAND       358.   C  GRVL       692.   M  BLDR         0.
      VC SAND       170.   VC GRVL       266.
SECTION NO.       1.210
      VF SAND        25.   VF GRVL       196.   S  COBL        21.
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      F  SAND        98.   F  GRVL       404.   L  COBL        0.
      M  SAND       573.   M  GRVL       704.   S  BLDR        0.
      C  SAND       332.   C  GRVL       548.   M  BLDR        0.
      VC SAND       156.   VC GRVL       219.
SECTION NO.      1.120
      VF SAND        26.   VF GRVL       202.   S  COBL       15.
      F  SAND       103.   F  GRVL       413.   L  COBL        0.
      M  SAND       600.   M  GRVL       728.   S  BLDR        0.
      C  SAND       347.   C  GRVL       621.   M  BLDR        0.
      VC SAND       162.   VC GRVL       228.
SECTION NO.      1.040
      VF SAND        26.   VF GRVL       190.   S  COBL       10.
      F  SAND        99.   F  GRVL       383.   L  COBL        0.
      M  SAND       573.   M  GRVL       697.   S  BLDR        0.
      C  SAND       331.   C  GRVL       651.   M  BLDR        0.
      VC SAND       154.   VC GRVL       221.
SECTION NO.      0.950
      VF SAND        25.   VF GRVL       176.   S  COBL       26.
      F  SAND        93.   F  GRVL       352.   L  COBL        0.
      M  SAND       541.   M  GRVL       672.   S  BLDR        0.
      C  SAND       311.   C  GRVL       702.   M  BLDR        0.
      VC SAND       144.   VC GRVL       261.
SECTION NO.      0.890
      VF SAND        23.   VF GRVL       166.   S  COBL       16.
      F  SAND        85.   F  GRVL       344.   L  COBL        0.
      M  SAND       499.   M  GRVL       626.   S  BLDR        0.
      C  SAND       287.   C  GRVL       523.   M  BLDR        0.
      VC SAND       133.   VC GRVL       179.
SECTION NO.      0.800
      VF SAND        27.   VF GRVL       208.   S  COBL      151.
      F  SAND       103.   F  GRVL       446.   L  COBL        0.
      M  SAND       609.   M  GRVL       922.   S  BLDR        0.
      C  SAND       351.   C  GRVL      1014.   M  BLDR        0.
      VC SAND       164.   VC GRVL       567.
SECTION NO.      0.720
      VF SAND        26.   VF GRVL       203.   S  COBL      144.
      F  SAND       102.   F  GRVL       436.   L  COBL        0.
      M  SAND       595.   M  GRVL       948.   S  BLDR        0.
      C  SAND       343.   C  GRVL      1201.   M  BLDR        0.
      VC SAND       160.   VC GRVL       663.
SECTION NO.      0.620
      VF SAND        22.   VF GRVL       156.   S  COBL       20.
      F  SAND        81.   F  GRVL       333.   L  COBL        0.
      M  SAND       463.   M  GRVL       712.   S  BLDR        0.
      C  SAND       266.   C  GRVL       755.   M  BLDR        0.
      VC SAND       124.   VC GRVL       302.
SECTION NO.      0.530
      VF SAND        22.   VF GRVL       159.   S  COBL        7.
      F  SAND        80.   F  GRVL       334.   L  COBL        0.
      M  SAND       465.   M  GRVL       623.   S  BLDR        0.
      C  SAND       268.   C  GRVL       540.   M  BLDR        0.
      VC SAND       125.   VC GRVL       176.
SECTION NO.      0.440
      VF SAND        21.   VF GRVL       156.   S  COBL        8.
      F  SAND        79.   F  GRVL       322.   L  COBL        0.
      M  SAND       465.   M  GRVL       576.   S  BLDR        0.
      C  SAND       268.   C  GRVL       474.   M  BLDR        0.
      VC SAND       124.   VC GRVL       155.
SECTION NO.      0.340
      VF SAND        29.   VF GRVL       234.   S  COBL      204.
      F  SAND       114.   F  GRVL       504.   L  COBL        0.
      M  SAND       674.   M  GRVL      1028.   S  BLDR        0.
      C  SAND       389.   C  GRVL      1148.   M  BLDR        0.
      VC SAND       182.   VC GRVL       626.
SECTION NO.      0.280
      VF SAND        30.   VF GRVL       241.   S  COBL      100.
      F  SAND       116.   F  GRVL       527.   L  COBL        0.
      M  SAND       689.   M  GRVL      1098.   S  BLDR        0.
      C  SAND       399.   C  GRVL      1174.   M  BLDR        0.
      VC SAND       187.   VC GRVL       540.
SECTION NO.      0.170
      VF SAND        28.   VF GRVL       226.   S  COBL       14.
      F  SAND       110.   F  GRVL       480.   L  COBL        0.
      M  SAND       649.   M  GRVL       870.   S  BLDR        0.
      C  SAND       375.   C  GRVL       669.   M  BLDR        0.
      VC SAND       176.   VC GRVL       220.
SECTION NO.      0.130
      VF SAND        36.   VF GRVL       308.   S  COBL      362.
      F  SAND       146.   F  GRVL       668.   L  COBL       21.
      M  SAND       869.   M  GRVL      1301.   S  BLDR        0.
      C  SAND       503.   C  GRVL      1277.   M  BLDR        0.
      VC SAND       237.   VC GRVL       743.
SECTION NO.      0.040
      VF SAND        36.   VF GRVL       280.   S  COBL      131.
      F  SAND       143.   F  GRVL       601.   L  COBL        0.
      M  SAND       800.   M  GRVL      1149.   S  BLDR        0.
      C  SAND       462.   C  GRVL      1129.   M  BLDR        0.
      VC SAND       217.   VC GRVL       623.

--------------------------------------------------------------------------------
$$END

      0   DATA ERRORS DETECTED.

TOTAL NO. OF TIME STEPS READ =        16
```

```
TOTAL NO. OF WS PROFILES =            34
ITERATIONS IN EXNER EQ =            9180

COMPUTATIONS COMPLETED
RUN TIME =  0 HOURS,  0 MINUTES &  1.00 SECONDS
```

APPENDIX H.12

Paradise Wash Overbank Model, 100-year Flood, Future Condition

```
T1      Cave Creek and Apache Wash WMP
T2      by Stantec: Proj. No. 82000077                  File: PW-F100F.DAT
T3      for Flood Control District of Maricopa County  Date: 07-27-99  srg

NC 0.055   0.055    0.03     0.1     0.3

X1  0.04      11 9970.1510032.22
GR  1738    9680    1734    9765    1732    9850    1732 9946.82    1730 9970.15
GR  1726 9998.41    172610018.18    173010032.22    173210090.04    173610255.73
GR  173810279.91
HD  0.04    10.0

X1  0.13       8 9978.4110047.54     425     465     390
GR  1738 9952.71    1734 9978.41    1732 9988.85    173210019.25    173410047.54
GR  1736 10172.1    1736 10543.1    173810553.61
HD  0.13    10.0

X1  0.17      12 9974.5110022.71     225     200     225
GR  1740 9957.91    1734 9974.51    1732  9980.5    173210003.82    173410022.71
GR  173610084.24    173810128.49    173810423.55    173610511.08    173610520.92
GR  173810528.63    174010535.83
HD  0.17    10.0

X1  0.28      14    9974   10038     550     550     550
GR  1746    9761    1744    9780    1742    9817    1740    9891    1742    9974
GR  1740    9982    1738    9991    1738   10008    1740   10017    1742   10038
GR  1744   10151    1743   10229    1744   10243    1746   10289
HD  0.28    10.0

X1  0.34      13 9969.7510014.83     290     340     300
GR  1750 9749.69    1748 9772.57    1746 9799.65    1744 9969.75    1744 9988.37
GR  174410012.01    174410014.83    174610073.32    174610188.93    174410285.92
GR  174410293.88    174810324.22    1750 10351.7
HD  0.34    10.0

X1  0.44      14 9992.4610028.31     500     380     450
GR  1752 9603.04    1750 9682.28    1748 9992.46    174610001.98    1746   10007
GR  174810019.54    174910028.31    174910052.71    174810105.67    1746 10138.9
GR  174610140.02    174810149.52    175010159.12    1752 10170.1
HD  0.44    10.0

X1  0.53      10    9976   10028     475     500     495
GR  1758    9511    1756    9574    1754    9729    1752    9976    1750    9983
GR  1750   10018    1752   10028    1754   10099    1756   10115    1758   10131
HD  0.53    10.0

X1  0.62      18    9967   10031     420     460     450
GR  1762    9548    1760    9586    1758    9657  1757.5    9688    1758    9750
GR1758.5    9798    1758    9938    1756    9967    1754    9983    1754   10018
GR  1756   10031    1754   10047    1754   10056    1756   10069    1758   10085
GR  1758   10218    1760   10245    1762   10263
HD  0.62    10.0

X1  0.72      17    9978   10018     400     425     420
GR  1766    9396    1764    9427    1762    9473    1761    9526    1762    9616
GR  1760    9682  1758.5    9721    1760    9758  1760.5    9796    1760    9886
GR  1760    9978    1758    9988    1758   10012    1760   10018    1762   10066
GR  1764   10106    1766   10141
HD  0.72    10.0

X1   0.8      10 9982.1410020.71     420     330     350
GR  1768 9593.82    1766 9646.26    1766 9785.49    1764 9982.14    1762 9989.01
GR  176210010.62    176410020.71    1764 10104.6    176610291.13    1768 10321.7
HD   0.8    10.0

X1  0.89      11 9981.0110021.69     520     480     500
GR  1772 9582.26    1772 9582.35    1770 9640.11    1770 9921.21    1768 9981.01
GR  1764 9985.21    176410009.58    176610018.11    176810021.69    177010163.03
GR  177210270.58
HD  0.89    10.0

X1  0.95      13 9984.4910070.19     250     310     275
GR  1774  9590.3    1774  9590.4    1772 9688.06    1772 9688.13    1772 9982.32
GR  1770 9984.49    1768 9986.77    176610001.77    176610019.78    176810036.54
GR  177010070.19    177210159.61    177410232.27
HD  0.95    10.0

X1  1.04      13  9985.510029.11     500     300     400
GR  1778 9371.44    1778 9371.87    1774 9547.56    1774 9547.64    1774 9676.69
GR  1774 9678.18    1772 9732.85    1772  9985.5    1770 9991.67    177010013.58
GR  177210029.11    177610053.67    177810108.42
HD  1.04    10.0

X1  1.12      23 9943.4610023.31     320     470     420
GR  1782 9323.43    1782 9323.49    1780 9334.19    1780 9334.29    1778 9344.65
GR  1778 9345.18    1778    9460    1776  9546.2    1776 9547.35    1776 9660.25
GR  1776 9661.37    1778 9701.23    1778 9701.63    1780 9764.83    1780 9764.91
GR  1780 9845.43    1776 9943.46    1774 9981.99    177210002.99    177210010.59
GR  177610023.31    178010036.17    178210084.32
HD  1.12    10.0

X1  1.21      22 9983.14 10020.6     400     450     440
GR  1784    9421    1780 9440.23    1780  9538.2    1782 9595.38    1782 9618.31
GR  1780 9801.74    1780 9802.59    1780 9835.89    1780 9836.44    1782 9877.07
GR  1782 9886.63    1780 9977.68    1778 9982.64    1778 9983.14    1776 9988.45
```

```
GR  177610013.85    177810020.25    1778 10020.6    177810096.24    178010106.85
GR  178210131.31    178410206.15
HD  1.21    10.0

X1  1.27      18 9969.1210057.73     390     320     350
GR  1788 9347.73    1786 9366.76    1784 9787.72    1784 9788.51    1784 9960.27
GR  1784 9960.65    1782 9969.04    1782 9969.12    1778 9988.65    1778 9989.09
GR  177810011.61    177810012.22    178210057.73    178210058.84    178410169.81
GR  178410171.13    178810205.64    178810206.31
HD  1.27    10.0

X1  1.37      24 9958.8710020.46     570     430     500
GR  1792    9345    1790    9385    1788    9440    1788    9490 1789.51  9650.6
GR  1788 9806.04    1788 9806.97    1786 9865.72    1786 9866.07    1784  9886.2
GR  1784 9886.27    1784 9957.84    1784 9958.87    1782  9968.7    1782 9968.84
GR  1782 9990.03    178610020.46    178610055.46    178610057.12    178810069.22
GR  178810069.72    178810181.45    179010258.34    179210303.11
HD  1.37    10.0

X1  1.46      16 9973.0310038.59     260     670     500
GR  1794    9420    1792    9455    1790    9645    1790    9685    1792 9843.42
GR  1792 9885.29    1790 9920.09    1788 9973.03    1786 9983.48    178610027.78
GR  178610028.33    178810038.59    1788 10039.2    179210295.57    179210295.61
GR1793.910328.92
HD  1.46    10.0

X1  1.54      13 9986.0310020.15     400     400     400
GR  1796 9735.34    1794 9972.06    1792 9986.03    1790 9993.93    1790 10012.3
GR  179210020.15    179210029.59    179010124.43    179010160.57    179210181.54
GR  179410288.06    179410495.09    179610533.67
HD  1.54    10.0

QT

X1  1.65      11    9971   10020     600     575     600
GR  1806    9893    1804    9901    1802    9909    1800    9915    1798    9923
GR1797.8    9971    1796    9988    1796   10012    1798   10020    1800   10273
GR  1802 10273.1
HD  1.65    10.0

X1  1.75      10 9964.4410022.87     485     500     490
GR  1806 9923.03    1804 9964.44    1802 9975.68    1800  9998.4    180010003.69
GR  180410022.87    180410187.38    180210279.87    180210305.65    180610358.49
HD  1.75    10.0

X1  1.83      10 9983.6710038.99     440     450     445
GR  1812 9956.91    1810 9974.62    1808 9983.67    1806 9990.95    180610005.18
GR  180810038.99    181010189.64    181010254.89    180810359.32    181210422.67
HD  1.83    10.0

X1  1.92      11    9935   10025     460     450     455
GR  1816    9925    1814    9935    1812    9945    1810    9965    1810   10010
GR  1812   10015    1814   10025    1812   10050    1814   10100    1814   10340
GR  1816   10380
HD  1.92    10.0

X1     2      15 9983.4610022.29     390     390     400
GR  1822 9956.92    1818 9973.16    1818 9974.89    1816 9981.08    1816 9983.46
GR  1814 9989.77    1814 9993.01    181410005.51    181410007.19    181610022.29
GR  181610025.64    181810088.76    182010488.79    1820 10588.7    182210637.44
HD     2    10.0

X1  2.07       7 9969.04   10060     415     260     390
GR  1824 9955.42    1822 9969.04    1821    9980    1821   10020    1822   10060
GR  182210667.15    182410737.75
HD  2.07    10.0

X1  2.14      10 9979.0110025.81     385     380     380
GR  1828 9961.98    1826 9969.94    1824 9979.01    1824 9981.08    182410020.87
GR  182410025.81    182610218.97    182610361.55    182610637.58    182810689.74
HD  2.14    10.0

QT

X1  2.23      11 9979.4310023.07     435     445     440
GR  1834 9916.62    1832 9941.49    1830 9962.82    1828 9979.43    1826 9994.11
GR  182610007.33    182810023.07    183010034.76    1832   10373    1832   10480
GR  1834   10620
HD  2.23    10.0
EJ

T4  Project: Upper Cave Creek Watercourse Master Plan Studies
T5  Client : Flood Control District of Maricopa County (FCDMC)
T6  Date:    August 26, 1999
T7  Firm:    Stantec Consulting, Inc.
T8  ******************************************************
I1            10
I4  SAND       4       1      14       0       0       0       0       0
I5           0.5     0.5    0.25     0.5    0.25       0     1.0
LQ    Q        1    1400    4200
LT   QS        1    7358   11381
LF   VFS 0.00081 0.00080 0.00052
LF    FS 0.02651 0.02650 0.02378
LF    MS 0.11916 0.11915 0.11366
LF    CS 0.21448 0.21447 0.20535
```

```
LF   VCS 0.21791 0.21790 0.21022
LF   VFG 0.11094 0.11093 0.10880
LF    FG 0.13400 0.13402 0.13942
LF    MG 0.12236 0.12237 0.12300
LF    CG 0.04500 0.04506 0.06258
LF   VCG 0.00879 0.00879 0.01267
LF    SC       0       0       0
LF    LC       0       0       0
LF    SB       0       0       0
LF    MB       0       0       0
PF          2.23     1.0    50.8    38.1      98    25.4      96   19.05      93
PFC 12.7      87   9.525      82    6.35      73    4.75      67    2.38      57
PFC    2      54    1.19      39    0.59      18    0.42      10     0.3       4
PFC0.149       1

$LOCAL
LQL    Q       1    1000
LTL   QS     0.1     0.1
LFL  VFS    0.10    0.10
LFL   FS    0.10    0.10
LFL   MS    0.10    0.10
LFL   CS    0.10    0.10
LFL  VCS    0.10    0.10
LFL  VFG    0.10    0.10
LFL   FG    0.10    0.10
LFL   MG    0.05    0.05
LFL   CG    0.05    0.05
LFL  VCG    0.05    0.05
LFL   SC    0.05    0.05
LFL   LC    0.05    0.05
LFL   SB    0.05    0.05
LFL   MB    0.00    0.00

LQL    Q       1    1500
LTL   QS     0.1     0.1
LFL  VFS    0.10    0.10
LFL   FS    0.10    0.10
LFL   MS    0.10    0.10
LFL   CS    0.10    0.10
LFL  VCS    0.10    0.10
LFL  VFG    0.10    0.10
LFL   FG    0.10    0.10
LFL   MG    0.05    0.05
LFL   CG    0.05    0.05
LFL  VCG    0.05    0.05
LFL   SC    0.05    0.05
LFL   LC    0.05    0.05
LFL   SB    0.05    0.05
LFL   MB    0.00    0.00

$HYD
$RATING
RC            13     500                0  1726.0 1728.36 1729.35 1730.07 1730.61
RC       1731.19 1731.71 1732.53 1732.92 1733.23 1733.48 1733.72 1733.98

*    A  Level output at time step 1 (0.250 day)
Q      3       0       1
T     68      68      68
X          0.025    0.25
*    A  Level output at time step 2 (0.0139 day)
Q     11       2       4
W 0.0139
*    A  Level output at time step 3 (0.0208 day)
Q     15       4       4
W 0.0208
*    A  Level output at time step 4 (0.0208 day)
Q     91      75       6
W 0.0208
*    A  Level output at time step 5 (0.0139 day)
Q    636     557      58
W 0.0139
*    A  Level output at time step 6 (0.0139 day)
Q   1162     431     393
W 0.0139
*    A  Level output at time step 7 (0.0208 day)
Q   4610    1226     610
W 0.0208
*    A  Level output at time step 8 (0.0208 day)
Q   4921      74    1210
W 0.0208
*    A  Level output at time step 9 (0.0278 day)
Q   2570     141     783
W 0.0278
*    A  Level output at time step 10 (0.0278 day)
Q   1245     205     373
W 0.0278
*    A  Level output at time step 11 (0.0278 day)
Q    712     151     203
W 0.0278
*    A  Level output at time step 12 (0.0347 day)
Q    457     108     123
W 0.0347
*    A  Level output at time step 13 (0.0764 day)
Q    307      61      76
W 0.0764
```

```
*    A  Level output at time step 14 (0.0764 day)
Q    235      44       59
W 0.0764
*    A  Level output at time step 15 (0.1458 day)
Q    357      60       88
W 0.1458
*    A  Level output at time step 16 (0.2083 day)
Q     87      29       23
X        0.02083  0.2083
$VOL  A
$$END
```

```
*************************************************     ********************************
*  SCOUR AND DEPOSITION IN RIVERS AND RESERVOIRS  *     *  U.S. ARMY CORPS OF ENGINEERS  *
*       Version: 4.1.00 -  OCTOBER 1993           *     *  HYDROLOGIC ENGINEERING CENTER *
*  INPUT FILE:  PW-F100F.DAT                      *     *  609 SECOND STREET             *
*  OUTPUT FILE: PW-F100F.OUT                      *     *  DAVIS, CALIFORNIA 95616-4687  *
*  RUN DATE: 10 OCT 00    RUN TIME: 08:14:44      *     *  (916) 756-1104                *
*************************************************     ********************************

                    X     X  XXXXXXX   XXXXX           XXXXX
                    X     X  X        X     X         X     X
                    X     X  X        X               X
                    XXXXXXX  XXXX     X        XXXXX  XXXXXX
                    X     X  X        X               X     X
                    X     X  X        X     X         X     X
                    X     X  XXXXXXX   XXXXX           XXXXX

         ******************************************************************
         *  MAXIMUM LIMITS FOR THIS VERSION ARE:                          *
         *       10  Stream Segments (Main Stem + Tributaries)            *
         *      500  Cross Sections                                       *
         *      200  Elevation/Station Points per Cross Section           *
         *       20  Grain Sizes                                          *
         *       10  Control Points                                       *
         ******************************************************************

T1      Cave Creek and Apache Wash WMP
T2      by Stantec: Proj. No. 82000077                  File: PW-F100F.DAT
T3      for Flood Control District of Maricopa County  Date: 07-27-99  srg

N values...  Left   Channel   Right    Contraction    Expansion
           0.0550   0.0300   0.0550       1.1000      0.7000

SECTION NO.     0.040
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     0.130
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     0.170
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     0.280
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     0.340
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     0.440
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     0.530
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     0.620
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     0.720
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     0.800
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     0.890
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     0.950
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     1.040
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     1.120
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     1.210
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     1.270
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     1.370
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     1.460
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     1.540
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

LOCAL INFLOW POINT  1 occurs upstream from Section No.       1.540

SECTION NO.     1.650
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     1.750
```

```
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     1.830
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     1.920
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     2.000
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     2.070
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     2.140
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

LOCAL INFLOW POINT  2 occurs upstream from Section No.       2.140

SECTION NO.     2.230
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

NO. OF CROSS SECTIONS IN STREAM SEGMENT= 27
NO. OF INPUT DATA MESSAGES =   0

TOTAL NO. OF CROSS SECTIONS IN THE NETWORK =  27
TOTAL NO. OF STREAM SEGMENTS IN THE NETWORK=   1
END OF GEOMETRIC DATA

==========================================================================================

T4  Project: Upper Cave Creek Watercourse Master Plan Studies
T5  Client : Flood Control District of Maricopa County (FCDMC)
T6  Date:    August 26, 1999
T7  Firm:    Stantec Consulting, Inc.
T8  ****************************************************

        Cave Creek and Apache Wash WMP
        by Stantec: Proj. No. 82000077                  File: PW-F100F.DAT
        for Flood Control District of Maricopa County  Date: 07-27-99  srg

- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
SEDIMENT PROPERITES AND PARAMETERS

       SPI     IBG    MNQ     SPGF     ACGR    NFALL    IBSHER
I1     10.      0      1     1.000    32.174     2         1
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 SANDS - BOULDERS ARE PRESENT

       MTC     IASA    LASA     SPGS      GSF      BSAE      PSI     UWDLB
I4      4       1      14     2.650     0.667     0.500    30.000    93.000

USING TRANSPORT CAPACITY RELATIONSHIP #  4, YANG
GRAIN SIZES UTILIZED (mean diameter - mm)
-----------------------------------------------------------------------
    VERY FINE SAND....     0.088  |  MEDIUM GRAVEL.....   11.314
    FINE SAND.........     0.177  |  COARSE GRAVEL.....   22.627
    MEDIUM SAND.......     0.354  |  VERY COARSE GRAVEL   45.255
    COARSE SAND.......     0.707  |  SMALL COBBLES.....   90.510
    VERY COARSE SAND..     1.414  |  LARGE COBBLES.....  181.019
    VERY FINE GRAVEL..     2.828  |  SMALL BOULDERS....  362.039
    FINE GRAVEL.......     5.657  |  MEDIUM BOULDERS...  724.077
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
COEFFICIENTS FOR COMPUTATION SCHEME WERE SPECIFIED
        DBI      DBN      XID      XIN      XIU      UBI      UBN      JSL
I5    0.500    0.500    0.250    0.500    0.250    0.000    1.000        1
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -

SEDIMENT LOAD TABLE FOR STREAM SEGMENT #   1
          LOAD BY GRAIN SIZE CLASS (tons/day)
-------------------------------------------------
LQ      Q | 1.00000     | 1400.00     | 4200.00     |
          ------------- ------------- -------------
LF    VFS |0.810000E-03| 5.88640     | 5.91812     |
LF     FS |0.265100E-01| 194.987     | 270.640     |
LF     MS |0.119160     | 876.706     | 1293.56     |
LF     CS |0.214480     | 1578.07     | 2337.09     |
LF    VCS |0.217910     | 1603.31     | 2392.51     |
LF    VFG |0.110940     | 816.223     | 1238.25     |
LF     FG |0.134000     | 986.119     | 1586.74     |
LF     MG |0.122360     | 900.398     | 1399.86     |
LF     CG |0.450000E-01| 331.551     | 712.223     |
LF    VCG |0.879000E-02| 64.6768     | 144.197     |
LF     SC |0.100000E-19|0.100000E-19|0.100000E-19|
LF     LC |0.100000E-19|0.100000E-19|0.100000E-19|
LF     SB |0.100000E-19|0.100000E-19|0.100000E-19|
LF     MB |0.100000E-19|0.100000E-19|0.100000E-19|
          ------------- ------------- -------------
   TOTAL |0.999960     | 7357.93     | 11381.0     |
-------------------------------------------------

REACH GEOMETRY FOR STREAM SEGMENT  1
-------------------------------------
  CROSS         REACH    MOVABLE      INITIAL BED-ELEVATIONS       ACCUMULATED CHANNEL DISTANCE
  SECTION       LENGTH     BED    LEFT SIDE  THALWEG  RIGHT SIDE        FROM DOWNSTREAM
```

NO.	(ft)	WIDTH	(ft)	(ft)	(ft)	(ft)	(miles)
	0.000						
0.040		599.910	1738.000	1726.000	1738.000	0.000	0.000
	390.000						
0.130		600.900	1738.000	1732.000	1738.000	390.000	0.074
	225.000						
0.170		577.920	1740.000	1732.000	1740.000	615.000	0.116
	550.000						
0.280		528.000	1746.000	1738.000	1746.000	1165.000	0.221
	300.000						
0.340		602.010	1750.000	1744.000	1750.000	1465.000	0.277
	450.000						
0.440		567.060	1752.000	1746.000	1752.000	1915.000	0.363
	495.000						
0.530		620.000	1758.000	1750.000	1758.000	2410.000	0.456
	450.000						
0.620		715.000	1762.000	1754.000	1762.000	2860.000	0.542
	420.000						
0.720		745.000	1766.000	1758.000	1766.000	3280.000	0.621
	350.000						
0.800		727.880	1768.000	1762.000	1768.000	3630.000	0.688
	500.000						
0.890		688.320	1772.000	1764.000	1772.000	4130.000	0.782
	275.000						
0.950		641.970	1774.000	1766.000	1774.000	4405.000	0.834
	400.000						
1.040		736.980	1778.000	1770.000	1778.000	4805.000	0.910
	420.000						
1.120		760.890	1782.000	1772.000	1782.000	5225.000	0.990
	440.000						
1.210		785.150	1784.000	1776.000	1784.000	5665.000	1.073
	350.000						
1.270		858.580	1788.000	1778.000	1788.000	6015.000	1.139
	500.000						
1.370		958.110	1792.000	1782.000	1792.000	6515.000	1.234
	500.000						
1.460		908.920	1794.000	1786.000	1793.900	7015.000	1.329
	400.000						
1.540		798.330	1796.000	1790.000	1796.000	7415.000	1.404
	600.000						
1.650		380.100	1806.000	1796.000	1802.000	8015.000	1.518
	490.000						
1.750		435.460	1806.000	1800.000	1806.000	8505.000	1.611
	445.000						
1.830		465.760	1812.000	1806.000	1812.000	8950.000	1.695
	455.000						
1.920		455.000	1816.000	1810.000	1816.000	9405.000	1.781
	400.000						
2.000		680.520	1822.000	1814.000	1822.000	9805.000	1.857
	390.000						
2.070		782.330	1824.000	1821.000	1824.000	10195.000	1.931
	380.000						
2.140		727.760	1828.000	1824.000	1828.000	10575.000	2.003
	440.000						
2.230		703.380	1834.000	1826.000	1834.000	11015.000	2.086

BED MATERIAL GRADATION

SECNO	SAE	DMAX (ft)	DXPI (ft)	XPI	TOTAL BED	BED MATERIAL FRACTIONS per grain size								
0.040	1.000	0.167	0.167	1.000	1.000	VF SAND	0.000	VF GRVL	0.105	S	COBL	0.000
						F SAND	0.022	F GRVL	0.136	L	COBL	0.000
						M SAND	0.109	M GRVL	0.123	S	BLDR	0.000
						C SAND	0.197	C GRVL	0.067	M	BLDR	0.000
						VC SAND	0.202	VC GRVL	0.029			
0.130	1.000	0.167	0.167	1.000	1.000	VF SAND	0.000	VF GRVL	0.105	S	COBL	0.000
						F SAND	0.022	F GRVL	0.136	L	COBL	0.000
						M SAND	0.109	M GRVL	0.123	S	BLDR	0.000
						C SAND	0.197	C GRVL	0.067	M	BLDR	0.000
						VC SAND	0.202	VC GRVL	0.029			
0.170	1.000	0.167	0.167	1.000	1.000	VF SAND	0.000	VF GRVL	0.105	S	COBL	0.000
						F SAND	0.022	F GRVL	0.136	L	COBL	0.000
						M SAND	0.109	M GRVL	0.123	S	BLDR	0.000
						C SAND	0.197	C GRVL	0.067	M	BLDR	0.000
						VC SAND	0.202	VC GRVL	0.029			
0.280	1.000	0.167	0.167	1.000	1.000	VF SAND	0.000	VF GRVL	0.105	S	COBL	0.000
						F SAND	0.022	F GRVL	0.136	L	COBL	0.000
						M SAND	0.109	M GRVL	0.123	S	BLDR	0.000
						C SAND	0.197	C GRVL	0.067	M	BLDR	0.000
						VC SAND	0.202	VC GRVL	0.029			
0.340	1.000	0.167	0.167	1.000	1.000	VF SAND	0.000	VF GRVL	0.105	S	COBL	0.000
						F SAND	0.022	F GRVL	0.136	L	COBL	0.000
						M SAND	0.109	M GRVL	0.123	S	BLDR	0.000
						C SAND	0.197	C GRVL	0.067	M	BLDR	0.000
						VC SAND	0.202	VC GRVL	0.029			
0.440	1.000	0.167	0.167	1.000	1.000	VF SAND	0.000	VF GRVL	0.105	S	COBL	0.000
						F SAND	0.022	F GRVL	0.136	L	COBL	0.000
						M SAND	0.109	M GRVL	0.123	S	BLDR	0.000

						C	SAND	0.197	C	GRVL	0.067	M	BLDR	0.000
						VC	SAND	0.202	VC	GRVL	0.029			
0.530	1.000	0.167	0.167	1.000	1.000	VF	SAND	0.000	VF	GRVL	0.105	S	COBL	0.000
						F	SAND	0.022	F	GRVL	0.136	L	COBL	0.000
						M	SAND	0.109	M	GRVL	0.123	S	BLDR	0.000
						C	SAND	0.197	C	GRVL	0.067	M	BLDR	0.000
						VC	SAND	0.202	VC	GRVL	0.029			
0.620	1.000	0.167	0.167	1.000	1.000	VF	SAND	0.000	VF	GRVL	0.105	S	COBL	0.000
						F	SAND	0.022	F	GRVL	0.136	L	COBL	0.000
						M	SAND	0.109	M	GRVL	0.123	S	BLDR	0.000
						C	SAND	0.197	C	GRVL	0.067	M	BLDR	0.000
						VC	SAND	0.202	VC	GRVL	0.029			
0.720	1.000	0.167	0.167	1.000	1.000	VF	SAND	0.000	VF	GRVL	0.105	S	COBL	0.000
						F	SAND	0.022	F	GRVL	0.136	L	COBL	0.000
						M	SAND	0.109	M	GRVL	0.123	S	BLDR	0.000
						C	SAND	0.197	C	GRVL	0.067	M	BLDR	0.000
						VC	SAND	0.202	VC	GRVL	0.029			
0.800	1.000	0.167	0.167	1.000	1.000	VF	SAND	0.000	VF	GRVL	0.105	S	COBL	0.000
						F	SAND	0.022	F	GRVL	0.136	L	COBL	0.000
						M	SAND	0.109	M	GRVL	0.123	S	BLDR	0.000
						C	SAND	0.197	C	GRVL	0.067	M	BLDR	0.000
						VC	SAND	0.202	VC	GRVL	0.029			
0.890	1.000	0.167	0.167	1.000	1.000	VF	SAND	0.000	VF	GRVL	0.105	S	COBL	0.000
						F	SAND	0.022	F	GRVL	0.136	L	COBL	0.000
						M	SAND	0.109	M	GRVL	0.123	S	BLDR	0.000
						C	SAND	0.197	C	GRVL	0.067	M	BLDR	0.000
						VC	SAND	0.202	VC	GRVL	0.029			
0.950	1.000	0.167	0.167	1.000	1.000	VF	SAND	0.000	VF	GRVL	0.105	S	COBL	0.000
						F	SAND	0.022	F	GRVL	0.136	L	COBL	0.000
						M	SAND	0.109	M	GRVL	0.123	S	BLDR	0.000
						C	SAND	0.197	C	GRVL	0.067	M	BLDR	0.000
						VC	SAND	0.202	VC	GRVL	0.029			
1.040	1.000	0.167	0.167	1.000	1.000	VF	SAND	0.000	VF	GRVL	0.105	S	COBL	0.000
						F	SAND	0.022	F	GRVL	0.136	L	COBL	0.000
						M	SAND	0.109	M	GRVL	0.123	S	BLDR	0.000
						C	SAND	0.197	C	GRVL	0.067	M	BLDR	0.000
						VC	SAND	0.202	VC	GRVL	0.029			
1.120	1.000	0.167	0.167	1.000	1.000	VF	SAND	0.000	VF	GRVL	0.105	S	COBL	0.000
						F	SAND	0.022	F	GRVL	0.136	L	COBL	0.000
						M	SAND	0.109	M	GRVL	0.123	S	BLDR	0.000
						C	SAND	0.197	C	GRVL	0.067	M	BLDR	0.000
						VC	SAND	0.202	VC	GRVL	0.029			
1.210	1.000	0.167	0.167	1.000	1.000	VF	SAND	0.000	VF	GRVL	0.105	S	COBL	0.000
						F	SAND	0.022	F	GRVL	0.136	L	COBL	0.000
						M	SAND	0.109	M	GRVL	0.123	S	BLDR	0.000
						C	SAND	0.197	C	GRVL	0.067	M	BLDR	0.000
						VC	SAND	0.202	VC	GRVL	0.029			
1.270	1.000	0.167	0.167	1.000	1.000	VF	SAND	0.000	VF	GRVL	0.105	S	COBL	0.000
						F	SAND	0.022	F	GRVL	0.136	L	COBL	0.000
						M	SAND	0.109	M	GRVL	0.123	S	BLDR	0.000
						C	SAND	0.197	C	GRVL	0.067	M	BLDR	0.000
						VC	SAND	0.202	VC	GRVL	0.029			
1.370	1.000	0.167	0.167	1.000	1.000	VF	SAND	0.000	VF	GRVL	0.105	S	COBL	0.000
						F	SAND	0.022	F	GRVL	0.136	L	COBL	0.000
						M	SAND	0.109	M	GRVL	0.123	S	BLDR	0.000
						C	SAND	0.197	C	GRVL	0.067	M	BLDR	0.000
						VC	SAND	0.202	VC	GRVL	0.029			
1.460	1.000	0.167	0.167	1.000	1.000	VF	SAND	0.000	VF	GRVL	0.105	S	COBL	0.000
						F	SAND	0.022	F	GRVL	0.136	L	COBL	0.000
						M	SAND	0.109	M	GRVL	0.123	S	BLDR	0.000
						C	SAND	0.197	C	GRVL	0.067	M	BLDR	0.000
						VC	SAND	0.202	VC	GRVL	0.029			
1.540	1.000	0.167	0.167	1.000	1.000	VF	SAND	0.000	VF	GRVL	0.105	S	COBL	0.000
						F	SAND	0.022	F	GRVL	0.136	L	COBL	0.000
						M	SAND	0.109	M	GRVL	0.123	S	BLDR	0.000
						C	SAND	0.197	C	GRVL	0.067	M	BLDR	0.000
						VC	SAND	0.202	VC	GRVL	0.029			
1.650	1.000	0.167	0.167	1.000	1.000	VF	SAND	0.000	VF	GRVL	0.105	S	COBL	0.000
						F	SAND	0.022	F	GRVL	0.136	L	COBL	0.000
						M	SAND	0.109	M	GRVL	0.123	S	BLDR	0.000
						C	SAND	0.197	C	GRVL	0.067	M	BLDR	0.000
						VC	SAND	0.202	VC	GRVL	0.029			
1.750	1.000	0.167	0.167	1.000	1.000	VF	SAND	0.000	VF	GRVL	0.105	S	COBL	0.000
						F	SAND	0.022	F	GRVL	0.136	L	COBL	0.000
						M	SAND	0.109	M	GRVL	0.123	S	BLDR	0.000
						C	SAND	0.197	C	GRVL	0.067	M	BLDR	0.000
						VC	SAND	0.202	VC	GRVL	0.029			
1.830	1.000	0.167	0.167	1.000	1.000	VF	SAND	0.000	VF	GRVL	0.105	S	COBL	0.000
						F	SAND	0.022	F	GRVL	0.136	L	COBL	0.000

```
                                                | M  SAND  0.109 | M  GRVL  0.123 | S  BLDR  0.000 |
                                                | C  SAND  0.197 | C  GRVL  0.067 | M  BLDR  0.000 |
                                                | VC SAND  0.202 | VC GRVL  0.029 |

     1.920  1.000  0.167  0.167  1.000  1.000 | VF SAND  0.000 | VF GRVL  0.105 | S  COBL  0.000 |
                                                | F  SAND  0.022 | F  GRVL  0.136 | L  COBL  0.000 |
                                                | M  SAND  0.109 | M  GRVL  0.123 | S  BLDR  0.000 |
                                                | C  SAND  0.197 | C  GRVL  0.067 | M  BLDR  0.000 |
                                                | VC SAND  0.202 | VC GRVL  0.029 |

     2.000  1.000  0.167  0.167  1.000  1.000 | VF SAND  0.000 | VF GRVL  0.105 | S  COBL  0.000 |
                                                | F  SAND  0.022 | F  GRVL  0.136 | L  COBL  0.000 |
                                                | M  SAND  0.109 | M  GRVL  0.123 | S  BLDR  0.000 |
                                                | C  SAND  0.197 | C  GRVL  0.067 | M  BLDR  0.000 |
                                                | VC SAND  0.202 | VC GRVL  0.029 |

     2.070  1.000  0.167  0.167  1.000  1.000 | VF SAND  0.000 | VF GRVL  0.105 | S  COBL  0.000 |
                                                | F  SAND  0.022 | F  GRVL  0.136 | L  COBL  0.000 |
                                                | M  SAND  0.109 | M  GRVL  0.123 | S  BLDR  0.000 |
                                                | C  SAND  0.197 | C  GRVL  0.067 | M  BLDR  0.000 |
                                                | VC SAND  0.202 | VC GRVL  0.029 |

     2.140  1.000  0.167  0.167  1.000  1.000 | VF SAND  0.000 | VF GRVL  0.105 | S  COBL  0.000 |
                                                | F  SAND  0.022 | F  GRVL  0.136 | L  COBL  0.000 |
                                                | M  SAND  0.109 | M  GRVL  0.123 | S  BLDR  0.000 |
                                                | C  SAND  0.197 | C  GRVL  0.067 | M  BLDR  0.000 |
                                                | VC SAND  0.202 | VC GRVL  0.029 |

     2.230  1.000  0.167  0.167  1.000  1.000 | VF SAND  0.000 | VF GRVL  0.105 | S  COBL  0.000 |
                                                | F  SAND  0.022 | F  GRVL  0.136 | L  COBL  0.000 |
                                                | M  SAND  0.109 | M  GRVL  0.123 | S  BLDR  0.000 |
                                                | C  SAND  0.197 | C  GRVL  0.067 | M  BLDR  0.000 |
                                                | VC SAND  0.202 | VC GRVL  0.029 |


..LOCAL INFLOW DATA...
SEDIMENT LOAD TABLE FOR STREAM SEGMENT #   1
                 AT LOCAL INFLOW POINT #   1
          LOAD BY GRAIN SIZE CLASS (tons/day)
-------------------------------------
LQL     Q | 1.00000    | 1000.00    |
          ------------ ------------
LFL   VFS |0.100000E-01|0.100000E-01|
LFL    FS |0.100000E-01|0.100000E-01|
LFL    MS |0.100000E-01|0.100000E-01|
LFL    CS |0.100000E-01|0.100000E-01|
LFL   VCS |0.100000E-01|0.100000E-01|
LFL   VFG |0.100000E-01|0.100000E-01|
LFL    FG |0.100000E-01|0.100000E-01|
LFL    MG |0.500000E-02|0.500000E-02|
LFL    CG |0.500000E-02|0.500000E-02|
LFL   VCG |0.500000E-02|0.500000E-02|
LFL    SC |0.500000E-02|0.500000E-02|
LFL    LC |0.500000E-02|0.500000E-02|
LFL    SB |0.500000E-02|0.500000E-02|
LFL    MB |0.100000E-19|0.100000E-19|
          ------------ ------------
   TOTAL  |0.100000    |0.100000    |
-------------------------------------

..LOCAL INFLOW DATA...
SEDIMENT LOAD TABLE FOR STREAM SEGMENT #   1
                 AT LOCAL INFLOW POINT #   2
          LOAD BY GRAIN SIZE CLASS (tons/day)
-------------------------------------
LQL     Q | 1.00000    | 1500.00    |
          ------------ ------------
LFL   VFS |0.100000E-01|0.100000E-01|
LFL    FS |0.100000E-01|0.100000E-01|
LFL    MS |0.100000E-01|0.100000E-01|
LFL    CS |0.100000E-01|0.100000E-01|
LFL   VCS |0.100000E-01|0.100000E-01|
LFL   VFG |0.100000E-01|0.100000E-01|
LFL    FG |0.100000E-01|0.100000E-01|
LFL    MG |0.500000E-02|0.500000E-02|
LFL    CG |0.500000E-02|0.500000E-02|
LFL   VCG |0.500000E-02|0.500000E-02|
LFL    SC |0.500000E-02|0.500000E-02|
LFL    LC |0.500000E-02|0.500000E-02|
LFL    SB |0.500000E-02|0.500000E-02|
LFL    MB |0.100000E-19|0.100000E-19|
          ------------ ------------
   TOTAL  |0.100000    |0.100000    |
-------------------------------------

BED SEDIMENT CONTROL VOLUMES

STREAM SEGMENT #  1: Cave Creek and Apache Wash WMP
|  SECTION  |   LENGTH   |   WIDTH    |  DEPTH   |          V O L U M E          |
|  NUMBER   |    (ft)    |    (ft)    |   (ft)   |   (cu.ft)    |   (cu.yd)      |
-------------------------------------------------------------------------------------
|    0.040  |   195.000  |   600.240  |  10.000  |0.117047E+07  | 43350.7        |
|    0.130  |   307.500  |   597.888  |  10.000  |0.183851E+07  | 68092.8        |
|    0.170  |   387.500  |   568.335  |  10.000  |0.220230E+07  | 81566.6        |
|    0.280  |   425.000  |   547.474  |  10.000  |0.232677E+07  | 86176.5        |
```

0.340	375.000	585.152	10.000	0.219432E+07	81271.1	
0.440	472.500	581.851	10.000	0.274925E+07	101824.	
0.530	472.500	625.836	10.000	0.295707E+07	109521.	
0.620	435.000	703.448	10.000	0.306000E+07	113333.	
0.720	385.000	736.952	10.000	0.283726E+07	105084.	
0.800	425.000	722.473	10.000	0.307051E+07	113723.	
0.890	387.500	691.345	10.000	0.267896E+07	99220.8	
0.950	337.500	667.032	10.000	0.225123E+07	83379.0	
1.040	410.000	725.613	10.000	0.297501E+07	110186.	
1.120	430.000	761.135	10.000	0.327288E+07	121218.	
1.210	395.000	791.490	10.000	0.312639E+07	115792.	
1.270	425.000	868.017	10.000	0.368907E+07	136632.	
1.370	500.000	933.323	10.000	0.466662E+07	172838.	
1.460	450.000	901.646	10.000	0.405741E+07	150274.	
1.540	500.000	729.429	10.000	0.364715E+07	135080.	
1.650	545.000	465.135	10.000	0.253499E+07	93888.4	
1.750	467.500	430.596	10.000	0.201304E+07	74556.9	
1.830	450.000	458.953	10.000	0.206529E+07	76492.1	
1.920	427.500	492.078	10.000	0.210363E+07	77912.3	
2.000	395.000	659.211	10.000	0.260388E+07	96440.1	
2.070	385.000	756.164	10.000	0.291123E+07	107823.	
2.140	410.000	731.829	10.000	0.300050E+07	111130.	
2.230	220.000	711.507	10.000	0.156531E+07	57974.6	

NO. OF INPUT DATA MESSAGES= 0
END OF SEDIMENT DATA

==========

$HYD
BEGIN COMPUTATIONS.

$RATING

Downstream Boundary Condition - Rating Curve

Elevation	Stage	Discharge	Elevation	Stage	Discharge
1726.000	1726.000	0.000	1732.530	1732.530	3500.000
1728.360	1728.360	500.000	1732.920	1732.920	4000.000
1729.350	1729.350	1000.000	1733.230	1733.230	4500.000
1730.070	1730.070	1500.000	1733.480	1733.480	5000.000
1730.610	1730.610	2000.000	1733.720	1733.720	5500.000
1731.190	1731.190	2500.000	1733.980	1733.980	6000.000
1731.710	1731.710	3000.000			

==========

TIME STEP # 1
* A Level output at time step 1 (0.250 day)
COMPUTING FROM TIME= 0.0000 DAYS TO TIME= 0.2500 DAYS IN 10 COMPUTATION STEPS

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT # 1
Cave Creek and Apache Wash WMP
ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT

TIME DAYS	ENTRY POINT	SAND INFLOW	SAND OUTFLOW	TRAP EFF
0.25	2.230	0.00		
	2.140	0.00		
	1.540	0.00		
TOTAL=	0.040	0.00	0.01	-35.01

==========

TIME STEP # 2
* A Level output at time step 2 (0.0139 day)

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT # 1
Cave Creek and Apache Wash WMP
ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT

TIME DAYS	ENTRY POINT	SAND INFLOW	SAND OUTFLOW	TRAP EFF
0.26	2.230	0.00		
	2.140	0.00		
	1.540	0.00		
TOTAL=	0.040	0.00	0.01	-31.14

==========

TIME STEP # 3
* A Level output at time step 3 (0.0208 day)

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT # 1
Cave Creek and Apache Wash WMP
ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT

TIME DAYS	ENTRY POINT	SAND INFLOW	SAND OUTFLOW	TRAP EFF
0.28	2.230	0.00		
	2.140	0.00		
	1.540	0.00		
TOTAL=	0.040	0.00	0.01	-25.60

```
==========================================================================================
TIME STEP #        4
*    A  Level output at time step 4 (0.0208 day)

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
**************************************************
    TIME        ENTRY *              SAND              *
    DAYS        POINT *    INFLOW    OUTFLOW  TRAP EFF *
    0.31        2.230 *      0.00                      *
                2.140 *      0.00                      *
                1.540 *      0.00                      *
   TOTAL=       0.040 *      0.00       0.03    -41.49 *
**************************************************

==========================================================================================
TIME STEP #        5
*    A  Level output at time step 5 (0.0139 day)

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
**************************************************
    TIME        ENTRY *              SAND              *
    DAYS        POINT *    INFLOW    OUTFLOW  TRAP EFF *
    0.32        2.230 *      0.00                      *
                2.140 *      0.00                      *
                1.540 *      0.00                      *
   TOTAL=       0.040 *      0.00       0.13   -136.49 *
**************************************************

==========================================================================================
TIME STEP #        6
*    A  Level output at time step 6 (0.0139 day)

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
**************************************************
    TIME        ENTRY *              SAND              *
    DAYS        POINT *    INFLOW    OUTFLOW  TRAP EFF *
    0.33        2.230 *      0.01                      *
                2.140 *      0.00                      *
                1.540 *      0.00                      *
   TOTAL=       0.040 *      0.01       0.34    -33.83 *
**************************************************

==========================================================================================
TIME STEP #        7
*    A  Level output at time step 7 (0.0208 day)
** Q ABOVE TABLE **                                                                    **INLOAD**
**WATER DISCHARGE, WATER-SEDIMENT LOAD TABLE ENDPOINT**        1226.00        1000.00        0.010000

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
**************************************************
    TIME        ENTRY *              SAND              *
    DAYS        POINT *    INFLOW    OUTFLOW  TRAP EFF *
    0.35        2.230 *      0.11                      *
                2.140 *      0.00                      *
                1.540 *      0.00                      *
   TOTAL=       0.040 *      0.11       1.61    -13.77 *
**************************************************

==========================================================================================
TIME STEP #        8
*    A  Level output at time step 8 (0.0208 day)

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
**************************************************
    TIME        ENTRY *              SAND              *
    DAYS        POINT *    INFLOW    OUTFLOW  TRAP EFF *
    0.37        2.230 *      0.22                      *
                2.140 *      0.00                      *
                1.540 *      0.00                      *
   TOTAL=       0.040 *      0.22       3.14    -13.33 *
**************************************************

==========================================================================================
TIME STEP #        9
*    A  Level output at time step 9 (0.0278 day)

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
**************************************************
    TIME        ENTRY *              SAND              *
    DAYS        POINT *    INFLOW    OUTFLOW  TRAP EFF *
    0.40        2.230 *      0.33                      *
                2.140 *      0.00                      *
                1.540 *      0.00                      *
```

```
   TOTAL=      0.040 *      0.33      4.26    -12.03 *
*****************************************************

==========================================================================================
TIME STEP #      10
*    A  Level output at time step 10 (0.0278 day)

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME       ENTRY *              SAND              *
    DAYS       POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.43       2.230 *      0.37                     *
               2.140 *      0.00                     *
               1.540 *      0.00                     *
   TOTAL=      0.040 *      0.37      4.78    -12.00 *
*****************************************************

==========================================================================================
TIME STEP #      11
*    A  Level output at time step 11 (0.0278 day)

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME       ENTRY *              SAND              *
    DAYS       POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.46       2.230 *      0.39                     *
               2.140 *      0.00                     *
               1.540 *      0.00                     *
   TOTAL=      0.040 *      0.39      5.00    -11.94 *
*****************************************************

==========================================================================================
TIME STEP #      12
*    A  Level output at time step 12 (0.0347 day)

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME       ENTRY *              SAND              *
    DAYS       POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.49       2.230 *      0.40                     *
               2.140 *      0.00                     *
               1.540 *      0.00                     *
   TOTAL=      0.040 *      0.40      5.17    -11.93 *
*****************************************************

==========================================================================================
TIME STEP #      13
*    A  Level output at time step 13 (0.0764 day)

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME       ENTRY *              SAND              *
    DAYS       POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.57       2.230 *      0.42                     *
               2.140 *      0.00                     *
               1.540 *      0.00                     *
   TOTAL=      0.040 *      0.42      5.46    -11.98 *
*****************************************************

==========================================================================================
TIME STEP #      14
*    A  Level output at time step 14 (0.0764 day)

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME       ENTRY *              SAND              *
    DAYS       POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.65       2.230 *      0.44                     *
               2.140 *      0.00                     *
               1.540 *      0.00                     *
   TOTAL=      0.040 *      0.44      5.58    -11.80 *
*****************************************************

==========================================================================================
TIME STEP #      15
*    A  Level output at time step 15 (0.1458 day)

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME       ENTRY *              SAND              *
    DAYS       POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.79       2.230 *      0.49                     *
               2.140 *      0.00                     *
```

```
                1.540 *       0.00                        *
   TOTAL=       0.040 *       0.49       6.01    -11.35 *
*****************************************************
```

```
==========================================================================================
TIME STEP #      16
*    B  Level output at time step 16 (0.2083 day)
COMPUTING FROM TIME=      0.7916 DAYS TO TIME=      0.9999 DAYS IN    10 COMPUTATION STEPS

- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
Cave Creek and Apache Wash WMP
       ACCUMULATED TIME (yrs)....       0.003
       FLOW DURATION (days)......       0.021

UPSTREAM BOUNDARY CONDITIONS
-----------------------------------------------------------------------------
Stream Segment # 1      |   DISCHARGE    | SEDIMENT LOAD | TEMPERATURE
Section No.      2.230  |     (cfs)      |  (tons/day)   |   (deg F)
-----------------------------------------------------------------------------
                INFLOW  |        35.00   |       79.02   |      68.00

Upstream of SECTION NO.      2.140 is...
LOCAL INFLOW POINT # 2  |   DISCHARGE    | SEDIMENT LOAD | TEMPERATURE
                        |     (cfs)      |  (tons/day)   |   (deg F)
-----------------------------------------------------------------------------
      MAINSTEM  INFLOW  |        35.00   |       79.02   |      68.00
      LOCAL     INFLOW  |        23.00   |        0.10   |      68.00
-----------------------------------------------------------------------------
                 TOTAL  |        58.00   |       79.12   |      68.00

Upstream of SECTION NO.      1.540 is...
LOCAL INFLOW POINT # 1  |   DISCHARGE    | SEDIMENT LOAD | TEMPERATURE
                        |     (cfs)      |  (tons/day)   |   (deg F)
-----------------------------------------------------------------------------
      MAINSTEM  INFLOW  |        58.00   |       79.12   |      68.00
      LOCAL     INFLOW  |        29.00   |        0.10   |      68.00
-----------------------------------------------------------------------------
                 TOTAL  |        87.00   |       79.22   |      68.00

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME        ENTRY *              SAND                 *
    DAYS        POINT *    INFLOW   OUTFLOW  TRAP EFF *
    1.00        2.230 *      0.49                      *
                2.140 *      0.00                      *
                1.540 *      0.00                      *
   TOTAL=       0.040 *      0.49       6.15    -11.43 *
*****************************************************
```

TABLE SB-1: SEDIMENT LOAD PASSING THE BOUNDARIES OF STREAM SEGMENT # 1

SEDIMENT INFLOW at the Upstream Boundary:

GRAIN SIZE	LOAD (tons/day)	GRAIN SIZE	LOAD (tons/day)
VERY FINE SAND....	0.06	MEDIUM GRAVEL.....	9.67
FINE SAND.....	2.09	COARSE GRAVEL.....	3.56
MEDIUM SAND.....	9.42	VERY COARSE GRAVEL	0.69
COARSE SAND.....	16.95	SMALL COBBLES.....	0.00
VERY COARSE SAND..	17.22	LARGE COBBLES.....	0.00
VERY FINE GRAVEL..	8.77	SMALL BOULDERS....	0.00
FINE GRAVEL.....	10.59	MEDIUM BOULDERS...	0.00
		TOTAL =	79.02

SEDIMENT OUTFLOW from the Downstream Boundary

GRAIN SIZE	LOAD (tons/day)	GRAIN SIZE	LOAD (tons/day)
VERY FINE SAND....	3.85	MEDIUM GRAVEL.....	18.87
FINE SAND.....	49.27	COARSE GRAVEL.....	0.00
MEDIUM SAND.....	227.35	VERY COARSE GRAVEL	0.00
COARSE SAND.....	323.94	SMALL COBBLES.....	0.00
VERY COARSE SAND..	254.95	LARGE COBBLES.....	0.00
VERY FINE GRAVEL..	25.20	SMALL BOULDERS....	0.00
FINE GRAVEL.....	34.00	MEDIUM BOULDERS...	0.00
		TOTAL =	937.43

TABLE SB-2: STATUS OF THE BED PROFILE AT TIME = 1.000 DAYS

SECTION NUMBER	BED CHANGE (ft)	WS ELEV (ft)	THALWEG (ft)	Q (cfs)	TRANSPORT RATE (tons/day) SAND
2.230	-0.24	1826.32	1825.76	35.	106.
2.140	-0.02	1824.46	1823.98	58.	68.
2.070	-0.52	1820.90	1820.48	58.	95.
2.000	0.00	1814.70	1814.00	58.	85.
1.920	-0.10	1810.43	1809.90	58.	73.
1.830	-0.43	1806.25	1805.57	58.	288.
1.750	-0.05	1801.12	1799.95	58.	281.
1.650	-0.04	1796.52	1795.96	58.	280.
1.540	-0.15	1790.40	1789.85	87.	363.
1.460	-0.03	1786.69	1785.97	87.	396.
1.370	-0.03	1782.74	1781.97	87.	414.
1.270	-0.02	1779.01	1777.98	87.	459.
1.210	-0.05	1776.72	1775.95	87.	486.

1.120	-0.04	1773.34	1771.96	87.	503.
1.040	-0.16	1770.76	1769.84	87.	622.
0.950	-0.02	1766.74	1765.98	87.	645.
0.890	0.10	1765.26	1764.10	87.	687.
0.800	-0.50	1762.24	1761.50	87.	639.
0.720	-0.31	1758.52	1757.69	87.	793.
0.620	0.07	1754.66	1754.07	87.	799.
0.530	0.11	1750.84	1750.11	87.	818.
0.440	0.02	1747.35	1746.02	87.	830.
0.340	-0.36	1744.11	1743.64	87.	981.
0.280	0.01	1738.93	1738.01	87.	893.
0.170	0.20	1733.44	1732.20	87.	789.
0.130	-0.40	1732.24	1731.60	87.	875.
0.040	-0.53	1726.41	1725.47	87.	937.

$VOL A

STREAM SEGMENT # 1: Cave Creek and Apache Wash WMP

SUMMARY TABLE: MASS AND VOLUME OF SEDIMENT

SECTION	SEDIMENT THROUGH SECTION (tons)				SEDIMENT DEPOSITED IN REACH in cu. yds				
	TOTAL	SAND	SILT	CLAY	TOTAL	CUMULATIVE	SAND	SILT	CLAY
INFLOW	1002.	1002.	0.	0.	798.				
2.230	1471.	1471.	0.	0.	-373.	-373.	-373.	0.	0.
LOCAL	0.	0.	0.	0.	0.				
2.140	1917.	1917.	0.	0.	-355.	-728.	-355.	0.	0.
2.070	3498.	3498.	0.	0.	-1259.	-1987.	-1259.	0.	0.
2.000	3720.	3720.	0.	0.	-177.	-2164.	-177.	0.	0.
1.920	4743.	4743.	0.	0.	-815.	-2980.	-815.	0.	0.
1.830	6158.	6158.	0.	0.	-1127.	-4106.	-1127.	0.	0.
1.750	6541.	6541.	0.	0.	-305.	-4412.	-305.	0.	0.
1.650	7030.	7030.	0.	0.	-389.	-4801.	-389.	0.	0.
LOCAL	0.	0.	0.	0.	0.				
1.540	7746.	7746.	0.	0.	-570.	-5371.	-570.	0.	0.
1.460	7961.	7961.	0.	0.	-171.	-5542.	-171.	0.	0.
1.370	7958.	7958.	0.	0.	2.	-5540.	2.	0.	0.
1.270	8195.	8195.	0.	0.	-189.	-5729.	-189.	0.	0.
1.210	8315.	8315.	0.	0.	-95.	-5825.	-95.	0.	0.
1.120	8239.	8239.	0.	0.	60.	-5764.	60.	0.	0.
1.040	8131.	8131.	0.	0.	87.	-5678.	87.	0.	0.
0.950	8344.	8344.	0.	0.	-169.	-5847.	-169.	0.	0.
0.890	8661.	8661.	0.	0.	-253.	-6100.	-253.	0.	0.
0.800	9760.	9760.	0.	0.	-876.	-6976.	-876.	0.	0.
0.720	10731.	10731.	0.	0.	-773.	-7749.	-773.	0.	0.
0.620	11073.	11073.	0.	0.	-272.	-8021.	-272.	0.	0.
0.530	10678.	10678.	0.	0.	315.	-7707.	315.	0.	0.
0.440	10448.	10448.	0.	0.	183.	-7523.	183.	0.	0.
0.340	12285.	12285.	0.	0.	-1463.	-8986.	-1463.	0.	0.
0.280	12288.	12288.	0.	0.	-3.	-8989.	-3.	0.	0.
0.170	12641.	12641.	0.	0.	-281.	-9270.	-281.	0.	0.
0.130	13366.	13366.	0.	0.	-577.	-9847.	-577.	0.	0.
0.040	12467.	12467.	0.	0.	716.	-9131.	716.	0.	0.

TOTAL SEDIMENT - per grain size - THROUGH EACH CROSS SECTION (tons)

UPSTREAM INFLOW						
VF SAND	1.	VF GRVL	110.	S	COBL	0.
F SAND	26.	F GRVL	136.	L	COBL	0.
M SAND	118.	M GRVL	123.	S	BLDR	0.
C SAND	212.	C GRVL	51.	M	BLDR	0.
VC SAND	216.	VC GRVL	10.			
SECTION NO. 2.230						
VF SAND	1.	VF GRVL	54.	S	COBL	0.
F SAND	42.	F GRVL	87.	L	COBL	0.
M SAND	229.	M GRVL	91.	S	BLDR	0.
C SAND	432.	C GRVL	51.	M	BLDR	0.
VC SAND	463.	VC GRVL	20.			
LOCAL INFLOW						
VF SAND	0.	VF GRVL	0.	S	COBL	0.
F SAND	0.	F GRVL	0.	L	COBL	0.
M SAND	0.	M GRVL	0.	S	BLDR	0.
C SAND	0.	C GRVL	0.	M	BLDR	0.
VC SAND	0.	VC GRVL	0.			
SECTION NO. 2.140						
VF SAND	1.	VF GRVL	54.	S	COBL	0.
F SAND	50.	F GRVL	101.	L	COBL	0.
M SAND	275.	M GRVL	120.	S	BLDR	0.
C SAND	576.	C GRVL	76.	M	BLDR	0.
VC SAND	634.	VC GRVL	31.			
SECTION NO. 2.070						
VF SAND	12.	VF GRVL	65.	S	COBL	0.
F SAND	206.	F GRVL	119.	L	COBL	0.
M SAND	660.	M GRVL	141.	S	BLDR	0.
C SAND	1079.	C GRVL	91.	M	BLDR	0.

```
      VC SAND      1085.   VC GRVL        40.
SECTION NO.      2.000
      VF SAND        12.   VF GRVL        43.   S  COBL          0.
      F  SAND       208.   F  GRVL        82.   L  COBL          0.
      M  SAND       695.   M  GRVL        99.   S  BLDR          0.
      C  SAND      1225.   C  GRVL        67.   M  BLDR          0.
      VC SAND      1256.   VC GRVL        32.
SECTION NO.      1.920
      VF SAND        17.   VF GRVL        40.   S  COBL          0.
      F  SAND       277.   F  GRVL        79.   L  COBL          0.
      M  SAND       988.   M  GRVL       100.   S  BLDR          0.
      C  SAND      1580.   C  GRVL        71.   M  BLDR          0.
      VC SAND      1552.   VC GRVL        38.
SECTION NO.      1.830
      VF SAND        28.   VF GRVL        45.   S  COBL          0.
      F  SAND       466.   F  GRVL        89.   L  COBL          0.
      M  SAND      1424.   M  GRVL       113.   S  BLDR          0.
      C  SAND      2012.   C  GRVL        82.   M  BLDR          0.
      VC SAND      1856.   VC GRVL        43.
SECTION NO.      1.750
      VF SAND        31.   VF GRVL        41.   S  COBL          0.
      F  SAND       492.   F  GRVL        82.   L  COBL          0.
      M  SAND      1515.   M  GRVL       107.   S  BLDR          0.
      C  SAND      2157.   C  GRVL        79.   M  BLDR          0.
      VC SAND      1996.   VC GRVL        42.
SECTION NO.      1.650
      VF SAND        31.   VF GRVL        40.   S  COBL          0.
      F  SAND       512.   F  GRVL        79.   L  COBL          0.
      M  SAND      1638.   M  GRVL       101.   S  BLDR          0.
      C  SAND      2358.   C  GRVL        72.   M  BLDR          0.
      VC SAND      2161.   VC GRVL        38.

LOCAL INFLOW
      VF SAND         0.   VF GRVL         0.   S  COBL          0.
      F  SAND         0.   F  GRVL         0.   L  COBL          0.
      M  SAND         0.   M  GRVL         0.   S  BLDR          0.
      C  SAND         0.   C  GRVL         0.   M  BLDR          0.
      VC SAND         0.   VC GRVL         0.

SECTION NO.      1.540
      VF SAND        43.   VF GRVL        43.   S  COBL          0.
      F  SAND       671.   F  GRVL        82.   L  COBL          0.
      M  SAND      1874.   M  GRVL        98.   S  BLDR          0.
      C  SAND      2540.   C  GRVL        66.   M  BLDR          0.
      VC SAND      2294.   VC GRVL        35.
SECTION NO.      1.460
      VF SAND        44.   VF GRVL        36.   S  COBL          0.
      F  SAND       679.   F  GRVL        71.   L  COBL          0.
      M  SAND      1938.   M  GRVL        86.   S  BLDR          0.
      C  SAND      2690.   C  GRVL        58.   M  BLDR          0.
      VC SAND      2330.   VC GRVL        29.
SECTION NO.      1.370
      VF SAND        44.   VF GRVL        33.   S  COBL          0.
      F  SAND       685.   F  GRVL        65.   L  COBL          0.
      M  SAND      1997.   M  GRVL        82.   S  BLDR          0.
      C  SAND      2727.   C  GRVL        58.   M  BLDR          0.
      VC SAND      2237.   VC GRVL        29.
SECTION NO.      1.270
      VF SAND        44.   VF GRVL        29.   S  COBL          0.
      F  SAND       701.   F  GRVL        58.   L  COBL          0.
      M  SAND      2161.   M  GRVL        74.   S  BLDR          0.
      C  SAND      2812.   C  GRVL        52.   M  BLDR          0.
      VC SAND      2239.   VC GRVL        26.
SECTION NO.      1.210
      VF SAND        44.   VF GRVL        28.   S  COBL          0.
      F  SAND       712.   F  GRVL        57.   L  COBL          0.
      M  SAND      2249.   M  GRVL        73.   S  BLDR          0.
      C  SAND      2846.   C  GRVL        51.   M  BLDR          0.
      VC SAND      2231.   VC GRVL        25.
SECTION NO.      1.120
      VF SAND        44.   VF GRVL        29.   S  COBL          0.
      F  SAND       716.   F  GRVL        59.   L  COBL          0.
      M  SAND      2270.   M  GRVL        76.   S  BLDR          0.
      C  SAND      2783.   C  GRVL        54.   M  BLDR          0.
      VC SAND      2185.   VC GRVL        25.
SECTION NO.      1.040
      VF SAND        44.   VF GRVL        30.   S  COBL          0.
      F  SAND       735.   F  GRVL        60.   L  COBL          0.
      M  SAND      2317.   M  GRVL        77.   S  BLDR          0.
      C  SAND      2707.   C  GRVL        53.   M  BLDR          0.
      VC SAND      2084.   VC GRVL        22.
SECTION NO.      0.950
      VF SAND        44.   VF GRVL        26.   S  COBL          0.
      F  SAND       753.   F  GRVL        53.   L  COBL          0.
      M  SAND      2437.   M  GRVL        69.   S  BLDR          0.
      C  SAND      2766.   C  GRVL        47.   M  BLDR          0.
      VC SAND      2125.   VC GRVL        22.
SECTION NO.      0.890
      VF SAND        45.   VF GRVL        25.   S  COBL          0.
      F  SAND       778.   F  GRVL        52.   L  COBL          0.
      M  SAND      2571.   M  GRVL        71.   S  BLDR          0.
      C  SAND      2850.   C  GRVL        54.   M  BLDR          0.
      VC SAND      2187.   VC GRVL        29.
SECTION NO.      0.800
      VF SAND        52.   VF GRVL        41.   S  COBL          0.
```

```
        F  SAND      914.   F  GRVL       84.   L  COBL        0.
        M  SAND     2868.   M  GRVL      111.   S  BLDR        0.
        C  SAND     3133.   C  GRVL       83.   M  BLDR        0.
        VC SAND     2431.   VC GRVL       43.
  SECTION NO.      0.720
        VF SAND       60.   VF GRVL       48.   S  COBL        0.
        F  SAND     1057.   F  GRVL       94.   L  COBL        0.
        M  SAND     3138.   M  GRVL      121.   S  BLDR        0.
        C  SAND     3420.   C  GRVL       87.   M  BLDR        0.
        VC SAND     2662.   VC GRVL       42.
  SECTION NO.      0.620
        VF SAND       60.   VF GRVL       38.   S  COBL        0.
        F  SAND     1065.   F  GRVL       76.   L  COBL        0.
        M  SAND     3298.   M  GRVL       97.   S  BLDR        0.
        C  SAND     3619.   C  GRVL       69.   M  BLDR        0.
        VC SAND     2715.   VC GRVL       35.
  SECTION NO.      0.530
        VF SAND       61.   VF GRVL       29.   S  COBL        0.
        F  SAND     1089.   F  GRVL       59.   L  COBL        0.
        M  SAND     3355.   M  GRVL       77.   S  BLDR        0.
        C  SAND     3438.   C  GRVL       56.   M  BLDR        0.
        VC SAND     2484.   VC GRVL       30.
  SECTION NO.      0.440
        VF SAND       61.   VF GRVL       36.   S  COBL        0.
        F  SAND     1111.   F  GRVL       73.   L  COBL        0.
        M  SAND     3329.   M  GRVL       95.   S  BLDR        0.
        C  SAND     3284.   C  GRVL       69.   M  BLDR        0.
        VC SAND     2355.   VC GRVL       36.
  SECTION NO.      0.340
        VF SAND       75.   VF GRVL       60.   S  COBL        0.
        F  SAND     1421.   F  GRVL      117.   L  COBL        0.
        M  SAND     3864.   M  GRVL      147.   S  BLDR        0.
        C  SAND     3750.   C  GRVL      103.   M  BLDR        0.
        VC SAND     2695.   VC GRVL       51.
  SECTION NO.      0.280
        VF SAND       76.   VF GRVL       38.   S  COBL        0.
        F  SAND     1424.   F  GRVL       75.   L  COBL        0.
        M  SAND     3886.   M  GRVL       97.   S  BLDR        0.
        C  SAND     3794.   C  GRVL       70.   M  BLDR        0.
        VC SAND     2794.   VC GRVL       34.
  SECTION NO.      0.170
        VF SAND       76.   VF GRVL       24.   S  COBL        0.
        F  SAND     1462.   F  GRVL       51.   L  COBL        0.
        M  SAND     4045.   M  GRVL       69.   S  BLDR        0.
        C  SAND     3978.   C  GRVL       53.   M  BLDR        0.
        VC SAND     2856.   VC GRVL       29.
  SECTION NO.      0.130
        VF SAND       86.   VF GRVL       39.   S  COBL        0.
        F  SAND     1640.   F  GRVL       76.   L  COBL        0.
        M  SAND     4253.   M  GRVL       96.   S  BLDR        0.
        C  SAND     4127.   C  GRVL       67.   M  BLDR        0.
        VC SAND     2949.   VC GRVL       33.
  SECTION NO.      0.040
        VF SAND       86.   VF GRVL       50.   S  COBL        0.
        F  SAND     1636.   F  GRVL       96.   L  COBL        0.
        M  SAND     4085.   M  GRVL      118.   S  BLDR        0.
        C  SAND     3719.   C  GRVL       80.   M  BLDR        0.
        VC SAND     2564.   VC GRVL       34.

--------------------------------------------------------------------------------
$$END

      0   DATA ERRORS DETECTED.

TOTAL NO. OF TIME STEPS READ =        16
TOTAL NO. OF WS PROFILES =            34
ITERATIONS IN EXNER EQ =            9180

COMPUTATIONS COMPLETED
RUN TIME =  0 HOURS,  0 MINUTES &  2.00 SECONDS
```

APPENDIX H.13

Desert Hills Wash Main Channel Model, 100-year Flood, Existing Condition

```
T1        Cave Creek and Apache Wash WMP
T2        by Stantec:  Proj. No. 82000077                File: DH-E100C.DAT
T3        for Flood Control District of Maricopa County  Date: 08-04-99  srg

NC 0.055   0.055    0.03     0.3     0.5

X1 0.386      14    9982   10014
GR  1748    9162    1746    9382    1744    9604    1742    9712    1740    9982
GR  1738    9988    1738   10012    1740   10014    1742   10212    1744   10235
GR  1744   10242    1742   10262    1744   10330    1746   10509
HD 0.386    10.0

NC 0.055   0.055    0.03     0.1     0.3

X1   0.4      20 9966.5610021.82     180     320     260
GR  1748    9000    1748    9100    1746 9402.16    1744 9610.77    1742 9720.22
GR  1742 9949.58    1742 9966.56    1740 9976.95    1738 9988.11    1738 9999.42
GR  174010008.13    174210016.94    174210021.82    174210103.85    174410240.84
GR  174610290.98    174610292.67    174810324.41    174810327.05    175010352.56
HD   0.4    10.0

X1  0.48      12 9979.9810013.02     410     340     380
GR1750.2    8900    1750    9100    1748    9415    1746    9560    1742 9979.98
GR  1740 9985.27    174010007.03    174210013.02    1744   10335    1746   10440
GR  1748   10475    1750   10500
HD  0.48    10.0

X1  0.56      16 9986.8910019.47     320     450     436
GR  1750    8940    1749    9000    1748    9200    1746    9475    1744    9600
GR  1744    9615    1745    9730    1744 9986.89    1740 9998.14    174010012.68
GR  174010012.77    174410019.47    174410081.48    174410085.66    174810292.39
GR  1750   10350
HD  0.56    10.0

X1  0.64      10 9977.7610018.06     270     450     450
GR  1750    9420    1748    9590    1746    9825    1746 9977.76    1742 9993.02
GR  174210006.33    1742 10006.4    174610018.06    1746   10305    1750   10517
HD  0.64    10.0

X1  0.72      21 9986.71 10016.5     340     325     373
GR  1756    9365    1754    9470    1752    9625    1750    9800    1748 9986.71
GR  1748 9986.75    1746 9991.03    1746 9991.08    1744 9995.08    1744 9995.12
GR  174410010.29    174610013.39    1748 10016.5    174810081.37  1746.2   10315
GR  1748   10380    1750   10510    1750   10610    1752   10740    1754   10800
GR  1756   10835
HD  0.72    10.0

X1  0.81      24 9983.5810018.03     550     400     492
GR1755.3    9680    1754    9730    1752 9779.07    1752 9805.44    1750 9883.96
GR  1750 9884.14    1750 9983.58    1750 9983.71    1750 9988.29    1748  9989.3
GR  1746 9990.31    1746 9990.32    1746 10011.7    174810014.89    174810014.94
GR  1750 10017.9    175010018.03    175010035.47    175010035.57  1748.5   10105
GR  1750   10270    1752   10535    1754   10680    1756   10740
HD  0.81    10.0

X1   0.9      20 9996.4910017.63     500     480     491
GR  1760 9643.57    1758  9698.3    1756 9729.54    1754 9766.39    1754 9766.58
GR  1752 9831.51    1751 9950.49    1750 9996.49    174810000.96    174810013.62
GR  174810013.64    175010017.63    175210021.66    175210021.74    175210038.07
GR  175210038.12    175210235.65    175410411.03    175610599.65    1758   10800
HD   0.9    10.0

NC 0.055   0.055    0.03     0.3     0.5

X1  0.99      24 9988.1910012.73     490     440     470
GR  1762 9333.68    1760 9403.72    1758 9486.25    1758 9487.32    1756 9640.92
GR  1754 9732.38    1754 9737.95    1754 9814.01    1752 9988.19    1750 9989.38
GR  1750 9990.31    1752 9991.34    1752 9992.23    1750 9994.34    1748 9996.33
GR  174810004.96    175010008.87    175210012.73    175410163.12    175610423.96
GR  175610451.19    175610470.06    175810553.26    176010641.18
HD  0.99    10.0
EJ

T4  Project: Upper Cave Creek Watercourse Master Plan Studies
T5  Client : Flood Control District of Maricopa County (FCDMC)
T6  Date:    August 3, 1999
T7  Firm:    Stantec Consulting, Inc.
T8  ********************************************************
I1            10
I4  SAND      10       1      14       0       0       0       0       0
I5           0.5     0.5    0.25     0.5    0.25       0     1.0
LQ     Q       1    3600   10800
LT    QS       1    1382    3302
LF   VFS 0.00669 0.00669 0.00409
LF    FS 0.03431 0.03431 0.02452
LF    MS 0.13714 0.13714 0.10371
LF    CS 0.24060 0.24060 0.19784
LF   VCS 0.20677 0.20677 0.15648
LF   VFG 0.11061 0.11061 0.08501
LF    FG 0.12622 0.12622 0.10520
LF    MG 0.12231 0.12231 0.14979
LF    CG 0.01534 0.01534 0.15983
LF   VCG                0 0.01352
LF    SC                0       0
LF    LC                0       0
```

```
LF    SB                0       0
LF    MB                0       0
PF          0.386     1.0   176.4    84.4    90.6    48.1    77.4    22.9    58.5
PFC 10.9    41.5     5.9    26.4     2.9    23.6    0.59      14    0.42       8
PFC  0.3       5   0.149       3   0.074     2.7

$HYD
$RATING
RC              8    2000                0 1738.00 1742.10 1742.87 1743.50 1744.08
RC        1744.58 1745.01 1745.39

*    A  Level output at time step 1 (0.2500 day)
Q      1
T     68
X           0.05  0.2500
*    A  Level output at time step 2 (0.0139 day)
Q      3
W 0.0139
*    A  Level output at time step 3 (0.0208 day)
Q      4
W 0.0208
*    A  Level output at time step 4 (0.0208 day)
Q     19
W 0.0208
*    A  Level output at time step 5 (0.0139 day)
Q    920
W 0.0139
*    A  Level output at time step 6 (0.0139 day)
Q   4632
W 0.0139
*    A  Level output at time step 7 (0.0208 day)
Q   9270
W 0.0208
*    A  Level output at time step 8 (0.0208 day)
Q   8753
W 0.0208
*    A  Level output at time step 9 (0.0278 day)
Q   5004
W 0.0278
*    A  Level output at time step 10 (0.0278 day)
Q   2535
W 0.0278
*    A  Level output at time step 11 (0.0278 day)
Q   1469
W 0.0278
*    A  Level output at time step 12 (0.0347 day)
Q    943
W 0.0347
*    A  Level output at time step 13 (0.0764 day)
Q    636
W 0.0764
*    A  Level output at time step 14 (0.0764 day)
Q    482
W 0.0764
*    A  Level output at time step 15 (0.1458 day)
Q    745
W 0.1458
*    A  Level output at time step 16 (0.2083 day)
Q    156
X        0.02083  0.2083
$VOL  A
$$END
```

```
*************************************************     ***********************************
*  SCOUR AND DEPOSITION IN RIVERS AND RESERVOIRS  *     *  U.S. ARMY CORPS OF ENGINEERS   *
*       Version: 4.1.00 -  OCTOBER 1993           *     *  HYDROLOGIC ENGINEERING CENTER  *
*  INPUT FILE:  DH-E100C.DAT                      *     *  609 SECOND STREET              *
*  OUTPUT FILE: DH-E100C.OUT                      *     *  DAVIS, CALIFORNIA 95616-4687   *
*  RUN DATE: 10 OCT 00    RUN TIME: 08:19:53      *     *  (916) 756-1104                 *
*************************************************     ***********************************

                     X     X  XXXXXXX   XXXXX           XXXXX
                     X     X  X        X     X         X     X
                     X     X  X        X               X
                     XXXXXXX  XXXX     X        XXXXX  XXXXXX
                     X     X  X        X               X     X
                     X     X  X        X     X         X     X
                     X     X  XXXXXXX   XXXXX           XXXXX

         ****************************************************************
         *  MAXIMUM LIMITS FOR THIS VERSION ARE:                        *
         *       10  Stream Segments (Main Stem + Tributaries)          *
         *      500  Cross Sections                                     *
         *      200  Elevation/Station Points per Cross Section         *
         *       20  Grain Sizes                                        *
         *       10  Control Points                                     *
         ****************************************************************

T1       Cave Creek and Apache Wash WMP
T2       by Stantec:  Proj. No. 82000077                File: DH-E100C.DAT
T3       for Flood Control District of Maricopa County  Date: 08-04-99  srg

N values...  Left   Channel   Right    Contraction    Expansion
           0.0550   0.0300   0.0550       1.3000      0.5000

SECTION NO.     0.386
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
           0.0550   0.0300   0.0550       1.1000      0.7000

SECTION NO.     0.400
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     0.480
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     0.560
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     0.640
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     0.720
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     0.810
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     0.900
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
           0.0550   0.0300   0.0550       1.3000      0.5000

SECTION NO.     0.990
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

NO. OF CROSS SECTIONS IN STREAM SEGMENT=  9
NO. OF INPUT DATA MESSAGES =   0

TOTAL NO. OF CROSS SECTIONS IN THE NETWORK =   9
TOTAL NO. OF STREAM SEGMENTS IN THE NETWORK=   1
END OF GEOMETRIC DATA

==========================================================================================

T4  Project: Upper Cave Creek Watercourse Master Plan Studies
T5  Client : Flood Control District of Maricopa County (FCDMC)
T6  Date:    August 3, 1999
T7  Firm:    Stantec Consulting, Inc.
T8  ******************************************************

         Cave Creek and Apache Wash WMP
         by Stantec:  Proj. No. 82000077                File: DH-E100C.DAT
         for Flood Control District of Maricopa County  Date: 08-04-99  srg

- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
SEDIMENT PROPERITES AND PARAMETERS

       SPI      IBG     MNQ      SPGF      ACGR     NFALL    IBSHER
I1     10.        0       1     1.000    32.174         2         1
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 SANDS - BOULDERS ARE PRESENT

       MTC      IASA     LASA      SPGS       GSF      BSAE       PSI     UWDLB
I4     10         1       14     2.650     0.667     0.500    30.000    93.000
```

USING TRANSPORT CAPACITY RELATIONSHIP # 10, MPM(1948)
GRAIN SIZES UTILIZED (mean diameter - mm)

VERY FINE SAND....	0.088	MEDIUM GRAVEL.....	11.314
FINE SAND.....	0.177	COARSE GRAVEL.....	22.627
MEDIUM SAND.....	0.354	VERY COARSE GRAVEL	45.255
COARSE SAND.....	0.707	SMALL COBBLES.....	90.510
VERY COARSE SAND..	1.414	LARGE COBBLES.....	181.019
VERY FINE GRAVEL..	2.828	SMALL BOULDERS....	362.039
FINE GRAVEL.....	5.657	MEDIUM BOULDERS...	724.077

COEFFICIENTS FOR COMPUTATION SCHEME WERE SPECIFIED

	DBI	DBN	XID	XIN	XIU	UBI	UBN	JSL
IS	0.500	0.500	0.250	0.500	0.250	0.000	1.000	1

SEDIMENT LOAD TABLE FOR STREAM SEGMENT # 1
LOAD BY GRAIN SIZE CLASS (tons/day)

LQ	Q	1.00000	3600.00	10800.0
LF	VFS	0.669000E-02	9.24558	13.5052
LF	FS	0.343100E-01	47.4164	80.9650
LF	MS	0.137140	189.527	342.450
LF	CS	0.240600	332.509	653.268
LF	VCS	0.206770	285.756	516.697
LF	VFG	0.110610	152.863	280.703
LF	FG	0.126220	174.436	347.370
LF	MG	0.122310	169.032	494.607
LF	CG	0.153400E-01	21.1999	527.759
LF	VCG	0.100000E-19	0.100000E-19	44.6430
LF	SC	0.100000E-19	0.100000E-19	0.100000E-19
LF	LC	0.100000E-19	0.100000E-19	0.100000E-19
LF	SB	0.100000E-19	0.100000E-19	0.100000E-19
LF	MB	0.100000E-19	0.100000E-19	0.100000E-19
	TOTAL	0.999990	1381.99	3301.97

REACH GEOMETRY FOR STREAM SEGMENT 1

CROSS SECTION NO.	REACH LENGTH (ft)	MOVABLE BED WIDTH	INITIAL BED-ELEVATIONS LEFT SIDE (ft)	THALWEG (ft)	RIGHT SIDE (ft)	ACCUMULATED CHANNEL DISTANCE FROM DOWNSTREAM (ft)	(miles)
	0.000						
0.386		1347.000	1748.000	1738.000	1746.000	0.000	0.000
	260.000						
0.400		1352.560	1748.000	1738.000	1750.000	260.000	0.049
	380.000						
0.480		1600.000	1750.200	1740.000	1750.000	640.000	0.121
	436.000						
0.560		1410.000	1750.000	1740.000	1750.000	1076.000	0.204
	450.000						
0.640		1097.000	1750.000	1742.000	1750.000	1526.000	0.289
	373.000						
0.720		1470.000	1756.000	1744.000	1756.000	1899.000	0.360
	492.000						
0.810		1060.000	1755.300	1746.000	1756.000	2391.000	0.453
	491.000						
0.900		1156.430	1760.000	1748.000	1758.000	2882.000	0.546
	470.000						
0.990		1307.500	1762.000	1748.000	1760.000	3352.000	0.635

BED MATERIAL GRADATION

SECNO	SAE	DMAX (ft)	DXPI (ft)	XPI	TOTAL BED	BED MATERIAL FRACTIONS per grain size							
0.386	1.000	0.579	0.579	1.000	1.000	VF SAND	0.003	VF GRVL	0.035	S	COBL	0.118
						F SAND	0.016	F GRVL	0.090	L	COBL	0.041
						M SAND	0.066	M GRVL	0.164	S	BLDR	0.000
						C SAND	0.061	C GRVL	0.167	M	BLDR	0.000
						VC SAND	0.042	VC GRVL	0.171			
0.400	1.000	0.579	0.579	1.000	1.000	VF SAND	0.003	VF GRVL	0.035	S	COBL	0.118
						F SAND	0.016	F GRVL	0.090	L	COBL	0.041
						M SAND	0.066	M GRVL	0.164	S	BLDR	0.000
						C SAND	0.061	C GRVL	0.167	M	BLDR	0.000
						VC SAND	0.042	VC GRVL	0.171			
0.480	1.000	0.579	0.579	1.000	1.000	VF SAND	0.003	VF GRVL	0.035	S	COBL	0.118
						F SAND	0.016	F GRVL	0.090	L	COBL	0.041
						M SAND	0.066	M GRVL	0.164	S	BLDR	0.000
						C SAND	0.061	C GRVL	0.167	M	BLDR	0.000
						VC SAND	0.042	VC GRVL	0.171			
0.560	1.000	0.579	0.579	1.000	1.000	VF SAND	0.003	VF GRVL	0.035	S	COBL	0.118
						F SAND	0.016	F GRVL	0.090	L	COBL	0.041
						M SAND	0.066	M GRVL	0.164	S	BLDR	0.000
						C SAND	0.061	C GRVL	0.167	M	BLDR	0.000
						VC SAND	0.042	VC GRVL	0.171			
0.640	1.000	0.579	0.579	1.000	1.000	VF SAND	0.003	VF GRVL	0.035	S	COBL	0.118
						F SAND	0.016	F GRVL	0.090	L	COBL	0.041

```
*    A  Level output at time step 3 (0.0208 day)

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
             Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME       ENTRY *              SAND              *
    DAYS       POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.28       0.990 *      0.00                     *
   TOTAL=      0.386 *      0.00      0.00    -25.77 *
*****************************************************

=====================================================================================
TIME STEP #        4
*    A  Level output at time step 4 (0.0208 day)

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
             Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME       ENTRY *              SAND              *
    DAYS       POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.31       0.990 *      0.00                     *
   TOTAL=      0.386 *      0.00      0.01    -20.64 *
*****************************************************

=====================================================================================
TIME STEP #        5
*    A  Level output at time step 5 (0.0139 day)

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
             Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME       ENTRY *              SAND              *
    DAYS       POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.32       0.990 *      0.00                     *
   TOTAL=      0.386 *      0.00      0.02     -6.15 *
*****************************************************

=====================================================================================
TIME STEP #        6
*    A  Level output at time step 6 (0.0139 day)

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
             Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME       ENTRY *              SAND              *
    DAYS       POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.33       0.990 *      0.01                     *
   TOTAL=      0.386 *      0.01      0.08     -4.89 *
*****************************************************

=====================================================================================
TIME STEP #        7
*    A  Level output at time step 7 (0.0208 day)

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
             Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME       ENTRY *              SAND              *
    DAYS       POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.35       0.990 *      0.04                     *
   TOTAL=      0.386 *      0.04      0.23     -4.29 *
*****************************************************

=====================================================================================
TIME STEP #        8
*    A  Level output at time step 8 (0.0208 day)

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
             Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME       ENTRY *              SAND              *
    DAYS       POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.37       0.990 *      0.07                     *
   TOTAL=      0.386 *      0.07      0.37     -4.17 *
*****************************************************

=====================================================================================
TIME STEP #        9
*    A  Level output at time step 9 (0.0278 day)

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
             Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME       ENTRY *              SAND              *
    DAYS       POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.40       0.990 *      0.09                     *
   TOTAL=      0.386 *      0.09      0.49     -4.22 *
*****************************************************
```

```
==========================================================================================
TIME STEP #      10
*    A  Level output at time step 10 (0.0278 day)

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
             Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME       ENTRY *              SAND             *
    DAYS       POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.43       0.990 *      0.11                    *
   TOTAL=      0.386 *      0.11      0.56     -4.18 *
*****************************************************

==========================================================================================
TIME STEP #      11
*    A  Level output at time step 11 (0.0278 day)

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
             Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME       ENTRY *              SAND             *
    DAYS       POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.46       0.990 *      0.12                    *
   TOTAL=      0.386 *      0.12      0.61     -4.20 *
*****************************************************

==========================================================================================
TIME STEP #      12
*    A  Level output at time step 12 (0.0347 day)

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
             Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME       ENTRY *              SAND             *
    DAYS       POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.49       0.990 *      0.12                    *
   TOTAL=      0.386 *      0.12      0.65     -4.23 *
*****************************************************

==========================================================================================
TIME STEP #      13
*    A  Level output at time step 13 (0.0764 day)

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
             Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME       ENTRY *              SAND             *
    DAYS       POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.57       0.990 *      0.14                    *
   TOTAL=      0.386 *      0.14      0.72     -4.29 *
*****************************************************

==========================================================================================
TIME STEP #      14
*    A  Level output at time step 14 (0.0764 day)

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
             Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME       ENTRY *              SAND             *
    DAYS       POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.65       0.990 *      0.14                    *
   TOTAL=      0.386 *      0.14      0.81     -4.61 *
*****************************************************

==========================================================================================
TIME STEP #      15
*    A  Level output at time step 15 (0.1458 day)

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
             Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME       ENTRY *              SAND             *
    DAYS       POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.79       0.990 *      0.17                    *
   TOTAL=      0.386 *      0.17      0.96     -4.69 *
*****************************************************

==========================================================================================
TIME STEP #      16
*    B  Level output at time step 16 (0.2083 day)
COMPUTING FROM TIME=      0.7916 DAYS TO TIME=      0.9999 DAYS IN    10 COMPUTATION STEPS

- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 Cave Creek and Apache Wash WMP
       ACCUMULATED TIME (yrs)....      0.003
       FLOW DURATION (days)......      0.021
```

UPSTREAM BOUNDARY CONDITIONS

Stream Segment # 1 Section No. 0.990	DISCHARGE (cfs)	SEDIMENT LOAD (tons/day)	TEMPERATURE (deg F)
INFLOW	156.00	86.44	68.00

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT # 1
Cave Creek and Apache Wash WMP
ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT

TIME DAYS	ENTRY POINT	INFLOW	SAND OUTFLOW	TRAP EFF
1.00	0.990	0.18		
TOTAL=	0.386	0.18	1.03	-4.81

TABLE SB-1: SEDIMENT LOAD PASSING THE BOUNDARIES OF STREAM SEGMENT # 1

SEDIMENT INFLOW at the Upstream Boundary:

GRAIN SIZE	LOAD (tons/day)	GRAIN SIZE	LOAD (tons/day)
VERY FINE SAND....	0.58	MEDIUM GRAVEL.....	10.57
FINE SAND.....	2.97	COARSE GRAVEL.....	1.33
MEDIUM SAND.....	11.85	VERY COARSE GRAVEL	0.00
COARSE SAND.....	20.80	SMALL COBBLES.....	0.00
VERY COARSE SAND..	17.87	LARGE COBBLES.....	0.00
VERY FINE GRAVEL..	9.56	SMALL BOULDERS....	0.00
FINE GRAVEL.....	10.91	MEDIUM BOULDERS...	0.00
		TOTAL =	86.44

SEDIMENT OUTFLOW from the Downstream Boundary

GRAIN SIZE	LOAD (tons/day)	GRAIN SIZE	LOAD (tons/day)
VERY FINE SAND....	3.41	MEDIUM GRAVEL.....	104.91
FINE SAND.....	20.62	COARSE GRAVEL.....	43.37
MEDIUM SAND.....	87.18	VERY COARSE GRAVEL	0.00
COARSE SAND.....	81.23	SMALL COBBLES.....	0.00
VERY COARSE SAND..	54.13	LARGE COBBLES.....	0.00
VERY FINE GRAVEL..	41.35	SMALL BOULDERS....	0.00
FINE GRAVEL.....	87.06	MEDIUM BOULDERS...	0.00
		TOTAL =	523.27

TABLE SB-2: STATUS OF THE BED PROFILE AT TIME = 1.000 DAYS

SECTION NUMBER	BED CHANGE (ft)	WS ELEV (ft)	THALWEG (ft)	Q (cfs)	TRANSPORT RATE (tons/day) SAND
0.990	-0.05	1751.40	1747.95	156.	82.
0.900	-0.17	1749.63	1747.83	156.	177.
0.810	-0.11	1747.78	1745.89	156.	285.
0.720	-0.04	1745.78	1743.96	156.	441.
0.640	0.03	1743.80	1742.03	156.	398.
0.560	0.11	1742.77	1740.11	156.	245.
0.480	-0.01	1741.37	1739.99	156.	330.
0.400	-0.14	1740.22	1737.86	156.	401.
0.386	-0.55	1738.52	1737.45	156.	523.

SVOL A

STREAM SEGMENT # 1: Cave Creek and Apache Wash WMP

SUMMARY TABLE: MASS AND VOLUME OF SEDIMENT

SECTION	SEDIMENT THROUGH SECTION (tons) TOTAL	SAND	SILT	CLAY	SEDIMENT DEPOSITED IN REACH in cu. yds TOTAL	CUMULATIVE	SAND	SILT	CLAY
INFLOW	360.	360.	0.	0.	287.				
0.990	651.	651.	0.	0.	-232.	-232.	-232.	0.	0.
0.900	1287.	1287.	0.	0.	-507.	-738.	-507.	0.	0.
0.810	1680.	1680.	0.	0.	-313.	-1051.	-313.	0.	0.
0.720	1672.	1672.	0.	0.	6.	-1045.	6.	0.	0.
0.640	1598.	1598.	0.	0.	59.	-986.	59.	0.	0.
0.560	1158.	1158.	0.	0.	350.	-636.	350.	0.	0.
0.480	1006.	1006.	0.	0.	121.	-514.	121.	0.	0.
0.400	1527.	1527.	0.	0.	-415.	-929.	-415.	0.	0.
0.386	2092.	2092.	0.	0.	-450.	-1379.	-450.	0.	0.

TOTAL SEDIMENT - per grain size - THROUGH EACH CROSS SECTION (tons)

UPSTREAM INFLOW

VF SAND	2.	VF GRVL	38.	S	COBL	0.
F SAND	11.	F GRVL	44.	L	COBL	0.
M SAND	46.	M GRVL	48.	S	BLDR	0.
C SAND	83.	C GRVL	18.	M	BLDR	0.
VC SAND	70.	VC GRVL	0.			

SECTION NO. 0.990

VF SAND	4.	VF GRVL	52.	S	COBL	0.
F SAND	21.	F GRVL	99.	L	COBL	0.
M SAND	87.	M GRVL	132.	S	BLDR	0.
C SAND	104.	C GRVL	65.	M	BLDR	0.
VC SAND	78.	VC GRVL	10.			

```
SECTION NO.      0.900
      VF SAND        6.   VF GRVL       87.   S  COBL        0.
      F  SAND       36.   F  GRVL      199.   L  COBL        0.
      M  SAND      152.   M  GRVL      303.   S  BLDR        0.
      C  SAND      156.   C  GRVL      190.   M  BLDR        0.
      VC SAND      112.   VC GRVL       47.
SECTION NO.      0.810
      VF SAND        8.   VF GRVL      111.   S  COBL        0.
      F  SAND       45.   F  GRVL      266.   L  COBL        0.
      M  SAND      193.   M  GRVL      409.   S  BLDR        0.
      C  SAND      189.   C  GRVL      260.   M  BLDR        0.
      VC SAND      134.   VC GRVL       66.
SECTION NO.      0.720
      VF SAND        8.   VF GRVL      107.   S  COBL        0.
      F  SAND       45.   F  GRVL      271.   L  COBL        0.
      M  SAND      193.   M  GRVL      418.   S  BLDR        0.
      C  SAND      184.   C  GRVL      244.   M  BLDR        0.
      VC SAND      128.   VC GRVL       73.
SECTION NO.      0.640
      VF SAND        8.   VF GRVL      108.   S  COBL        0.
      F  SAND       49.   F  GRVL      259.   L  COBL        0.
      M  SAND      209.   M  GRVL      384.   S  BLDR        0.
      C  SAND      196.   C  GRVL      205.   M  BLDR        0.
      VC SAND      134.   VC GRVL       46.
SECTION NO.      0.560
      VF SAND        8.   VF GRVL       92.   S  COBL        0.
      F  SAND       48.   F  GRVL      191.   L  COBL        0.
      M  SAND      200.   M  GRVL      224.   S  BLDR        0.
      C  SAND      182.   C  GRVL       88.   M  BLDR        0.
      VC SAND      120.   VC GRVL        5.
SECTION NO.      0.480
      VF SAND        8.   VF GRVL       79.   S  COBL        0.
      F  SAND       44.   F  GRVL      164.   L  COBL        0.
      M  SAND      179.   M  GRVL      192.   S  BLDR        0.
      C  SAND      163.   C  GRVL       67.   M  BLDR        0.
      VC SAND      106.   VC GRVL        4.
SECTION NO.      0.400
      VF SAND        9.   VF GRVL      106.   S  COBL        0.
      F  SAND       54.   F  GRVL      240.   L  COBL        0.
      M  SAND      226.   M  GRVL      334.   S  BLDR        0.
      C  SAND      206.   C  GRVL      180.   M  BLDR        0.
      VC SAND      136.   VC GRVL       35.
SECTION NO.      0.386
      VF SAND       11.   VF GRVL      124.   S  COBL        0.
      F  SAND       62.   F  GRVL      286.   L  COBL        0.
      M  SAND      258.   M  GRVL      468.   S  BLDR        0.
      C  SAND      235.   C  GRVL      369.   M  BLDR        0.
      VC SAND      156.   VC GRVL      124.

-----------------------------------------------------------------------------------------
$$END

      0   DATA ERRORS DETECTED.

TOTAL NO. OF TIME STEPS READ =        16
TOTAL NO. OF WS PROFILES =            29
ITERATIONS IN EXNER EQ =            2610

COMPUTATIONS COMPLETED
RUN TIME =  0 HOURS,  0 MINUTES &  0.00 SECONDS
```

APPENDIX H.14

Desert Hills Wash Overbank Model, 100-year Flood, Existing Condition

```
T1        Cave Creek and Apache Wash WMP
T2        by Stantec:  Proj. No. 82000077                    File: DH-E100F.DAT
T3        for Flood Control District of Maricopa County      Date: 08-04-99  srg

NC 0.055   0.055    0.03     0.3     0.5

X1 0.386      14    9982   10014
GR  1748    9162    1746    9382    1744    9604    1742    9712    1740    9982
GR  1738    9988    1738   10012    1740   10014    1742   10212    1744   10235
GR  1744   10242    1742   10262    1744   10330    1746   10509
HD 0.386    10.0

NC 0.055   0.055    0.03     0.1     0.3

X1   0.4      20 9966.5610021.82     180     320     260
GR  1748    9000    1748    9100    1746 9402.16    1744 9610.77    1742 9720.22
GR  1742 9949.58    1742 9966.56    1740 9976.95    1738 9988.11    1738 9999.42
GR  174010008.13    174210016.94    174210021.82    174210103.85    174410240.84
GR  174610290.98    174610292.67    174810324.41    174810327.05    175010352.56
HD   0.4    10.0

X1  0.48      12 9979.9810013.02     410     340     380
GR1750.2    8900    1750    9100    1748    9415    1746    9560    1742 9979.98
GR  1740 9985.27    174010007.03    174210013.02    1744   10335    1746   10440
GR  1748   10475    1750   10500
HD  0.48    10.0

X1  0.56      16 9986.8910019.47     320     450     436
GR  1750    8940    1749    9000    1748    9200    1746    9475    1744    9600
GR  1744    9615    1745    9730    1744 9986.89    1740 9998.14    174010012.68
GR  174010012.77    174410019.47    174410081.48    174410085.66    174810292.39
GR  1750   10350
HD  0.56    10.0

X1  0.64      10 9977.7610018.06     270     450     450
GR  1750    9420    1748    9590    1746    9825    1746 9977.76    1742 9993.02
GR  174210006.33    1742 10006.4    174610018.06    1746   10305    1750   10517
HD  0.64    10.0

X1  0.72      21 9986.71 10016.5     340     325     373
GR  1756    9365    1754    9470    1752    9625    1750    9800    1748 9986.71
GR  1748 9986.75    1746 9991.03    1746 9991.08    1744 9995.08    1744 9995.12
GR  174410010.29    174610013.39    1748 10016.5    174810081.37  1746.2   10315
GR  1748   10380    1750   10510    1750   10610    1752   10740    1754   10800
GR  1756   10835
HD  0.72    10.0

X1  0.81      24 9983.5810018.03     550     400     492
GR1755.3    9680    1754    9730    1752 9779.07    1752 9805.44    1750 9883.96
GR  1750 9884.14    1750 9983.58    1750 9983.71    1750 9988.29    1748  9989.3
GR  1746 9990.31    1746 9990.32    1746 10011.7    174810014.89    174810014.94
GR  1750 10017.9    175010018.03    175010035.47    175010035.57  1748.5   10105
GR  1750   10270    1752   10535    1754   10680    1756   10740
HD  0.81    10.0

X1   0.9      20 9996.4910017.63     500     480     491
GR  1760 9643.57    1758  9698.3    1756 9729.54    1754 9766.39    1754 9766.58
GR  1752 9831.51    1751 9950.49    1750 9996.49    174810000.96    174810013.62
GR  174810013.64    175010017.63    175210021.66    175210021.74    175210038.07
GR  175210038.12    175210235.65    175410411.03    175610599.65    1758   10800
HD   0.9    10.0

NC 0.055   0.055    0.03     0.3     0.5

X1  0.99      24 9988.1910012.73     490     440     470
GR  1762 9333.68    1760 9403.72    1758 9486.25    1758 9487.32    1756 9640.92
GR  1754 9732.38    1754 9737.95    1754 9814.01    1752 9988.19    1750 9989.38
GR  1750 9990.31    1752 9991.34    1752 9992.23    1750 9994.34    1748 9996.33
GR  174810004.96    175010008.87    175210012.73    175410163.12    175610423.96
GR  175610451.19    175610470.06    175810553.26    176010641.18
HD  0.99    10.0
EJ

T4  Project: Upper Cave Creek Watercourse Master Plan Studies
T5  Client : Flood Control District of Maricopa County (FCDMC)
T6  Date:    August 3, 1999
T7  Firm:    Stantec Consulting, Inc.
T8  ********************************************************
I1            10
I4  SAND       4       1      14       0       0       0       0       0
I5           0.5     0.5    0.25     0.5    0.25       0     1.0
LQ    Q        1    3600   10800
LT   QS        1    1382    3302
LF  VFS  0.00669 0.00669 0.00409
LF   FS  0.03431 0.03431 0.02452
LF   MS  0.13714 0.13714 0.10371
LF   CS  0.24060 0.24060 0.19784
LF  VCS  0.20677 0.20677 0.15648
LF  VFG  0.11061 0.11061 0.08501
LF   FG  0.12622 0.12622 0.10520
LF   MG  0.12231 0.12231 0.14979
LF   CG  0.01534 0.01534 0.15983
LF  VCG                0 0.01352
LF   SC                0       0
LF   LC                0       0
```

```
LF    SB                0       0
LF    MB                0       0
PF          0.99      1.0    76.2    50.8      95    38.1      85    25.4      71
PFC19.05      64     12.7      55   9.525      50    6.35      44    4.75      41
PFC 2.38      36        2      34    1.19      27    0.59      14    0.42       8
PFC  0.3       5    0.149       3   0.074     2.7

$HYD
$RATING
RC              8     2000                0 1738.00 1742.10 1742.87 1743.50 1744.08
RC        1744.58 1745.01 1745.39

*    A  Level output at time step 1 (0.2500 day)
Q      1
T     68
X           0.05  0.2500
*    A  Level output at time step 2 (0.0139 day)
Q      3
W 0.0139
*    A  Level output at time step 3 (0.0208 day)
Q      4
W 0.0208
*    A  Level output at time step 4 (0.0208 day)
Q     19
W 0.0208
*    A  Level output at time step 5 (0.0139 day)
Q    920
W 0.0139
*    A  Level output at time step 6 (0.0139 day)
Q   4632
W 0.0139
*    A  Level output at time step 7 (0.0208 day)
Q   9270
W 0.0208
*    A  Level output at time step 8 (0.0208 day)
Q   8753
W 0.0208
*    A  Level output at time step 9 (0.0278 day)
Q   5004
W 0.0278
*    A  Level output at time step 10 (0.0278 day)
Q   2535
W 0.0278
*    A  Level output at time step 11 (0.0278 day)
Q   1469
W 0.0278
*    A  Level output at time step 12 (0.0347 day)
Q    943
W 0.0347
*    A  Level output at time step 13 (0.0764 day)
Q    636
W 0.0764
*    A  Level output at time step 14 (0.0764 day)
Q    482
W 0.0764
*    A  Level output at time step 15 (0.1458 day)
Q    745
W 0.1458
*    A  Level output at time step 16 (0.2083 day)
Q    156
X        0.02083  0.2083
$VOL  A
$$END
```

```
*************************************************     ***********************************
*  SCOUR AND DEPOSITION IN RIVERS AND RESERVOIRS  *     *  U.S. ARMY CORPS OF ENGINEERS   *
*       Version: 4.1.00 -  OCTOBER 1993           *     *  HYDROLOGIC ENGINEERING CENTER  *
*  INPUT FILE:  DH-E100F.DAT                      *     *  609 SECOND STREET              *
*  OUTPUT FILE: DH-E100F.OUT                      *     *  DAVIS, CALIFORNIA 95616-4687   *
*  RUN DATE: 10 OCT 00    RUN TIME: 08:22:15      *     *  (916) 756-1104                 *
*************************************************     ***********************************

                    X     X  XXXXXXX   XXXXX           XXXXX
                    X     X  X        X     X         X     X
                    X     X  X        X               X
                    XXXXXXX  XXXX     X        XXXXX  XXXXXX
                    X     X  X        X               X     X
                    X     X  X        X     X         X     X
                    X     X  XXXXXXX   XXXXX           XXXXX

         ****************************************************************
         *  MAXIMUM LIMITS FOR THIS VERSION ARE:                        *
         *       10  Stream Segments (Main Stem + Tributaries)          *
         *      500  Cross Sections                                     *
         *      200  Elevation/Station Points per Cross Section         *
         *       20  Grain Sizes                                        *
         *       10  Control Points                                     *
         ****************************************************************

T1       Cave Creek and Apache Wash WMP
T2       by Stantec:  Proj. No. 82000077                File: DH-E100F.DAT
T3       for Flood Control District of Maricopa County  Date: 08-04-99  srg

N values...  Left   Channel   Right    Contraction    Expansion
           0.0550   0.0300   0.0550       1.3000      0.5000

SECTION NO.     0.386
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
           0.0550   0.0300   0.0550       1.1000      0.7000

SECTION NO.     0.400
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     0.480
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     0.560
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     0.640
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     0.720
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     0.810
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     0.900
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
           0.0550   0.0300   0.0550       1.3000      0.5000

SECTION NO.     0.990
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

NO. OF CROSS SECTIONS IN STREAM SEGMENT=  9
NO. OF INPUT DATA MESSAGES =   0

TOTAL NO. OF CROSS SECTIONS IN THE NETWORK =   9
TOTAL NO. OF STREAM SEGMENTS IN THE NETWORK=   1
END OF GEOMETRIC DATA

==========================================================================================

T4  Project: Upper Cave Creek Watercourse Master Plan Studies
T5  Client : Flood Control District of Maricopa County (FCDMC)
T6  Date:    August 3, 1999
T7  Firm:    Stantec Consulting, Inc.
T8  ******************************************************

         Cave Creek and Apache Wash WMP
         by Stantec:  Proj. No. 82000077                File: DH-E100F.DAT
         for Flood Control District of Maricopa County  Date: 08-04-99  srg

- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
SEDIMENT PROPERITES AND PARAMETERS

       SPI     IBG    MNQ     SPGF     ACGR     NFALL    IBSHER
I1     10.      0      1     1.000   32.174      2         1
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 SANDS - BOULDERS ARE PRESENT

       MTC     IASA    LASA     SPGS      GSF      BSAE      PSI     UWDLB
I4      4       1      14     2.650     0.667     0.500    30.000    93.000
```

USING TRANSPORT CAPACITY RELATIONSHIP # 4, YANG
GRAIN SIZES UTILIZED (mean diameter - mm)

VERY FINE SAND....	0.088	MEDIUM GRAVEL.....	11.314
FINE SAND.....	0.177	COARSE GRAVEL.....	22.627
MEDIUM SAND.....	0.354	VERY COARSE GRAVEL	45.255
COARSE SAND.....	0.707	SMALL COBBLES.....	90.510
VERY COARSE SAND..	1.414	LARGE COBBLES.....	181.019
VERY FINE GRAVEL..	2.828	SMALL BOULDERS....	362.039
FINE GRAVEL.....	5.657	MEDIUM BOULDERS...	724.077

COEFFICIENTS FOR COMPUTATION SCHEME WERE SPECIFIED

	DBI	DBN	XID	XIN	XIU	UBI	UBN	JSL
IS	0.500	0.500	0.250	0.500	0.250	0.000	1.000	1

SEDIMENT LOAD TABLE FOR STREAM SEGMENT # 1
LOAD BY GRAIN SIZE CLASS (tons/day)

LQ	Q	1.00000	3600.00	10800.0
LF	VFS	0.669000E-02	9.24558	13.5052
LF	FS	0.343100E-01	47.4164	80.9650
LF	MS	0.137140	189.527	342.450
LF	CS	0.240600	332.509	653.268
LF	VCS	0.206770	285.756	516.697
LF	VFG	0.110610	152.863	280.703
LF	FG	0.126220	174.436	347.370
LF	MG	0.122310	169.032	494.607
LF	CG	0.153400E-01	21.1999	527.759
LF	VCG	0.100000E-19	0.100000E-19	44.6430
LF	SC	0.100000E-19	0.100000E-19	0.100000E-19
LF	LC	0.100000E-19	0.100000E-19	0.100000E-19
LF	SB	0.100000E-19	0.100000E-19	0.100000E-19
LF	MB	0.100000E-19	0.100000E-19	0.100000E-19
	TOTAL	0.999990	1381.99	3301.97

REACH GEOMETRY FOR STREAM SEGMENT 1

CROSS SECTION NO.	REACH LENGTH (ft)	MOVABLE BED WIDTH	INITIAL BED-ELEVATIONS LEFT SIDE (ft)	THALWEG (ft)	RIGHT SIDE (ft)	ACCUMULATED CHANNEL DISTANCE FROM DOWNSTREAM (ft)	(miles)
	0.000						
0.386		1347.000	1748.000	1738.000	1746.000	0.000	0.000
	260.000						
0.400		1352.560	1748.000	1738.000	1750.000	260.000	0.049
	380.000						
0.480		1600.000	1750.200	1740.000	1750.000	640.000	0.121
	436.000						
0.560		1410.000	1750.000	1740.000	1750.000	1076.000	0.204
	450.000						
0.640		1097.000	1750.000	1742.000	1750.000	1526.000	0.289
	373.000						
0.720		1470.000	1756.000	1744.000	1756.000	1899.000	0.360
	492.000						
0.810		1060.000	1755.300	1746.000	1756.000	2391.000	0.453
	491.000						
0.900		1156.430	1760.000	1748.000	1758.000	2882.000	0.546
	470.000						
0.990		1307.500	1762.000	1748.000	1760.000	3352.000	0.635

BED MATERIAL GRADATION

SECNO	SAE	DMAX (ft)	DXPI (ft)	XPI	TOTAL BED	BED MATERIAL FRACTIONS per grain size							
0.386	1.000	0.250	0.250	1.000	1.000	VF SAND	0.003	VF GRVL	0.058	S	COBL	0.022	
						F SAND	0.016	F GRVL	0.077	L	COBL	0.000	
						M SAND	0.066	M GRVL	0.127	S	BLDR	0.000	
						C SAND	0.127	C GRVL	0.188	M	BLDR	0.000	
						VC SAND	0.102	VC GRVL	0.189				
0.400	1.000	0.250	0.250	1.000	1.000	VF SAND	0.003	VF GRVL	0.058	S	COBL	0.022	
						F SAND	0.016	F GRVL	0.077	L	COBL	0.000	
						M SAND	0.066	M GRVL	0.127	S	BLDR	0.000	
						C SAND	0.127	C GRVL	0.188	M	BLDR	0.000	
						VC SAND	0.102	VC GRVL	0.189				
0.480	1.000	0.250	0.250	1.000	1.000	VF SAND	0.003	VF GRVL	0.058	S	COBL	0.022	
						F SAND	0.016	F GRVL	0.077	L	COBL	0.000	
						M SAND	0.066	M GRVL	0.127	S	BLDR	0.000	
						C SAND	0.127	C GRVL	0.188	M	BLDR	0.000	
						VC SAND	0.102	VC GRVL	0.189				
0.560	1.000	0.250	0.250	1.000	1.000	VF SAND	0.003	VF GRVL	0.058	S	COBL	0.022	
						F SAND	0.016	F GRVL	0.077	L	COBL	0.000	
						M SAND	0.066	M GRVL	0.127	S	BLDR	0.000	
						C SAND	0.127	C GRVL	0.188	M	BLDR	0.000	
						VC SAND	0.102	VC GRVL	0.189				
0.640	1.000	0.250	0.250	1.000	1.000	VF SAND	0.003	VF GRVL	0.058	S	COBL	0.022	
						F SAND	0.016	F GRVL	0.077	L	COBL	0.000	

```
                                        | M  SAND  0.066 | M  GRVL  0.127 | S  BLDR  0.000 |
                                        | C  SAND  0.127 | C  GRVL  0.188 | M  BLDR  0.000 |
                                        | VC SAND  0.102 | VC GRVL  0.189 |

     0.720  1.000  0.250  0.250  1.000  1.000 | VF SAND  0.003 | VF GRVL  0.058 | S  COBL  0.022 |
                                        | F  SAND  0.016 | F  GRVL  0.077 | L  COBL  0.000 |
                                        | M  SAND  0.066 | M  GRVL  0.127 | S  BLDR  0.000 |
                                        | C  SAND  0.127 | C  GRVL  0.188 | M  BLDR  0.000 |
                                        | VC SAND  0.102 | VC GRVL  0.189 |

     0.810  1.000  0.250  0.250  1.000  1.000 | VF SAND  0.003 | VF GRVL  0.058 | S  COBL  0.022 |
                                        | F  SAND  0.016 | F  GRVL  0.077 | L  COBL  0.000 |
                                        | M  SAND  0.066 | M  GRVL  0.127 | S  BLDR  0.000 |
                                        | C  SAND  0.127 | C  GRVL  0.188 | M  BLDR  0.000 |
                                        | VC SAND  0.102 | VC GRVL  0.189 |

     0.900  1.000  0.250  0.250  1.000  1.000 | VF SAND  0.003 | VF GRVL  0.058 | S  COBL  0.022 |
                                        | F  SAND  0.016 | F  GRVL  0.077 | L  COBL  0.000 |
                                        | M  SAND  0.066 | M  GRVL  0.127 | S  BLDR  0.000 |
                                        | C  SAND  0.127 | C  GRVL  0.188 | M  BLDR  0.000 |
                                        | VC SAND  0.102 | VC GRVL  0.189 |

     0.990  1.000  0.250  0.250  1.000  1.000 | VF SAND  0.003 | VF GRVL  0.058 | S  COBL  0.022 |
                                        | F  SAND  0.016 | F  GRVL  0.077 | L  COBL  0.000 |
                                        | M  SAND  0.066 | M  GRVL  0.127 | S  BLDR  0.000 |
                                        | C  SAND  0.127 | C  GRVL  0.188 | M  BLDR  0.000 |
                                        | VC SAND  0.102 | VC GRVL  0.189 |


BED SEDIMENT CONTROL VOLUMES

STREAM SEGMENT #  1:  Cave Creek and Apache Wash WMP
| SECTION  |  LENGTH   |   WIDTH    |  DEPTH   |        V O L U M E        |
| NUMBER   |   (ft)    |    (ft)    |   (ft)   |   (cu.ft)    |   (cu.yd)  |
-----------------------------------------------------------------------------
|    0.386 |  130.000  |  1348.853  |  10.000  |0.175351E+07  |  64944.8   |
|    0.400 |  320.000  |  1400.780  |  10.000  |0.448249E+07  |  166018.   |
|    0.480 |  408.000  |  1527.750  |  10.000  |0.623322E+07  |  230860.   |
|    0.560 |  443.000  |  1388.175  |  10.000  |0.614962E+07  |  227764.   |
|    0.640 |  411.500  |  1210.398  |  10.000  |0.498079E+07  |  184474.   |
|    0.720 |  432.500  |  1338.652  |  10.000  |0.578967E+07  |  214432.   |
|    0.810 |  491.500  |  1144.458  |  10.000  |0.562501E+07  |  208334.   |
|    0.900 |  480.500  |  1164.635  |  10.000  |0.559607E+07  |  207262.   |
|    0.990 |  235.000  |  1257.143  |  10.000  |0.295429E+07  |  109418.   |

NO. OF INPUT DATA MESSAGES=     0
END OF SEDIMENT DATA

==============================================================================

$HYD
BEGIN COMPUTATIONS.

------------------------------------------------------------------------------
$RATING

Downstream Boundary Condition - Rating Curve
  Elevation      Stage     Discharge |  Elevation      Stage     Discharge
 ----------------------------------|-----------------------------------
   1738.000    1738.000        0.000 |  1744.080    1744.080     8000.000
   1742.100    1742.100     2000.000 |  1744.580    1744.580    10000.000
   1742.870    1742.870     4000.000 |  1745.010    1745.010    12000.000
   1743.500    1743.500     6000.000 |  1745.390    1745.390    14000.000

==============================================================================
TIME STEP #        1
*    A  Level output at time step 1 (0.2500 day)
COMPUTING FROM TIME=      0.0000 DAYS TO TIME=      0.2500 DAYS IN     5 COMPUTATION STEPS

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
             Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
****************************************************
    TIME        ENTRY *              SAND            *
    DAYS        POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.25        0.990 *      0.00                   *
   TOTAL=       0.386 *      0.00      0.00      0.78 *
****************************************************

==============================================================================
TIME STEP #        2
*    A  Level output at time step 2 (0.0139 day)

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
             Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
****************************************************
    TIME        ENTRY *              SAND            *
    DAYS        POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.26        0.990 *      0.00                   *
   TOTAL=       0.386 *      0.00      0.00     -5.26 *
****************************************************

==============================================================================
TIME STEP #        3
```

```
*    A  Level output at time step 3 (0.0208 day)

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache Wash WMP
           ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME       ENTRY *              SAND              *
    DAYS       POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.28       0.990 *      0.00                     *
   TOTAL=      0.386 *      0.00      0.00     -7.56 *
*****************************************************

==========================================================================
TIME STEP #       4
*    A  Level output at time step 4 (0.0208 day)

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache Wash WMP
           ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME       ENTRY *              SAND              *
    DAYS       POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.31       0.990 *      0.00                     *
   TOTAL=      0.386 *      0.00      0.00     -5.85 *
*****************************************************

==========================================================================
TIME STEP #       5
*    A  Level output at time step 5 (0.0139 day)

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache Wash WMP
           ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME       ENTRY *              SAND              *
    DAYS       POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.32       0.990 *      0.00                     *
   TOTAL=      0.386 *      0.00      0.03     -9.18 *
*****************************************************

==========================================================================
TIME STEP #       6
*    A  Level output at time step 6 (0.0139 day)

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache Wash WMP
           ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME       ENTRY *              SAND              *
    DAYS       POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.33       0.990 *      0.01                     *
   TOTAL=      0.386 *      0.01      0.31    -20.59 *
*****************************************************

==========================================================================
TIME STEP #       7
*    A  Level output at time step 7 (0.0208 day)

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache Wash WMP
           ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME       ENTRY *              SAND              *
    DAYS       POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.35       0.990 *      0.04                     *
   TOTAL=      0.386 *      0.04      1.21    -26.95 *
*****************************************************

==========================================================================
TIME STEP #       8
*    A  Level output at time step 8 (0.0208 day)

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache Wash WMP
           ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME       ENTRY *              SAND              *
    DAYS       POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.37       0.990 *      0.07                     *
   TOTAL=      0.386 *      0.07      2.01    -27.48 *
*****************************************************

==========================================================================
TIME STEP #       9
*    A  Level output at time step 9 (0.0278 day)

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
            Cave Creek and Apache Wash WMP
           ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME       ENTRY *              SAND              *
    DAYS       POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.40       0.990 *      0.09                     *
   TOTAL=      0.386 *      0.09      2.57    -26.26 *
*****************************************************
```

```
==========================================================================================
TIME STEP #      10
*    A  Level output at time step 10 (0.0278 day)

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
             Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
****************************************************
    TIME       ENTRY *              SAND              *
    DAYS       POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.43       0.990 *      0.11                     *
   TOTAL=      0.386 *      0.11      2.79    -24.74 *
****************************************************

==========================================================================================
TIME STEP #      11
*    A  Level output at time step 11 (0.0278 day)

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
             Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
****************************************************
    TIME       ENTRY *              SAND              *
    DAYS       POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.46       0.990 *      0.12                     *
   TOTAL=      0.386 *      0.12      2.91    -23.93 *
****************************************************

==========================================================================================
TIME STEP #      12
*    A  Level output at time step 12 (0.0347 day)

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
             Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
****************************************************
    TIME       ENTRY *              SAND              *
    DAYS       POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.49       0.990 *      0.12                     *
   TOTAL=      0.386 *      0.12      3.01    -23.24 *
****************************************************

==========================================================================================
TIME STEP #      13
*    A  Level output at time step 13 (0.0764 day)

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
             Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
****************************************************
    TIME       ENTRY *              SAND              *
    DAYS       POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.57       0.990 *      0.14                     *
   TOTAL=      0.386 *      0.14      3.14    -22.22 *
****************************************************

==========================================================================================
TIME STEP #      14
*    A  Level output at time step 14 (0.0764 day)

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
             Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
****************************************************
    TIME       ENTRY *              SAND              *
    DAYS       POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.65       0.990 *      0.14                     *
   TOTAL=      0.386 *      0.14      3.26    -21.63 *
****************************************************

==========================================================================================
TIME STEP #      15
*    A  Level output at time step 15 (0.1458 day)

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
             Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
****************************************************
    TIME       ENTRY *              SAND              *
    DAYS       POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.79       0.990 *      0.17                     *
   TOTAL=      0.386 *      0.17      3.63    -20.50 *
****************************************************

==========================================================================================
TIME STEP #      16
*    B  Level output at time step 16 (0.2083 day)
COMPUTING FROM TIME=      0.7916 DAYS TO TIME=      0.9999 DAYS IN    10 COMPUTATION STEPS

- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 Cave Creek and Apache Wash WMP
       ACCUMULATED TIME (yrs)....      0.003
       FLOW DURATION (days)......      0.021
```

UPSTREAM BOUNDARY CONDITIONS

Stream Segment # 1 Section No.	0.990	DISCHARGE (cfs)	SEDIMENT LOAD (tons/day)	TEMPERATURE (deg F)
	INFLOW	156.00	86.44	68.00

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT # 1
Cave Creek and Apache Wash WMP
ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT

TIME DAYS	ENTRY POINT	INFLOW	SAND OUTFLOW	TRAP EFF
1.00	0.990	0.18		
TOTAL=	0.386	0.18	3.71	-19.84

TABLE SB-1: SEDIMENT LOAD PASSING THE BOUNDARIES OF STREAM SEGMENT # 1

SEDIMENT INFLOW at the Upstream Boundary:

GRAIN SIZE	LOAD (tons/day)	GRAIN SIZE	LOAD (tons/day)
VERY FINE SAND....	0.58	MEDIUM GRAVEL.....	10.57
FINE SAND.....	2.97	COARSE GRAVEL.....	1.33
MEDIUM SAND.....	11.85	VERY COARSE GRAVEL	0.00
COARSE SAND.....	20.80	SMALL COBBLES.....	0.00
VERY COARSE SAND..	17.87	LARGE COBBLES.....	0.00
VERY FINE GRAVEL..	9.56	SMALL BOULDERS....	0.00
FINE GRAVEL.....	10.91	MEDIUM BOULDERS...	0.00
		TOTAL =	86.44

SEDIMENT OUTFLOW from the Downstream Boundary

GRAIN SIZE	LOAD (tons/day)	GRAIN SIZE	LOAD (tons/day)
VERY FINE SAND....	10.12	MEDIUM GRAVEL.....	17.66
FINE SAND.....	40.12	COARSE GRAVEL.....	1.94
MEDIUM SAND.....	113.62	VERY COARSE GRAVEL	0.00
COARSE SAND.....	166.31	SMALL COBBLES.....	0.00
VERY COARSE SAND..	130.46	LARGE COBBLES.....	0.00
VERY FINE GRAVEL..	7.22	SMALL BOULDERS....	0.00
FINE GRAVEL.....	12.03	MEDIUM BOULDERS...	0.00
		TOTAL =	499.49

TABLE SB-2: STATUS OF THE BED PROFILE AT TIME = 1.000 DAYS

SECTION NUMBER	BED CHANGE (ft)	WS ELEV (ft)	THALWEG (ft)	Q (cfs)	TRANSPORT RATE (tons/day) SAND
0.990	-0.11	1751.35	1747.89	156.	56.
0.900	-0.30	1749.56	1747.70	156.	74.
0.810	-0.20	1747.70	1745.80	156.	261.
0.720	-0.08	1745.77	1743.92	156.	358.
0.640	-0.02	1743.70	1741.98	156.	362.
0.560	0.04	1742.74	1740.04	156.	348.
0.480	0.01	1741.45	1740.01	156.	409.
0.400	-0.08	1740.08	1737.92	156.	475.
0.386	-0.75	1738.32	1737.25	156.	499.

$VOL A

STREAM SEGMENT # 1: Cave Creek and Apache Wash WMP

SUMMARY TABLE: MASS AND VOLUME OF SEDIMENT

SECTION	SEDIMENT THROUGH SECTION (tons) TOTAL	SAND	SILT	CLAY	SEDIMENT DEPOSITED IN REACH in cu. yds TOTAL	CUMULATIVE	SAND	SILT	CLAY
INFLOW	360.	360.	0.	0.	287.				
0.990	1608.	1608.	0.	0.	-994.	-994.	-994.	0.	0.
0.900	4445.	4445.	0.	0.	-2260.	-3254.	-2260.	0.	0.
0.810	5977.	5977.	0.	0.	-1220.	-4474.	-1220.	0.	0.
0.720	6645.	6645.	0.	0.	-532.	-5006.	-532.	0.	0.
0.640	6768.	6768.	0.	0.	-97.	-5104.	-97.	0.	0.
0.560	6192.	6192.	0.	0.	459.	-4645.	459.	0.	0.
0.480	5679.	5679.	0.	0.	408.	-4237.	408.	0.	0.
0.400	6119.	6119.	0.	0.	-350.	-4587.	-350.	0.	0.
0.386	7507.	7507.	0.	0.	-1106.	-5693.	-1106.	0.	0.

TOTAL SEDIMENT - per grain size - THROUGH EACH CROSS SECTION (tons)

UPSTREAM INFLOW

VF SAND	2.	VF GRVL	38.	S	COBL	0.
F SAND	11.	F GRVL	44.	L	COBL	0.
M SAND	46.	M GRVL	48.	S	BLDR	0.
C SAND	83.	C GRVL	18.	M	BLDR	0.
VC SAND	70.	VC GRVL	0.			

SECTION NO. 0.990

VF SAND	46.	VF GRVL	7.	S	COBL	2.
F SAND	148.	F GRVL	16.	L	COBL	0.
M SAND	359.	M GRVL	41.	S	BLDR	0.
C SAND	482.	C GRVL	80.	M	BLDR	0.
VC SAND	341.	VC GRVL	85.			

```
SECTION NO.      0.900
      VF SAND      113.   VF GRVL      14.   S  COBL      16.
      F  SAND      425.   F  GRVL      33.   L  COBL       0.
      M  SAND     1047.   M  GRVL      86.   S  BLDR       0.
      C  SAND     1373.   C  GRVL     186.   M  BLDR       0.
      VC SAND      940.   VC GRVL     213.
SECTION NO.      0.810
      VF SAND      171.   VF GRVL      17.   S  COBL      20.
      F  SAND      603.   F  GRVL      38.   L  COBL       0.
      M  SAND     1420.   M  GRVL     102.   S  BLDR       0.
      C  SAND     1861.   C  GRVL     221.   M  BLDR       0.
      VC SAND     1265.   VC GRVL     258.
SECTION NO.      0.720
      VF SAND      198.   VF GRVL      17.   S  COBL      21.
      F  SAND      664.   F  GRVL      39.   L  COBL       0.
      M  SAND     1575.   M  GRVL     104.   S  BLDR       0.
      C  SAND     2104.   C  GRVL     224.   M  BLDR       0.
      VC SAND     1435.   VC GRVL     265.
SECTION NO.      0.640
      VF SAND      200.   VF GRVL      16.   S  COBL      16.
      F  SAND      677.   F  GRVL      36.   L  COBL       0.
      M  SAND     1640.   M  GRVL      95.   S  BLDR       0.
      C  SAND     2183.   C  GRVL     206.   M  BLDR       0.
      VC SAND     1460.   VC GRVL     240.
SECTION NO.      0.560
      VF SAND      205.   VF GRVL      11.   S  COBL       4.
      F  SAND      684.   F  GRVL      24.   L  COBL       0.
      M  SAND     1608.   M  GRVL      66.   S  BLDR       0.
      C  SAND     2010.   C  GRVL     140.   M  BLDR       0.
      VC SAND     1297.   VC GRVL     144.
SECTION NO.      0.480
      VF SAND      208.   VF GRVL      10.   S  COBL       1.
      F  SAND      684.   F  GRVL      23.   L  COBL       0.
      M  SAND     1536.   M  GRVL      59.   S  BLDR       0.
      C  SAND     1794.   C  GRVL     118.   M  BLDR       0.
      VC SAND     1134.   VC GRVL     113.
SECTION NO.      0.400
      VF SAND      222.   VF GRVL      17.   S  COBL       9.
      F  SAND      713.   F  GRVL      37.   L  COBL       0.
      M  SAND     1583.   M  GRVL      94.   S  BLDR       0.
      C  SAND     1865.   C  GRVL     191.   M  BLDR       0.
      VC SAND     1195.   VC GRVL     195.
SECTION NO.      0.386
      VF SAND      272.   VF GRVL      19.   S  COBL      17.
      F  SAND      884.   F  GRVL      43.   L  COBL       0.
      M  SAND     1952.   M  GRVL     111.   S  BLDR       0.
      C  SAND     2277.   C  GRVL     231.   M  BLDR       0.
      VC SAND     1450.   VC GRVL     251.

--------------------------------------------------------------------------------
$$END

      0   DATA ERRORS DETECTED.

TOTAL NO. OF TIME STEPS READ =        16
TOTAL NO. OF WS PROFILES =            29
ITERATIONS IN EXNER EQ =            2610

COMPUTATIONS COMPLETED
RUN TIME =  0 HOURS,  0 MINUTES &  0.00 SECONDS
```

APPENDIX H.15

Desert Hills Wash Main Channel Model, 100-year Flood, Future Condition

```
T1        Cave Creek and Apache Wash WMP
T2        by Stantec:  Proj. No. 82000077                    File: DH-F100C.DAT
T3        for Flood Control District of Maricopa County   Date: 08-26-99  srg

NC 0.055   0.055    0.03     0.3     0.5

X1 0.386      14    9982   10014
GR  1748    9162    1746    9382    1744    9604    1742    9712    1740    9982
GR  1738    9988    1738   10012    1740   10014    1742   10212    1744   10235
GR  1744   10242    1742   10262    1744   10330    1746   10509
HD 0.386    10.0

NC 0.055   0.055    0.03     0.1     0.3

X1   0.4      20 9966.5610021.82     180     320     260
GR  1748    9000    1748    9100    1746 9402.16    1744 9610.77    1742 9720.22
GR  1742 9949.58    1742 9966.56    1740 9976.95    1738 9988.11    1738 9999.42
GR  174010008.13    174210016.94    174210021.82    174210103.85    174410240.84
GR  174610290.98    174610292.67    174810324.41    174810327.05    175010352.56
HD   0.4    10.0

X1  0.48      12 9979.9810013.02     410     340     380
GR1750.2    8900    1750    9100    1748    9415    1746    9560    1742 9979.98
GR  1740 9985.27    174010007.03    174210013.02    1744   10335    1746   10440
GR  1748   10475    1750   10500
HD  0.48    10.0

X1  0.56      16 9986.8910019.47     320     450     436
GR  1750    8940    1749    9000    1748    9200    1746    9475    1744    9600
GR  1744    9615    1745    9730    1744 9986.89    1740 9998.14    174010012.68
GR  174010012.77    174410019.47    174410081.48    174410085.66    174810292.39
GR  1750   10350
HD  0.56    10.0

X1  0.64      10 9977.7610018.06     270     450     450
GR  1750    9420    1748    9590    1746    9825    1746 9977.76    1742 9993.02
GR  174210006.33    1742 10006.4    174610018.06    1746   10305    1750   10517
HD  0.64    10.0

X1  0.72      21 9986.71 10016.5     340     325     373
GR  1756    9365    1754    9470    1752    9625    1750    9800    1748 9986.71
GR  1748 9986.75    1746 9991.03    1746 9991.08    1744 9995.08    1744 9995.12
GR  174410010.29    174610013.39    1748 10016.5    174810081.37  1746.2   10315
GR  1748   10380    1750   10510    1750   10610    1752   10740    1754   10800
GR  1756   10835
HD  0.72    10.0

X1  0.81      24 9983.5810018.03     550     400     492
GR1755.3    9680    1754    9730    1752 9779.07    1752 9805.44    1750 9883.96
GR  1750 9884.14    1750 9983.58    1750 9983.71    1750 9988.29    1748  9989.3
GR  1746 9990.31    1746 9990.32    1746 10011.7    174810014.89    174810014.94
GR  1750 10017.9    175010018.03    175010035.47    175010035.57  1748.5   10105
GR  1750   10270    1752   10535    1754   10680    1756   10740
HD  0.81    10.0

X1   0.9      20 9996.4910017.63     500     480     491
GR  1760 9643.57    1758  9698.3    1756 9729.54    1754 9766.39    1754 9766.58
GR  1752 9831.51    1751 9950.49    1750 9996.49    174810000.96    174810013.62
GR  174810013.64    175010017.63    175210021.66    175210021.74    175210038.07
GR  175210038.12    175210235.65    175410411.03    175610599.65    1758   10800
HD   0.9    10.0

NC 0.055   0.055    0.03     0.3     0.5

X1  0.99      24 9988.1910012.73     490     440     470
GR  1762 9333.68    1760 9403.72    1758 9486.25    1758 9487.32    1756 9640.92
GR  1754 9732.38    1754 9737.95    1754 9814.01    1752 9988.19    1750 9989.38
GR  1750 9990.31    1752 9991.34    1752 9992.23    1750 9994.34    1748 9996.33
GR  174810004.96    175010008.87    175210012.73    175410163.12    175610423.96
GR  175610451.19    175610470.06    175810553.26    176010641.18
HD  0.99    10.0
EJ

T4  Project: Upper Cave Creek Watercourse Master Plan Studies
T5  Client : Flood Control District of Maricopa County (FCDMC)
T6  Date:    August 3, 1999
T7  Firm:    Stantec Consulting, Inc.
T8  ********************************************************
I1            10
I4  SAND      10       1      14       0       0       0       0       0
I5           0.5     0.5    0.25     0.5    0.25       0     1.0
LQ    Q       1    3600   10800
LT   QS       1    1382    3302
LF  VFS 0.00669 0.00669 0.00409
LF   FS 0.03431 0.03431 0.02452
LF   MS 0.13714 0.13714 0.10371
LF   CS 0.24060 0.24060 0.19784
LF  VCS 0.20677 0.20677 0.15648
LF  VFG 0.11061 0.11061 0.08501
LF   FG 0.12622 0.12622 0.10520
LF   MG 0.12231 0.12231 0.14979
LF   CG 0.01534 0.01534 0.15983
LF  VCG                 0 0.01352
LF   SC                 0       0
LF   LC                 0       0
```

```
LF    SB                0       0
LF    MB                0       0
PF          0.386     1.0   176.4    84.4    90.6    48.1    77.4    22.9    58.5
PFC 10.9    41.5     5.9    26.4     2.9    23.6    0.59      14    0.42       8
PFC  0.3       5   0.149       3   0.074     2.7

$HYD
$RATING
RC              8    2000                0 1738.00 1742.10 1742.87 1743.50 1744.08
RC        1744.58 1745.01 1745.39

*    A  Level output at time step 1 (0.2500 days)
Q     11
T     68
X           0.05  0.2500
*    A  Level output at time step 2 (0.0139 day)
Q     31
W 0.0139
*    A  Level output at time step 3 (0.0208 day)
Q     39
W 0.0208
*    A  Level output at time step 4 (0.0208 day)
Q     87
W 0.0208
*    A  Level output at time step 5 (0.0139 day)
Q   1246
W 0.0139
*    A  Level output at time step 6 (0.0139 day)
Q   5179
W 0.0139
*    A  Level output at time step 7 (0.0208 day)
Q   9881
W 0.0208
*    A  Level output at time step 8 (0.0208 day)
Q   9060
W 0.0208
*    A  Level output at time step 9 (0.0278 day)
Q   5129
W 0.0278
*    A  Level output at time step 10 (0.0278 day)
Q   2584
W 0.0278
*    A  Level output at time step 11 (0.0278 day)
Q   1491
W 0.0278
*    A  Level output at time step 12 (0.0347 day)
Q    955
W 0.0347
*    A  Level output at time step 13 (0.0764 day)
Q    643
W 0.0764
*    A  Level output at time step 14 (0.0764 day)
Q    487
W 0.0764
*    A  Level output at time step 15 (0.1458 day)
Q    751
W 0.1458
*    A  Level output at time step 16 (0.2083 day)
Q    157
X        0.02083  0.2083
$VOL  A
$$END
```

```
*************************************************     *********************************
*  SCOUR AND DEPOSITION IN RIVERS AND RESERVOIRS  *     *  U.S. ARMY CORPS OF ENGINEERS   *
*        Version: 4.1.00 -  OCTOBER 1993          *     *  HYDROLOGIC ENGINEERING CENTER  *
*  INPUT FILE:  DH-F100C.DAT                     *     *  609 SECOND STREET              *
*  OUTPUT FILE: DH-F100C.OUT                     *     *  DAVIS, CALIFORNIA 95616-4687   *
*  RUN DATE: 10 OCT 00    RUN TIME: 08:24:29     *     *  (916) 756-1104                 *
*************************************************     *********************************

                    X     X  XXXXXXX   XXXXX           XXXXX
                    X     X  X        X     X         X     X
                    X     X  X        X               X
                    XXXXXXX  XXXX     X        XXXXX  XXXXXX
                    X     X  X        X               X     X
                    X     X  X        X     X         X     X
                    X     X  XXXXXXX   XXXXX           XXXXX

          ******************************************************************
          *  MAXIMUM LIMITS FOR THIS VERSION ARE:                          *
          *       10  Stream Segments (Main Stem + Tributaries)            *
          *      500  Cross Sections                                       *
          *      200  Elevation/Station Points per Cross Section           *
          *       20  Grain Sizes                                          *
          *       10  Control Points                                       *
          ******************************************************************

T1        Cave Creek and Apache Wash WMP
T2        by Stantec:  Proj. No. 82000077                 File: DH-F100C.DAT
T3        for Flood Control District of Maricopa County   Date: 08-26-99  srg

N values...  Left   Channel   Right    Contraction    Expansion
           0.0550   0.0300   0.0550       1.3000      0.5000

SECTION NO.     0.386
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
           0.0550   0.0300   0.0550       1.1000      0.7000

SECTION NO.     0.400
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     0.480
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     0.560
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     0.640
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     0.720
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     0.810
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     0.900
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
           0.0550   0.0300   0.0550       1.3000      0.5000

SECTION NO.     0.990
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

NO. OF CROSS SECTIONS IN STREAM SEGMENT=  9
NO. OF INPUT DATA MESSAGES =   0

TOTAL NO. OF CROSS SECTIONS IN THE NETWORK =   9
TOTAL NO. OF STREAM SEGMENTS IN THE NETWORK=   1
END OF GEOMETRIC DATA

==========================================================================================

T4  Project: Upper Cave Creek Watercourse Master Plan Studies
T5  Client : Flood Control District of Maricopa County (FCDMC)
T6  Date:    August 3, 1999
T7  Firm:    Stantec Consulting, Inc.
T8  ****************************************************

         Cave Creek and Apache Wash WMP
         by Stantec:  Proj. No. 82000077                 File: DH-F100C.DAT
         for Flood Control District of Maricopa County   Date: 08-26-99  srg

- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
SEDIMENT PROPERITES AND PARAMETERS

       SPI     IBG    MNQ     SPGF     ACGR     NFALL    IBSHER
I1     10.       0      1    1.000   32.174         2         1
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 SANDS - BOULDERS ARE PRESENT

       MTC     IASA    LASA     SPGS      GSF     BSAE      PSI     UWDLB
I4     10        1      14    2.650    0.667    0.500   30.000    93.000
```

USING TRANSPORT CAPACITY RELATIONSHIP # 10, MPM(1948)
GRAIN SIZES UTILIZED (mean diameter - mm)

VERY FINE SAND....	0.088	MEDIUM GRAVEL.....	11.314
FINE SAND.....	0.177	COARSE GRAVEL.....	22.627
MEDIUM SAND.....	0.354	VERY COARSE GRAVEL	45.255
COARSE SAND.....	0.707	SMALL COBBLES.....	90.510
VERY COARSE SAND..	1.414	LARGE COBBLES.....	181.019
VERY FINE GRAVEL..	2.828	SMALL BOULDERS....	362.039
FINE GRAVEL.....	5.657	MEDIUM BOULDERS...	724.077

COEFFICIENTS FOR COMPUTATION SCHEME WERE SPECIFIED

	DBI	DBN	XID	XIN	XIU	UBI	UBN	JSL
I5	0.500	0.500	0.250	0.500	0.250	0.000	1.000	1

SEDIMENT LOAD TABLE FOR STREAM SEGMENT # 1
LOAD BY GRAIN SIZE CLASS (tons/day)

LQ	Q	1.00000	3600.00	10800.0
LF	VFS	0.669000E-02	9.24558	13.5052
LF	FS	0.343100E-01	47.4164	80.9650
LF	MS	0.137140	189.527	342.450
LF	CS	0.240600	332.509	653.268
LF	VCS	0.206770	285.756	516.697
LF	VFG	0.110610	152.863	280.703
LF	FG	0.126220	174.436	347.370
LF	MG	0.122310	169.032	494.607
LF	CG	0.153400E-01	21.1999	527.759
LF	VCG	0.100000E-19	0.100000E-19	44.6430
LF	SC	0.100000E-19	0.100000E-19	0.100000E-19
LF	LC	0.100000E-19	0.100000E-19	0.100000E-19
LF	SB	0.100000E-19	0.100000E-19	0.100000E-19
LF	MB	0.100000E-19	0.100000E-19	0.100000E-19
	TOTAL	0.999990	1381.99	3301.97

REACH GEOMETRY FOR STREAM SEGMENT 1

CROSS SECTION NO.	REACH LENGTH (ft)	MOVABLE BED WIDTH	INITIAL BED-ELEVATIONS LEFT SIDE (ft)	THALWEG (ft)	RIGHT SIDE (ft)	ACCUMULATED CHANNEL DISTANCE FROM DOWNSTREAM (ft)	(miles)
	0.000						
0.386		1347.000	1748.000	1738.000	1746.000	0.000	0.000
	260.000						
0.400		1352.560	1748.000	1738.000	1750.000	260.000	0.049
	380.000						
0.480		1600.000	1750.200	1740.000	1750.000	640.000	0.121
	436.000						
0.560		1410.000	1750.000	1740.000	1750.000	1076.000	0.204
	450.000						
0.640		1097.000	1750.000	1742.000	1750.000	1526.000	0.289
	373.000						
0.720		1470.000	1756.000	1744.000	1756.000	1899.000	0.360
	492.000						
0.810		1060.000	1755.300	1746.000	1756.000	2391.000	0.453
	491.000						
0.900		1156.430	1760.000	1748.000	1758.000	2882.000	0.546
	470.000						
0.990		1307.500	1762.000	1748.000	1760.000	3352.000	0.635

BED MATERIAL GRADATION

SECNO	SAE	DMAX (ft)	DXPI (ft)	XPI	TOTAL BED	BED MATERIAL FRACTIONS per grain size									
0.386	1.000	0.579	0.579	1.000	1.000	VF SAND	0.003	VF GRVL	0.035	S COBL	0.118				
						F SAND	0.016	F GRVL	0.090	L COBL	0.041				
						M SAND	0.066	M GRVL	0.164	S BLDR	0.000				
						C SAND	0.061	C GRVL	0.167	M BLDR	0.000				
						VC SAND	0.042	VC GRVL	0.171						
0.400	1.000	0.579	0.579	1.000	1.000	VF SAND	0.003	VF GRVL	0.035	S COBL	0.118				
						F SAND	0.016	F GRVL	0.090	L COBL	0.041				
						M SAND	0.066	M GRVL	0.164	S BLDR	0.000				
						C SAND	0.061	C GRVL	0.167	M BLDR	0.000				
						VC SAND	0.042	VC GRVL	0.171						
0.480	1.000	0.579	0.579	1.000	1.000	VF SAND	0.003	VF GRVL	0.035	S COBL	0.118				
						F SAND	0.016	F GRVL	0.090	L COBL	0.041				
						M SAND	0.066	M GRVL	0.164	S BLDR	0.000				
						C SAND	0.061	C GRVL	0.167	M BLDR	0.000				
						VC SAND	0.042	VC GRVL	0.171						
0.560	1.000	0.579	0.579	1.000	1.000	VF SAND	0.003	VF GRVL	0.035	S COBL	0.118				
						F SAND	0.016	F GRVL	0.090	L COBL	0.041				
						M SAND	0.066	M GRVL	0.164	S BLDR	0.000				
						C SAND	0.061	C GRVL	0.167	M BLDR	0.000				
						VC SAND	0.042	VC GRVL	0.171						
0.640	1.000	0.579	0.579	1.000	1.000	VF SAND	0.003	VF GRVL	0.035	S COBL	0.118				
						F SAND	0.016	F GRVL	0.090	L COBL	0.041				

```
                                                | M  SAND  0.066 | M  GRVL  0.164 | S  BLDR  0.000 |
                                                | C  SAND  0.061 | C  GRVL  0.167 | M  BLDR  0.000 |
                                                | VC SAND  0.042 | VC GRVL  0.171 |

     0.720  1.000  0.579  0.579  1.000  1.000 | VF SAND  0.003 | VF GRVL  0.035 | S  COBL  0.118 |
                                                | F  SAND  0.016 | F  GRVL  0.090 | L  COBL  0.041 |
                                                | M  SAND  0.066 | M  GRVL  0.164 | S  BLDR  0.000 |
                                                | C  SAND  0.061 | C  GRVL  0.167 | M  BLDR  0.000 |
                                                | VC SAND  0.042 | VC GRVL  0.171 |

     0.810  1.000  0.579  0.579  1.000  1.000 | VF SAND  0.003 | VF GRVL  0.035 | S  COBL  0.118 |
                                                | F  SAND  0.016 | F  GRVL  0.090 | L  COBL  0.041 |
                                                | M  SAND  0.066 | M  GRVL  0.164 | S  BLDR  0.000 |
                                                | C  SAND  0.061 | C  GRVL  0.167 | M  BLDR  0.000 |
                                                | VC SAND  0.042 | VC GRVL  0.171 |

     0.900  1.000  0.579  0.579  1.000  1.000 | VF SAND  0.003 | VF GRVL  0.035 | S  COBL  0.118 |
                                                | F  SAND  0.016 | F  GRVL  0.090 | L  COBL  0.041 |
                                                | M  SAND  0.066 | M  GRVL  0.164 | S  BLDR  0.000 |
                                                | C  SAND  0.061 | C  GRVL  0.167 | M  BLDR  0.000 |
                                                | VC SAND  0.042 | VC GRVL  0.171 |

     0.990  1.000  0.579  0.579  1.000  1.000 | VF SAND  0.003 | VF GRVL  0.035 | S  COBL  0.118 |
                                                | F  SAND  0.016 | F  GRVL  0.090 | L  COBL  0.041 |
                                                | M  SAND  0.066 | M  GRVL  0.164 | S  BLDR  0.000 |
                                                | C  SAND  0.061 | C  GRVL  0.167 | M  BLDR  0.000 |
                                                | VC SAND  0.042 | VC GRVL  0.171 |


BED SEDIMENT CONTROL VOLUMES

STREAM SEGMENT #  1:  Cave Creek and Apache Wash WMP
|  SECTION  |   LENGTH   |   WIDTH    |  DEPTH   |        V O L U M E        |
|  NUMBER   |    (ft)    |    (ft)    |   (ft)   |   (cu.ft)   |   (cu.yd)   |
-------------------------------------------------------------------------------
|     0.386 |   130.000  |  1348.853  |  10.000  |0.175351E+07 |  64944.8    |
|     0.400 |   320.000  |  1400.780  |  10.000  |0.448249E+07 |  166018.    |
|     0.480 |   408.000  |  1527.750  |  10.000  |0.623322E+07 |  230860.    |
|     0.560 |   443.000  |  1388.175  |  10.000  |0.614962E+07 |  227764.    |
|     0.640 |   411.500  |  1210.398  |  10.000  |0.498079E+07 |  184474.    |
|     0.720 |   432.500  |  1338.652  |  10.000  |0.578967E+07 |  214432.    |
|     0.810 |   491.500  |  1144.458  |  10.000  |0.562501E+07 |  208334.    |
|     0.900 |   480.500  |  1164.635  |  10.000  |0.559607E+07 |  207262.    |
|     0.990 |   235.000  |  1257.143  |  10.000  |0.295429E+07 |  109418.    |

NO. OF INPUT DATA MESSAGES=     0
END OF SEDIMENT DATA

===============================================================================

$HYD
BEGIN COMPUTATIONS.

-------------------------------------------------------------------------------
$RATING

Downstream Boundary Condition - Rating Curve
  Elevation      Stage      Discharge |  Elevation      Stage      Discharge
 ----------------------------------------|-----------------------------------
   1738.000    1738.000         0.000 |   1744.080    1744.080     8000.000
   1742.100    1742.100      2000.000 |   1744.580    1744.580    10000.000
   1742.870    1742.870      4000.000 |   1745.010    1745.010    12000.000
   1743.500    1743.500      6000.000 |   1745.390    1745.390    14000.000

===============================================================================
TIME STEP #        1
*    A  Level output at time step 1 (0.2500 days)
COMPUTING FROM TIME=       0.0000 DAYS TO TIME=       0.2500 DAYS IN      5 COMPUTATION STEPS

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
             Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*************************************************
    TIME        ENTRY *              SAND        *
    DAYS        POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.25        0.990 *      0.00                  *
   TOTAL=       0.386 *      0.00      0.02    -16.68 *
*************************************************

===============================================================================
TIME STEP #        2
*    A  Level output at time step 2 (0.0139 day)

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
             Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*************************************************
    TIME        ENTRY *              SAND        *
    DAYS        POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.26        0.990 *      0.00                  *
   TOTAL=       0.386 *      0.00      0.02    -15.44 *
*************************************************

===============================================================================
TIME STEP #        3
```

```
*    A  Level output at time step 3 (0.0208 day)

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
             Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME       ENTRY *              SAND             *
    DAYS       POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.28       0.990 *      0.00                     *
   TOTAL=      0.386 *      0.00      0.02    -13.62 *
*****************************************************

=====================================================================================
TIME STEP #        4
*    A  Level output at time step 4 (0.0208 day)

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
             Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME       ENTRY *              SAND             *
    DAYS       POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.31       0.990 *      0.00                     *
   TOTAL=      0.386 *      0.00      0.02    -11.62 *
*****************************************************

=====================================================================================
TIME STEP #        5
*    A  Level output at time step 5 (0.0139 day)

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
             Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME       ENTRY *              SAND             *
    DAYS       POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.32       0.990 *      0.01                     *
   TOTAL=      0.386 *      0.01      0.04     -5.71 *
*****************************************************

=====================================================================================
TIME STEP #        6
*    A  Level output at time step 6 (0.0139 day)

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
             Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME       ENTRY *              SAND             *
    DAYS       POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.33       0.990 *      0.02                     *
   TOTAL=      0.386 *      0.02      0.09     -4.24 *
*****************************************************

=====================================================================================
TIME STEP #        7
*    A  Level output at time step 7 (0.0208 day)

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
             Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME       ENTRY *              SAND             *
    DAYS       POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.35       0.990 *      0.05                     *
   TOTAL=      0.386 *      0.05      0.23     -3.65 *
*****************************************************

=====================================================================================
TIME STEP #        8
*    A  Level output at time step 8 (0.0208 day)

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
             Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME       ENTRY *              SAND             *
    DAYS       POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.37       0.990 *      0.08                     *
   TOTAL=      0.386 *      0.08      0.35     -3.55 *
*****************************************************

=====================================================================================
TIME STEP #        9
*    A  Level output at time step 9 (0.0278 day)

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
             Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME       ENTRY *              SAND             *
    DAYS       POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.40       0.990 *      0.10                     *
   TOTAL=      0.386 *      0.10      0.46     -3.61 *
*****************************************************
```

```
==========================================================================================
TIME STEP #      10
*    A  Level output at time step 10 (0.0278 day)

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
             Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME       ENTRY *             SAND              *
    DAYS       POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.43       0.990 *      0.12                    *
   TOTAL=      0.386 *      0.12      0.53     -3.59 *
*****************************************************

==========================================================================================
TIME STEP #      11
*    A  Level output at time step 11 (0.0278 day)

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
             Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME       ENTRY *             SAND              *
    DAYS       POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.46       0.990 *      0.12                    *
   TOTAL=      0.386 *      0.12      0.57     -3.60 *
*****************************************************

==========================================================================================
TIME STEP #      12
*    A  Level output at time step 12 (0.0347 day)

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
             Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME       ENTRY *             SAND              *
    DAYS       POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.49       0.990 *      0.13                    *
   TOTAL=      0.386 *      0.13      0.61     -3.62 *
*****************************************************

==========================================================================================
TIME STEP #      13
*    A  Level output at time step 13 (0.0764 day)

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
             Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME       ENTRY *             SAND              *
    DAYS       POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.57       0.990 *      0.14                    *
   TOTAL=      0.386 *      0.14      0.67     -3.69 *
*****************************************************

==========================================================================================
TIME STEP #      14
*    A  Level output at time step 14 (0.0764 day)

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
             Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME       ENTRY *             SAND              *
    DAYS       POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.65       0.990 *      0.15                    *
   TOTAL=      0.386 *      0.15      0.78     -4.16 *
*****************************************************

==========================================================================================
TIME STEP #      15
*    A  Level output at time step 15 (0.1458 day)

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
             Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME       ENTRY *             SAND              *
    DAYS       POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.79       0.990 *      0.18                    *
   TOTAL=      0.386 *      0.18      0.91     -4.17 *
*****************************************************

==========================================================================================
TIME STEP #      16
*    B  Level output at time step 16 (0.2083 day)
COMPUTING FROM TIME=      0.7916 DAYS TO TIME=      0.9999 DAYS IN    10 COMPUTATION STEPS

- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 Cave Creek and Apache Wash WMP
       ACCUMULATED TIME (yrs)....      0.003
       FLOW DURATION (days)......      0.021
```

UPSTREAM BOUNDARY CONDITIONS

Stream Segment # 1 Section No. 0.990	DISCHARGE (cfs)	SEDIMENT LOAD (tons/day)	TEMPERATURE (deg F)
INFLOW	157.00	86.93	68.00

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT # 1
Cave Creek and Apache Wash WMP
ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT

TIME DAYS	ENTRY POINT	INFLOW	SAND OUTFLOW	TRAP EFF
1.00	0.990	0.19		
TOTAL=	0.386	0.19	0.98	-4.32

TABLE SB-1: SEDIMENT LOAD PASSING THE BOUNDARIES OF STREAM SEGMENT # 1

SEDIMENT INFLOW at the Upstream Boundary:

GRAIN SIZE	LOAD (tons/day)	GRAIN SIZE	LOAD (tons/day)
VERY FINE SAND....	0.58	MEDIUM GRAVEL.....	10.63
FINE SAND.....	2.98	COARSE GRAVEL.....	1.33
MEDIUM SAND.....	11.92	VERY COARSE GRAVEL	0.00
COARSE SAND.....	20.91	SMALL COBBLES.....	0.00
VERY COARSE SAND..	17.97	LARGE COBBLES.....	0.00
VERY FINE GRAVEL..	9.62	SMALL BOULDERS....	0.00
FINE GRAVEL.....	10.97	MEDIUM BOULDERS...	0.00
		TOTAL =	86.93

SEDIMENT OUTFLOW from the Downstream Boundary

GRAIN SIZE	LOAD (tons/day)	GRAIN SIZE	LOAD (tons/day)
VERY FINE SAND....	3.35	MEDIUM GRAVEL.....	107.82
FINE SAND.....	20.24	COARSE GRAVEL.....	46.42
MEDIUM SAND.....	85.59	VERY COARSE GRAVEL	0.00
COARSE SAND.....	80.22	SMALL COBBLES.....	0.00
VERY COARSE SAND..	54.09	LARGE COBBLES.....	0.00
VERY FINE GRAVEL..	41.97	SMALL BOULDERS....	0.00
FINE GRAVEL.....	89.81	MEDIUM BOULDERS...	0.00
		TOTAL =	529.51

TABLE SB-2: STATUS OF THE BED PROFILE AT TIME = 1.000 DAYS

SECTION NUMBER	BED CHANGE (ft)	WS ELEV (ft)	THALWEG (ft)	Q (cfs)	TRANSPORT RATE (tons/day) SAND
0.990	-0.05	1751.43	1747.95	157.	82.
0.900	-0.20	1749.69	1747.80	157.	246.
0.810	-0.12	1747.77	1745.88	157.	300.
0.720	-0.06	1745.80	1743.94	157.	387.
0.640	0.02	1743.76	1742.02	157.	398.
0.560	0.12	1742.73	1740.12	157.	233.
0.480	-0.01	1741.37	1739.99	157.	315.
0.400	-0.14	1740.17	1737.86	157.	397.
0.386	-0.65	1738.42	1737.35	157.	530.

$VOL A

STREAM SEGMENT # 1: Cave Creek and Apache Wash WMP

SUMMARY TABLE: MASS AND VOLUME OF SEDIMENT

SECTION	SEDIMENT THROUGH SECTION (tons) TOTAL	SAND	SILT	CLAY	SEDIMENT DEPOSITED IN REACH in cu. yds TOTAL	CUMULATIVE	SAND	SILT	CLAY
INFLOW	375.	375.	0.	0.	299.				
0.990	666.	666.	0.	0.	-232.	-232.	-232.	0.	0.
0.900	1297.	1297.	0.	0.	-503.	-735.	-503.	0.	0.
0.810	1656.	1656.	0.	0.	-286.	-1020.	-286.	0.	0.
0.720	1765.	1765.	0.	0.	-87.	-1107.	-87.	0.	0.
0.640	1773.	1773.	0.	0.	-6.	-1114.	-6.	0.	0.
0.560	1245.	1245.	0.	0.	421.	-693.	421.	0.	0.
0.480	1029.	1029.	0.	0.	173.	-520.	173.	0.	0.
0.400	1512.	1512.	0.	0.	-385.	-906.	-385.	0.	0.
0.386	1994.	1994.	0.	0.	-384.	-1289.	-384.	0.	0.

TOTAL SEDIMENT - per grain size - THROUGH EACH CROSS SECTION (tons)

UPSTREAM INFLOW

VF SAND	2.	VF GRVL	39.	S	COBL	0.
F SAND	12.	F GRVL	45.	L	COBL	0.
M SAND	48.	M GRVL	50.	S	BLDR	0.
C SAND	86.	C GRVL	20.	M	BLDR	0.
VC SAND	72.	VC GRVL	0.			

SECTION NO. 0.990

VF SAND	3.	VF GRVL	58.	S	COBL	0.
F SAND	18.	F GRVL	105.	L	COBL	0.
M SAND	76.	M GRVL	136.	S	BLDR	0.
C SAND	108.	C GRVL	63.	M	BLDR	0.
VC SAND	88.	VC GRVL	10.			

```
SECTION NO.      0.900
      VF SAND        5.   VF GRVL       81.   S  COBL        0.
      F  SAND       30.   F  GRVL      201.   L  COBL        0.
      M  SAND      126.   M  GRVL      332.   S  BLDR        0.
      C  SAND      137.   C  GRVL      222.   M  BLDR        0.
      VC SAND      102.   VC GRVL       61.
SECTION NO.      0.810
      VF SAND        6.   VF GRVL       99.   S  COBL        0.
      F  SAND       38.   F  GRVL      263.   L  COBL        0.
      M  SAND      162.   M  GRVL      438.   S  BLDR        0.
      C  SAND      163.   C  GRVL      289.   M  BLDR        0.
      VC SAND      118.   VC GRVL       80.
SECTION NO.      0.720
      VF SAND        7.   VF GRVL      105.   S  COBL        0.
      F  SAND       43.   F  GRVL      276.   L  COBL        0.
      M  SAND      182.   M  GRVL      467.   S  BLDR        0.
      C  SAND      177.   C  GRVL      294.   M  BLDR        0.
      VC SAND      125.   VC GRVL       87.
SECTION NO.      0.640
      VF SAND        8.   VF GRVL      117.   S  COBL        0.
      F  SAND       50.   F  GRVL      292.   L  COBL        0.
      M  SAND      214.   M  GRVL      449.   S  BLDR        0.
      C  SAND      202.   C  GRVL      251.   M  BLDR        0.
      VC SAND      141.   VC GRVL       48.
SECTION NO.      0.560
      VF SAND        8.   VF GRVL      101.   S  COBL        0.
      F  SAND       50.   F  GRVL      216.   L  COBL        0.
      M  SAND      206.   M  GRVL      245.   S  BLDR        0.
      C  SAND      190.   C  GRVL       94.   M  BLDR        0.
      VC SAND      128.   VC GRVL        5.
SECTION NO.      0.480
      VF SAND        8.   VF GRVL       83.   S  COBL        0.
      F  SAND       44.   F  GRVL      171.   L  COBL        0.
      M  SAND      179.   M  GRVL      197.   S  BLDR        0.
      C  SAND      164.   C  GRVL       70.   M  BLDR        0.
      VC SAND      108.   VC GRVL        5.
SECTION NO.      0.400
      VF SAND        9.   VF GRVL      100.   S  COBL        0.
      F  SAND       51.   F  GRVL      232.   L  COBL        0.
      M  SAND      211.   M  GRVL      345.   S  BLDR        0.
      C  SAND      193.   C  GRVL      198.   M  BLDR        0.
      VC SAND      128.   VC GRVL       46.
SECTION NO.      0.386
      VF SAND       10.   VF GRVL      109.   S  COBL        1.
      F  SAND       55.   F  GRVL      256.   L  COBL        0.
      M  SAND      228.   M  GRVL      388.   S  BLDR        0.
      C  SAND      208.   C  GRVL      413.   M  BLDR        0.
      VC SAND      138.   VC GRVL      189.

--------------------------------------------------------------------------------
$$END

      0   DATA ERRORS DETECTED.

TOTAL NO. OF TIME STEPS READ =        16
TOTAL NO. OF WS PROFILES =            29
ITERATIONS IN EXNER EQ =            2610

COMPUTATIONS COMPLETED
RUN TIME =  0 HOURS,  0 MINUTES &  0.00 SECONDS
```

APPENDIX H.16

Desert Hills Wash Overbank Model, 100-year Flood, Future Condition

```
T1       Cave Creek and Apache Wash WMP
T2       by Stantec:  Proj. No. 82000077                File: DH-F100F.DAT
T3       for Flood Control District of Maricopa County  Date: 08-26-99  srg

NC 0.055   0.055    0.03     0.3     0.5

X1 0.386      14    9982   10014
GR  1748    9162    1746    9382    1744    9604    1742    9712    1740    9982
GR  1738    9988    1738   10012    1740   10014    1742   10212    1744   10235
GR  1744   10242    1742   10262    1744   10330    1746   10509
HD 0.386    10.0

NC 0.055   0.055    0.03     0.1     0.3

X1   0.4      20 9966.5610021.82     180     320     260
GR  1748    9000    1748    9100    1746 9402.16    1744 9610.77    1742 9720.22
GR  1742 9949.58    1742 9966.56    1740 9976.95    1738 9988.11    1738 9999.42
GR  174010008.13    174210016.94    174210021.82    174210103.85    174410240.84
GR  174610290.98    174610292.67    174810324.41    174810327.05    175010352.56
HD   0.4    10.0

X1  0.48      12 9979.9810013.02     410     340     380
GR1750.2    8900    1750    9100    1748    9415    1746    9560    1742 9979.98
GR  1740 9985.27    174010007.03    174210013.02    1744   10335    1746   10440
GR  1748   10475    1750   10500
HD  0.48    10.0

X1  0.56      16 9986.8910019.47     320     450     436
GR  1750    8940    1749    9000    1748    9200    1746    9475    1744    9600
GR  1744    9615    1745    9730    1744 9986.89    1740 9998.14    174010012.68
GR  174010012.77    174410019.47    174410081.48    174410085.66    174810292.39
GR  1750   10350
HD  0.56    10.0

X1  0.64      10 9977.7610018.06     270     450     450
GR  1750    9420    1748    9590    1746    9825    1746 9977.76    1742 9993.02
GR  174210006.33    1742 10006.4    174610018.06    1746   10305    1750   10517
HD  0.64    10.0

X1  0.72      21 9986.71 10016.5     340     325     373
GR  1756    9365    1754    9470    1752    9625    1750    9800    1748 9986.71
GR  1748 9986.75    1746 9991.03    1746 9991.08    1744 9995.08    1744 9995.12
GR  174410010.29    174610013.39    1748 10016.5    174810081.37  1746.2   10315
GR  1748   10380    1750   10510    1750   10610    1752   10740    1754   10800
GR  1756   10835
HD  0.72    10.0

X1  0.81      24 9983.5810018.03     550     400     492
GR1755.3    9680    1754    9730    1752 9779.07    1752 9805.44    1750 9883.96
GR  1750 9884.14    1750 9983.58    1750 9983.71    1750 9988.29    1748  9989.3
GR  1746 9990.31    1746 9990.32    1746 10011.7    174810014.89    174810014.94
GR  1750 10017.9    175010018.03    175010035.47    175010035.57  1748.5   10105
GR  1750   10270    1752   10535    1754   10680    1756   10740
HD  0.81    10.0

X1   0.9      20 9996.4910017.63     500     480     491
GR  1760 9643.57    1758  9698.3    1756 9729.54    1754 9766.39    1754 9766.58
GR  1752 9831.51    1751 9950.49    1750 9996.49    174810000.96    174810013.62
GR  174810013.64    175010017.63    175210021.66    175210021.74    175210038.07
GR  175210038.12    175210235.65    175410411.03    175610599.65    1758   10800
HD   0.9    10.0

NC 0.055   0.055    0.03     0.3     0.5

X1  0.99      24 9988.1910012.73     490     440     470
GR  1762 9333.68    1760 9403.72    1758 9486.25    1758 9487.32    1756 9640.92
GR  1754 9732.38    1754 9737.95    1754 9814.01    1752 9988.19    1750 9989.38
GR  1750 9990.31    1752 9991.34    1752 9992.23    1750 9994.34    1748 9996.33
GR  174810004.96    175010008.87    175210012.73    175410163.12    175610423.96
GR  175610451.19    175610470.06    175810553.26    176010641.18
HD  0.99    10.0
EJ

T4  Project: Upper Cave Creek Watercourse Master Plan Studies
T5  Client : Flood Control District of Maricopa County (FCDMC)
T6  Date:    August 3, 1999
T7  Firm:    Stantec Consulting, Inc.
T8  ********************************************************
I1            10
I4  SAND       4       1      14       0       0       0       0       0
I5           0.5     0.5    0.25     0.5    0.25       0     1.0
LQ    Q        1    3600   10800
LT   QS        1    1382    3302
LF   VFS 0.00669 0.00669 0.00409
LF    FS 0.03431 0.03431 0.02452
LF    MS 0.13714 0.13714 0.10371
LF    CS 0.24060 0.24060 0.19784
LF   VCS 0.20677 0.20677 0.15648
LF   VFG 0.11061 0.11061 0.08501
LF    FG 0.12622 0.12622 0.10520
LF    MG 0.12231 0.12231 0.14979
LF    CG 0.01534 0.01534 0.15983
LF   VCG                 0 0.01352
LF    SC                 0       0
LF    LC                 0       0
```

```
LF    SB                0       0
LF    MB                0       0

PF           0.99     1.0    76.2    50.8      95    38.1      85    25.4      71
PFC19.05       64    12.7      55   9.525      50    6.35      44    4.75      41
PFC 2.38       36       2      34    1.19      27    0.59      14    0.42       8
PFC  0.3        5   0.149       3   0.074     2.7

$HYD
$RATING
RC              8    2000                0 1738.00 1742.10 1742.87 1743.50 1744.08
RC        1744.58 1745.01 1745.39

*    A  Level output at time step 1 (0.2500 days)
Q     11
T     68
X           0.05  0.2500
*    A  Level output at time step 2 (0.0139 day)
Q     31
W 0.0139
*    A  Level output at time step 3 (0.0208 day)
Q     39
W 0.0208
*    A  Level output at time step 4 (0.0208 day)
Q     87
W 0.0208
*    A  Level output at time step 5 (0.0139 day)
Q   1246
W 0.0139
*    A  Level output at time step 6 (0.0139 day)
Q   5179
W 0.0139
*    A  Level output at time step 7 (0.0208 day)
Q   9881
W 0.0208
*    A  Level output at time step 8 (0.0208 day)
Q   9060
W 0.0208
*    A  Level output at time step 9 (0.0278 day)
Q   5129
W 0.0278
*    A  Level output at time step 10 (0.0278 day)
Q   2584
W 0.0278
*    A  Level output at time step 11 (0.0278 day)
Q   1491
W 0.0278
*    A  Level output at time step 12 (0.0347 day)
Q    955
W 0.0347
*    A  Level output at time step 13 (0.0764 day)
Q    643
W 0.0764
*    A  Level output at time step 14 (0.0764 day)
Q    487
W 0.0764
*    A  Level output at time step 15 (0.1458 day)
Q    751
W 0.1458
*    A  Level output at time step 16 (0.2083 day)
Q    157
X        0.02083  0.2083
$VOL  A
$$END
```

```
*************************************************     ***********************************
*  SCOUR AND DEPOSITION IN RIVERS AND RESERVOIRS  *     *  U.S. ARMY CORPS OF ENGINEERS   *
*       Version: 4.1.00 -  OCTOBER 1993           *     *  HYDROLOGIC ENGINEERING CENTER  *
*  INPUT FILE:  DH-F100F.DAT                      *     *  609 SECOND STREET              *
*  OUTPUT FILE: DH-F100F.OUT                      *     *  DAVIS, CALIFORNIA 95616-4687   *
*  RUN DATE: 10 OCT 00    RUN TIME: 08:26:38      *     *  (916) 756-1104                 *
*************************************************     ***********************************

                    X     X  XXXXXXX   XXXXX           XXXXX
                    X     X  X        X     X         X     X
                    X     X  X        X               X
                    XXXXXXX  XXXX     X        XXXXX  XXXXXX
                    X     X  X        X               X     X
                    X     X  X        X     X         X     X
                    X     X  XXXXXXX   XXXXX           XXXXX

         ****************************************************************
         *  MAXIMUM LIMITS FOR THIS VERSION ARE:                        *
         *       10  Stream Segments (Main Stem + Tributaries)          *
         *      500  Cross Sections                                     *
         *      200  Elevation/Station Points per Cross Section         *
         *       20  Grain Sizes                                        *
         *       10  Control Points                                     *
         ****************************************************************

T1       Cave Creek and Apache Wash WMP
T2       by Stantec:  Proj. No. 82000077                File: DH-F100F.DAT
T3       for Flood Control District of Maricopa County  Date: 08-26-99  srg

N values...  Left   Channel   Right    Contraction    Expansion
           0.0550   0.0300   0.0550       1.3000      0.5000

SECTION NO.     0.386
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
           0.0550   0.0300   0.0550       1.1000      0.7000

SECTION NO.     0.400
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     0.480
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     0.560
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     0.640
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     0.720
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     0.810
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

SECTION NO.     0.900
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

N values...  Left   Channel   Right    Contraction    Expansion
           0.0550   0.0300   0.0550       1.3000      0.5000

SECTION NO.     0.990
...DEPTH of the Bed Sediment Control Volume =   10.00 ft.

NO. OF CROSS SECTIONS IN STREAM SEGMENT=  9
NO. OF INPUT DATA MESSAGES =   0

TOTAL NO. OF CROSS SECTIONS IN THE NETWORK =   9
TOTAL NO. OF STREAM SEGMENTS IN THE NETWORK=   1
END OF GEOMETRIC DATA

==========================================================================================

T4  Project: Upper Cave Creek Watercourse Master Plan Studies
T5  Client : Flood Control District of Maricopa County (FCDMC)
T6  Date:    August 3, 1999
T7  Firm:    Stantec Consulting, Inc.
T8  ****************************************************

         Cave Creek and Apache Wash WMP
         by Stantec:  Proj. No. 82000077                File: DH-F100F.DAT
         for Flood Control District of Maricopa County  Date: 08-26-99  srg

- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
SEDIMENT PROPERITES AND PARAMETERS

       SPI     IBG    MNQ      SPGF      ACGR     NFALL    IBSHER
I1     10.       0      1     1.000    32.174         2         1
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 SANDS - BOULDERS ARE PRESENT

       MTC     IASA    LASA     SPGS       GSF      BSAE       PSI     UWDLB
I4      4        1      14     2.650     0.667     0.500    30.000    93.000
```

USING TRANSPORT CAPACITY RELATIONSHIP # 4, YANG
GRAIN SIZES UTILIZED (mean diameter - mm)

VERY FINE SAND....	0.088	MEDIUM GRAVEL.....	11.314
FINE SAND.....	0.177	COARSE GRAVEL.....	22.627
MEDIUM SAND.....	0.354	VERY COARSE GRAVEL	45.255
COARSE SAND.....	0.707	SMALL COBBLES.....	90.510
VERY COARSE SAND..	1.414	LARGE COBBLES.....	181.019
VERY FINE GRAVEL..	2.828	SMALL BOULDERS....	362.039
FINE GRAVEL.....	5.657	MEDIUM BOULDERS...	724.077

COEFFICIENTS FOR COMPUTATION SCHEME WERE SPECIFIED

	DBI	DBN	XID	XIN	XIU	UBI	UBN	JSL
I5	0.500	0.500	0.250	0.500	0.250	0.000	1.000	1

SEDIMENT LOAD TABLE FOR STREAM SEGMENT # 1
LOAD BY GRAIN SIZE CLASS (tons/day)

LQ	Q	1.00000	3600.00	10800.0
LF	VFS	0.669000E-02	9.24558	13.5052
LF	FS	0.343100E-01	47.4164	80.9650
LF	MS	0.137140	189.527	342.450
LF	CS	0.240600	332.509	653.268
LF	VCS	0.206770	285.756	516.697
LF	VFG	0.110610	152.863	280.703
LF	FG	0.126220	174.436	347.370
LF	MG	0.122310	169.032	494.607
LF	CG	0.153400E-01	21.1999	527.759
LF	VCG	0.100000E-19	0.100000E-19	44.6430
LF	SC	0.100000E-19	0.100000E-19	0.100000E-19
LF	LC	0.100000E-19	0.100000E-19	0.100000E-19
LF	SB	0.100000E-19	0.100000E-19	0.100000E-19
LF	MB	0.100000E-19	0.100000E-19	0.100000E-19
	TOTAL	0.999990	1381.99	3301.97

REACH GEOMETRY FOR STREAM SEGMENT 1

CROSS SECTION NO.	REACH LENGTH (ft)	MOVABLE BED WIDTH	INITIAL BED-ELEVATIONS LEFT SIDE (ft)	THALWEG (ft)	RIGHT SIDE (ft)	ACCUMULATED CHANNEL DISTANCE FROM DOWNSTREAM (ft)	(miles)
	0.000						
0.386		1347.000	1748.000	1738.000	1746.000	0.000	0.000
	260.000						
0.400		1352.560	1748.000	1738.000	1750.000	260.000	0.049
	380.000						
0.480		1600.000	1750.200	1740.000	1750.000	640.000	0.121
	436.000						
0.560		1410.000	1750.000	1740.000	1750.000	1076.000	0.204
	450.000						
0.640		1097.000	1750.000	1742.000	1750.000	1526.000	0.289
	373.000						
0.720		1470.000	1756.000	1744.000	1756.000	1899.000	0.360
	492.000						
0.810		1060.000	1755.300	1746.000	1756.000	2391.000	0.453
	491.000						
0.900		1156.430	1760.000	1748.000	1758.000	2882.000	0.546
	470.000						
0.990		1307.500	1762.000	1748.000	1760.000	3352.000	0.635

BED MATERIAL GRADATION

SECNO	SAE	DMAX (ft)	DXPI (ft)	XPI	TOTAL BED	BED MATERIAL FRACTIONS per grain size							
0.386	1.000	0.250	0.250	1.000	1.000	VF SAND	0.003	VF GRVL	0.058	S	COBL	0.022
						F SAND	0.016	F GRVL	0.077	L	COBL	0.000
						M SAND	0.066	M GRVL	0.127	S	BLDR	0.000
						C SAND	0.127	C GRVL	0.188	M	BLDR	0.000
						VC SAND	0.102	VC GRVL	0.189			
0.400	1.000	0.250	0.250	1.000	1.000	VF SAND	0.003	VF GRVL	0.058	S	COBL	0.022
						F SAND	0.016	F GRVL	0.077	L	COBL	0.000
						M SAND	0.066	M GRVL	0.127	S	BLDR	0.000
						C SAND	0.127	C GRVL	0.188	M	BLDR	0.000
						VC SAND	0.102	VC GRVL	0.189			
0.480	1.000	0.250	0.250	1.000	1.000	VF SAND	0.003	VF GRVL	0.058	S	COBL	0.022
						F SAND	0.016	F GRVL	0.077	L	COBL	0.000
						M SAND	0.066	M GRVL	0.127	S	BLDR	0.000
						C SAND	0.127	C GRVL	0.188	M	BLDR	0.000
						VC SAND	0.102	VC GRVL	0.189			
0.560	1.000	0.250	0.250	1.000	1.000	VF SAND	0.003	VF GRVL	0.058	S	COBL	0.022
						F SAND	0.016	F GRVL	0.077	L	COBL	0.000
						M SAND	0.066	M GRVL	0.127	S	BLDR	0.000
						C SAND	0.127	C GRVL	0.188	M	BLDR	0.000
						VC SAND	0.102	VC GRVL	0.189			
0.640	1.000	0.250	0.250	1.000	1.000	VF SAND	0.003	VF GRVL	0.058	S	COBL	0.022
						F SAND	0.016	F GRVL	0.077	L	COBL	0.000

```
                                                | M  SAND  0.066 | M  GRVL  0.127 | S  BLDR  0.000 |
                                                | C  SAND  0.127 | C  GRVL  0.188 | M  BLDR  0.000 |
                                                | VC SAND  0.102 | VC GRVL  0.189 |

     0.720  1.000  0.250  0.250  1.000  1.000 | VF SAND  0.003 | VF GRVL  0.058 | S  COBL  0.022 |
                                                | F  SAND  0.016 | F  GRVL  0.077 | L  COBL  0.000 |
                                                | M  SAND  0.066 | M  GRVL  0.127 | S  BLDR  0.000 |
                                                | C  SAND  0.127 | C  GRVL  0.188 | M  BLDR  0.000 |
                                                | VC SAND  0.102 | VC GRVL  0.189 |

     0.810  1.000  0.250  0.250  1.000  1.000 | VF SAND  0.003 | VF GRVL  0.058 | S  COBL  0.022 |
                                                | F  SAND  0.016 | F  GRVL  0.077 | L  COBL  0.000 |
                                                | M  SAND  0.066 | M  GRVL  0.127 | S  BLDR  0.000 |
                                                | C  SAND  0.127 | C  GRVL  0.188 | M  BLDR  0.000 |
                                                | VC SAND  0.102 | VC GRVL  0.189 |

     0.900  1.000  0.250  0.250  1.000  1.000 | VF SAND  0.003 | VF GRVL  0.058 | S  COBL  0.022 |
                                                | F  SAND  0.016 | F  GRVL  0.077 | L  COBL  0.000 |
                                                | M  SAND  0.066 | M  GRVL  0.127 | S  BLDR  0.000 |
                                                | C  SAND  0.127 | C  GRVL  0.188 | M  BLDR  0.000 |
                                                | VC SAND  0.102 | VC GRVL  0.189 |

     0.990  1.000  0.250  0.250  1.000  1.000 | VF SAND  0.003 | VF GRVL  0.058 | S  COBL  0.022 |
                                                | F  SAND  0.016 | F  GRVL  0.077 | L  COBL  0.000 |
                                                | M  SAND  0.066 | M  GRVL  0.127 | S  BLDR  0.000 |
                                                | C  SAND  0.127 | C  GRVL  0.188 | M  BLDR  0.000 |
                                                | VC SAND  0.102 | VC GRVL  0.189 |


BED SEDIMENT CONTROL VOLUMES

STREAM SEGMENT #  1:  Cave Creek and Apache Wash WMP
|  SECTION  |   LENGTH   |   WIDTH    |  DEPTH   |        V O L U M E        |
|  NUMBER   |    (ft)    |    (ft)    |   (ft)   |   (cu.ft)   |   (cu.yd)   |
-----------------------------------------------------------------------------
|     0.386 |    130.000 |   1348.853 |   10.000 |0.175351E+07 | 64944.8     |
|     0.400 |    320.000 |   1400.780 |   10.000 |0.448249E+07 | 166018.     |
|     0.480 |    408.000 |   1527.750 |   10.000 |0.623322E+07 | 230860.     |
|     0.560 |    443.000 |   1388.175 |   10.000 |0.614962E+07 | 227764.     |
|     0.640 |    411.500 |   1210.398 |   10.000 |0.498079E+07 | 184474.     |
|     0.720 |    432.500 |   1338.652 |   10.000 |0.578967E+07 | 214432.     |
|     0.810 |    491.500 |   1144.458 |   10.000 |0.562501E+07 | 208334.     |
|     0.900 |    480.500 |   1164.635 |   10.000 |0.559607E+07 | 207262.     |
|     0.990 |    235.000 |   1257.143 |   10.000 |0.295429E+07 | 109418.     |

NO. OF INPUT DATA MESSAGES=     0
END OF SEDIMENT DATA

==============================================================================

$HYD
BEGIN COMPUTATIONS.

------------------------------------------------------------------------------
$RATING

Downstream Boundary Condition - Rating Curve
  Elevation      Stage     Discharge |  Elevation      Stage     Discharge
 ----------------------------------|-----------------------------------
   1738.000    1738.000        0.000 |  1744.080    1744.080     8000.000
   1742.100    1742.100     2000.000 |  1744.580    1744.580    10000.000
   1742.870    1742.870     4000.000 |  1745.010    1745.010    12000.000
   1743.500    1743.500     6000.000 |  1745.390    1745.390    14000.000

==============================================================================
TIME STEP #        1
*    A  Level output at time step 1 (0.2500 days)
COMPUTING FROM TIME=      0.0000 DAYS TO TIME=      0.2500 DAYS IN     5 COMPUTATION STEPS

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
             Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME       ENTRY *             SAND             *
    DAYS       POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.25       0.990 *      0.00                    *
   TOTAL=      0.386 *      0.00      0.01     -4.63 *
*****************************************************

==============================================================================
TIME STEP #        2
*    A  Level output at time step 2 (0.0139 day)

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
             Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME       ENTRY *             SAND             *
    DAYS       POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.26       0.990 *      0.00                    *
   TOTAL=      0.386 *      0.00      0.01     -4.52 *
*****************************************************

==============================================================================
TIME STEP #        3
```

```
*    A  Level output at time step 3 (0.0208 day)

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
             Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
****************************************************
    TIME       ENTRY *             SAND              *
    DAYS       POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.28       0.990 *      0.00                    *
   TOTAL=      0.386 *      0.00      0.01     -4.62 *
****************************************************

==========================================================================================
TIME STEP #       4
*    A  Level output at time step 4 (0.0208 day)

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
             Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
****************************************************
    TIME       ENTRY *             SAND              *
    DAYS       POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.31       0.990 *      0.00                    *
   TOTAL=      0.386 *      0.00      0.01     -4.92 *
****************************************************

==========================================================================================
TIME STEP #       5
*    A  Level output at time step 5 (0.0139 day)

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
             Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
****************************************************
    TIME       ENTRY *             SAND              *
    DAYS       POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.32       0.990 *      0.01                    *
   TOTAL=      0.386 *      0.01      0.05     -8.17 *
****************************************************

==========================================================================================
TIME STEP #       6
*    A  Level output at time step 6 (0.0139 day)

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
             Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
****************************************************
    TIME       ENTRY *             SAND              *
    DAYS       POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.33       0.990 *      0.02                    *
   TOTAL=      0.386 *      0.02      0.35    -18.45 *
****************************************************

==========================================================================================
TIME STEP #       7
*    A  Level output at time step 7 (0.0208 day)

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
             Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
****************************************************
    TIME       ENTRY *             SAND              *
    DAYS       POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.35       0.990 *      0.05                    *
   TOTAL=      0.386 *      0.05      1.24    -24.61 *
****************************************************

==========================================================================================
TIME STEP #       8
*    A  Level output at time step 8 (0.0208 day)

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
             Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
****************************************************
    TIME       ENTRY *             SAND              *
    DAYS       POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.37       0.990 *      0.08                    *
   TOTAL=      0.386 *      0.08      2.05    -25.68 *
****************************************************

==========================================================================================
TIME STEP #       9
*    A  Level output at time step 9 (0.0278 day)

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
             Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
****************************************************
    TIME       ENTRY *             SAND              *
    DAYS       POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.40       0.990 *      0.10                    *
   TOTAL=      0.386 *      0.10      2.60    -24.79 *
****************************************************
```

```
==========================================================================================
TIME STEP #      10
*    A  Level output at time step 10 (0.0278 day)

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
             Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME       ENTRY *              SAND             *
    DAYS       POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.43       0.990 *      0.12                    *
   TOTAL=      0.386 *      0.12      2.82    -23.52 *
*****************************************************

==========================================================================================
TIME STEP #      11
*    A  Level output at time step 11 (0.0278 day)

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
             Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME       ENTRY *              SAND             *
    DAYS       POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.46       0.990 *      0.12                    *
   TOTAL=      0.386 *      0.12      2.94    -22.76 *
*****************************************************

==========================================================================================
TIME STEP #      12
*    A  Level output at time step 12 (0.0347 day)

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
             Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME       ENTRY *              SAND             *
    DAYS       POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.49       0.990 *      0.13                    *
   TOTAL=      0.386 *      0.13      3.03    -22.12 *
*****************************************************

==========================================================================================
TIME STEP #      13
*    A  Level output at time step 13 (0.0764 day)

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
             Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME       ENTRY *              SAND             *
    DAYS       POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.57       0.990 *      0.14                    *
   TOTAL=      0.386 *      0.14      3.16    -21.22 *
*****************************************************

==========================================================================================
TIME STEP #      14
*    A  Level output at time step 14 (0.0764 day)

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
             Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME       ENTRY *              SAND             *
    DAYS       POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.65       0.990 *      0.15                    *
   TOTAL=      0.386 *      0.15      3.29    -20.76 *
*****************************************************

==========================================================================================
TIME STEP #      15
*    A  Level output at time step 15 (0.1458 day)

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT #  1
             Cave Creek and Apache Wash WMP
            ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****************************************************
    TIME       ENTRY *              SAND             *
    DAYS       POINT *    INFLOW   OUTFLOW  TRAP EFF *
    0.79       0.990 *      0.18                    *
   TOTAL=      0.386 *      0.18      3.64    -19.63 *
*****************************************************

==========================================================================================
TIME STEP #      16
*    B  Level output at time step 16 (0.2083 day)
COMPUTING FROM TIME=      0.7916 DAYS TO TIME=      0.9999 DAYS IN    10 COMPUTATION STEPS

- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 Cave Creek and Apache Wash WMP
       ACCUMULATED TIME (yrs)....        0.003
       FLOW DURATION (days)......        0.021
```

UPSTREAM BOUNDARY CONDITIONS

Stream Segment # 1 / Section No. 0.990	DISCHARGE (cfs)	SEDIMENT LOAD (tons/day)	TEMPERATURE (deg F)
INFLOW	157.00	86.93	68.00

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT # 1
Cave Creek and Apache Wash WMP
ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT

TIME DAYS	ENTRY POINT	INFLOW	SAND OUTFLOW	TRAP EFF
1.00	0.990	0.19		
TOTAL=	0.386	0.19	3.70	-18.97

TABLE SB-1: SEDIMENT LOAD PASSING THE BOUNDARIES OF STREAM SEGMENT # 1

SEDIMENT INFLOW at the Upstream Boundary:

GRAIN SIZE	LOAD (tons/day)	GRAIN SIZE	LOAD (tons/day)
VERY FINE SAND....	0.58	MEDIUM GRAVEL.....	10.63
FINE SAND.....	2.98	COARSE GRAVEL.....	1.33
MEDIUM SAND.....	11.92	VERY COARSE GRAVEL	0.00
COARSE SAND.....	20.91	SMALL COBBLES.....	0.00
VERY COARSE SAND..	17.97	LARGE COBBLES.....	0.00
VERY FINE GRAVEL..	9.62	SMALL BOULDERS....	0.00
FINE GRAVEL.....	10.97	MEDIUM BOULDERS...	0.00
		TOTAL =	86.93

SEDIMENT OUTFLOW from the Downstream Boundary

GRAIN SIZE	LOAD (tons/day)	GRAIN SIZE	LOAD (tons/day)
VERY FINE SAND....	9.66	MEDIUM GRAVEL.....	16.15
FINE SAND.....	38.75	COARSE GRAVEL.....	2.94
MEDIUM SAND.....	109.89	VERY COARSE GRAVEL	0.00
COARSE SAND.....	159.74	SMALL COBBLES.....	0.00
VERY COARSE SAND..	114.60	LARGE COBBLES.....	0.00
VERY FINE GRAVEL..	6.67	SMALL BOULDERS....	0.00
FINE GRAVEL.....	11.01	MEDIUM BOULDERS...	0.00
		TOTAL =	469.39

TABLE SB-2: STATUS OF THE BED PROFILE AT TIME = 1.000 DAYS

SECTION NUMBER	BED CHANGE (ft)	WS ELEV (ft)	THALWEG (ft)	Q (cfs)	TRANSPORT RATE (tons/day) SAND
0.990	0.01	1751.34	1748.01	157.	58.
0.900	-0.35	1749.54	1747.65	157.	75.
0.810	-0.20	1747.71	1745.80	157.	239.
0.720	-0.10	1745.81	1743.90	157.	352.
0.640	-0.02	1743.73	1741.98	157.	361.
0.560	0.04	1742.74	1740.04	157.	351.
0.480	0.01	1741.45	1740.01	157.	392.
0.400	-0.08	1740.21	1737.92	157.	458.
0.386	-0.65	1738.42	1737.35	157.	469.

$VOL A

STREAM SEGMENT # 1: Cave Creek and Apache Wash WMP

SUMMARY TABLE: MASS AND VOLUME OF SEDIMENT

SECTION	SEDIMENT THROUGH SECTION (tons) TOTAL	SAND	SILT	CLAY	SEDIMENT DEPOSITED IN REACH in cu. yds TOTAL	CUMULATIVE	SAND	SILT	CLAY
INFLOW	375.	375.	0.	0.	299.				
0.990	705.	705.	0.	0.	-263.	-263.	-263.	0.	0.
0.900	4109.	4109.	0.	0.	-2712.	-2974.	-2712.	0.	0.
0.810	5907.	5907.	0.	0.	-1431.	-4406.	-1431.	0.	0.
0.720	6699.	6699.	0.	0.	-632.	-5037.	-632.	0.	0.
0.640	6872.	6872.	0.	0.	-138.	-5175.	-138.	0.	0.
0.560	6437.	6437.	0.	0.	347.	-4828.	347.	0.	0.
0.480	5930.	5930.	0.	0.	404.	-4425.	404.	0.	0.
0.400	6363.	6363.	0.	0.	-345.	-4770.	-345.	0.	0.
0.386	7492.	7492.	0.	0.	-899.	-5668.	-899.	0.	0.

TOTAL SEDIMENT - per grain size - THROUGH EACH CROSS SECTION (tons)

UPSTREAM INFLOW

VF SAND	2.	VF GRVL	39.	S COBL	0.
F SAND	12.	F GRVL	45.	L COBL	0.
M SAND	48.	M GRVL	50.	S BLDR	0.
C SAND	86.	C GRVL	20.	M BLDR	0.
VC SAND	72.	VC GRVL	0.		

SECTION NO. 0.990

VF SAND	2.	VF GRVL	9.	S COBL	3.
F SAND	14.	F GRVL	19.	L COBL	0.
M SAND	84.	M GRVL	46.	S BLDR	0.
C SAND	183.	C GRVL	89.	M BLDR	0.
VC SAND	163.	VC GRVL	94.		

```
SECTION NO.      0.900
      VF SAND       79.   VF GRVL       15.   S  COBL       18.
      F  SAND      351.   F  GRVL       34.   L  COBL        0.
      M  SAND      930.   M  GRVL       91.   S  BLDR        0.
      C  SAND     1273.   C  GRVL      196.   M  BLDR        0.
      VC SAND      894.   VC GRVL      228.
SECTION NO.      0.810
      VF SAND      154.   VF GRVL       17.   S  COBL       22.
      F  SAND      571.   F  GRVL       39.   L  COBL        0.
      M  SAND     1394.   M  GRVL      103.   S  BLDR        0.
      C  SAND     1848.   C  GRVL      226.   M  BLDR        0.
      VC SAND     1265.   VC GRVL      267.
SECTION NO.      0.720
      VF SAND      197.   VF GRVL       18.   S  COBL       24.
      F  SAND      661.   F  GRVL       40.   L  COBL        0.
      M  SAND     1570.   M  GRVL      107.   S  BLDR        0.
      C  SAND     2115.   C  GRVL      233.   M  BLDR        0.
      VC SAND     1454.   VC GRVL      282.
SECTION NO.      0.640
      VF SAND      197.   VF GRVL       16.   S  COBL       18.
      F  SAND      672.   F  GRVL       37.   L  COBL        0.
      M  SAND     1639.   M  GRVL      100.   S  BLDR        0.
      C  SAND     2216.   C  GRVL      218.   M  BLDR        0.
      VC SAND     1499.   VC GRVL      259.
SECTION NO.      0.560
      VF SAND      197.   VF GRVL       11.   S  COBL        5.
      F  SAND      695.   F  GRVL       25.   L  COBL        0.
      M  SAND     1671.   M  GRVL       68.   S  BLDR        0.
      C  SAND     2100.   C  GRVL      145.   M  BLDR        0.
      VC SAND     1367.   VC GRVL      152.
SECTION NO.      0.480
      VF SAND      197.   VF GRVL       10.   S  COBL        2.
      F  SAND      700.   F  GRVL       23.   L  COBL        0.
      M  SAND     1611.   M  GRVL       60.   S  BLDR        0.
      C  SAND     1888.   C  GRVL      121.   M  BLDR        0.
      VC SAND     1199.   VC GRVL      119.
SECTION NO.      0.400
      VF SAND      213.   VF GRVL       17.   S  COBL       11.
      F  SAND      732.   F  GRVL       38.   L  COBL        0.
      M  SAND     1656.   M  GRVL       96.   S  BLDR        0.
      C  SAND     1947.   C  GRVL      197.   M  BLDR        0.
      VC SAND     1251.   VC GRVL      207.
SECTION NO.      0.386
      VF SAND      259.   VF GRVL       20.   S  COBL       19.
      F  SAND      870.   F  GRVL       44.   L  COBL        0.
      M  SAND     1945.   M  GRVL      113.   S  BLDR        0.
      C  SAND     2274.   C  GRVL      237.   M  BLDR        0.
      VC SAND     1449.   VC GRVL      262.

-----------------------------------------------------------------------------
$$END

      0   DATA ERRORS DETECTED.

TOTAL NO. OF TIME STEPS READ =        16
TOTAL NO. OF WS PROFILES =            29
ITERATIONS IN EXNER EQ =            2610

COMPUTATIONS COMPLETED
RUN TIME =  0 HOURS,  0 MINUTES &  1.00 SECONDS
```

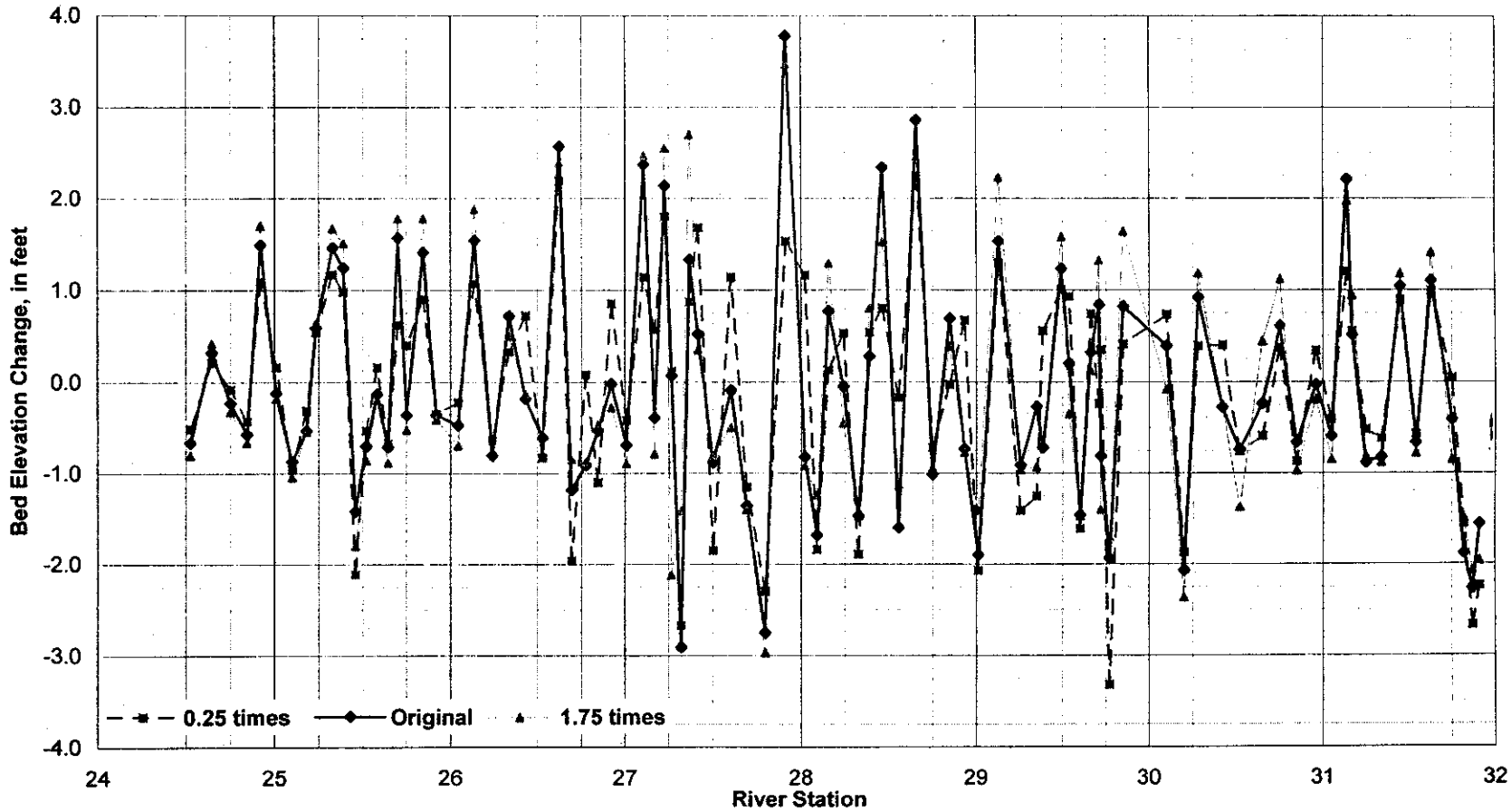
APPENDIX I

SENSITIVITY ANALYSIS RESULTS

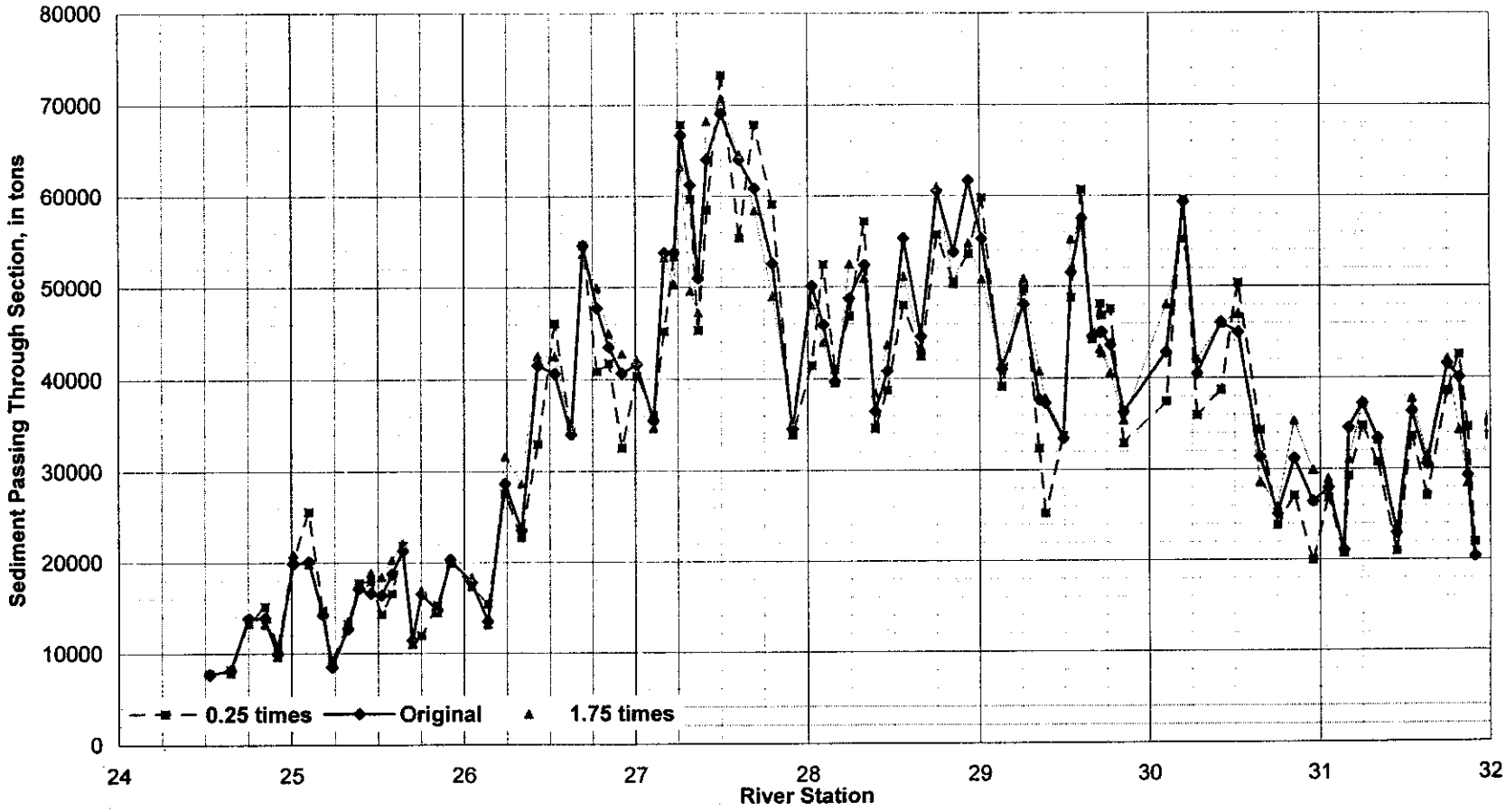
APPENDIX I.1

Inflowing Sediment

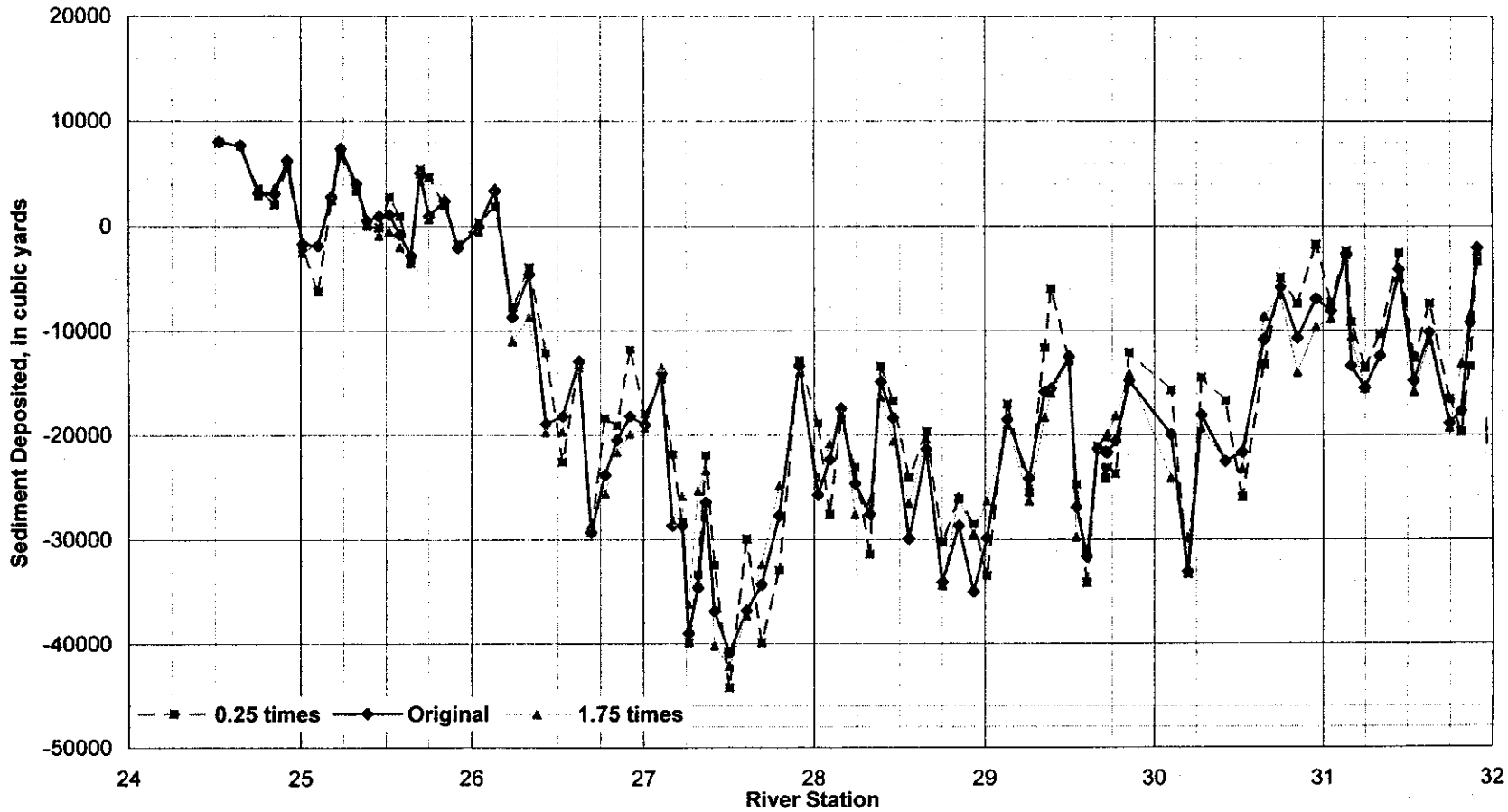
Bed Material Sensitivity
Bed Elevation Change at Last Time Step
Cave Creek Main Channel Model, 100-year Flood, Future Condition



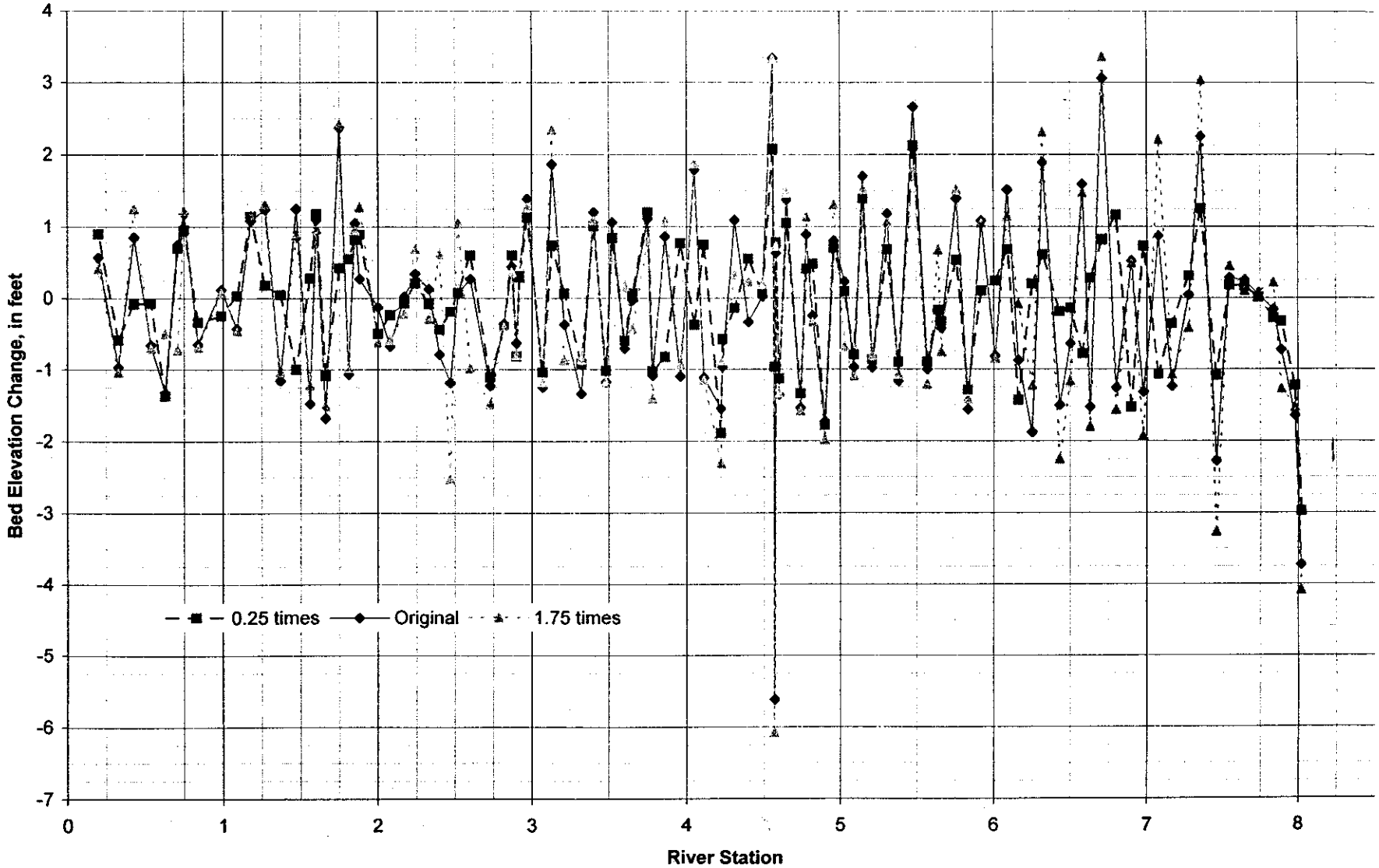
Bed Material Sensitivity
Sediment Passing Through Section
Cave Creek Main Channel Model, 100-year Flood, Future Condition



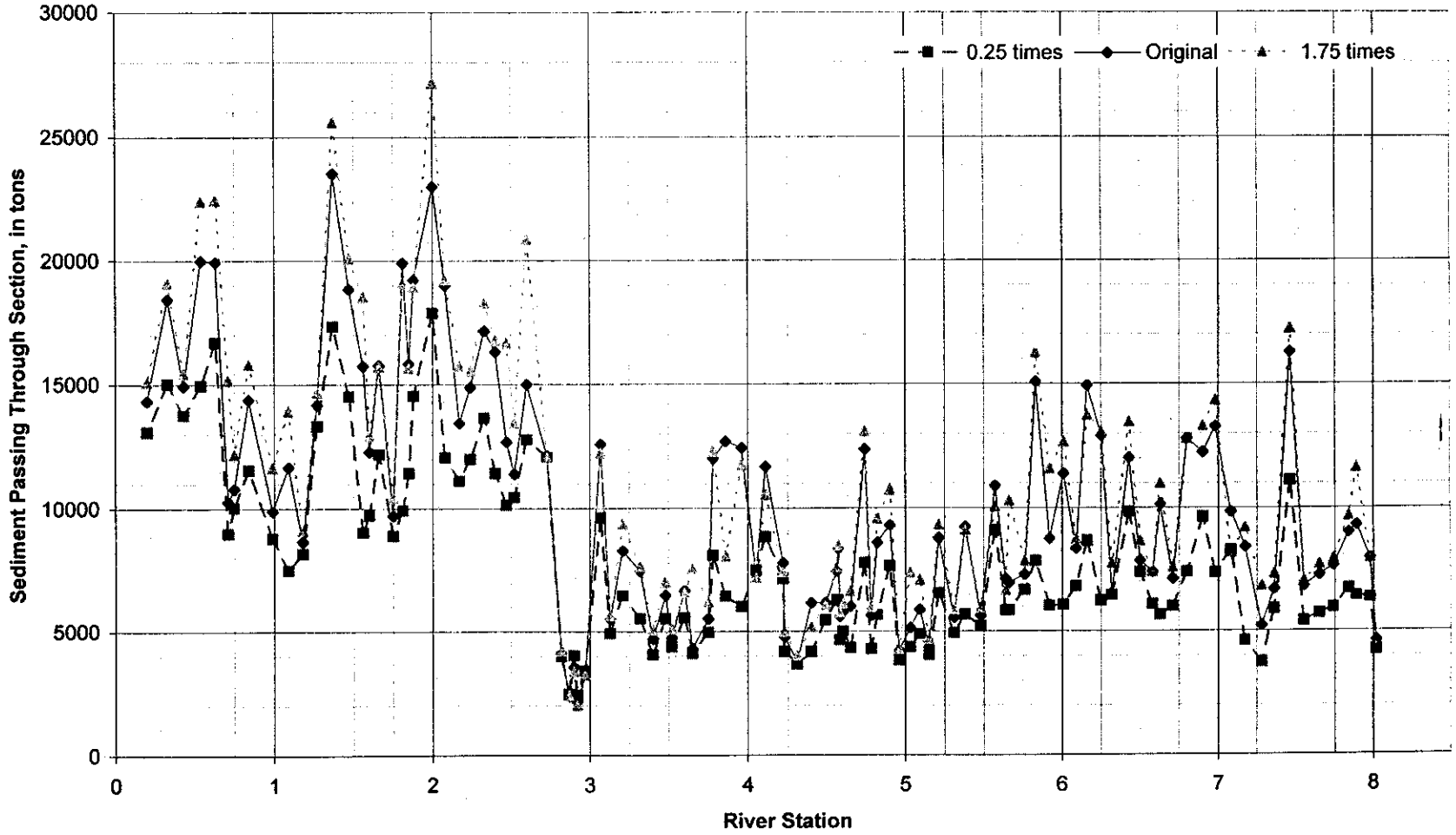
Bed Material Sensitivity
Accumulative Sediment Deposited Upstream of Section
Cave Creek Main Channel Model, 100-year Flood, Future Condition



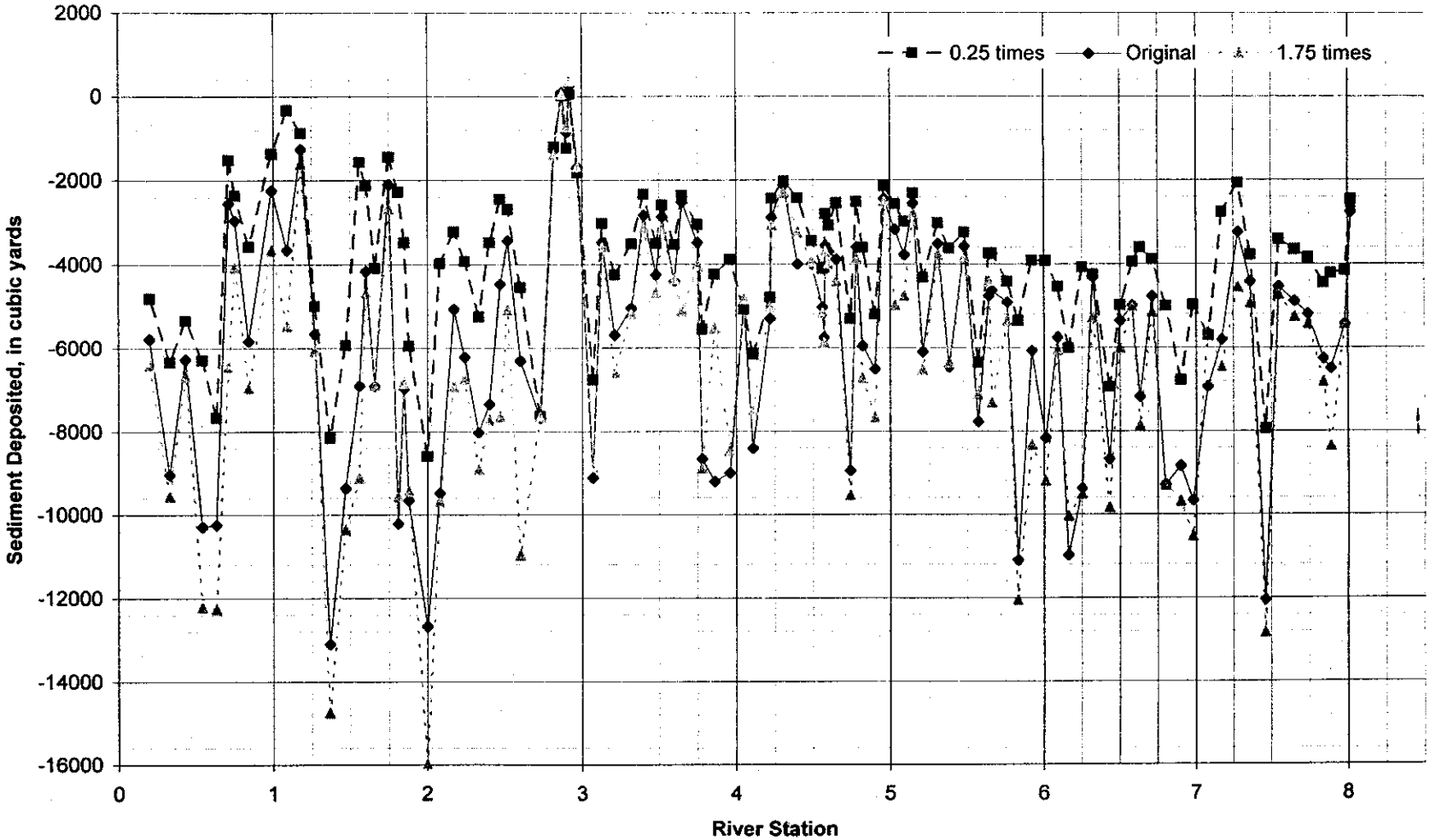
Bed Material Sensitivity
Bed Elevation Change at Last Time Step
Apache Wash Main Channel Model, 100-year Flood, Future Condition



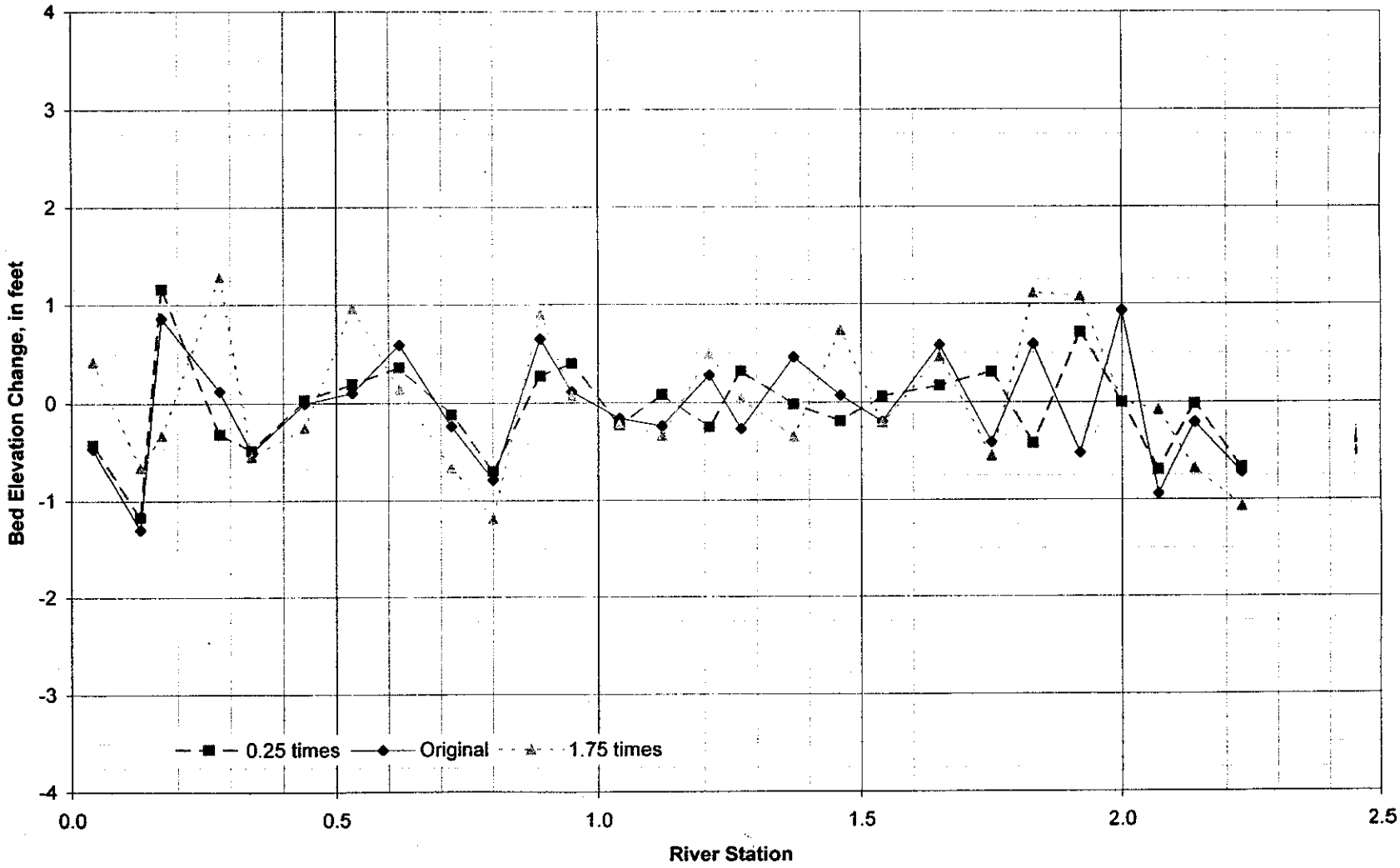
Bed Material Sensitivity
Sediment Passing Through Section
Apache Wash Main Channel Model, 100-year Flood, Future Condition



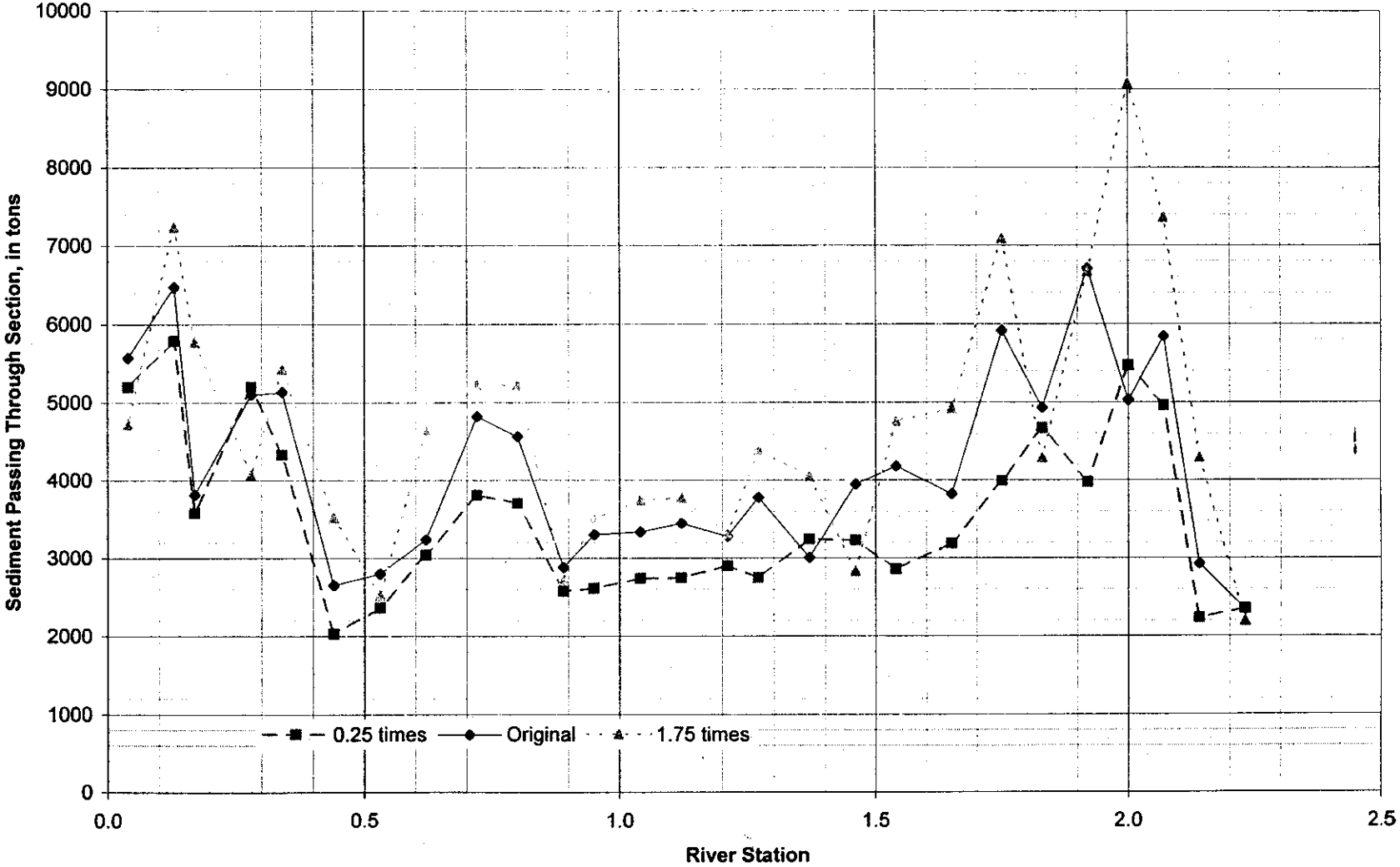
Bed Material Sensitivity
Accumulative Sediment Deposited Upstream of Section
Apache Wash Main Channel Model, 100-year Flood, Future Condition



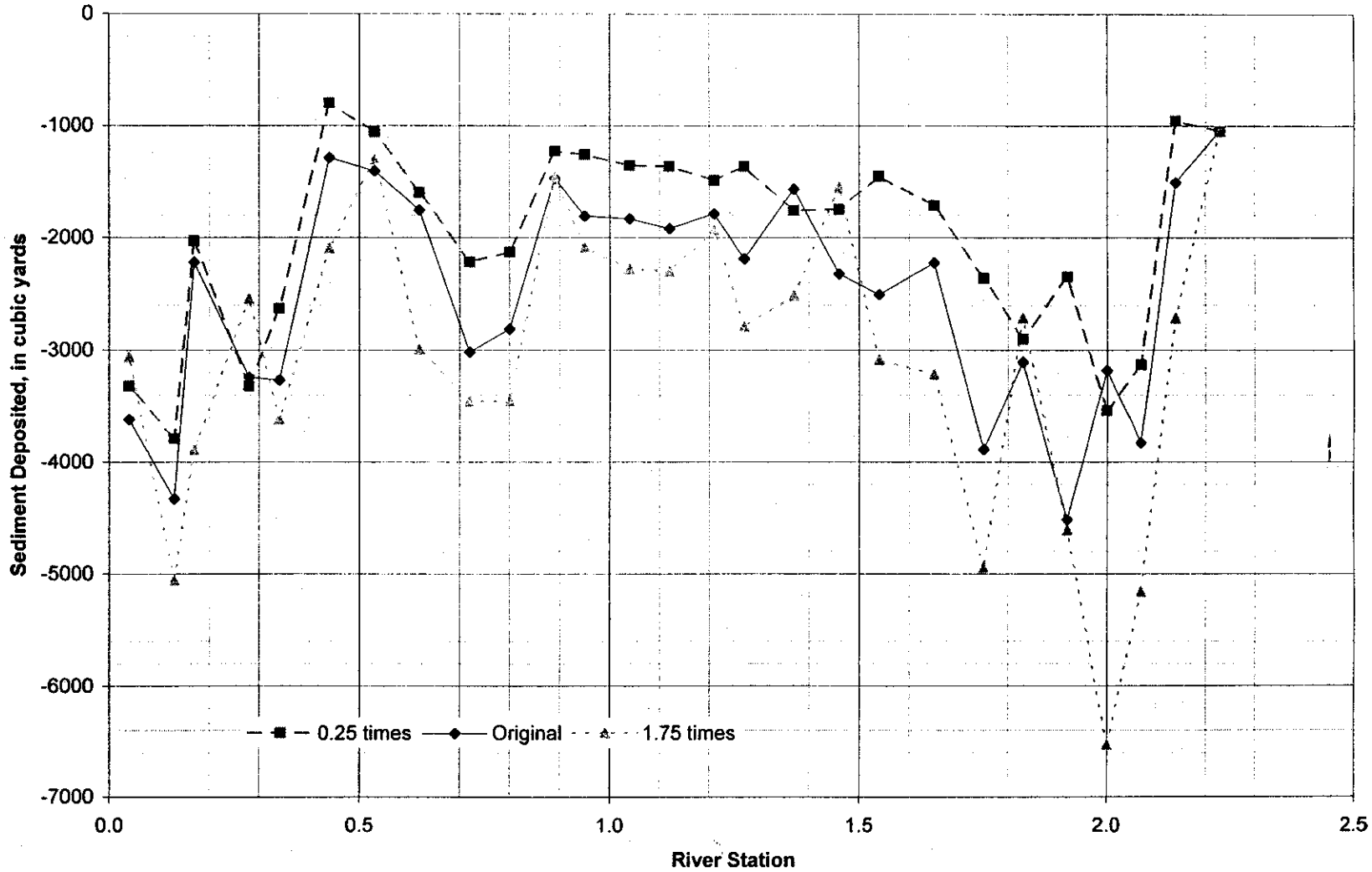
Bed Material Sensitivity
Bed Elevation Change at Last Time Step
Paradise Wash Main Channel Model, 100-year Flood, Future Condition



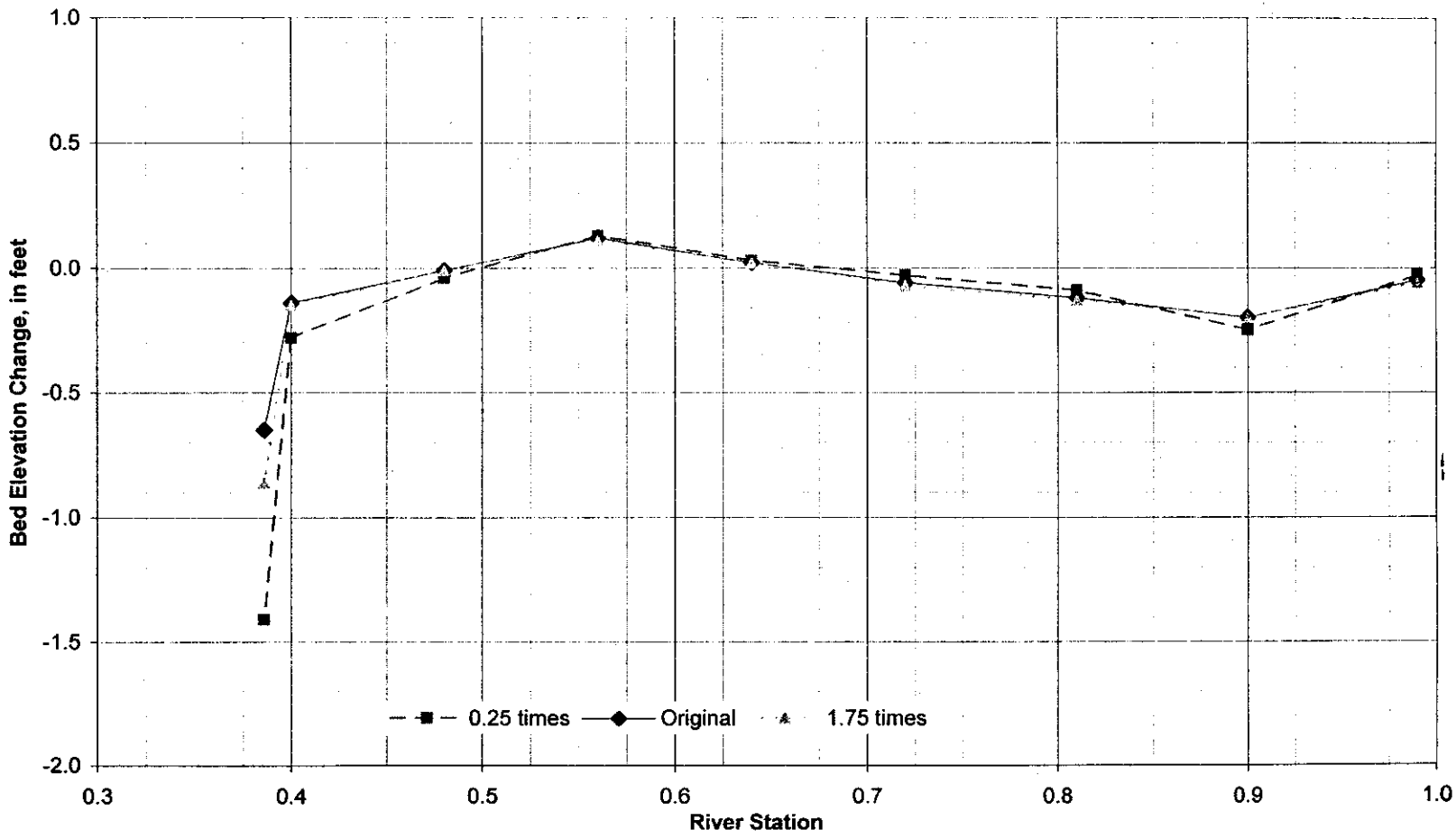
Bed Material Sensitivity
Sediment Passing Through Section
Paradise Wash Main Channel Model, 100-year Flood, Future Condition



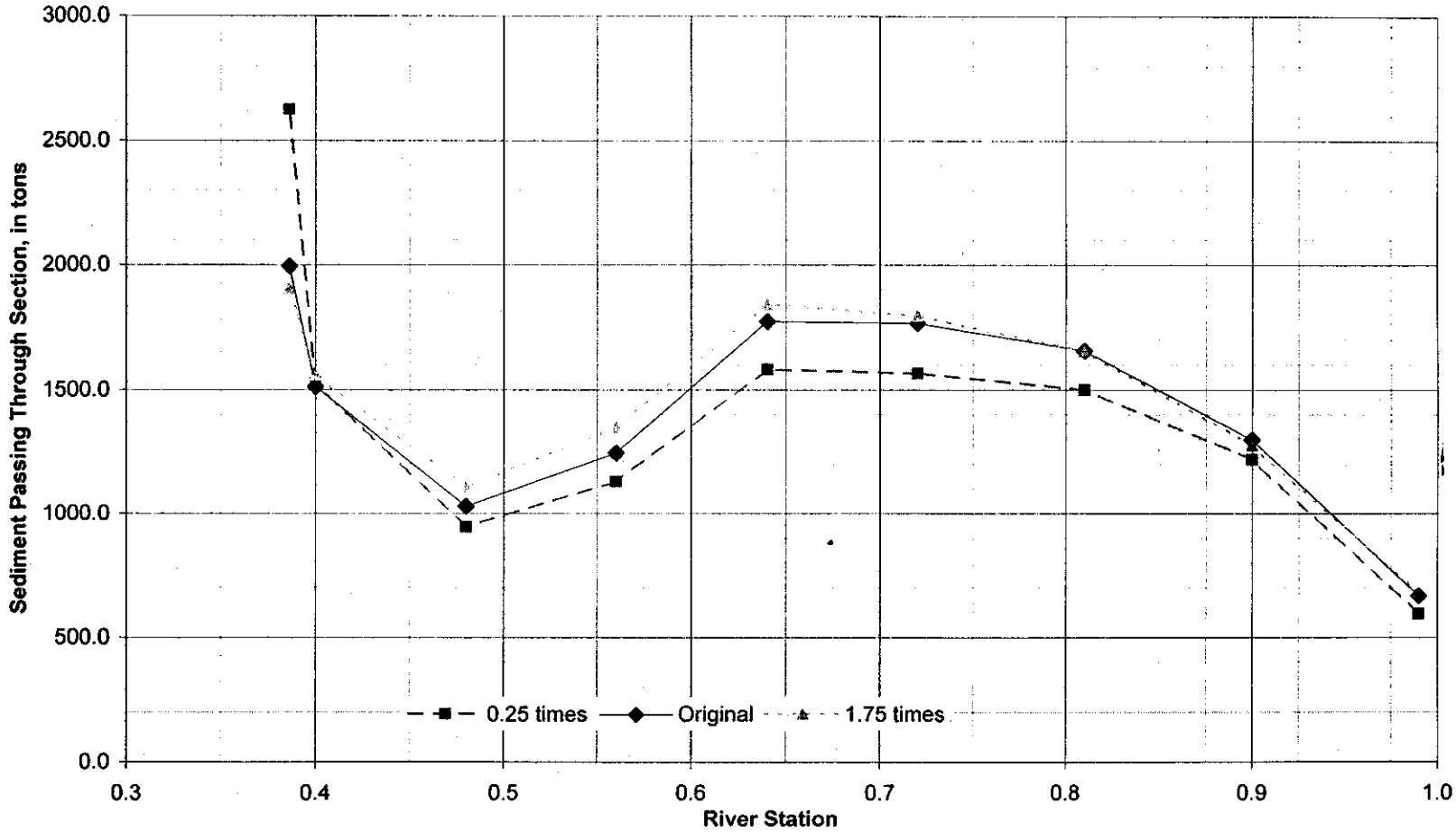
Bed Material Sensitivity
Accumulative Sediment Deposited Upstream of Section
Paradise Wash Main Channel Model, 100-year Flood, Future Condition



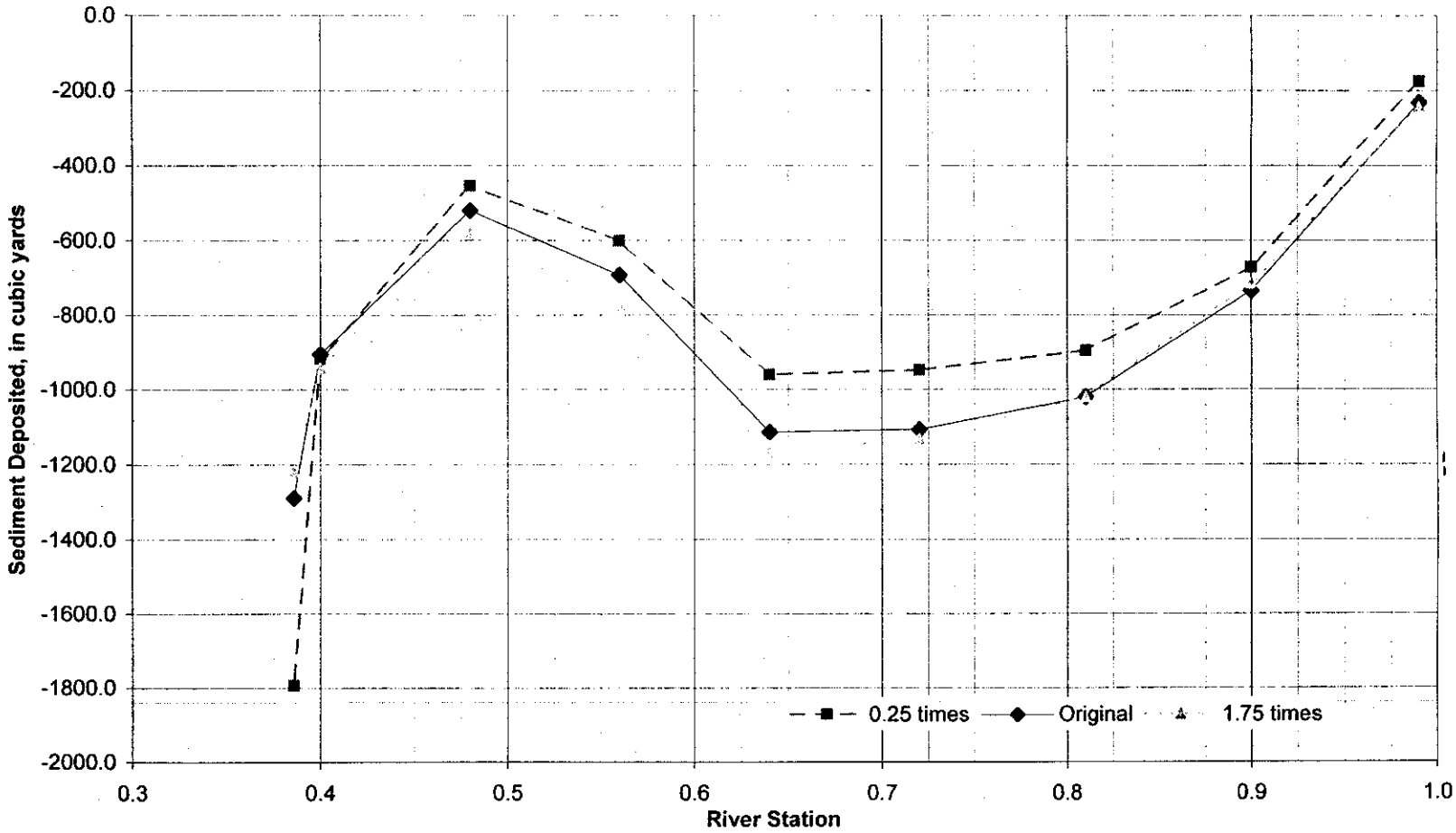
Bed Material Sensitivity
Bed Elevation Change at Last Time Step
Desert Hills Wash Main Channel Model, 100-year Flood, Future Condition



Bed Material Sensitivity
Sediment Passing Through Section
Desert Hills Wash Main Channel Model, 100-year Flood, Future Condition



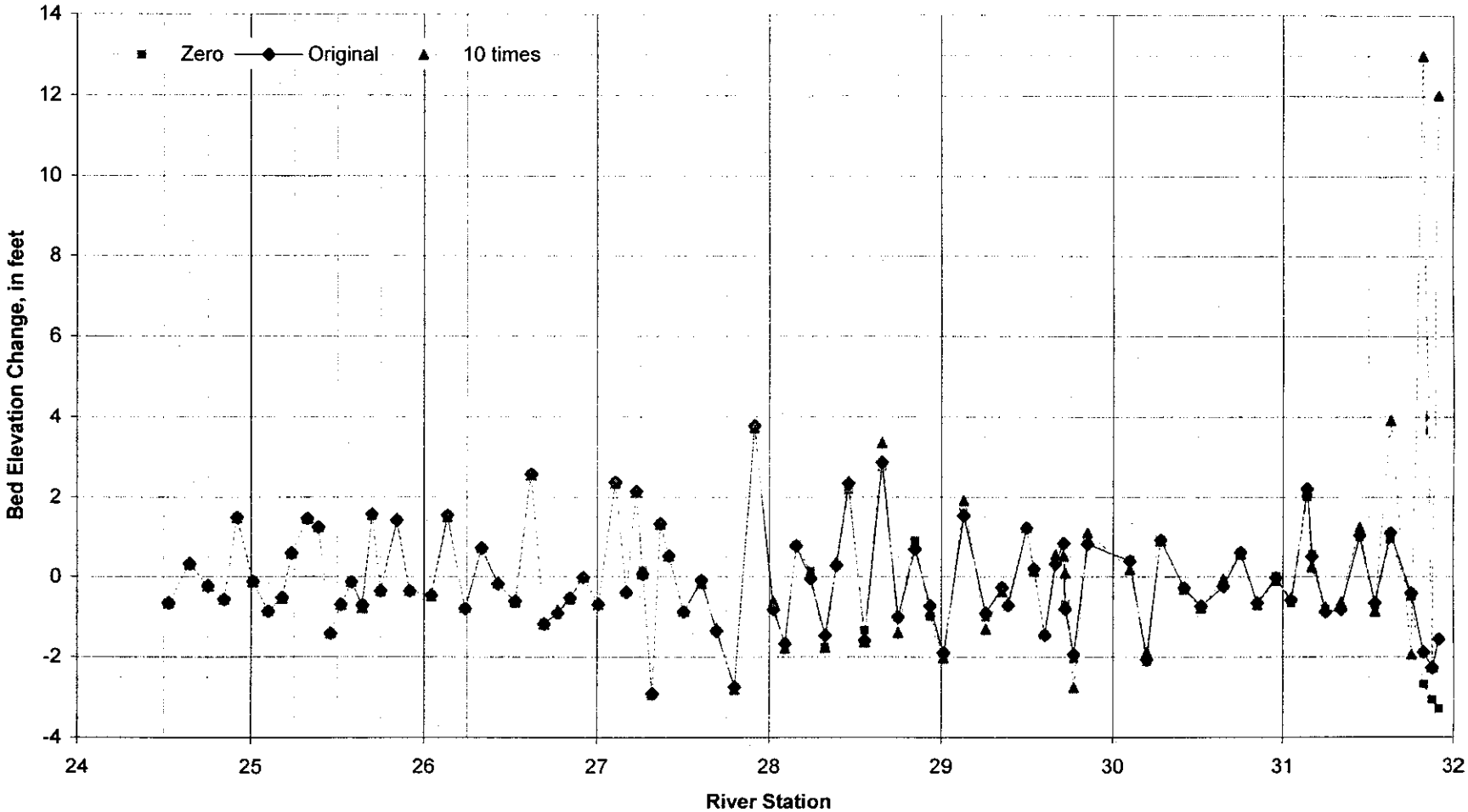
Bed Material Sensitivity
Accumulative Sediment Deposited Upstream of Section
Desert Hills Wash Main Channel Model, 100-year Flood, Future Condition



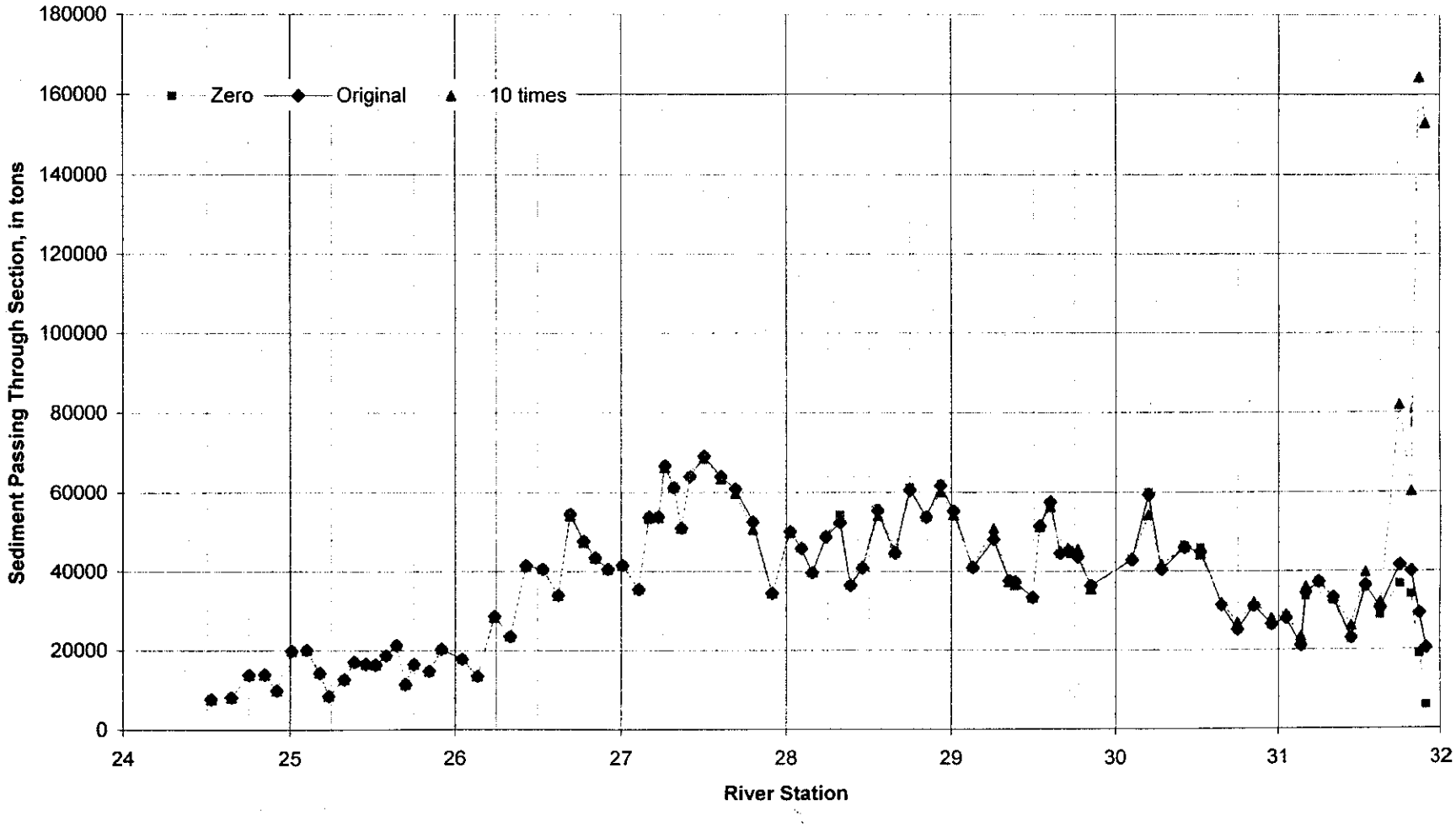
APPENDIX I.2

Bed Material Size Distribution

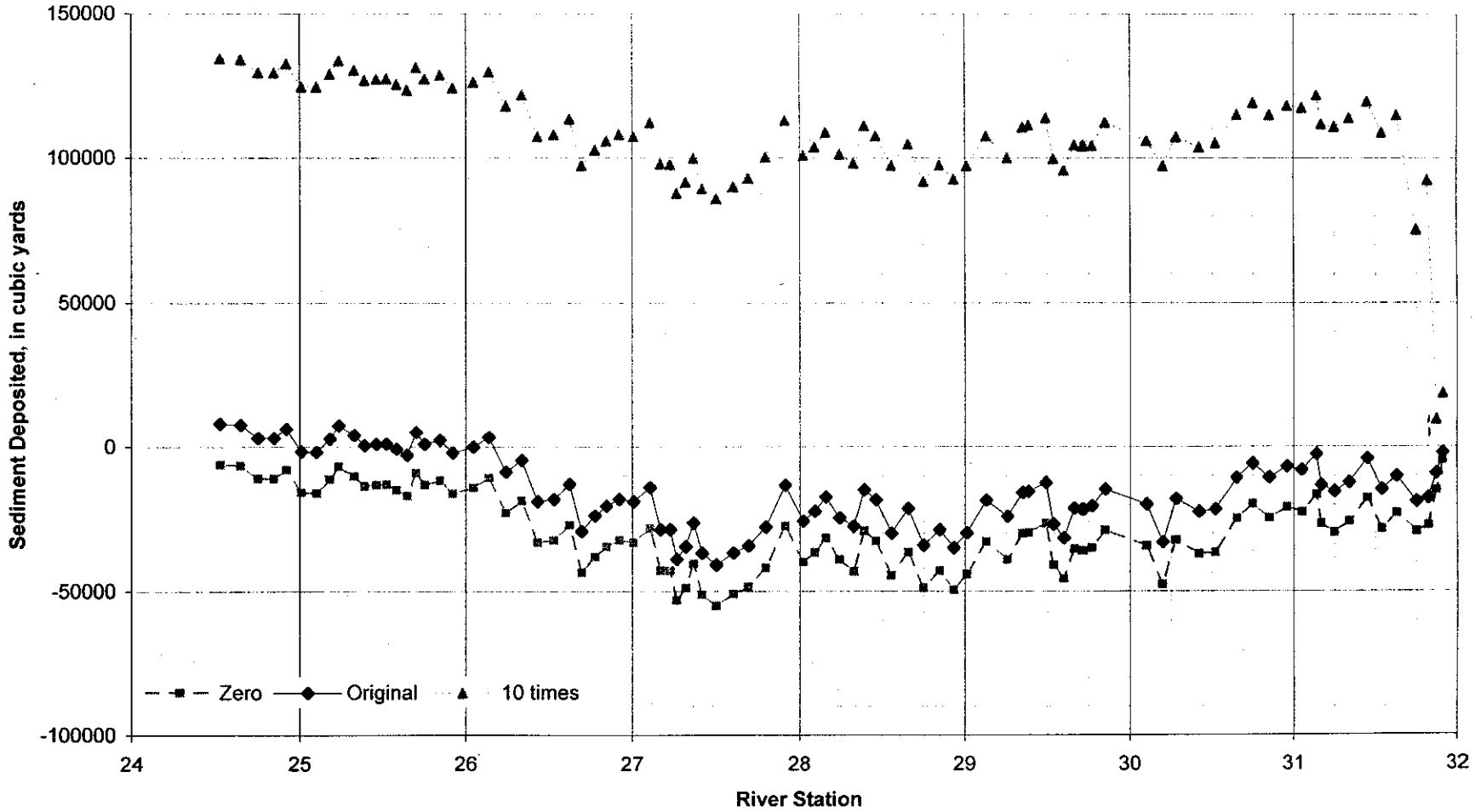
Inflowing Sediment Sensitivity Analysis
Bed Elevation Change at Last Time Step
Cave Creek Main Channel Model, 100-year Flood, Future Condition



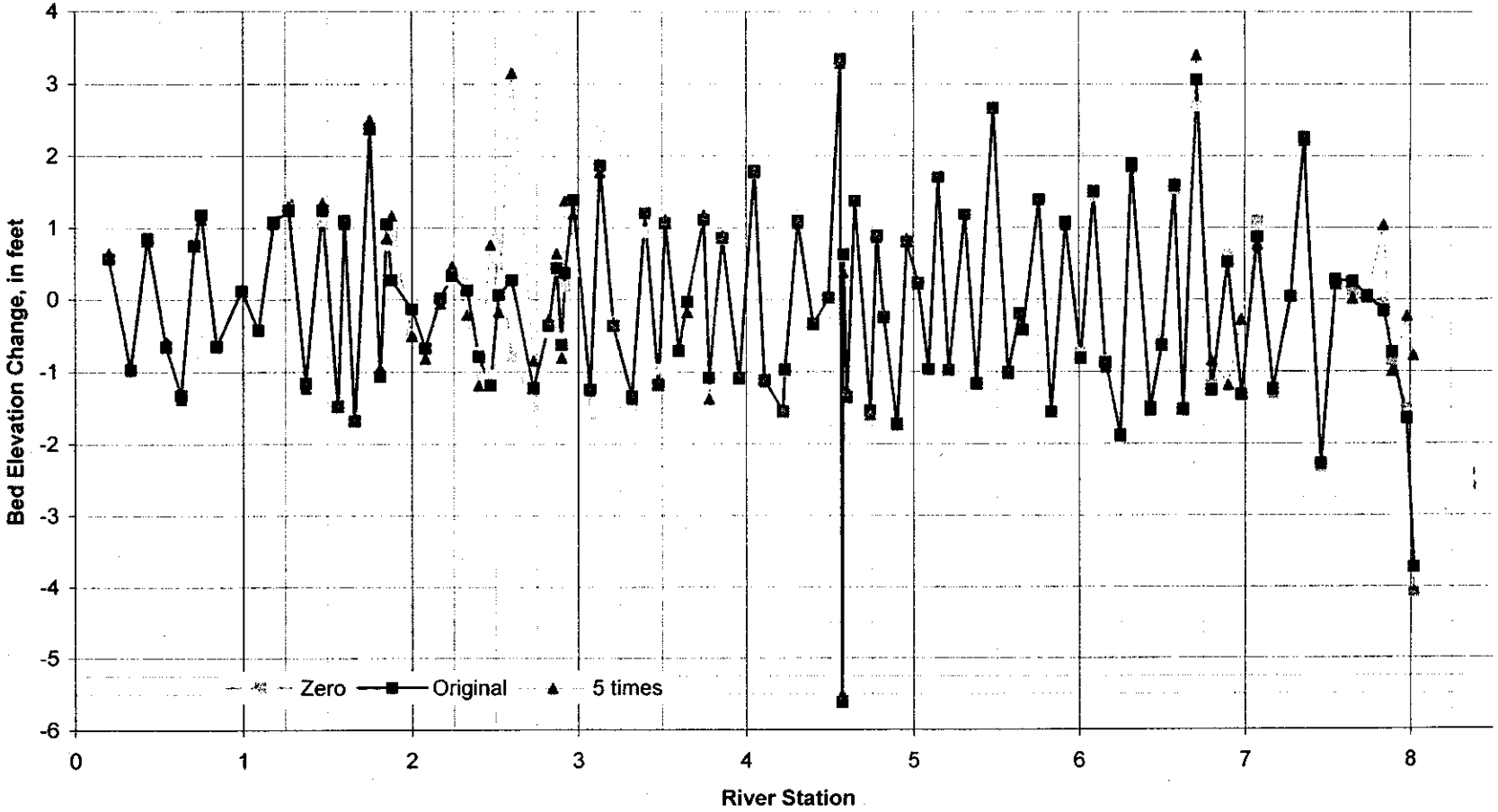
Inflowing Sediment Sensitivity Analysis
Sediment Passing Through Section
Cave Creek Main Channel Model, 100-year Flood, Future Condition



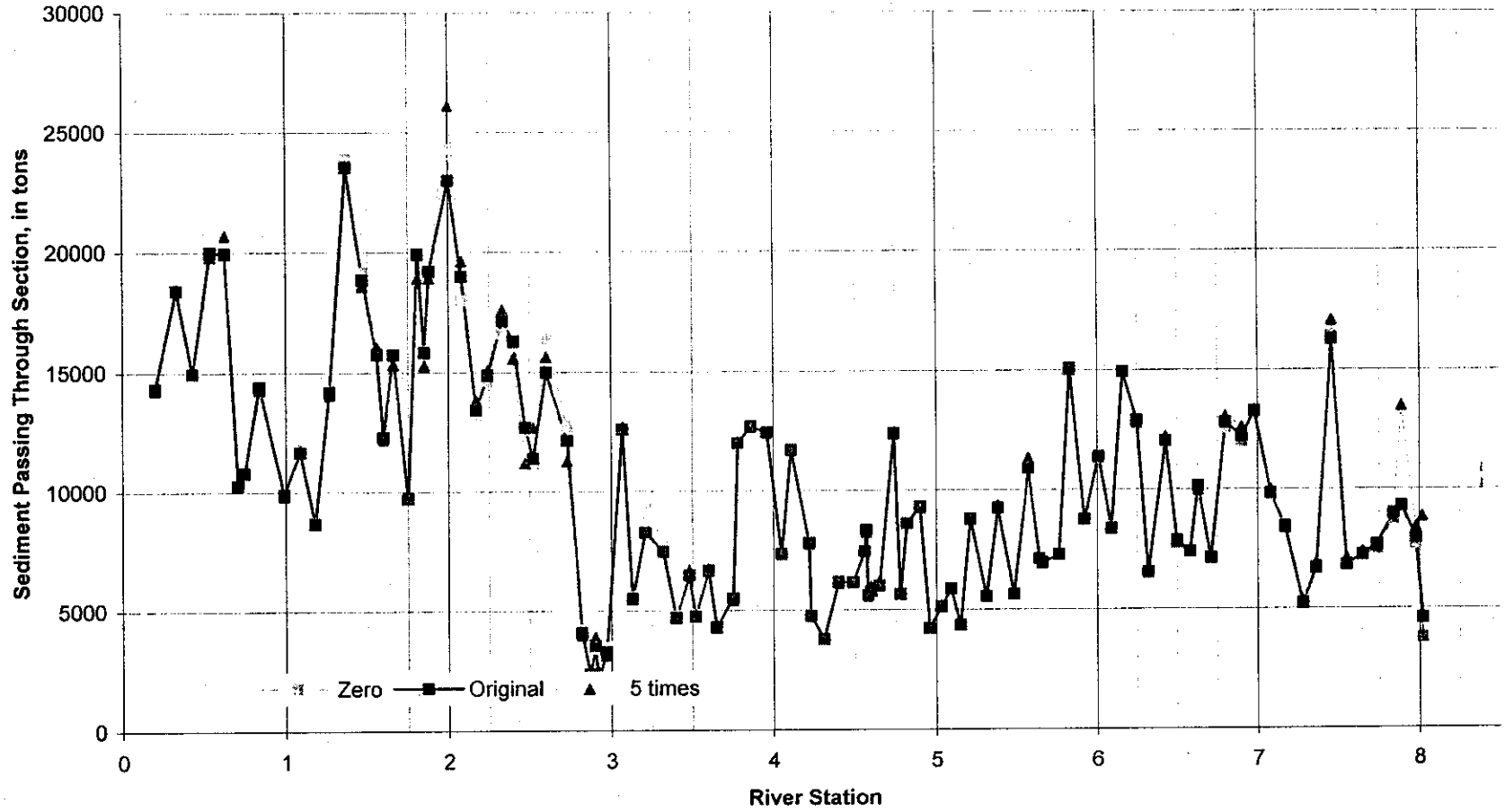
Inflowing Sediment Sensitivity Analysis
Accumulative Sediment Deposited Upstream of Section
Cave Creek Main Channel Model, 100-year Flood, Future Condition



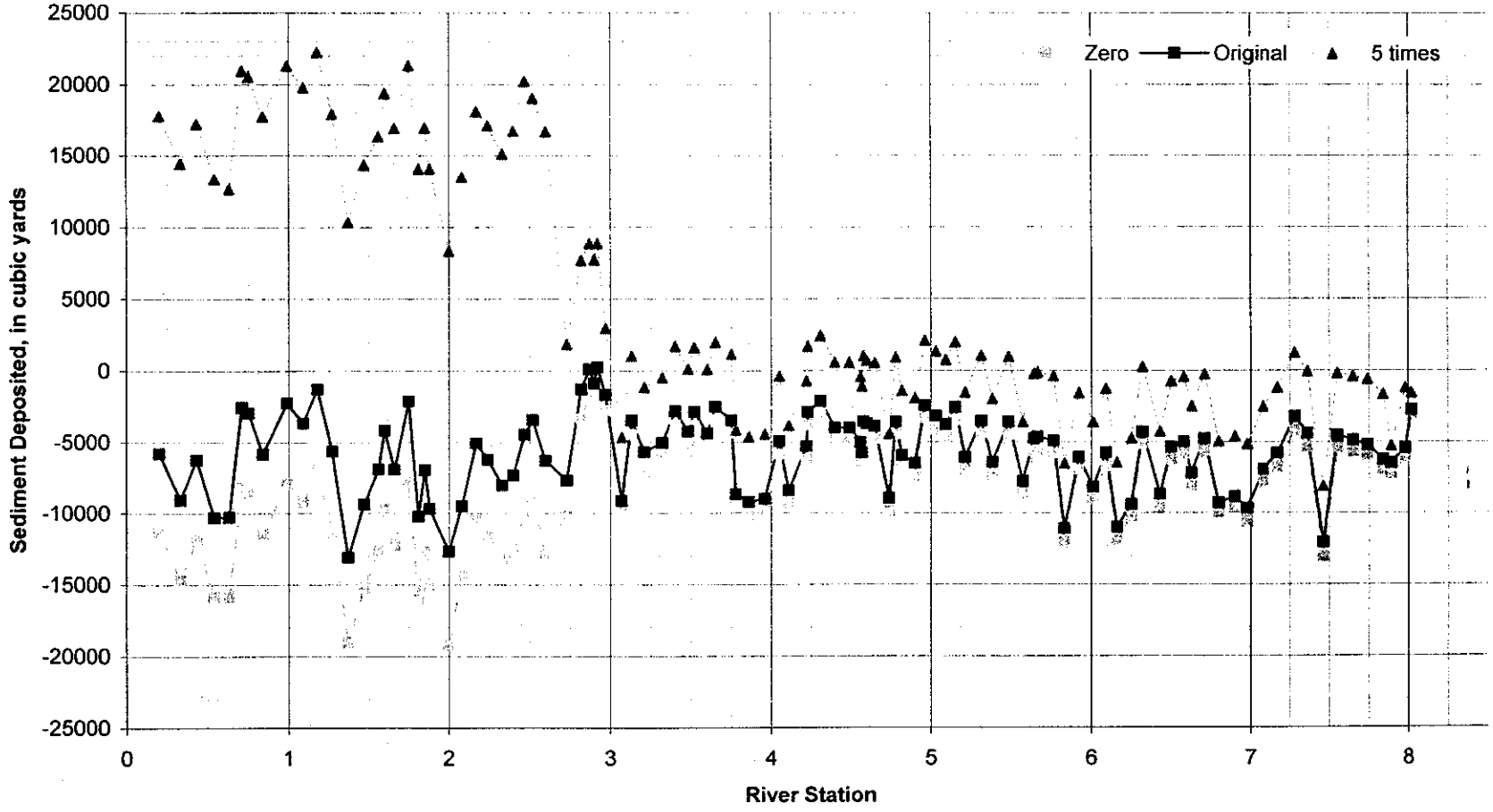
Inflowing Sediment Sensitivity Analysis
Bed Elevation Change at Last Time Step
Apache Wash Main Channel Model, 100-year Flood, Future Condtion



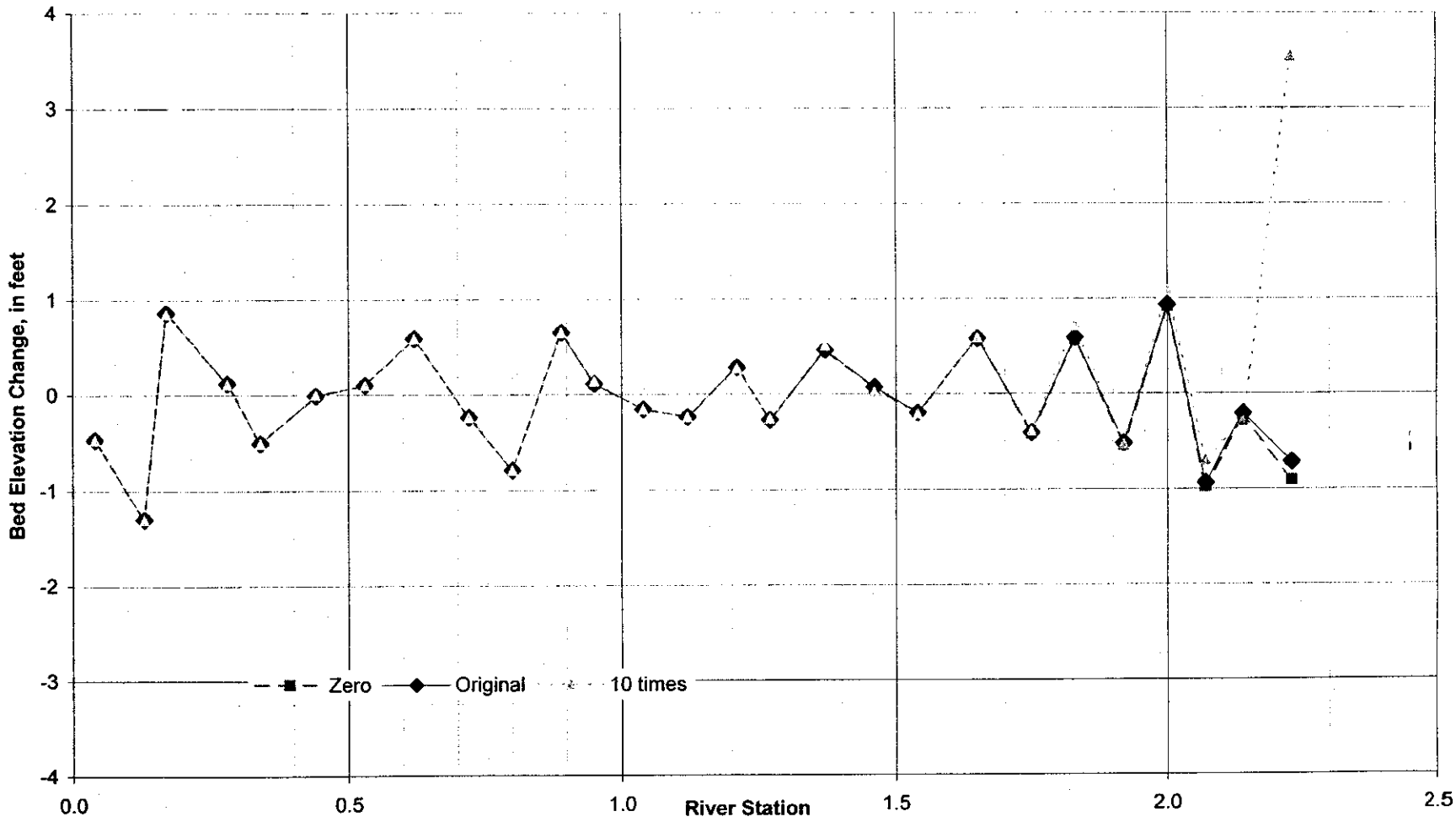
Inflowing Sediment Sensitivity Analysis
Sediment Passing Through Section
Apache Wash Main Channel Model, 100-year Flood, Future Condtion



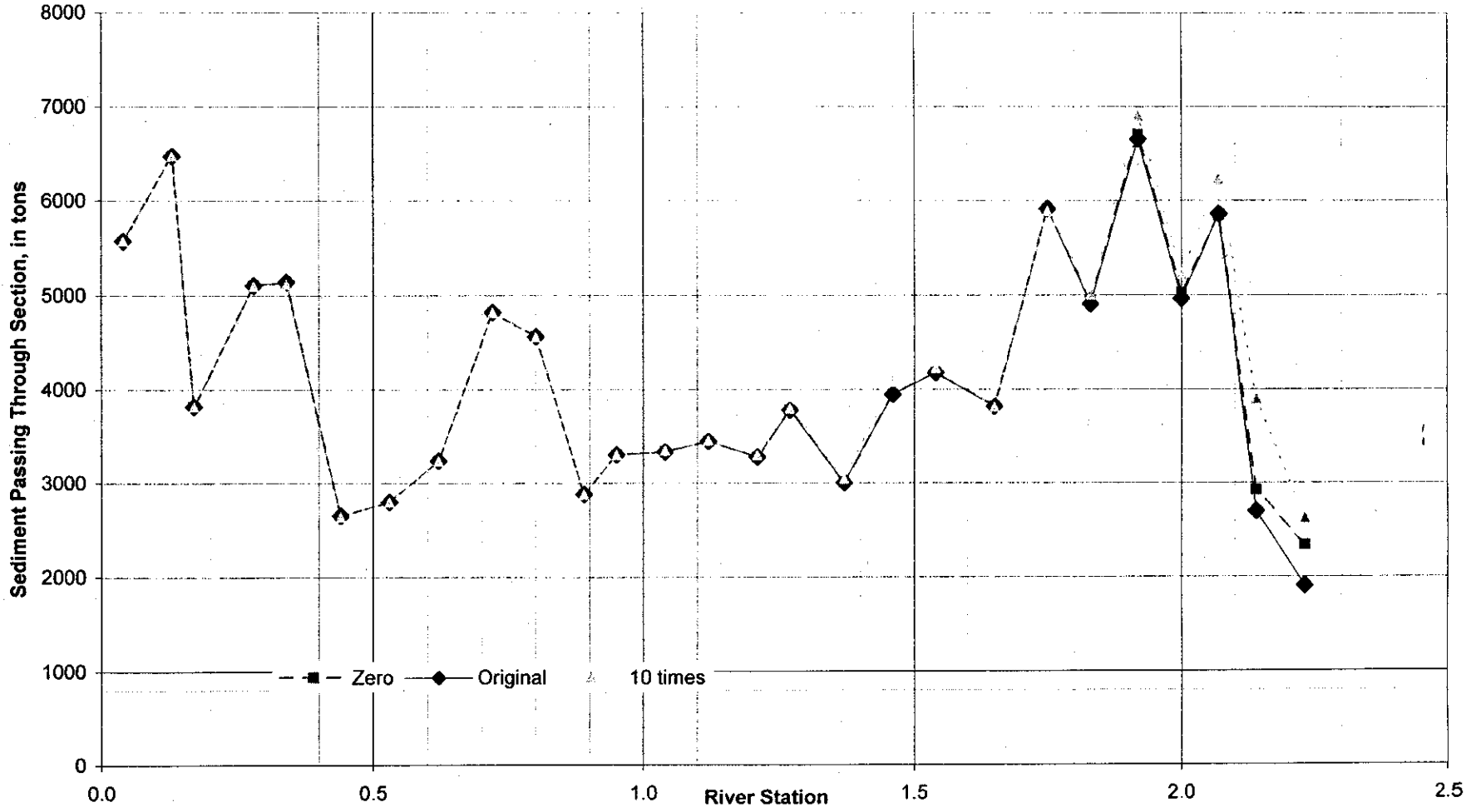
Inflowing Sediment Sensitivity Analysis
Accumulative Sediment Deposited Upstream of Section
Apache Wash Main Channel Model, 100-year Flood, Future Condtion



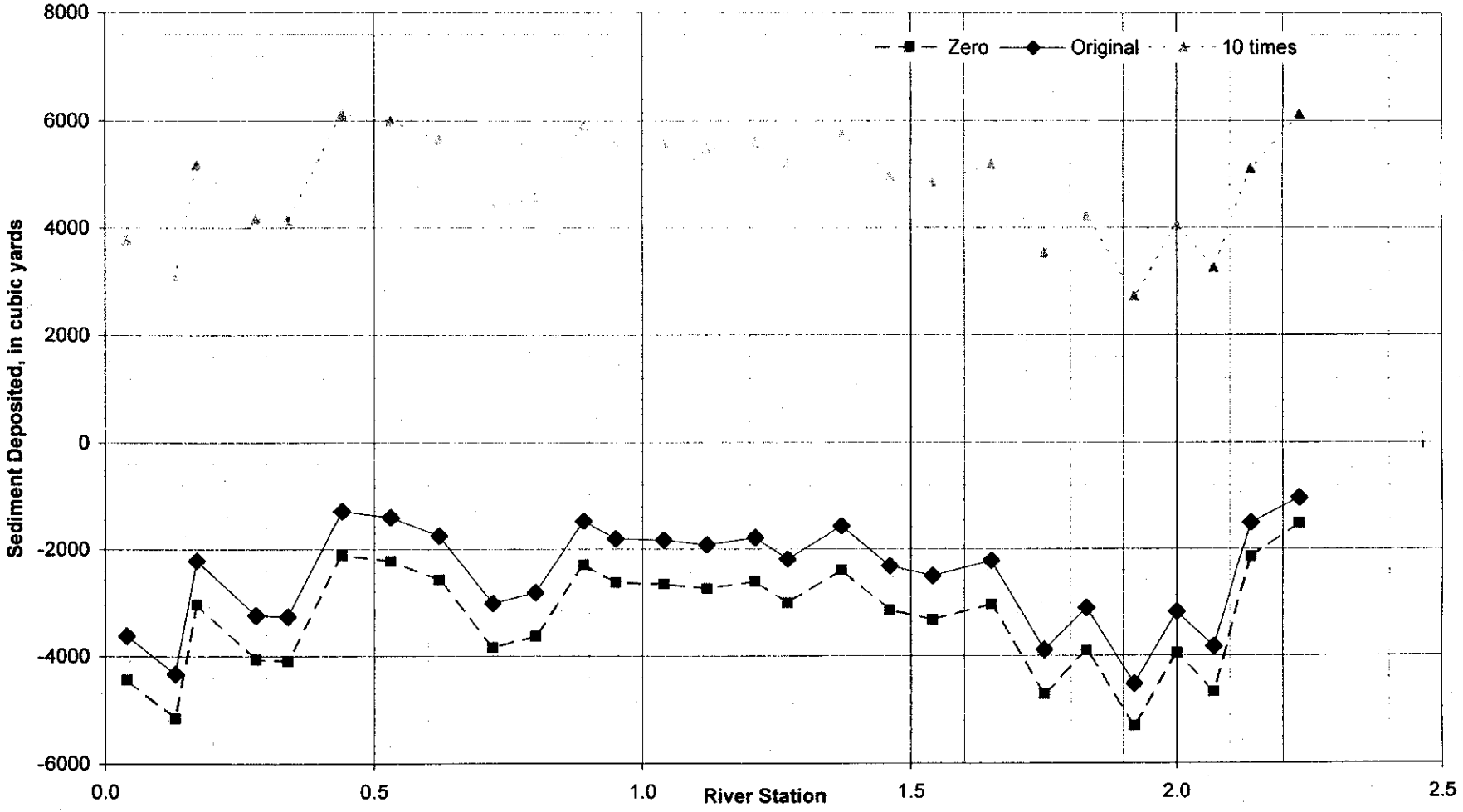
Inflowing Sediment Sensitivity Analysis
Bed Elevation Change at Last Time Step
Paradise Wash Main Channel Model, 100-year Flood, Future Condition



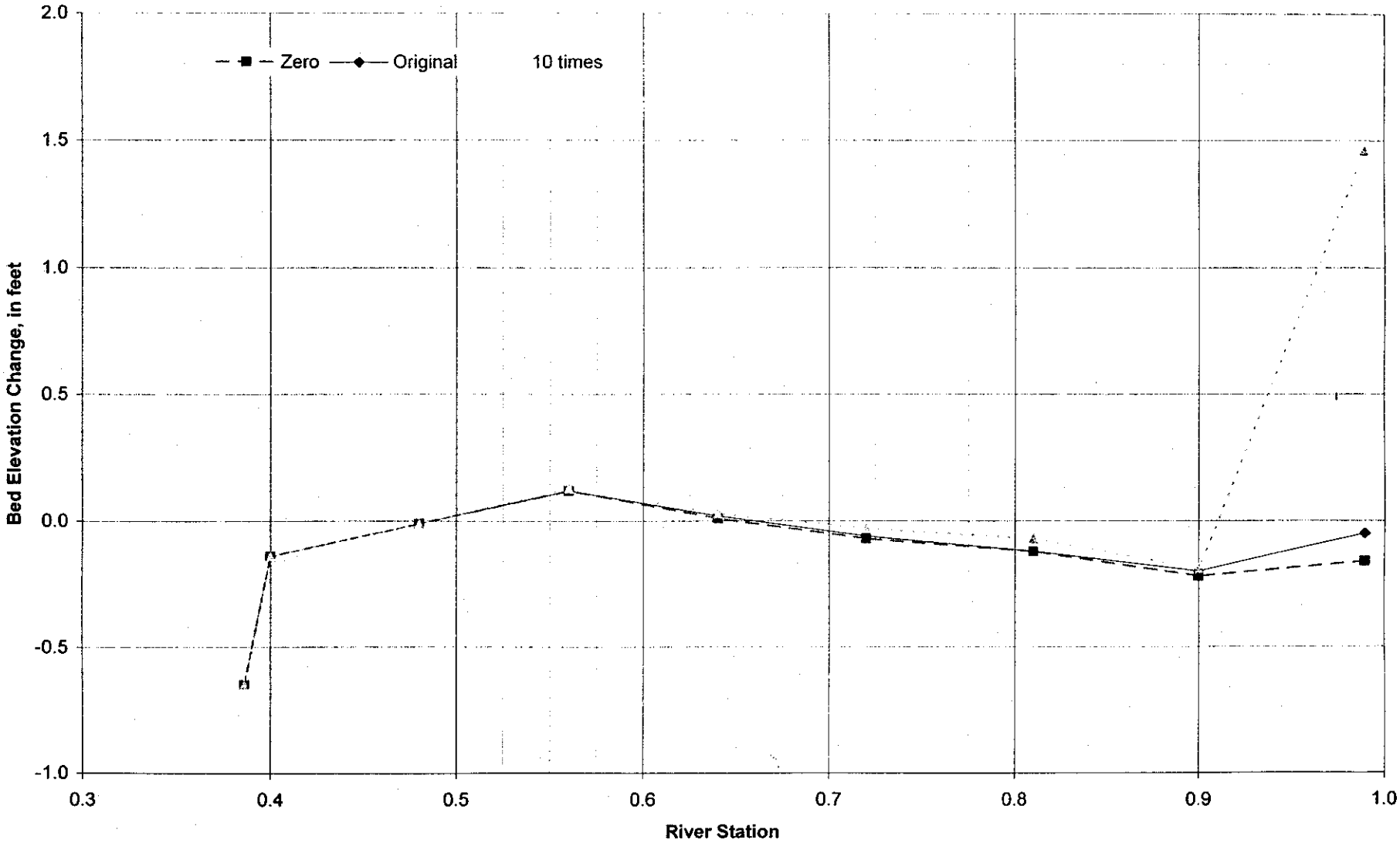
Inflowing Sediment Sensitivity Analysis
Sediment Passing Through Section
Paradise Wash Main Channel Model, 100-year Flood, Future Condition



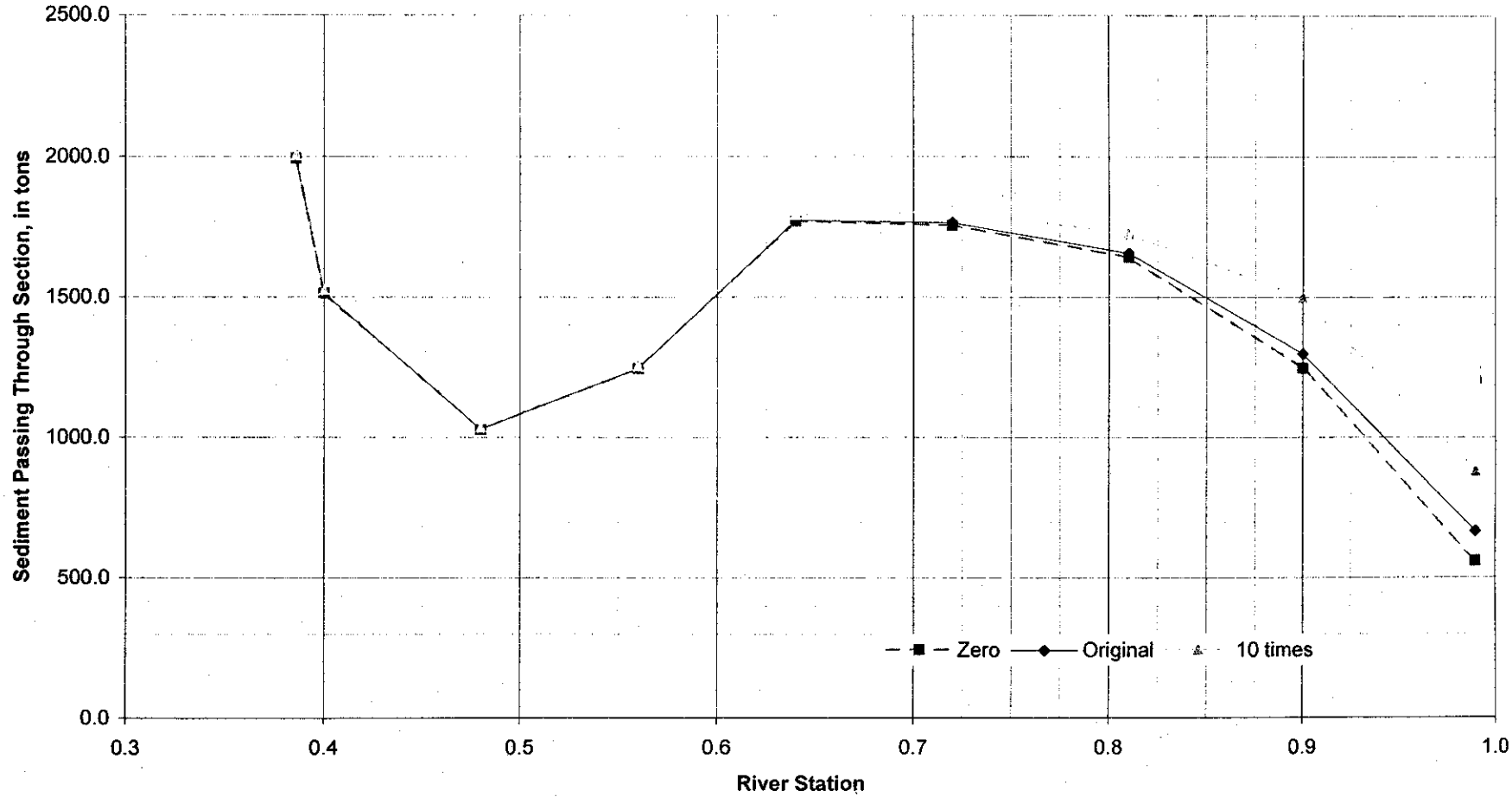
Inflowing Sediment Sensitivity Analysis
Accumulative Sediment Deposited Upstream of Section
Paradise Wash Main Channel Model, 100-year Flood, Future Condition



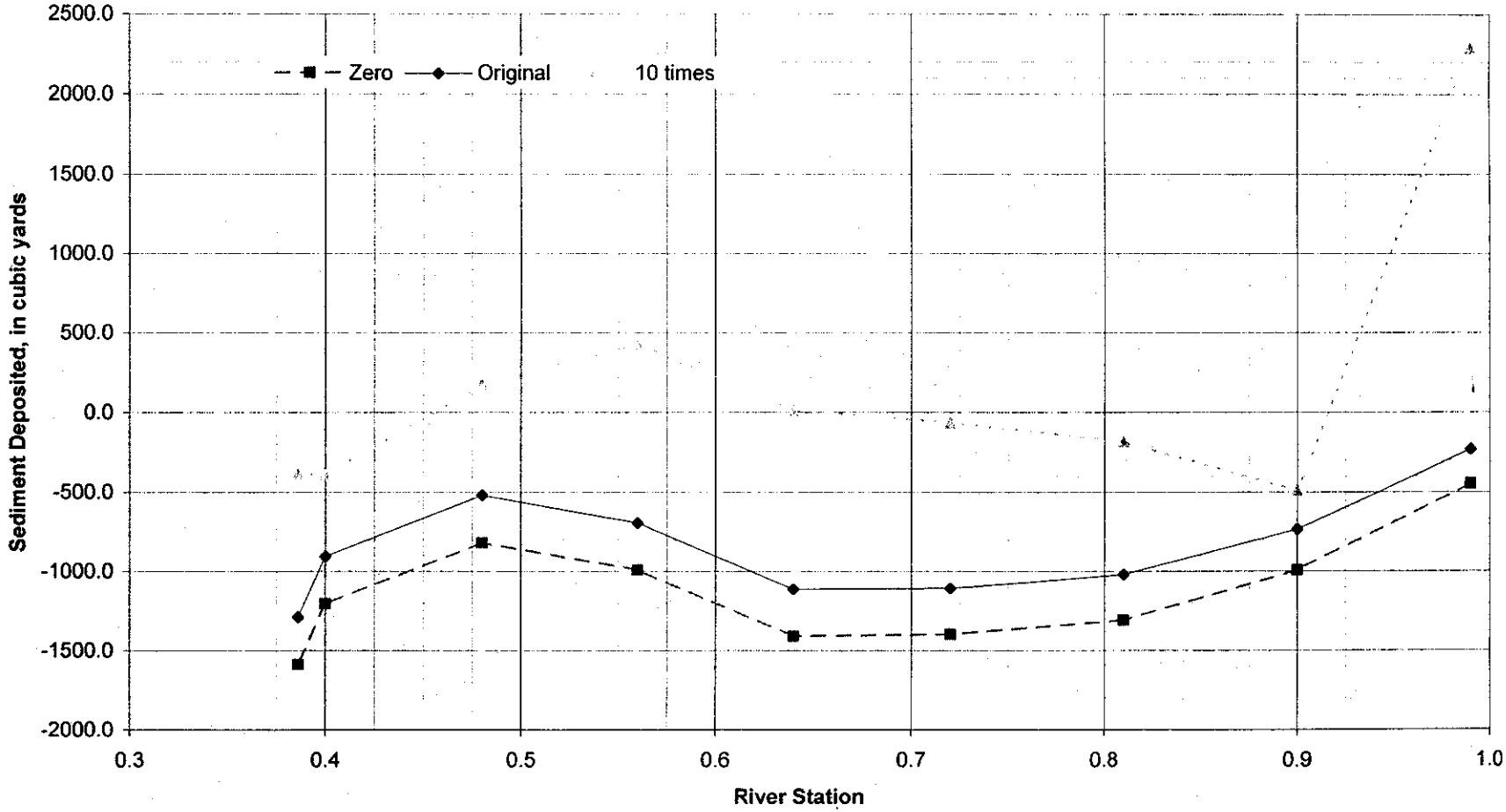
Inflowing Sediment Sensitivity Analysis
Bed Elevation Change at Last Time Step
Desert Hills Wash Main Channel Model, 100-year Flood, Future Condition



Inflowing Sediment Sensitivity Analysis
Sediment Passing Through Section
Desert Hills Wash Main Channel Model, 100-year Flood, Future Condition



Inflowing Sediment Sensitivity Analysis
Accumulative Sediment Deposited Upstream of Section
Desert Hills Wash Main Channel Model, 100-year Flood, Future Condition



APPENDIX J

CD OF HEC-RAS AND HEC-6 MODEL FILES

APPENDIX K

GRAPHICAL REPRESENTATION OF 100-YEAR HEC-6 MODEL RESULTS

Index Graphs of 100-year HEC-6 Model Results

Number	Figure Name
CC-C-1	Bed Elevation Change at Last Time Step, Cave Creek Main Channel Model, 100-year Flood, Existing Condition
CC-C-2	Minimum and Maximum Bed Elevation Change During Flood, Cave Creek Main Channel Model, 100-year Flood, Existing Condition
CC-C-3	Sediment Load Passing Through Section, Cave Creek Main Channel Model, 100-year Flood, Existing Condition
CC-C-4	Accumulative Sediment Deposited Upstream of Section, Cave Creek Main Channel Model, 100-year Flood, Existing Condition
CC-C-5	Bed Elevation Change at Last Time Step, Cave Creek Main Channel Model, 100-year Flood, Future Condition
CC-C-6	Minimum and Maximum Bed Elevation Change During Flood, Cave Creek Main Channel Model, 100-year Flood, Future Condition
CC-C-7	Sediment Load Passing Through Section, Cave Creek Main Channel Model, 100-year Flood, Future Condition
CC-C-8	Accumulative Sediment Deposited Upstream of Section, Cave Creek Main Channel Model, 100-year Flood, Future Condition
CC-C-9	Sediment Load vs. Time (Sta. 29.601), Cave Creek Main Channel Model, 100-year Flood, Future Condition
CC-C-10	Sediment Load vs. Time (Sta. 28.555), Cave Creek Main Channel Model, 100-year Flood, Future Condition
CC-C-11	Sediment Load vs. Time (Sta. 27.913), Cave Creek Main Channel Model, 100-year Flood, Future Condition
CC-C-12	Sediment Load vs. Time (Sta. 26.912), Cave Creek Main Channel Model, 100-year Flood, Future Condition
CC-C-13	Sediment Load vs. Time (Sta. 24.646), Cave Creek Main Channel Model, 100-year Flood, Future Condition
CC-O-1	Bed Elevation Change at Last Time Step, Cave Creek Overbank Model, 100-year Flood, Existing Condition
CC-O-2	Minimum and Maximum Bed Elevation Change During Flood, Cave Creek Overbank Model, 100-year Flood, Existing Condition
CC-O-3	Sediment Load Passing Through Section, Cave Creek Overbank Model, 100-year Flood, Existing Condition
CC-O-4	Accumulative Sediment Deposited Upstream of Section, Cave Creek Overbank Model, 100-year Flood, Existing Condition
CC-O-5	Bed Elevation Change at Last Time Step, Cave Creek Overbank Model, 100-year Flood, Future Condition
CC-O-6	Minimum and Maximum Bed Elevation Change During Flood, Cave Creek Overbank Model, 100-year Flood, Future Condition
CC-O-7	Sediment Load Passing Through Section, Cave Creek Overbank Model, 100-year Flood, Future Condition
CC-O-8	Accumulative Sediment Deposited Upstream of Section, Cave Creek Overbank Model, 100-year Flood, Future Condition
CC-O-9	Sediment Load vs. Time (Sta. 29.601), Cave Creek Overbank Model, 100-year Flood, Future Condition
CC-O-10	Sediment Load vs. Time (Sta. 28.555), Cave Creek Overbank Model, 100-year Flood, Future Condition
CC-O-11	Sediment Load vs. Time (Sta. 27.913), Cave Creek Overbank Model, 100-year Flood, Future Condition
CC-O-12	Sediment Load vs. Time (Sta. 26.912), Cave Creek Overbank Model, 100-year Flood, Future Condition
CC-O-13	Sediment Load vs. Time (Sta. 24.646), Cave Creek Overbank Model, 100-year Flood, Future Condition
AW-C-1	Bed Elevation Change at Last Time Step, Apache Wash Main Channel Model, 100-year Flood, Existing Condition
AW-C-2	Minimum and Maximum Bed Elevation Change During Flood, Apache Wash Main Channel Model, 100-year Flood, Existing Condition
AW-C-3	Sediment Load Passing Through Section, Apache Wash Main Channel Model, 100-year Flood, Existing Condition
AW-C-4	Accumulative Sediment Deposited Upstream of Section, Apache Wash Main Channel Model, 100-year Flood, Existing Condition
AW-C-5	Bed Elevation Change at Last Time Step, Apache Wash Main Channel Model, 100-year Flood, Future Condition
AW-C-6	Minimum and Maximum Bed Elevation Change During Flood, Apache Wash Main Channel Model, 100-year Flood, Future Condition
AW-C-7	Sediment Load Passing Through Section, Apache Wash Main Channel Model, 100-year Flood, Future Condition
AW-C-8	Accumulative Sediment Deposited Upstream of Section, Apache Wash Main Channel Model, 100-year Flood, Future Condition
AW-C-9	Sediment Load vs. Time (Sta. 3.047), Apache Wash Main Channel Model, 100-year Flood, Future Condition
AW-C-10	Sediment Load vs. Time (Sta. 2.97), Apache Wash Main Channel Model, 100-year Flood, Future Condition
AW-C-11	Sediment Load vs. Time (Sta. 2.73), Apache Wash Main Channel Model, 100-year Flood, Future Condition
AW-C-12	Sediment Load vs. Time (Sta. 2.6), Apache Wash Main Channel Model, 100-year Flood, Future Condition
AW-C-13	Sediment Load vs. Time (Sta. 0.2), Apache Wash Main Channel Model, 100-year Flood, Future Condition
AW-O-1	Bed Elevation Change at Last Time Step, Apache Wash Overbank Model, 100-year Flood, Existing Condition
AW-O-2	Minimum and Maximum Bed Elevation Change During Flood, Apache Wash Overbank Model, 100-year Flood, Existing Condition
AW-O-3	Sediment Load Passing Through Section, Apache Wash Overbank Model, 100-year Flood, Existing Condition
AW-O-4	Accumulative Sediment Deposited Upstream of Section, Apache Wash Overbank Model, 100-year Flood, Existing Condition
AW-O-5	Bed Elevation Change at Last Time Step, Apache Wash Overbank Model, 100-year Flood, Future Condition
AW-O-6	Minimum and Maximum Bed Elevation Change During Flood, Apache Wash Overbank Model, 100-year Flood, Future Condition
AW-O-7	Sediment Load Passing Through Section, Apache Wash Overbank Model, 100-year Flood, Future Condition
AW-O-8	Accumulative Sediment Deposited Upstream of Section, Apache Wash Overbank Model, 100-year Flood, Future Condition
AW-O-9	Sediment Load vs. Time (Sta. 3.047), Apache Wash Overbank Model, 100-year Flood, Future Condition
AW-O-10	Sediment Load vs. Time (Sta. 2.97), Apache Wash Overbank Model, 100-year Flood, Future Condition
AW-O-11	Sediment Load vs. Time (Sta. 2.73), Apache Wash Overbank Model, 100-year Flood, Future Condition
AW-O-12	Sediment Load vs. Time (Sta. 2.6), Apache Wash Overbank Model, 100-year Flood, Future Condition
AW-O-13	Sediment Load vs. Time (Sta. 0.2), Apache Wash Overbank Model, 100-year Flood, Future Condition
PW-C-1	Bed Elevation Change at Last Time Step, Paradise Wash Main Channel Model, 100-year Flood, Existing Condition
PW-C-2	Minimum and Maximum Bed Elevation Change During Flood, Paradise Wash Main Channel Model, 100-year Flood, Existing

	Condition
PW-C-3	Sediment Load Passing Through Section, Paradise Wash Main Channel Model, 100-year Flood, Existing Condition
PW-C-4	Accumulative Sediment Deposited Upstream of Section, Paradise Wash Main Channel Model, 100-year Flood, Existing Condition
PW-C-5	Bed Elevation Change at Last Time Step, Paradise Wash Main Channel Model, 100-year Flood, Future Condition
PW-C-6	Minimum and Maximum Bed Elevation Change During Flood, Paradise Wash Main Channel Model, 100-year Flood, Future Condition
PW-C-7	Sediment Load Passing Through Section, Paradise Wash Main Channel Model, 100-year Flood, Future Condition
PW-C-8	Accumulative Sediment Deposited Upstream of Section, Paradise Wash Main Channel Model, 100-year Flood, Future Condition
PW-O-1	Bed Elevation Change at Last Time Step, Paradise Wash Overbank Model, 100-year Flood, Existing Condition
PW-O-2	Minimum and Maximum Bed Elevation Change During Flood, Paradise Wash Overbank Model, 100-year Flood, Existing Condition
PW-O-3	Sediment Load Passing Through Section, Paradise Wash Overbank Model, 100-year Flood, Existing Condition
PW-O-4	Accumulative Sediment Deposited Upstream of Section, Paradise Wash Overbank Model, 100-year Flood, Existing Condition
PW-O-5	Bed Elevation Change at Last Time Step, Paradise Wash Overbank Model, 100-year Flood, Future Condition
PW-O-6	Minimum and Maximum Bed Elevation Change During Flood, Paradise Wash Overbank Model, 100-year Flood, Future Condition
PW-O-7	Sediment Load Passing Through Section, Paradise Wash Overbank Model, 100-year Flood, Future Condition
PW-O-8	Accumulative Sediment Deposited Upstream of Section, Paradise Wash Overbank Model, 100-year Flood, Future Condition
DHW-C-1	Bed Elevation Change at Last Time Step, Desert Hills Wash Main Channel Model, 100-year Flood, Existing Condition
DHW-C-2	Minimum and Maximum Bed Elevation Change During Flood, Desert Hills Wash Main Channel Model, 100-year Flood, Existing Condition
DHW-C-3	Sediment Load Passing Through Section, Desert Hills Wash Main Channel Model, 100-year Flood, Existing Condition
DHW-C-4	Accumulative Sediment Deposited Upstream of Section, Desert Hills Wash Main Channel Model, 100-year Flood, Existing Condition
DHW-C-5	Bed Elevation Change at Last Time Step, Desert Hills Wash Main Channel Model, 100-year Flood, Future Condition
DHW-C-6	Minimum and Maximum Bed Elevation Change During Flood, Desert Hills Wash Main Channel Model, 100-year Flood, Future Condition
DHW-C-7	Sediment Load Passing Through Section, Desert Hills Wash Main Channel Model, 100-year Flood, Future Condition
DHW-C-8	Accumulative Sediment Deposited Upstream of Section, Desert Hills Wash Main Channel Model, 100-year Flood, Future Condition
DHW-O-1	Bed Elevation Change at Last Time Step, Desert Hills Wash Overbank Model, 100-year Flood, Existing Condition
DHW-O-2	Minimum and Maximum Bed Elevation Change During Flood, Desert Hills Wash Overbank Model, 100-year Flood, Existing Condition
DHW-O-3	Sediment Load Passing Through Section, Desert Hills Wash Overbank Model, 100-year Flood, Existing Condition
DHW-O-4	Accumulative Sediment Deposited Upstream of Section, Desert Hills Wash Overbank Model, 100-year Flood, Existing Condition
DHW-O-5	Bed Elevation Change at Last Time Step, Desert Hills Wash Overbank Model, 100-year Flood, Future Condition
DHW-O-6	Minimum and Maximum Bed Elevation Change During Flood, Desert Hills Wash Overbank Model, 100-year Flood, Future Condition
DHW-O-7	Sediment Load Passing Through Section, Desert Hills Wash Overbank Model, 100-year Flood, Future Condition
DHW-O-8	Accumulative Sediment Deposited Upstream of Section, Desert Hills Wash Overbank Model, 100-year Flood, Future Condition

Figure CC-C-1
Bed Elevation Change at Last Time Step
Cave Creek Main Channel Model, 100-year Flood, Existing Condition

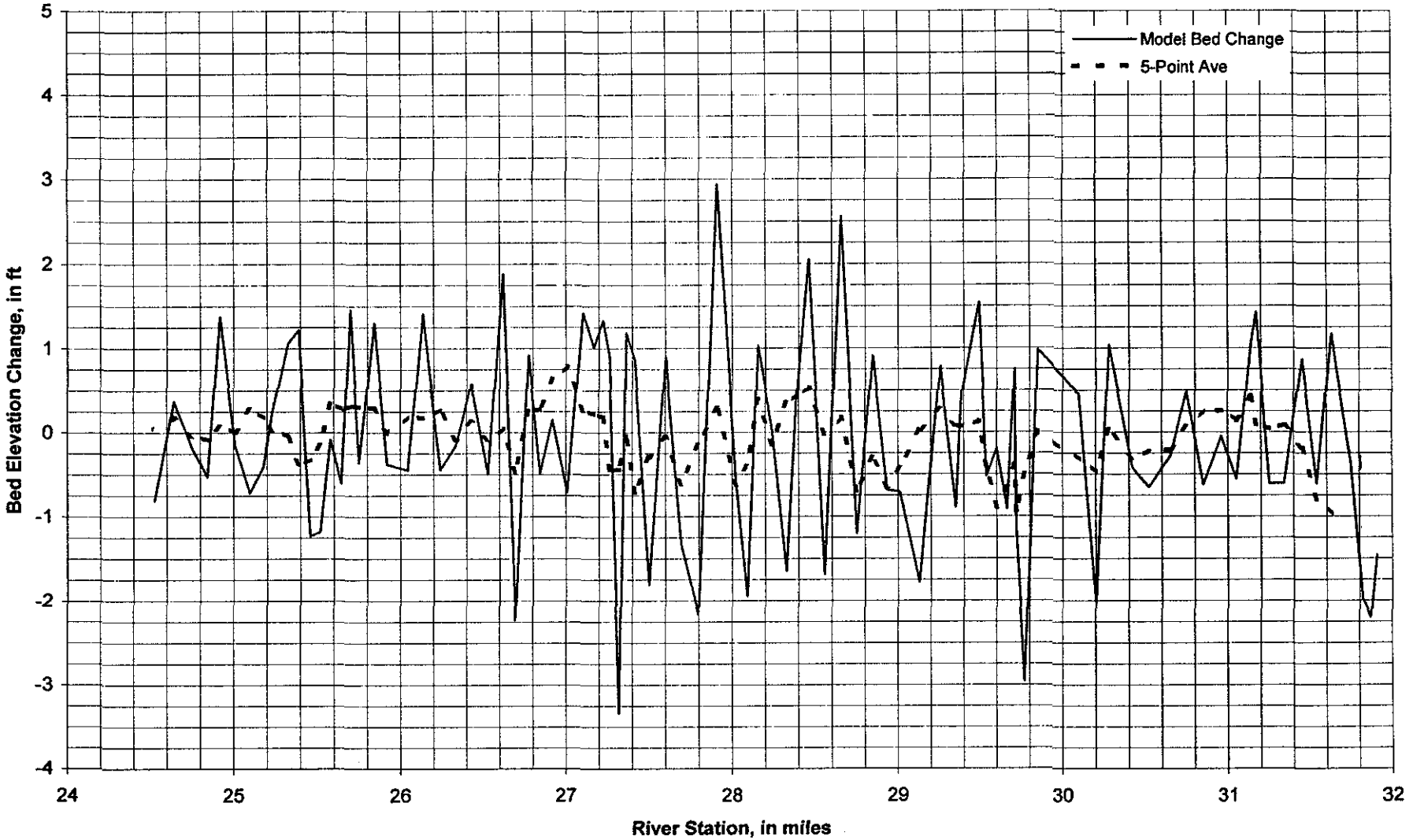


Figure CC-C-2
Minimum and Maximum Bed Elevation Change During Flood
Cave Creek Main Channel Model, 100-year Flood, Existing Condition

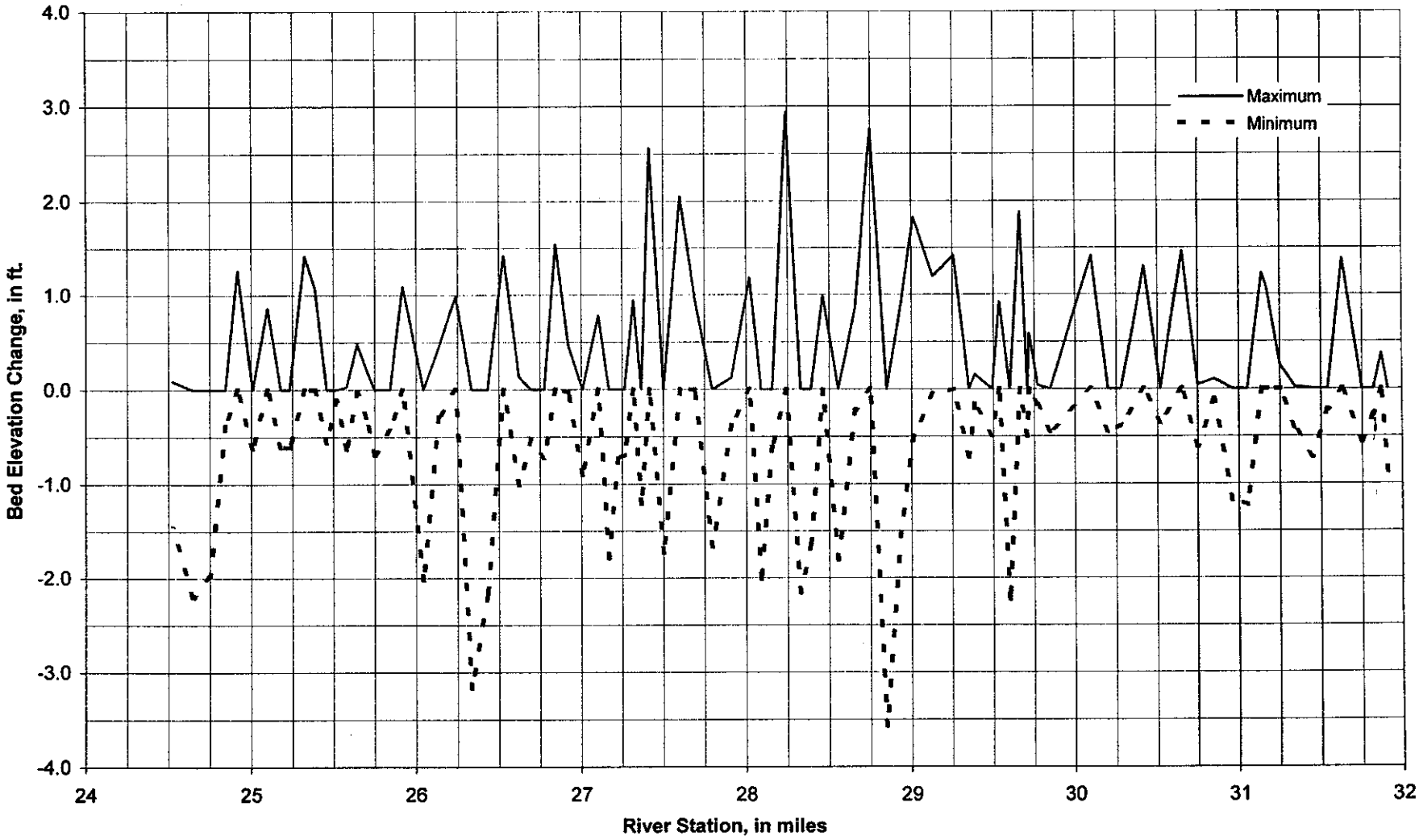


Figure CC-C-3
Sediment Load Passing Through Section
Cave Creek Main Channel Model, 100-year Flood, Existing Condition

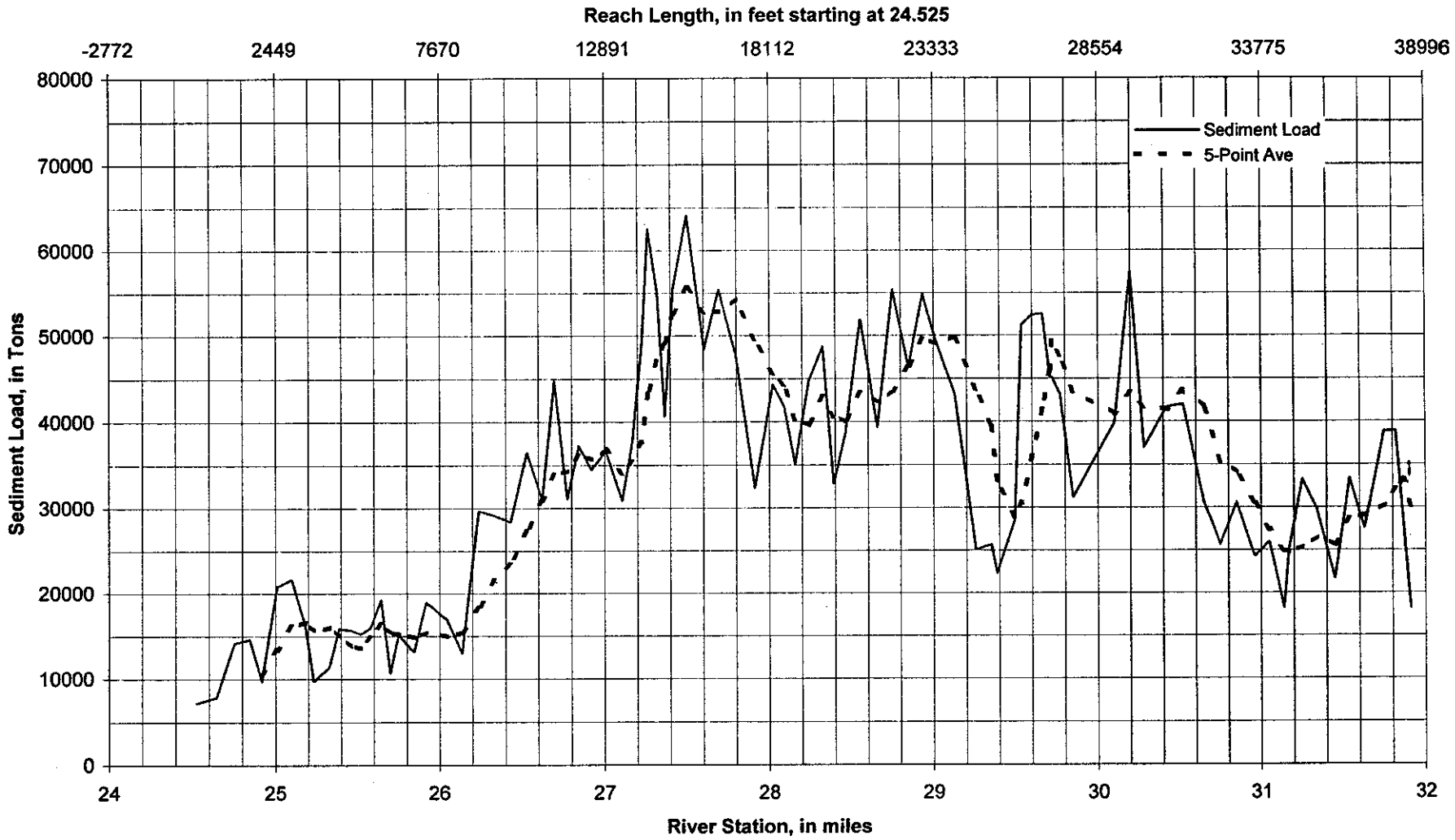


Figure CC-C-4
Accumulative Sediment Deposited Upstream of Section
Cave Creek Main Channel Model, 100-year Flood, Existing Condition

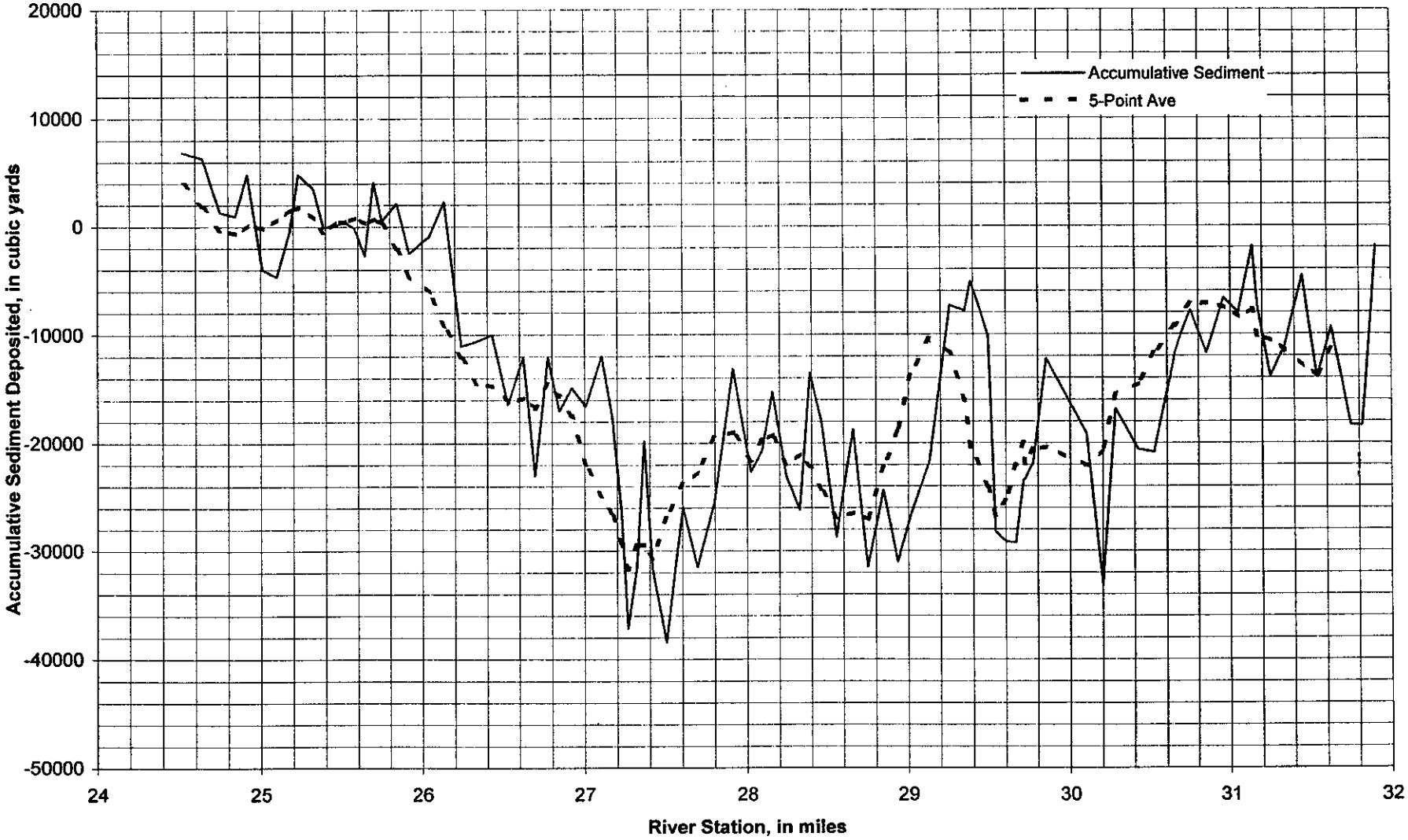


Figure CC-C-5
Bed Elevation Change at Last Time Step
Cave Creek Main Channel Model, 100-year Flood, Future Condition

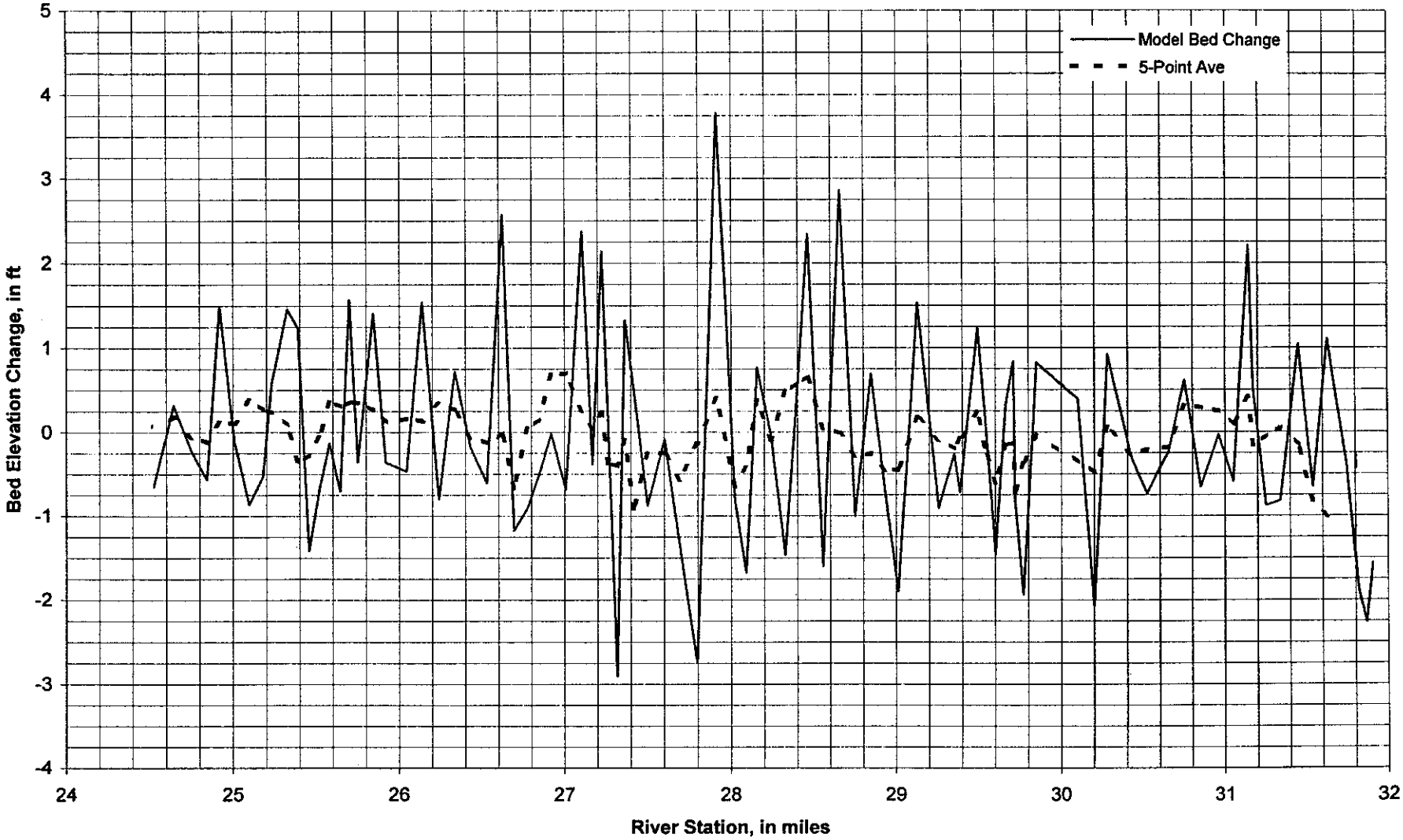


Figure CC-C-6
Minimum and Maximum Bed Elevation Change During Flood
Cave Creek Main Channel Model, 100-year Flood, Future Condition

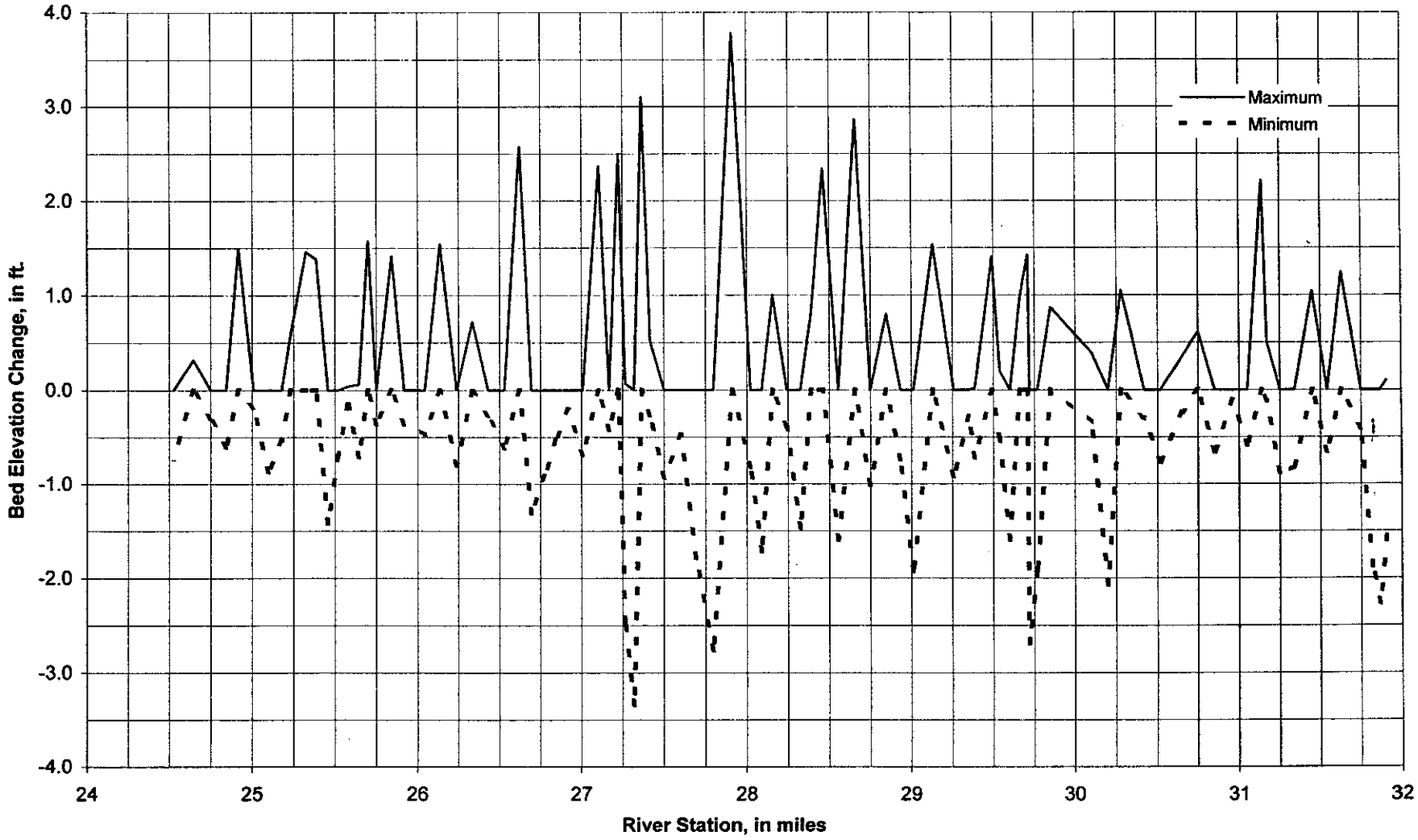


Figure CC-C-7
Sediment Load Passing Through Section
Cave Creek Main Channel Model, 100-year Flood, Future Condition

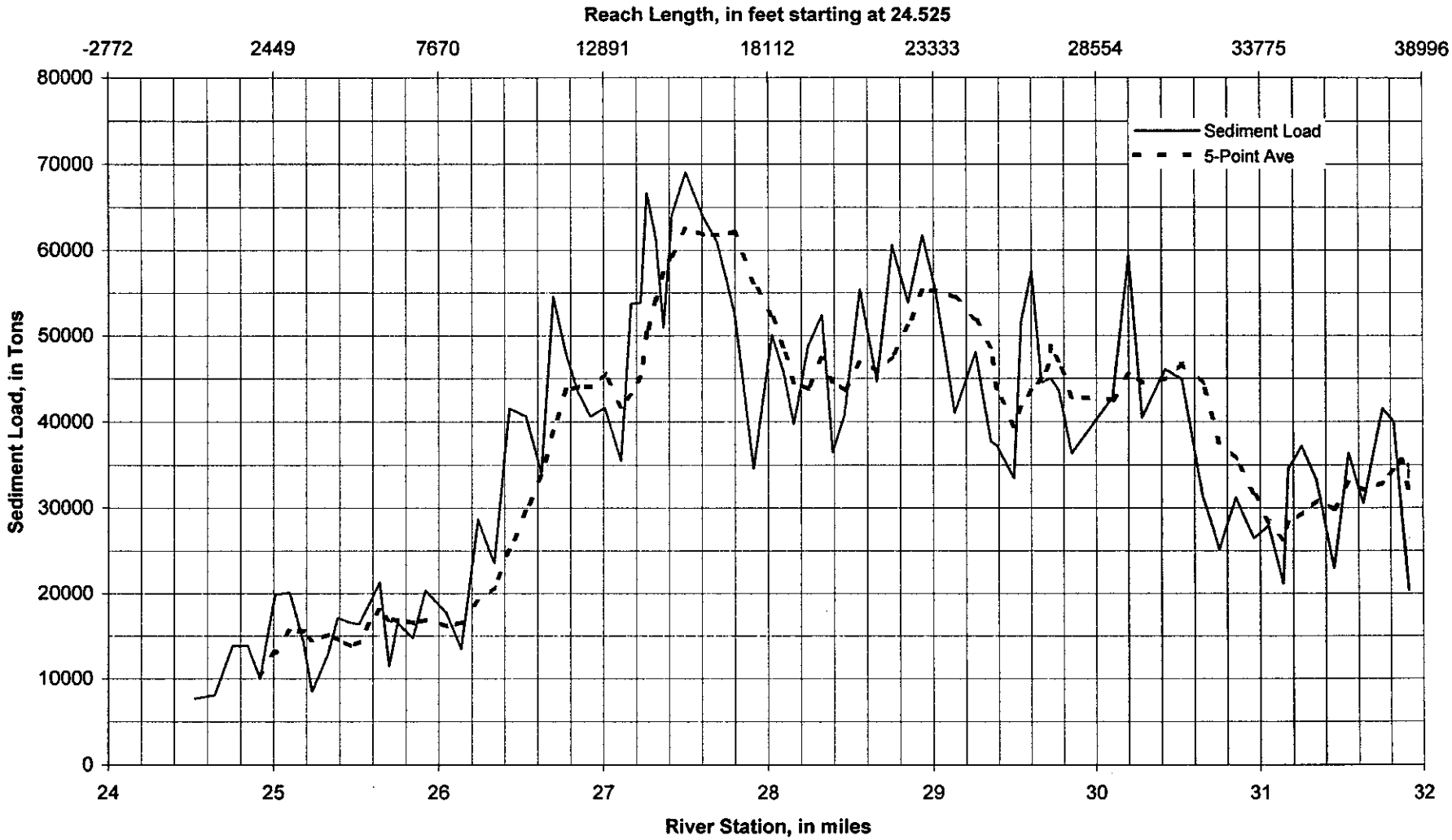


Figure CC-C-8
Accumulative Sediment Deposited Upstream of Section
Cave Creek Main Channel Model, 100-year Flood, Future Condition

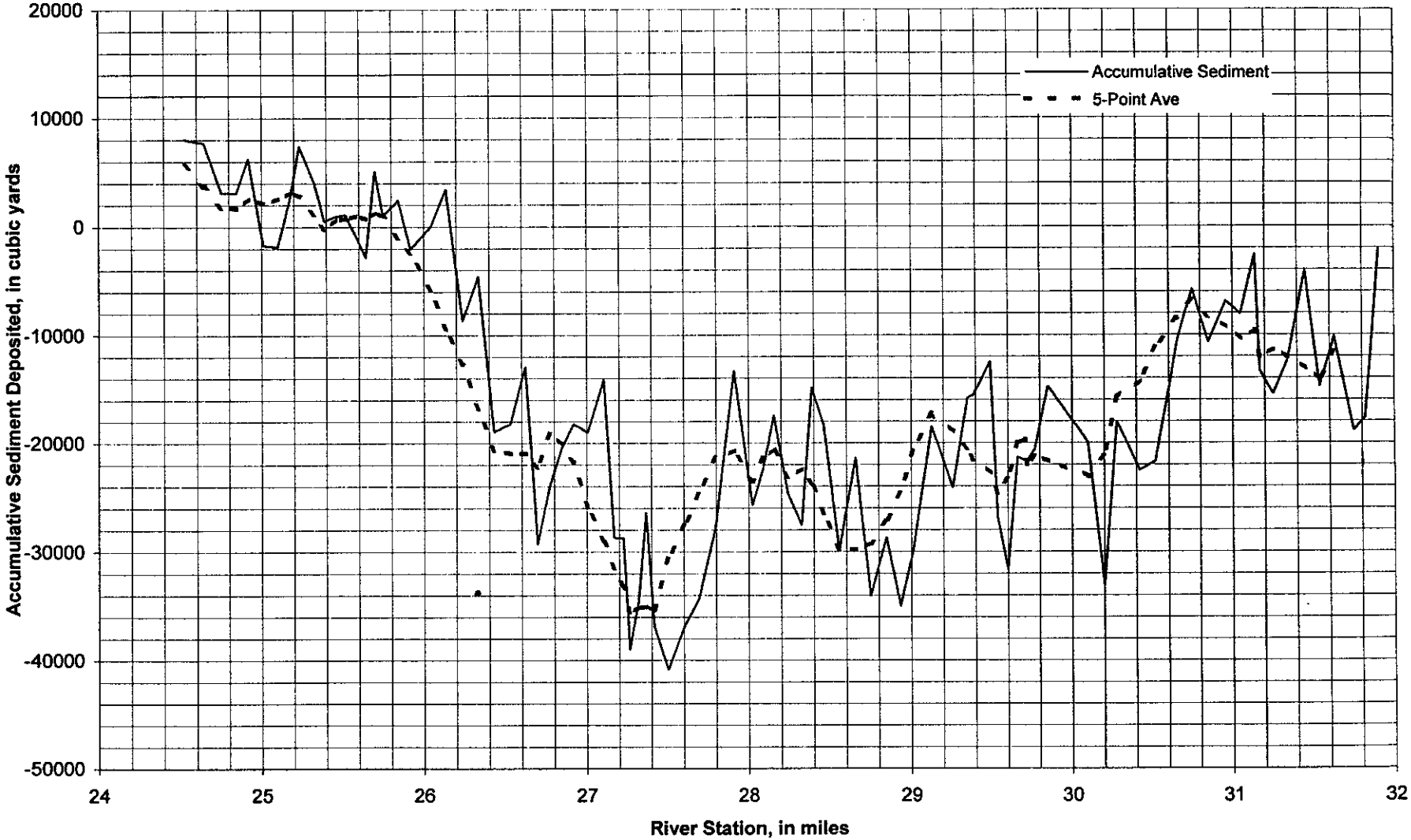


Figure CC-C-9
Sediment Load vs. Time (Sta. 29.601)
Cave Creek Main Channel Model, 100-year Flood, Future Condtion

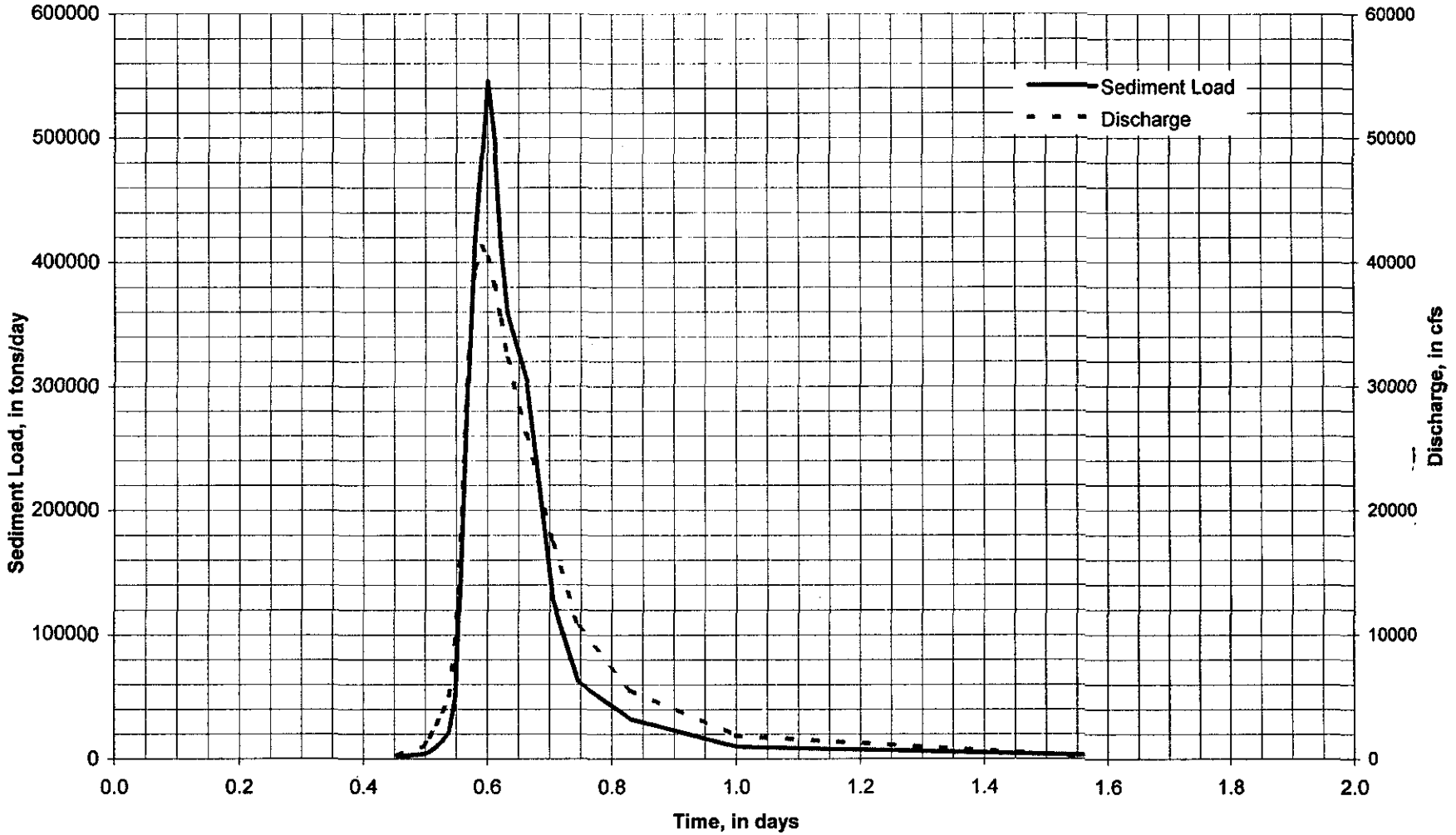


Figure CC-C-10
Sediment Load vs. Time (Sta. 28.555)
Cave Creek Main Channel Model, 100-year Flood, Future Condtion

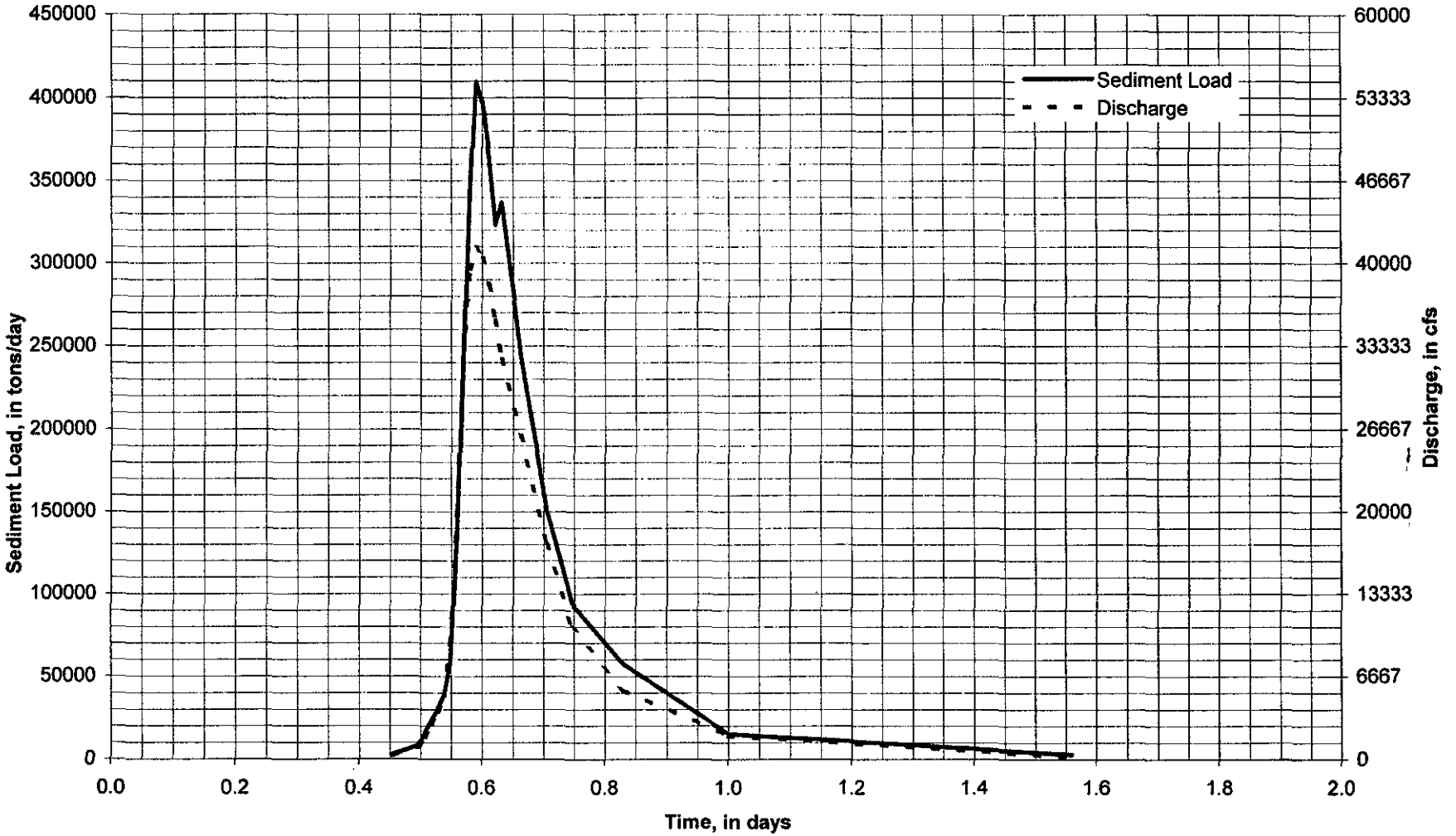


Figure CC-C-11
Sediment Load vs. Time (Sta. 27.913)
Cave Creek Main Channel Model, 100-year Flood, Future Condtion

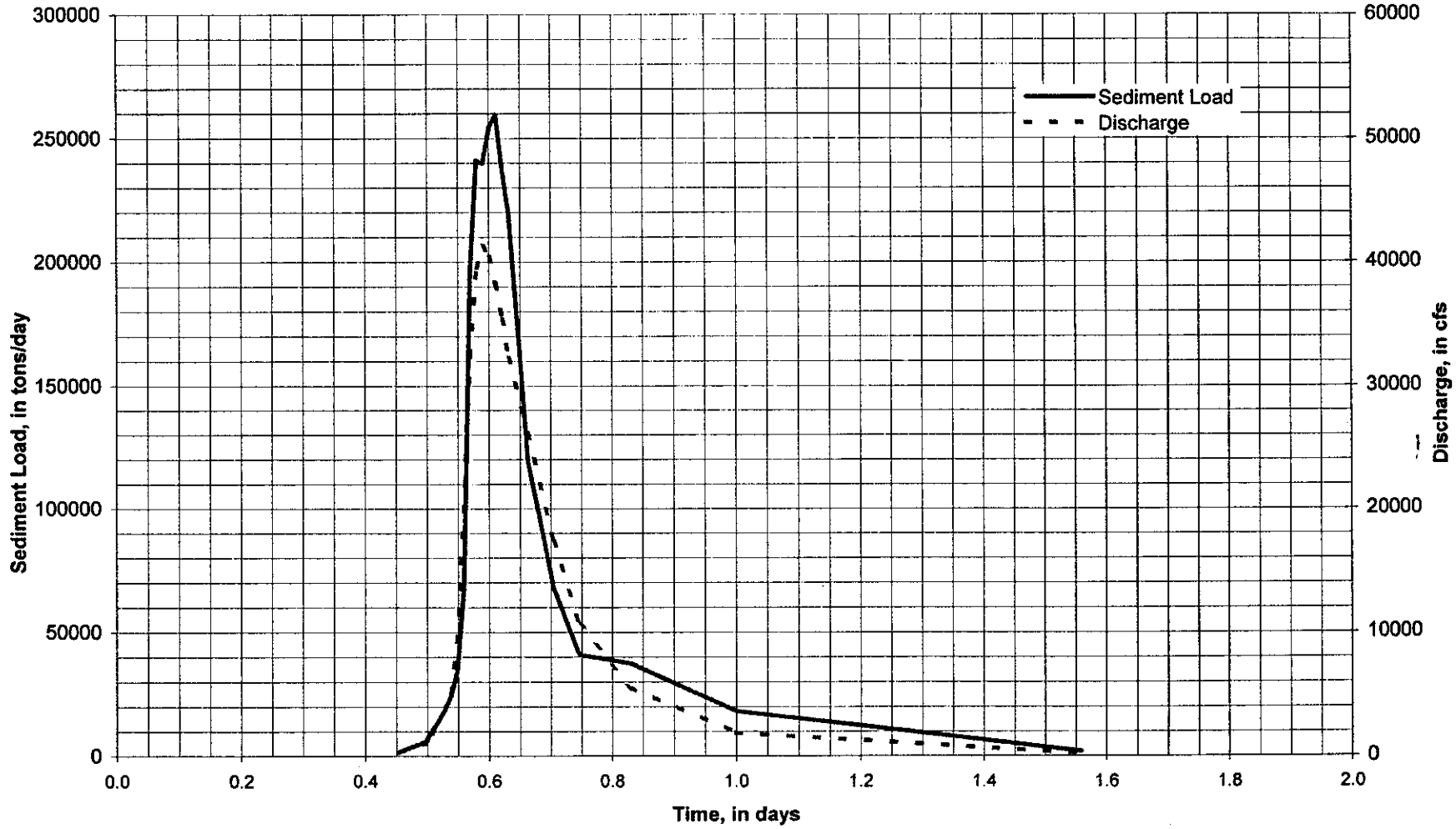


Figure CC-C-12
Sediment Load vs. Time (Sta. 26.912)
Cave Creek Main Channel Model, 100-year Flood, Future Condtion

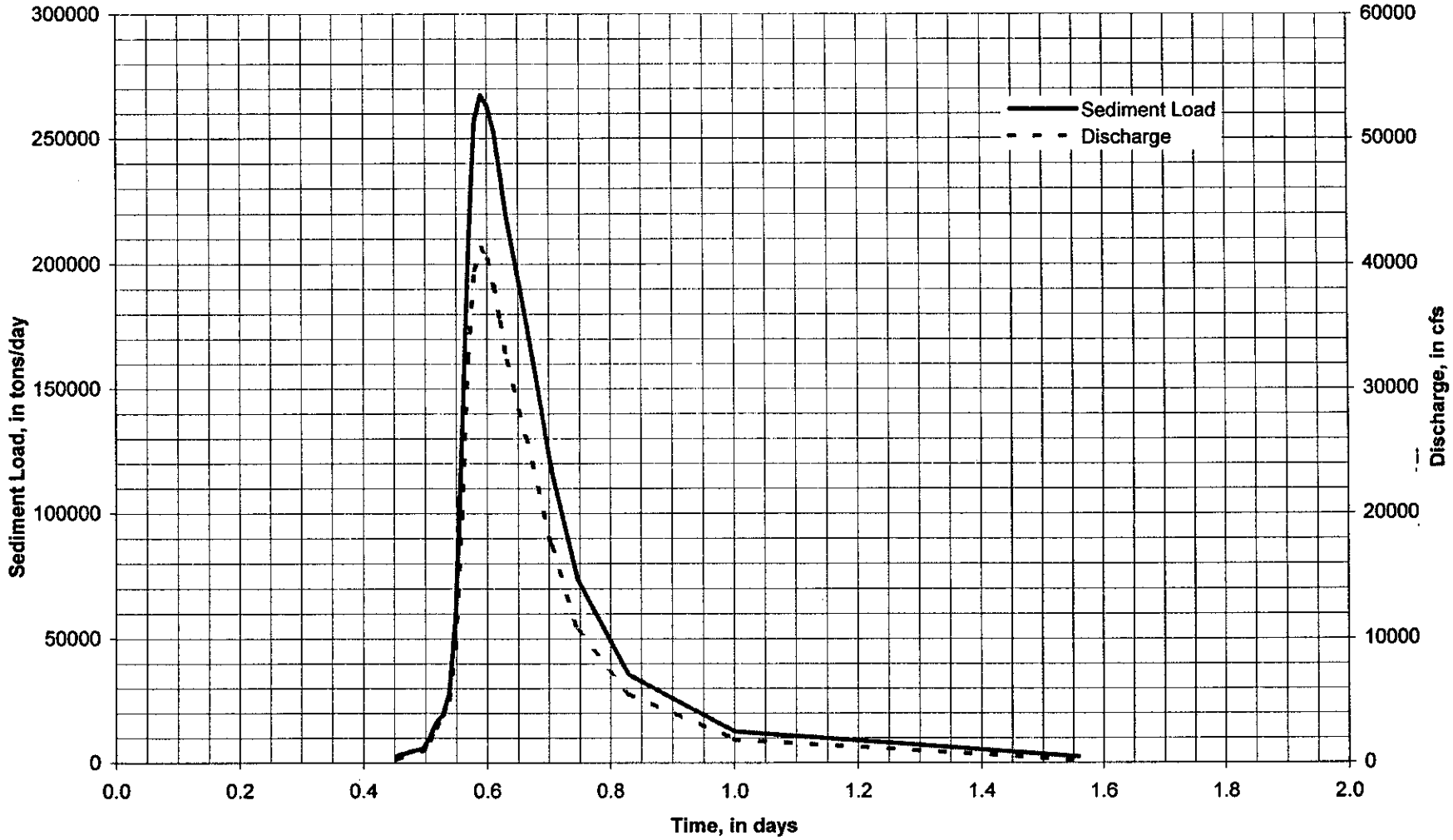


Figure CC-C-13
Sediment Load vs. Time (Sta. 24.646)
Cave Creek Main Channel Model, 100-year Flood, Future Condtion

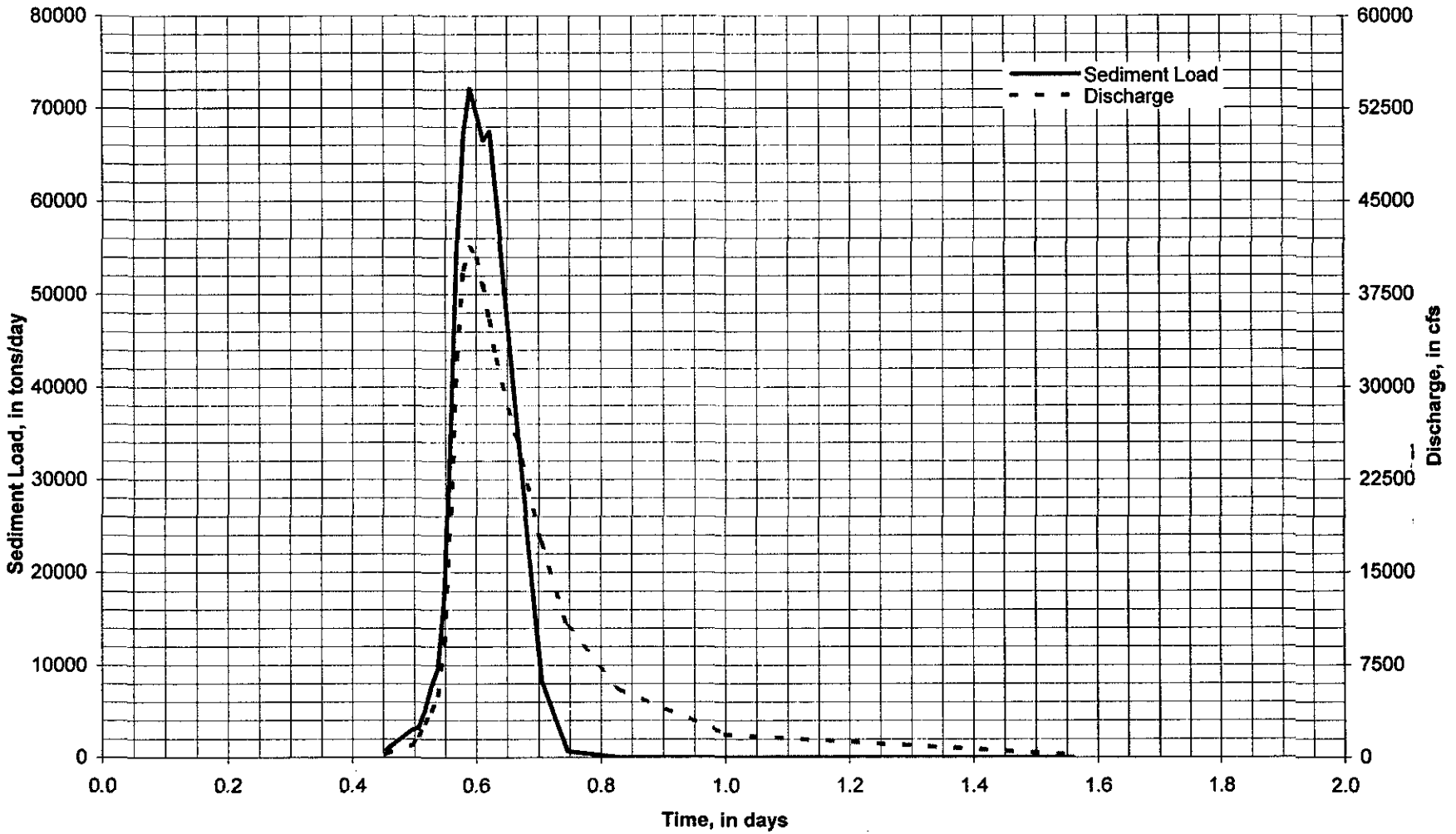


Figure CC-O-1
Bed Elevation Change at Last Time Step
Cave Creek Overbank Model, 100-year Flood, Existing Condition

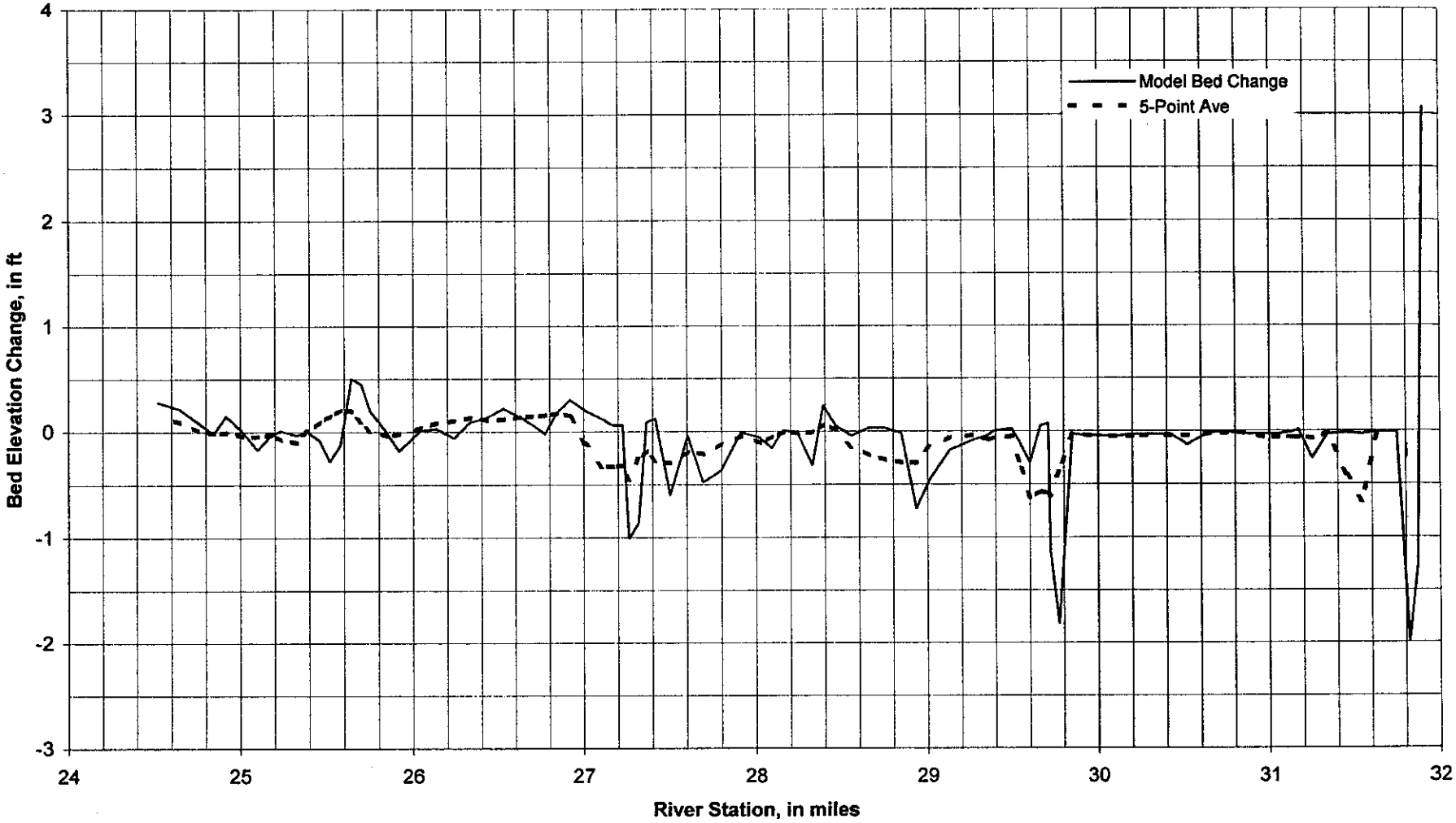


Figure CC-O-2
Minimum and Maximum Bed Elevation Change During Flood
Cave Creek Overbank Model, 100-year Flood, Existing Condition

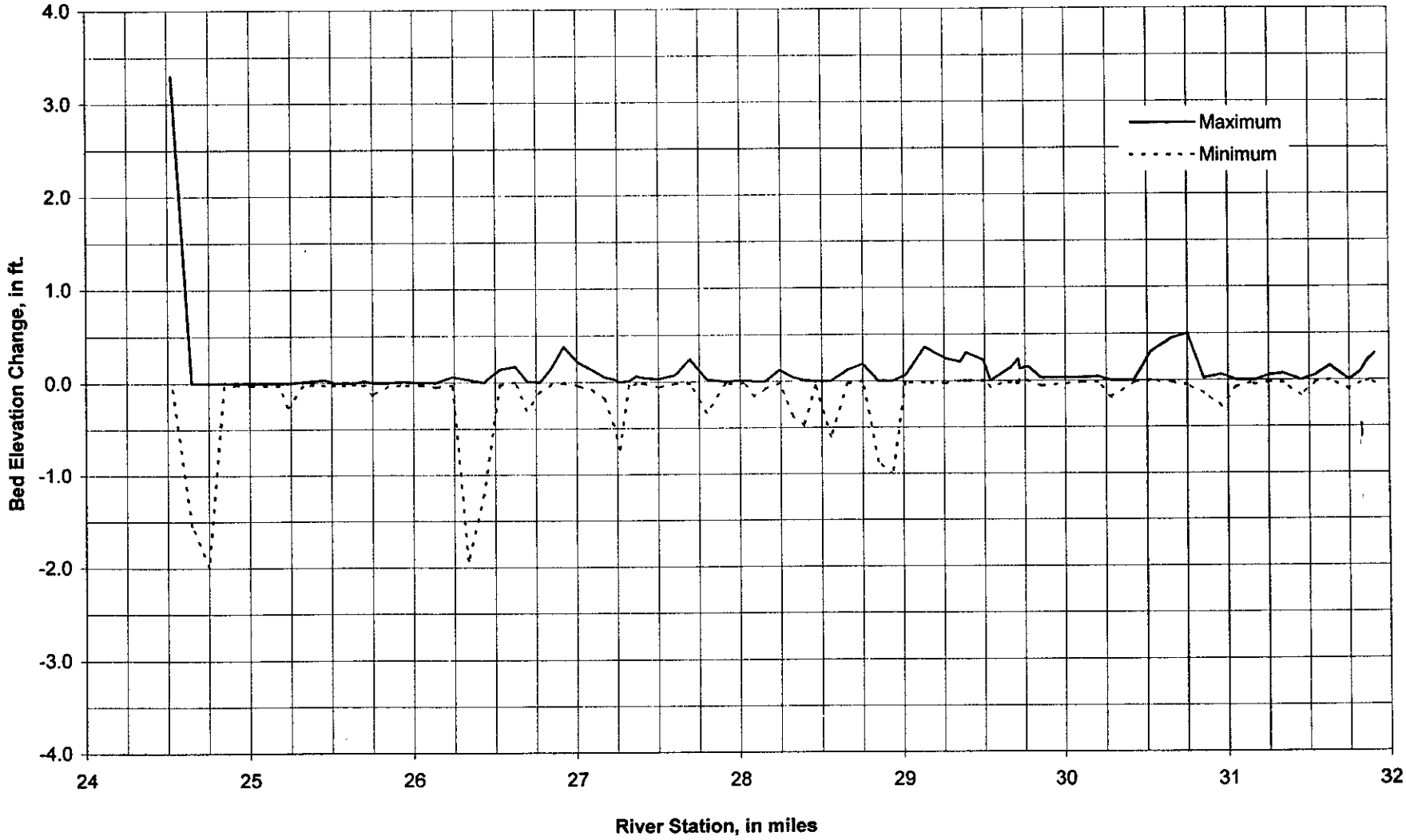


Figure CC-O-3
Sediment Load Passing Through Section
Cave Creek Overbank Model, 100-year Flood, Existing Condition

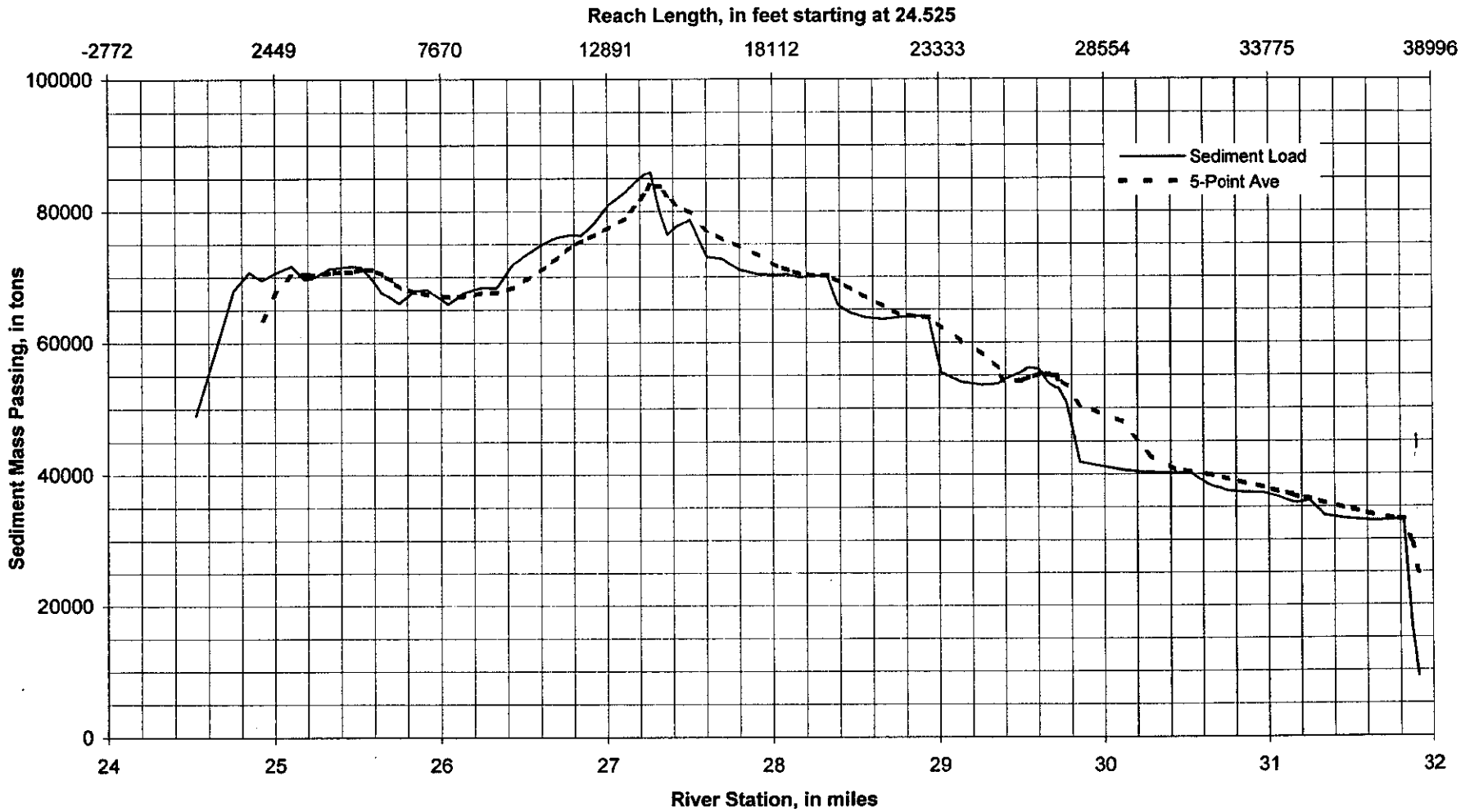


Figure CC-O-4
Accumulative Sediment Deposited Upstream of Section
Cave Creek Overbank Model, 100-year Flood, Existing Condition

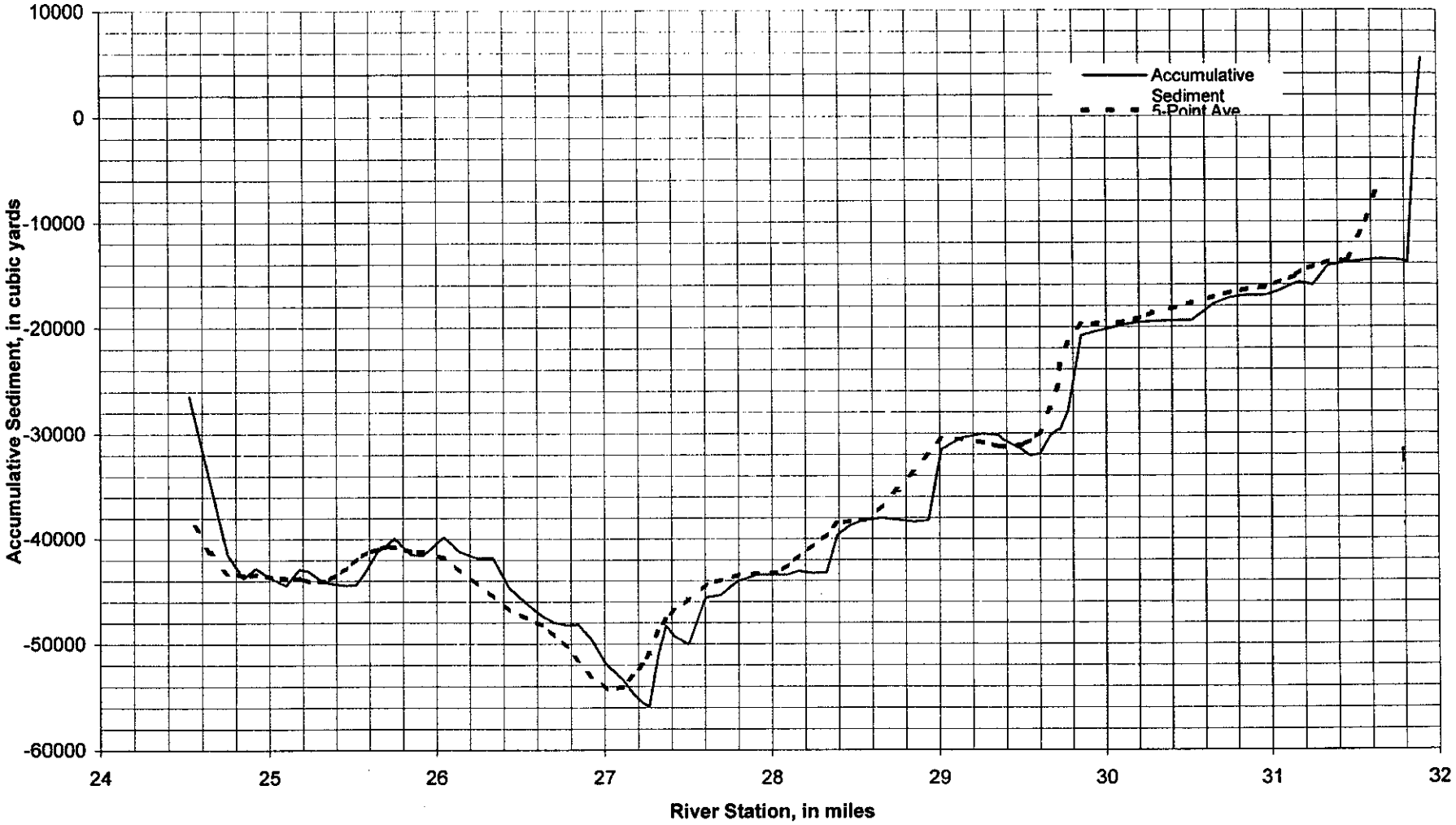


Figure CC-O-5
Bed Elevation Change at Last Time Step
Cave Creek Overbank Model, 100-year Flood, Future Condition

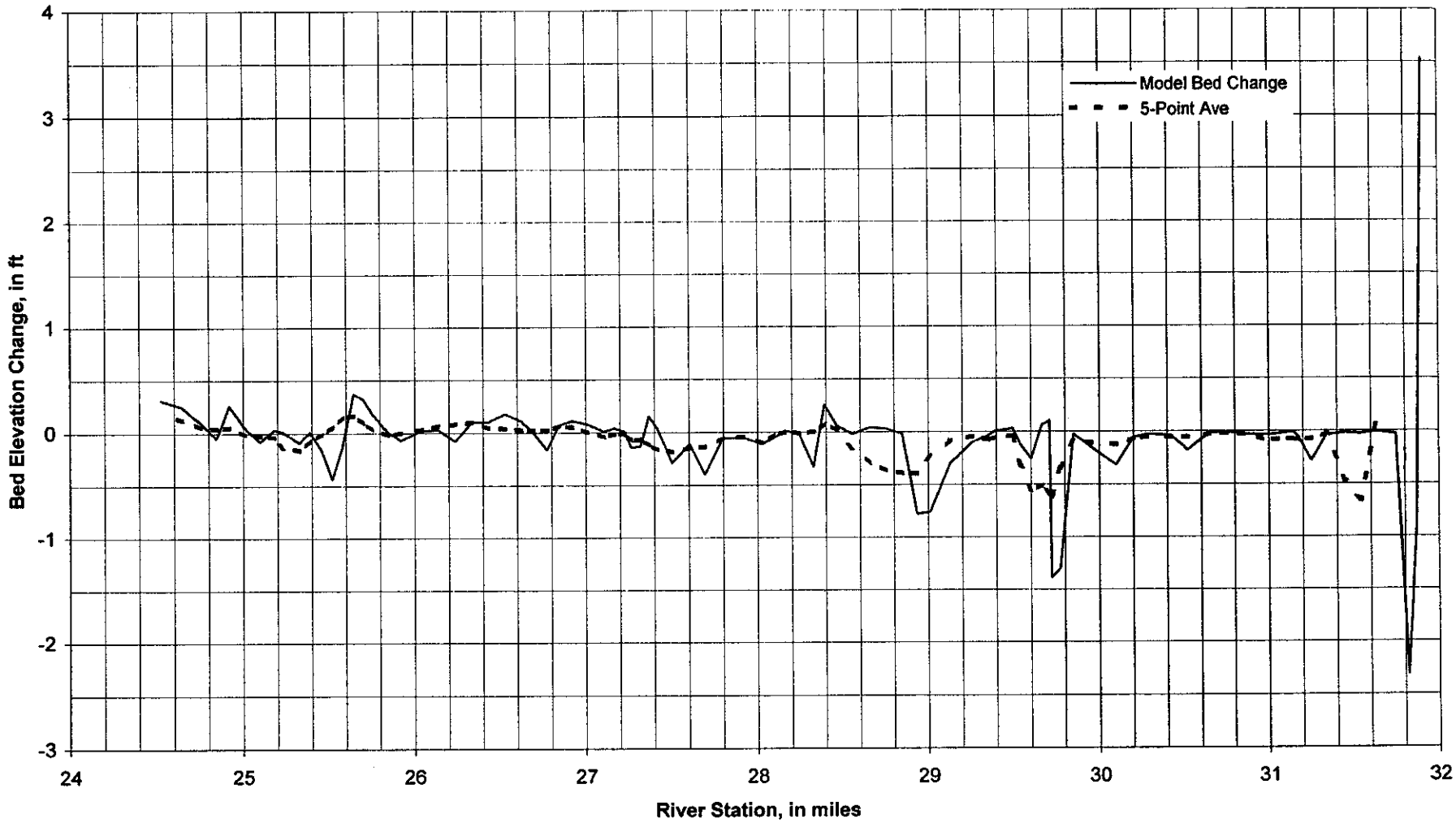


Figure CC-O-6
Minimum and Maximum Bed Elevation Change During Flood
Cave Creek Overbank Model, 100-year Flood, Future Condition

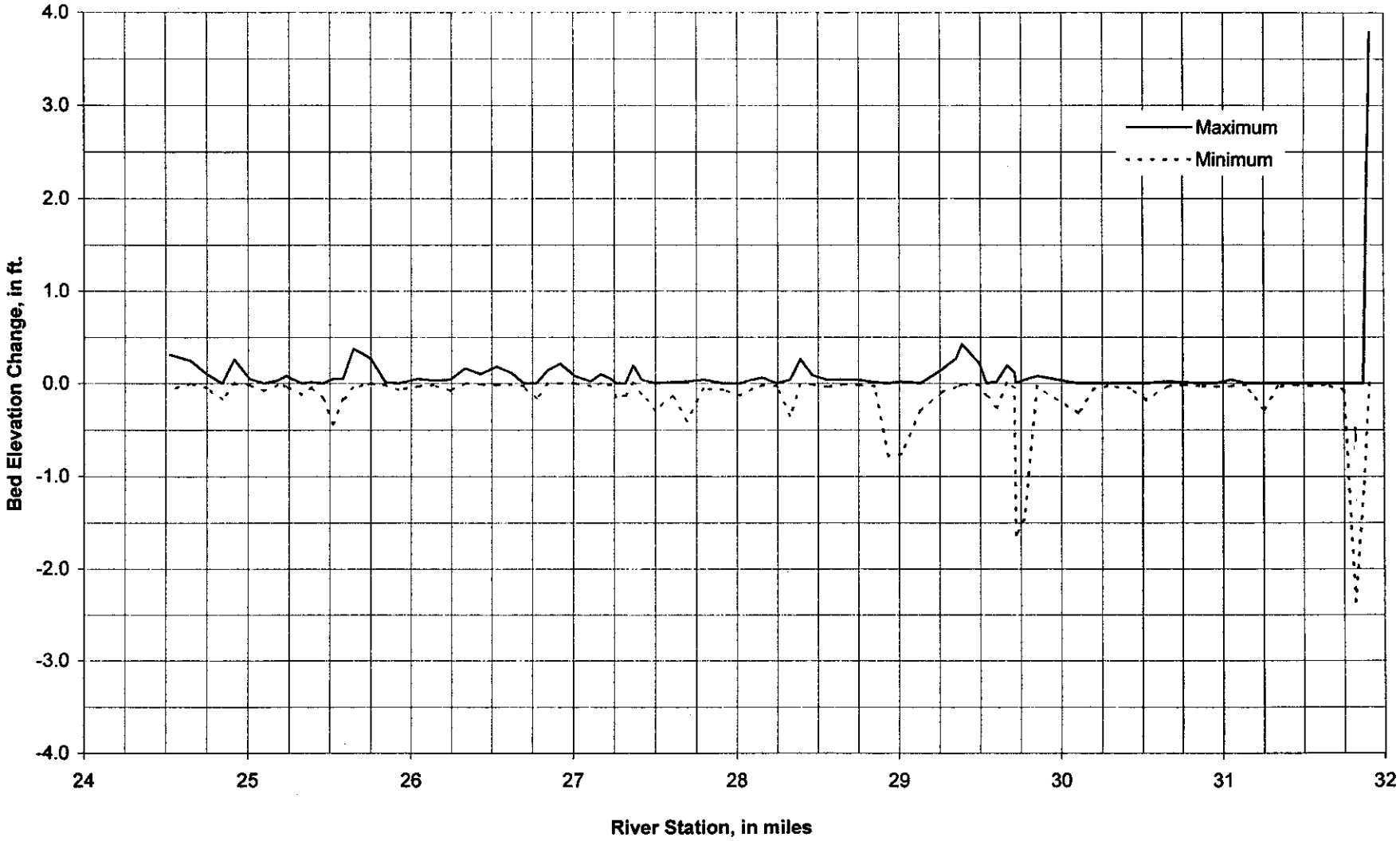


Figure CC-O-7
Sediment Load Passing Through Section
Cave Creek Overbank Model, 100-year Flood, Future Condition

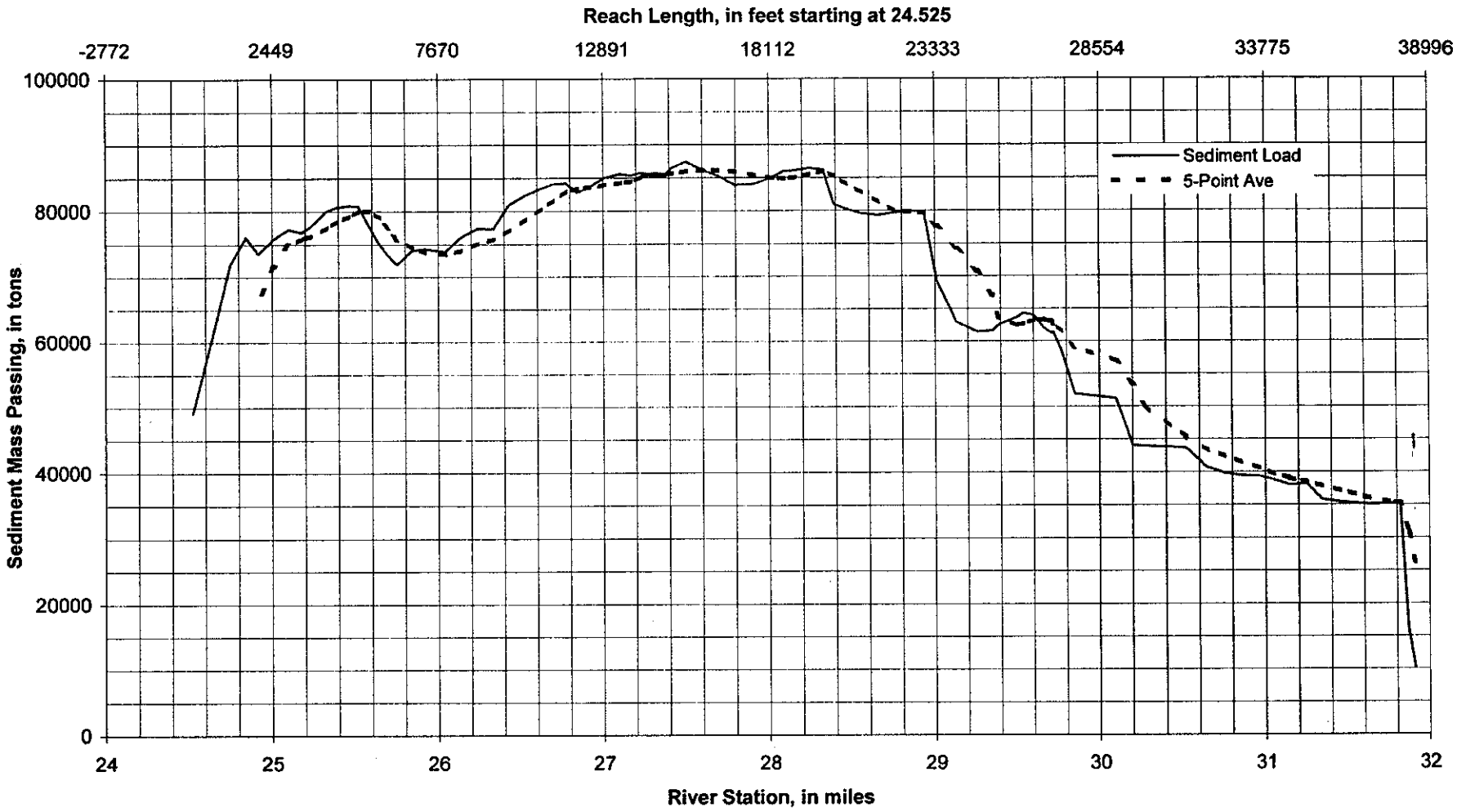


Figure CC-O-8
Accumulative Sediment Deposited Upstream of Section
Cave Creek Overbank Model, 100-year Flood, Future Condition

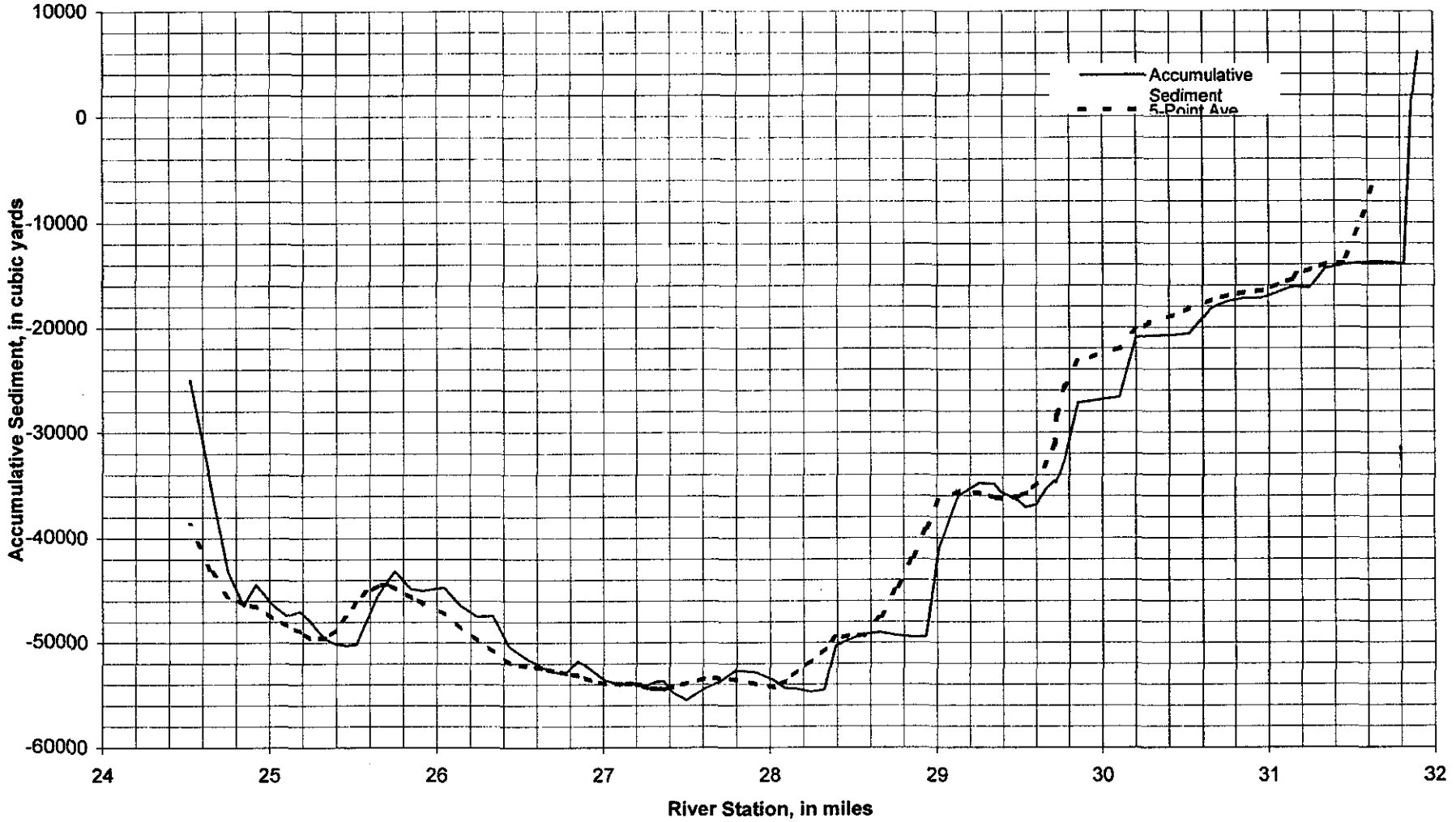


Figure CC-O-9
Sediment Load vs. Time (Sta. 29.601)
Cave Creek Overbank Model, 100-year Flood, Future Condition

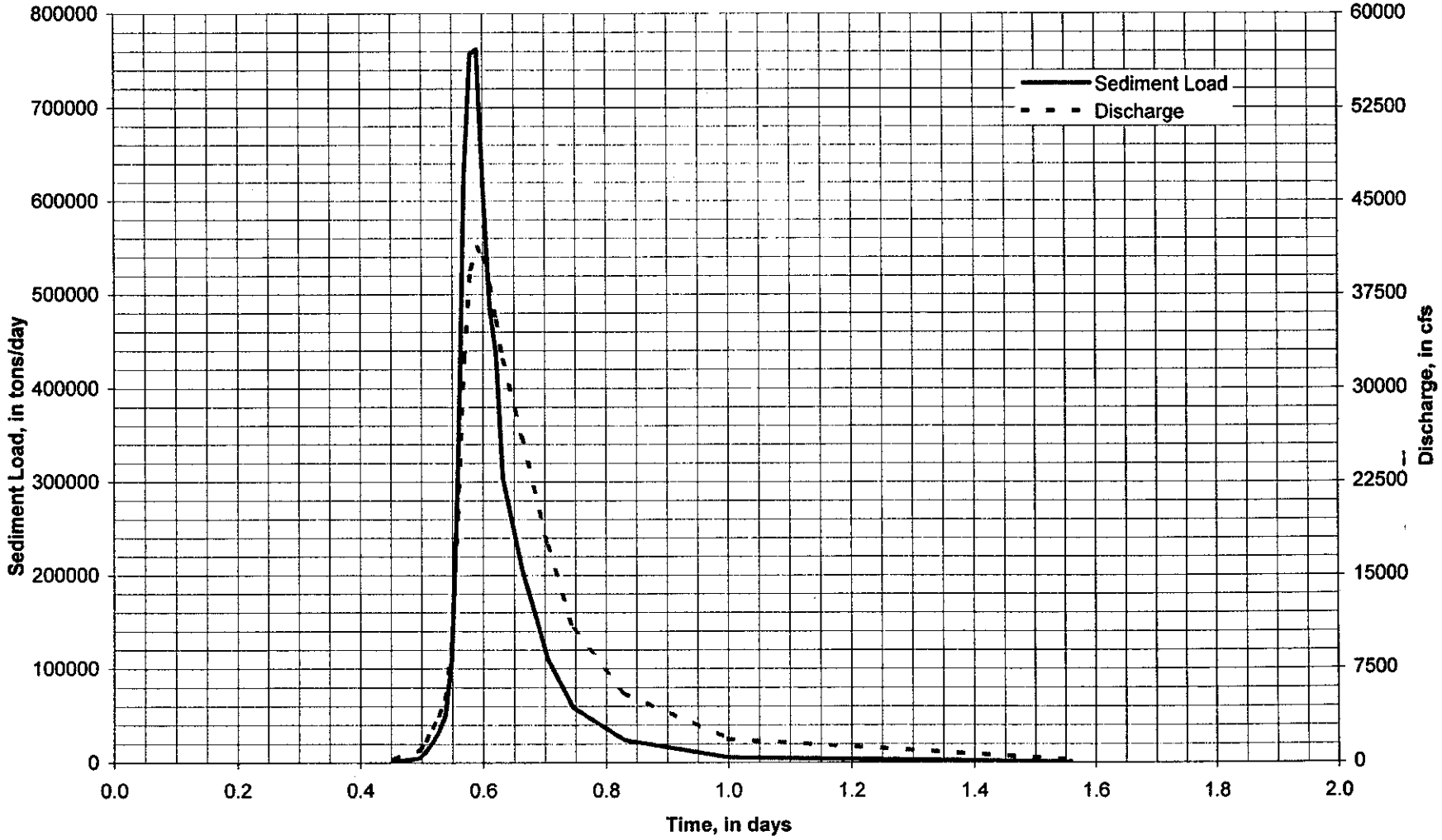


Figure CC-O-10
Sediment Load vs. Time (Sta. 28.555)
Cave Creek Overbank Model, 100-year Flood, Future Condition

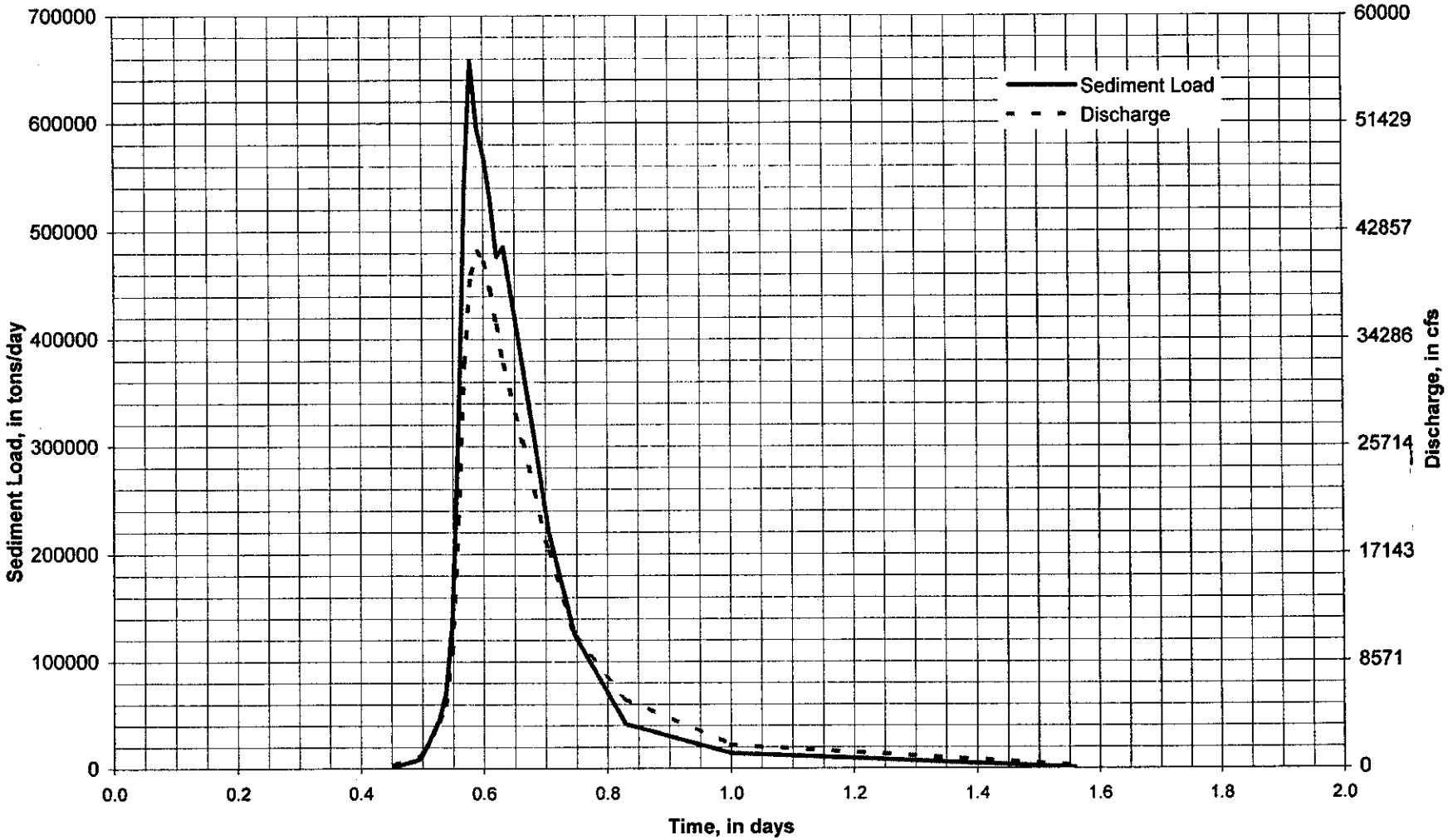


Figure CC-F-5

Figure CC-O-11
Sediment Load vs. Time (Sta. 27.913)
Cave Creek Overbank Model, 100-year Flood, Future Condition

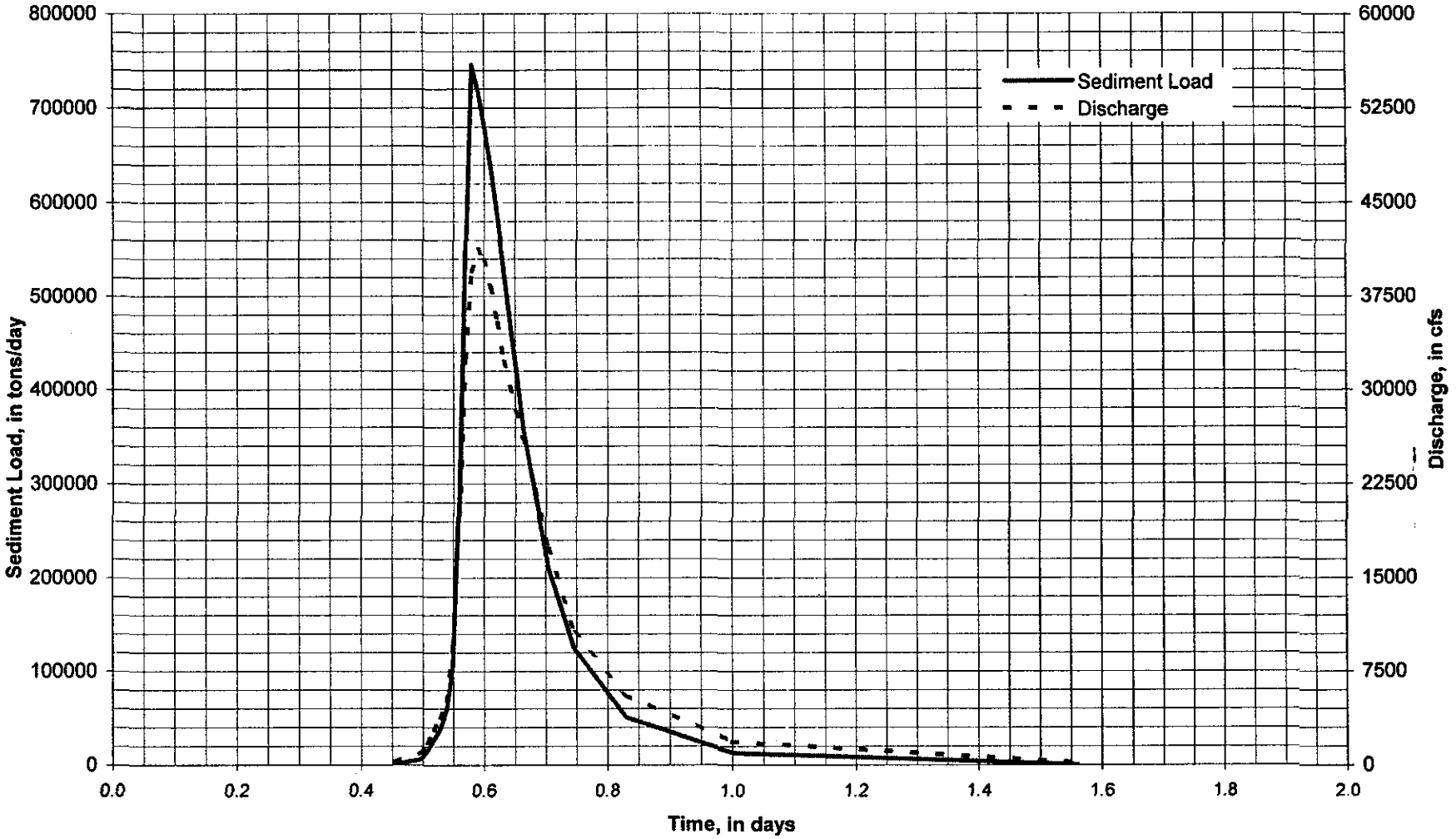


Figure CC-O-12
Sediment Load vs. Time (Sta. 26.912)
Cave Creek Overbank Model, 100-year Flood, Future Condition

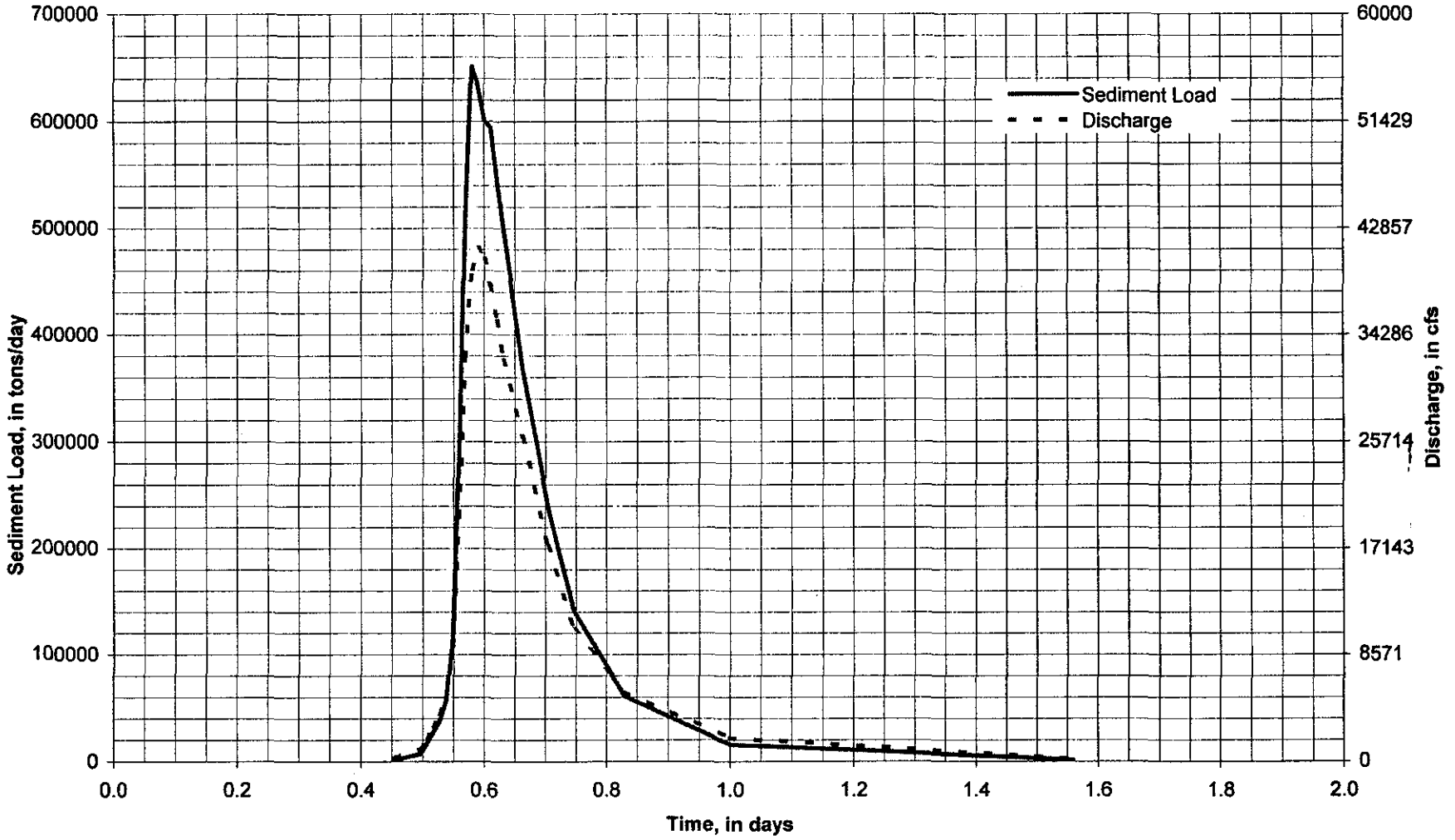


Figure CC-O-13
Sediment Load vs. Time (Sta. 24.646)
Cave Creek Overbank Model, 100-year Flood, Future Condition

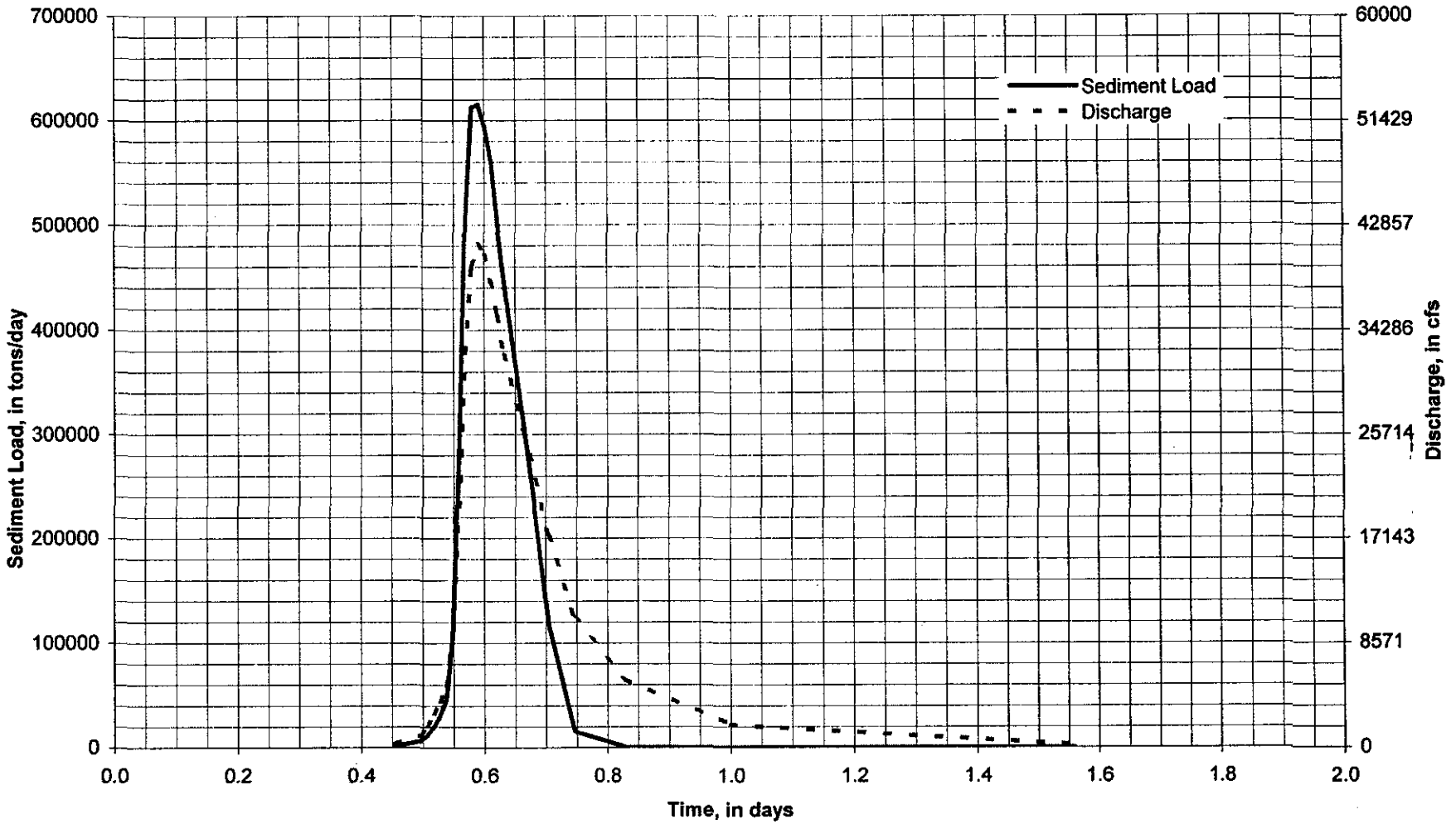


Figure AW-C-1
Bed Elevation Change at Last Time Step
Apache Wash Main Channel Model, 100-year Flood, Existing Conditions

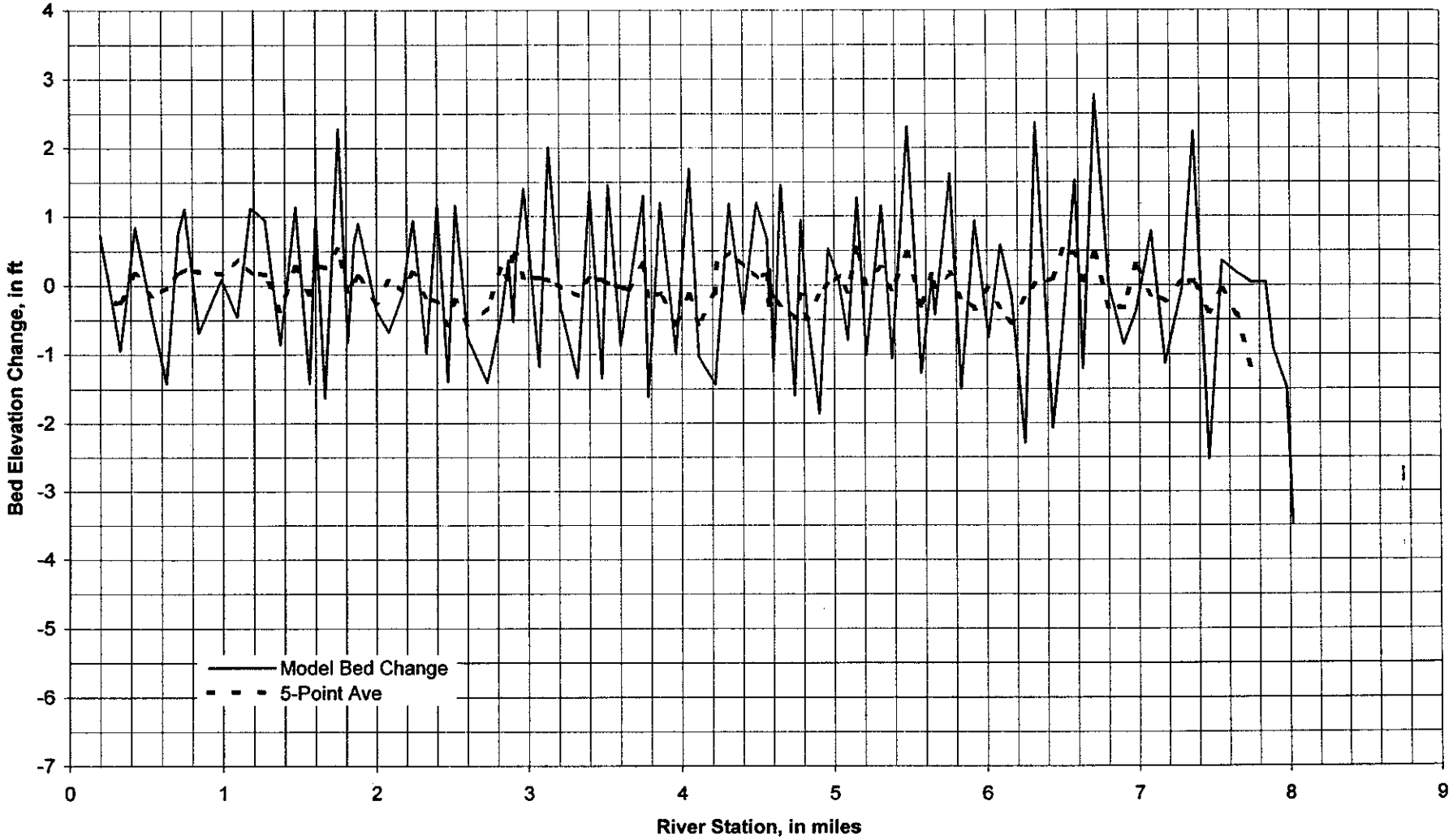


Figure AW-C-2
Minimum and Maximum Bed Elevation Change during Flood
Apache Wash Main Channel Model, 100-year Flood, Existing Condition

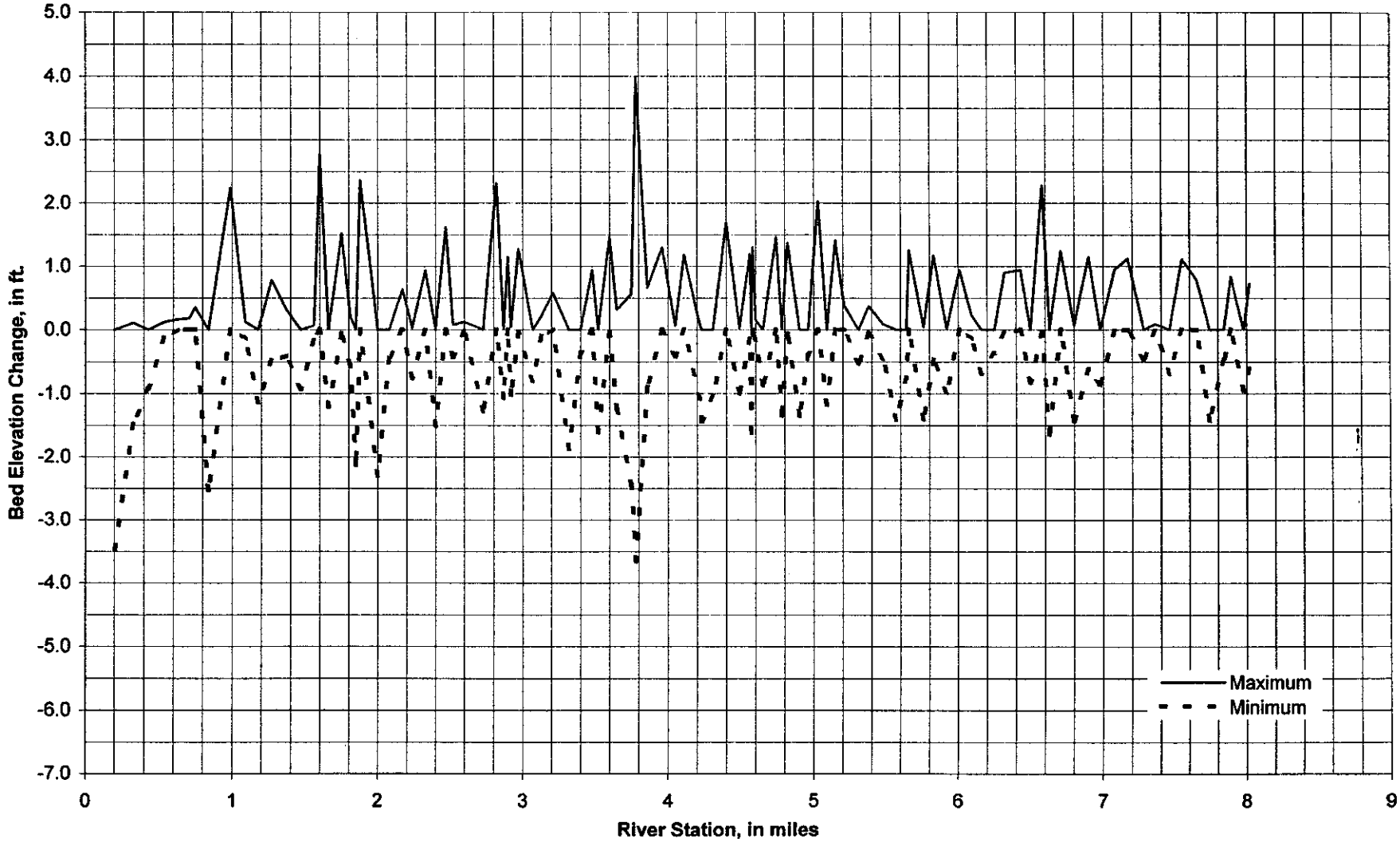


Figure AW-C-3
Sediment Load Passing Through Section
Apache Wash Channel Model, 100-year Flood, Existing Condition

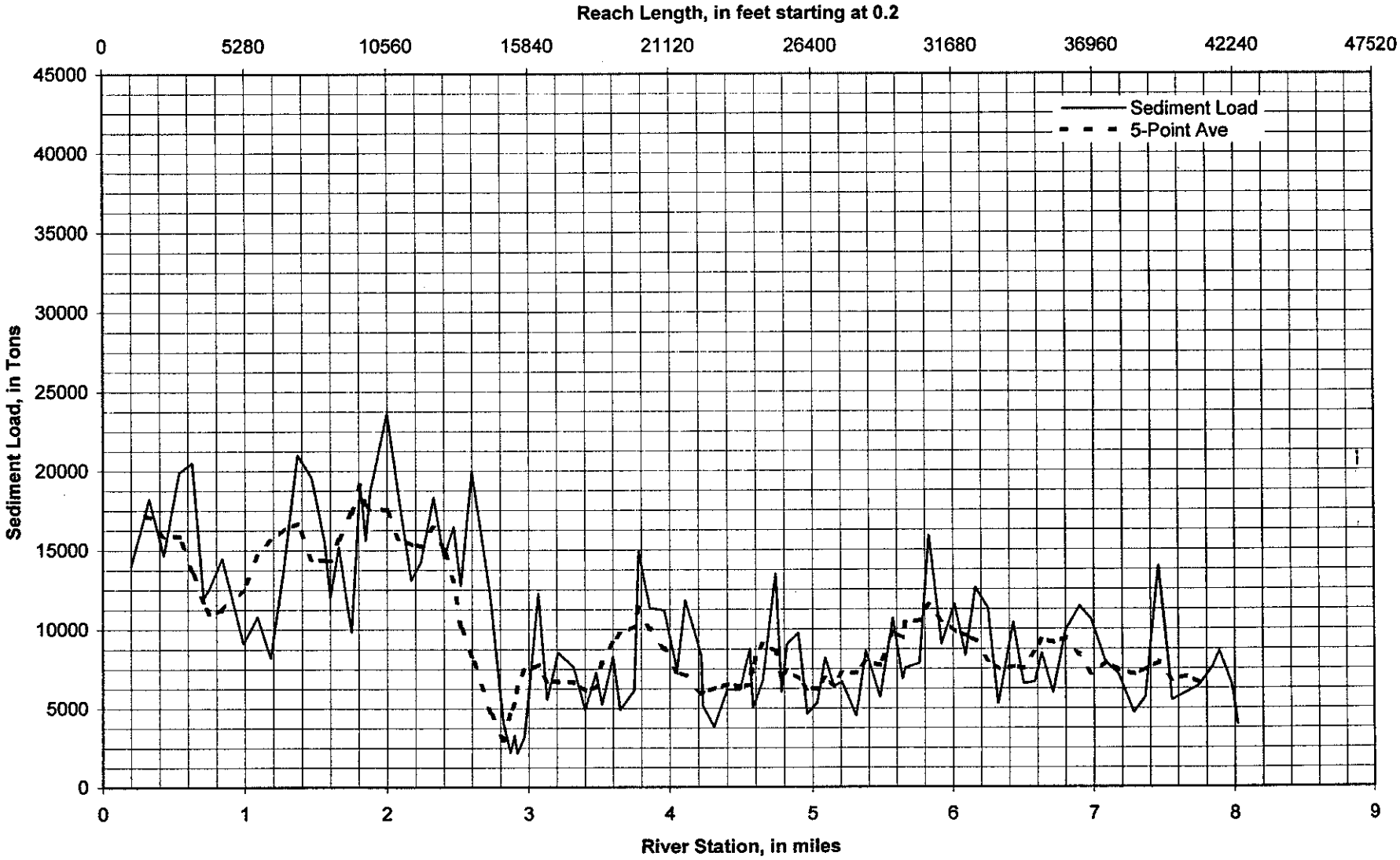


Figure AW-C-4
Accumulative Sediment Deposited Upstream of Section
Apache Wash Main Channel Model, 100-year Flood, Existing Conditions

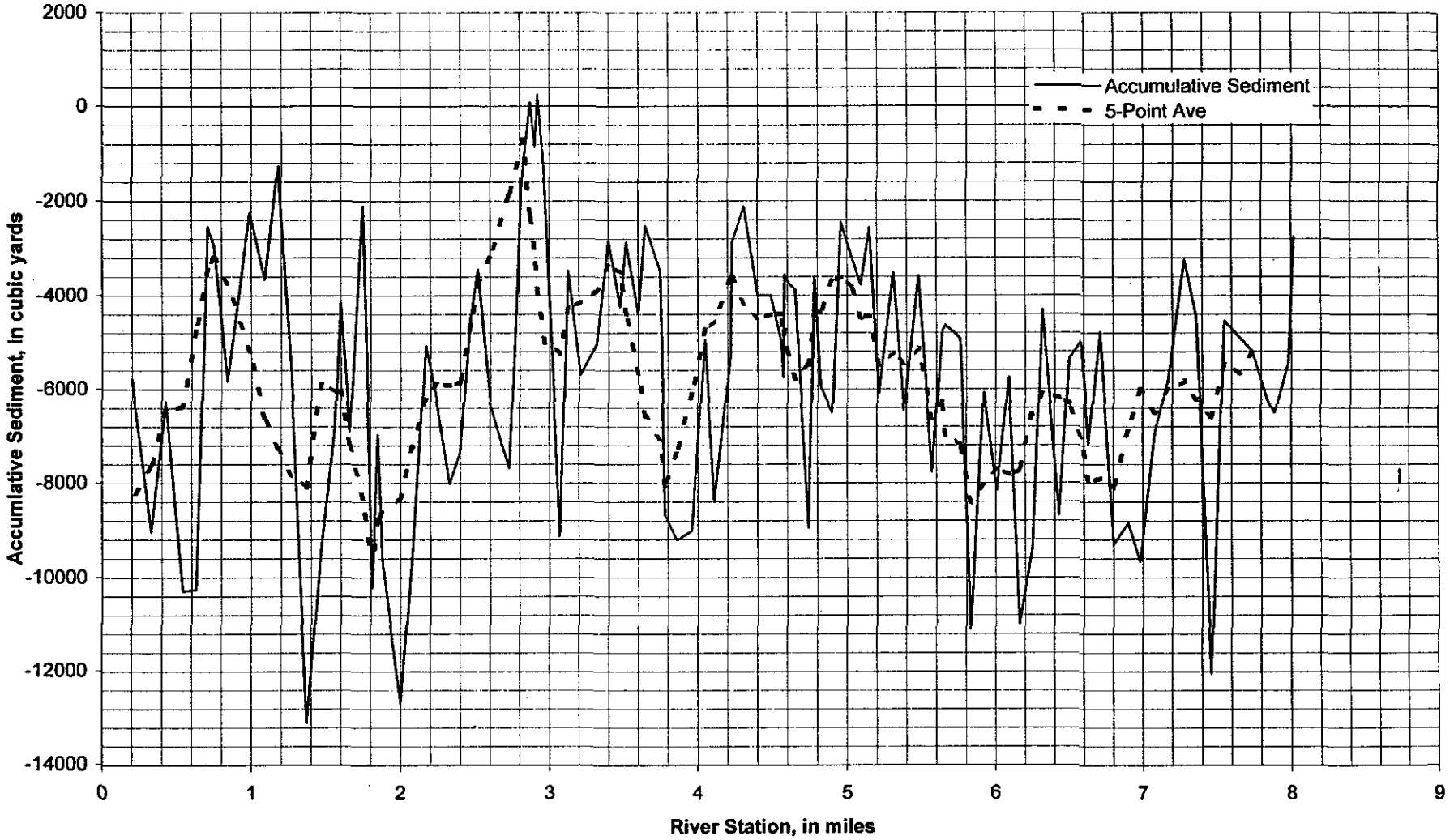


Figure AW-C-5
Bed Elevation Change at Last Time Step
Apache Wash Main Channel Model, 100-year Flood, Future Conditions

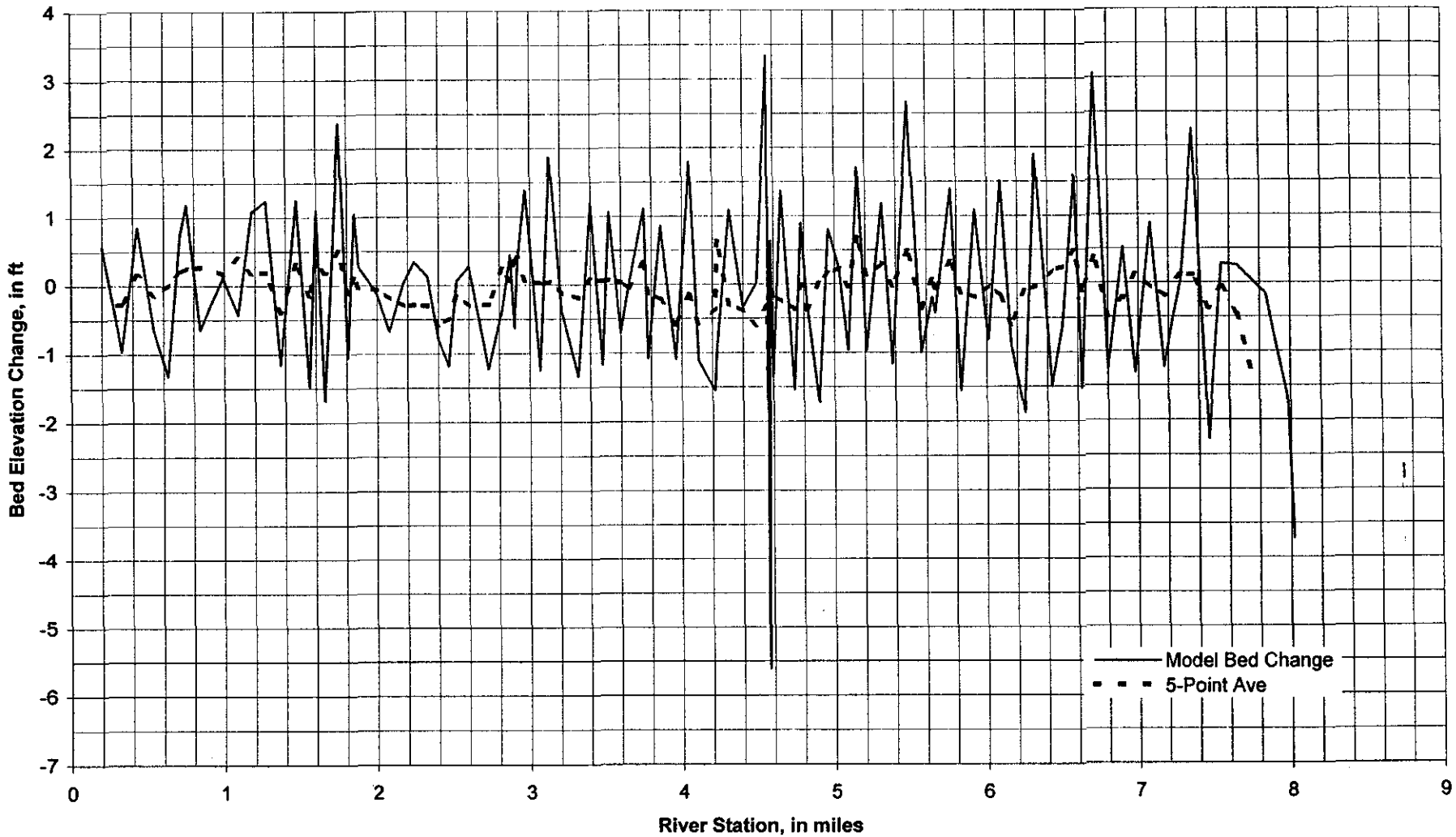


Figure AW-C-6
Minimum and Maximum Bed Elevation Change during Flood
Apache Wash Main Channel Model, 100-year Flood, Future Condition

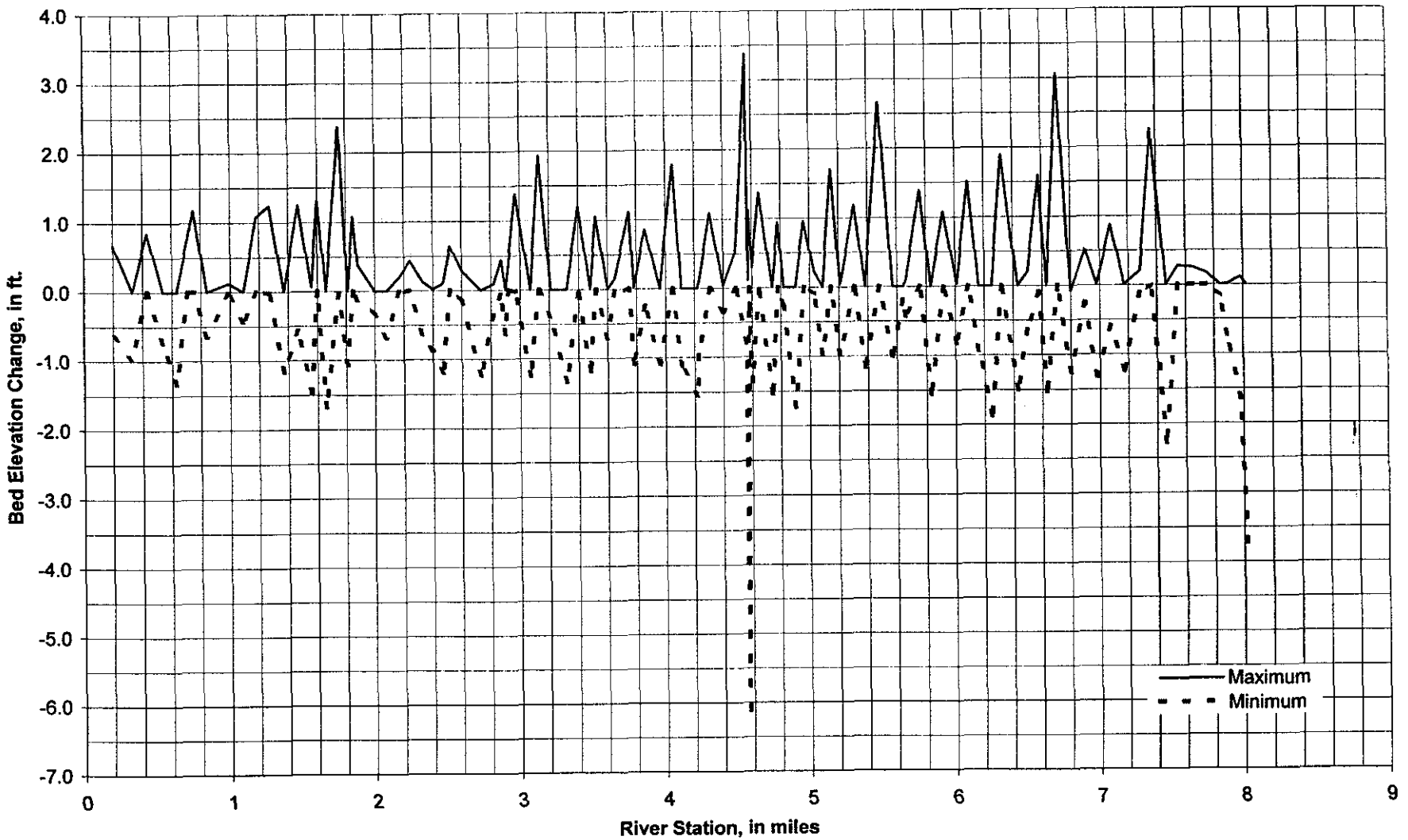


Figure AW-C-7
Sediment Load Passing Through Section
Apache Wash Channel Model, 100-year Flood, Future Condition

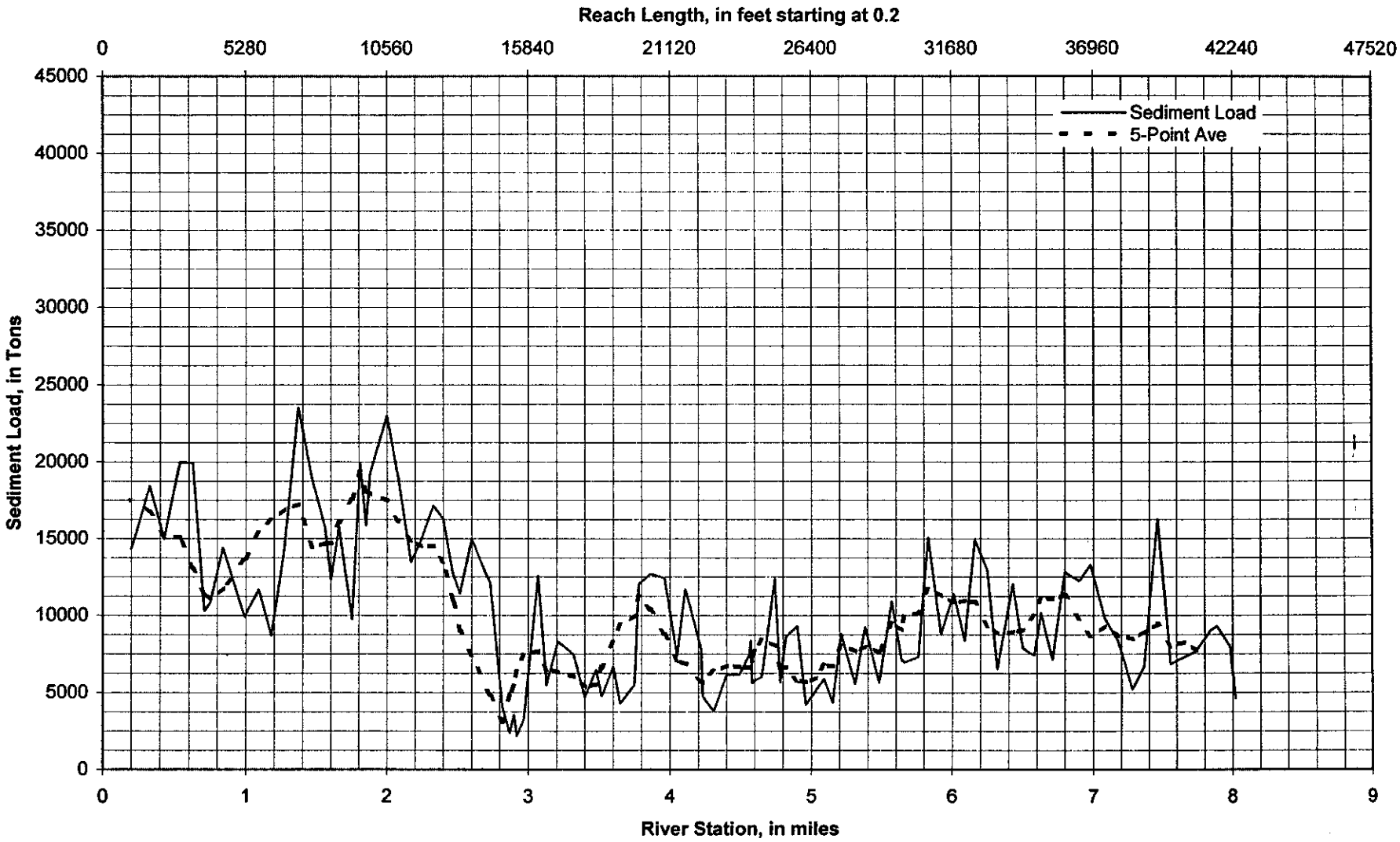


Figure AW-C-8
Accumulative Sediment Deposited Upstream of Section
Apache Wash Main Channel Model, 100-year Flood, Future Conditions

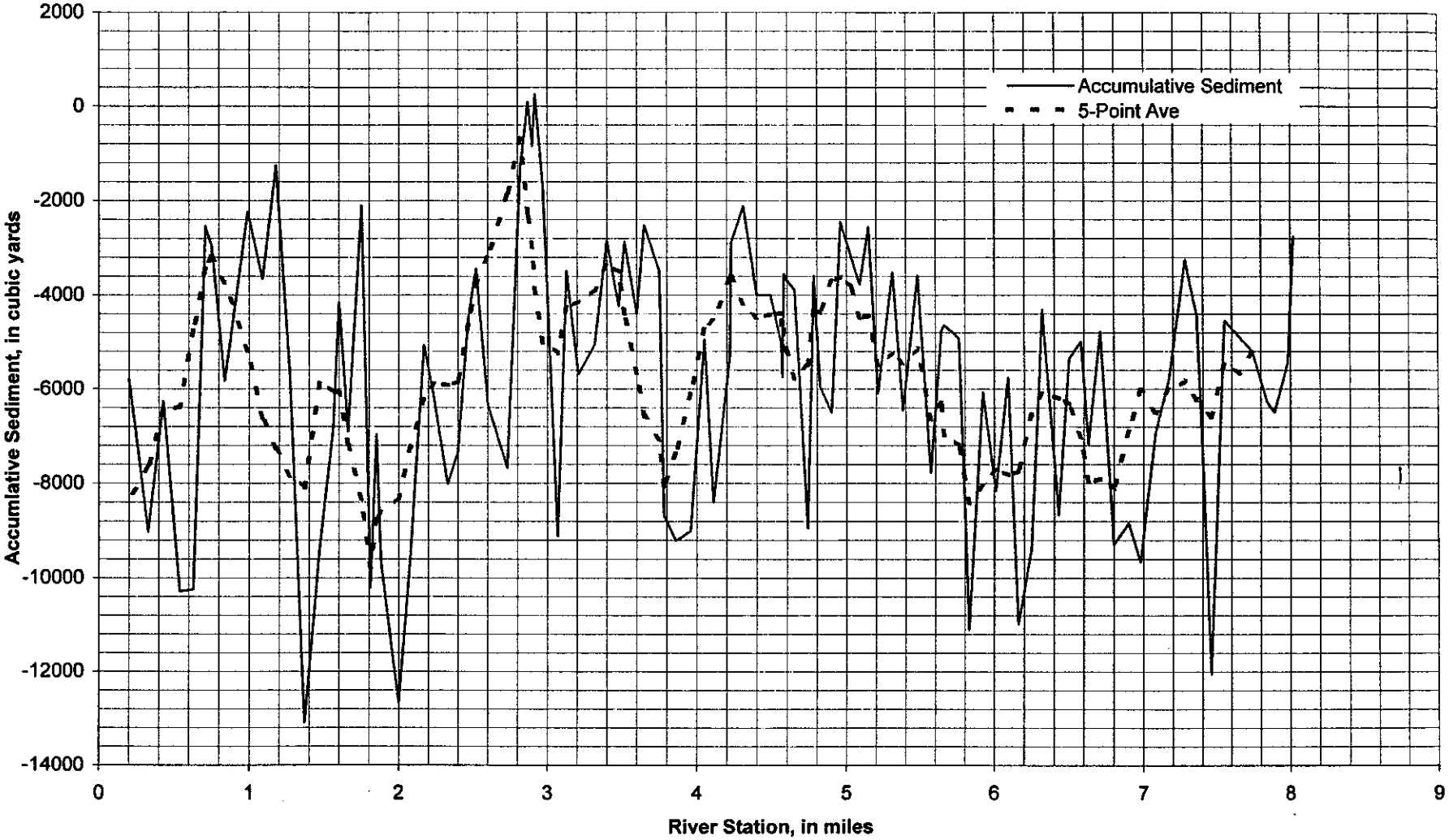


Figure AW-C-9
Sediment Load vs. Time (Sta. 3.07)
Apache Wash Main Channel Model, 100-year Flood, Future Condition

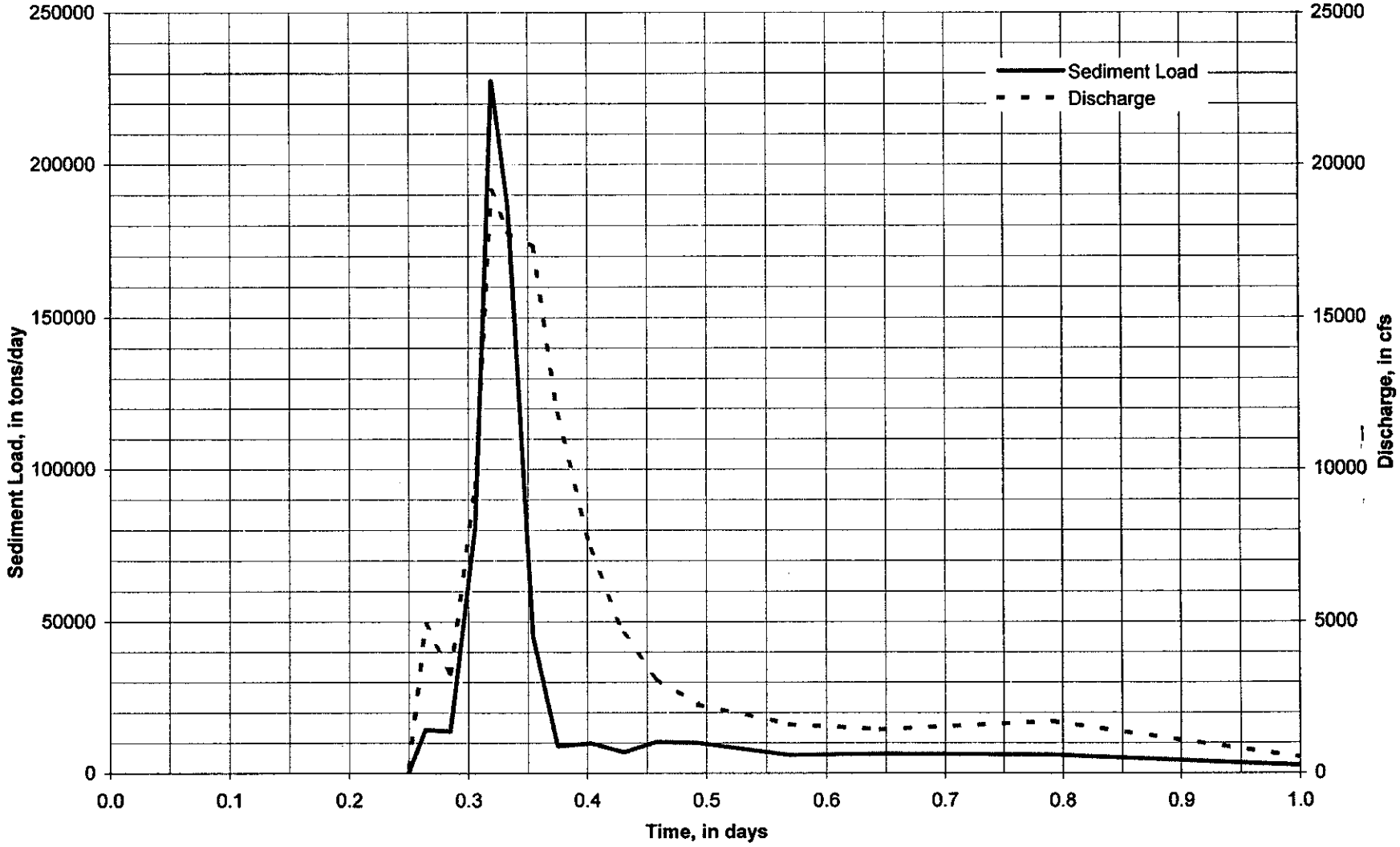


Figure AW-C-10
Sediment Load vs. Time (Sta. 2.97)
Apache Wash Main Channel Model, 100-year Flood, Future Condition

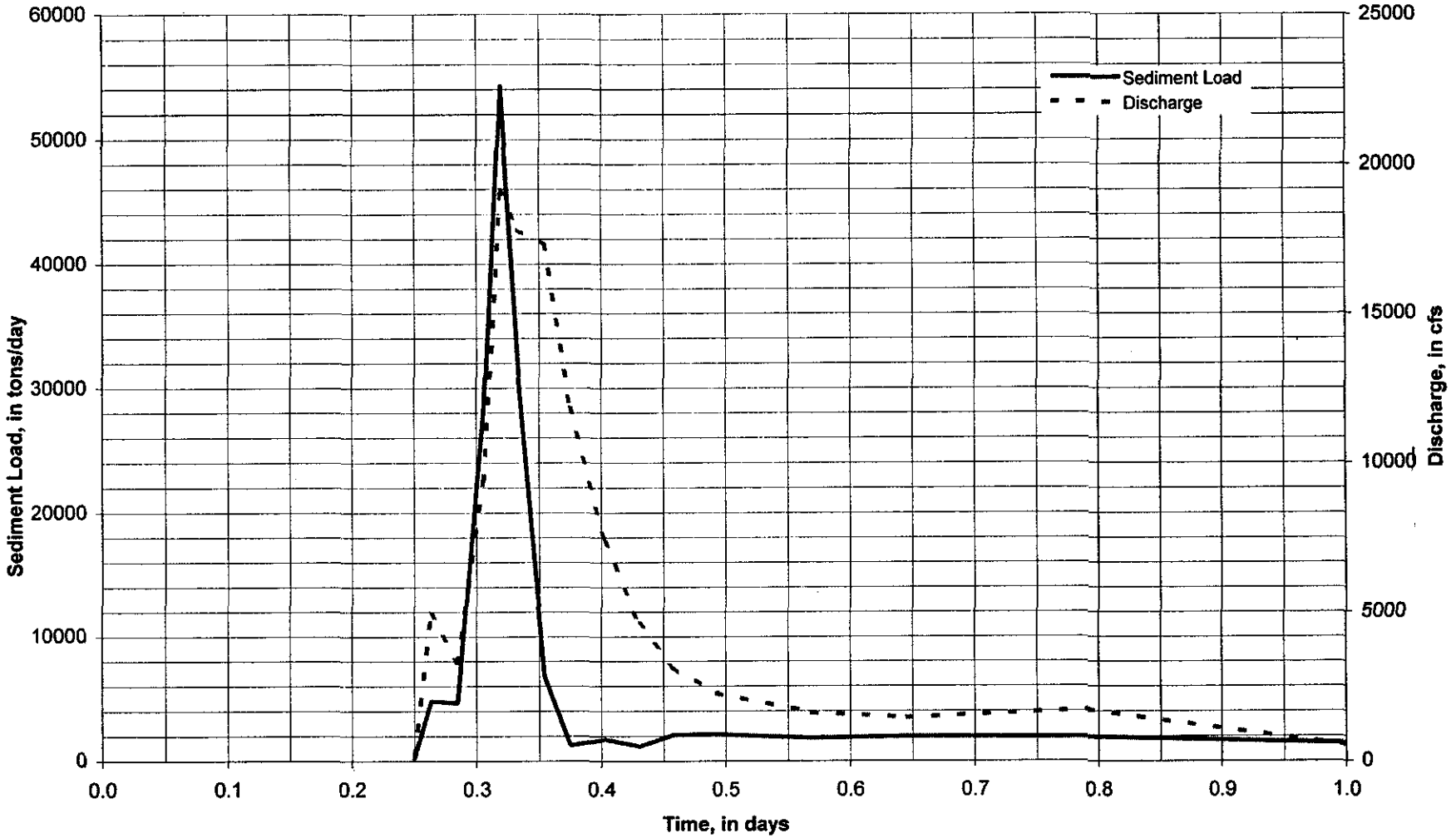


Figure AW-C-11
Sediment Load vs. Time (Sta. 2.73)
Apache Wash Main Channel Model, 100-year Flood, Future Condition

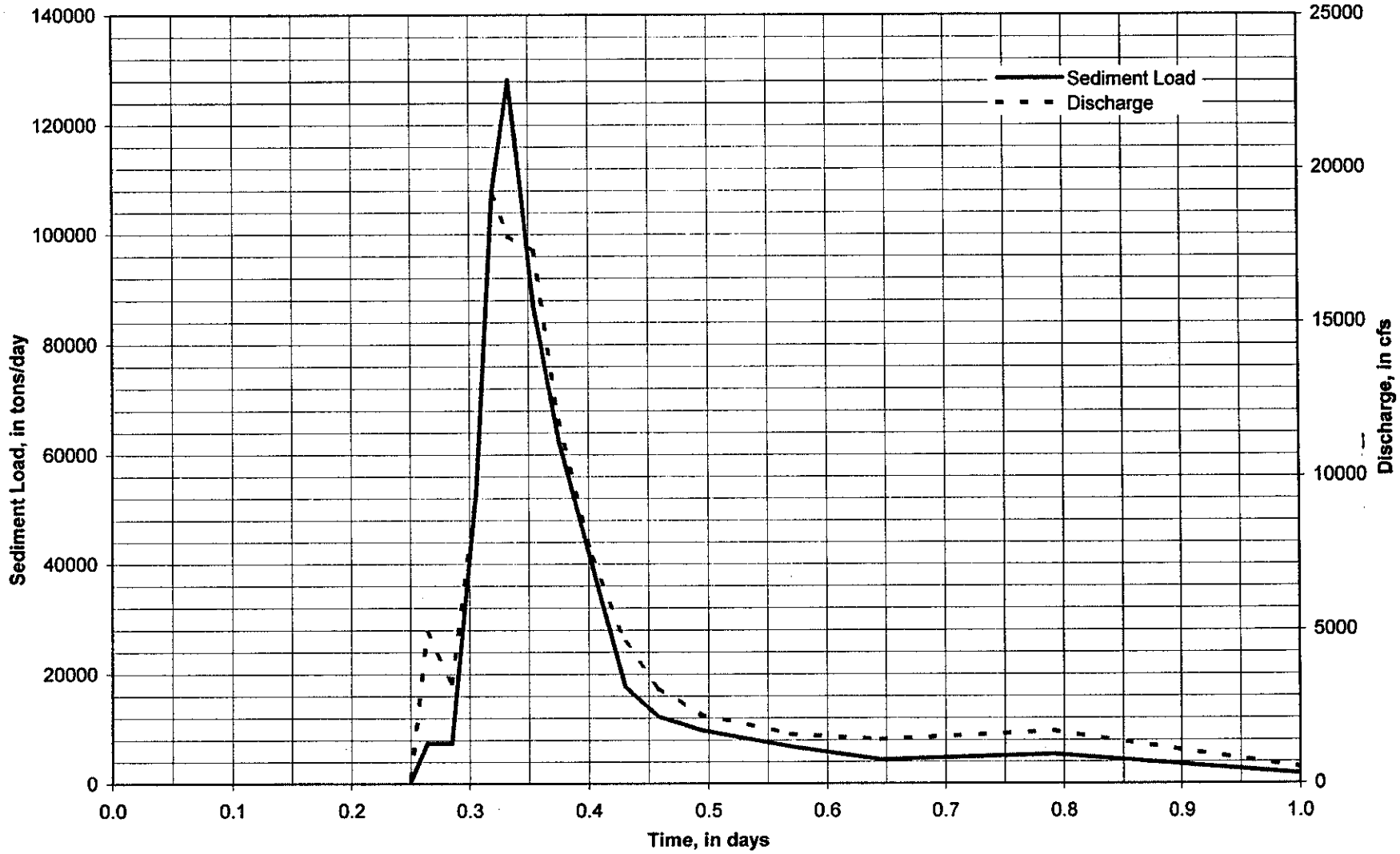


Figure AW-C-12
Sediment Load vs. Time (Sta. 2.6)
Apache Wash Main Channel Model, 100-year Flood, Future Condition

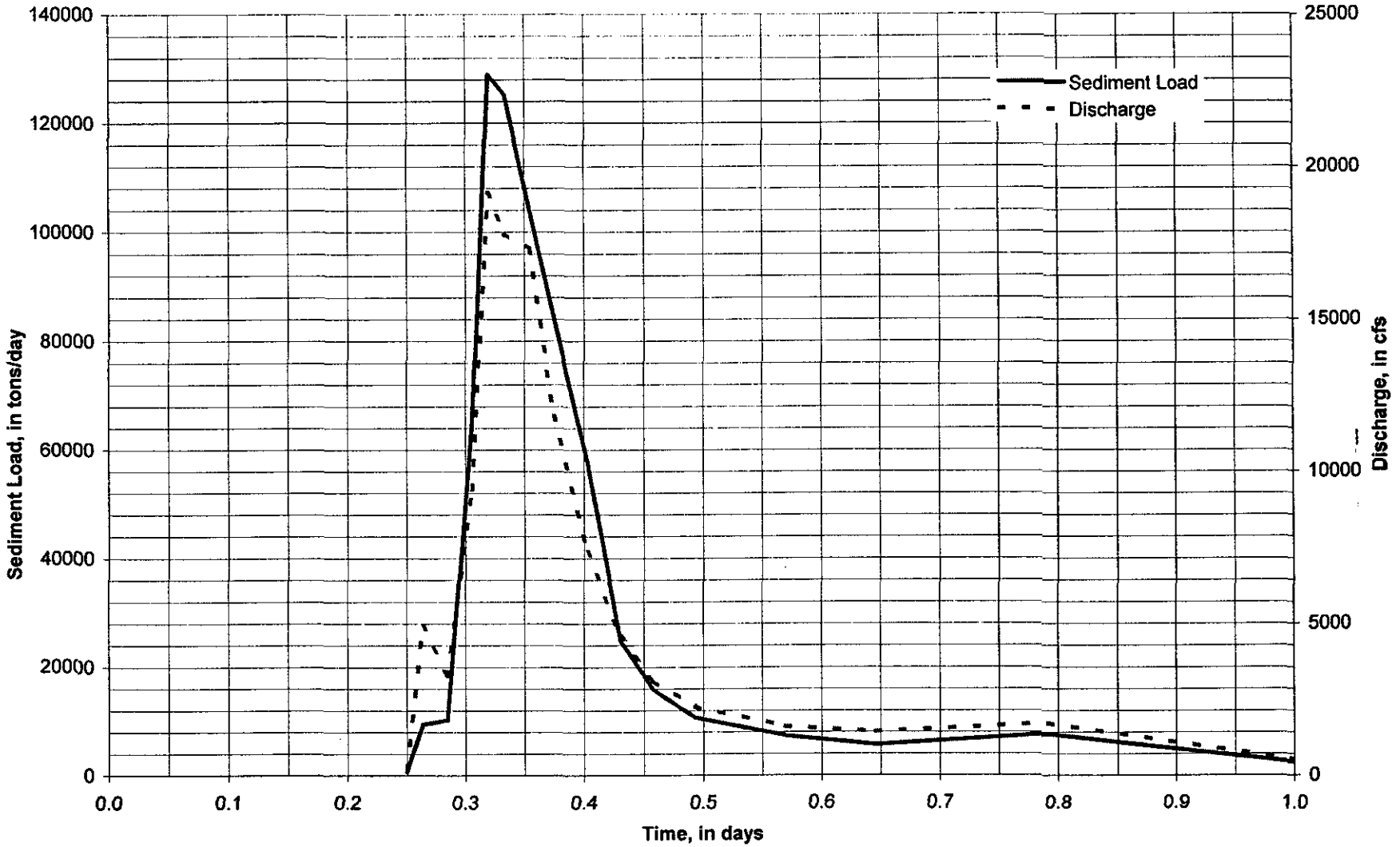


Figure AW-C-13
Sediment Load vs. Time (Sta. 0.2)
Apache Wash Main Channel Model, 100-year Flood, Future Condition

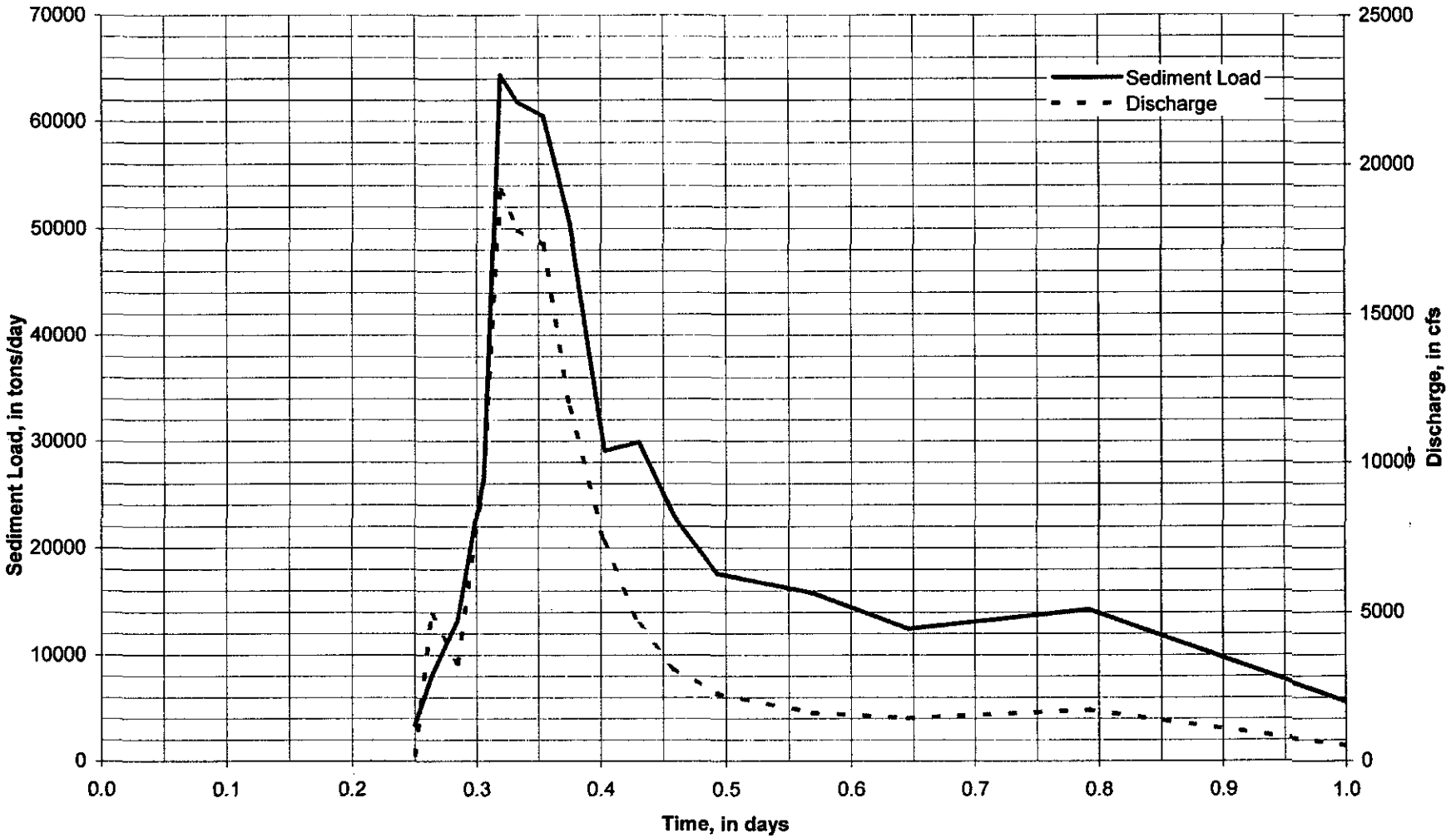


Figure AW-0-1
Bed Elevation Change at Last Time Step
Apache Wash Overbank Model, 100-year Flood, Existing Conditions

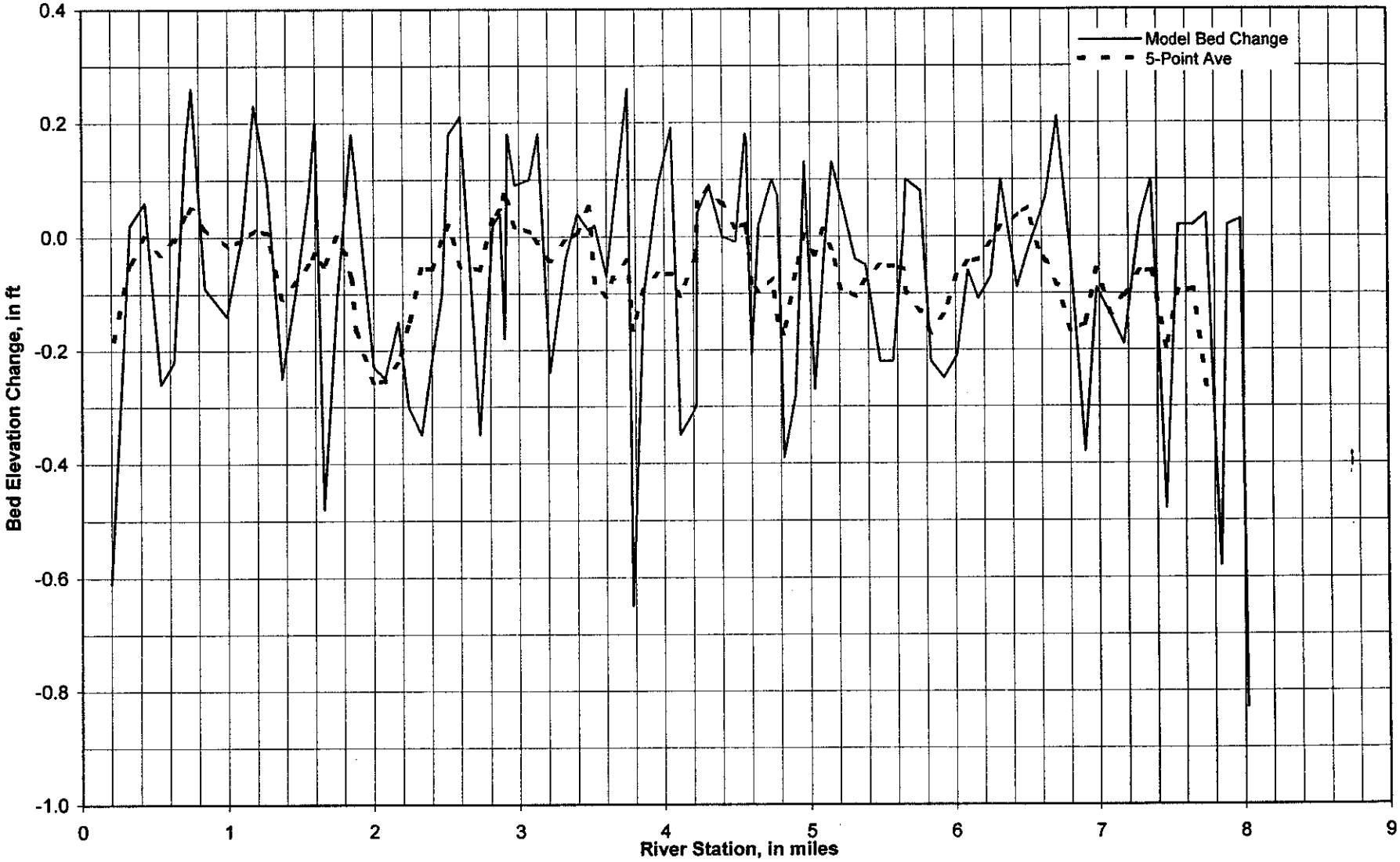


Figure AW-0-2
Minimum and Maximum Bed Elevation Change During Flood
Apache Wash Overbank Model, 100-year Flood, Existing Condition

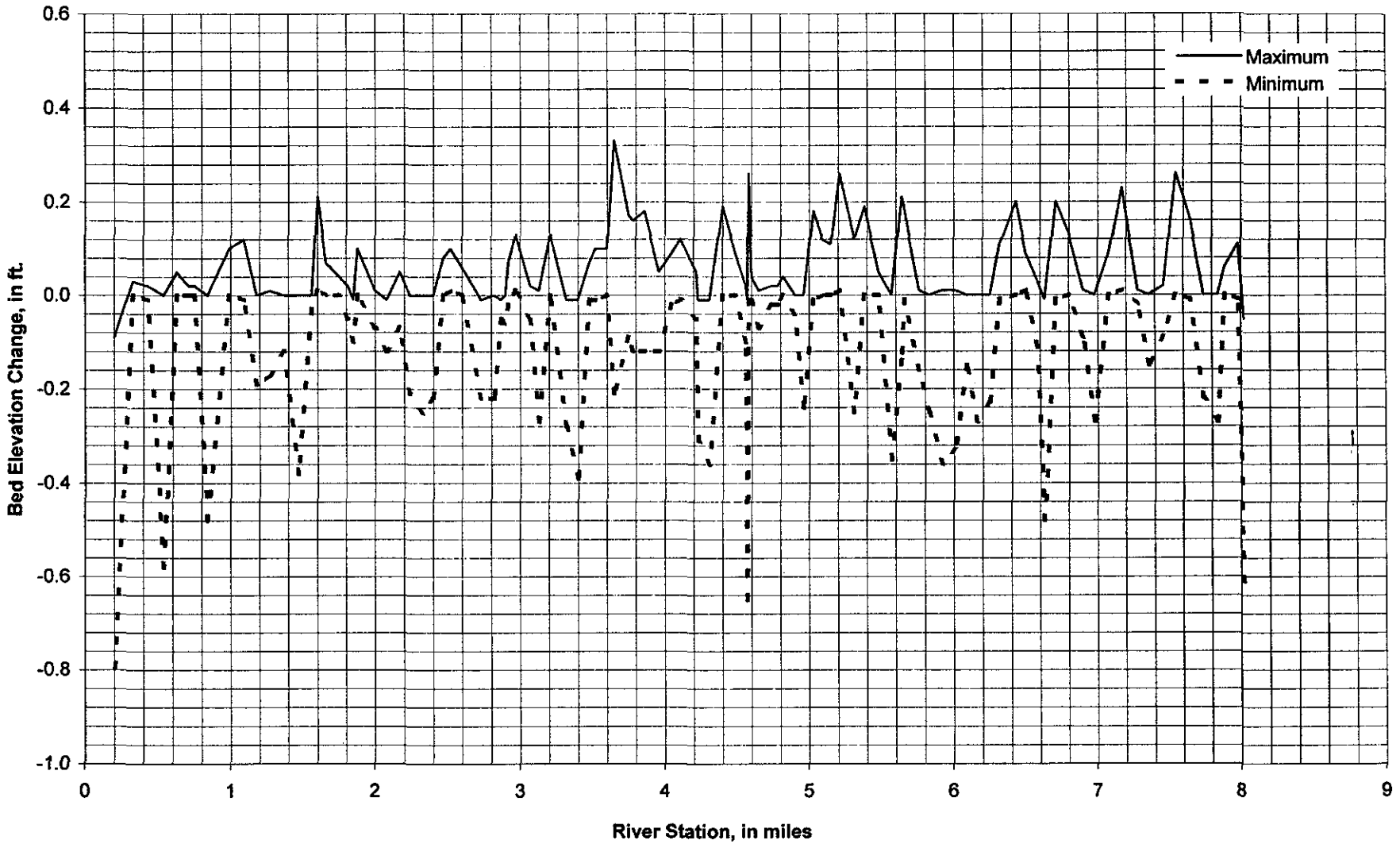


Figure AW-0-3
Sediment Load Passing Through Section
Apache Wash Overbank Model, 100-year Flood, Existing Condition

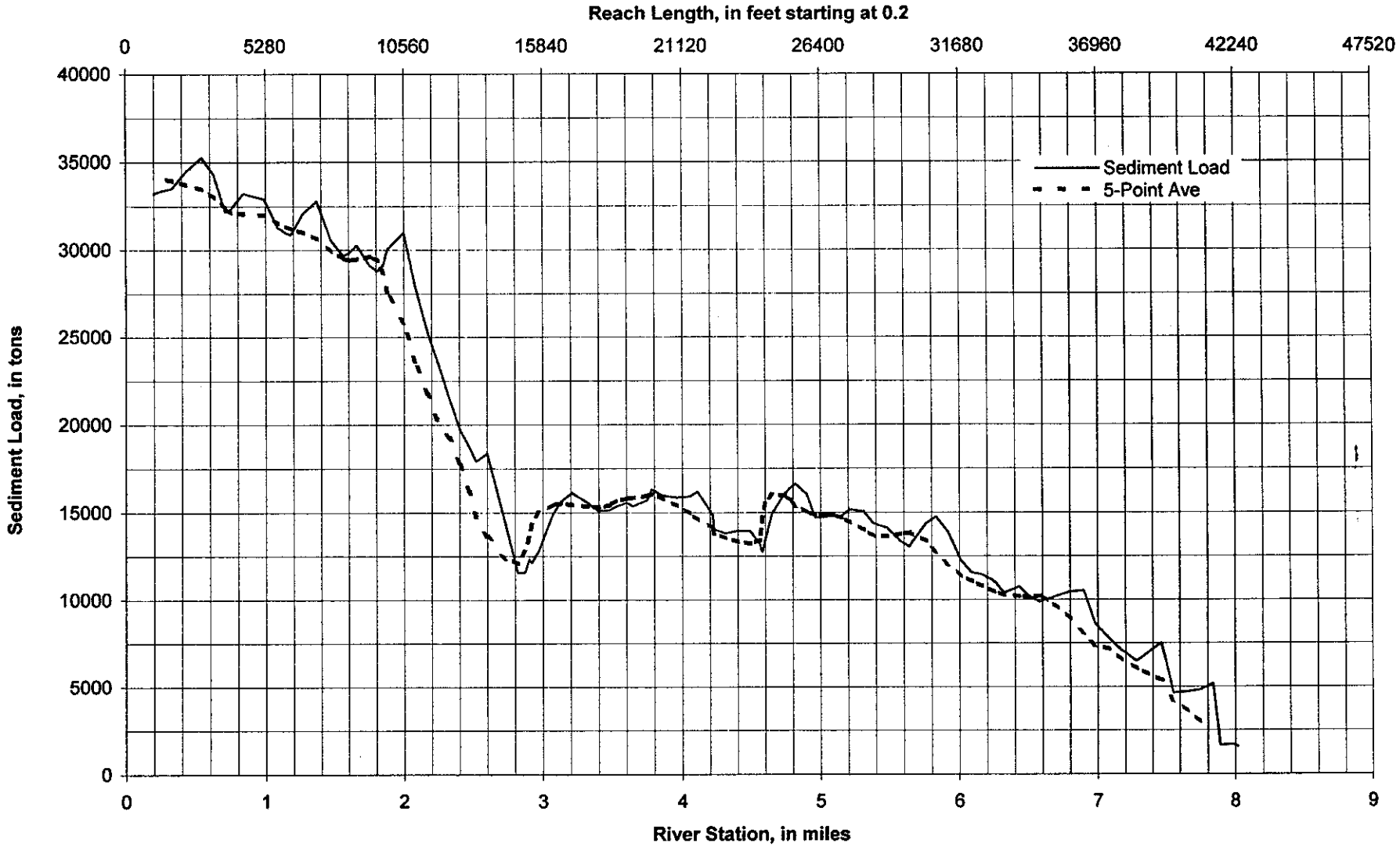


Figure AW-0-4
Accumulative Sediment Deposited Upstream of Section
Apache Wash Overbank Model, 100-year Flood, Existing Conditions

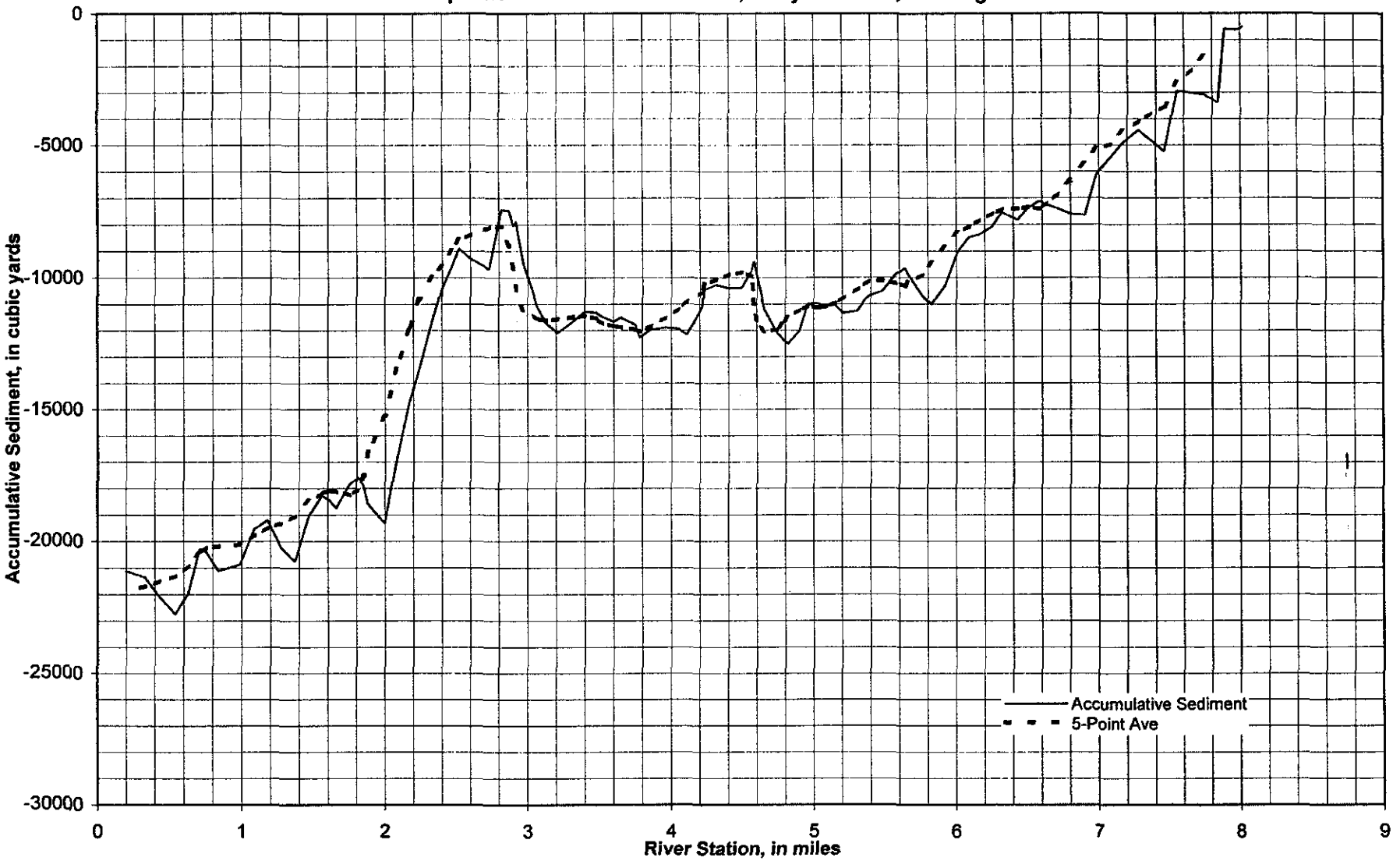


Figure AW-0-5
Bed Elevation Change at Last Time Step
Apache Wash Overbank Model, 100-year Flood, Future Conditions

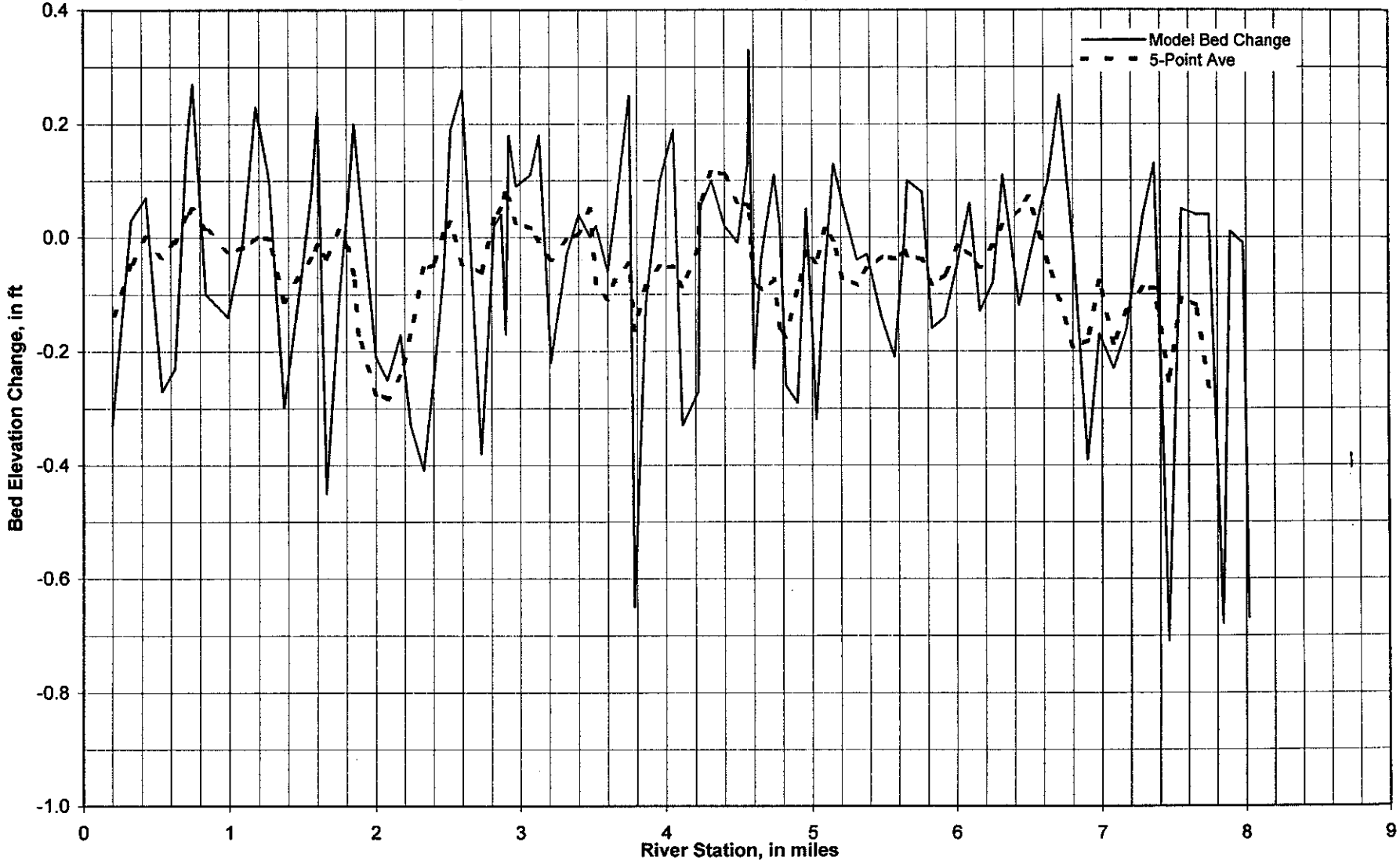


Figure AW-0-6
Minimum and Maximum Bed Elevation Change During Flood
Apache Wash Overbank Model, 100-year Flood, Future Condition

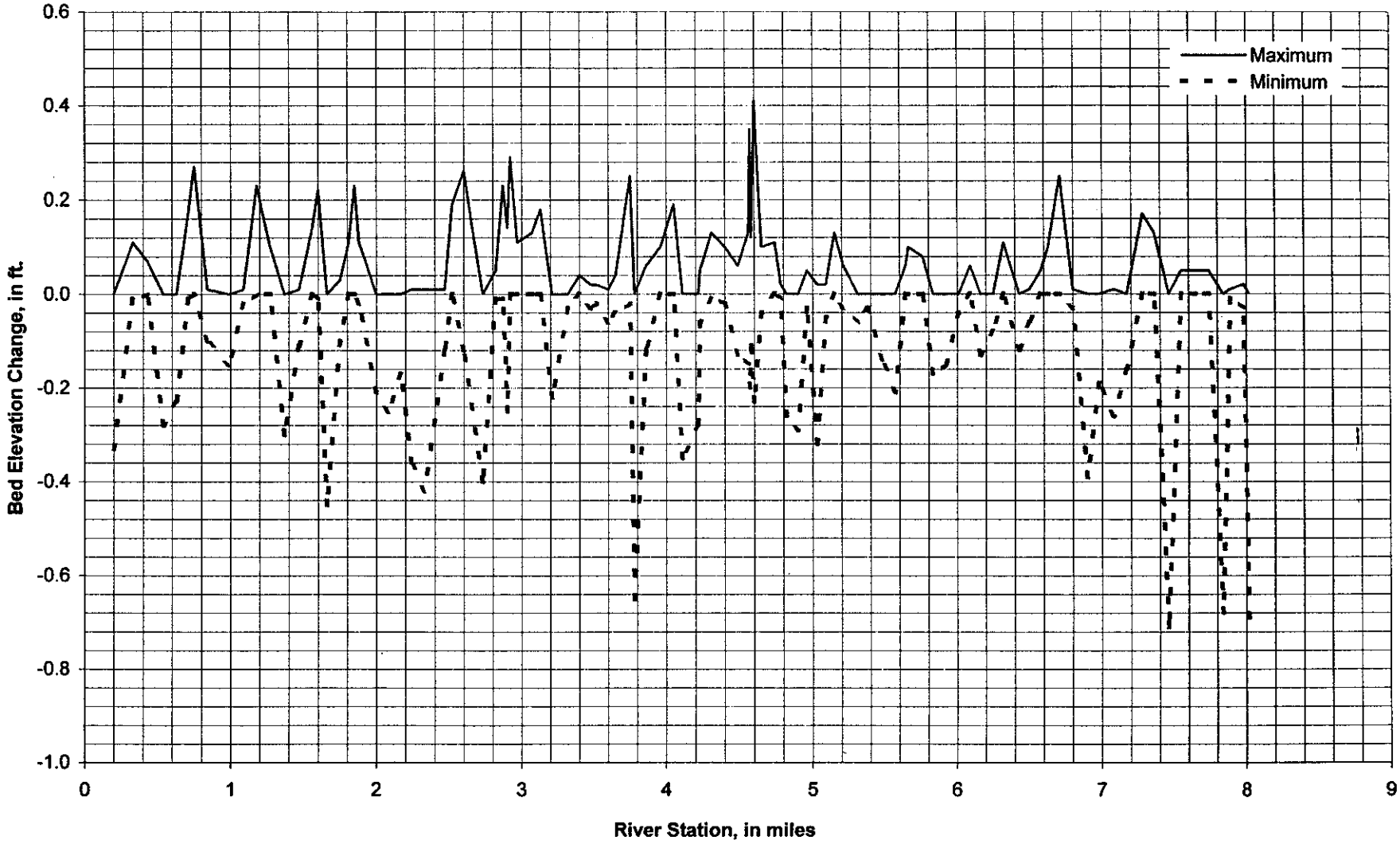


Figure AW-0-7
Sediment Load Passing Through Section
Apache Wash Overbank Model, 100-year Flood, Future Condition

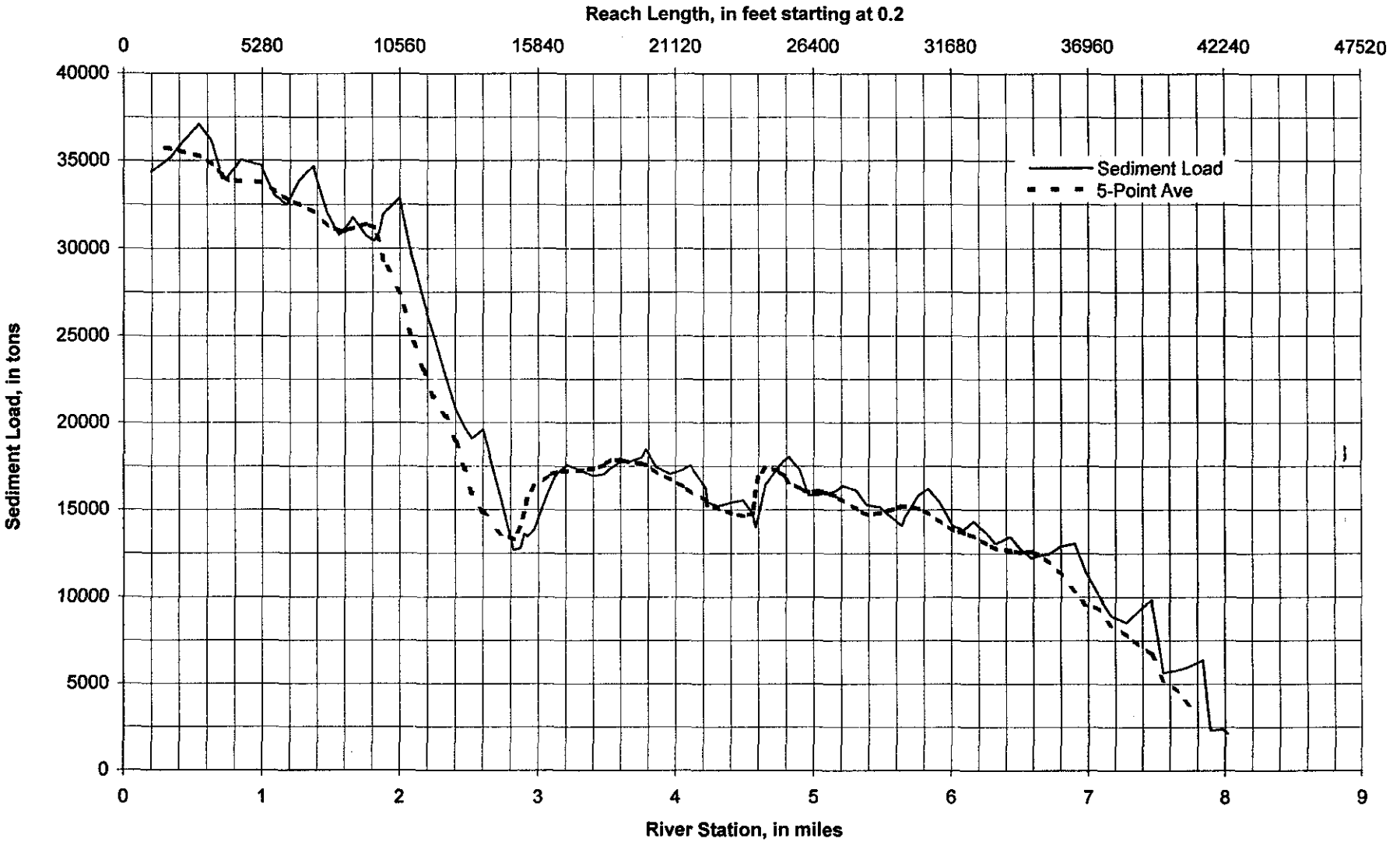


Figure AW-0-8
Accumulative Sediment Deposited Upstream of Section
Apache Wash Overbank Model, 100-year Flood, Future Conditions

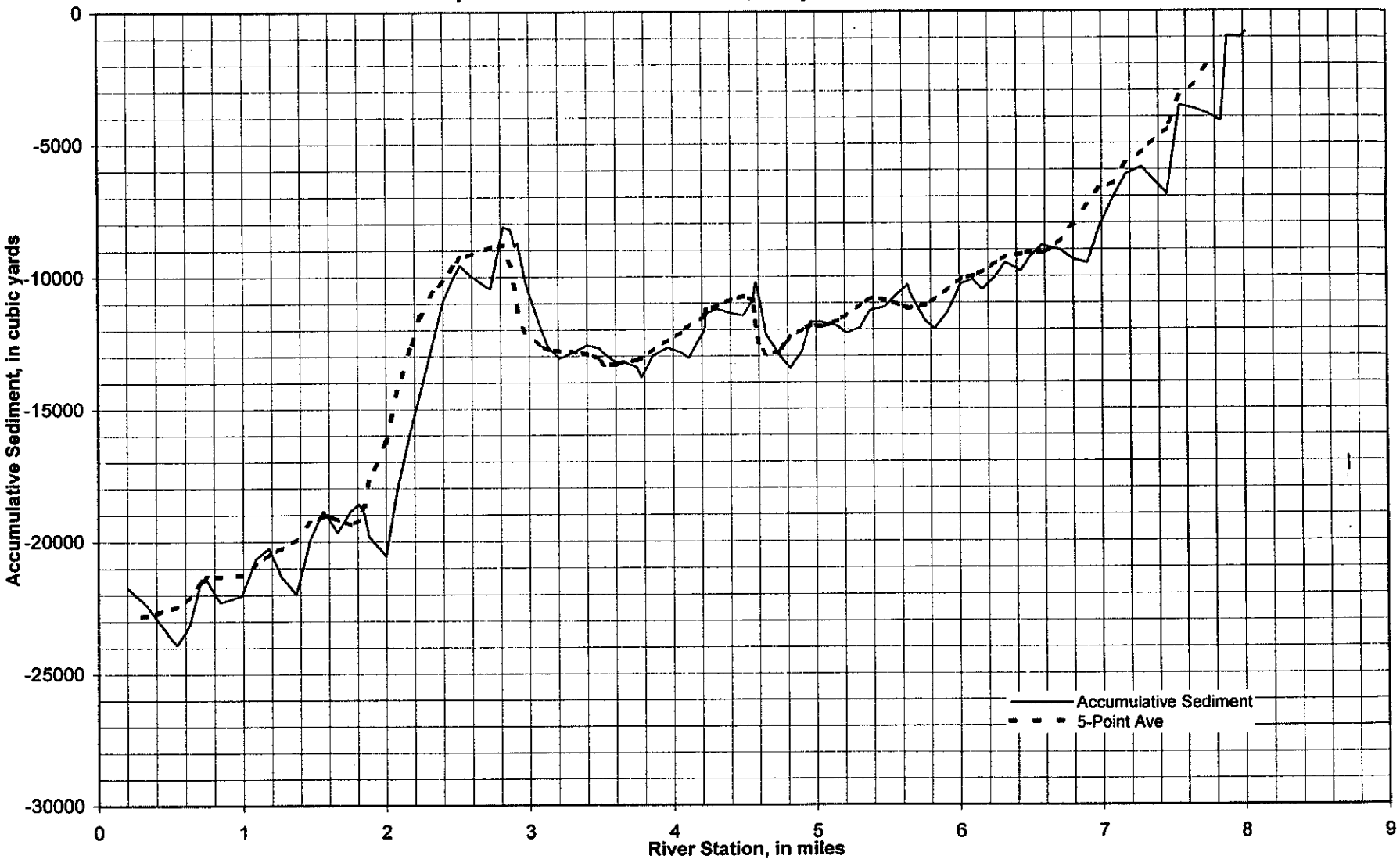


Figure AW-0-9
Sediment Load vs. Time (Sta. 3.07)
Apache Wash Overbank Model, 100-year Flood, Future Conditions

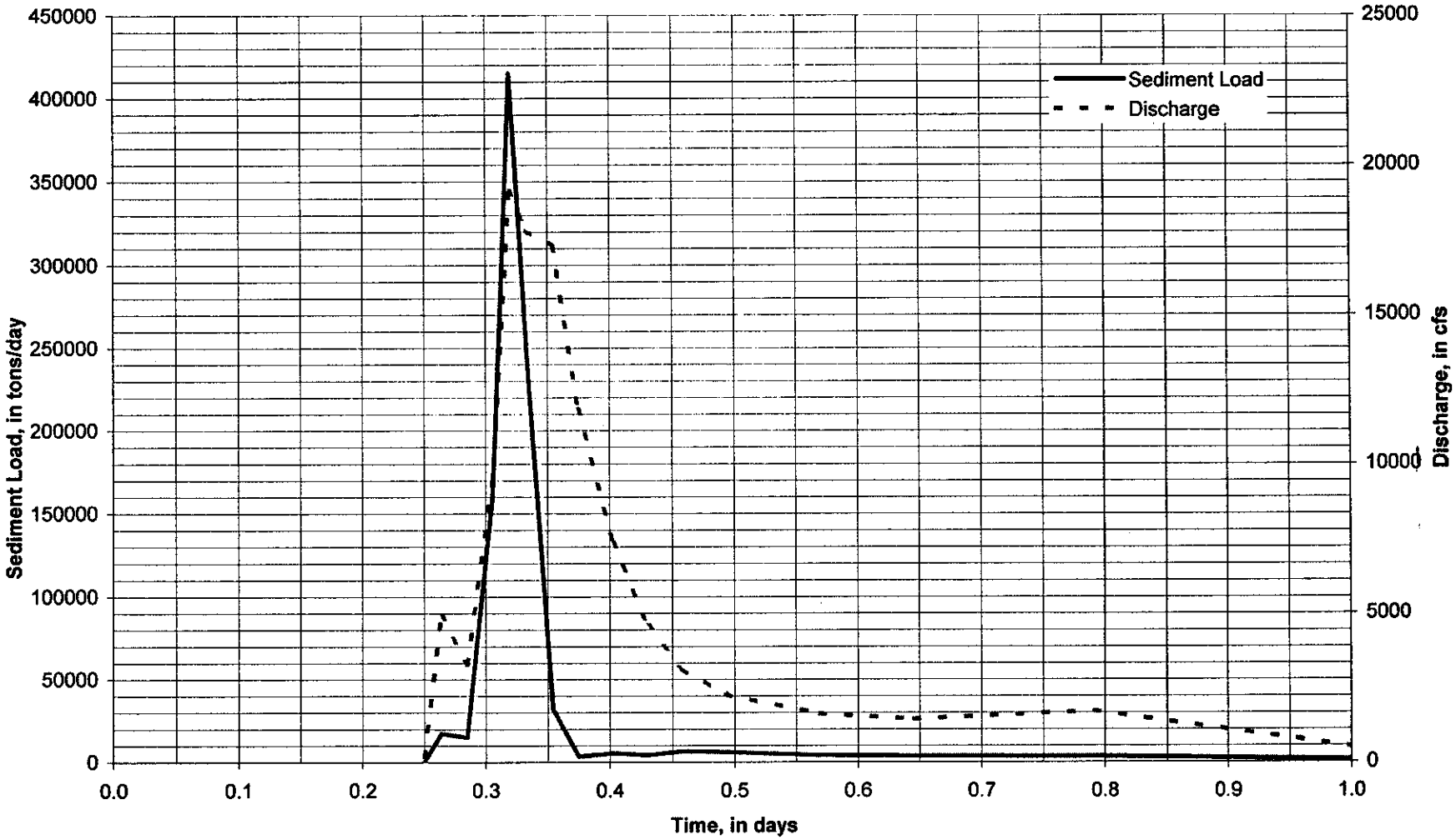


Figure AW-0-10
Sediment Load vs. Time (Sta. 2.97)
Apache Wash Overbank Model, 100-year Flood, Future Conditions

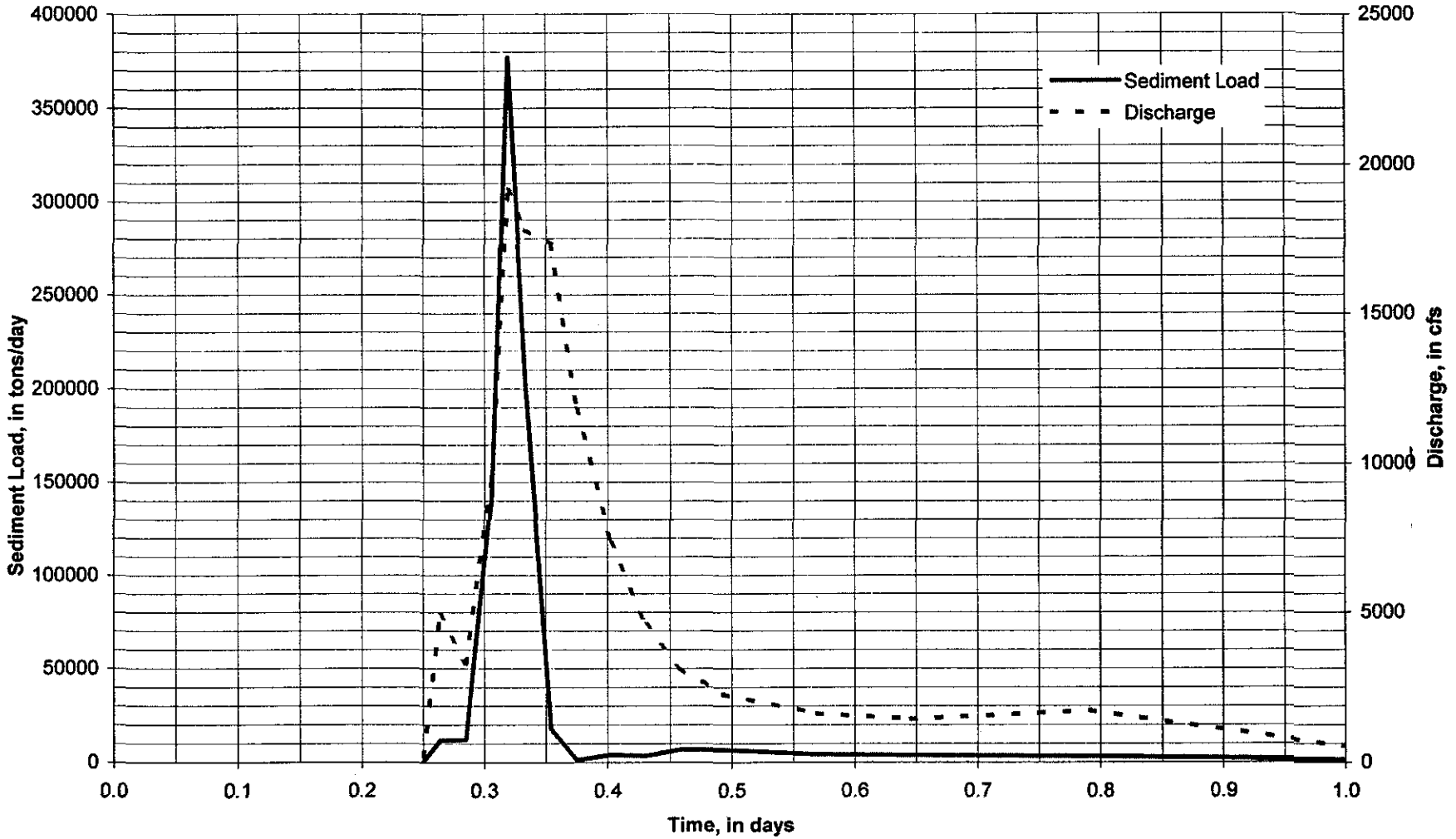


Figure AW-0-11
Sediment Load vs. Time (Sta. 2.73)
Apache Wash Overbank Model, 100-year Flood, Future Conditions

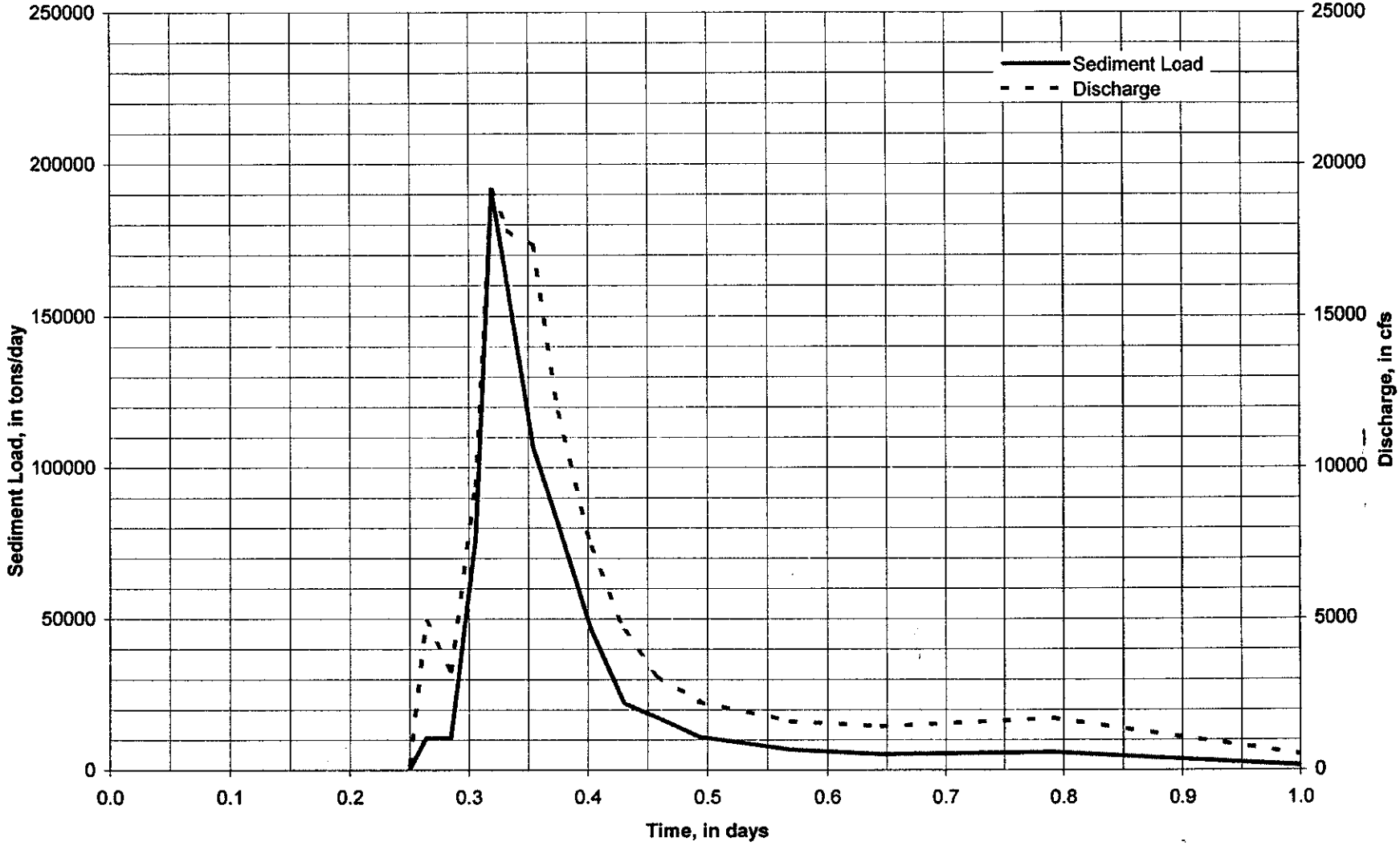


Figure AW-0-12
Sediment Load vs. Time (Sta. 2.6)
Apache Wash Overbank Model, 100-year Flood, Future Conditions

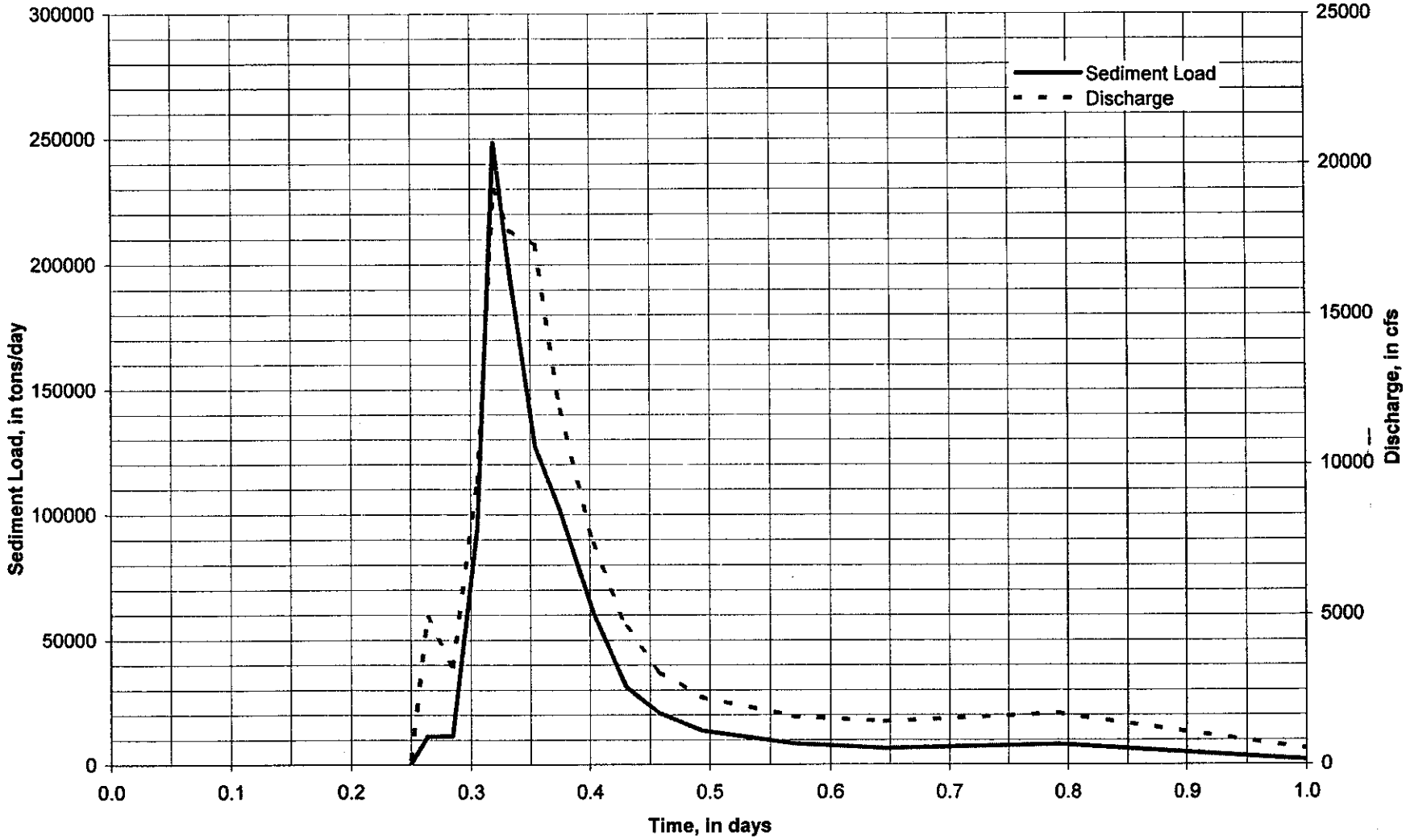


Figure AW-0-13
Sediment Load vs. Time (Sta. 0.2)
Apache Wash Overbank Model, 100-year Flood, Future Conditions

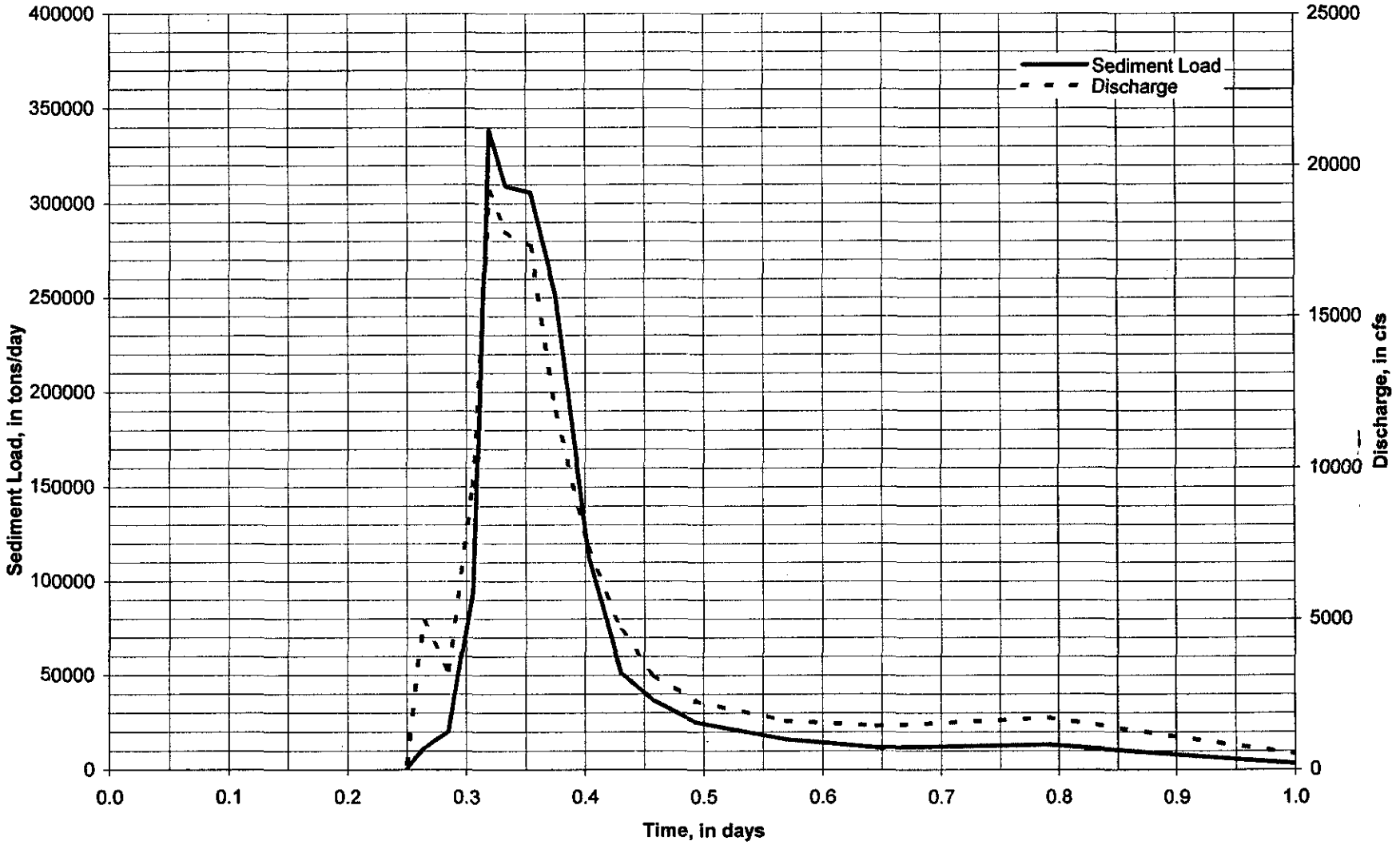


Figure PW-C-1
Bed Elevation Change at Last Time Step
Paradise Wash Main Channel Model, 100-year Flood, Existing Condition

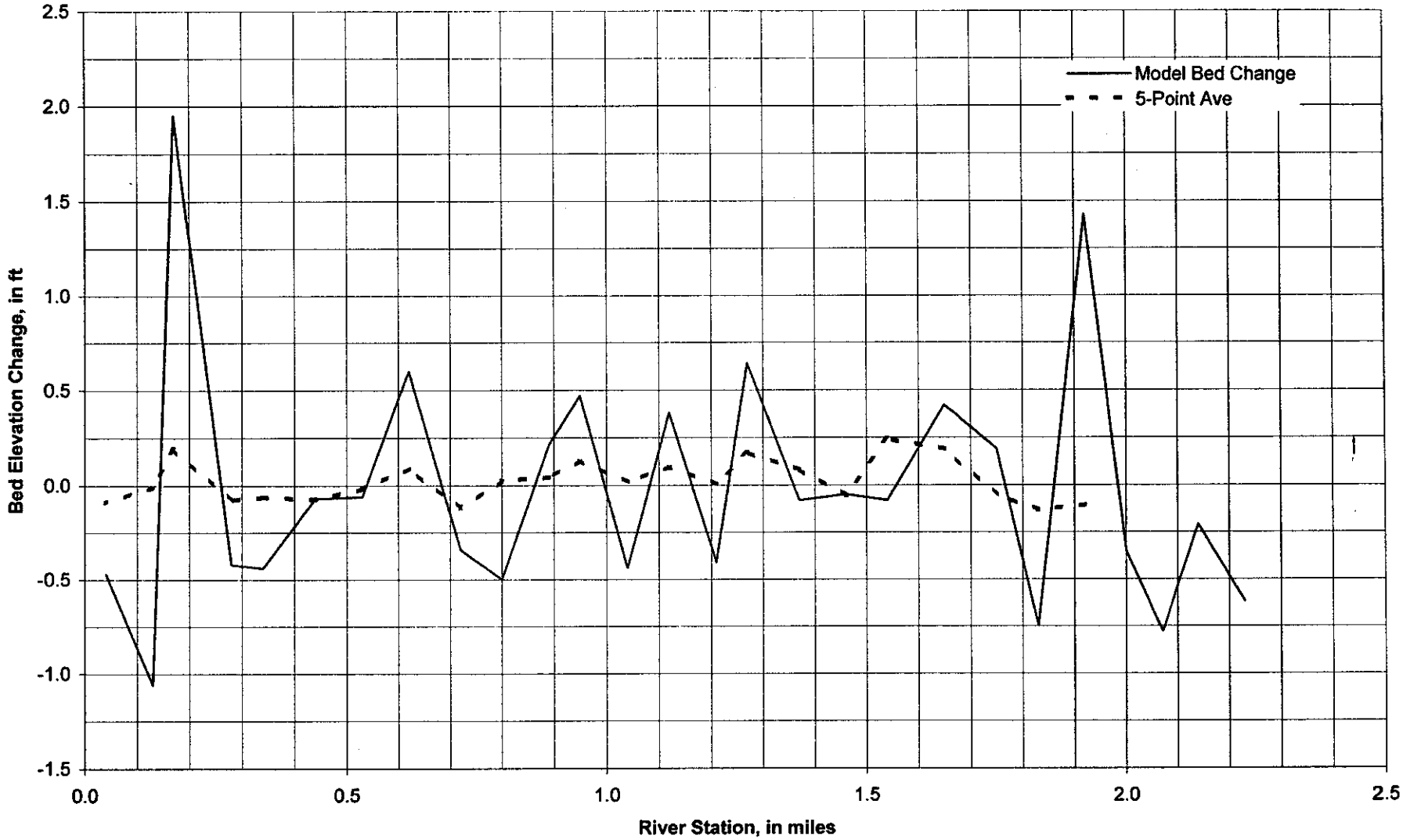


Figure PW-C-2
Minimum and Maximum Bed Elevation Change During Flood
Paradise Wash Main Channel Model, 100-year Flood, Existing Condition

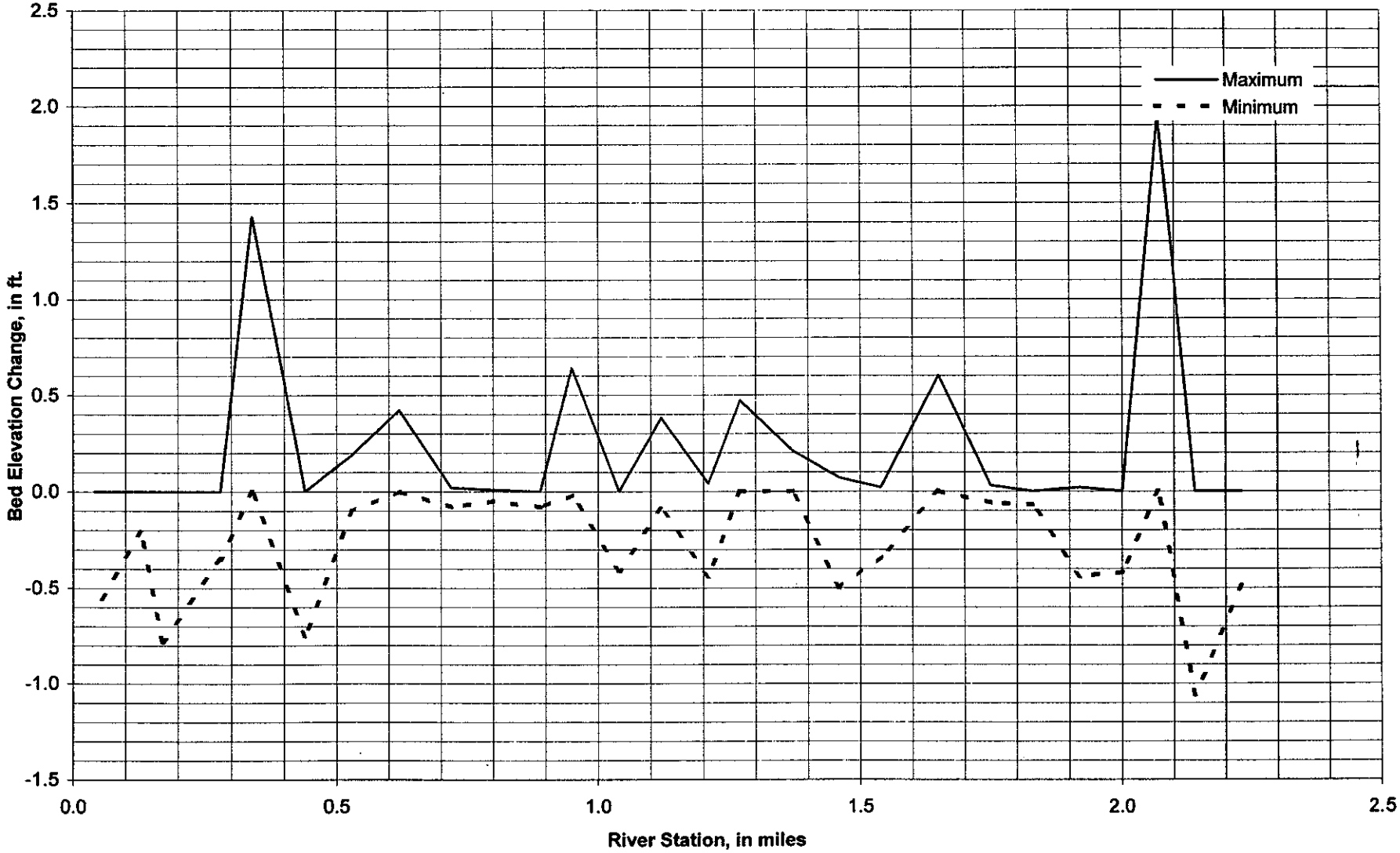


Figure PW-C-3
Sediment Load Passing Through Section
Paradise Wash Main Channel Model, 100-year Flood, Existing Condition

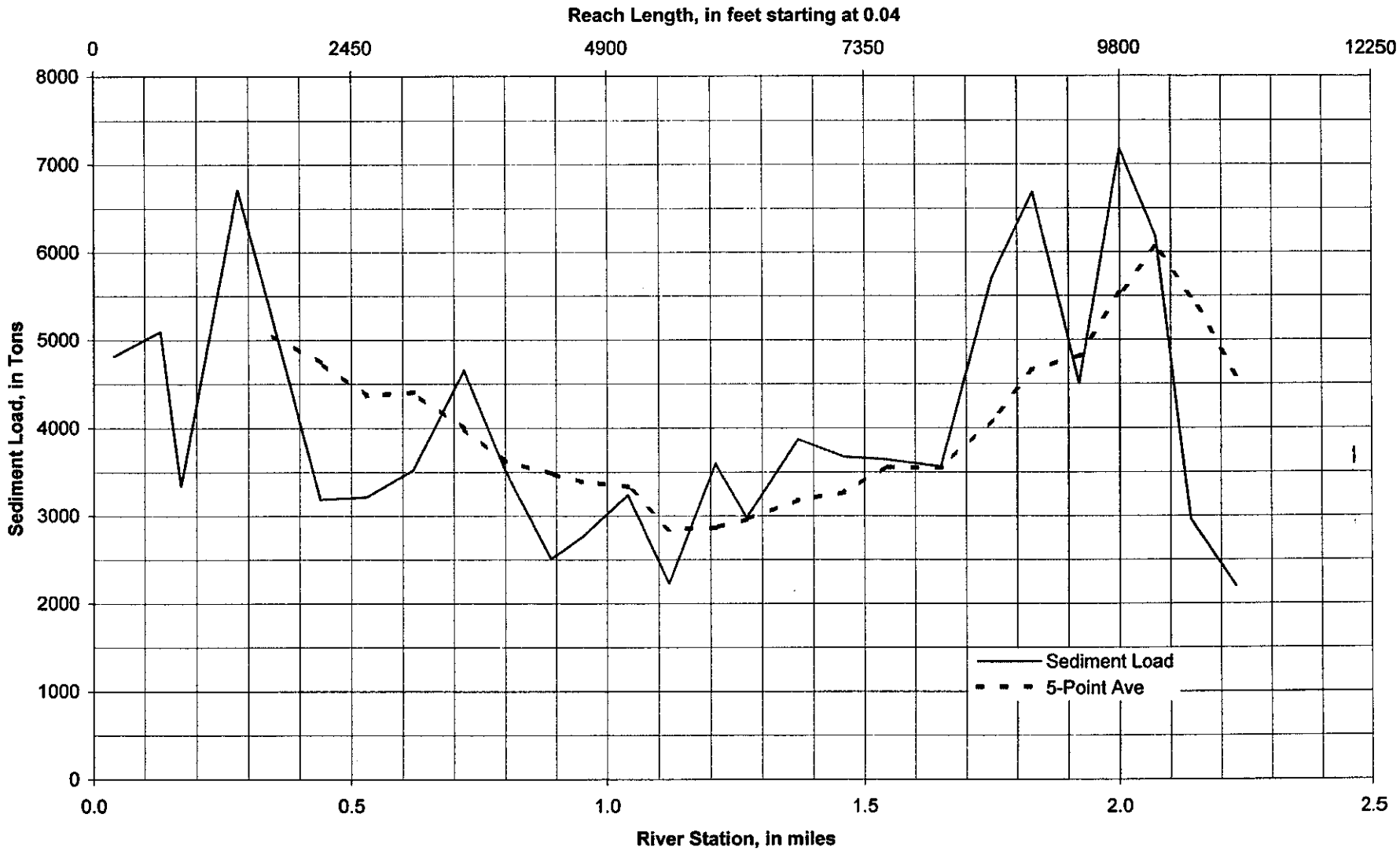


Figure PW-C-4
Accumulative Sediment Deposited Upstream of Section
Paradise Wash Main Channel Model, 100-year Flood, Existing Condition

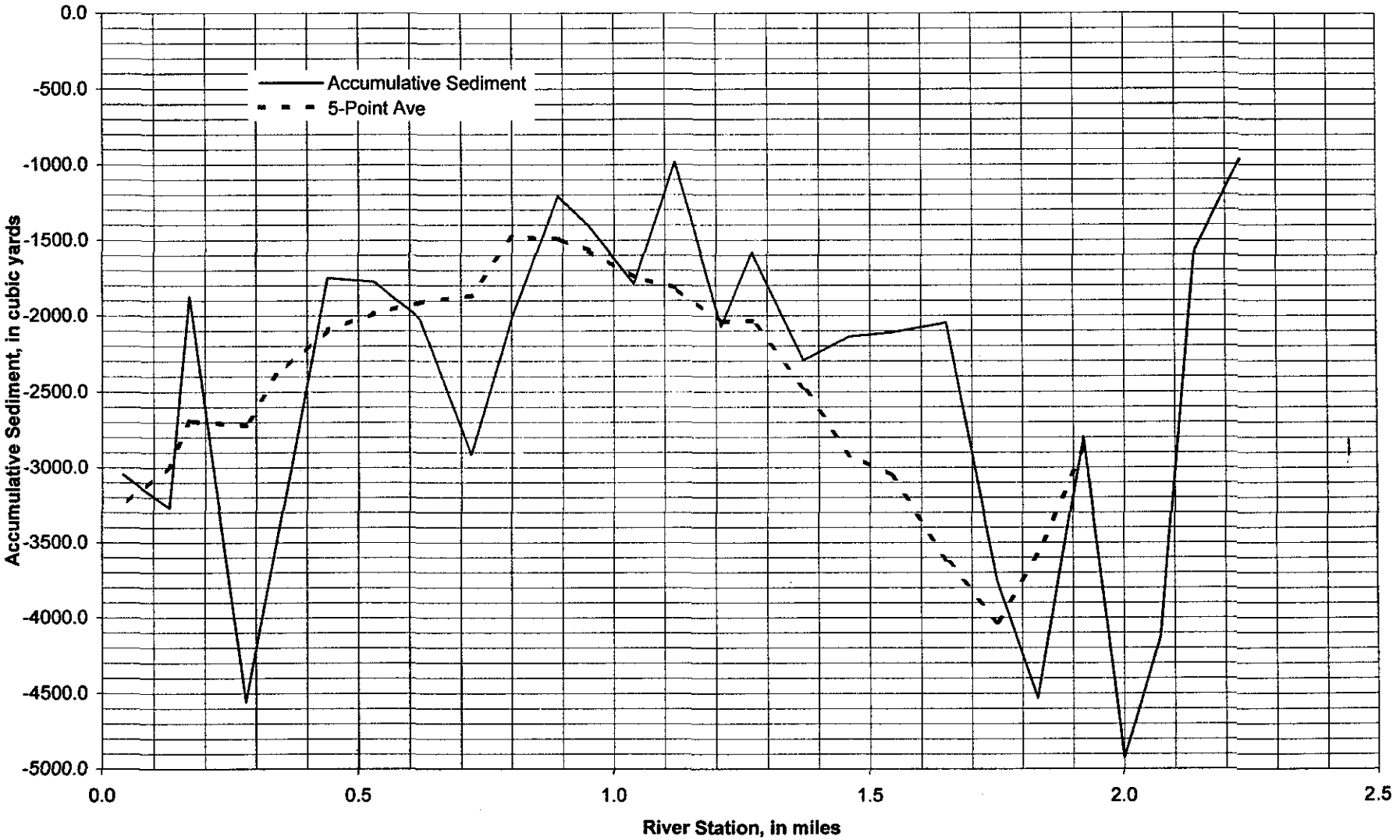


Figure PW-C-5
Bed Elevation Change at Last Time Step
Paradise Wash Main Channel Model, 100-year Flood, Future Condition

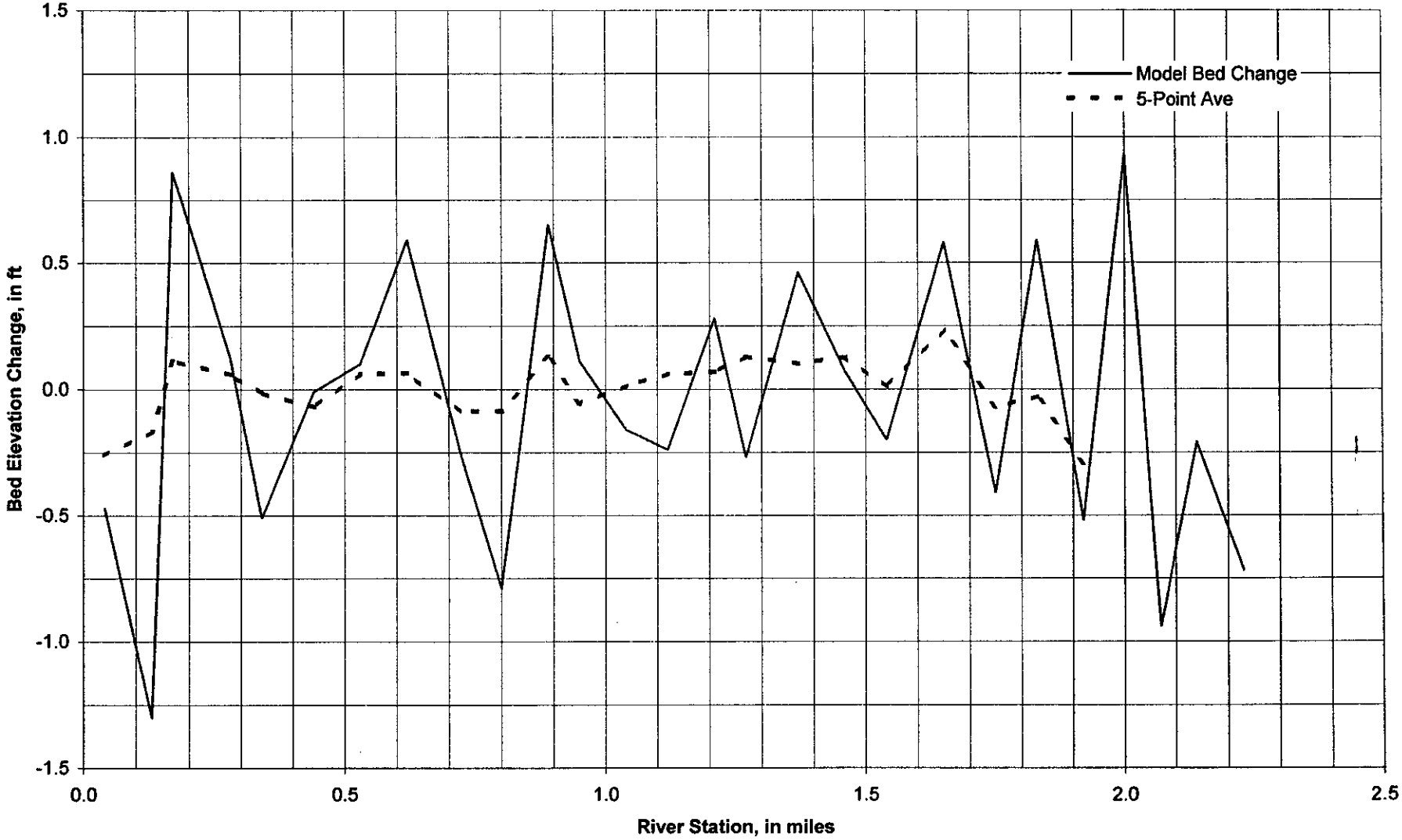


Figure PW-C-6
Minimum and Maximum Bed Elevation Change During Flood
Paradise Wash Main Channel Model, 100-year Flood, Future Condition

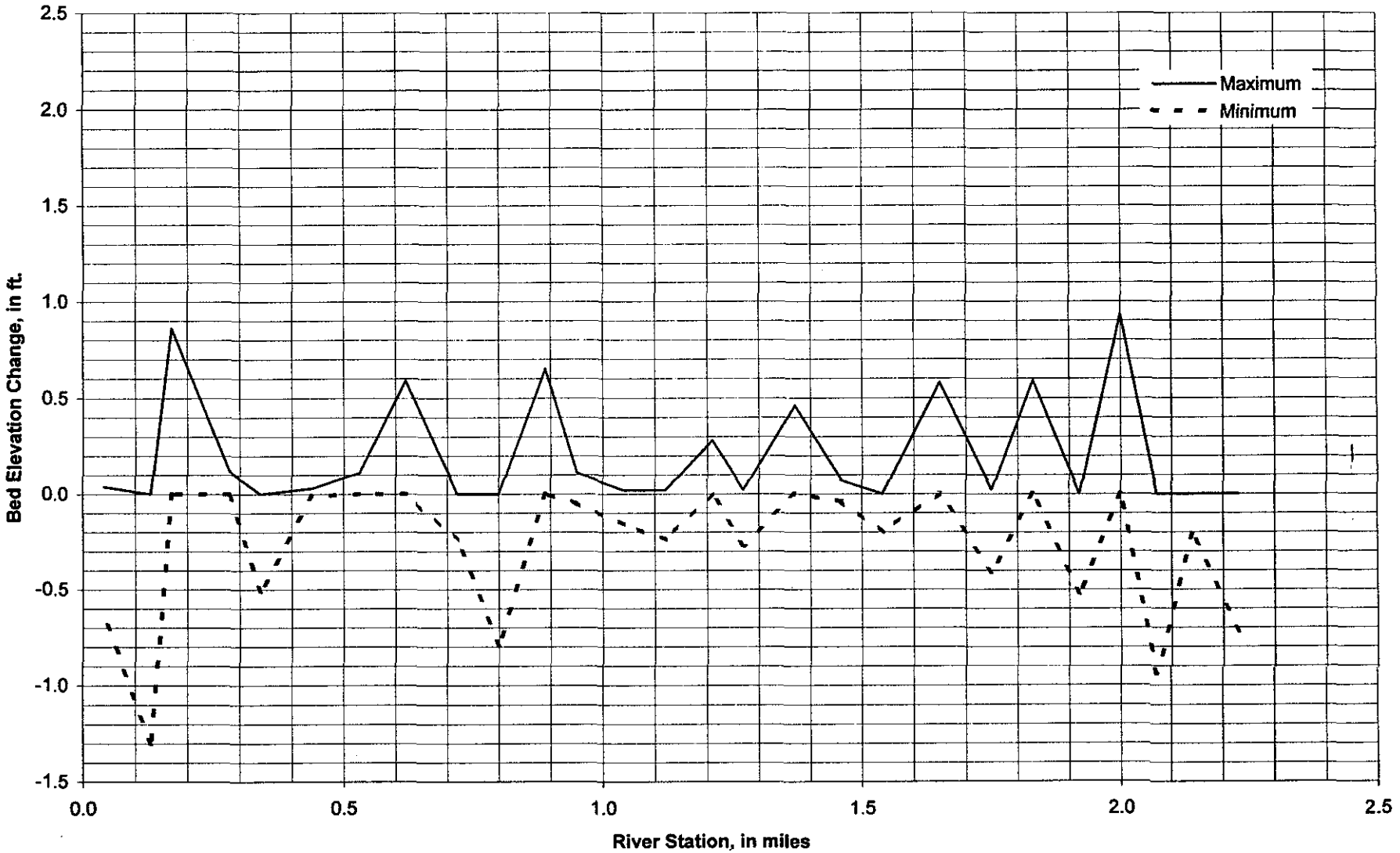


Figure PW-C-7
Sediment Load Passing Through Section
Paradise Wash Main Channel Model, 100-year Flood, Future Condition

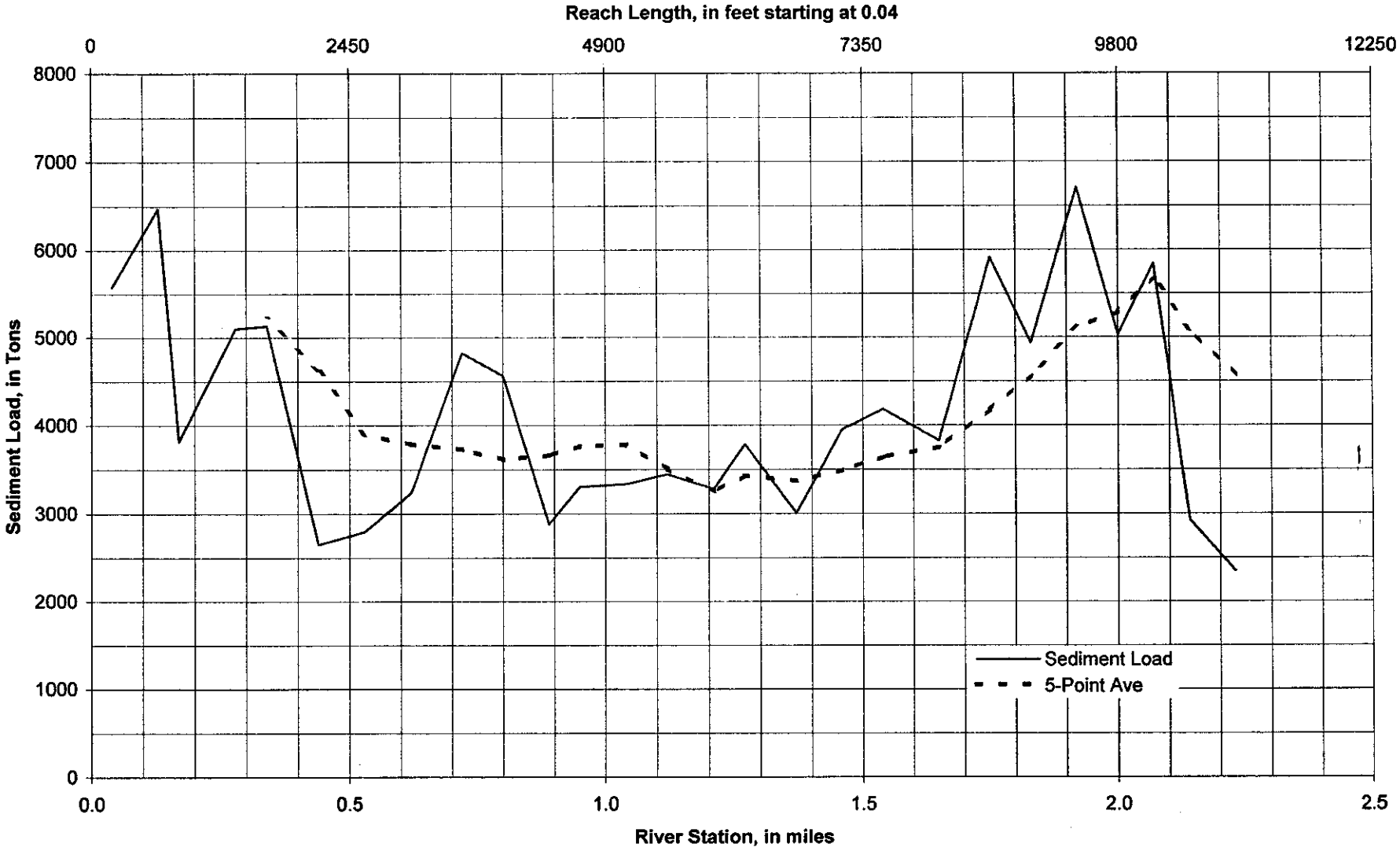


Figure PW-C-8
Accumulative Sediment Deposited Upstream of Section
Paradise Wash Main Channel Model, 100-year Flood, Future Condition

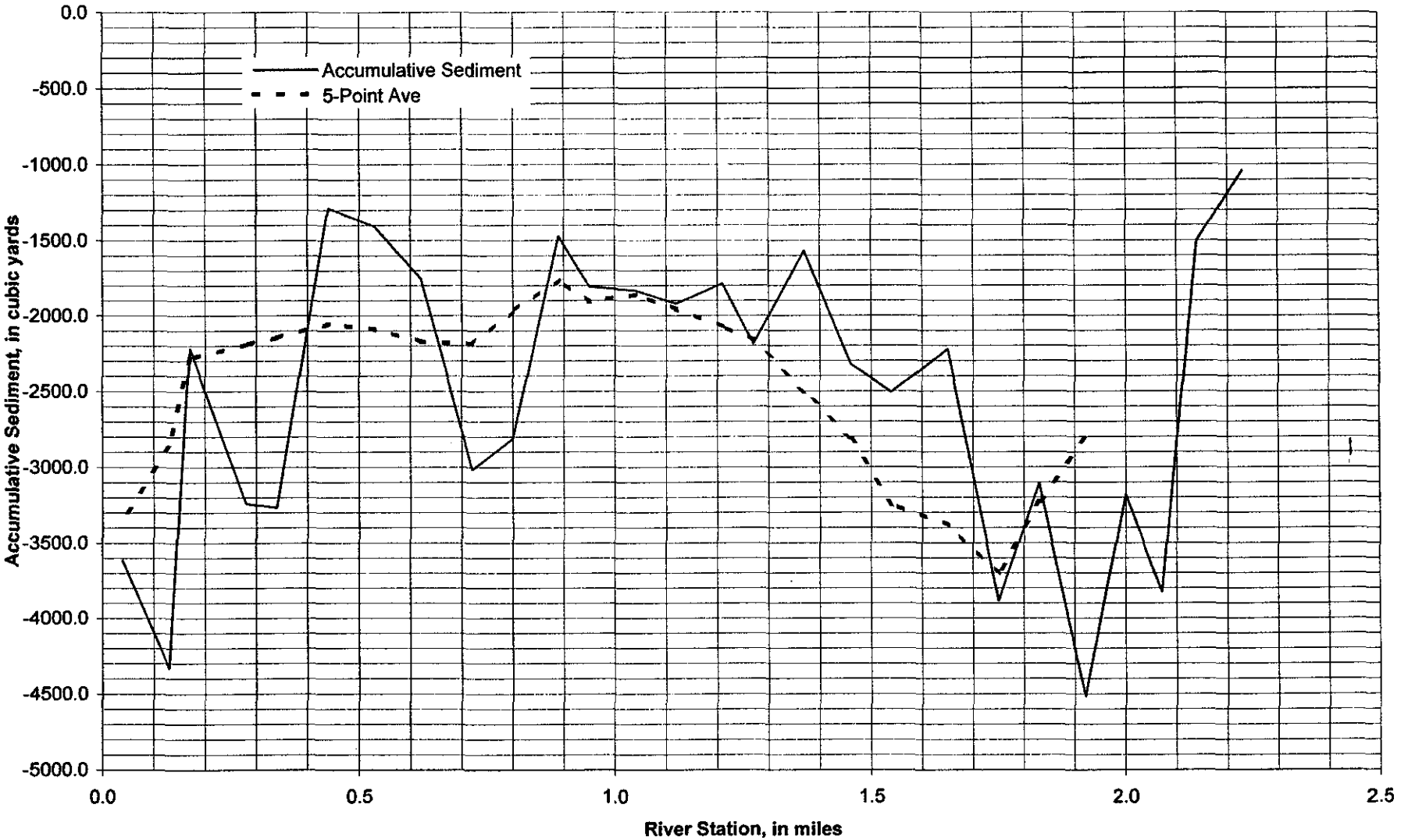


Figure PW-O-1
Bed Elevation at Last Time Step
Paradise Wash Overbank Model, 100-year Flood, Existing Condition

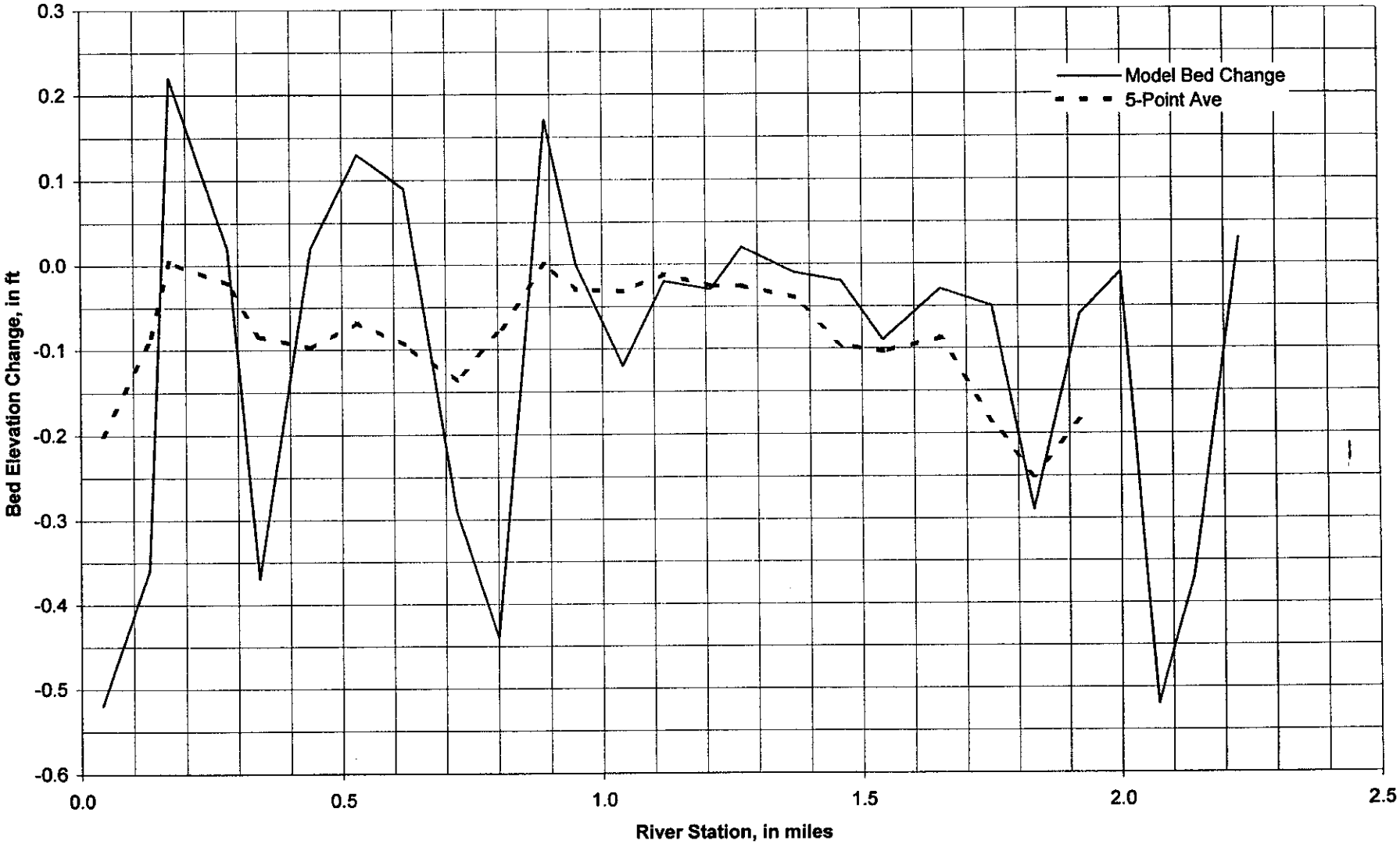


Figure PW-O-2
Minimum and Maximum Bed Elevation Change During Flood
Paradise Wash Overbank Model, 100-year Flood, Existing Condition

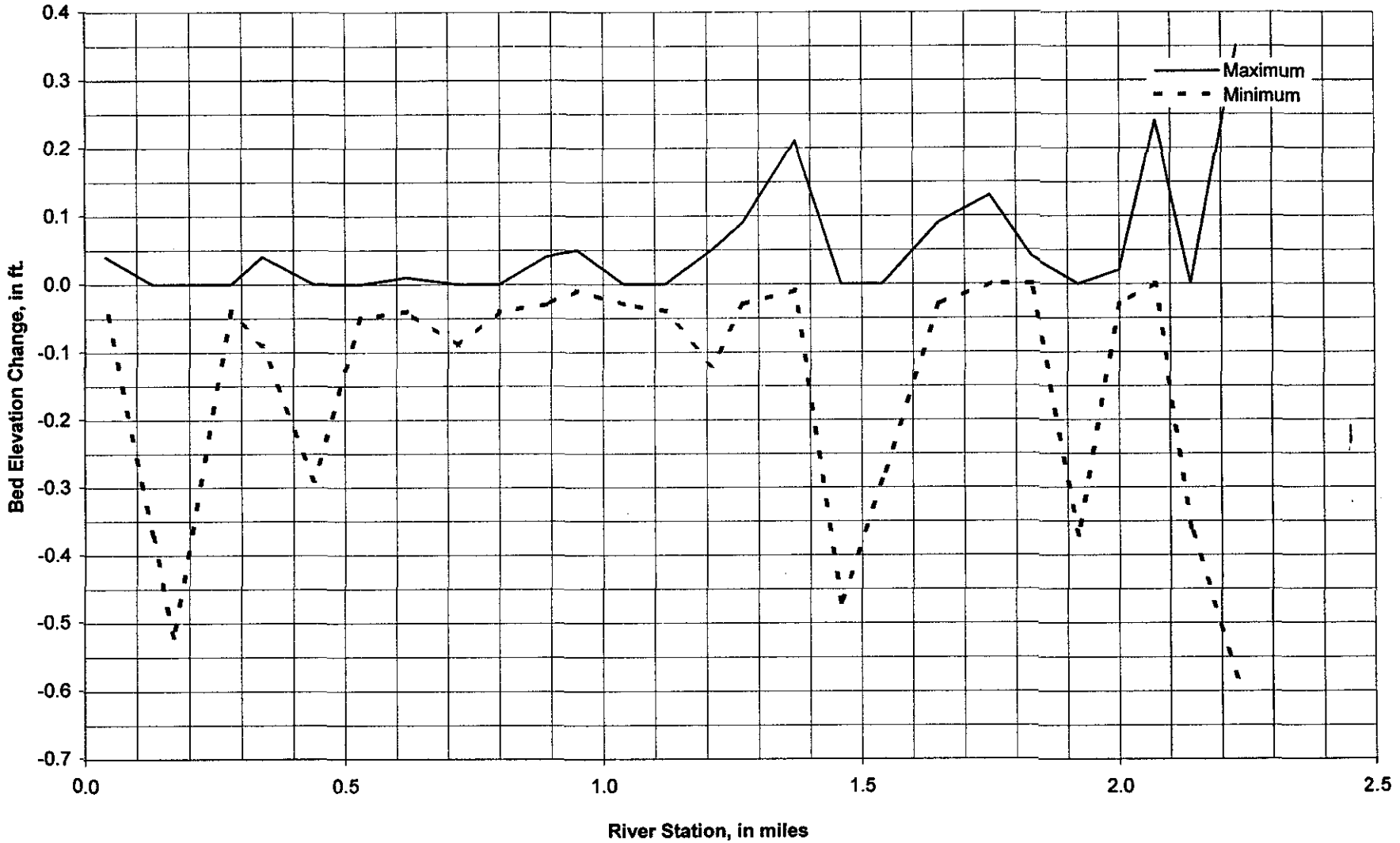


Figure PW-O-3
Sediment Load Passing Through Section
Paradise Wash Overbank Model, 100-year Flood, Existing Condition

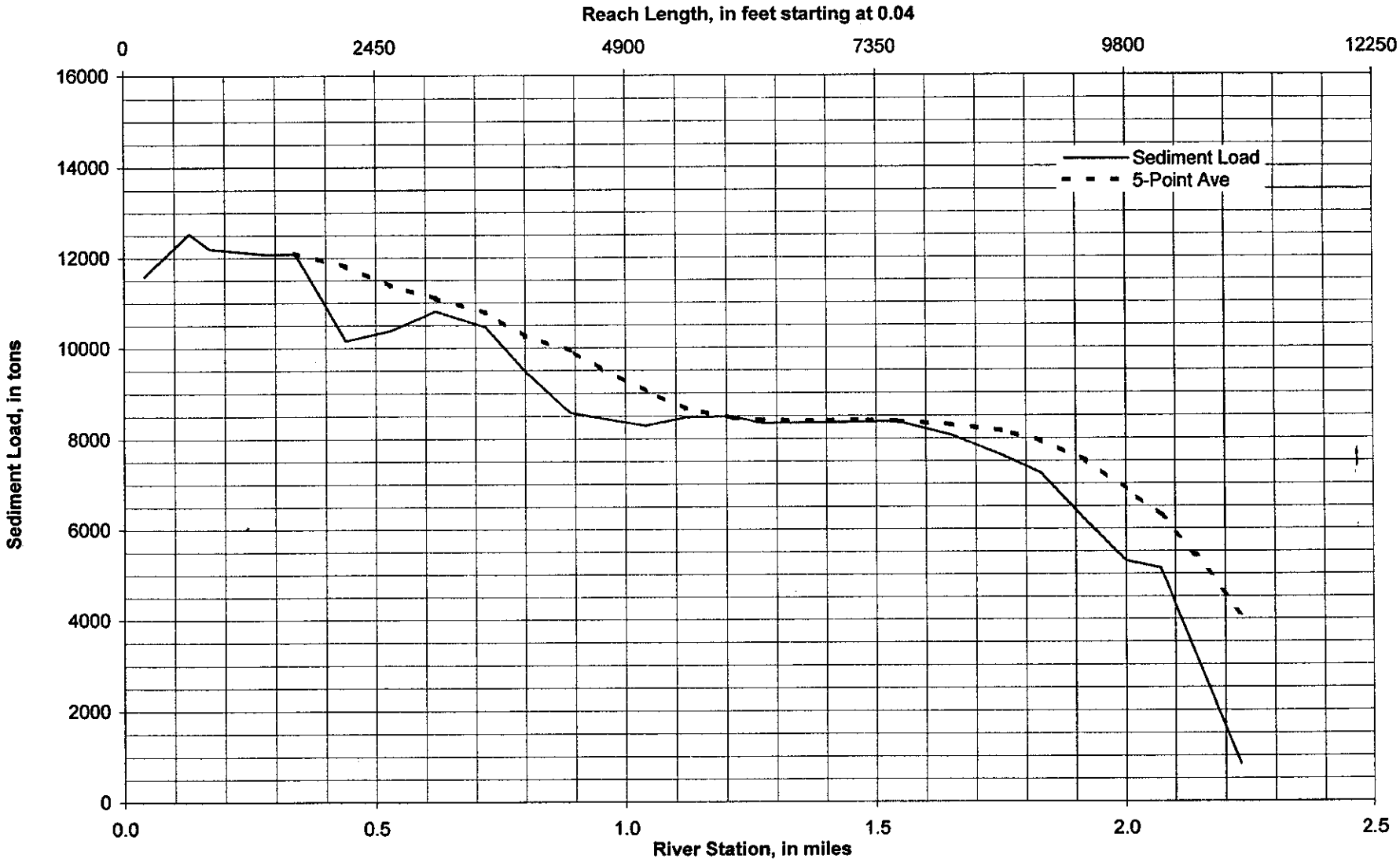


Figure PW-O-4
Accumulative Sediment Deposited Upstream of Section
Paradise Wash Overbank Model, 100-year Flood, Existing Condition

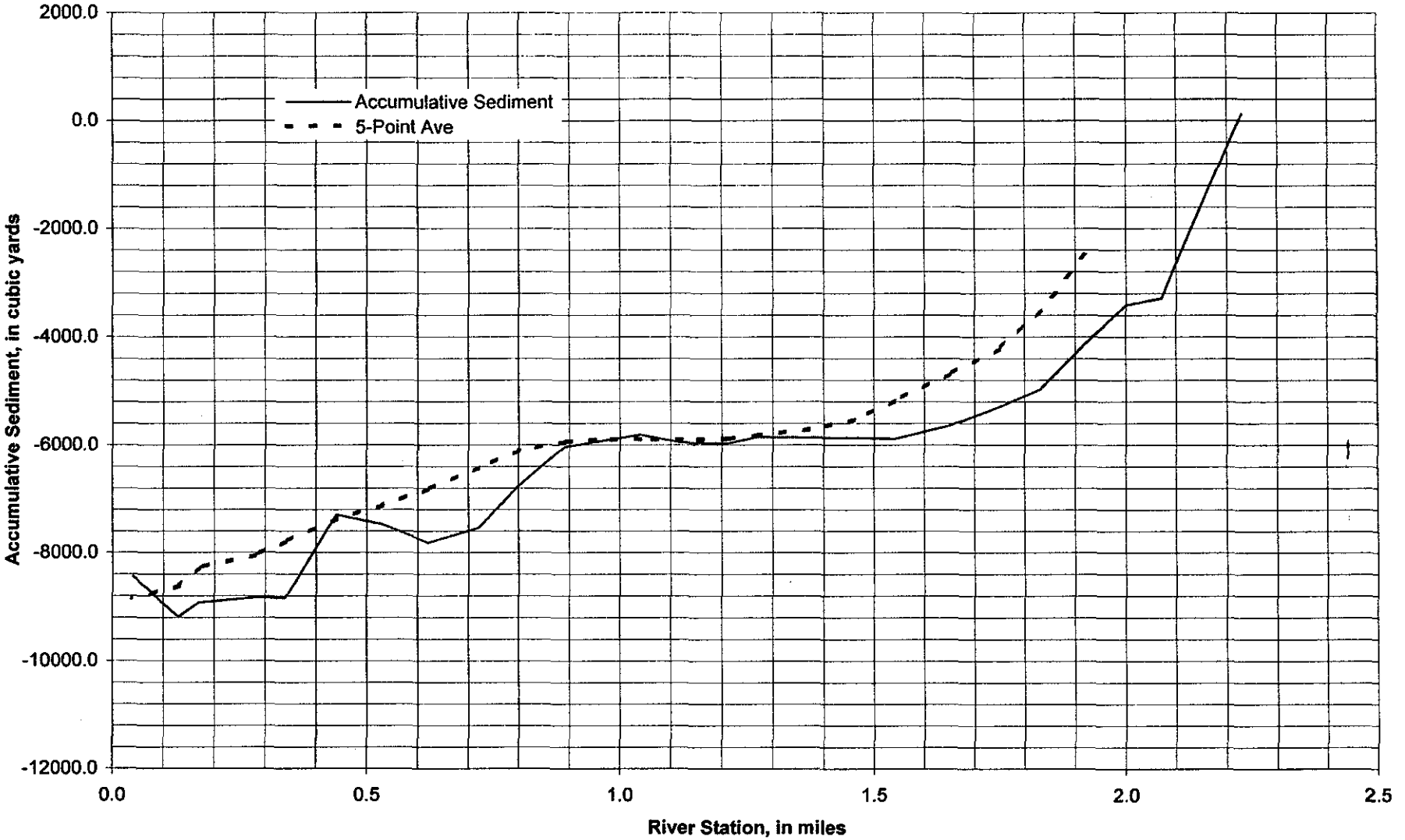


Figure PW-O-5
Bed Elevation at Last Time Step
Paradise Wash Overbank Model, 100-year Flood, Future Condition

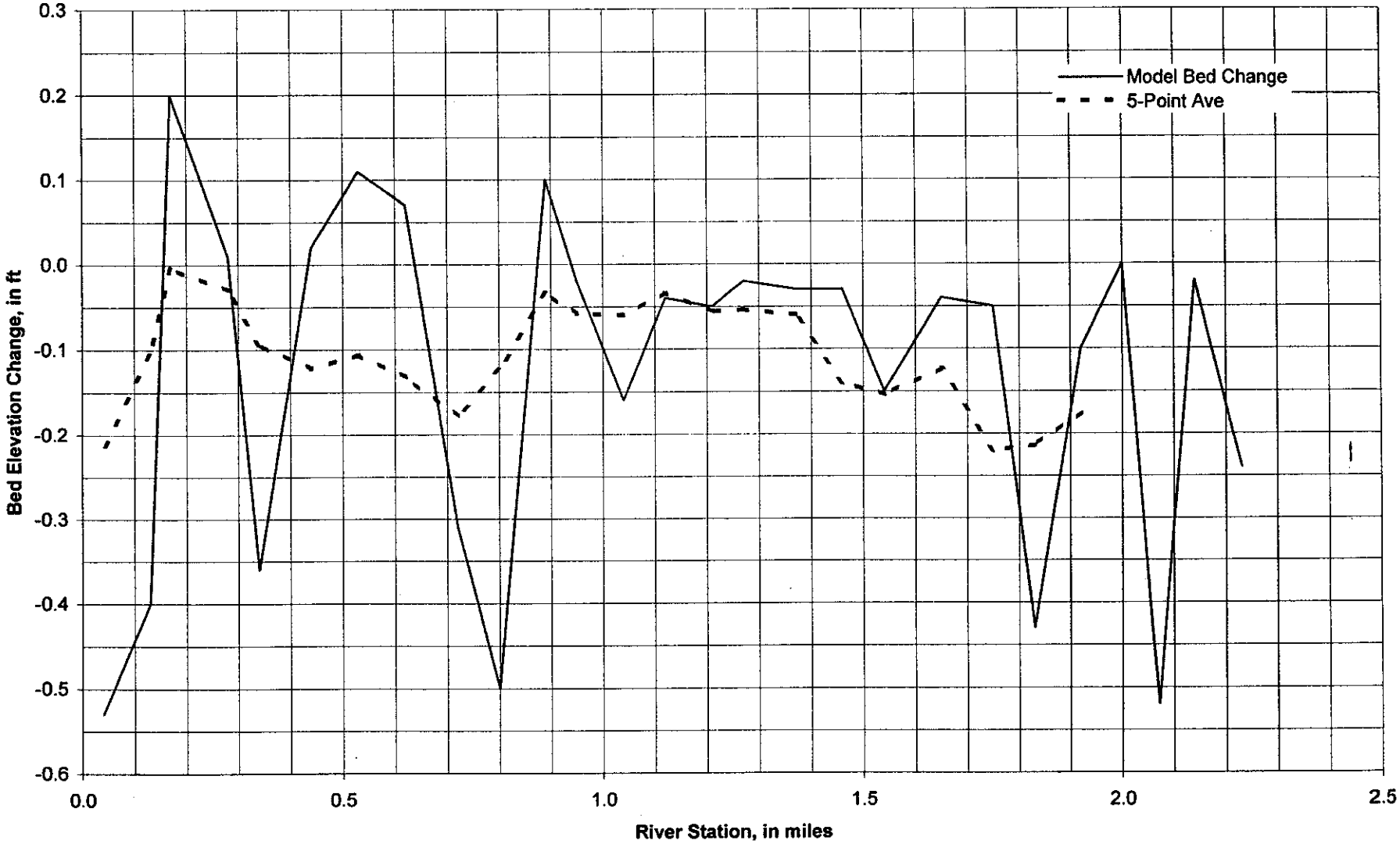


Figure PW-O-6
Minimum and Maximum Bed Elevation Change During Flood
Paradise Wash Overbank Model, 100-year Flood, Future Condition

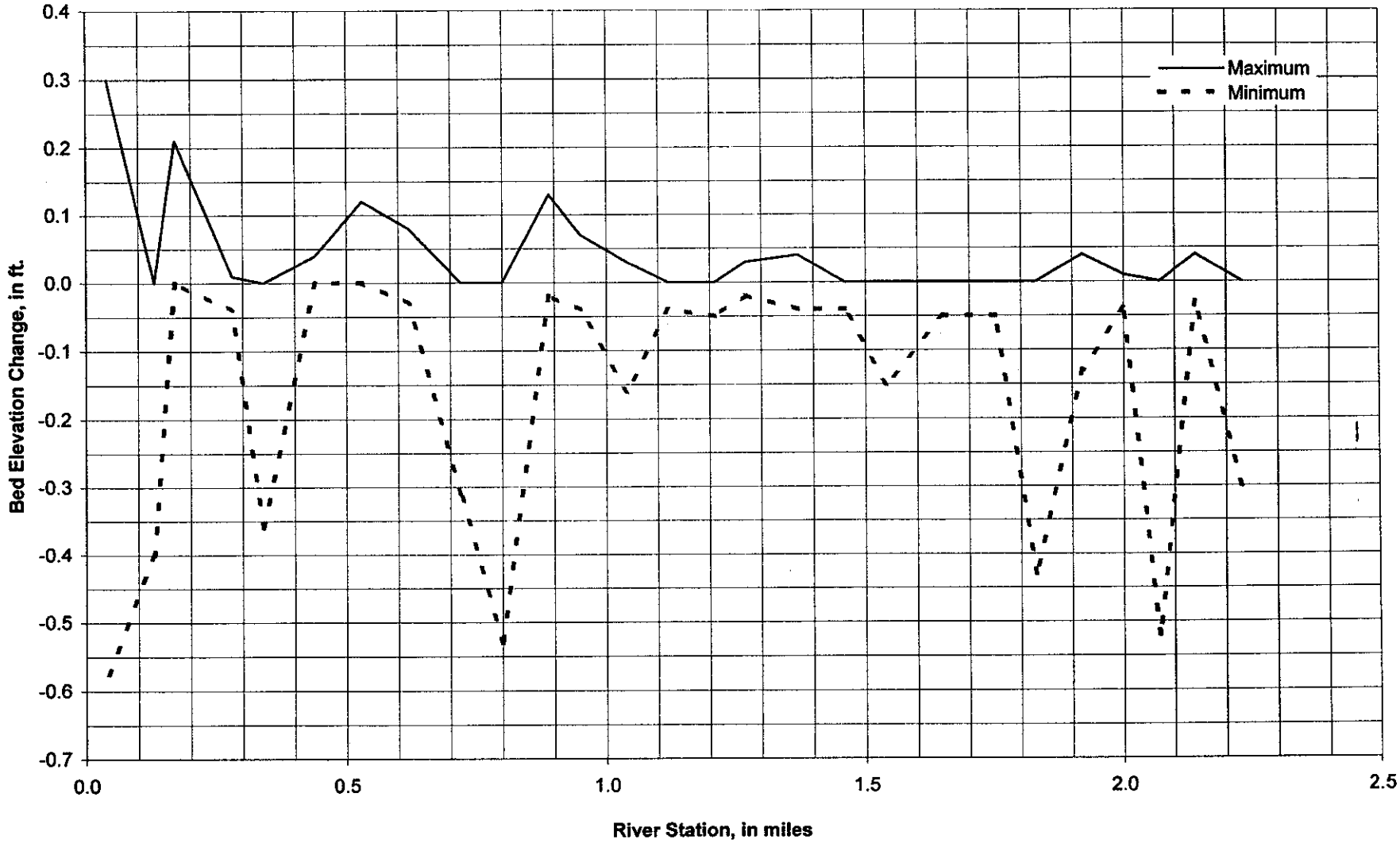


Figure PW-O-7
Sediment Load Passing Through Section
Paradise Wash Overbank Model, 100-year Flood, Future Condition

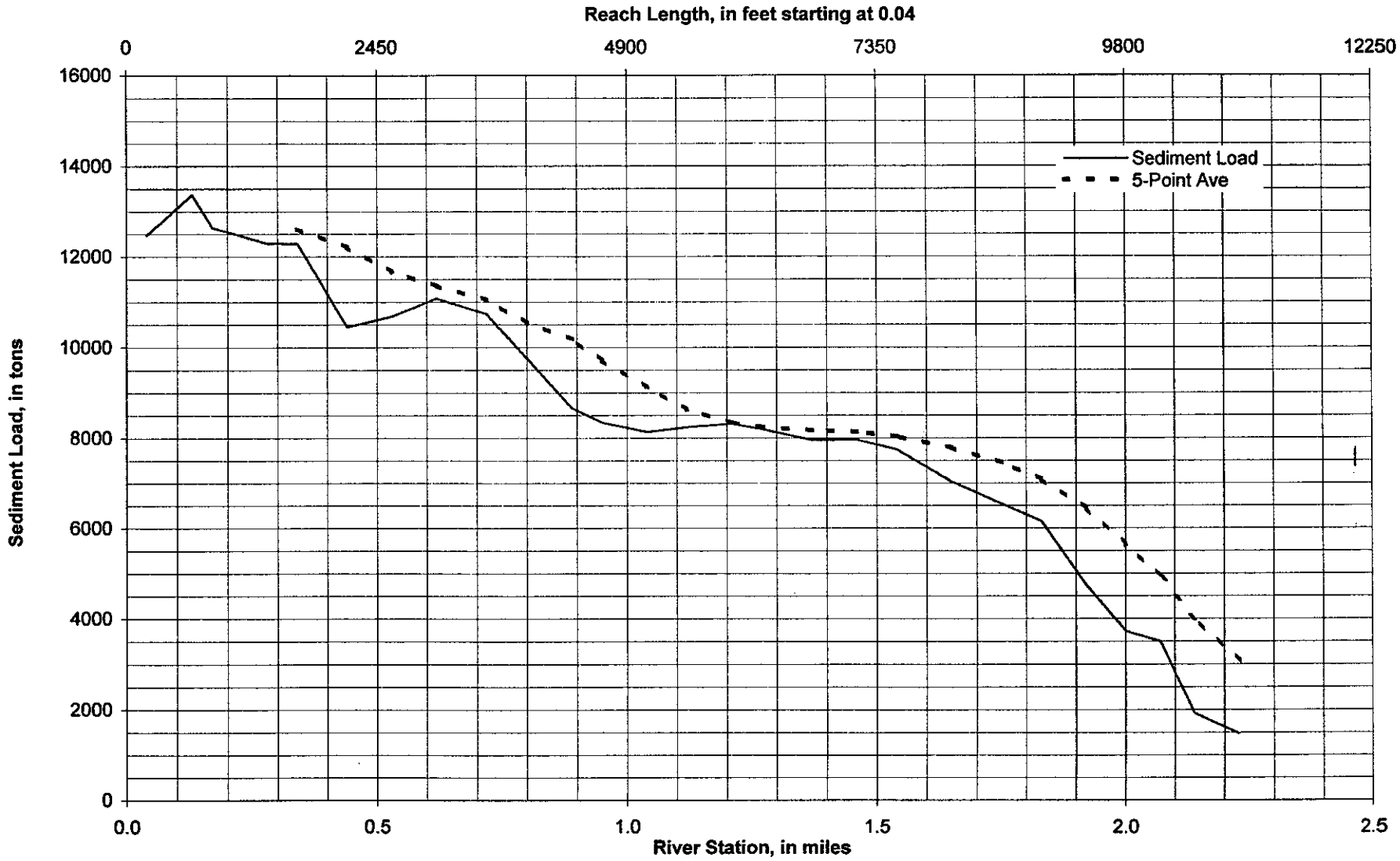


Figure PW-O-8
Accumulative Sediment Deposited Upstream of Section
Paradise Wash Overbank Model, 100-year Flood, Future Condition

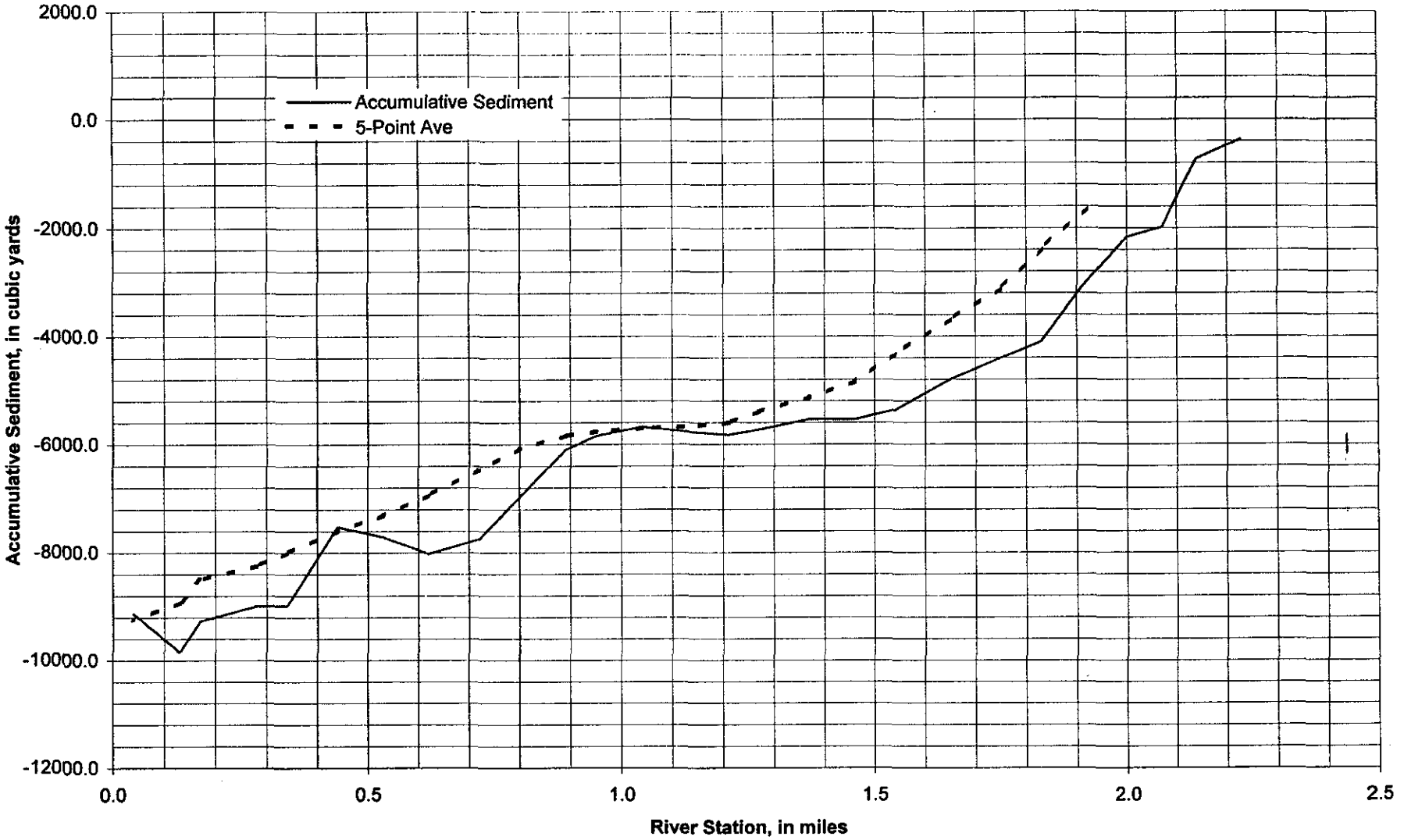


Figure DHW-C-1
Bed Elevation Change at Last Time Step
Desert Hills Wash Main Channel Model, 100-year Flood, Existing Condition

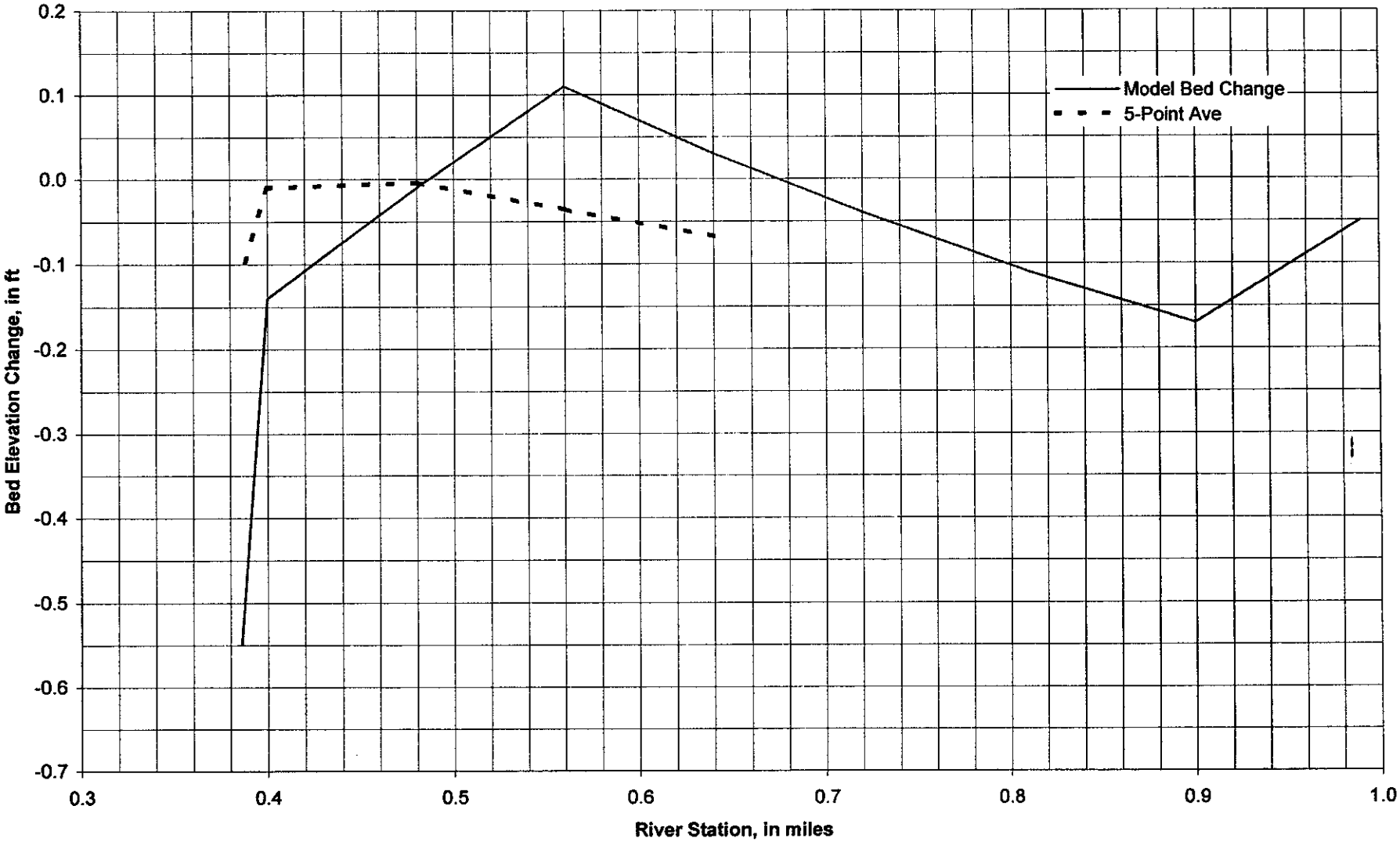


Figure DHW-C-2
Minimum and Maximum Bed Elevation Change During Flood
Desert Hills Wash Main Channel Model, 100-year Flood, Existing Condition

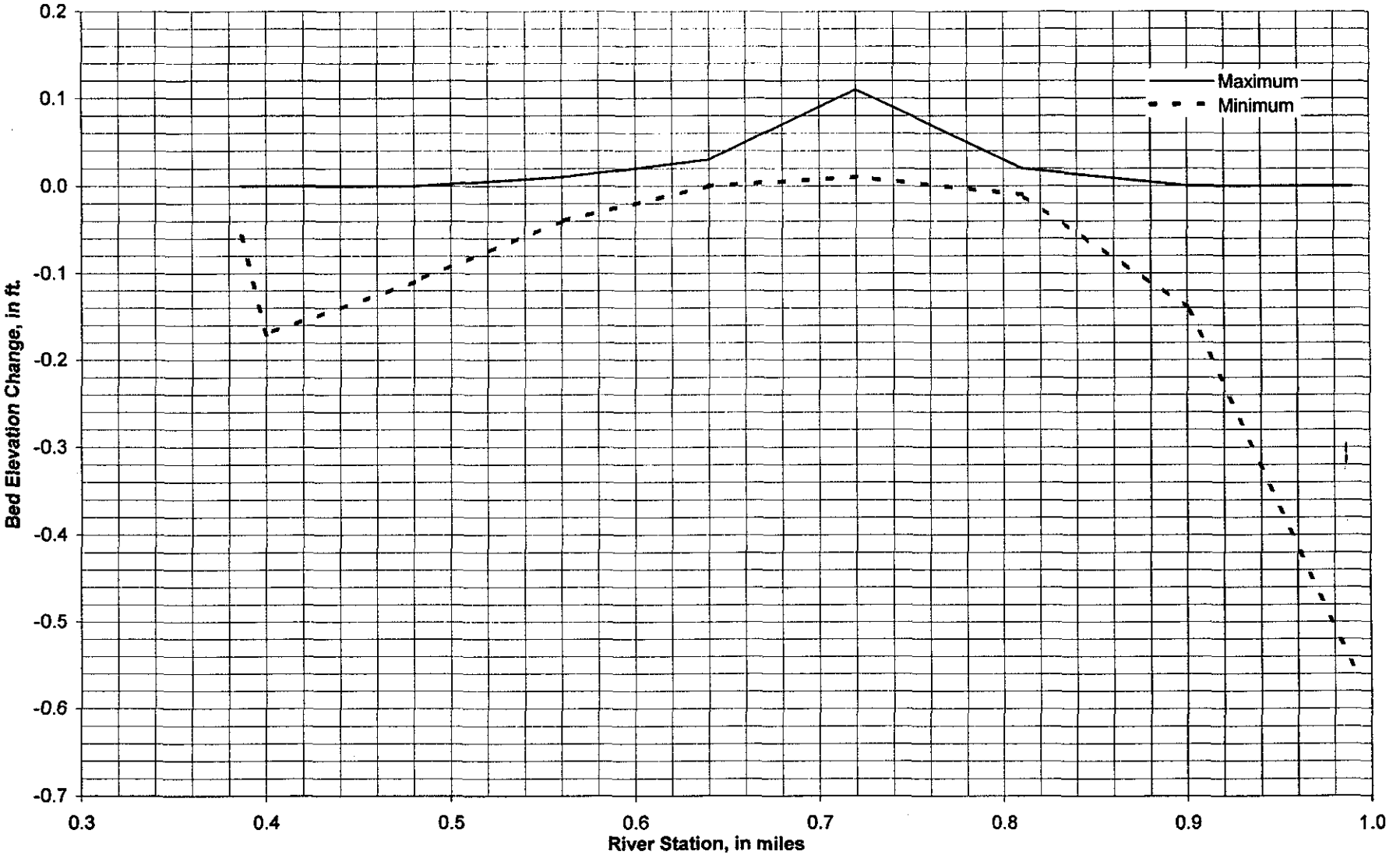


Figure DHW-C-3
Sediment Load Passing Through Section
Desert Hills Wash Main Channel Model, 100-year Flood, Existing Condition

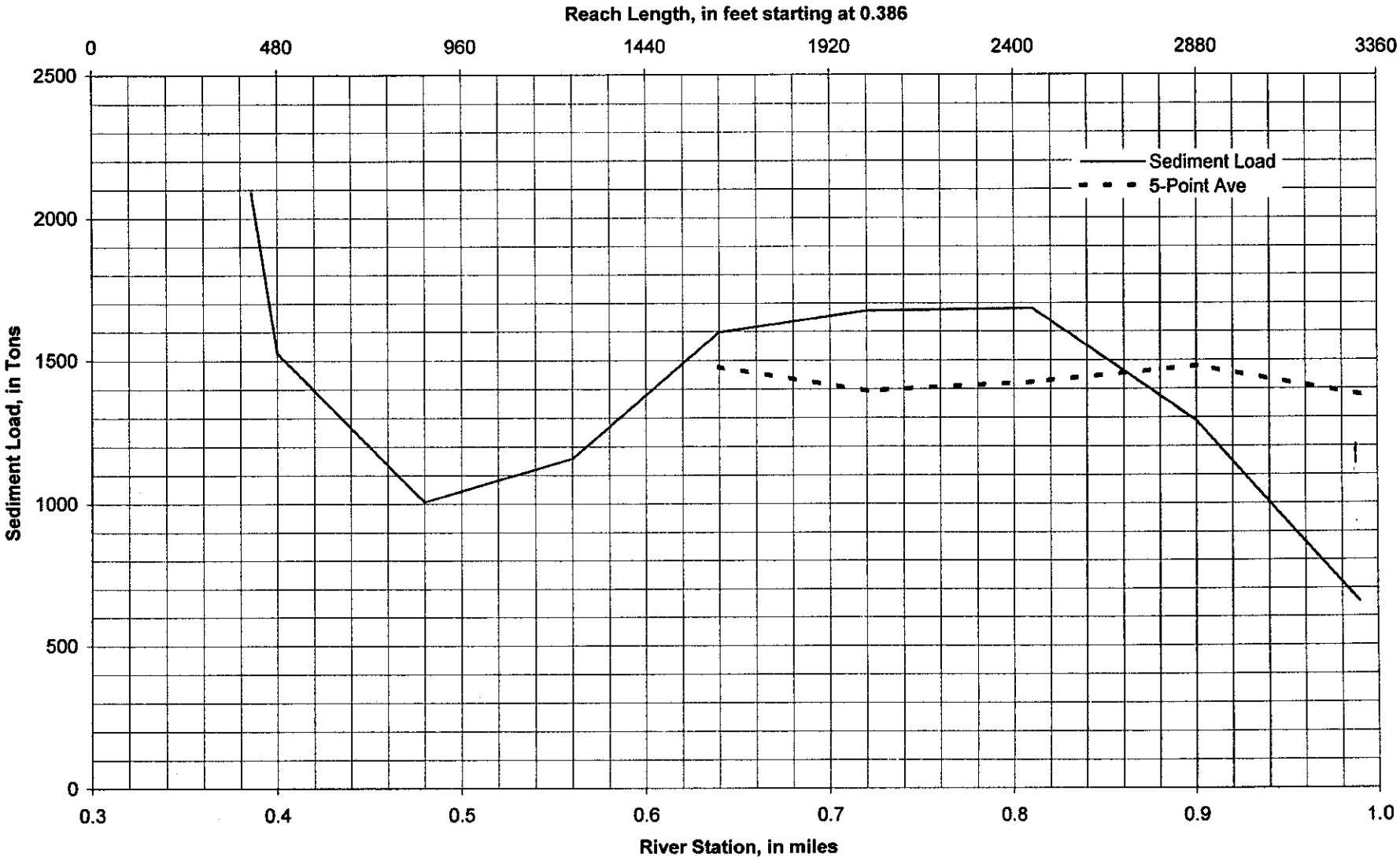


Figure DHW-C-4
Accumulative Sediment Deposited Upstream of Section
Desert Hills Wash Main Channel Model, 100-year Flood, Existing Condition

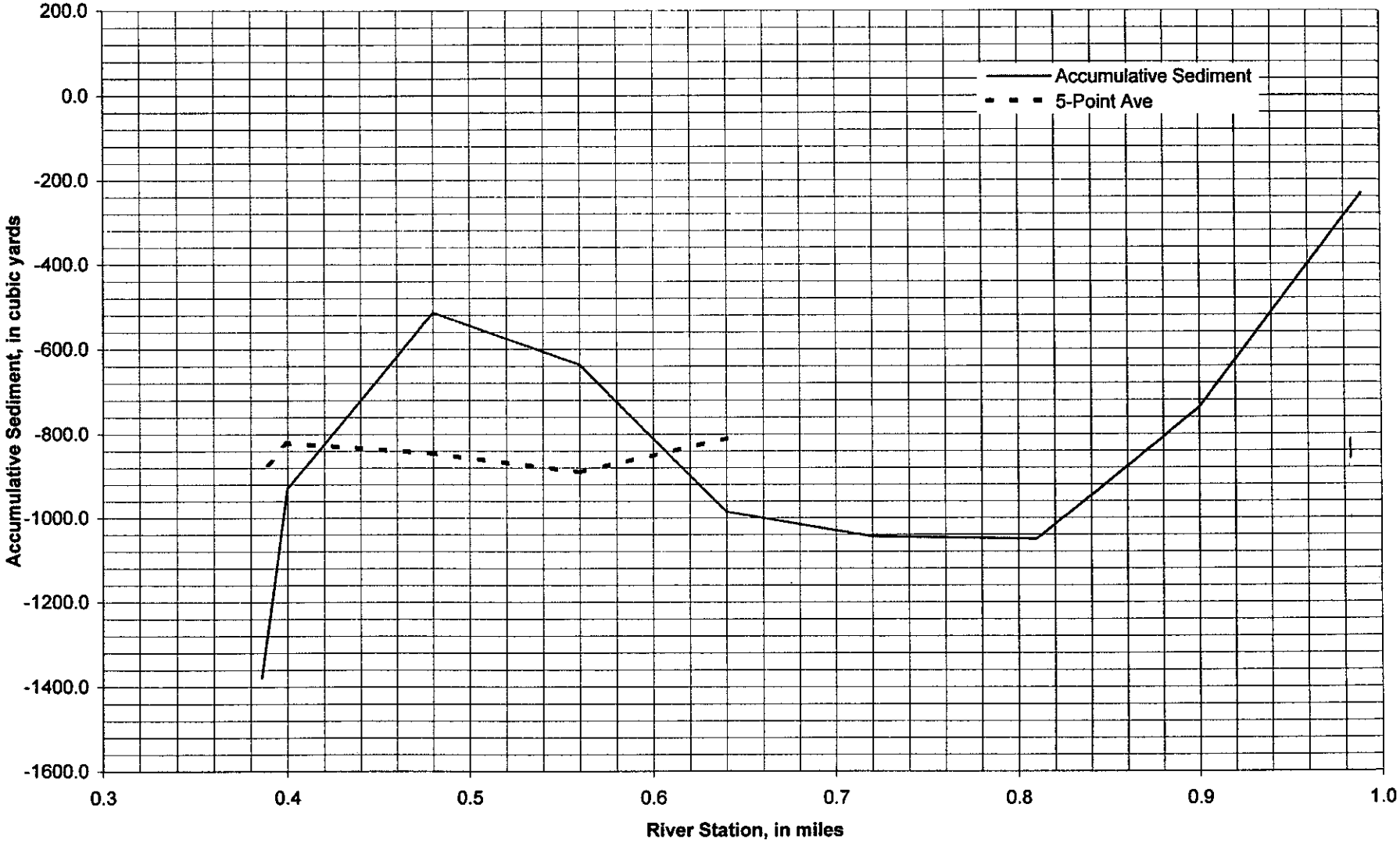


Figure DHW-C-5
Bed Elevation Change at Last Time Step
Desert Hills Wash Main Channel Model, 100-year Flood, Future Condition

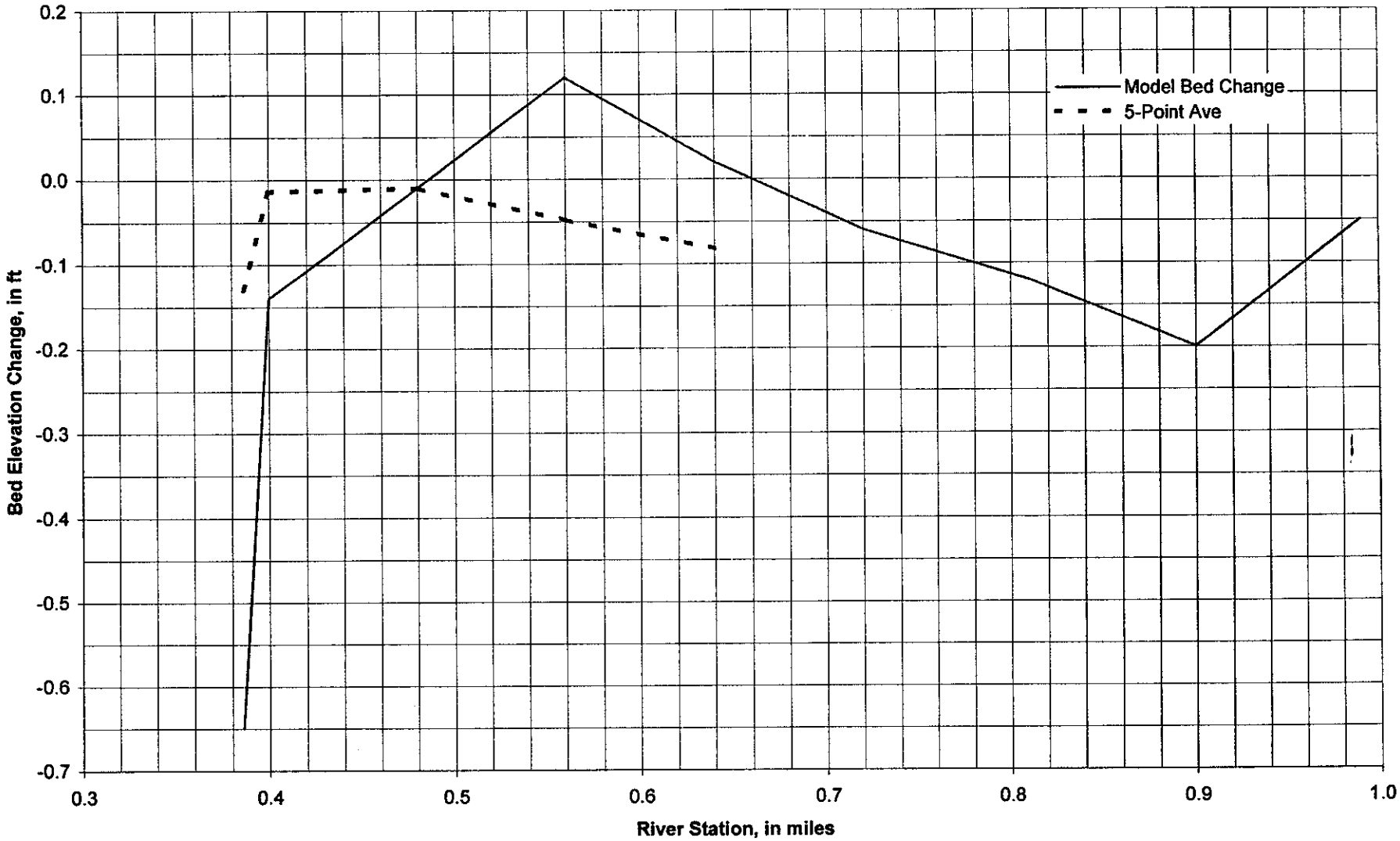


Figure DHW-C-6
Minimum and Maximum Bed Elevation Change *During Flood*
Desert Hills Wash Main Channel Model, 100-year Flood, Future Condition

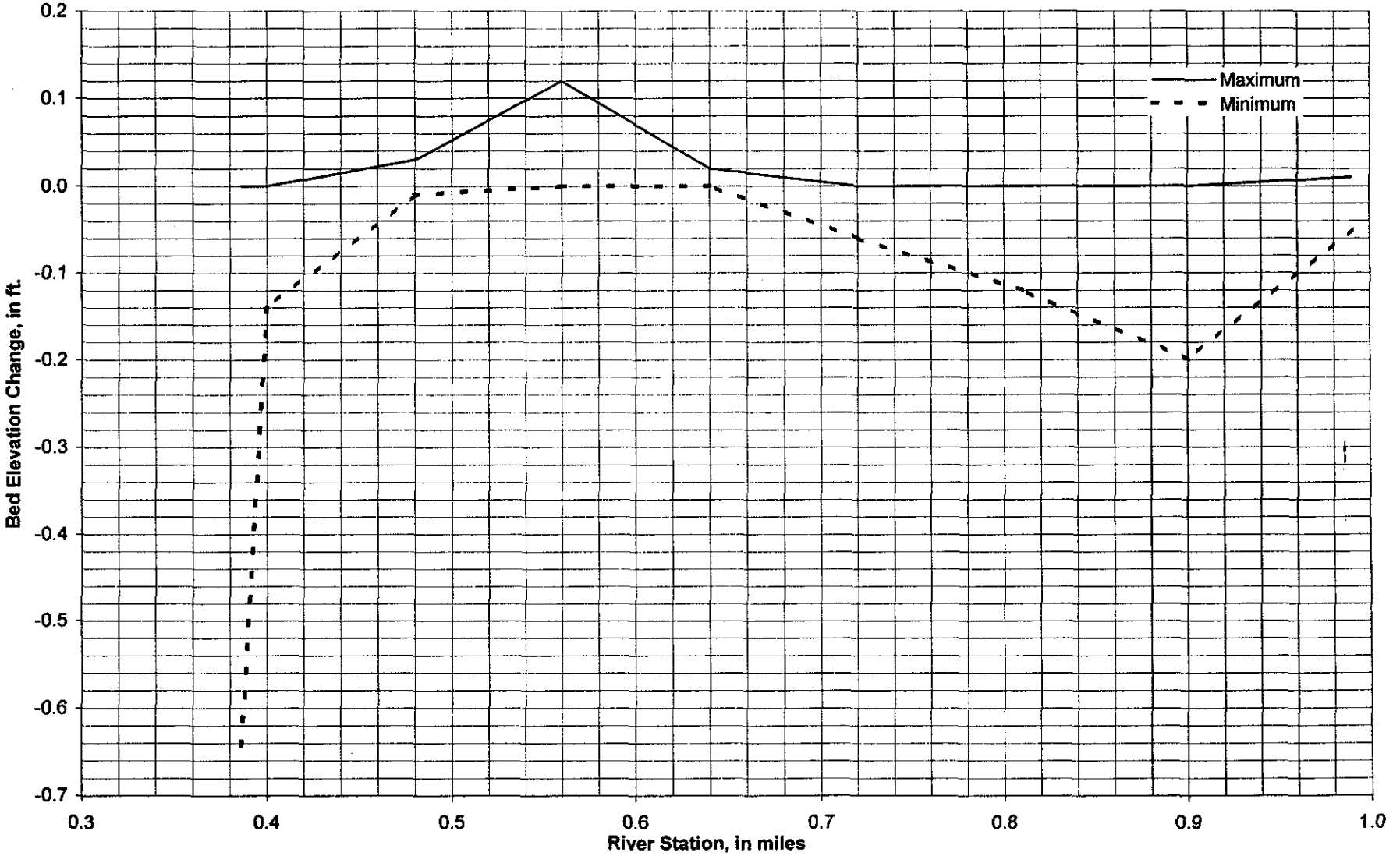


Figure DHW-C-7
Sediment Load Passing Through Section
Desert Hills Wash Main Channel Model, 100-year Flood, Future Condition

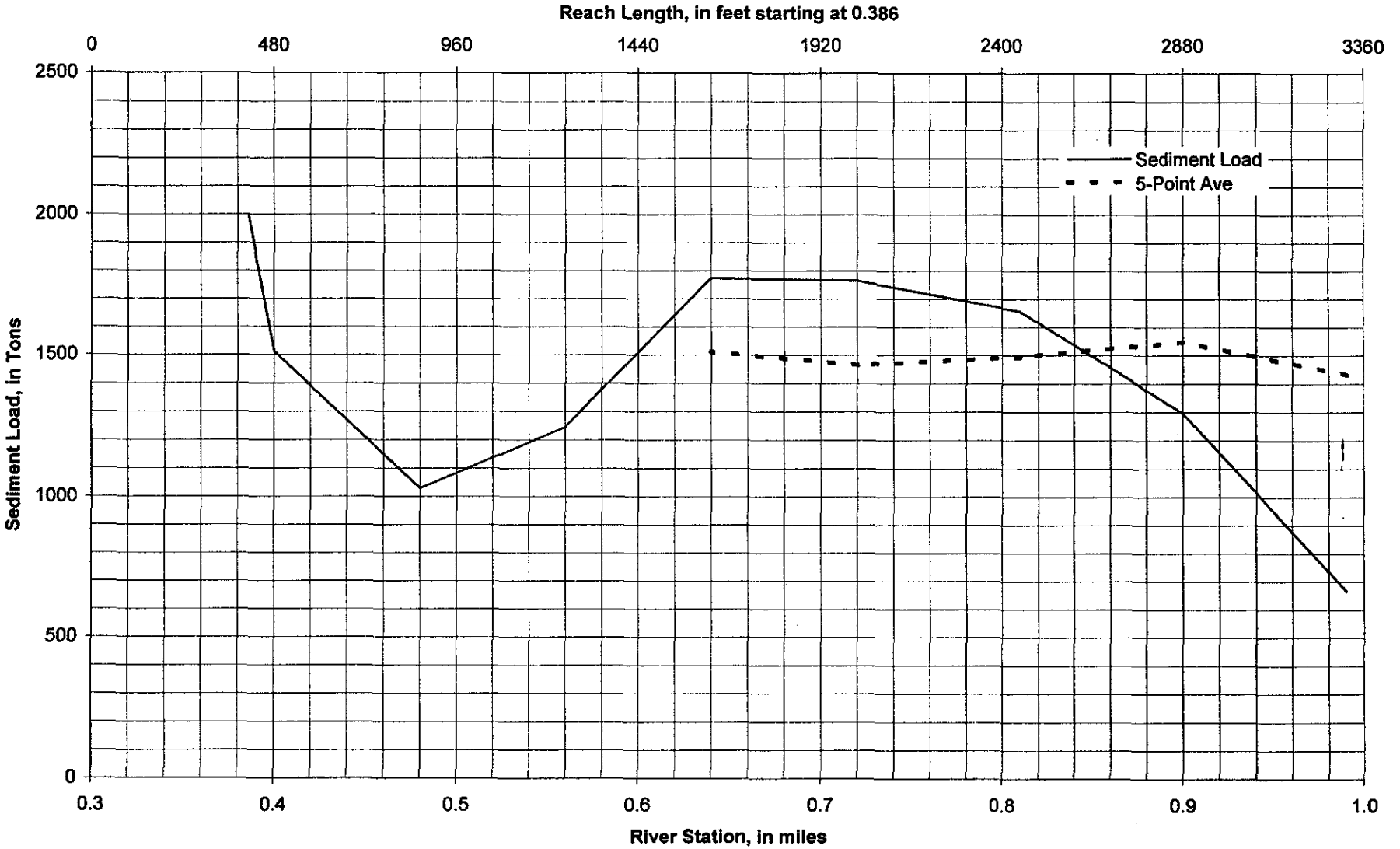


Figure DHW-C-8
Accumulative Sediment Deposited Upstream of Section
Desert Hills Wash Main Channel Model, 100-year Flood, Future Condition

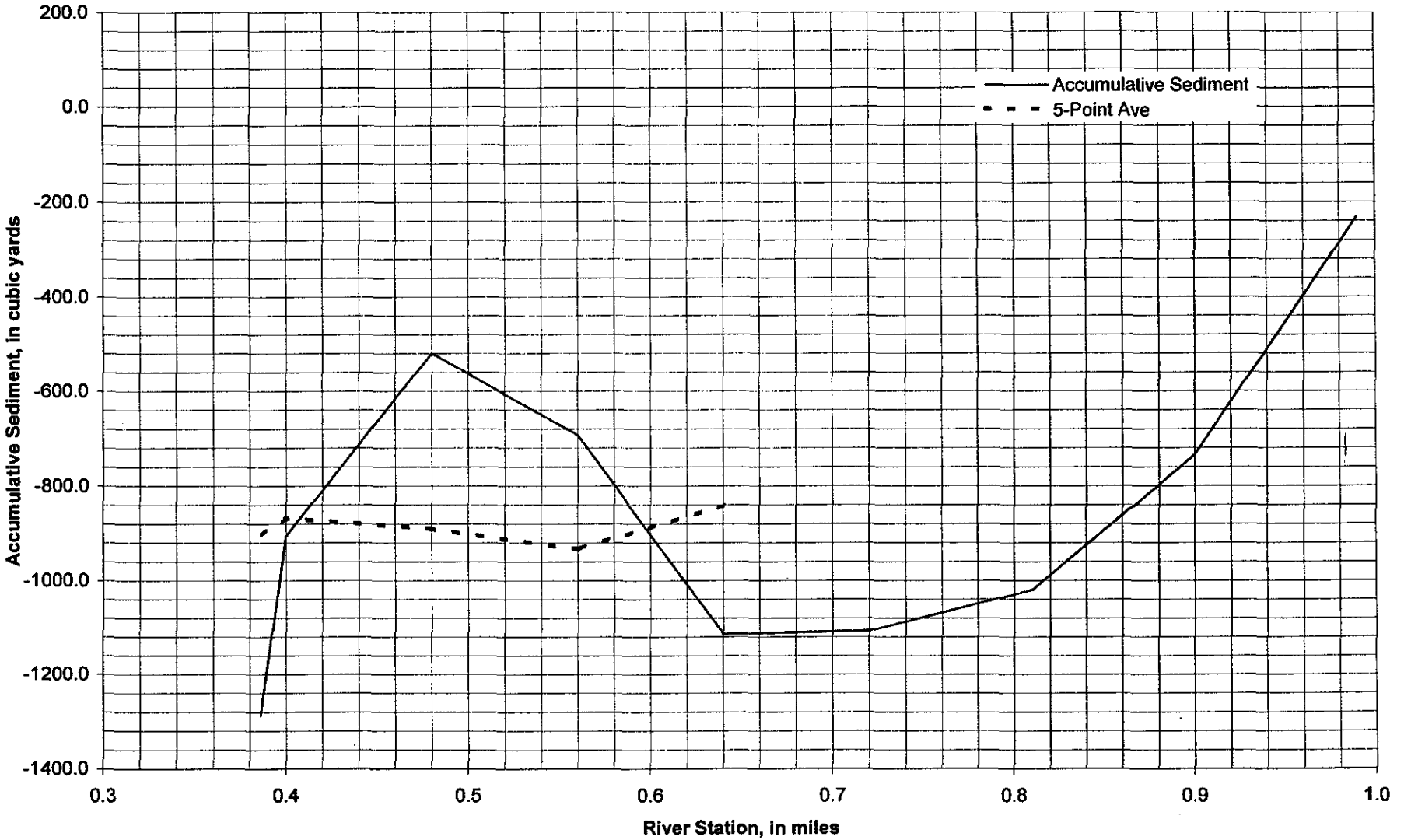


Figure DHW-O-1
Bed Elevation Change at Last Time Step
Desert Hills Wash Overbank Model, 100-year Flood, Existing Condition

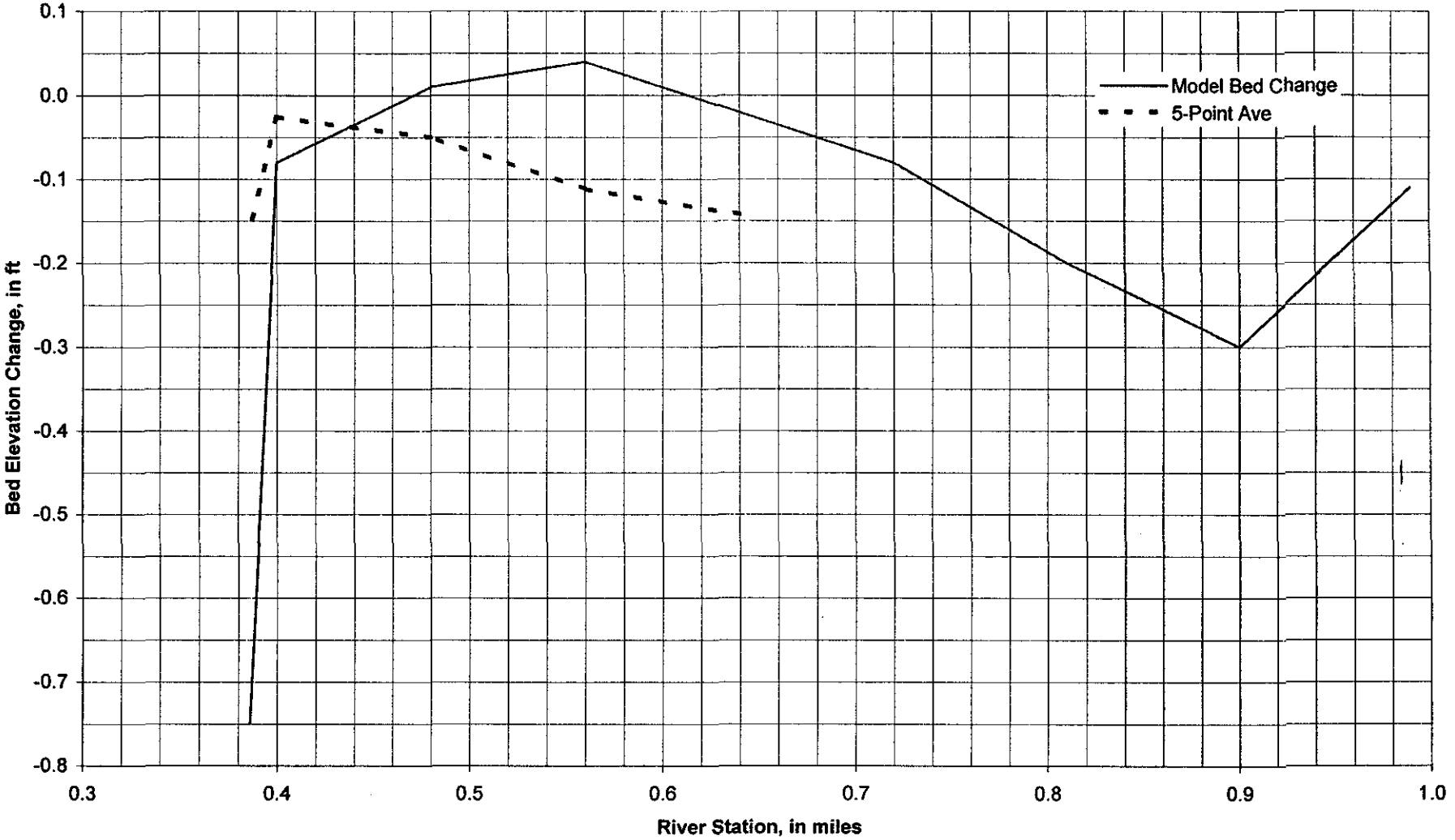


Figure DHW-O-2
Minimum and Maximum Bed Elevation Change During Flood
Desert Hills Wash Overbank Model, 100-year Flood, Existing Condition

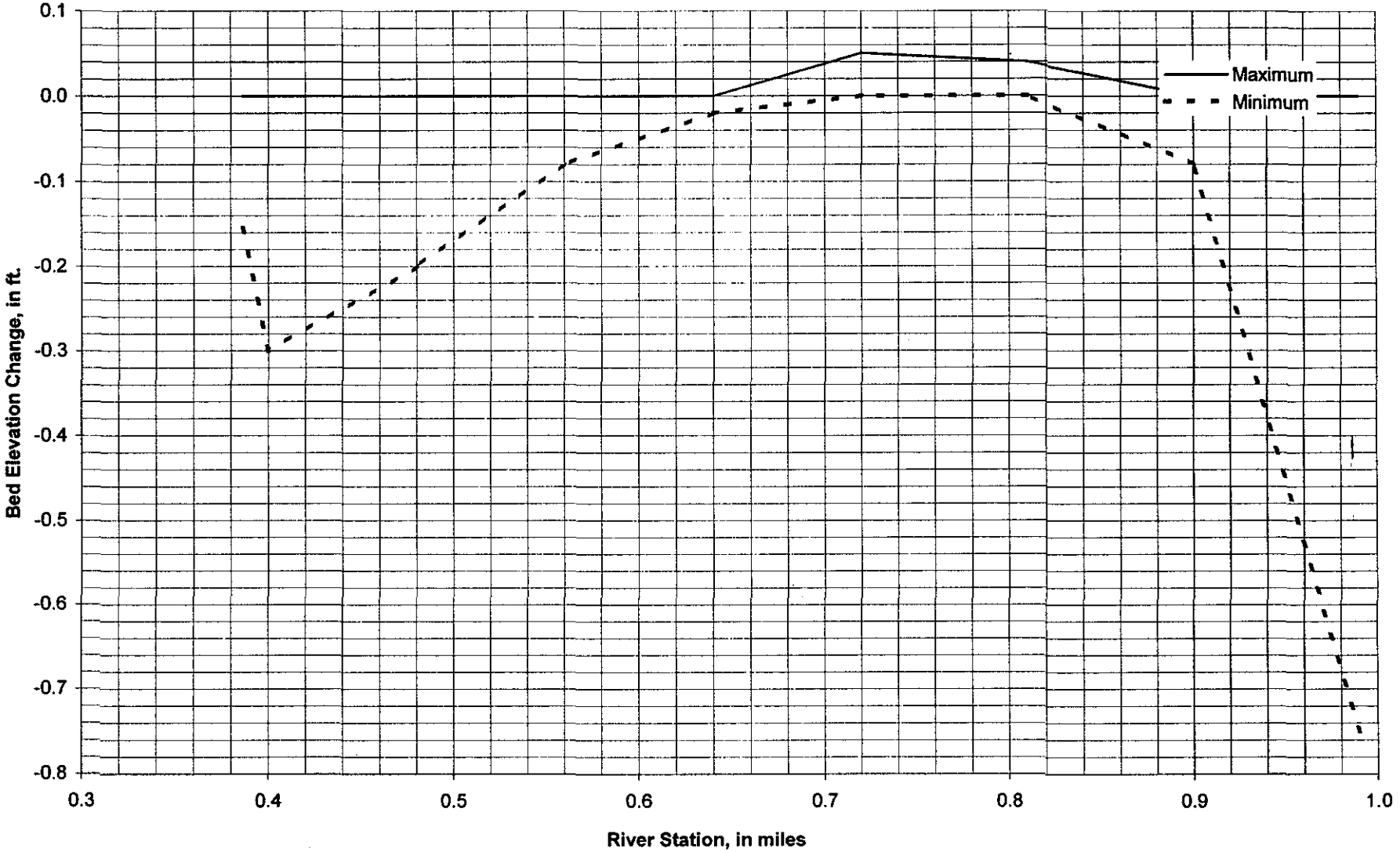


Figure DHW-O-3
Sediment Load Passing Through Section
Desert Hills Wash Overbank Model, 100-year Flood, Existing Condition

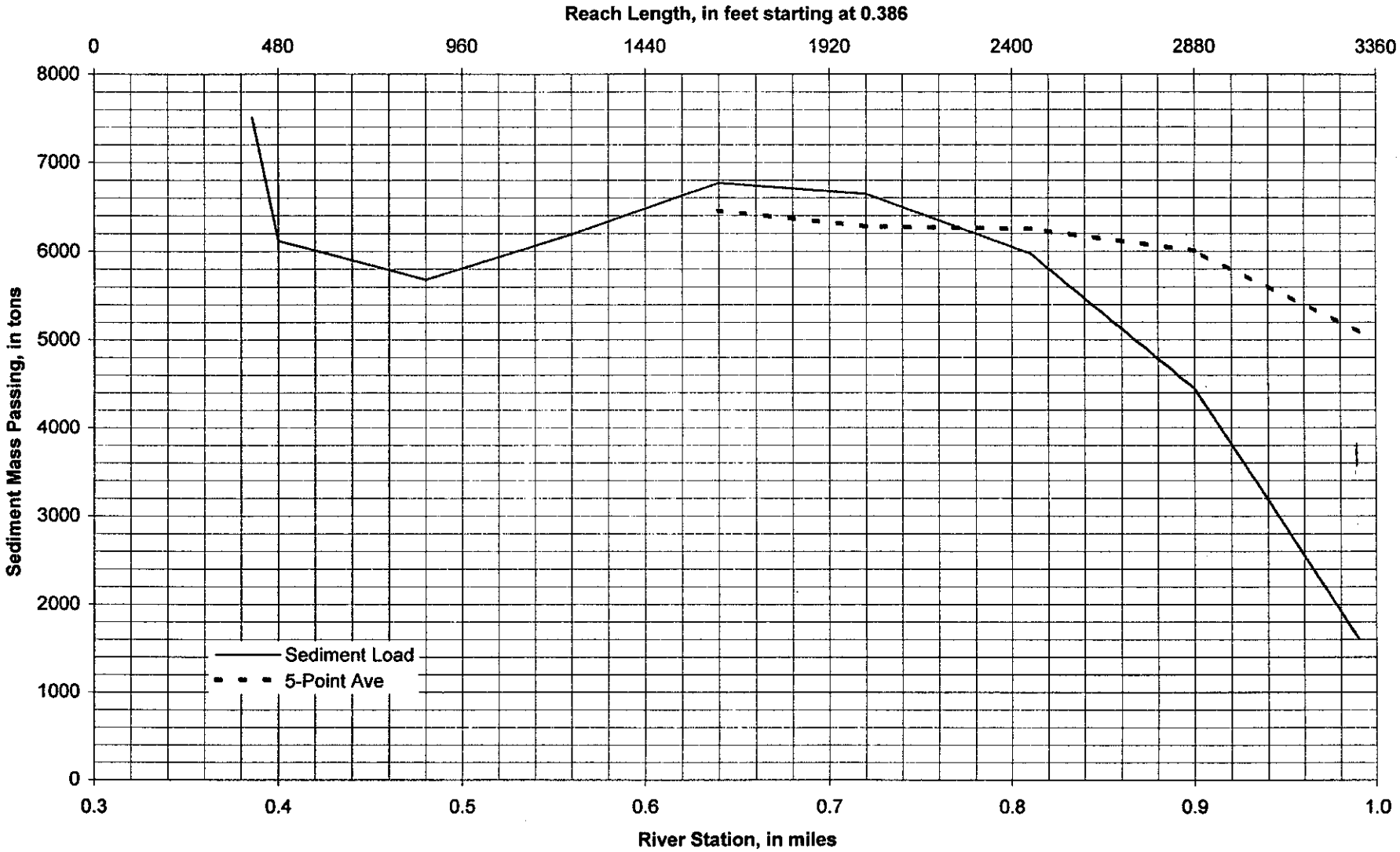


Figure DHW-O-4
Accumulative Sediment Deposited Upstream of Section
Desert Hills Wash Overbank Model, 100-year Flood, Existing Condition

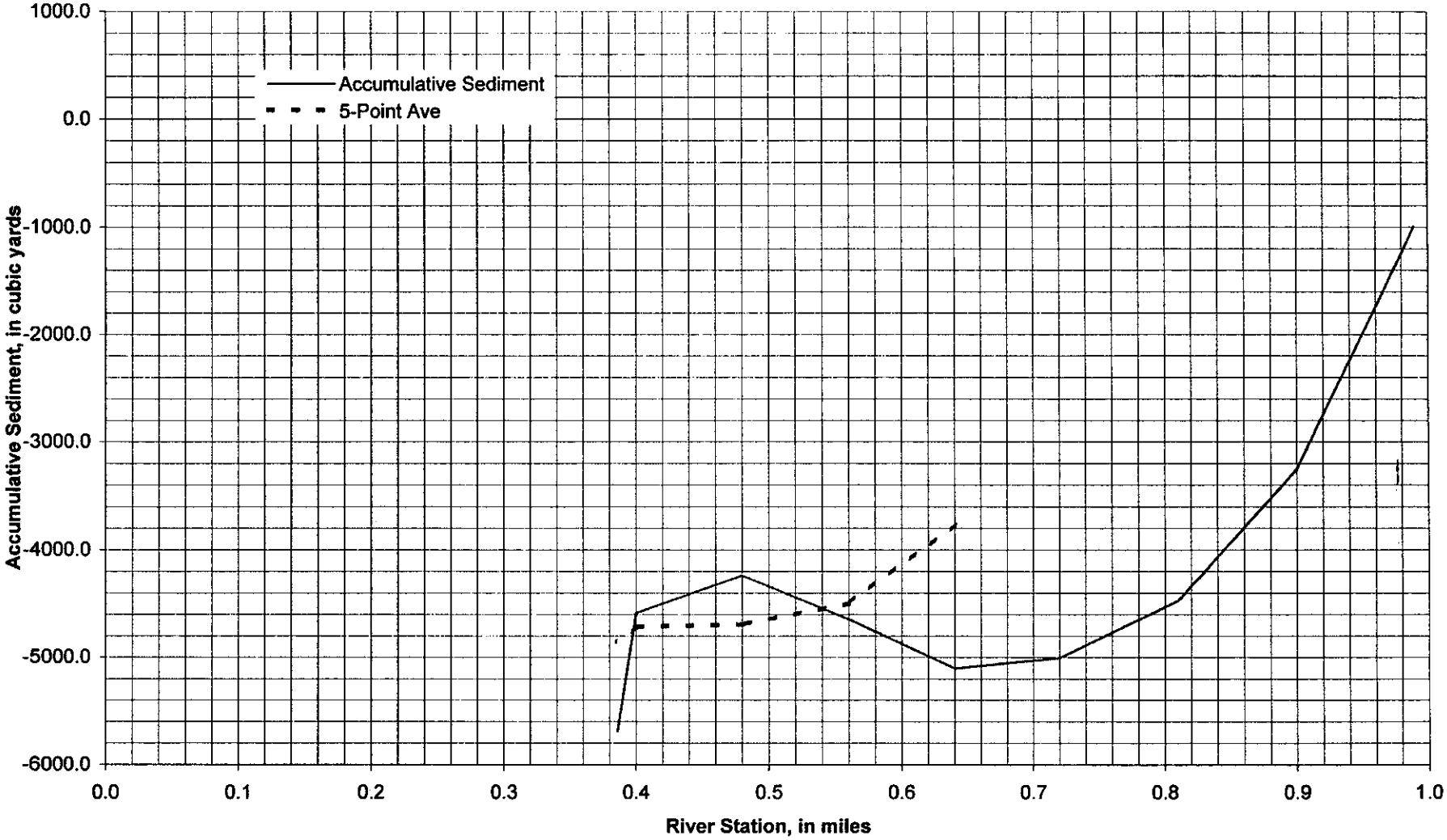


Figure DHW-O-5
Bed Elevation Change at Last Time Step
Desert Hills Wash Overbank Model, 100-year Flood, Future Condition

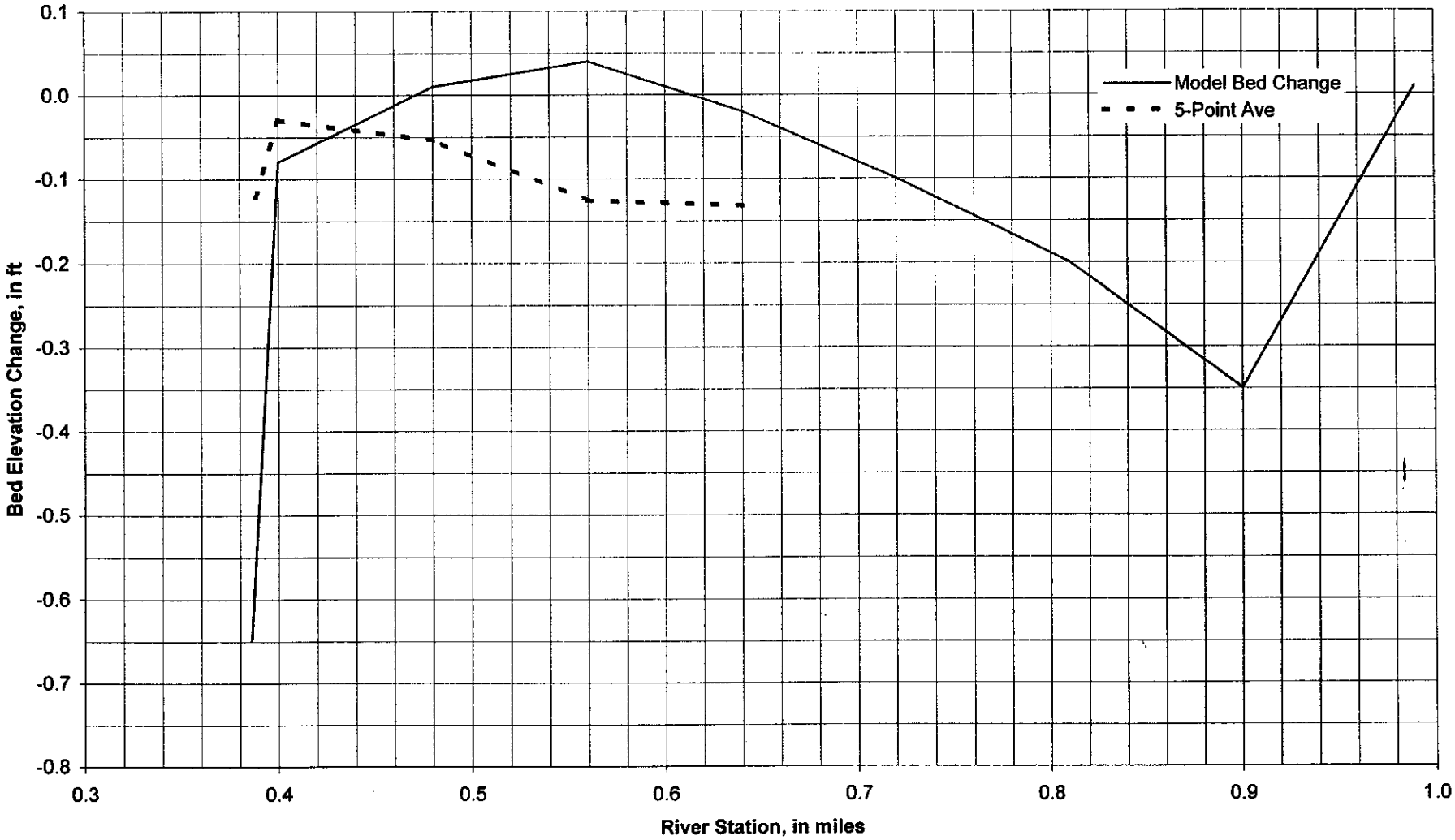


Figure DHW-O-7
Sediment Load Passing Through Section
Desert Hills Wash Overbank Model, 100-year Flood, Future Condition

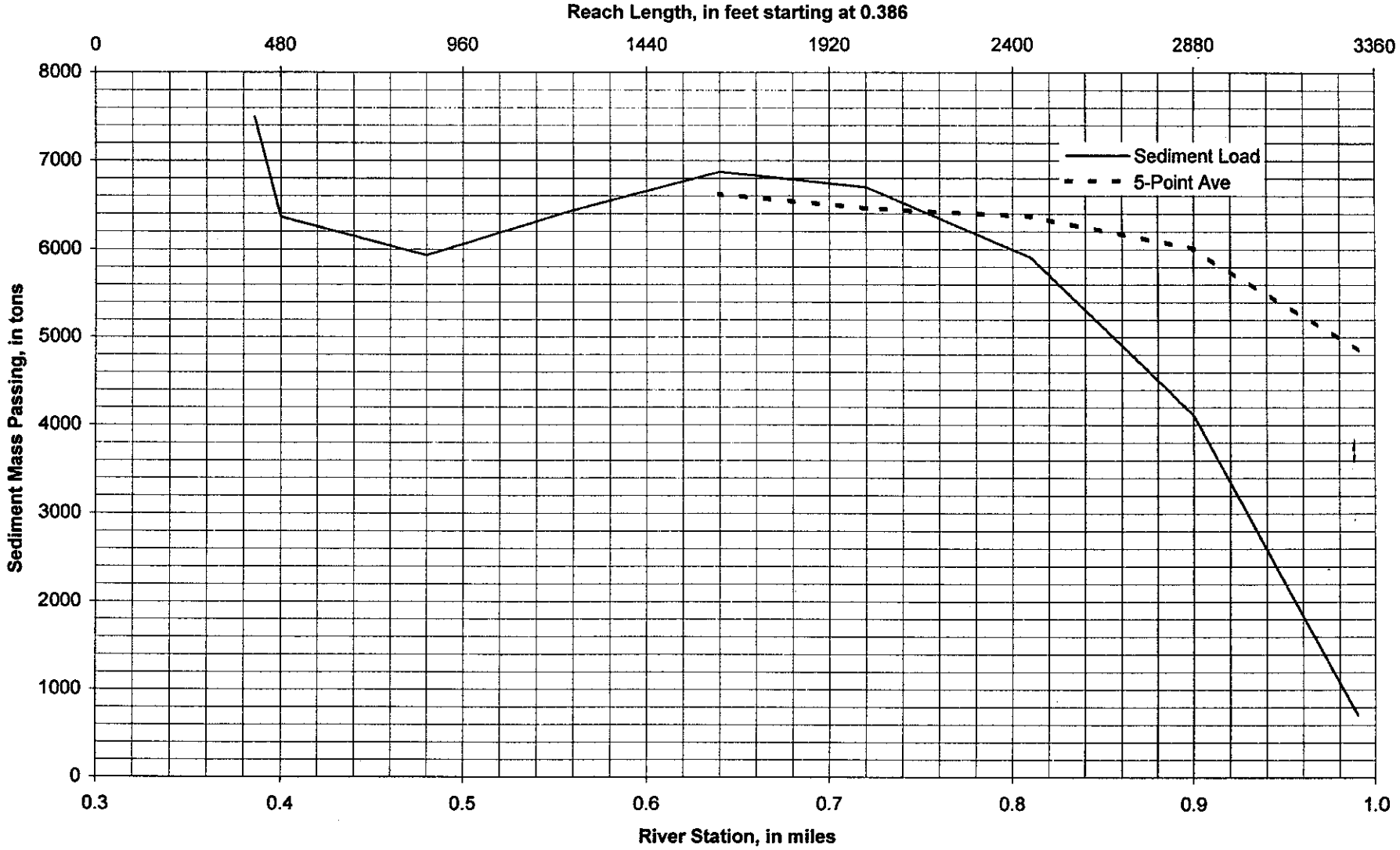
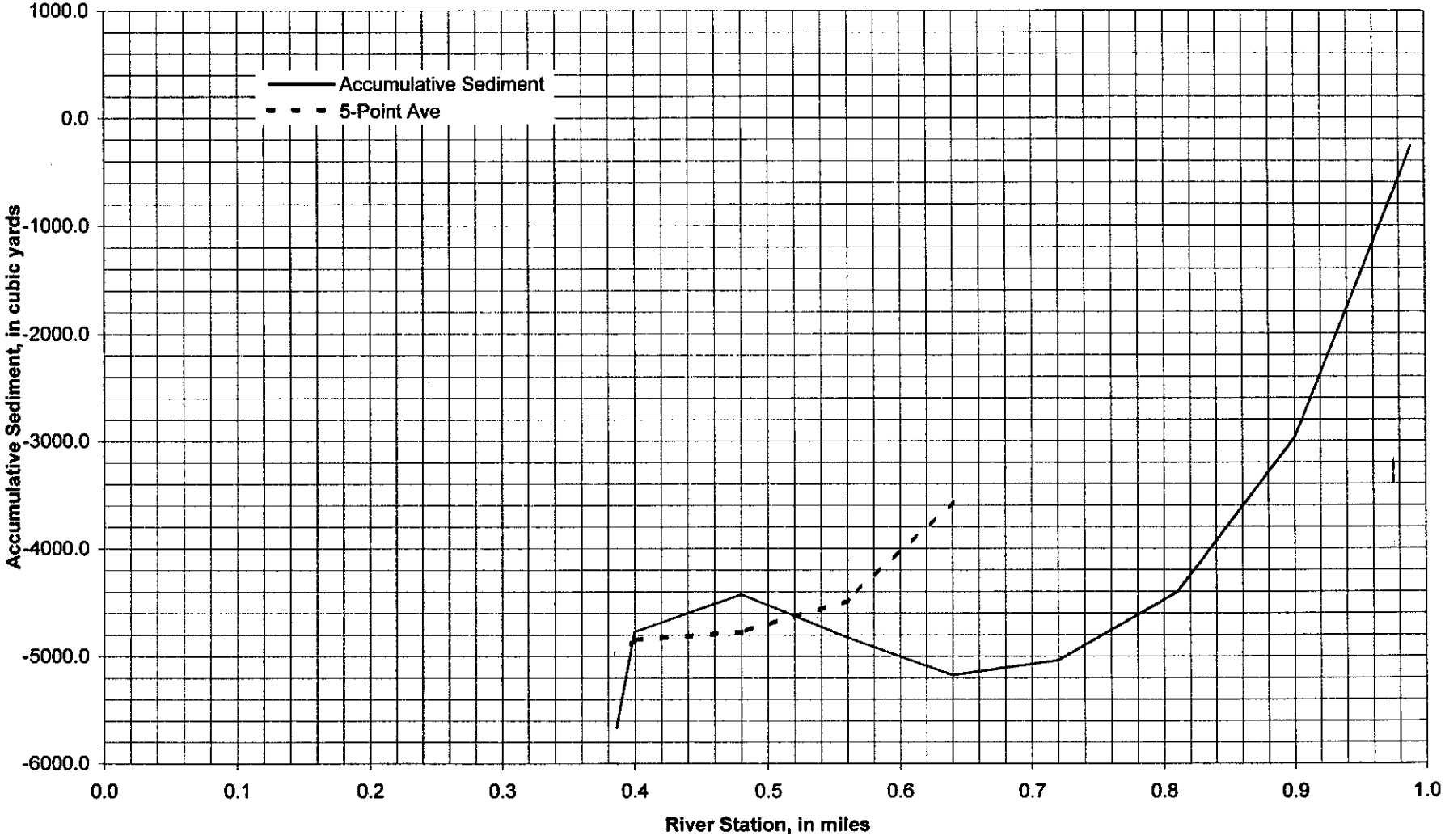


Figure DHW-O-8
Accumulative Sediment Deposited Upstream of Section
Desert Hills Wash Overbank Model, 100-year Flood, Future Condition



APPENDIX L

GRAPHICAL REPRESENTATION OF 10-YEAR HEC-6 MODEL RESULTS

Index Graphs of 10-year HEC-6 Model Results

CC-C-1	Bed Elevation Change at Last Time Step, Cave Creek Main Channel Model, 10-year Flood, Existing Condition
CC-C-2	Accumulative Sediment Deposited Upstream of Section, Cave Creek Main Channel Model, 100-year Flood, Existing Condition
CC-C-3	Bed Elevation Change at Last Time Step, Cave Creek Main Channel Model, 10-year Flood, Future Condition
CC-C-4	Accumulative Sediment Deposited Upstream of Section, Cave Creek Main Channel Model, 100-year Flood, Future Condition
CC-O-1	Bed Elevation Change at Last Time Step, Cave Creek Overbank Model, 10-year Flood, Existing Condition
CC-O-2	Accumulative Sediment Deposited Upstream of Section, Cave Creek Overbank Model, 100-year Flood, Existing Condition
CC-O-3	Bed Elevation Change at Last Time Step, Cave Creek Overbank Model, 10-year Flood, Future Condition
CC-O-4	Accumulative Sediment Deposited Upstream of Section, Cave Creek Overbank Model, 100-year Flood, Future Condition
AW-C-1	Bed Elevation Change at Last Time Step, Apache Wash Main Channel Model, 10-year Flood, Existing Condition
AW-C-2	Accumulative Sediment Deposited Upstream of Section, Apache Wash Main Channel Model, 100-year Flood, Existing Condition
AW-C-3	Bed Elevation Change at Last Time Step, Apache Wash Main Channel Model, 10-year Flood, Future Condition
AW-C-4	Accumulative Sediment Deposited Upstream of Section, Apache Wash Main Channel Model, 100-year Flood, Future Condition
AW-O-1	Bed Elevation Change at Last Time Step, Apache Wash Overbank Model, 10-year Flood, Existing Condition
AW-O-2	Accumulative Sediment Deposited Upstream of Section, Apache Wash Overbank Model, 100-year Flood, Existing Condition
AW-O-3	Bed Elevation Change at Last Time Step, Apache Wash Overbank Model, 10-year Flood, Future Condition
AW-O-4	Accumulative Sediment Deposited Upstream of Section, Apache Wash Overbank Model, 100-year Flood, Future Condition
PW-C-1	Bed Elevation Change at Last Time Step, Paradise Wash Main Channel Model, 10-year Flood, Existing Condition
PW-C-2	Accumulative Sediment Deposited Upstream of Section, Paradise Wash Main Channel Model, 100-year Flood, Existing Condition
PW-C-3	Bed Elevation Change at Last Time Step, Paradise Wash Main Channel Model, 10-year Flood, Future Condition
PW-C-4	Accumulative Sediment Deposited Upstream of Section, Paradise Wash Main Channel Model, 100-year Flood, Future Condition
PW-O-1	Bed Elevation Change at Last Time Step, Paradise Wash Overbank Model, 10-year Flood, Existing Condition
PW-O-2	Accumulative Sediment Deposited Upstream of Section, Paradise Wash Overbank Model, 100-year Flood, Existing Condition
PW-O-3	Bed Elevation Change at Last Time Step, Paradise Wash Overbank Model, 10-year Flood, Future Condition
PW-O-4	Accumulative Sediment Deposited Upstream of Section, Paradise Wash Overbank Model, 100-year Flood, Future Condition
DHW-C-1	Bed Elevation Change at Last Time Step, Desert Hills Wash Main Channel Model, 10-year Flood, Existing Condition
DHW-C-2	Accumulative Sediment Deposited Upstream of Section, Desert Hills Wash Main Channel Model, 100-year Flood, Existing Condition
DHW-C-3	Bed Elevation Change at Last Time Step, Desert Hills Wash Main Channel Model, 10-year Flood, Future Condition
DHW-C-4	Accumulative Sediment Deposited Upstream of Section, Desert Hills Wash Main Channel Model, 100-year Flood, Future Condition
DHW-O-1	Bed Elevation Change at Last Time Step, Desert Hills Wash Overbank Model, 10-year Flood, Existing Condition
DHW-O-2	Accumulative Sediment Deposited Upstream of Section, Desert Hills Wash Overbank Model, 100-year Flood, Existing Condition
DHW-O-3	Bed Elevation Change at Last Time Step, Desert Hills Wash Overbank Model, 10-year Flood, Future Condition
DHW-O-4	Accumulative Sediment Deposited Upstream of Section, Desert Hills Wash Overbank Model, 100-year Flood, Future Condition

Figure CC-C-1
Bed Elevation Change at Last Time Step
Cave Creek Main Channel Model, 10-year Flood, Existing Condition

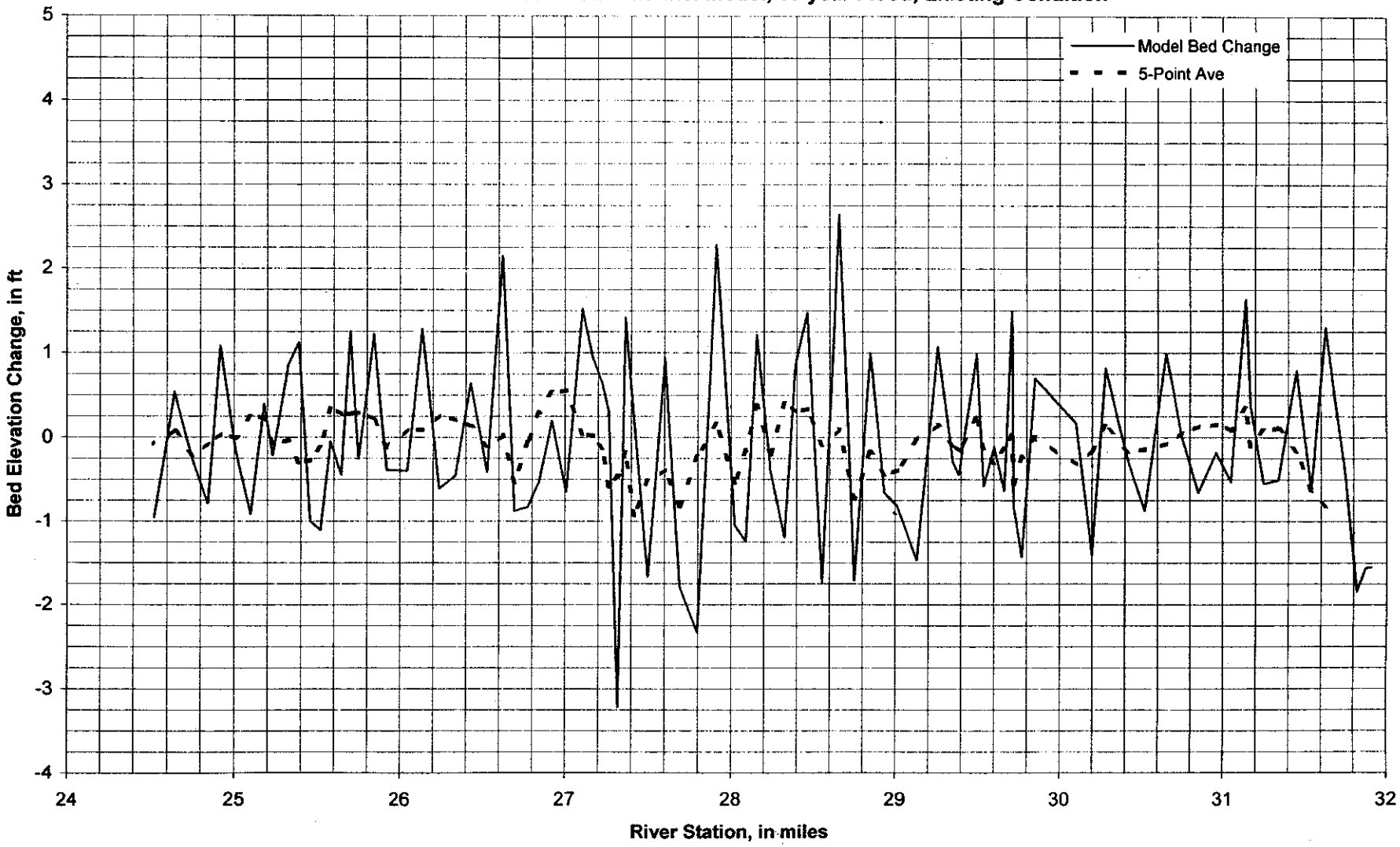


Figure CC-C-2
Accumulative Sediment Deposited Upstream of Section
Cave Creek Main Channel Model, 10-year Flood, Existing Condition

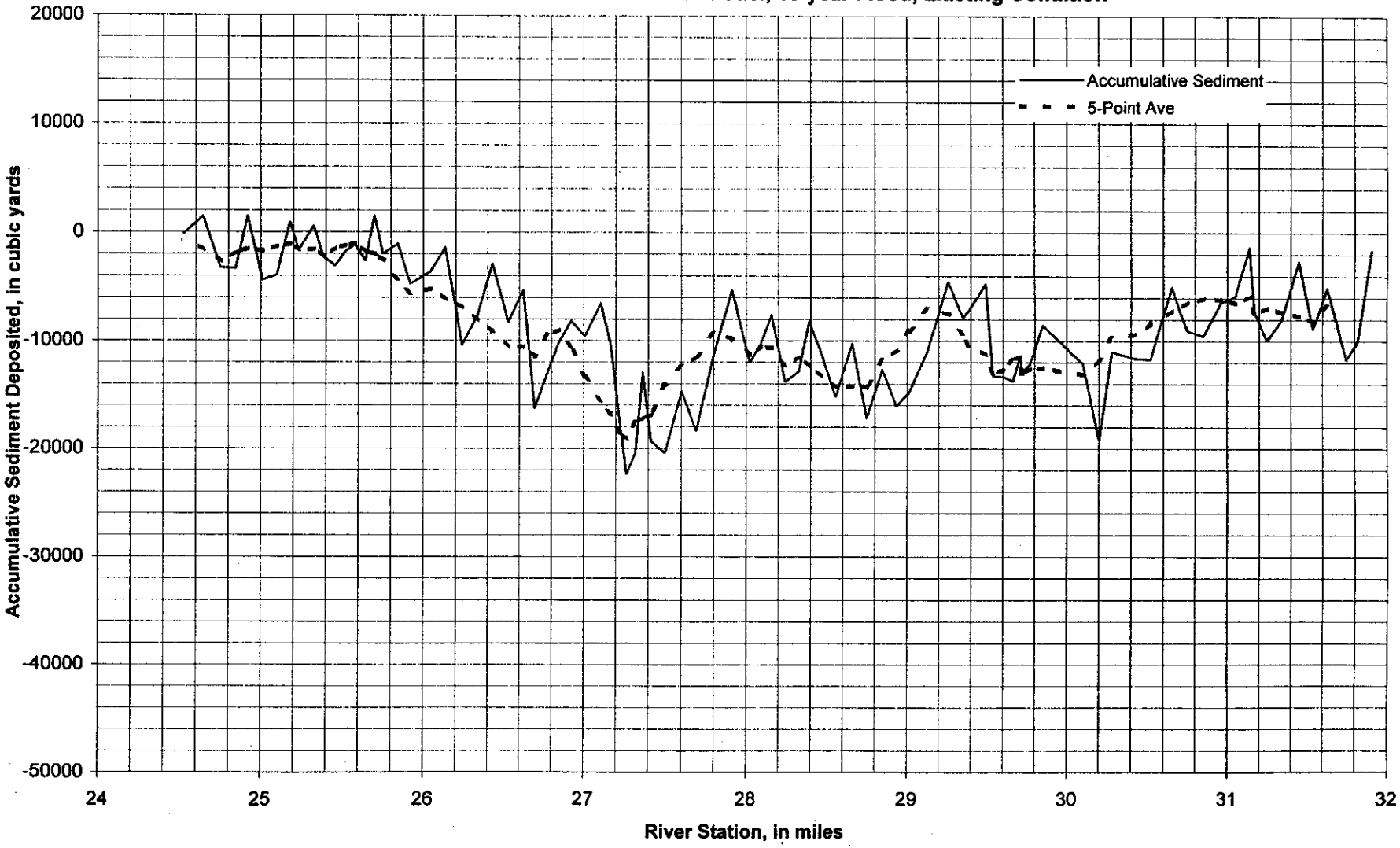


Figure CC-C-3
Bed Elevation Change at Last Time Step
Cave Creek Main Channel Model, 10-year Flood, Future Condition

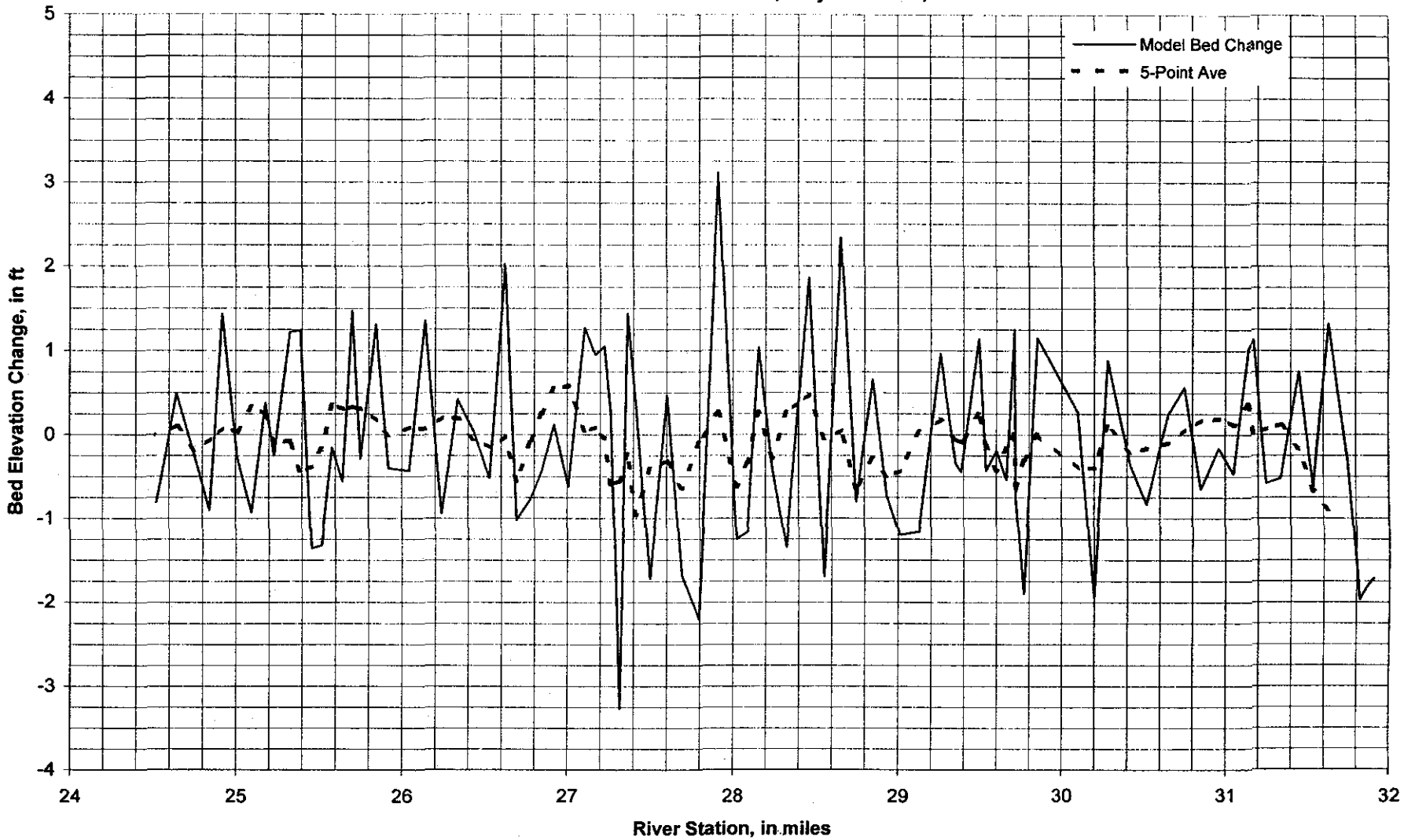


Figure CC-C-4
Accumulative Sediment Deposited Upstream of Section
Cave Creek Main Channel Model, 10-year Flood, Future Condition

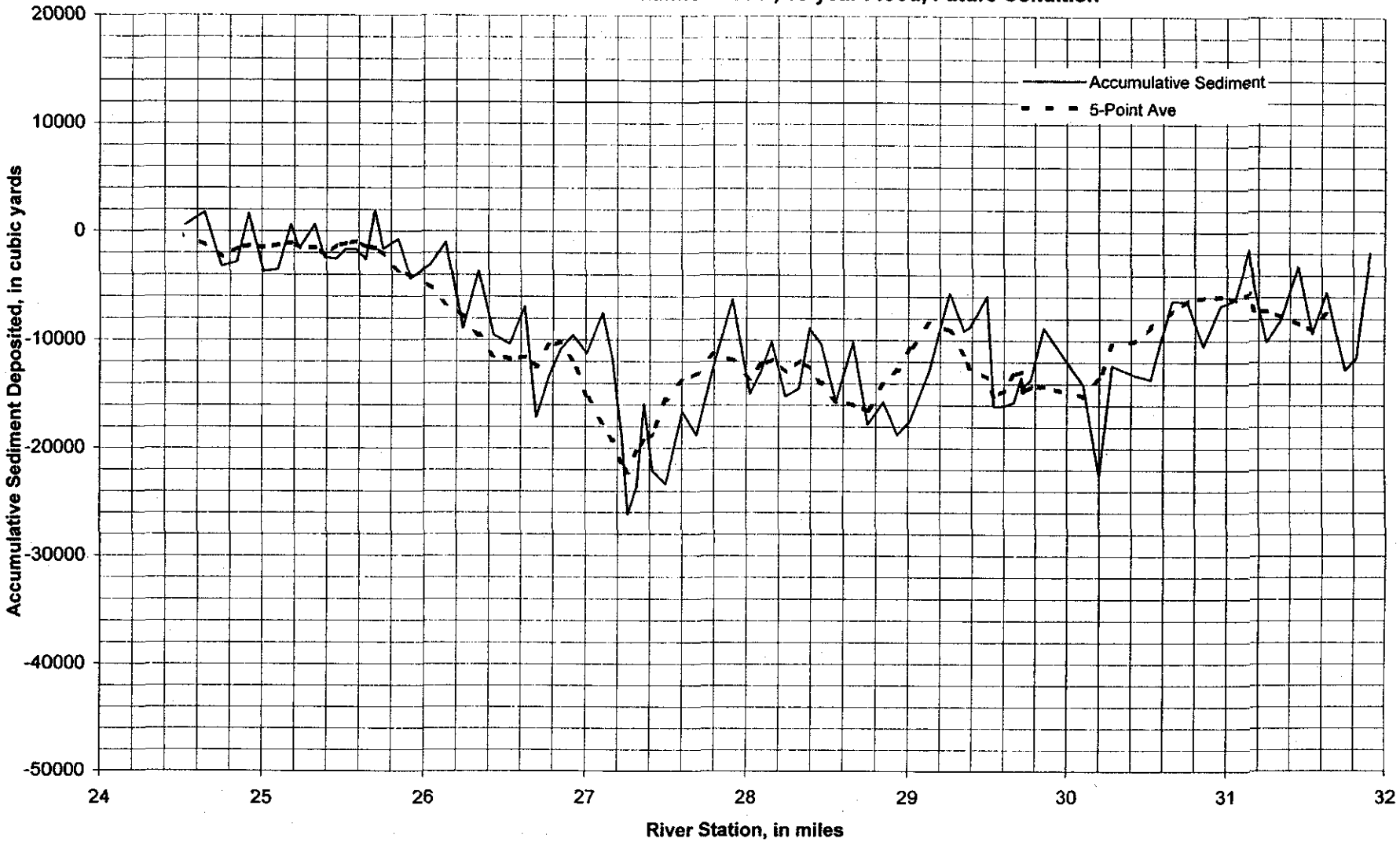


Figure CC-O-1
Bed Elevation Change at Last Time Step
Cave Creek Overbank Model, 10-year Flood, Existing Condition

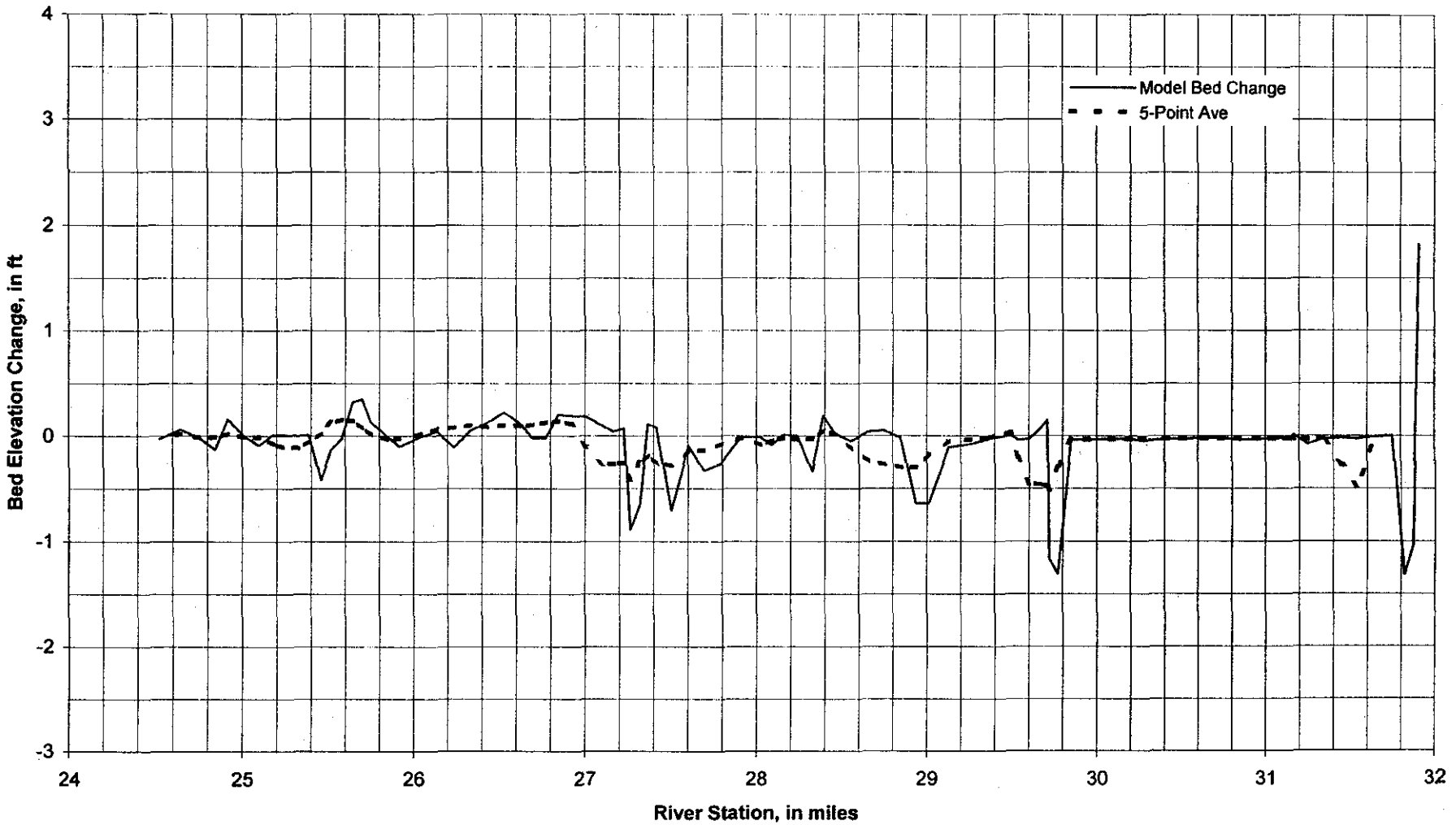


Figure CC-O-2
Accumulative Sediment Deposited Upstream of Section
Cave Creek Overbank Model, 10-year Flood, Existing Condition

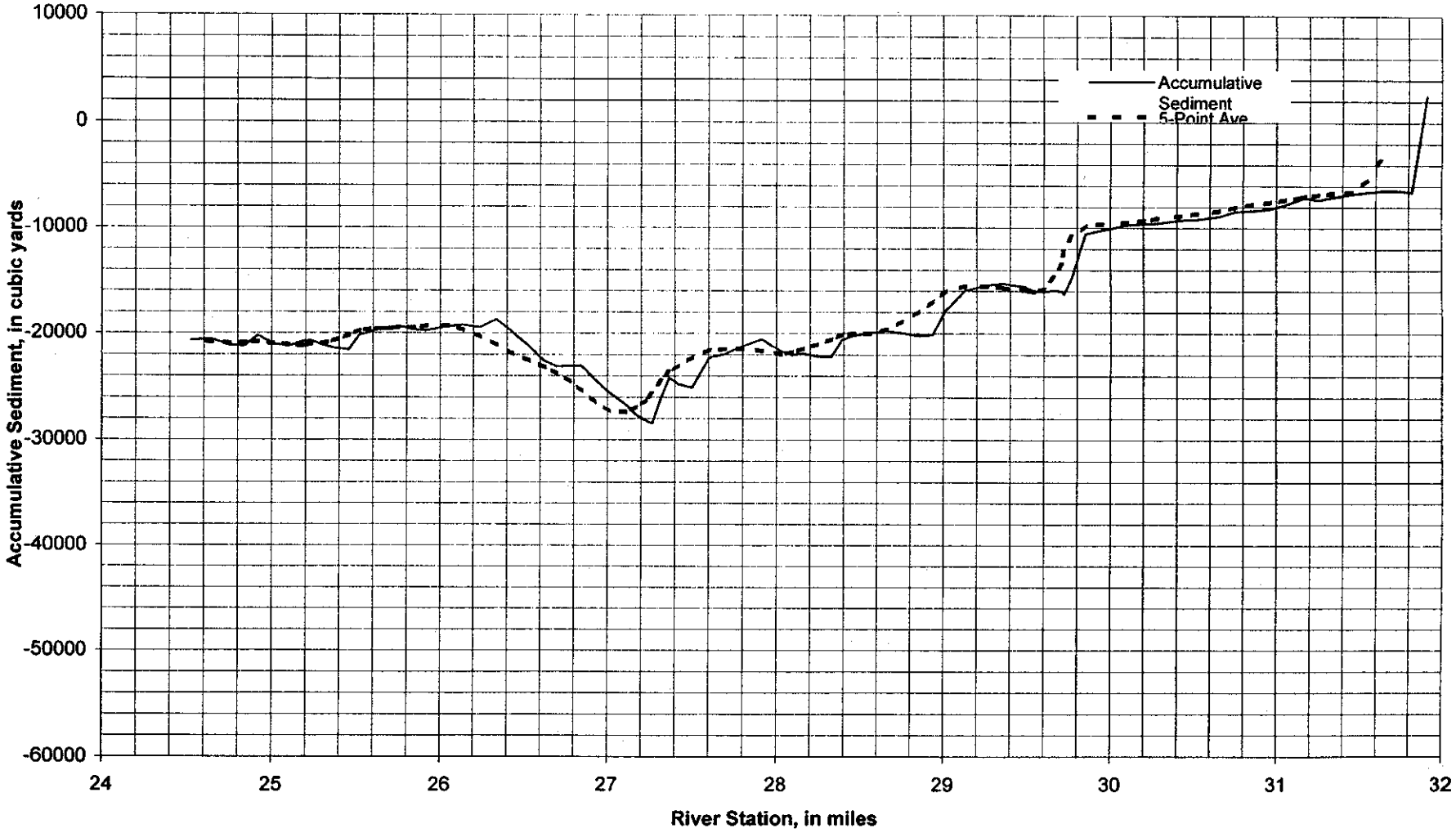


Figure CC-O-3
Bed Elevation Change at Last Time Step
Cave Creek Overbank Model, 10-year Flood, Future Condition

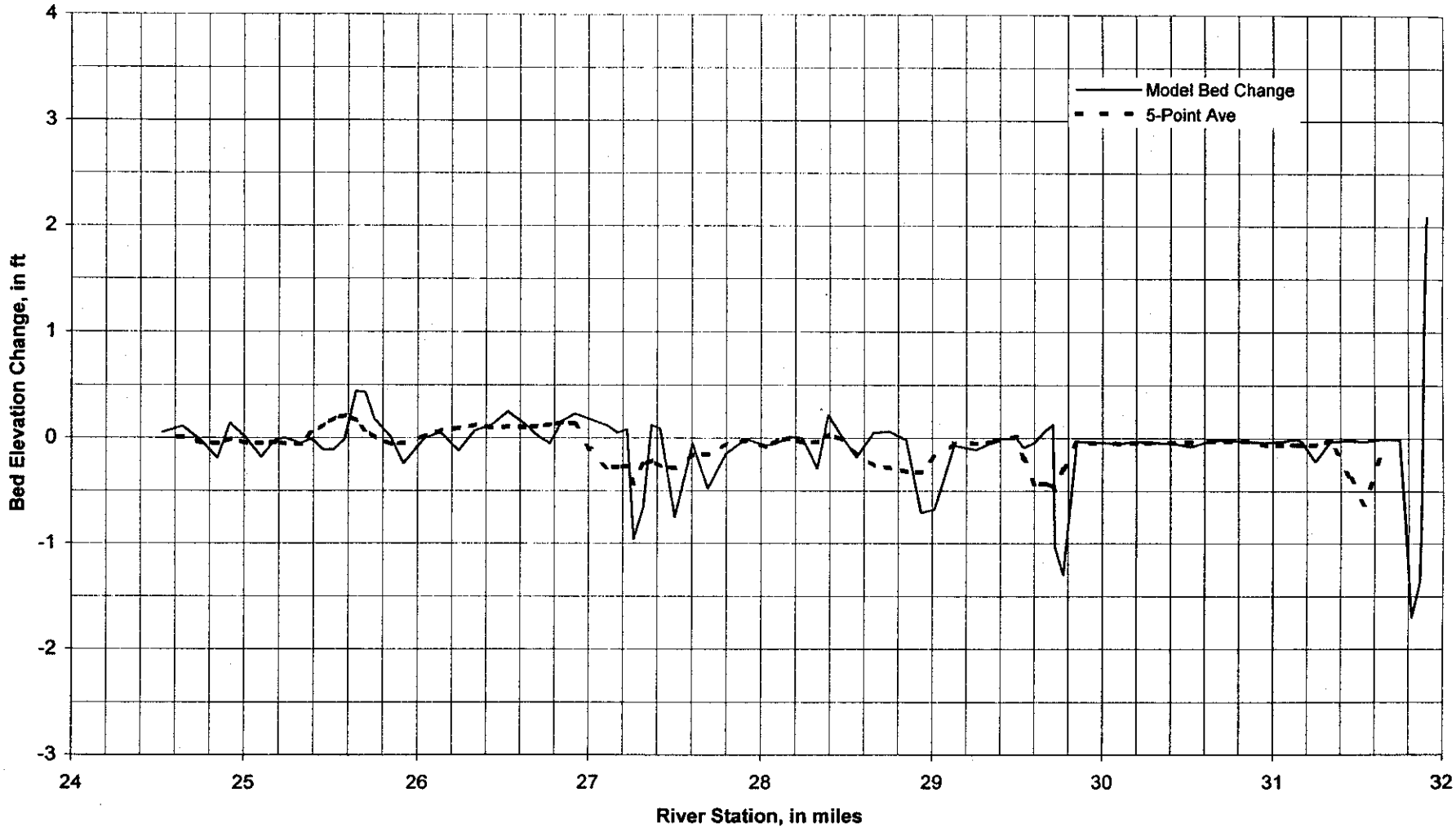


Figure CC-O-4
Accumulative Sediment Deposited Upstream of Section
Cave Creek Overbank Model, 10-year Flood, Future Condition

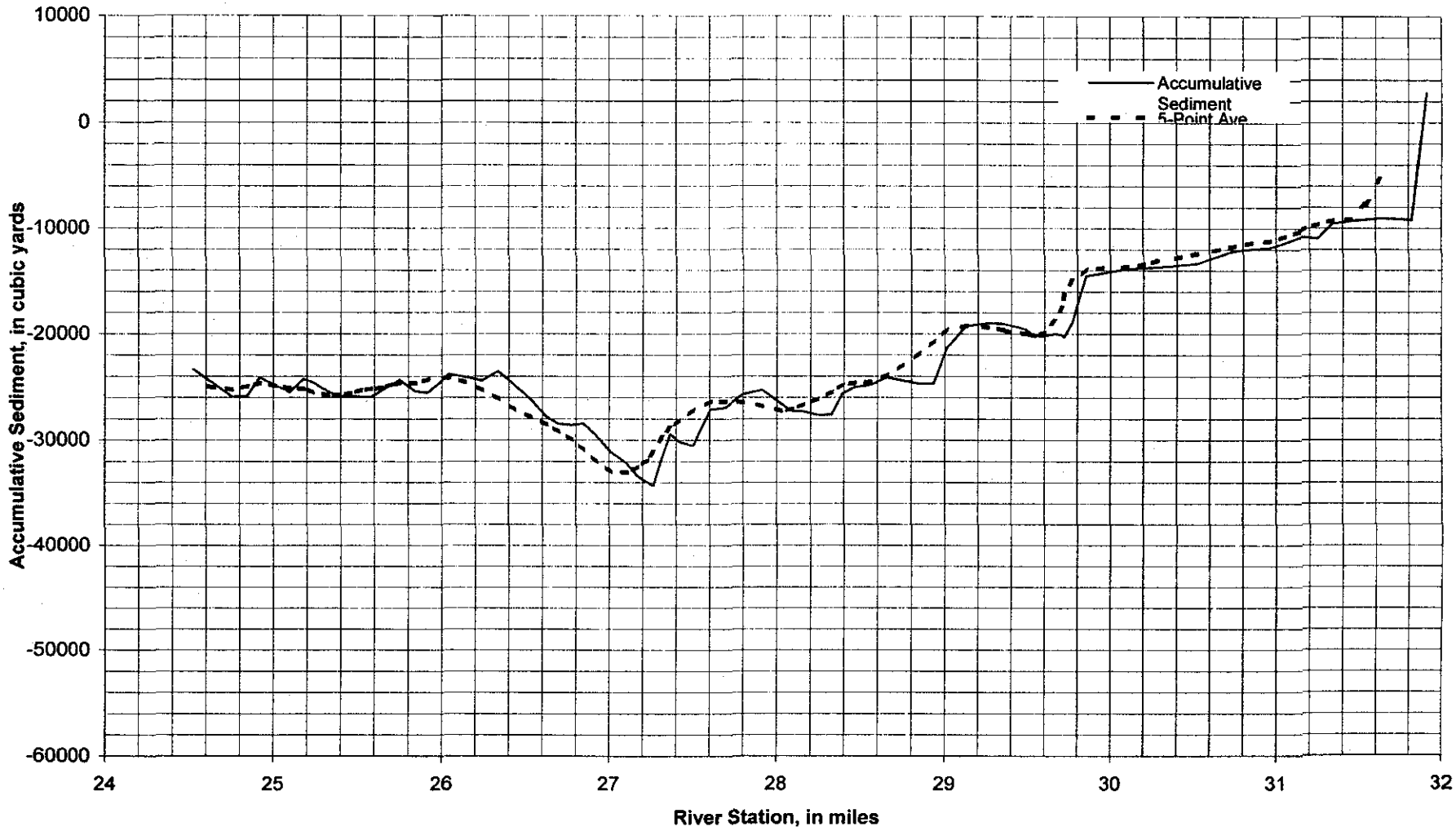


Figure AW-C-1
Bed Elevation Change at Last Time Step
Apache Wash Main Channel Model, 10-year Flood, Existing Conditions

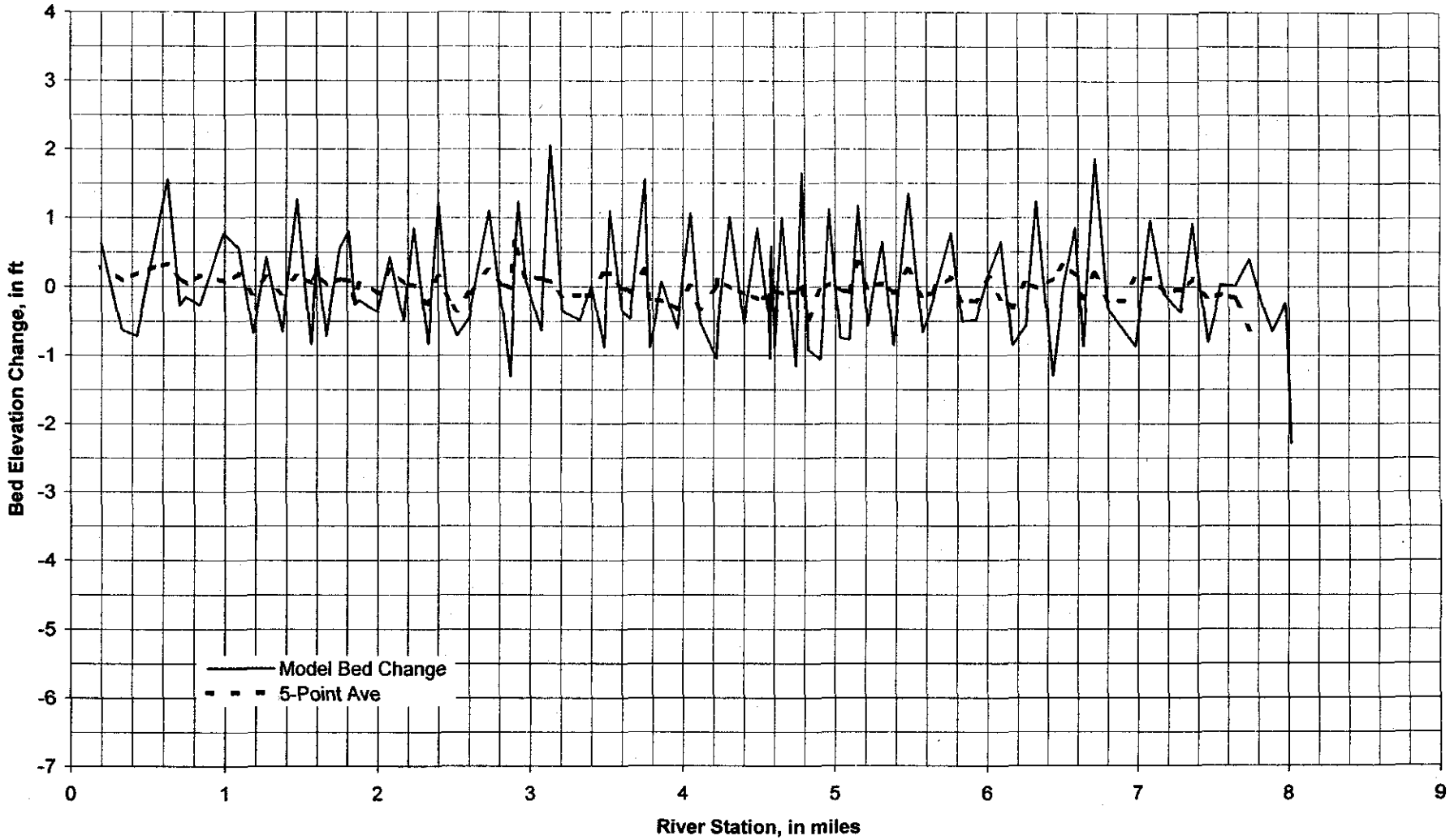


Figure AW-C-2
Accumulative Sediment Deposited Upstream of Section
Apache Wash Main Channel Model, 10-year Flood, Existing Conditions

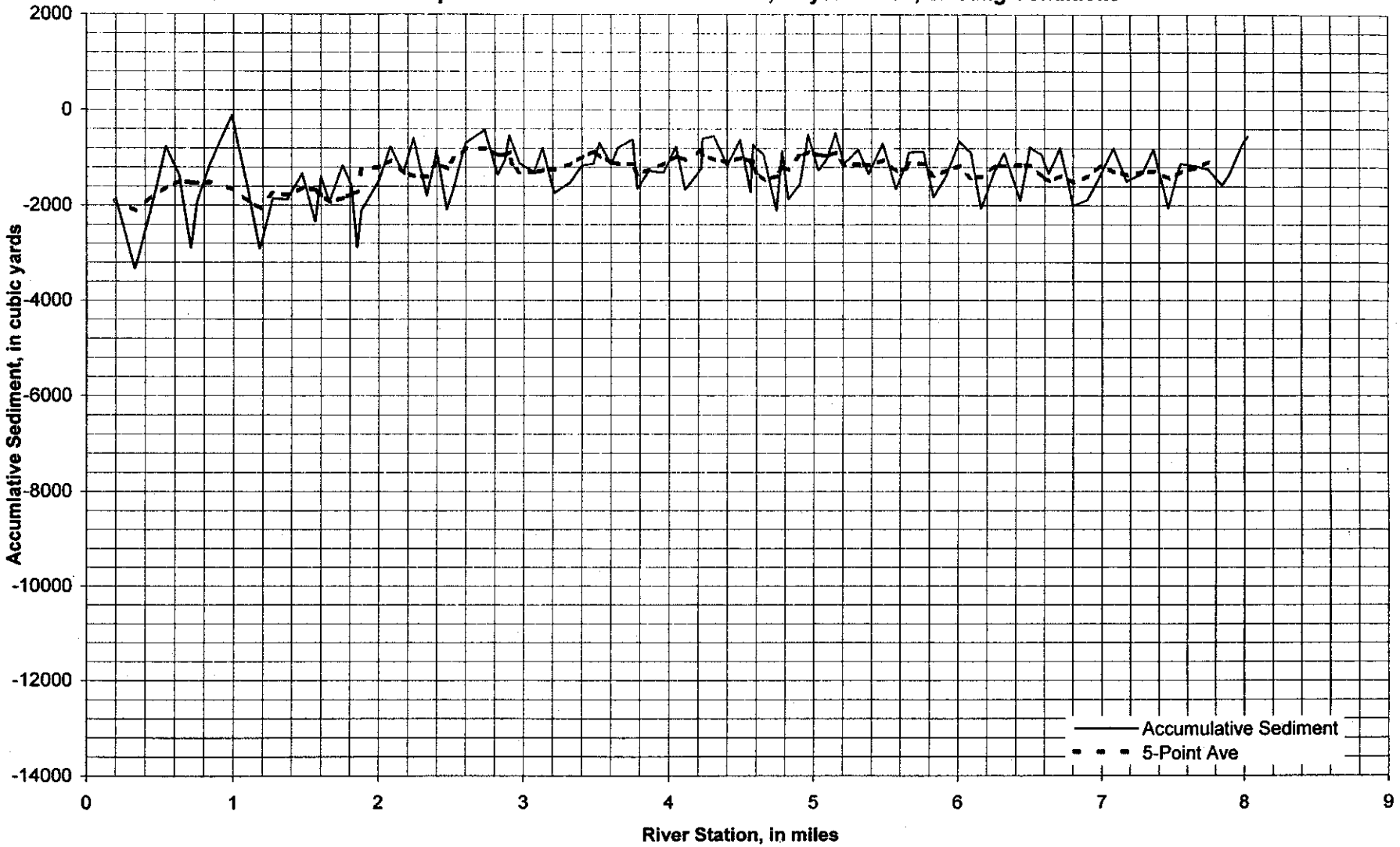


Figure AW-C-3
Bed Elevation Change at Last Time Step
Apache Wash Main Channel Model, 10-year Flood, Future Conditions

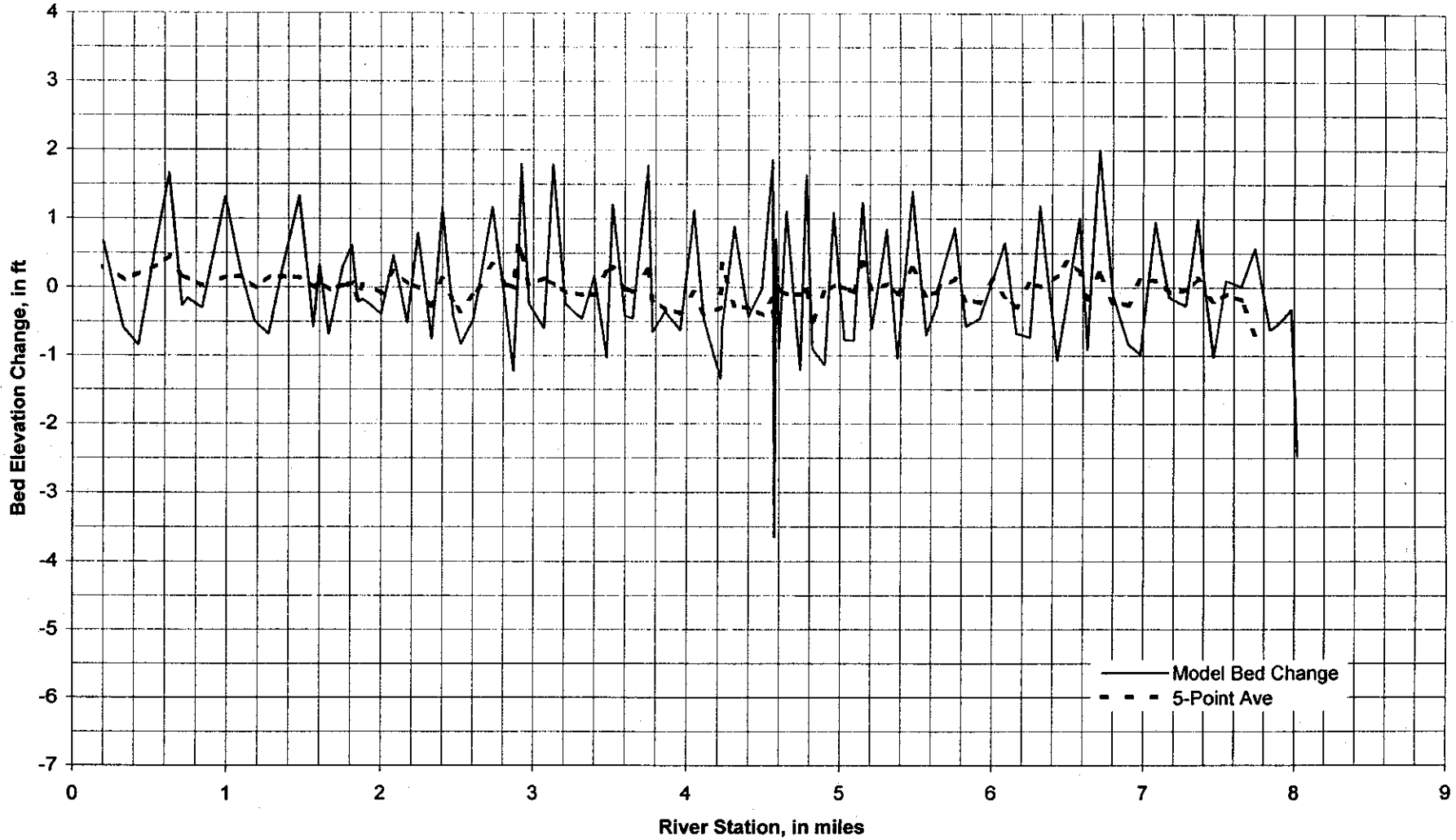


Figure AW-C-4
Accumulative Sediment Deposited Upstream of Section
Apache Wash Main Channel Model, 10-year Flood, Future Conditions

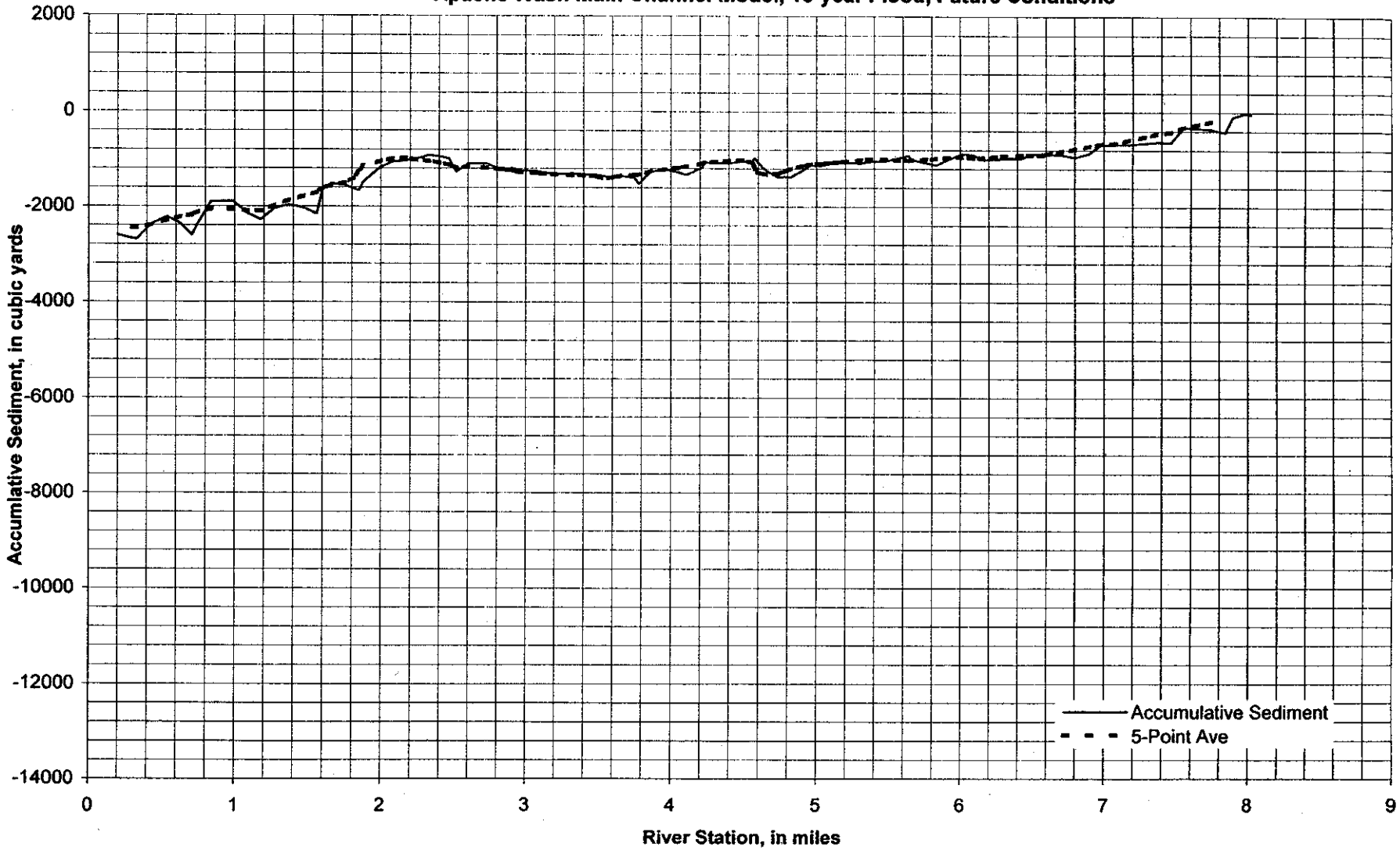


Figure AW-0-1
Bed Elevation Change at Last Time Step
Apache Wash Overbank Model, 10-year Flood, Existing Conditions

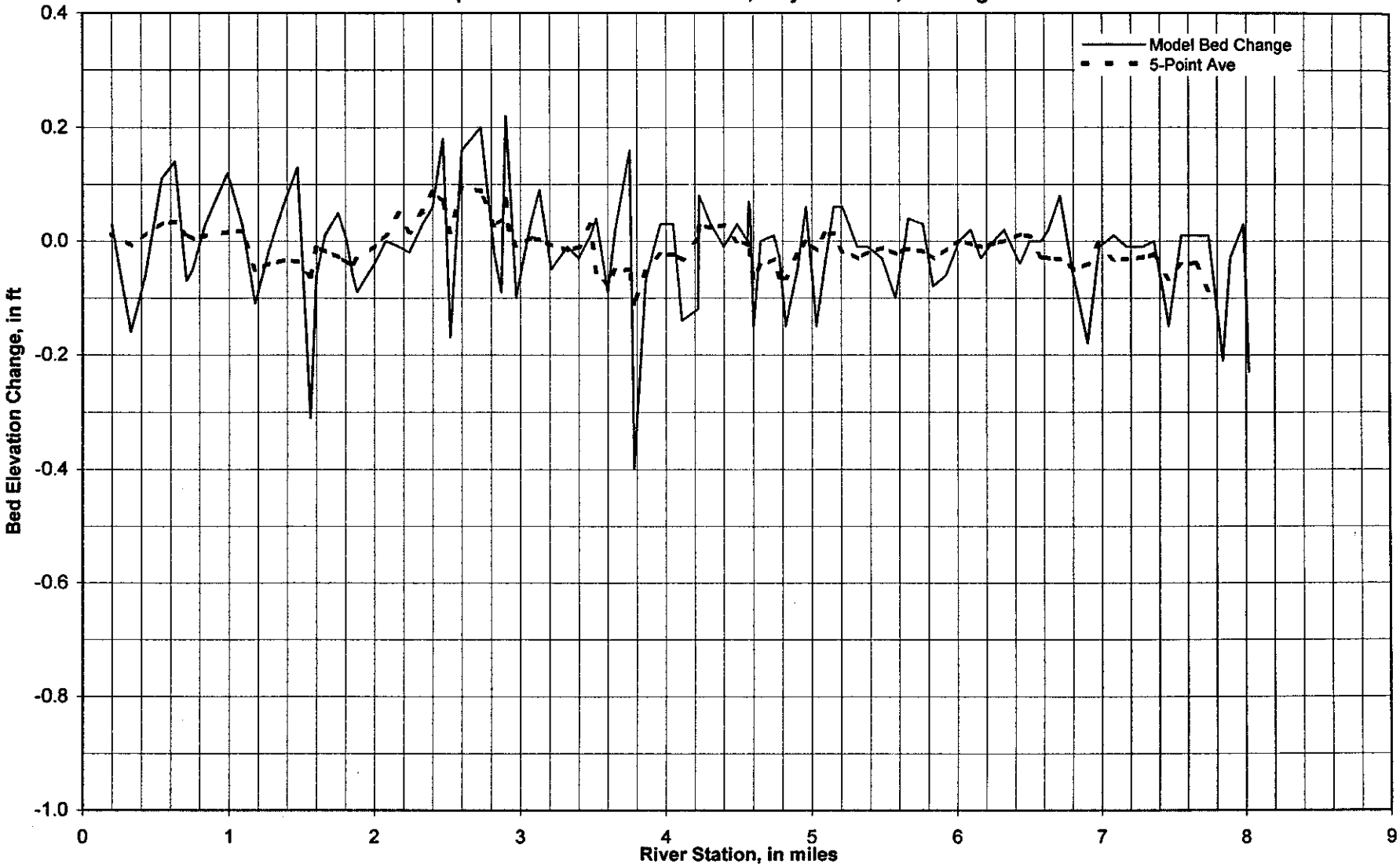


Figure AW-0-2
Accumulative Sediment Deposited Upstream of Section
Apache Wash Overbank Model, 10-year Flood, Existing Conditions

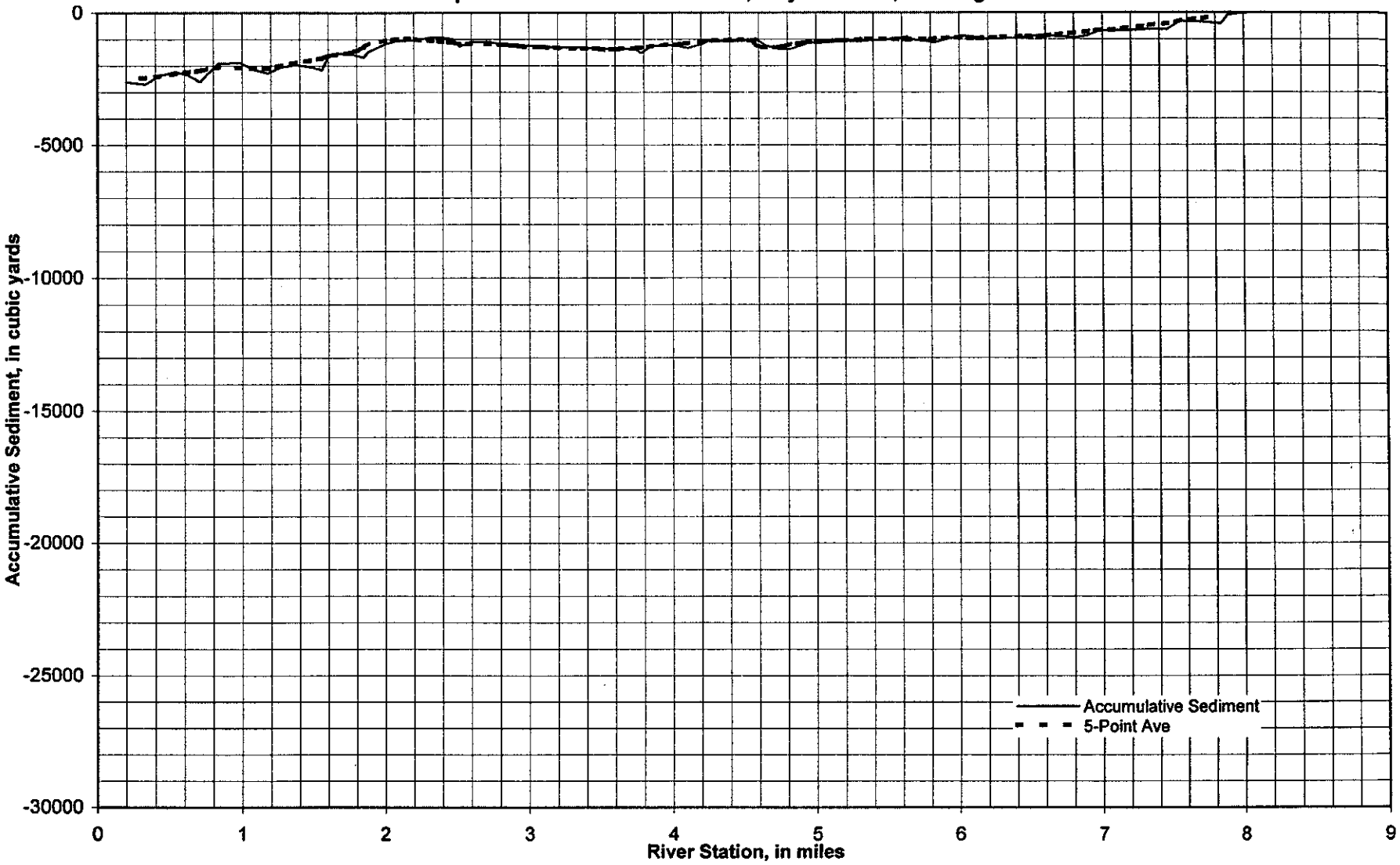
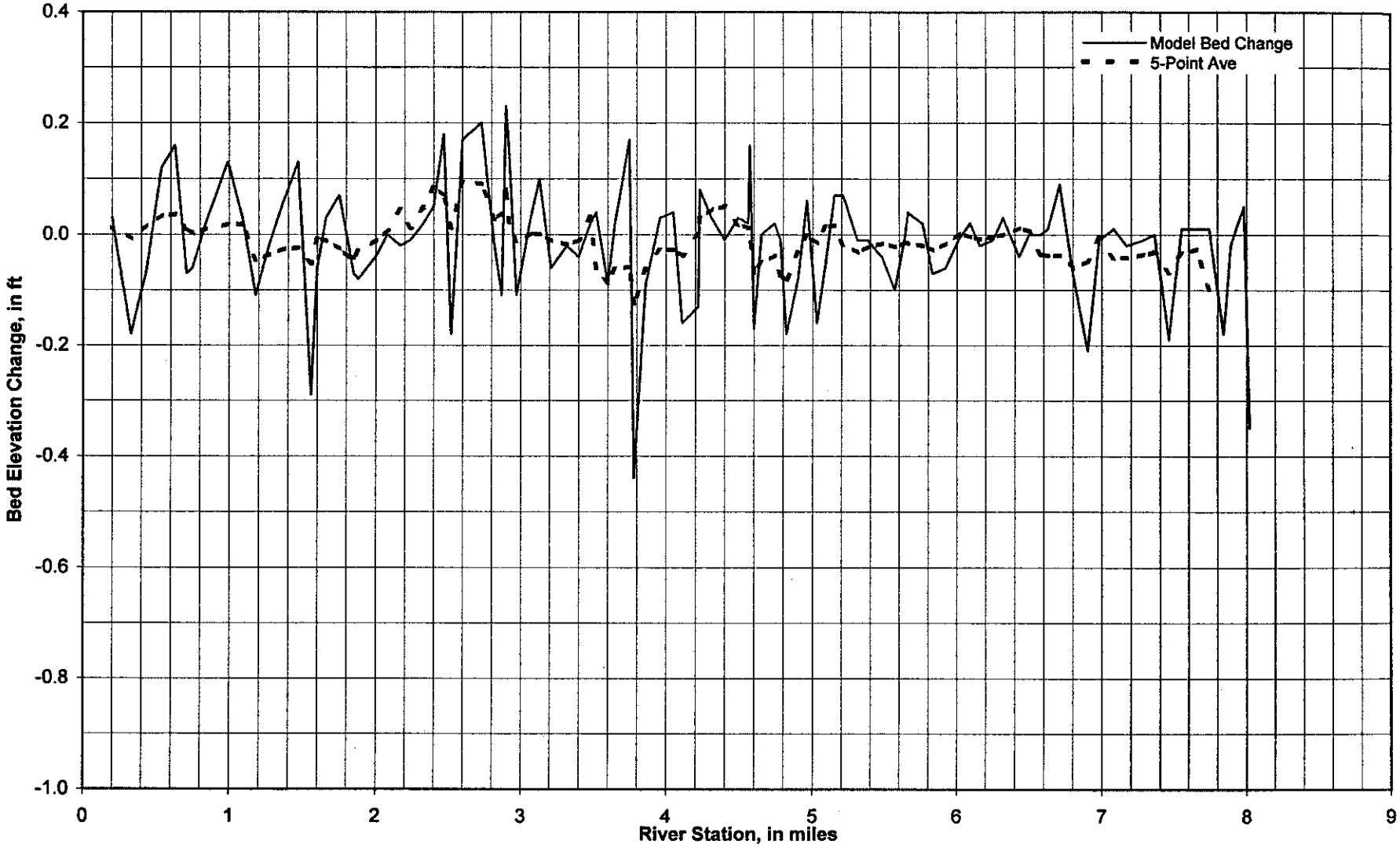


Figure AW-0-3
Bed Elevation Change at Last Time Step
Apache Wash Overbank Model, 10-year Flood, Future Conditions



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Accumulative Sediment Deposited Upstream of Section
Apache Wash Overbank Model, 10-year Flood, Future Conditions

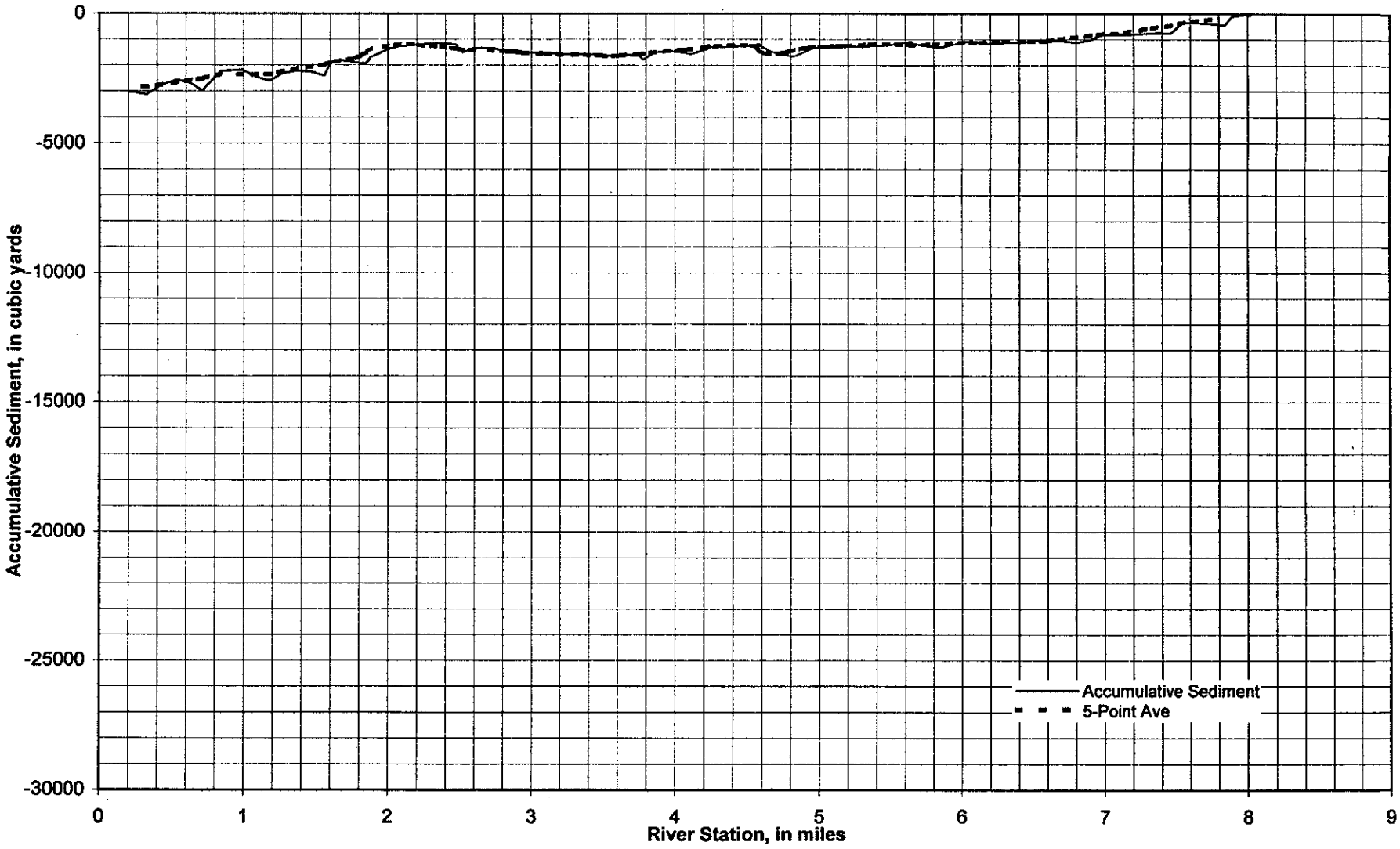


Figure PW-C-1
Bed Elevation Change at Last Time Step
Paradise Wash Main Channel Model, 10-year Flood, Existing Condition

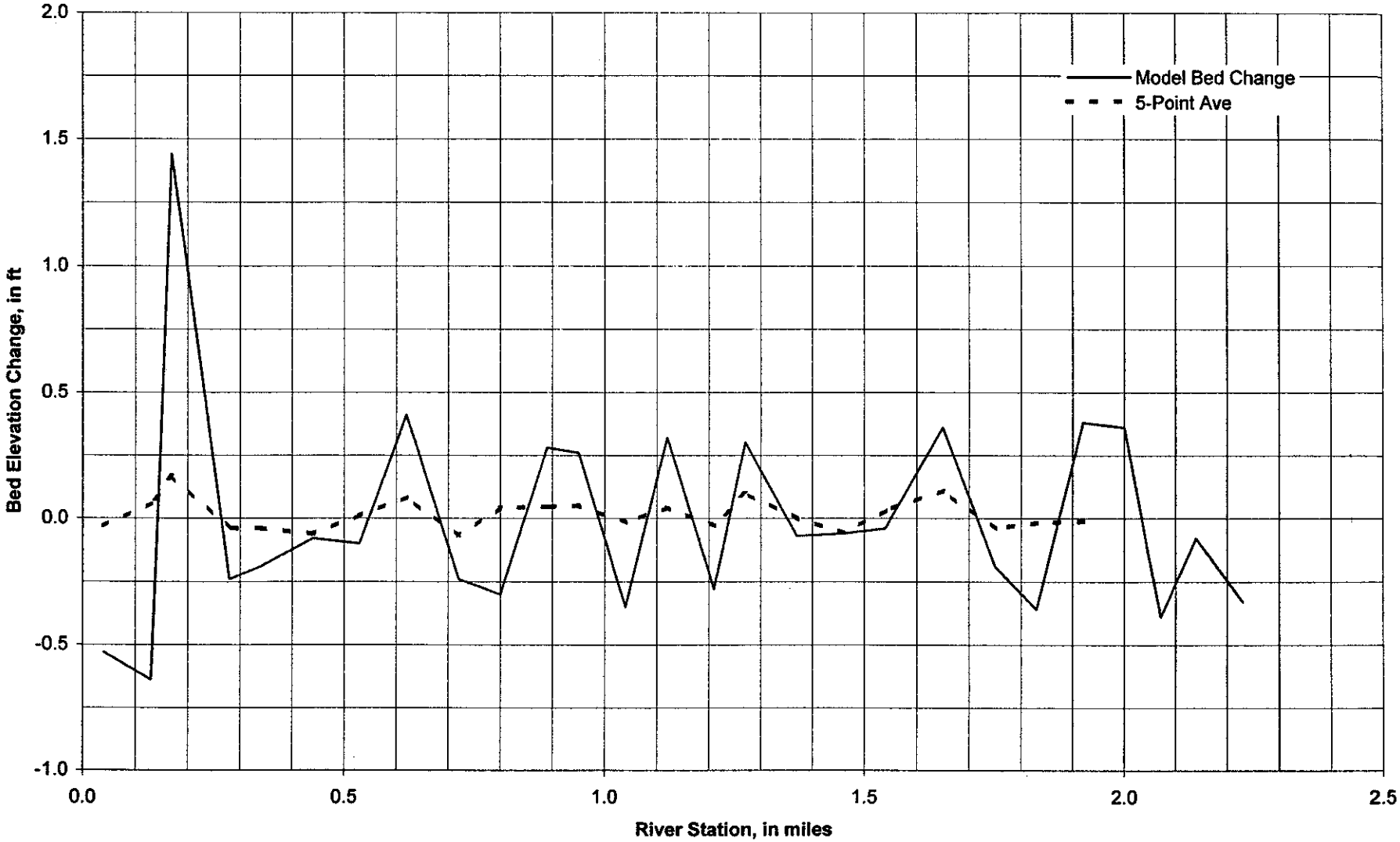


Figure PW-C-2
Accumulative Sediment Deposited Upstream of Section
Paradise Wash Main Channel Model, 10-year Flood, Existing Condition

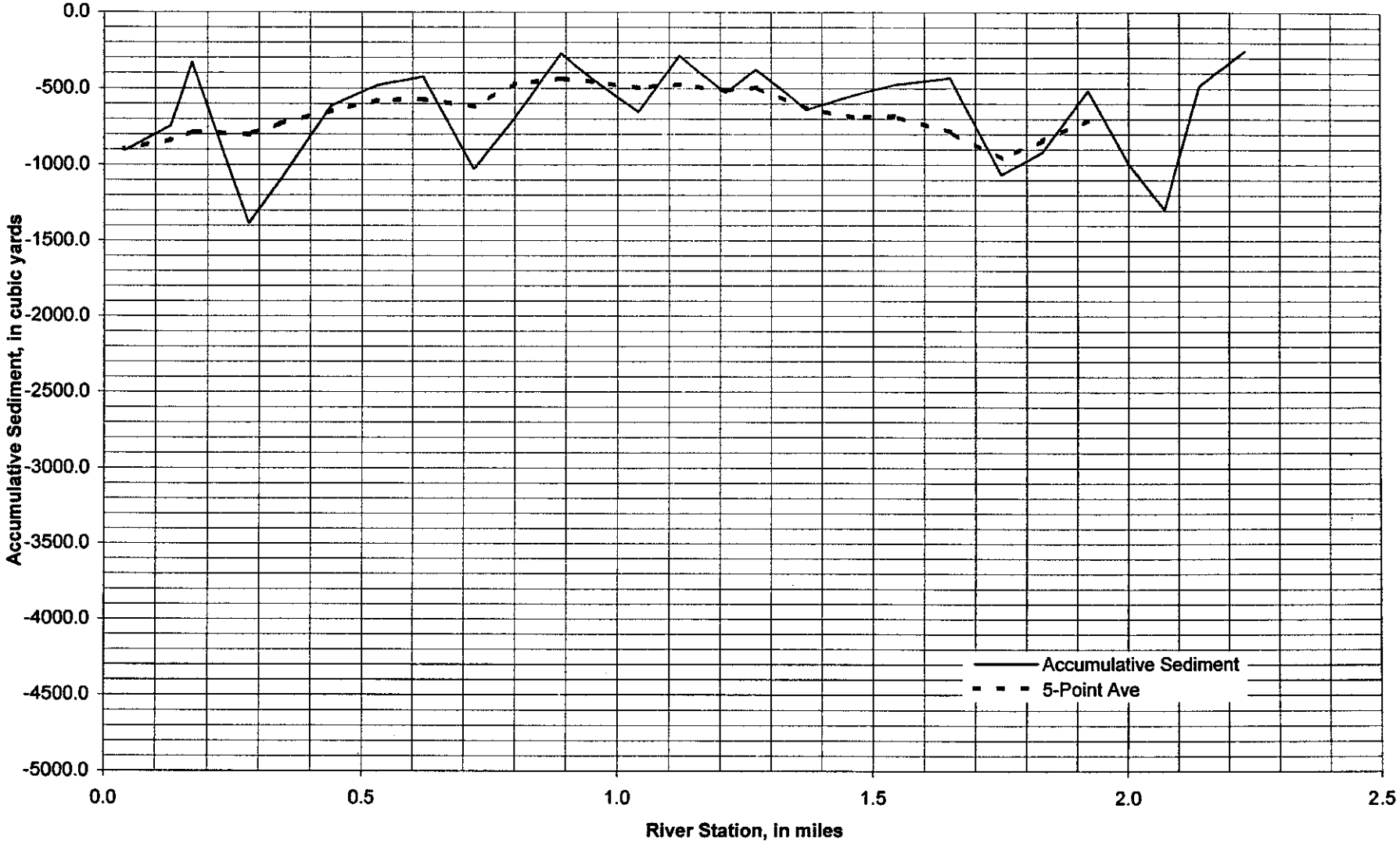


Figure PW-C-3
Bed Elevation Change at Last Time Step
Paradise Wash Main Channel Model, 10-year Flood, Future Condition

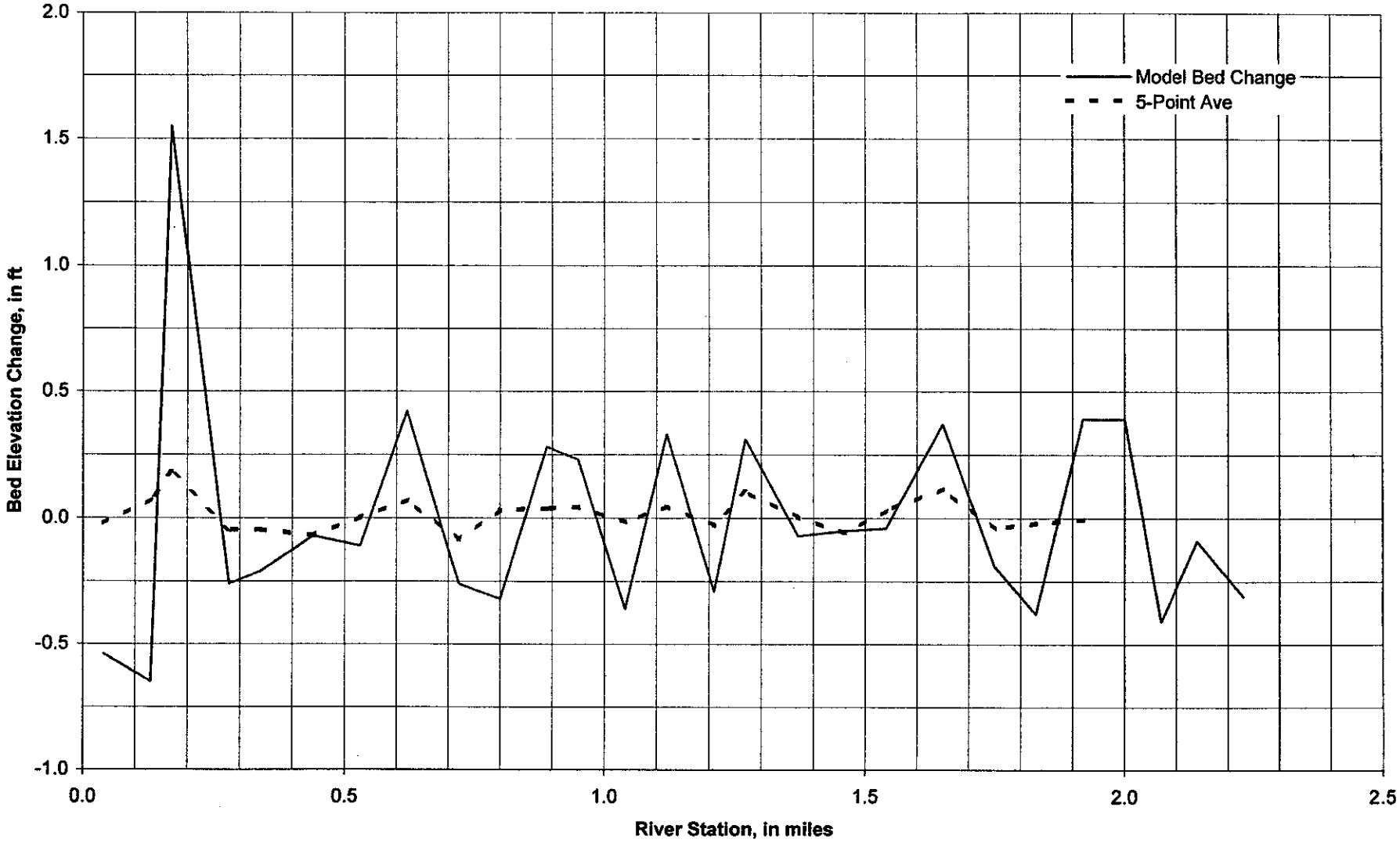


Figure PW-C-4
Accumulative Sediment Deposited Upstream of Section
Paradise Wash Main Channel Model, 10-year Flood, Future Condition

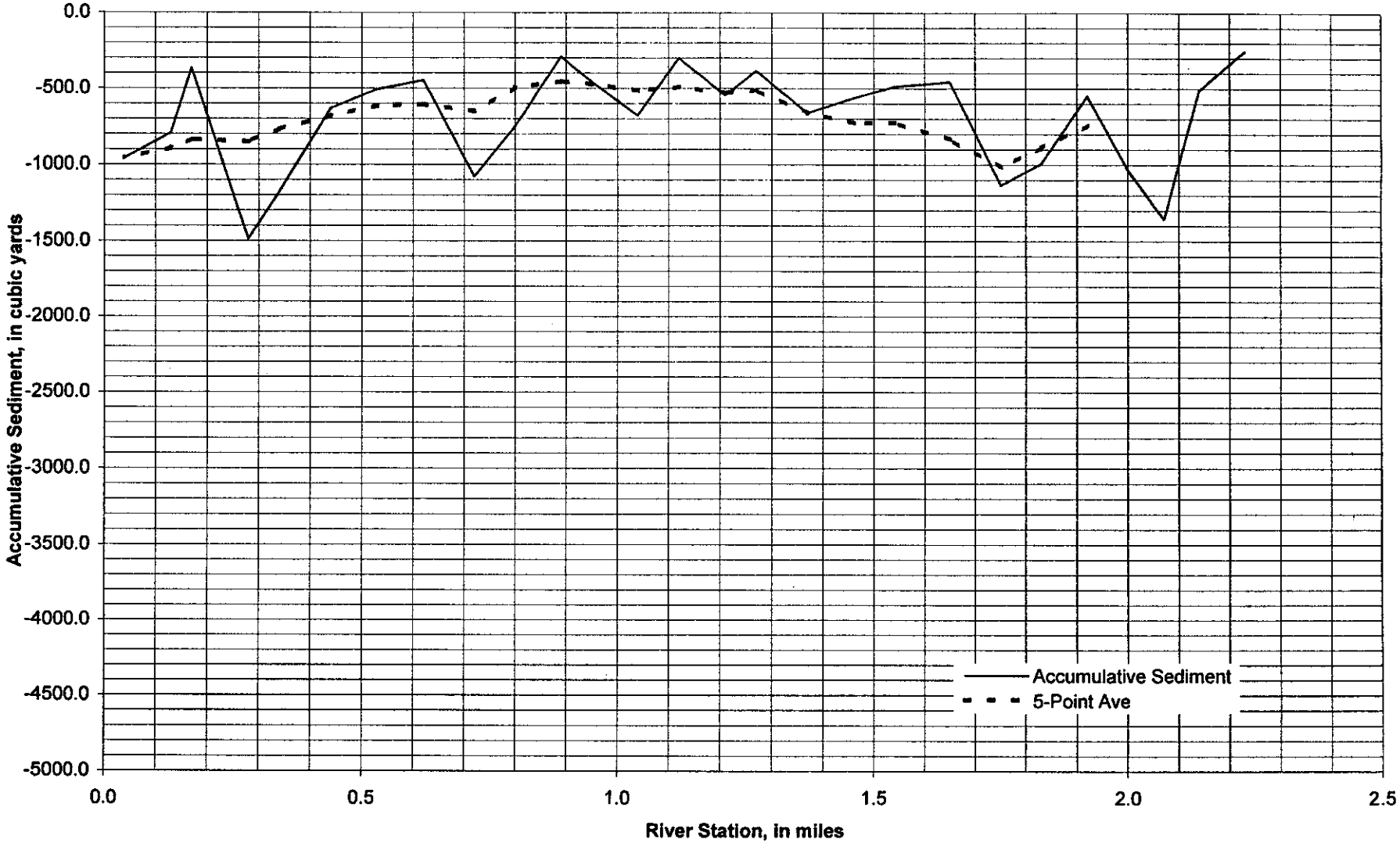


Figure PW-O-1
Bed Elevation at Last Time Step
Paradise Wash Overbank Model, 10-year Flood, Existing Condition

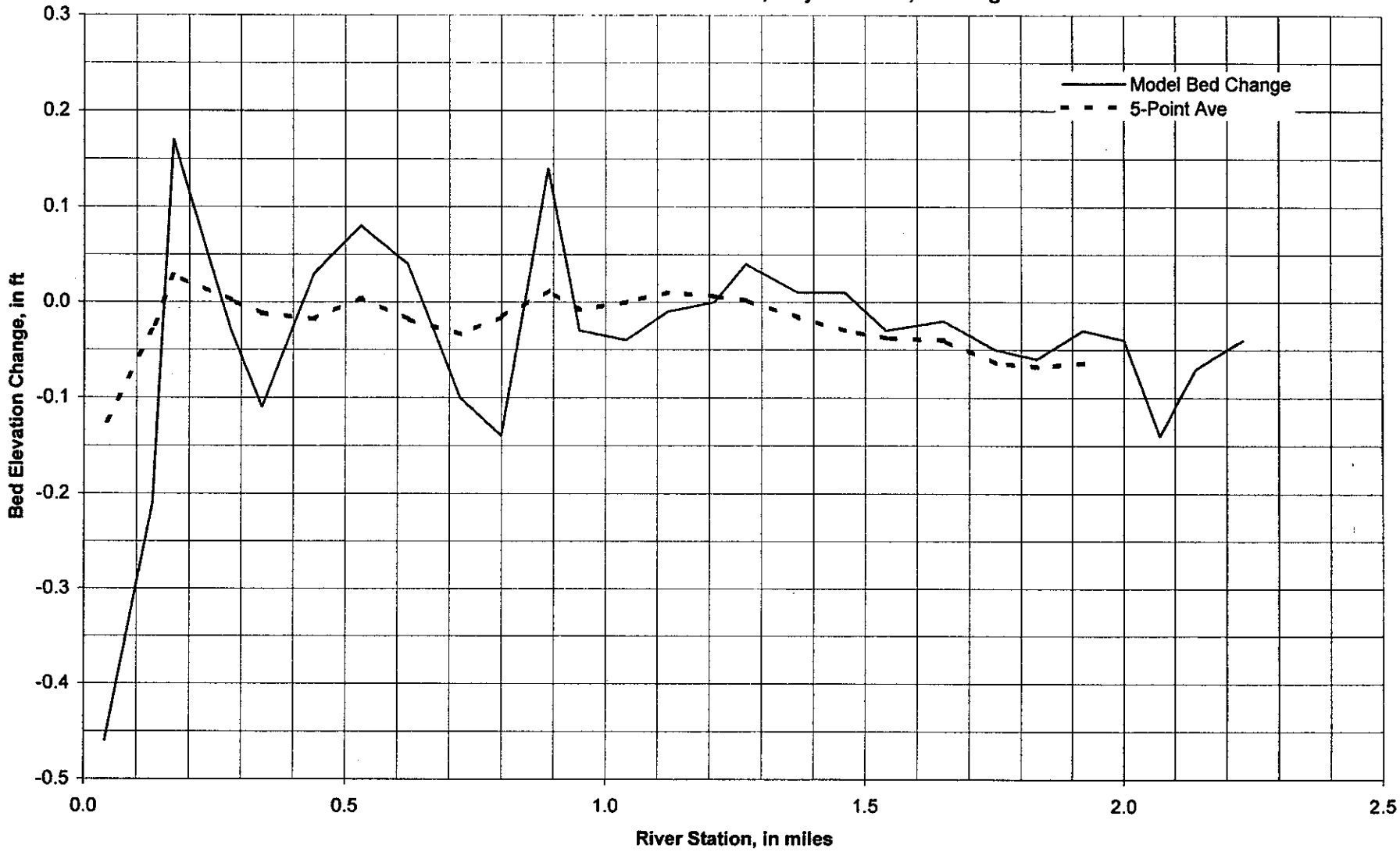


Figure PW-O-2
Accumulative Sediment Deposited Upstream of Section
Paradise Wash Overbank Model, 10-year Flood, Existing Condition

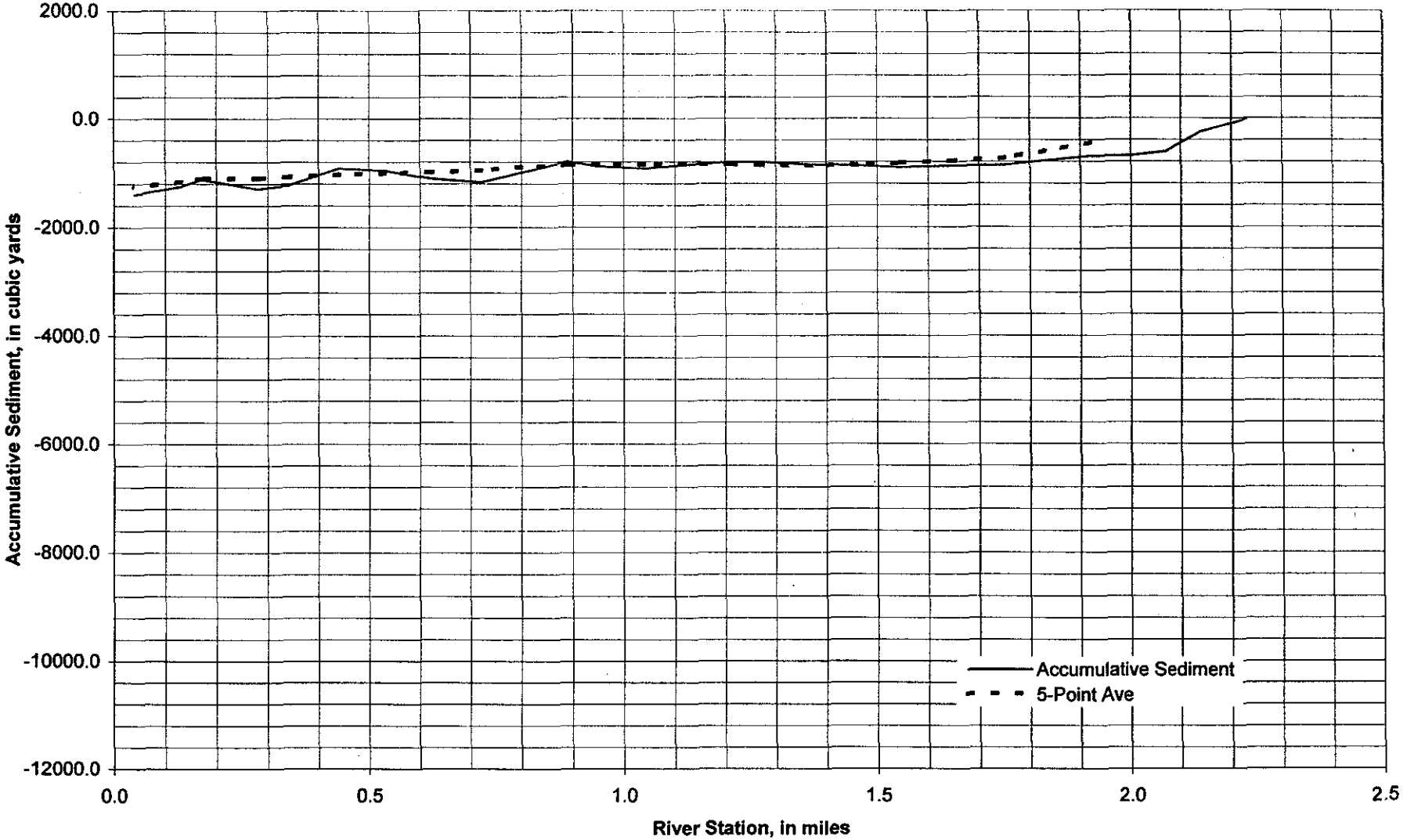


Figure PW-O-3
Bed Elevation at Last Time Step
Paradise Wash Overbank Model, 10-year Flood, Future Condition

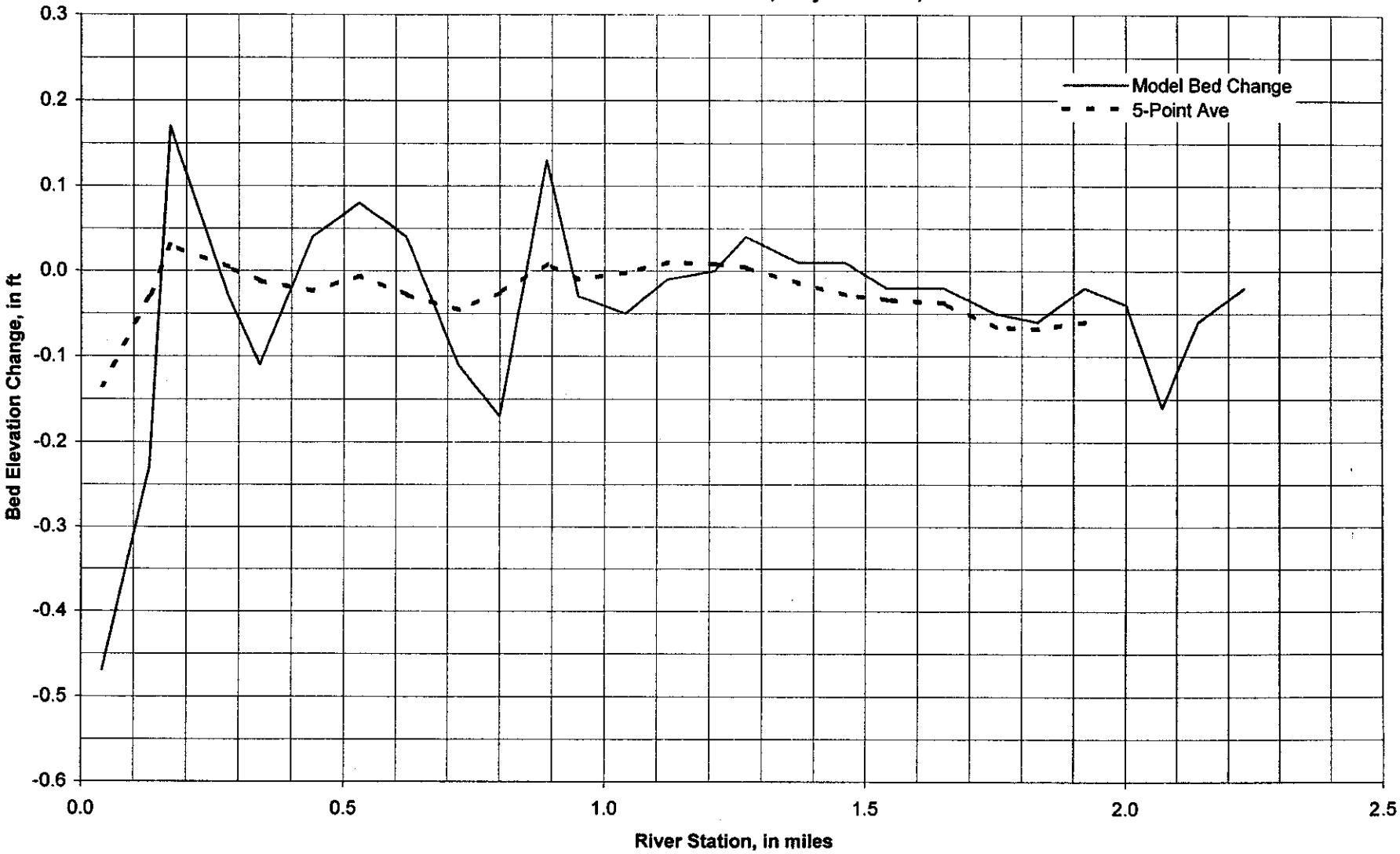


Figure PW-O-4
Accumulative Sediment Deposited Upstream of Section
Paradise Wash Overbank Model, 10-year Flood, Future Condition

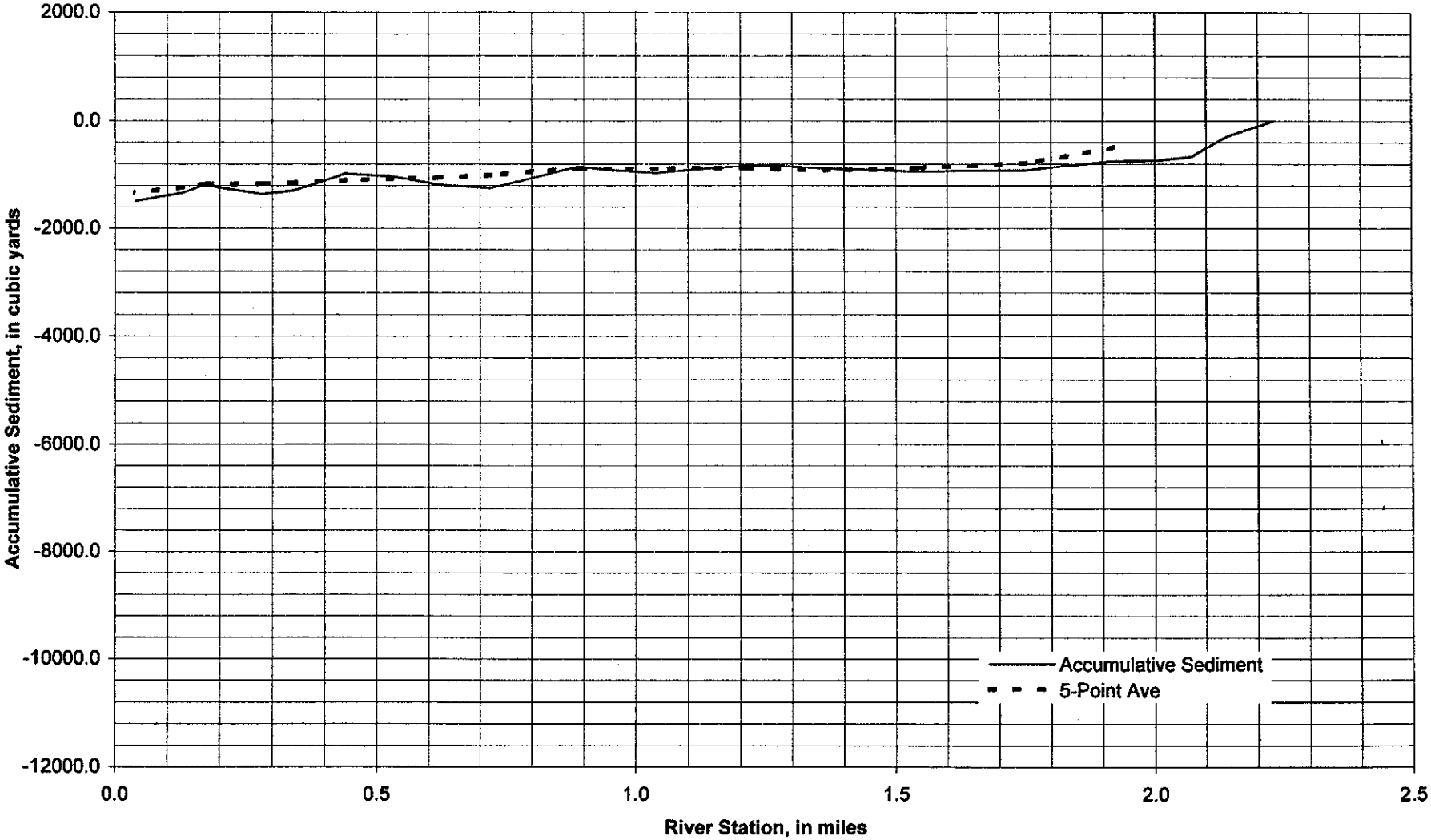


Figure DHW-C-1
Bed Elevation Change at Last Time Step
Desert Hills Wash Main Channel Model, 10-year Flood, Existing Condition

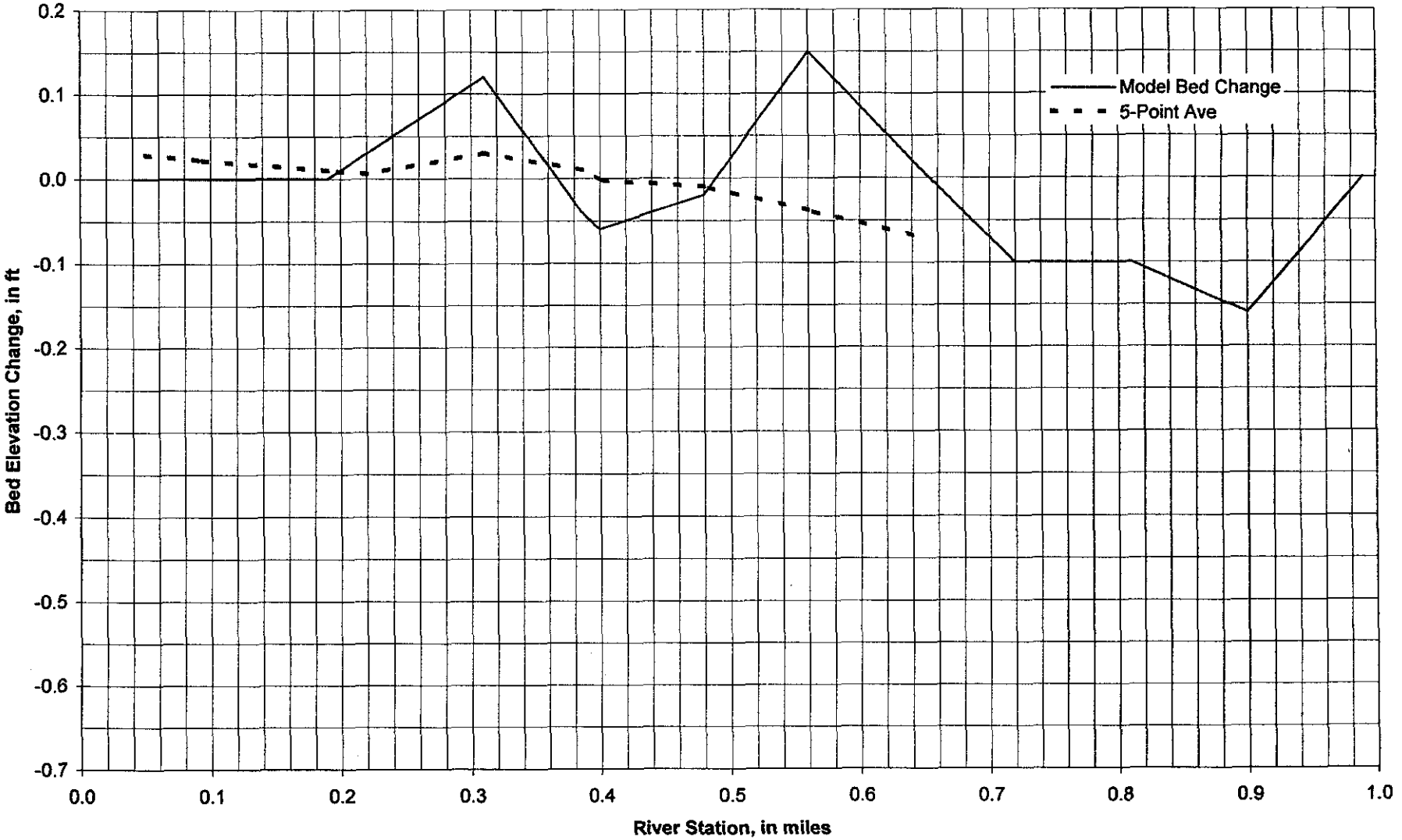


Figure DHW-C-2
Accumulative Sediment Deposited Upstream of Section
Desert Hills Wash Main Channel Model, 10-year Flood, Existing Condition

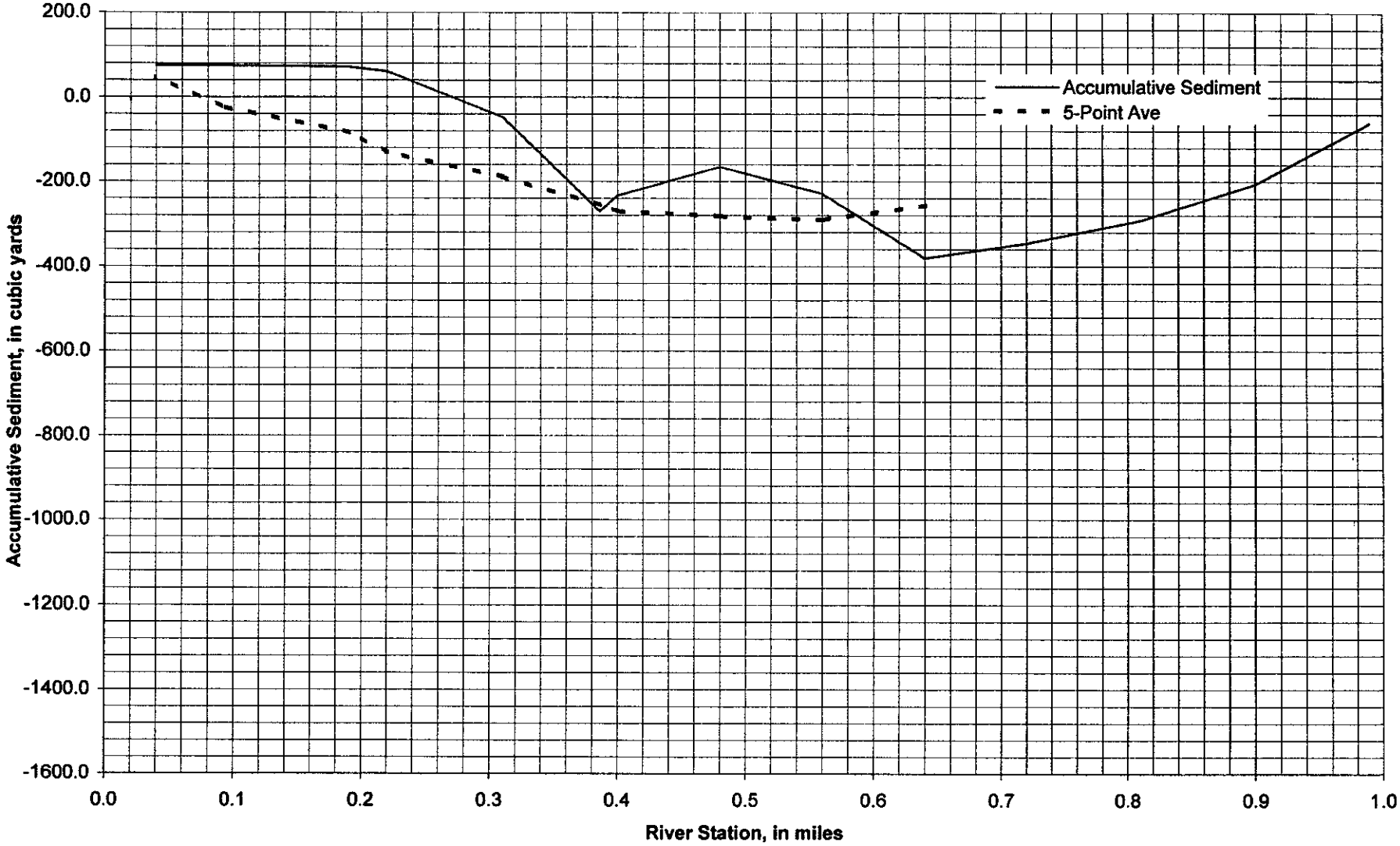


Figure DHW-C-3
Bed Elevation Change at Last Time Step
Desert Hills Wash Main Channel Model, 10-year Flood, Future Condition

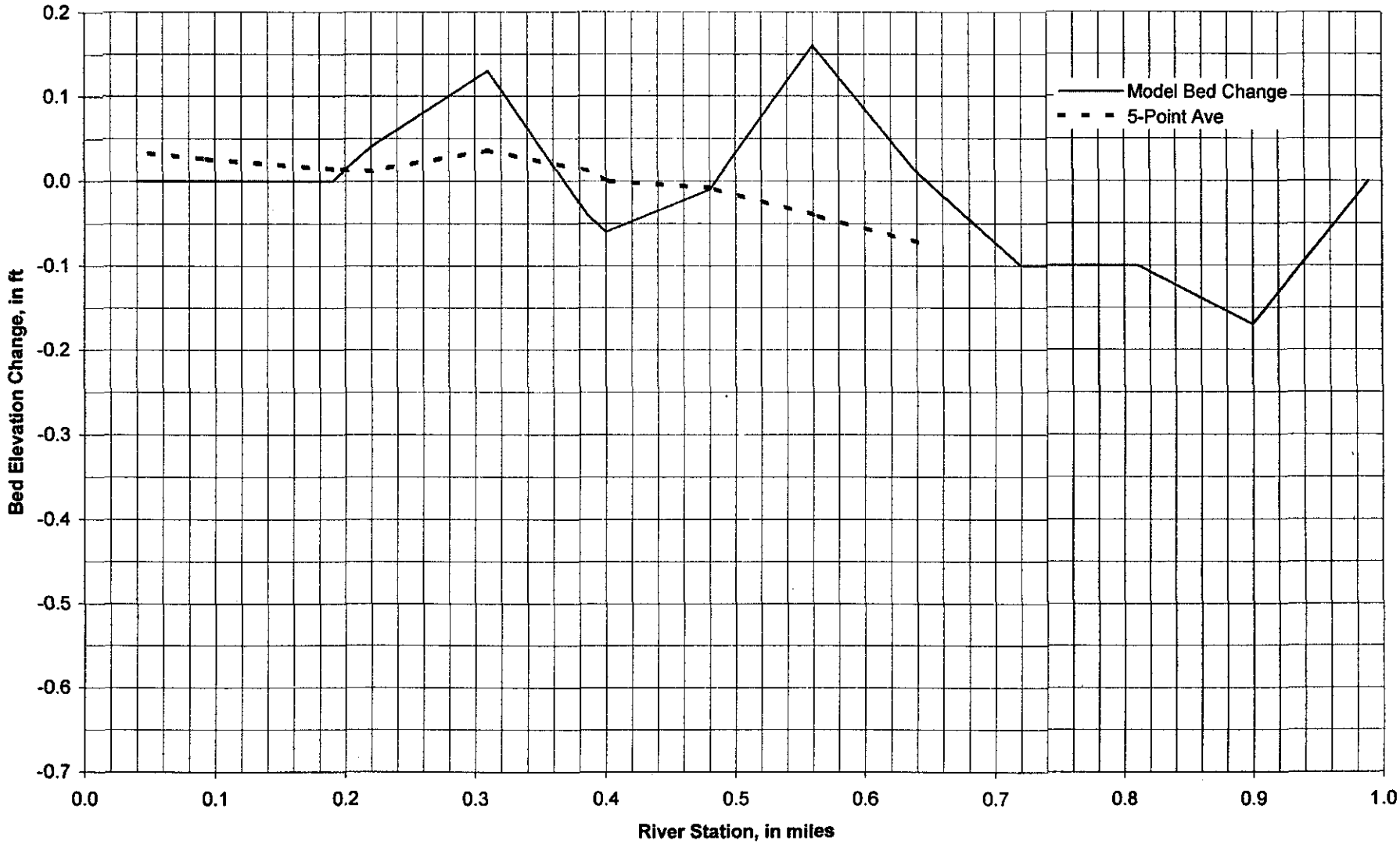


Figure DHW-C-4
Accumulative Sediment Deposited Upstream of Section
Desert Hills Wash Main Channel Model, 10-year Flood, Future Condition

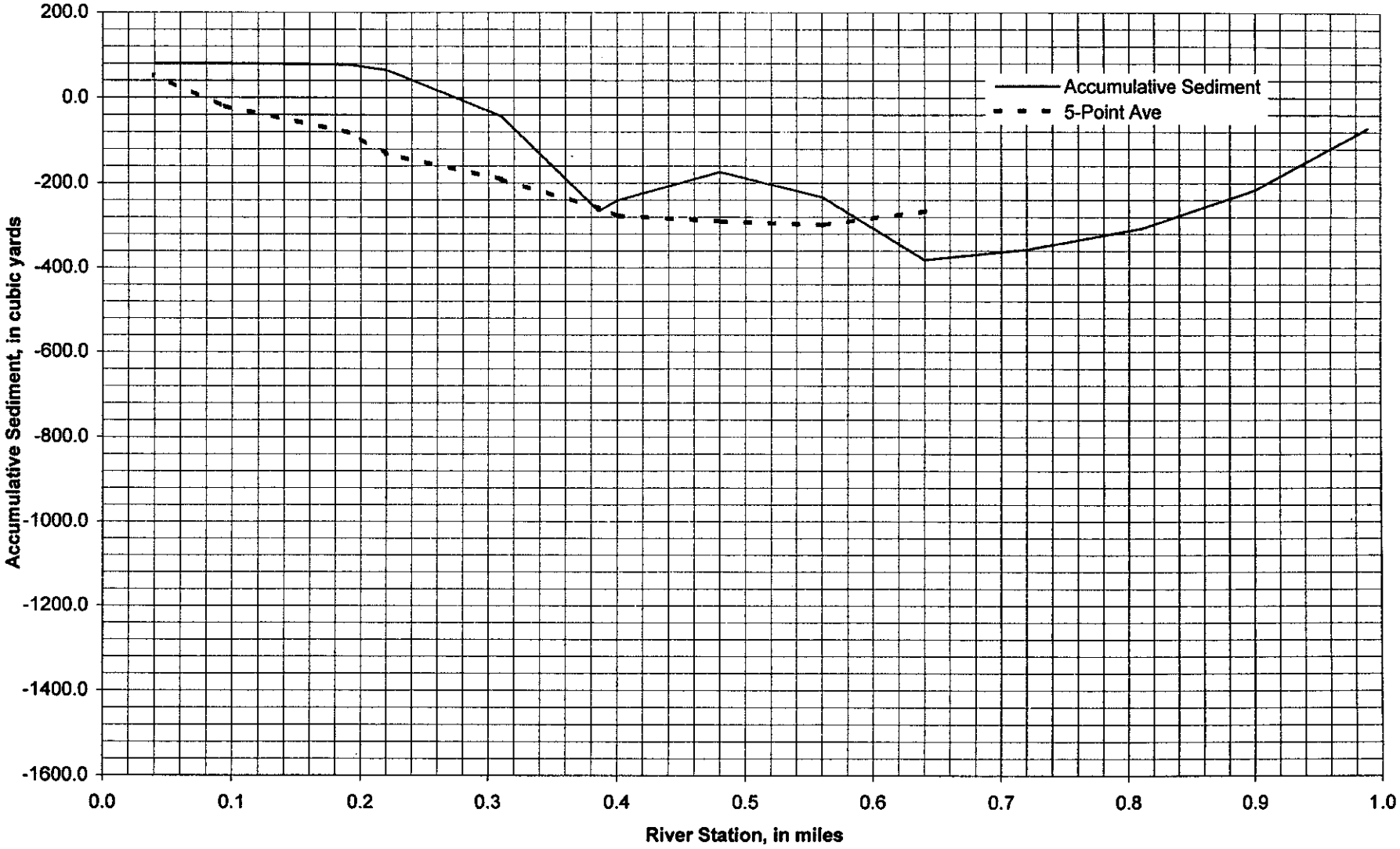
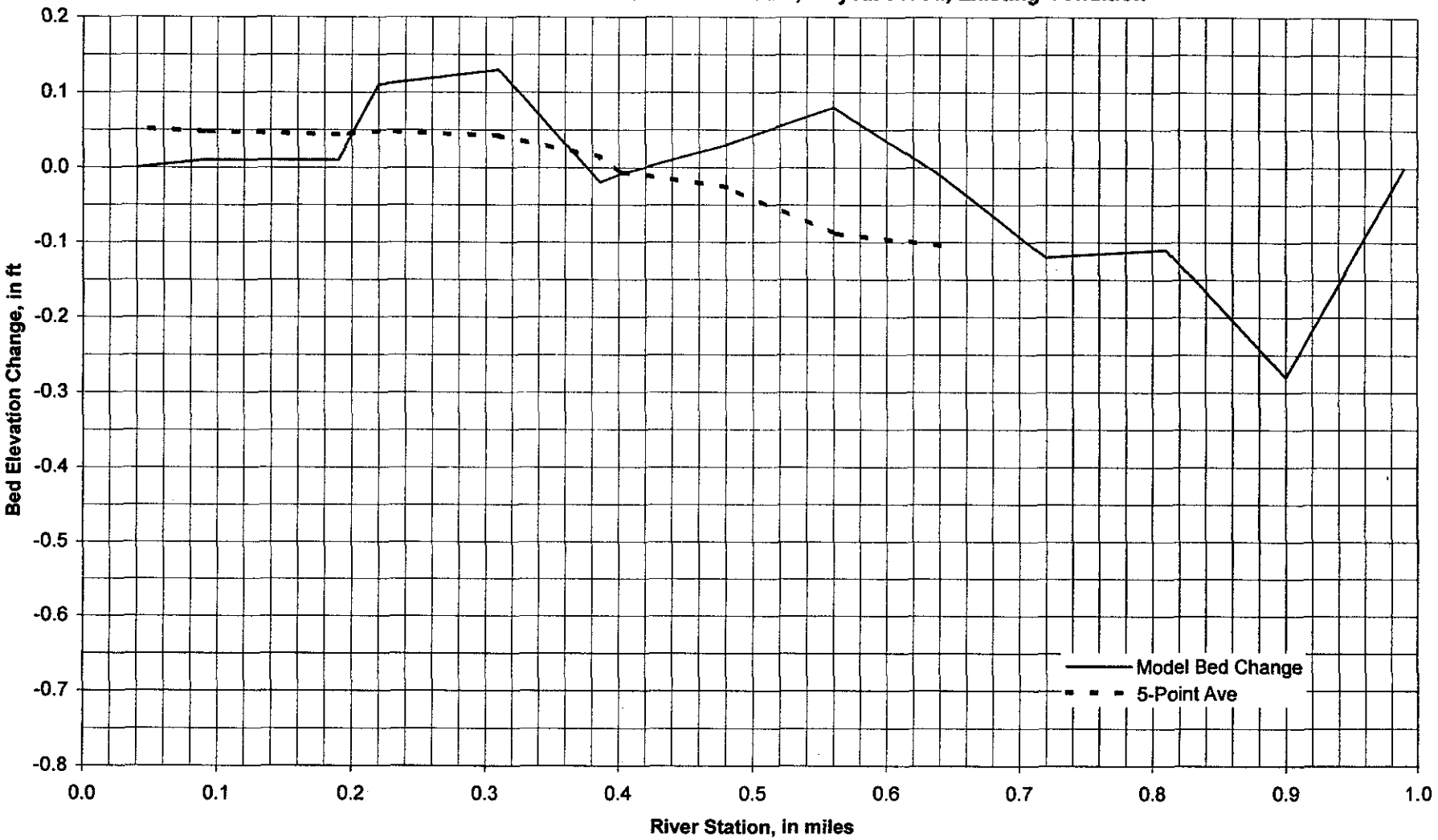


Figure DHW-O-1
Bed Elevation Change at Last Time Step
Desert Hills Wash Overbank Model, 10-year Flood, Existing Condition



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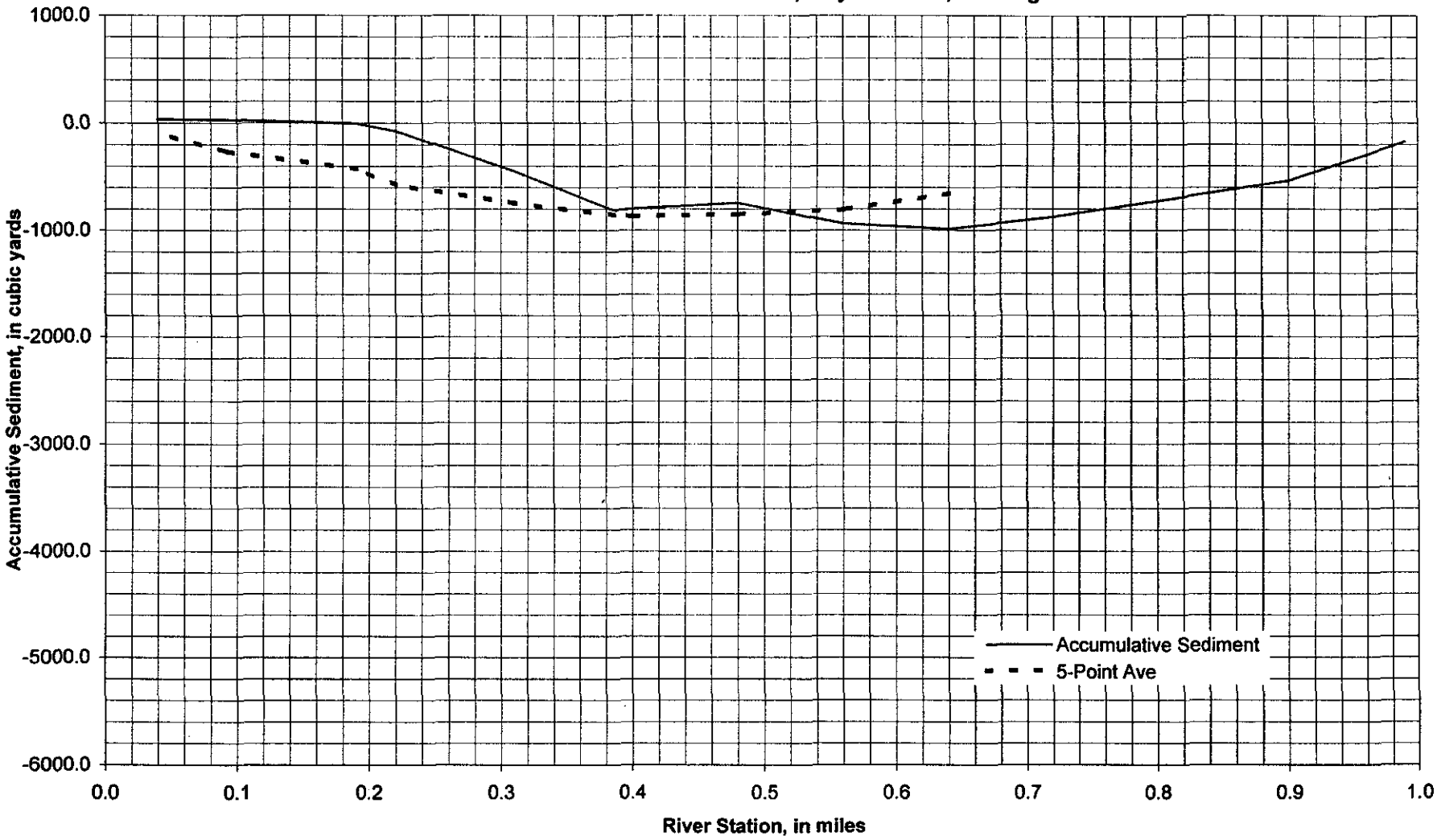
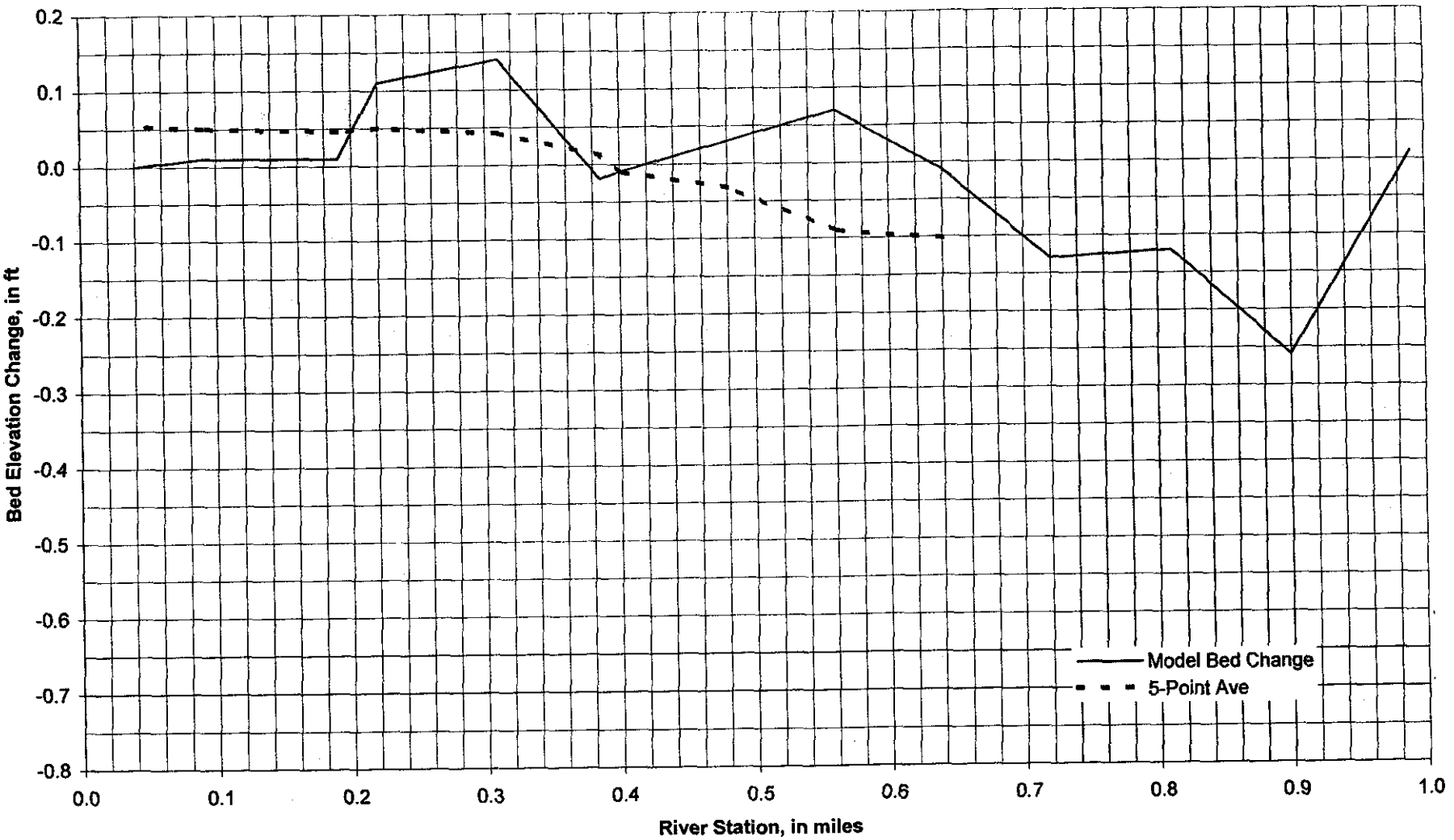
Accumulative Sediment Deposited Upstream of Section
Desert Hills Wash Overbank Model, 10-year Flood, Existing Condition



Figu[illegible]HW-O-3
Bed Elevation Change at Last Time Step
Desert Hills Wash Overbank Model, 10-year Flood, Future Condition