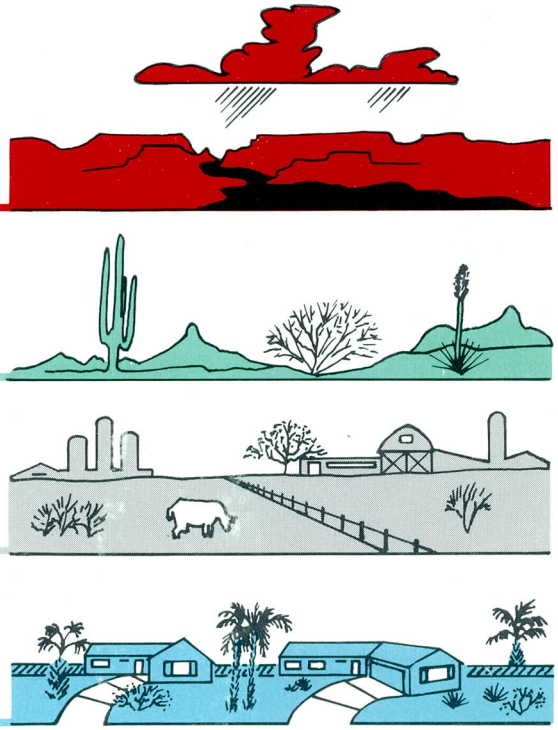

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

STORM REPORT

JULY 23-24, 1992

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

STORM REPORT

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STORM REPORT
JULY 23-24, 1992

Flood Control District of Maricopa County
2801 W. Durango Street
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Appendix C: Rainfall Amounts Reported by FCD Observers

INTRODUCTION

The purpose of this report is to present in a concise manner selected rainfall, runoff, and statistical data from the storm event of July 23-24, 1992, which was most intense in and around the Phoenix metro area. The majority of the data presented was collected by the Flood Control District's (FCD) ALERT system, with contributions from FCD and National Weather Service (NWS) rainfall observers.

The goal of this report is to present the data for general information purposes, and as a guide for future prediction of water levels and discharge rates for FCD structures, particularly Dreamy Draw dam, Indian Bend Wash, and the Arizona Canal Diversion Channel (ACDC).

Meteorology

Listed below are condensed versions of several NWS watches and warnings which were issued prior to and during the storm event of July 23-24, 1992.

Flash Flood Watch
NWS Phoenix
1:33 pm MST Thursday July 23, 1992
... Flash Flood Watch for the east half of Arizona this afternoon and evening until 9:00 pm ...

The NWS in Phoenix has issued a flash flood watch until 9:00 pm to include the eastern Arizona counties of Apache, Navajo, eastern Coconino, Gila, Graham, Greenly, far east Maricopa, Pinal, eastern Pima, Santa Cruz, and Cochise. Tucson is included in the watch, but Phoenix and Flagstaff are not included.

Special Weather Statement
NWS Phoenix
7:45 pm MST Thursday July 23, 1992
... Thunderstorms Developing Around Metro Phoenix ...

Radar at Phoenix airport spotted some newly developing thunderstorms around the Salt River valley at 7:30 pm this evening. One fairly strong cell was developing near Goodyear and Avondale. Others were developing further south ... in the region east of Gila Bend. Visual reports of cloud development indicate other thunderstorms may be about to develop over other parts of the metro area.

Flash Flood Watch
NWS Phoenix
8:40 pm MST Thursday July 23-24, 1992
... Flash Flood Watch extended for much of southern Arizona ...

A giant thunderstorm complex has developed over southeast Arizona and a large part of Sonora Mexico ... spreading over most of out state east and south of Phoenix and in Mexico from the Sierra Madre to the Sea of Cortez. Southeast winds are moving this mass of thunderstorms toward the northwest at around 10 mph. Satellite images show the cloud tops beginning to warm up, indicating the system is beginning to weaken as it moves further into Arizona. But it could still cause an inch or two of rain in some of its heavier individual showers, especially during the first half of the night.

Flash Flood Statement
NWS Phoenix
12:35 am Friday July 24, 1992
... The flash flood watch that was in effect for southcentral through eastcentral and southeast Arizona has expired ...

NWS radar and satellite pictures show a decrease in showers and thunderstorms in most of central and eastern Arizona as of midnight. However, some street flooding has been reported in the eastern portion of the greater Phoenix area including southern Scottsdale near McKellips and McDowell roads, and in portions of Mesa. It is possible that some washes are running in the former watch area.

Flash Flood Watch
NWS Phoenix
1:50 am Friday July 24, 1992
... Flash flood watch for central Arizona including the Phoenix area and the eastern half of Maricopa County, northern Pinal County, eastern Yavapai County, and northwestern Gila County including Payson ...

NWS radar was indicating redevelopment of thunderstorms with heavy rain in the flash flood watch area as of 1:30 am this morning. It is unusual for thunderstorms with heavy rain to be developing so early in the morning. This indicates how moist and unstable the airmass is. An observer at New River reported 1.25 inches of rain in 45 minutes at 1:50 am this morning. Also, radar indicated thunderstorms with very heavy rain developing over the southeast greater Phoenix area near Chandler and also over Saguaro lake north of Apach Junction.

Urban and Small Stream Flood Advisory
NWS Phoenix
3:19 am MST Friday July 24, 1992

... Urban and small stream flood advisory for eastern Maricopa and northern Pinal counties, including the greater Phoenix area, until 7:00 am MST ...

NWS radar was showing that strong thunderstorms with heavy downpours are likely to continue for the next several hours, or until about 7:00 am.

EBS Activation Requested
Flash Flood Warning
NWS Phoenix
4:40 am MST Friday July 24, 1992

A Flash Flood Warning effective until 7:00 am MST has been issued for western Gila County, eastern Maricopa County, and northwestern Pinal County.
NWS radar, satellite pictures, and cooperative observer reports indicate very

heavy rain in the flash flood warning area. Several reports of well over an inch of rain have been received. Heavy rainfall is expected to continue until 6 or 7 am MST this morning, then decrease thereafter.

EBS Activation Requested
Flash Flood Warning ... Correction for Issuance Time
NWS Phoenix
7:00 am MST Friday July 24, 1992

The NWS in Phoenix has extended a flash flood warning for eastern Maricopa County, Pinal County, and Western Gila County until 9:00 am MST. In addition, the flash flood warning has been extended to include the southeast half of Yavapai County. NWS radar, satellite pictures, and cooperative observer reports indicate that very heavy rain has occurred or was still occurring in the warning area. The greatest report of overnight rain received as of 7:00 am was 6.05 inches at 27th Avenue and Camelback Road. Heavy rainfall is expected to continue at least in the northern portion of the warning area until 8 or 9 am MST this morning.

Flash Flood Statement
NWS Phoenix
9:02 am MST Friday July 24, 1992

... Flash Flood Warning Expires ...

The flash flood warning for central Arizona including the Phoenix metro area expired at 9:00 am.

Flash Flood Watch
NWS Phoenix
9:25 am MST Friday July 24, 1992

... Flash Flood Watch for south central and northeast Arizona until 9:00 pm. ...

The watch includes Santa Cruz, Pima, Pinal, Maricopa, Gila, Yavapai, eastern Coconino, Navajo, and Apache counties. Flagstaff is not included in the watch area.

Copies of the actual bulletins issued by the National Weather Service are included as Appendix A of this report.

Rainfall

Listed below are statistics for the Flood Control District's 125 telemetered raingages.

1. Number of Gages which failed to operate during the storm: 3.
2. Average rainfall duration: 7.7 hours.
3. Rainfall duration standard deviation from the mean: 3.5 hours.
4. Number of gages recording no rainfall: 15.
5. Number of gages recording .01 to 1.0 inches of rainfall: 53.
6. Number of gages recording 1.01 to 2.0 inches of rainfall: 37.
7. Number of gages recording 2.01 to 3.0 inches of rainfall: 11.
8. Number of gages recording more than 3.0 inches of rainfall: 2.
9. Greatest amount of rain recorded: 3.87 inches at 59th Ave. & Indian School.

Rainfall totals and durations in 30 minute intervals for all FCD telemetered rain gages are presented in Appendix B. Return periods were estimated for selected stations in the urban area based on the total storm duration and the Phoenix WBO duration/frequency table in "Estimated Return Periods for Short Duration Precipitation in Arizona" by P. Kangieser (Table 1). More accurate return period computations for three selected stations are presented as Figures 1, 2, and 3. These figures generally characterize this storm as being of low return period for the peak rainfall intensities less than 2 hours, but gradually increasing in return period as the duration approaches 6 to 8 hours.

Graphical representations of rainfall distributions corresponding to the more precise return period estimates are presented as Figures 4, 5, and 6. A list of rainfall amounts recorded by FCD observers is presented as Appendix C.

TABLE 1

ESTIMATED RETURN PERIODS FOR SHORT-DURATION PRECIPITATION IN ARIZONA
(Inches)

Station: Phoenix WBO

Latitude: 33° 26'

Longitude: 112° 01'

Elevation (feet): 1117

RETURN PERIOD (YEARS)

DURATION	1	2	5	10	25	50	100
5 min.	0.17	0.26	0.38	0.47	0.59	0.68	0.77
10 min.	0.27	0.40	0.59	0.72	0.91	1.06	1.20
15 min.	0.34	0.50	0.74	0.92	1.15	1.34	1.52
30 min.	0.47	0.70	1.03	1.27	1.60	1.86	2.10
1 hr.	0.60	0.88	1.30	1.61	2.02	2.35	2.66
2 hr.	0.65	0.94	1.39	1.72	2.15	2.49	2.82
3 hr.	0.69	1.01	1.48	1.82	2.27	2.62	2.97
6 hr.	0.81	1.16	1.70	2.07	2.57	2.96	3.35
12 hr.	0.91	1.30	1.90	2.30	2.84	3.26	3.69
24 hr.	1.02	1.44	2.10	2.53	3.12	3.57	4.04

FIGURE 1

STATION 6575
MARYVALE MUNI GOLF (Indian School & 59TH Ave.)
STORM OF July 23-24, 1992
3.78 inches of Rain in 7 hours

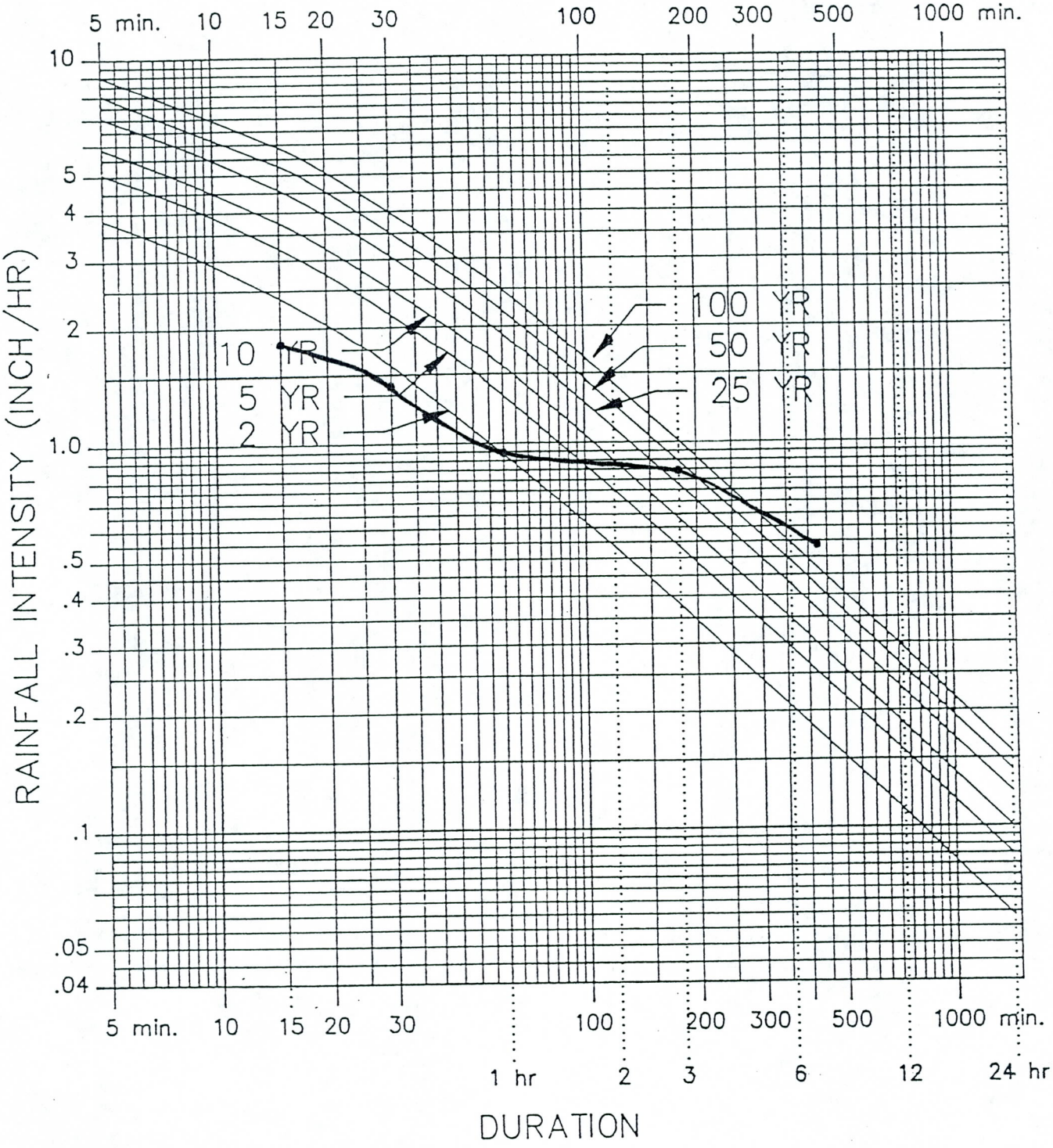

Figure 1
Rainfall Intensity-Duration-Frequency Relation
(Phoenix Metro Area)

FIGURE 2

STATION 6200
DURANGO II COMPLEX
STORM OF JULY 23-24, 1992
3.03 Inches of Rain in 7.5 HOURS

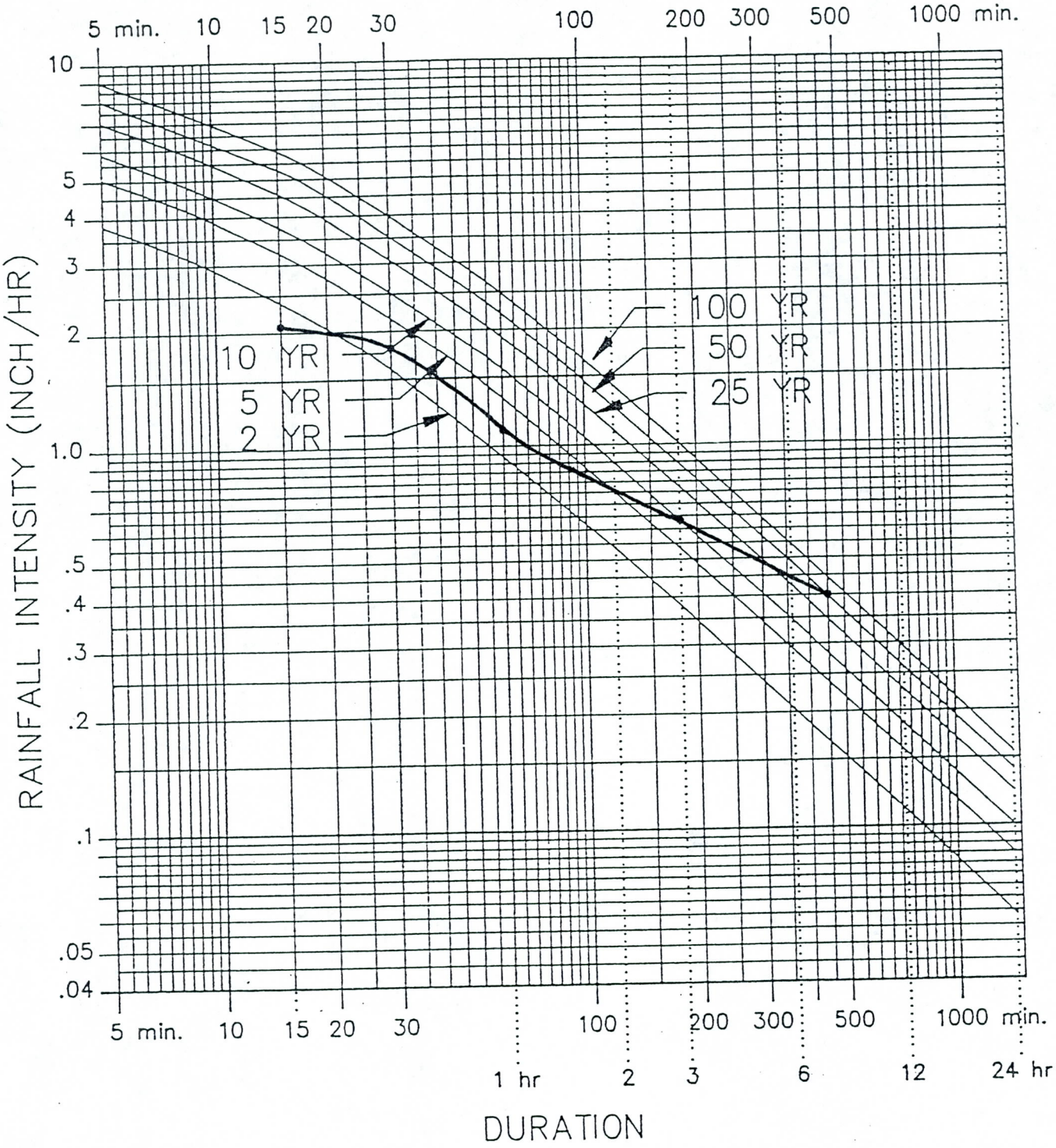

Figure 2
Rainfall Intensity-Duration-Frequency Relation
(Phoenix Metro Area)

FIGURE 3

STATION 6300
DREAMY DRAW DAM
STORM OF July 23-24, 1992
1.93 inches of rain in 11 hours
Peak Stage: 17.9 feet

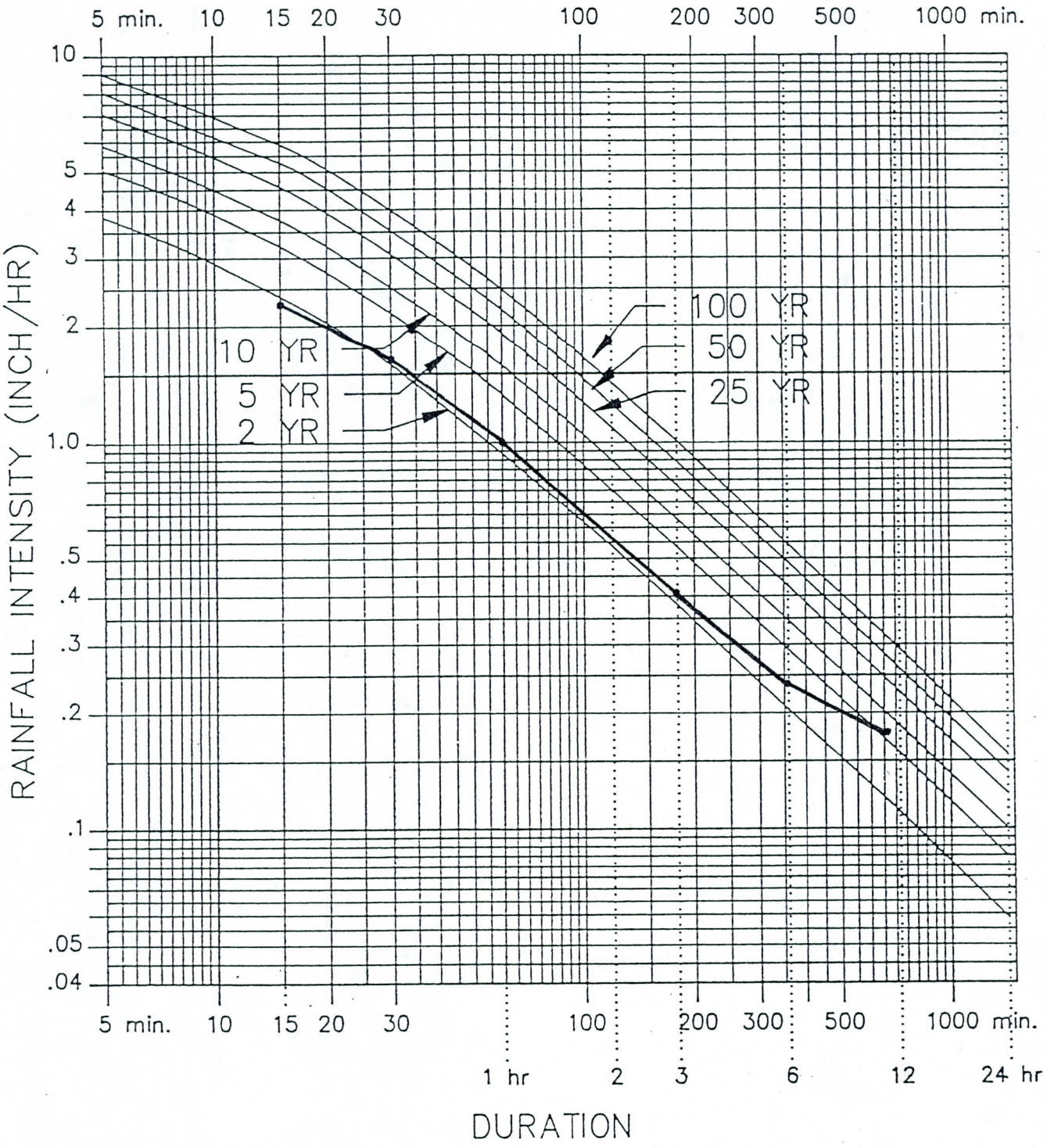

Figure 3
Rainfall Intensity-Duration-Frequency Relation
(Phoenix Metro Area)

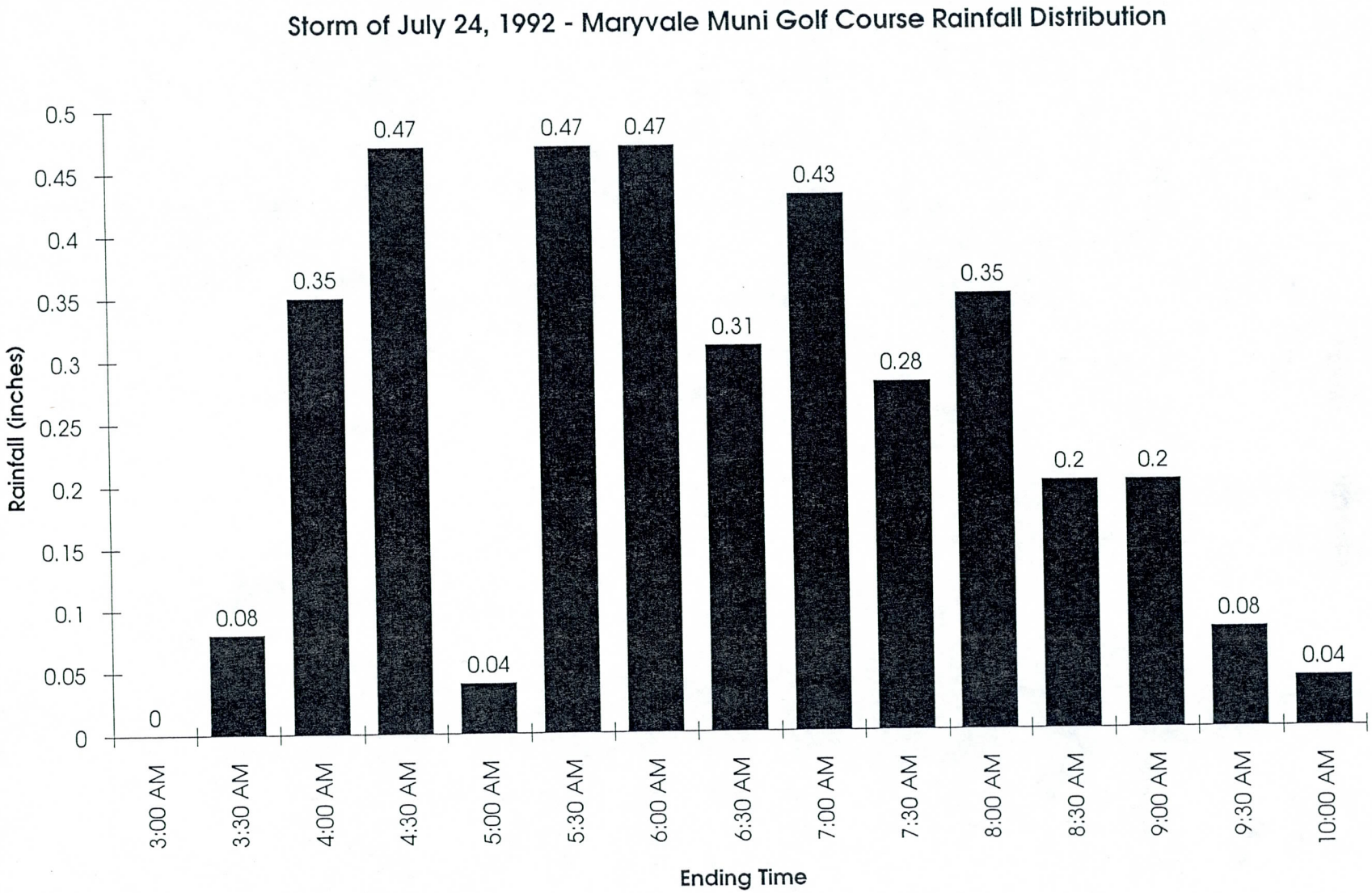

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Fig. 4

Storm of July 24, 1992 - Durango Complex Rainfall Distribution

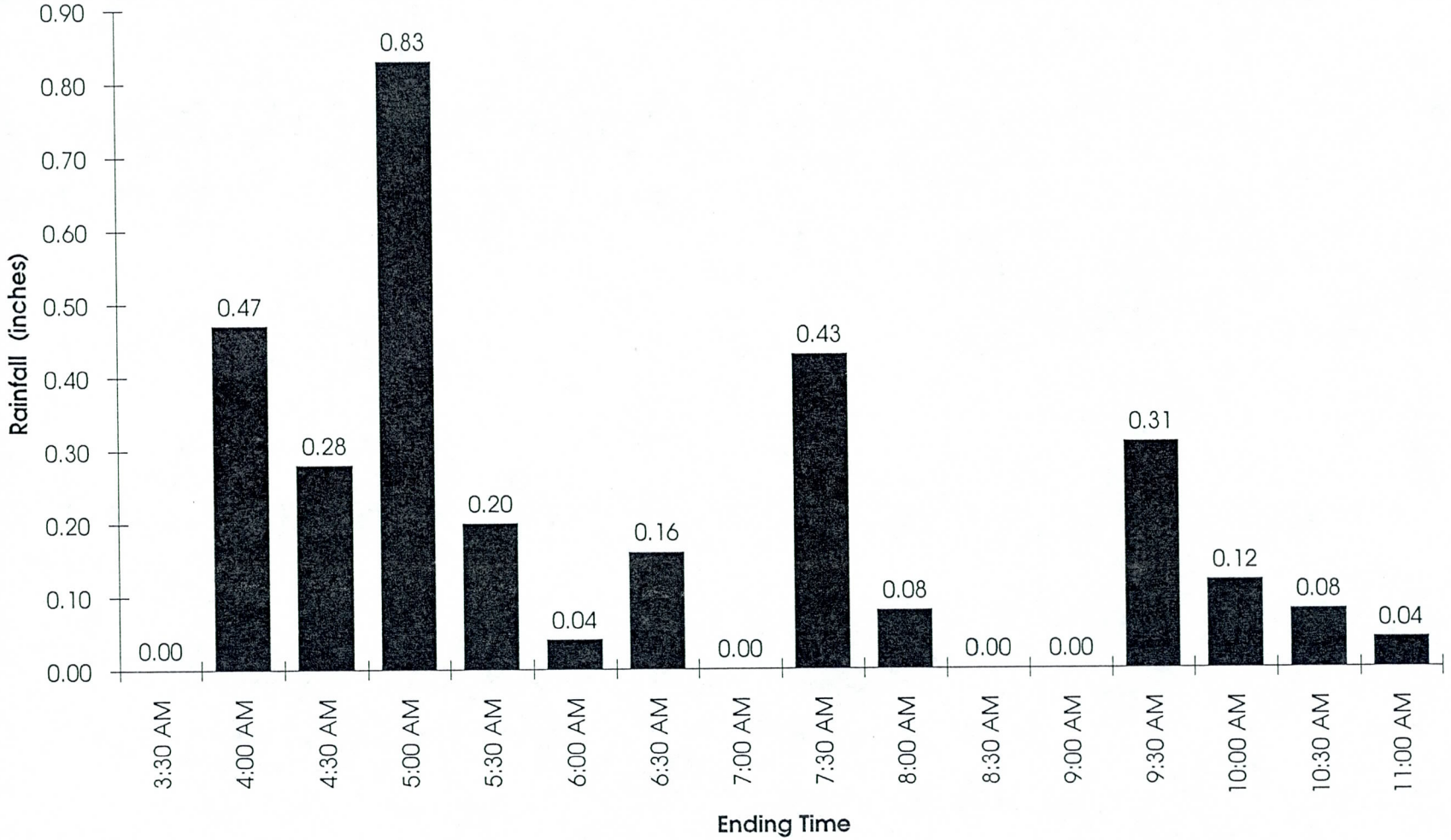

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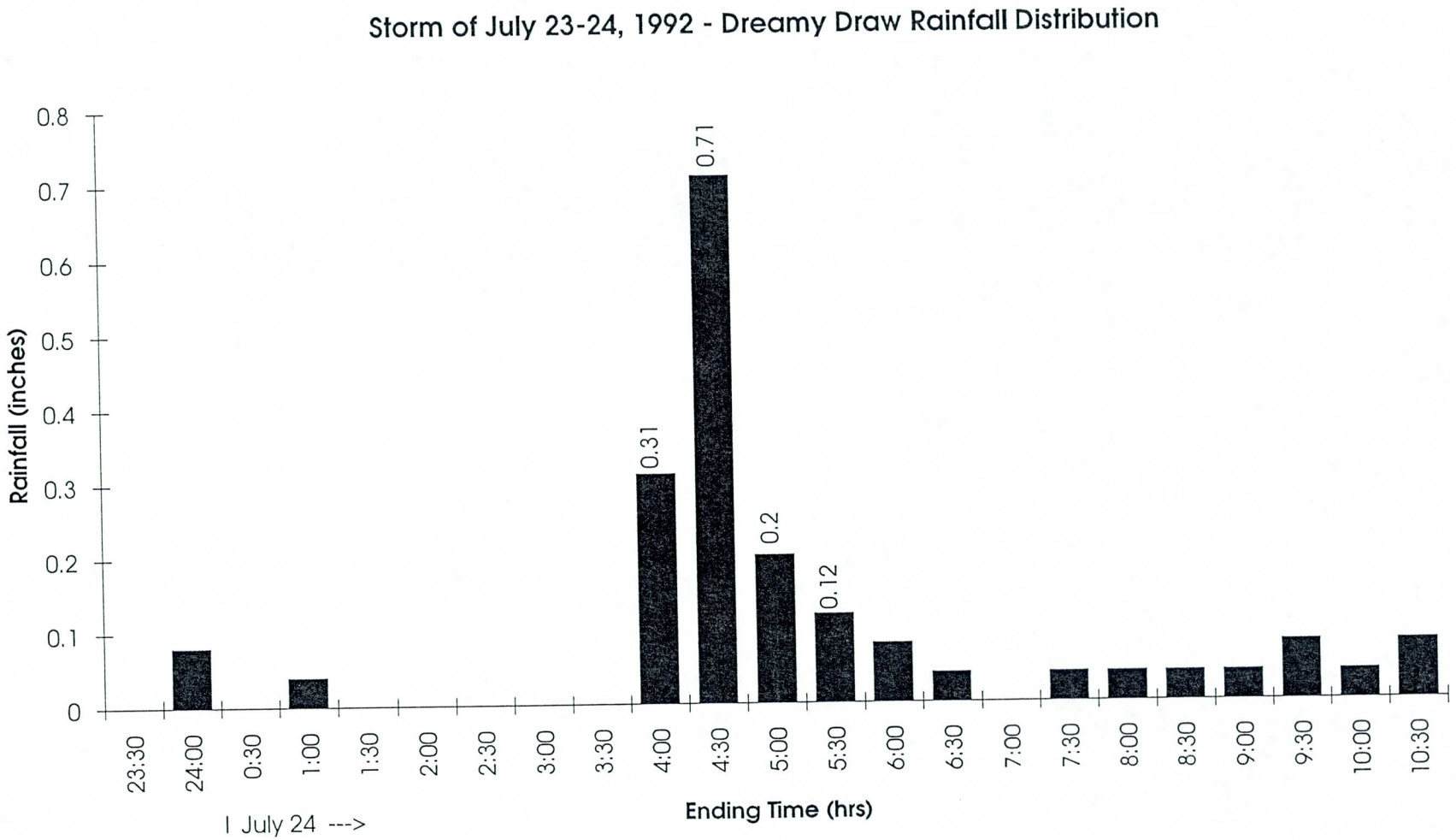
Fig. 5



Storm Report July 23-24, 1992

Fig. 6

Figure 7 is an Isohyetal (lines of equal rainfall) map for the Phoenix metro area, where the greatest amounts of rainfall were recorded. Data plotted on the map include rainfall measurements by FCD telemetered raingages, FCD rainfall observers, and NWS rainfall observers. There appears to be an interesting correlation between the areas of high rainfall depth and the urbanized areas where nighttime temperatures remain high in comparison to the surrounding desert and agricultural areas.

Rainfall rate alarms were common throughout the storm, and are listed in Tables 2 and 3 of the ALERT System Performance Section in this report.

FIGURE 7

STORM OF JULY 23-24, 1992

1.5 — ISOHYET, AMOUNT IN INCHES

(1.78) — FCD TELEMETERED RAINGAGE, AMOUNT IN INCHES

(.91) — NWS OBSERVER GAGE, AMOUNT IN INCHES

(6.00) — FCD OBSERVER GAGE, AMOUNT IN INCHES

N

SCALE 0 1 2 mi

CAVE CREEK
CAREFREE
SCOTTSDALE
PARADISE VALLEY
PHOENIX
PEORIA
SURPRISE
EL MIRAGE
YOUNGTOWN
GLENDALE
LITCHFIELD PARK
TOLLESON
AVONDALE
GUADALUPE
TEMPE
MESA
GILBERT
FOUNTAIN HILLS
Bartlett Reservoir
Morristown - New River Hwy.
Carefree Hwy.(34600-N)
Dove Valley Rd.(33000-N)
Lone Mountain Rd.(31400-N)
Dixileta Dr.(29800-N)
Dynamite Blvd.(28200-N)
Pinnacle Peak Rd.(23400-N)
Happy Valley Rd.(25000-N)
Jomax Rd.(26600-N)
Deer Valley Dr.(21800-N)
Beardsley Rd.(20200-N)
Union Hills Dr.(18600-N)
Bell Rd.(17000-N)
Greenway Rd.(15400-N)
Thunderbird Rd.(13800-N)
Cactus Rd.(12200-N)
Shea Blvd.(10600-N)
Double Tree Ranch Rd.(9000-N)
Northern Ave.(8000-N)
Indian Bend Rd.(7000-N)
Lincoln Dr.(6500-N)
McDonald Dr.(6000-N)
Chaparral Rd.(5000-N)
Camelback Rd.(4500-N)
Indian School Rd.(4100-N)
Thomas Rd.(2900-N)
McDowell Rd.(1600-N)
Yuma Rd.(1200-S)
Buckeye Rd.(1200-S)
Lo. Buckeye Rd.(2500-S)
Broadway Rd.(4400-S)
Southern Ave.(6000-S)
Baseline Rd.(7600-S)
Dobbins Rd.(9200-S)
Elliot Rd.(10800-S)
Warner Rd.(12400-S)
Knox Rd.(13200-S)
Desert Hills Dr.(39400-N)
Cave Creek Park
Grapevine Rd.
Tom Darlington Dr.
Cave Creek Wash
Carefree
Forest
Granite Mtn.
Bartlett Dam
Bee Mtn.
Round Butte
Needle Rock
Rio Verde Dr.
Rio Verde
Fraesfield Mtn. 3055
Pinnacle Peak
Scottsdale Rd.
Hayden Rd.
Pima Rd.
40th St.
48th St.
56th St.
60th St.
64th St.
32nd St.
Cave Creek
Deer Valley Airport
Thunderbird Park
Adobe Dam Rec. Area
Ludden Mtn.
Dove Buttes
Dam Hills
Union Hills
Waddell Dam
Waddell
Reems Rd. (155th Ave.)
Bullard Ave. (147th Ave.)
Litchfield Rd. (139th Ave.)
Dysart Rd. (131st Ave.)
El Mirage Rd. (123rd Ave.)
115th Ave.
107th Ave.
99th Ave.
91st Ave.
Saddleback Mtn.
Twin Buttes
Santa Fe R.R.
Agua Fria River
New River
Arrowhead Canyon
Deer Valley
Paradise Valley Park
Central Arizona Project
Scottsdale Municipal Airport
McDowell Mountain Park
McDowell Mountains
McDowell Peak 4034
Thompson Peak
Golden Eagle Blvd.
Fountain Hills Blvd.
Saguaro Blvd.
Palisades Blvd.
Fort McDowell Indian Reservation
Salt River
Salt River Indian Reservation
Central Arizona Project
Granite Reef Dam
Granite Reef Rd.
Bush Highway
Usery Pass Rd.
Signal Butte (108th St.)
Mountain Rd. (112th St.)
Meridian Rd. (116th St.)
Higley Rd. (52nd St.)
Recker Rd. (60th St.)
Greenfield Rd. (44th St.)
Val Vista Dr. (28th St.)
Gilbert Rd. (20th St.)
Lindsay Rd. (28th St.)
Spook Hill Rd.
Sycamore Creek
Adams Mesa
Mesa Municipal Airport
Bush Highway Park
Usery Mountain Park
Superstition Freeway
Apache
Oasis Park
Kiwanis Park
Tempe Town Lake
Papago Buttes
Papago Park
Encanto Park
Grand Canal
Roosevelt Irrigation District
Arizona Canal
Squaw Peak Park
Squaw Peak
Camelback Mtn. 2704
Granite Mtn.
Tatum Blvd.
Black Canyon
North Mountain Park
Paradise Valley Mall
Scottsdale Airpark
Deer Valley Airport
Thunderbird Airpark
Glendale Municipal Airport
Luke Air Force Base
Litchfield Park
Goodyear Luke Aux. No. 6
Phoenix Litchfield Municipal Airport
Gila River
Estrella Mountain
Girl Scouts of America
G.M. Desert Proving Grounds
Tres Rios
Sun City
Sun City West
Arizona Cardinals Stadium
Tempe Diablo Stadium
Maricopa County Complex
Maricopa County Sheriff's Posse Grounds
Arizona State Capitol
Civic Plaza
Phoenix Zoo
Sky Harbor International Airport
Papago Park Military Reservation
Desert Botanical Garden
Phoenix Municipal Stadium
Arizona Biltmore Golf & Country Club
Salt River Project
Western Canal
Highline Canal
Eastern Canal
Southern Pacific R.R.
Tolleson Union High School District
Litchfield Park Service Co.
Goodyear Farms
Perryville
Liberty
Laveen
Maricopa Colony
Cashion
Town Hall
City Hall
Fire Station
Police Station
Library
Post Office
Water Tank
Park
Golf Course
Cemetery
Church
School
Hospital
Airport
Dam
Canal
Wash
Creek
Mountain
Hill
Butte
Valley
Ridge
Pass
Trail
Road
Highway
Freeway
Boulevard
Avenue
Street
Drive
Lane
Place
Court
Circle
Terrace
Parkway
Expressway
Interstate
U.S. Route
State Route
County Road
Section Line
Township Line
Range Line
Meridian
Baseline
Datum
Elevation
Contour
Scale
Legend
Key
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Longitude
Degree
Minute
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South
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West
Northeast
Northwest
Southeast
Southwest
Center
Centerline
Boundary
Limit
Extent
Area
Region
Zone
District
Division
Section
Township
Range
Meridian
Baseline
Datum
Elevation
Contour
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Northeast
Northwest
Southeast
Southwest
Center
Centerline
Boundary
Limit
Extent
Area
Region
Zone
District
Division

Runoff

The FCD ALERT system recorded runoff at 16 of it's 50 water level stations, three of which were dams and thirteen were channels or rivers (see Table 2). Nine of the sixteen gages had flows or stage which exceeded alarm criteria established in the ALERT system (see Tables 3 and 4 in the ALERT System Performance section of this report). Graphical data for three stations with significant runoff (Dreamy Draw dam, ACDC at 67th Ave., and Indian Bend Wash at McKellips road) are presented in Figures 8, 9, and 10. Since the storm, the United States Geological Survey has used the slope-area method to estimate a peak discharge of 3,500 cfs for the Indian Bend Wash at Indian Bend Road crossing. According to the most recent Flood Insurance Study for Indian Bend Wash, this represents approximately a 10-year recurrence interval runoff event.

There were no reports of water overtopping any FCD structures or channels, and no reports of structure damage to our facilities or gages.

TABLE 2

Runoff Summary - Storm of July 23-24, 1992

Station	Stage (ft)	Discharge (cfs)
Agua Fria River at Buckeye Road	1.5	4,375
New River at Glendale Ave.	2.5	1,350
Skunk Creek at Interstate 17	1.8	130
Vekol Wash at I-8 (east of Gila Bend)	2.7	66
Sweetwater Wash at Sweetwater	2.5	100
Indian Bend Wash at Indian Bend Road	5.8	3,500
Indian Bend Wash at McKellips Rd.	5.0	3,120
Cave Creek at Cactus Rd.	6.9	190
ACDC at 43rd Ave.	2.7	1,000
ACDC at 67th Ave.	4.6	1,300
East Maricopa Floodway at Broadway Rd.	2.2	950
East Maricopa Floodway at Arizona Ave.	0.6	80
Dreamy Draw Dam	17.9	150
Spookhill Dam	2.0	25
Rittenhouse Dam	1.1	8

FIGURE 8

Storm of July 24, 1992 - Dreamy Draw Stage Gage

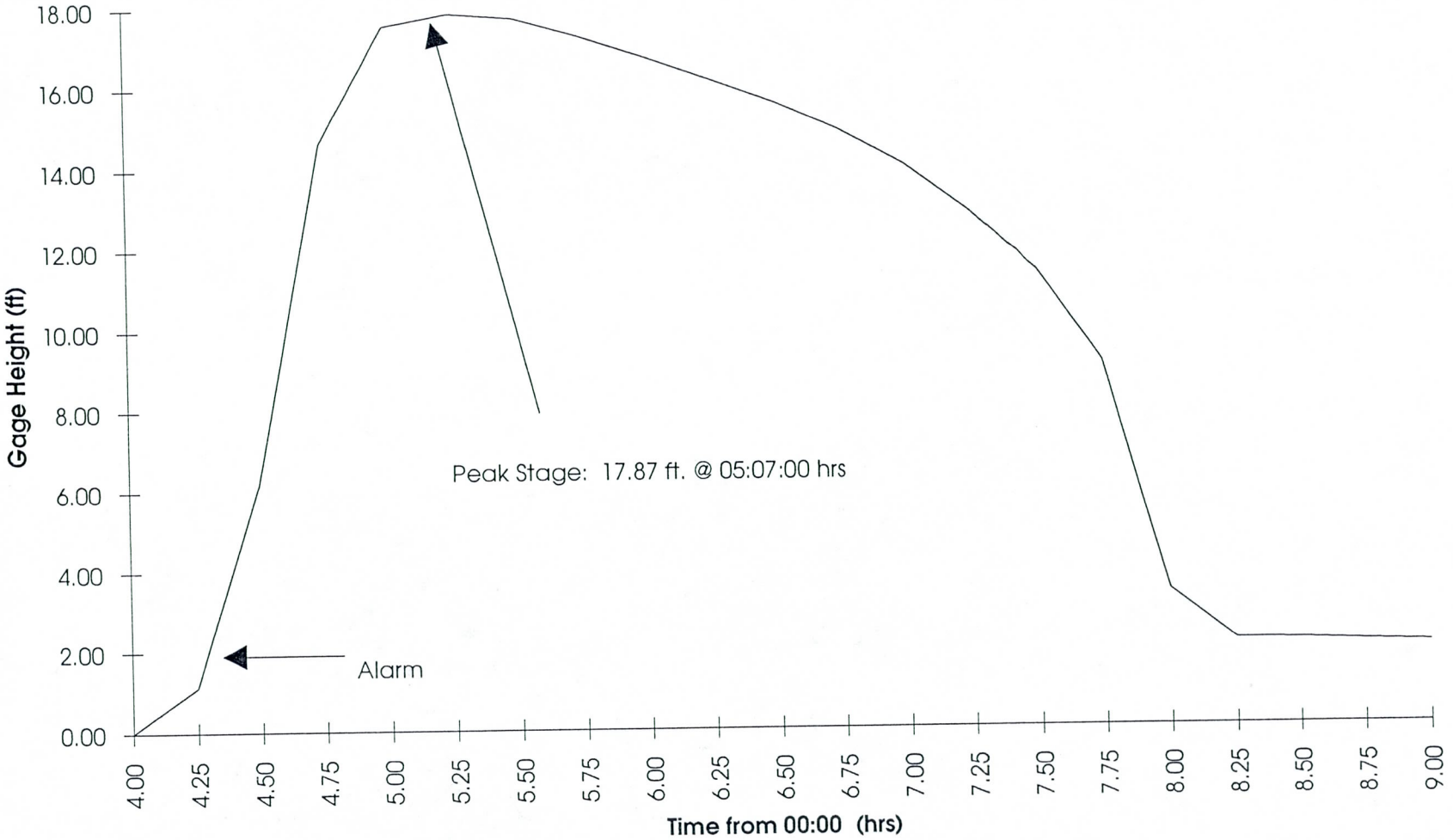


FIGURE 9

Storm of July 23-24, 1992 - ACDC @ 67th Ave Streamgage

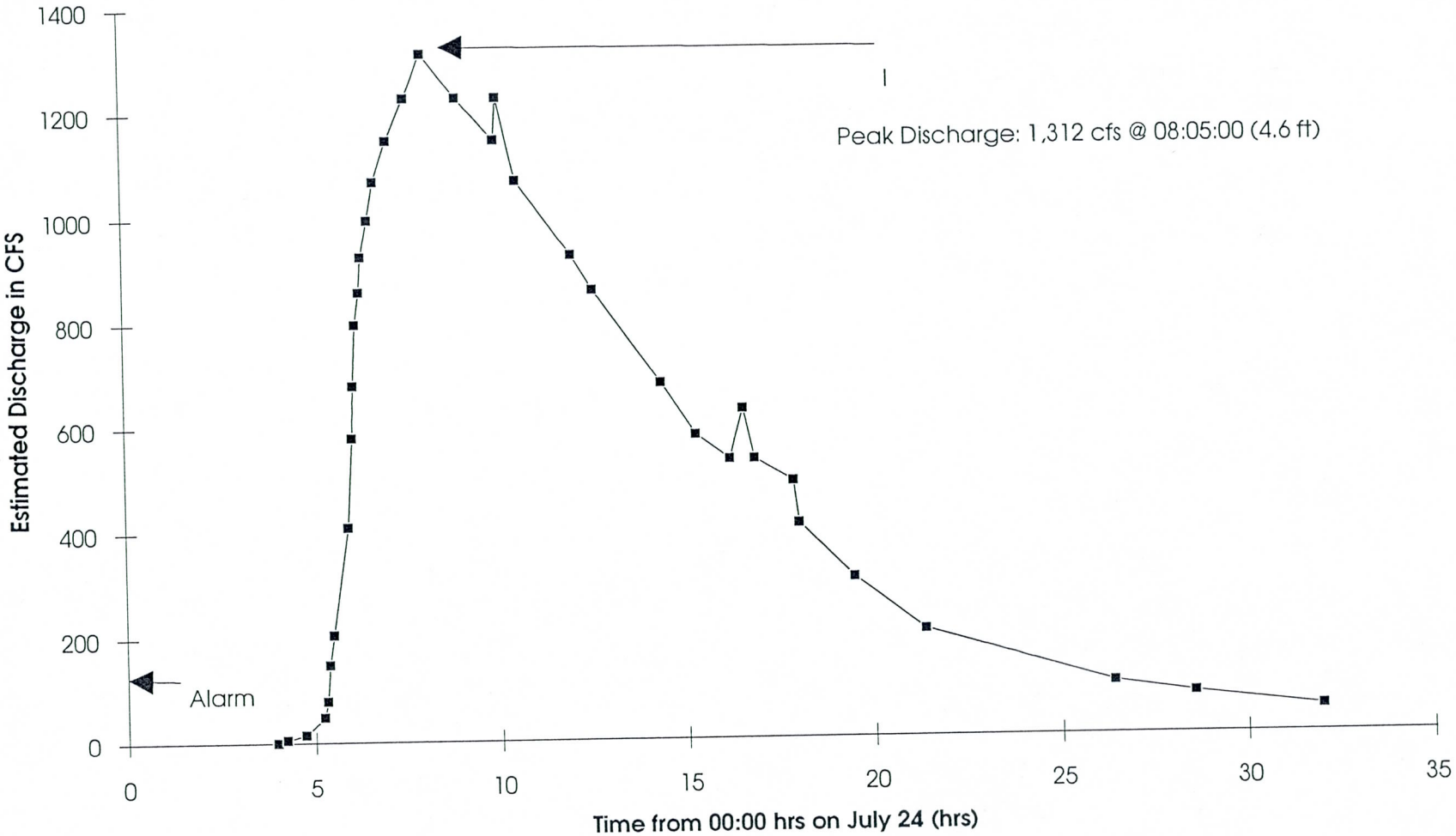
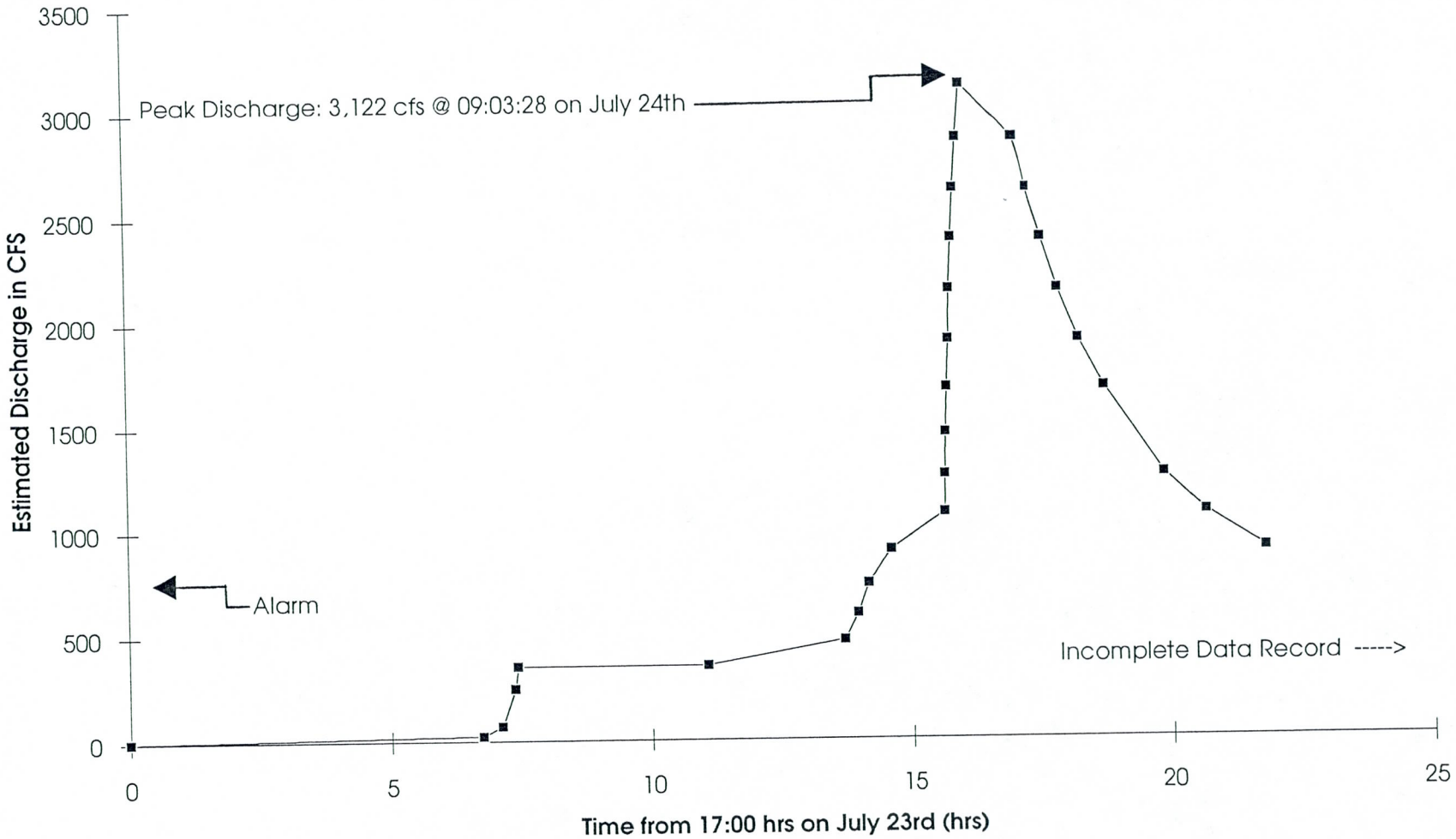


FIGURE 10

Storm of July 23-24, 1992 - IBW @ McKellips Streamgage



ALERT System Performance

The overall performance of the ALERT system during this storm event was excellent. As mentioned previously, only three of the 125 telemetered raingages returned questionable data, and all of the water level gages performed as expected well past peak stage. Originally during the event the ALERT operator reported a peak discharge of 9,300 cfs for Indian Bend Wash at Indian Bend Road. This inaccuracy was traced to unusually high grass in the channel which slowed the velocity of the water and raised the depth. Steps are currently being taken to remedy this situation.

A record of ALERT alarms is presented in Tables 3 and 4. All alarms sounding when the system was not manned (previous to 6:30 am on the 24th) were transferred to the voice synthesizer dial-out system, and operaters were alerted to the alarm conditions at home. The Chief Hydrologist was notified when Dreamy Draw dam stage reached 8.0 feet at approximately 4:40 am on the 24th (see Table 5), as outlined in the "Flood Control District Flood Emergency Procedures Flowchart" (Figure 11) and the "Emergency Notification Elevations" (Table 6). The Chief Hydrologist immediately notified the Chief of Construction/Operations, who dispatched a crew to monitor the dam. The County Department of Emergency Services was notified by telephone when Dreamy Draw stage reached 17 feet at approximately 5:00 am, but the water only rose another foot then quickly receded.

TABLE 3 : System Alarm Log

IHS: show_alarm_log

Sensor	Sensor Name	Cause of Alarm	Date/Time of Alarm	
1510	precip	A.C.D.C. & 67th Ave	Failed to report on time	7/29/92 6:14:00
1635	precip	White Tanks 3	Failed to report on time	7/29/92 5:51:00
6610	precip	Queen Creek Rd.	Failed to report on time	7/29/92 5:31:00
5490	precip	Castle Hot Springs	Failed to report on time	7/29/92 5:18:00
5455	precip	Wittmann	Failed to report on time	7/29/92 4:51:00
2510	precip	Grapevine	Failed to report on time	7/29/92 3:10:00
3770	precip	Perry Park	Failed to report on time	7/29/92 3:04:00
1625	precip	Buckeye FRS	Failed to report on time	7/29/92 3:01:00
1630	precip	White Tanks 4	Failed to report on time	7/29/92 2:38:00
5435	precip	McMicken Floodway	Failed to report on time	7/29/92 2:25:00
6980	precip	Vekol Wash	Failed to report on time	7/29/92 2:07:00
6050	precip	Mountain View Park	Failed to report on time	7/29/92 1:48:00
5220	precip	Morristown	Failed to report on time	7/29/92 1:43:00
3750	precip	Greenway & 32nd Ave	Failed to report on time	7/29/92 1:10:00
6920	precip	Sauceda Wash	Failed to report on time	7/28/92 23:38:00
640	precip	Centennial Levee	Failed to report on time	7/28/92 17:44:00
5380	precip	Mt. Union	Failed to report on time	7/28/92 6:04:00
6413	river	Cave Creek	Above absolute maximum	7/27/92 19:24:44
5385	rptbat	Mt. Union	Below absolute minimum	7/27/92 0:23:56
6940	precip	Sand Tanks Wash	Failed to report on time	7/26/92 14:03:00
5450	precip	Patton Rd.	Failed to report on time	7/26/92 13:23:00
5000	precip	Mt. Oatman	Failed to report on time	7/26/92 11:23:00
5475	precip	Circle City	Failed to report on time	7/26/92 9:33:00
6900	precip	Upper Waterman	Failed to report on time	7/26/92 5:17:00
6920	precip	Sauceda Wash	Failed to report on time	7/25/92 22:27:00
5385	rptbat	Mt. Union	Failed to report on time	7/25/92 13:56:00
5004	rptbat	Mt. Oatman	Failed to report on time	7/25/92 12:23:00
1619	rptbat	White Tanks	Failed to report on time	7/25/92 11:04:00
5194	rptbat	Smith Peak	Failed to report on time	7/25/92 8:21:00
5344	rptbat	Towers Mtn.	Failed to report on time	7/25/92 7:57:00
5949	rptbat	Thompson Peak	Failed to report on time	7/24/92 18:43:00
1543	river	A.C.D.C. & 43rd Ave	Above absolute maximum	7/24/92 11:17:05
5385	rptbat	Mt. Union	Below absolute minimum	7/24/92 10:53:04
6659	river	Sweetwater	Above absolute maximum	7/24/92 10:23:37
2820	precip	Holly Acres	Rainfall rate exceeded	7/24/92 8:27:57
6659	river	Sweetwater	Above absolute maximum	7/24/92 7:21:12
6099	river	IBW @ McKellips Rd.	Above absolute maximum	7/24/92 7:11:28
5508	river	NewRiver @ Glendale	Above absolute maximum	7/24/92 6:51:27
6299	river	Dreamy Draw	Above absolute maximum	7/24/92 6:38:22
4620	precip	Garfias Mt. Ranch	Rainfall rate exceeded	7/24/92 6:14:56
6113	river	IBW @ Indian Bend	Above absolute maximum	7/24/92 5:29:32
1500	precip	City of Glendale	Rainfall rate exceeded	7/24/92 5:27:31
1513	river	A.C.D.C. & 67th Ave	Above absolute maximum	7/24/92 5:24:47
1543	river	A.C.D.C. & 43rd Ave	Above absolute maximum	7/24/92 5:16:37
1500	precip	City of Glendale	Rainfall rate exceeded	7/24/92 5:03:26
6659	river	Sweetwater	Above absolute maximum	7/24/92 4:57:21
6210	precip	Phoenix Municipal	Rainfall rate exceeded	7/24/92 4:56:31
1553	river	Cave Creek & Cactus	Above absolute maximum	7/24/92 4:56:03
1500	precip	City of Glendale	Rainfall rate exceeded	7/24/92 4:53:06
1510	precip	A.C.D.C. & 67th Ave	Rainfall rate exceeded	7/24/92 4:50:25
6200	precip	Durango Complex	Rainfall rate exceeded	7/24/92 4:48:35
3750	precip	Greenway & 32nd Ave	Rainfall rate exceeded	7/24/92 4:46:43
1550	precip	Cave Creek & Cactus	Rainfall rate exceeded	7/24/92 4:42:08
6645	precip	P.V. Country Club	Rainfall rate exceeded	7/24/92 4:31:05
6300	precip	Dreamy Draw	Rainfall rate exceeded	7/24/92 4:23:52
6299	river	Dreamy Draw	Above absolute maximum	7/24/92 4:23:38
6130	precip	Thunderbird Academy	Rainfall rate exceeded	7/24/92 4:17:39

TABLE 4

6520 precip Carrage Lane Park	Rainfall rate exceeded	7/24/92	3:49:51
6568 river Broadway EMF	Above absolute maximum	7/24/92	1:27:50
3730 Sensor is not established	Failed to report on time	7/23/92	13:46:05
5450 precip Patton Rd.	Failed to report on time	7/23/92	13:22:00
5380 precip Mt. Union	Failed to report on time	7/23/92	4:05:00
6960 precip Bender Wash	Failed to report on time	7/22/92	17:44:00
6880 precip Waterman Wash	Failed to report on time	7/22/92	7:37:00
1530 Sensor is not established	Failed to report on time	7/22/92	4:23:00
5004 rptbat Mt. Oatman	Failed to report on time	7/20/92	23:08:00
6565 precip Broadway EMF	Failed to report on time	7/19/92	0:57:00
1530 Sensor is not established	Failed to report on time	7/18/92	2:48:00
5380 precip Mt. Union	Failed to report on time	7/18/92	2:07:00
6568 river Broadway EMF	Above absolute maximum	7/17/92	8:30:32
5385 rptbat Mt. Union	Below absolute minimum	7/17/92	1:10:42
5000 precip Mt. Oatman	Rainfall rate exceeded	7/16/92	10:09:26
5000 precip Mt. Oatman	Rainfall rate exceeded	7/16/92	10:08:32
5000 precip Mt. Oatman	Rainfall rate exceeded	7/16/92	10:07:47
6520 precip Carrage Lane Park	Failed to report on time	7/16/92	6:40:00
5380 precip Mt. Union	Failed to report on time	7/16/92	1:19:00
6920 precip Sauceda Wash	Failed to report on time	7/14/92	5:54:00
5004 rptbat Mt. Oatman	Failed to report on time	7/13/92	10:22:00
1540 precip A.C.D.C. & 43rd Ave	Rainfall rate exceeded	7/13/92	8:11:31
3633 river Sunset Dam	Above absolute maximum	7/11/92	23:57:59
6923 river Sauceda Wash	Above absolute maximum	7/11/92	13:45:11
3633 river Sunset Dam	Above absolute maximum	7/11/92	8:51:21
1513 river A.C.D.C. & 67th Ave	Above absolute maximum	7/11/92	5:47:12
3630 precip Sunset Dam	Rainfall rate exceeded	7/11/92	1:47:53
3635 precip Sunny Cove Dam	Rainfall rate exceeded	7/11/92	1:46:44
533 Sensor is not established	Above absolute maximum	7/11/92	1:40:19
1620 precip Jackrabbit Wash 2	Rainfall rate exceeded	7/11/92	0:54:27
5400 precip Agua Fria @ Buckeye	Rainfall rate exceeded	7/11/92	0:21:20
3770 precip Perry Park	Rainfall rate exceeded	7/10/92	23:41:50
3710 Sensor is not established	Rainfall rate exceeded	7/10/92	23:27:40
2510 precip Grapevine	Rainfall rate exceeded	7/10/92	22:59:29
6880 precip Waterman Wash	Rainfall rate exceeded	7/10/92	21:35:13
6880 precip Waterman Wash	Rainfall rate exceeded	7/10/92	21:23:39
3635 precip Sunny Cove Dam	Rainfall rate exceeded	7/10/92	20:55:22
2600 precip Mt. Ord	Rainfall rate exceeded	7/10/92	18:07:16
5340 precip Towers Mtn.	Rainfall rate exceeded	7/10/92	16:46:03
4510 precip Horsethief Basin	Rainfall rate exceeded	7/10/92	16:37:28
5340 precip Towers Mtn.	Rainfall rate exceeded	7/10/92	16:31:17
4530 precip Crown King	Rainfall rate exceeded	7/10/92	16:27:44
3610 precip O'Brian	Rainfall rate exceeded	7/10/92	16:13:29
533 Sensor is not established	Above absolute maximum	7/10/92	15:43:10
6920 precip Sauceda Wash	Failed to report on time	7/10/92	8:45:00
6654 Sensor is not established	Failed to report on time	7/10/92	6:35:54
660 precip Saddleback FRS	Failed to report on time	7/09/92	15:43:00
4625 precip Dewey	Failed to report on time	7/09/92	15:41:00
6670 precip Apache FRS	Failed to report on time	7/09/92	15:35:00
6550 precip South Mountain West	Failed to report on time	7/09/92	15:30:00
4530 precip Crown King	Failed to report on time	7/09/92	15:15:00
6120 precip IBW Interceptor	Failed to report on time	7/09/92	15:10:00
6110 precip IBW @ Indian Bend	Failed to report on time	7/09/92	15:08:00
5565 precip Skunk Creek & I-17	Failed to report on time	7/09/92	14:54:00
5445 precip McMicken Dam	Failed to report on time	7/09/92	14:48:00
6880 precip Waterman Wash	Failed to report on time	7/09/92	14:40:00
6630 Sensor is not established	Failed to report on time	7/09/92	14:22:00
5340 precip Towers Mtn.	Failed to report on time	7/09/92	14:22:00
620 precip Gladden	Failed to report on time	7/09/92	14:21:00
4520 precip Sunset Point	Failed to report on time	7/09/92	14:14:00

TABLE 5 : SYSTEM LOGON RECORD

ILE wholog.1

sdw	0	0:00:01	Jul-15	6:50 am	----	who
sdw	0	0:00:01	Jul-15	1:18 pm	----	who
sdw	0	0:00:00	Jul-15	2:25 pm	----	who
sdw	0	0:00:00	Jul-16	6:43 am	----	who
tjk	5	0:00:01	Jul-16	7:36 am	----	who
tjk	5	0:00:01	Jul-16	7:52 am	----	who
sdw	0	0:00:00	Jul-16	7:57 am	----	who
cfk	0	0:00:00	Jul-16	2:44 pm	----	who
rde	5	0:00:01	Jul-17	6:10 am	----	who
rde	5	0:00:00	Jul-17	6:23 am	----	who
tmd	0	0:00:00	Jul-17	7:04 am	----	who
tmd	0	0:00:00	Jul-17	9:02 am	----	who
sdw	0	0:00:00	Jul-17	1:12 pm	----	who
tmd	9	0:00:00	Jul-17	5:20 pm	----	who
cfk	7	0:00:01	Jul-18	8:02 pm	----	who
sdw	0	0:00:00	Jul-20	6:37 am	----	who
sdw	0	0:00:01	Jul-20	8:51 am	----	who
sdw	0	0:00:01	Jul-20	11:22 am	----	who
cfk	7	0:00:00	Jul-20	3:25 pm	----	who
cfk	7	0:00:00	Jul-20	3:34 pm	----	who
rde	5	0:00:01	Jul-21	5:38 am	----	who
cfk	12	0:00:01	Jul-21	6:16 am	----	who
cfk	0	0:00:00	Jul-21	6:20 am	----	who
sdw	0	0:00:00	Jul-21	7:07 am	----	who
jjt	0	0:00:00	Jul-21	9:22 am	----	who
sdw	0	0:00:00	Jul-21	9:39 am	----	who
sdw	0	0:00:00	Jul-21	10:41 am	----	who
tmd	0	0:00:01	Jul-21	11:28 am	----	who
sdw	0	0:00:01	Jul-21	11:40 am	----	who
rde	5	0:00:00	Jul-21	3:09 pm	----	who
rde	5	0:00:01	Jul-22	5:38 am	----	who
rde	5	0:00:01	Jul-22	5:41 am	----	who
sdw	0	0:00:00	Jul-22	6:38 am	----	who
tjk	5	0:00:00	Jul-22	9:59 am	----	who
tjk	5	0:00:00	Jul-22	10:02 am	----	who
rde	5	0:00:00	Jul-22	4:05 pm	----	who
rde	5	0:00:01	Jul-23	5:48 am	----	who
rde	5	0:00:01	Jul-23	5:57 am	----	who
sdw	0	0:00:00	Jul-23	6:37 am	----	who
sdw	0	0:00:01	Jul-23	10:26 am	----	who
sdw	0	0:00:00	Jul-23	1:26 pm	----	who
sdw	5	0:00:00	Jul-24	4:34 am	----	who
sdw	5	0:00:00	Jul-24	4:46 am	----	who
sdw	5	0:00:00	Jul-24	5:07 am	----	who
tmd	5	0:00:01	Jul-24	5:41 am	----	who
sdw	0	0:00:00	Jul-24	6:26 am	----	who
tjk	5	0:00:01	Jul-24	6:36 am	----	who
sdw	12	0:00:01	Jul-24	7:20 am	----	who
sdw	13	0:00:00	Jul-24	7:21 am	----	who
cfk	5	0:00:00	Jul-24	8:00 am	----	who
sdw	0	0:00:00	Jul-24	3:25 pm	----	who
sdw	0	0:00:00	Jul-24	3:29 pm	----	who
sdw	0	0:00:00	Jul-25	6:39 pm	----	who
sdw	0	0:00:00	Jul-25	6:43 pm	----	who
sdw	5	0:00:01	Jul-25	7:20 pm	----	who
sdw	5	0:00:00	Jul-26	9:37 am	----	who
sdw	5	0:00:00	Jul-26	5:19 pm	----	who
cfk	7	0:00:00	Jul-26	8:12 pm	----	who

Figure 11

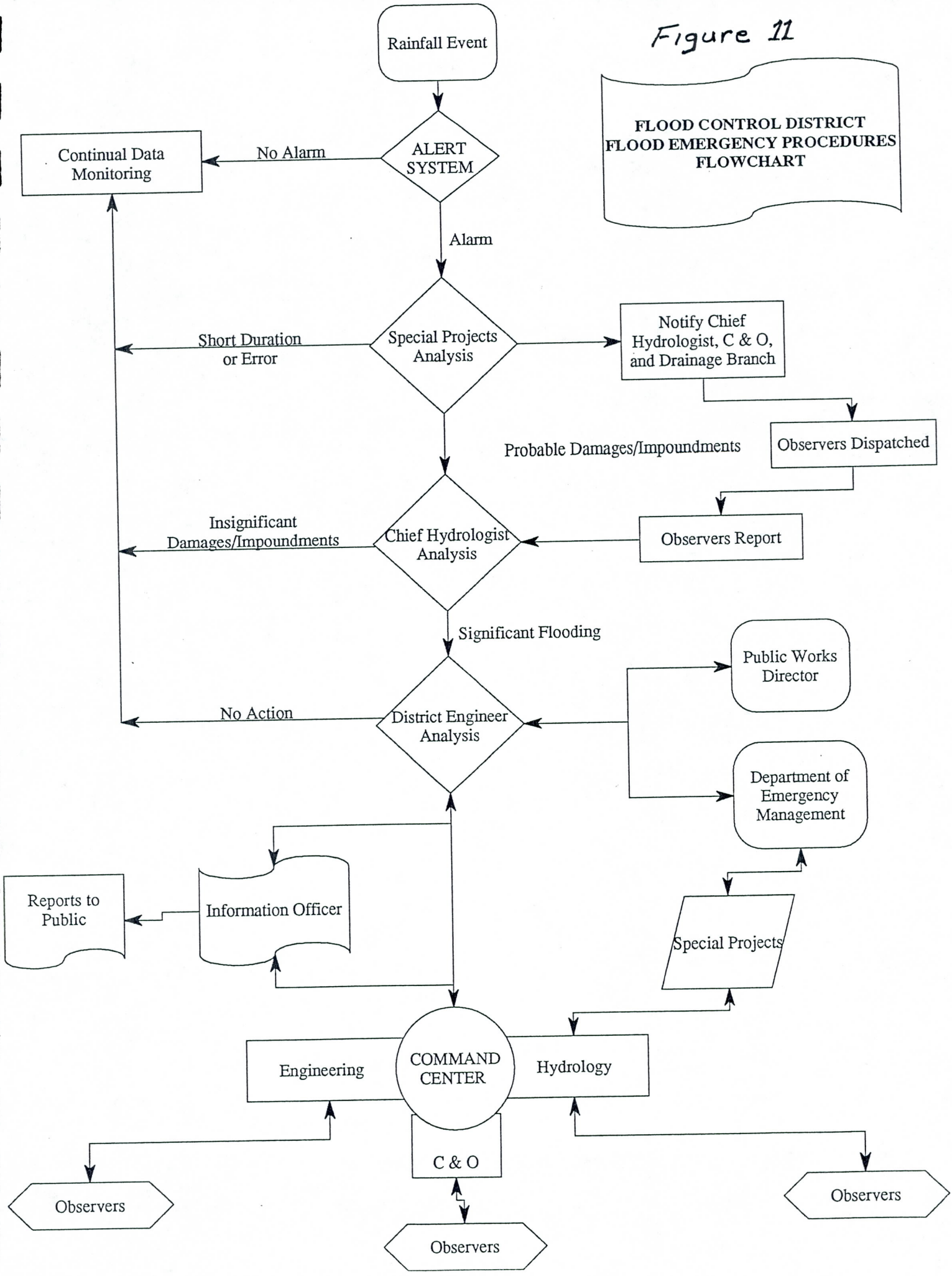

FLOOD CONTROL DISTRICT
FLOOD EMERGENCY PROCEDURES
FLOWCHART
Rainfall Event
ALERT SYSTEM
No Alarm
Continual Data Monitoring
Alarm
Special Projects Analysis
Short Duration or Error
Notify Chief Hydrologist, C & O, and Drainage Branch
Observers Dispatched
Probable Damages/Impoundments
Observers Report
Chief Hydrologist Analysis
Insignificant Damages/Impoundments
Significant Flooding
Public Works Director
District Engineer Analysis
No Action
Department of Emergency Management
Special Projects
Information Officer
Reports to Public
Engineering
COMMAND CENTER
Hydrology
C & O
Observers
Observers
Observers

TABLE 6

EMERGENCY NOTIFICATION ELEVATIONS
(TO BE USED BY DISTRICT STAFF TO NOTIFY CIVIL DEFENSE)

Civil Defense/Emergency Services 24 hr phone # 273-1411

Depths of impoundment and operation of the emergency spillway were measured from the invert of the principal outlet.

Please keep in mind, that C&O field observers should more than likely be notified and sent out to check on the structure impoundments prior to reaching the notification elevations.

STRUCTURE	IMPOUNDMENT NOTIFICATION DEPTH CIVIL DEFENSE	C & O NOTIFICATION	SPILLWAY OPERATION DEPTH
SUNSET	10 FT.	4 FT. & RISING	20 FT.
SUNNYCOVE	19 FT.	6 FT. & RISING	37 FT.
MCMICKEN	13 FT.	6 FT. & RISING	19 FT.
NEW RIVER	45 FT.	15 FT. "	67 FT.
ADOBE	26 FT.	10 FT. "	40 FT.
CAVE BUTTES	65 FT.	15 FT. "	97 FT.
DREAMY DRAW	17 FT.	8 FT. "	35 FT.
GUADALUPE	10 FT.	5 FT. "	15 FT.
SPOOKHILL	11 FT.	6 FT. "	16 FT.
SIGNAL BUTTES	8 FT.	4 FT. "	11 FT.
APACHE JUNCTION	11 FT.	6 FT. "	16 FT.
WHITE TANKS #3	13 FT.	7 FT. "	20 FT.
WHITE TANKS #4	9 FT.	5 FT. "	13 FT.
RITTENHOUSE	13 FT.	7 FT. "	19.4 FT.
SADDLEBACK	8 FT.	5 FT. "	N/A
VINEYARD	8 FT.	5 FT. "	11.8 FT.
BUCKEYE #1	13 FT.	7 FT. "	19.8 FT.

Summary

This report presented rainfall, runoff, and statistical data from the Flood Control District's ALERT system for the Storm of July 23-24, 1992. This particular storm appeared to slowly move in a south to north direction, and intensified as it moved over the metro area. By the time the NWS had issued a Flash Flood Warning, Dreamy Draw Dam had reached 8 feet of stage. Thirteen FCD telemetered raingages measured more than 2 inches of rain over an average duration of 7 hours. Significant runoff events were monitored at Dreamy Draw Dam, Indian Bend Wash, and the Arizona Canal Diversion Channel. The ALERT system performance was exemplary, allowing the operators to make required safety notifications according to District policy.

APPENDIX A

National Oceanic and Atmospheric Administration

National Weather Service

Fax Transmittal

National Weather Service Forecast Office
PAB 500
PO Box 52025
Phoenix, Arizona 85072-2025

From: Tom Zickus

To: Steve Waters

Time: 2 pm Date: 7/29/92

Sent By: TZ

To transmit messages to this office: (602) 267-2051
For inquires concerning this message: (602) 379-4507 or FTS 261-4607

Pages sent (including this cover sheet): 10

Subject: Watches & Warnings
7/23-24/92

ZCZC PHXFFAPHX ALL 240330
TTAA00 KPHX DDHHMM
AZC001-003-005-007-009-011-013-017-019-021-023-240330-

BULLETIN - IMMEDIATE BROADCAST REQUESTED
FLASH FLOOD WATCH
NATIONAL WEATHER SERVICE PHOENIX ARIZONA
133 PM MST THU JUL 23 1992

...FLASH FLOOD WATCH FOR EAST HALF ARIZONA THIS AFTERNOON AND EVENING UNTIL 9 PM...

THE NATIONAL WEATHER SERVICE IN PHOENIX ARIZONA HAS ISSUED A FLASH FLOOD WATCH UNTIL 9 PM TO INCLUDE THE EASTERN ARIZONA COUNTIES OF APACHE...NAVAJO...EASTERN COCONINO...GILA...GRAHAM...GREENLEE...FAR EAST MARICOPA...PINAL...EASTERN PIMA...SANTA CRUZ AND COCHISE.

TUCSON IS INCLUDED IN THE WATCH...BUT PHOENIX AND FLAGSTAFF ARE NOT INCLUDED.

ABUNDANT SUBTROPICAL MOISTURE COVERS THE EAST HALF OF ARIZONA. SCATTERED SHOWERS AND THUNDERSTORMS BEGAN IN THE EARLY MORNING. BY MIDDAY STRONG THUNDERSTORMS WITH LOCALLY HEAVY RAIN WERE DEVELOPING... MAINLY IN THE CENTRAL PORTION OF THE STATE FROM WEST OF TUCSON TO GILA COUNTY TO THE LAKE POWELL AREA.

THE PUBLIC REPORTED A RAIN SHOWER AT CHRISTOPHER CREEK THAT DUMPED ABOUT TWO INCHES OF RAIN IN 45 MINUTES DURING THE NOON HOUR. CREEKS AND NORMALLY DRY CROSSINGS WERE RUNNING HEAVILY.

SOME PORTIONS IN THE WATCH AREA WERE MOSTLY SUNNY IN THE EARLY AFTERNOON. HOWEVER...THE STRONGER HEATING WHICH IS ALLOWED MAY BRING VERY HEAVY THUNDERSTORMS TO THOSE SAME AREAS IN LATE AFTERNOON AND EARLY EVENING.

A FLASH FLOOD WATCH MEANS THAT CONDITIONS ARE FAVORABLE FOR HEAVY RAIN WHICH COULD LEAD TO FLASH FLOODING. PERSONS IN EASTERN ARIZONA SHOULD TAKE WHATEVER MEASURES POSSIBLE TO PROTECT PROPERTY AND LIVES FROM THE POTENTIAL OF FLOODS THE REMAINDER OF TODAY. REMEMBER NEVER TO CROSS FLOODED WASHES AND HIGHWAY DIPS.

BJOREM

NNNN

ZCZC PHXSPSPHX ALL 240345
TTAA00 KPHX DDHHMM
AZC013-240345-

SPECIAL WEATHER STATEMENT
NATIONAL WEATHER SERVICE PHOENIX ARIZONA
745 PM MST THU JUL 23 1992

...THUNDERSTORMS DEVELOPING AROUND METRO PHOENIX...

RADAR AT PHOENIX AIRPORT SPOTTED SOME NEWLY DEVELOPING THUNDERSTORMS AROUND THE SALT RIVER VALLEY AT 730 PM THIS EVENING. ONE FAIRLY STRONG CELL WAS DEVELOPING NEAR GOODYEAR AND AVONDALE. OTHERS WERE DEVELOPING FURTHER SOUTH...IN THE REGION EAST OF GILA BEND. VISUAL REPORTS OF CLOUD DEVELOPMENT INDICATE OTHER THUNDERSTORMS MAY BE ABOUT TO DEVELOP OVER OTHER PARTS OF THE METRO AREA.

THERE HAVE BEEN SOME HEAVY RAINS AND HAIL FROM THUNDERSTORMS IN OTHER PARTS OF ARIZONA TODAY...INCLUDING SOME THAT OCCURRED THIS EVENING. SOME HAVE DUMPED OVER TWO INCHES OF RAIN IN A SHORT TIME. SO HEAVY RAIN AND STREET FLOODING COULD OCCUR IN PHOENIX TONIGHT.

SO FAR NONE OF TODAYS THUNDERSTORMS HAVE CAUSED DAMAGING WINDS OR LARGE HAIL. BUT THERE IS ALWAYS A RISK OF THESE IN THE LARGER STORMS. LISTEN TO RADIO OR TV FOR THE LATEST WEATHER UPDATES AND POSSIBLE WARNINGS.

TENHARKEL

ZCZC PHXFFAPHX ALL 240700
TTAA00 KPHX DDHHMM
AZC003-007-009-011-013-019-021-023-240700-

BULLETIN - IMMEDIATE BROADCAST REQUESTED
FLASH FLOOD WATCH
NATIONAL WEATHER SERVICE PHOENIX ARIZONA
840 PM MST THU JUL 23 1992

...FLASH FLOOD WATCH EXTENDED FOR MUCH OF SOUTHERN ARIZONA...

THE FLASH FLOOD WATCH FOR NORTHEAST ARIZONA EXPIRES AT 9 PM...BUT THE WEATHER SERVICE HAS EXTENDED THE WATCH UNTIL MIDNIGHT FOR SOUTHEAST ARIZONA. ALSO...THE WATCH HAS BEEN EXTENDED FURTHER WEST TO COVER THE PHOENIX AREA AND WESTERN PIMA COUNTY.

A GIANT THUNDERSTORM COMPLEX HAS DEVELOPED OVER SOUTHEAST ARIZONA AND A LARGE PART OF SONORA MEXICO...SPREADING OVER MOST OF OUR STATE EAST AND SOUTH OF PHOENIX AND IN MEXICO FROM THE SIERRA MADRE TO THE SEA OF CORTEZ. SOUTHEAST WINDS ARE MOVING THIS MASS OF THUNDERSTORMS TOWARD THE NORTHWEST AROUND 10 MPH.

SATELLITE INFRA RED IMAGES SHOW THE CLOUD TOPS BEGINNING TO WARM UP...INDICATING THE SYSTEM IS BEGINNING TO WEAKEN AS IT MOVES FURTHER INTO ARIZONA. BUT IT COULD STILL CAUSE AN INCH OR TWO OF RAIN IN SOME OF ITS HEAVIER INDIVIDUAL SHOWERS...ESPECIALLY DURING THE FIRST HALF OF THE NIGHT. LIGHT TO MODERATE SHOWERS MAY THEN PERSIST FOR MOST OF THE REMAINDER OF THE NIGHT AND INTO THE MORNING FRIDAY.

TENHARKEL

NNNN

FHXFFSPHX
TTAA00 KPHX 240736
AZC003-007-009-011-013-019-021-023-240900-

FLASH FLOOD STATEMENT
NATIONAL WEATHER SERVICE PHOENIX ARIZONA
1235 AM MST FRI JUL 24 1992

...THE FLASH FLOOD WATCH THAT WAS IN EFFECT FOR
SOUTHCENTRAL...EASTCENTRAL AND SOUTHEAST ARIZONA HAS EXPIRED...

NATIONAL WEATHER SERVICE RADAR AND SATELLITE PICTURES SHOW A DECREASE IN SHOWERS AND THUNDERSTORMS IN MOST OF CENTRAL AND EASTERN ARIZONA AS OF MIDNIGHT. HOWEVER...SOME STREET FLOODING HAS BEEN REPORTED IN THE EASTERN PORTION OF THE GREATER PHOENIX AREA INCLUDING SOUTHERN SCOTTSDALE NEAR MCKELLIPS AND MCDOWELL ROADS...AND IN PORTIONS OF MESA. AT 1215 AM...THE SCOTTSDALE POLICE DEPARTMENT REPORTED THAT SOME ROAD CLOSURES MAY TAKE PLACE.

IT IS POSSIBLE THAT SOME WASHES ARE RUNNING IN THE FORMER WATCH AREA... SO MOTORISTS DRIVING OFF THE MAIN INTERSTATE HIGHWAYS SHOULD WATCH OUT FOR WATER AND MUD IN DIPS AND LOW SPOTS.

PLEASE USE EXTRA CAUTION IF DRIVING TONIGHT AND AVOID FLOODED ROADS IF POSSIBLE. IF YOU DO NOT KNOW WHETHER OR NOT IT IS SAFE FOR YOUR VEHICLE TO CROSS A FLOODED ROAD...DRIVE AWAY FROM THE FLOODED AREA... BETTER TO PLAY IT SAFE.

CRAIG ELLIS

ZCZC PHXFFAPHX ALL 241400
TTAA00 KPHX DDHHMM
AZC007-013-021-025-241400-

BULLETIN - IMMEDIATE BROADCAST REQUESTED
FLASH FLOOD WATCH
NATIONAL WEATHER SERVICE PHOENIX ARIZONA
150 AM MST FRI JUL 24 1992

THE NATIONAL WEATHER SERVICE IN PHOENIX ARIZONA HAS ISSUED A FLASH FLOOD WATCH FOR CENTRAL ARIZONA INCLUDING THE GREATER PHOENIX AREA. THE WATCH IS IN EFFECT UNTIL 7 AM MST THIS MORNING. THE FLASH FLOOD WATCH INCLUDES THE EASTERN HALF OF MARICOPA COUNTY...NORTHERN PINAL COUNTY...EASTERN YAVAPAI COUNTY...AND NORTHWESTERN GILA COUNTY INCLUDING PAYSON.

NATIONAL WEATHER SERVICE RADAR WAS INDICATING REDEVELOPMENT OF THUNDERSTORMS WITH HEAVY RAIN IN THE FLASH FLOOD WATCH AREA AS OF 130 AM MST THIS MORNING. IT IS UNUSUAL FOR THUNDERSTORMS WITH HEAVY RAIN TO BE DEVELOPING SO EARLY IN THE MORNING. THIS INDICATES HOW MOIST AND UNSTABLE THE AIRMASS IS.

AN OBSERVER AT NEW RIVER REPORTED 1.25 INCHES OF RAIN IN LESS THAN 45 MINUTES AT 150 AM MST THIS MORNING. ALSO...NATIONAL WEATHER SERVICE RADAR INDICATED THUNDERSTORMS WITH VERY HEAVY RAIN DEVELOPING OVER THE SOUTHEAST GREATER PHOENIX AREA NEAR CHANDLER AND ALSO OVER SAGUARO LAKE NORTH OF APACHE JUNCTION. THE THUNDERSTORMS WERE MOVING FROM THE SOUTH TOWARD THE NORTH AT 10 MILES PER HOUR.

A FLASH FLOOD WATCH MEANS THAT CONDITIONS ARE FAVORABLE FOR HEAVY RAIN WHICH COULD LEAD TO FLASH FLOODING. IF YOU ARE IN THE FLASH FLOOD WATCH AREA OF CENTRAL ARIZONA INCLUDING THE GREATER PHOENIX AREA... YOU ARE URGED TO TAKE WHATEVER MEASURES POSSIBLE TO PROTECT PROPERTY AND YOUR LIFE FROM THE POTENTIAL OF FLASH FLOODING THROUGH EARLY THIS MORNING.

PLEASE USE EXTRA CAUTION IF DRIVING IN CENTRAL ARIZONA THROUGH EARLY THIS MORNING AND AVOID FLOODED ROADS. IF YOU DO NOT KNOW WHETHER OR NOT IT IS SAFE FOR YOUR VEHICLE TO CROSS A FLOODED ROAD...DRIVE AWAY FROM THE FLOODED AREA...BETTER TO PLAY IT SAFE. IF YOU OBSERVE A FLOODED ROAD...CALL YOUR NEAREST LAW ENFORCEMENT AGENCY TO INFORM THEM.

07/29/92 14:01

TTAA00 KPHX 241023
AZC013-021-241400-

URBAN AND SMALL STREAM FLOOD ADVISORY
NATIONAL WEATHER SERVICE PHOENIX ARIZONA
319 AM MST FRI JUL 24 1992

...URBAN AND SMALL STREAM FLOOD ADVISORY FOR EASTERN MARICOPA AND NORTHERN PINAL COUNTIES...INCLUDING THE GREATER PHOENIX AREA UNTIL 7AM MST...

SHOWERS AND THUNDERSTORMS CONTINUED TO DEVELOP ACROSS THE FLASH FLOOD WATCH AREA OF CENTRAL ARIZONA AT 310 AM MST..AT 305 AM MST AN OBSERVER IN APACHE JUNCTION HAD RECEIVED 0.69 INCHES OF RAIN IN ONLY 15 MINUTES AND IT WAS STILL POURING. THERE WAS ALSO A REPORT FROM THE GILBERT POLICE DEPARTMENT OF MINOR STREET FLOODING IN THE TOWN OF GILBERT.

RADAR WAS SHOWING THAT STRONG THUNDERSTORMS WITH HEAVY DOWNPOURS ARE LIKELY TO CONTINUE FOR THE NEXT SEVERAL HOURS...OR ABOUT UNTIL 7 AM OR SO. THIS WILL LIKELY CONTRIBUTE TO AREAS OF POOR DRIVING CONDITIONS FOR THE UPCOMING RUSH HOUR IN AND AROUND THE GREATER PHOENIX AREA.

MORNING COMMUTERS SHOULD BE SURE TO ALLOW EXTRA DRIVE TIME TO WORK ...AS FLOODED INTRSECTIONS AND ROADWAY DIPS WILL BE ENCOUNTERED ACROS MUCH OF THE SALT RIVER VALLEY.

REMEMBER...A FLASH FLOOD WATCH REMAINS IN EFFECT FOR MUCH OF CENTRAL ARIZONA UNTIL 7 AM MST.

STAY TUNED TO NOAA WEATHER RADIO OR COMMERCIAL RADIO AND T.V. BROADCASTS FOR THE LATEST WEATHER INFORMATION REGARDING THESE THUNDERSTORMS.

ESTLE

TTAA00 KPHX DDHHMM
AZC007-013-021-241400-

BULLETIN - EBS ACTIVATION REQUESTED
FLASH FLOOD WARNING
NATIONAL WEATHER SERVICE PHOENIX ARIZONA
440 AM MST FRI JUL 24 1992

THE NATIONAL WEATHER SERVICE IN PHOENIX ARIZONA HAS ISSUED A FLASH FLOOD WARNING EFFECTIVE UNTIL 700 AM MST FOR THE FOLLOWING LOCATIONS...

IN EAST CENTRAL ARIZONA

...WESTERN GILA COUNTY

IN SOUTH CENTRAL ARIZONA

...EASTERN MARICOPA COUNTY...NORTHWESTERN PINAL COUNTY

THE NATIONAL WEATHER SERVICE IN PHOENIX HAS ISSUED A FLASH FLOOD WARNING FOR EASTERN MARICOPA COUNTY...NORTHWEST PINAL COUNTY...AND WESTERN GILA COUNTY UNTIL 7 AM MST. THE FLASH FLOOD WARNING INCLUDES THE GREATER PHOENIX AREA.

NATIONAL WEATHER SERVICE RADAR...SATELLITE PICTURES AND COOPERATIVE OBSERVER REPORTS INDICATE VERY HEAVY RAIN IN THE FLASH FLOOD WARNING AREA. SEVERAL REPORTS OF WELL OVER AN INCH OF RAIN HAVE BEEN RECEIVED. MANY ROADS ARE BECOMING FLOODED. RAINFALL IS EXPECTED TO CONTINUE HEAVY UNTIL 6 OR 7 AM MST THIS MORNING THEN DECREASE THEREAFTER.

THIS IS A SERIOUS SITUATION. PLEASE USE DISCRETION WHEN TRAVELLING THIS MORNING. CHECK THE LATEST ROAD REPORTS AS SOME ROADS MAY BE CLOSED OR IMPASSABLE. FLOODING HAS BEEN REPORTED ON HIGHWAY 88 BETWEEN GLOBE AND ROOSEVELT LAKE IN GILA COUNTY. STAY AWAY FROM FLOODED ROADS.

URBAN FLOODING IS OVERFLOW OF CITY STREETS AND DRAINAGE SYSTEMS... ENOUGH TO FLOOD RESIDENCES AND BUSINESSES AND CLOSE CITY STREETS. POSTPONE ANY UNNECESSARY DRIVING UNTIL THE STORM IS OVER.

MOST DEATHS IN FLASH FLOODING OCCUR IN AUTOMOBILES. DONT TRY TO CROSS FLOODING WASHES OR STREAMS. NEVER DRIVE ONTO A BRIDGE COVERED BY WATER. STAY OFF FLOODED CITY STREETS. OUTSIDE THE CITY...STAY ON MAIN HIGHWAYS. AVOID SECONDARY ROADS AND FARM ROADS...ESPECIALLY AT NIGHT.

PHXFFWPHX
TTAA00 KPHX 241416 COR
AZC007-013-021-241600-

BULLETIN - EBS ACTIVATION REQUESTED
FLASH FLOOD WARNING...CORRECTION FOR ISSUANCE TIME
NATIONAL WEATHER SERVICE PHOENIX ARIZONA
700 AM MST FRI JUL 24 1992.

THE NATIONAL WEATHER SERVICE IN PHOENIX ARIZONA HAS ISSUED A
FLASH FLOOD WARNING EFFECTIVE UNTIL 900 AM MST
FOR THE FOLLOWING LOCATIONS...

IN EAST CENTRAL ARIZONA

...WESTERN GILA COUNTY

IN SOUTH CENTRAL ARIZONA

...EASTERN MARICOPA COUNTY...PINAL COUNTY

IN NORTH CENTRAL ARIZONA

...SOUTHEAST HALF OF YAVAPAI COUNTY

THE NATIONAL WEATHER SERVICE IN PHOENIX HAS EXTENDED A FLASH FLOOD
WARNING FOR EASTERN MARICOPA COUNTY...PINAL COUNTY...AND WESTERN GILA
COUNTY UNTIL 9 AM MST. IN ADDITION...THE FLASH FLOOD WARNING HAS BEEN
EXTENDED TO INCLUDE THE SOUTHEAST HALF OF YAVAPAI COUNTY.

NATIONAL WEATHER SERVICE RADAR...SATELLITE PICTURES AND COOPERATIVE
OBSERVER REPORTS INDICATE VERY HEAVY RAIN HAS OCCURRED OR WAS STILL
OCCURING IN THE WARNING AREA. SEVERAL REPORTS OF OVER 2 INCES OF RAIN
HAVE BEEN RECEIVED. THE GREATEST REPORT OF OVERNIGHT RAIN RECEIVED AS
OF 700 AM WAS A WHOPPING 6.05 INCHES AT 27TH AVENUE AND CAMELBACK ROAD.

RAINFALL IS EXPECTED TO CONTINUE HEAVY AT LEAST IN THE NORTHERN PORTION
OF THE FLASH FLOOD WARNING AREA UNTIL 8 OR 9 AM MST THIS MORNING. EVEN
LIGHT RAIN ON ALREADY SATURATED GROUND AND FLOODED AREAS CAN AGGRAVATE
THE SITUATION.

THE ARIZONA DEPARTMENT OF TRANSPORTATION REPORTED 2 TO 3 FEET OF WATER
ON THE BLACK CANYON FREEWAY AT THE CAMELBACK ROAD UNDERPASS AT 630 AM
MST. AT THE SAME TIME...A FOOT OF WATER WAS REPORTED AT THE BELL ROAD
UNDERPASS. THE DEPARTMENT OF PUBLIC SAFETY REPORTED THAT THE BLACK
CANYON FREEWAY SOUTHBOUND WAS CLOSED AT CAMELBACK ROAD DUE TO FLOODING.
THIS REPORT WAS AT 650 AM MST. AT 640 AM MST...THE GILA COUNTY SHERIFFS
OFFICE REPORTED FLOODING ALONG STATE HIGHWAY 88 NORTH OF GLOBE AND
NORTH AND SOUTH OF ROOSEVELT LAKE.

THIS IS A SERIOUS SITUATION. PLEASE USE YOUR BEST JUDGEMENT WHEN
TRAVELING THIS MORNING. LEAVE HOME EARLY AS IT MAY TAKE YOU LONGER
THAN NORMAL TO GET TO YOUR DESTINATION. CHECK THE LATEST ROAD REPORTS
SINCE SOME ROADS MAY BE CLOSED OR IMPASSABLE. STAY AWAY FROM FLOODED
ROADS.

CRAIG ELLIS

ZCZC PHXFFSPHX ALL 241700
TTAA00 KPHX DDHHMM
AZC007-013-021-025-241700-

FLASH FLOOD STATEMENT
NATIONAL WEATHER SERVICE PHOENIX ARIZONA
902 AM MST FRI JUL 24 1992

...FLASH FLOOD WARNING EXPIRES...

THE FLASH FLOOD WARNING FOR CENTRAL ARIZONA INCLUDING THE PHOENIX METROPOLITAN AREA WILL EXPIRE AT 9 AM.

RAINS BEGAN DECREASING IN THE PHOENIX AREA AFTER 8 AM.. RADAR AND SATELLITE OBSERVATIONS INDICATED MODERATE RAINS WERE CONTINUING IN NORTH CENTRAL PINAL COUNTY WHICH INCLUDES FLORENCE AND SUPERIOR.

URBAN STREET FLOODING IN THE PHOENIX AREA WAS EXTENSIVE IN THE LATE NIGHT HOURS. THOUGH THE FLOODING HAD NOT YET DIMINISHED AS OF 8.30 AM. THE FLOODING WAS ABATING AND NO NEW FLOODING IN EXPECTED.

THE FLASH FLOOD WARNING IS BEING ALLOWED TO EXPIRE AS SCHEDULED AT 9 AM. HOWEVER...THE AIR OVER CENTRAL ARIZONA IS NEAR SATURATION AND HEAVY SHOWERS MAY OCCUR LATER IN THE DAY. A FLASH FLOOD WATCH WILL BE IMPLEMENTED FOR MUCH OF CENTRAL AND EAST ARIZONA BECAUSE OF THE CONTINUING POTENTIAL FOR HEAVY RAINS OVER MUCH OF THE STATE. THAT WATCH IS COVERED UNDER A SEPERATE STATEMENT.

BJOREM

NNNN

ZCZC PHXFFAPHX ALL 250430
TTAA00 KPHX DDHHMM
AZC001-005-007-013-017-019-021-023-025-250430-

BULLETIN - IMMEDIATE BROADCAST REQUESTED
FLASH FLOOD WATCH
NATIONAL WEATHER SERVICE PHOENIX ARIZONA
925 AM MST FRI JUL 24 1992

...FLASH FLOOD WATCH FOR SOUTH CENTRAL AND NORTHEAST ARIZONA UNTIL 9 PM...

THE WATCH INCLUDES SANTA CRUZ...PIMA...PINAL...MARICOPA...GILA... YAVAPAI...EASTERN COCONINO...NAVAJO AND APACHE COUNTIES. FLAGSTAFF IS NOT INCLUDED IN THE WATCH AREA.

THE AIRMASS OVER CENTRAL AND EASTERN ARIZONA IS NEAR SATURATION AND THE LEAST DISTURBANCES IN THE ATMOSPHERE HAVE BEEN SETTING OFF LOCALLY HEAVY SHOWERS AND THUNDERSTORMS.

HEAVY RAINS OVERNIGHT IN CENTRAL ARIZONA...INCLUDING THE PHOENIX METROPOLITAN AREA...RESULTED IN LOCAL FLOODING AND A FLASH FLOOD WARNING WAS IN EFFECT FROM 4.40 AM UNTIL 9 AM. SEVERAL REPORTS OF FOUR INCHES OF RAIN AND ONE REPORT OF SIX INCHES OF RAIN WERE RECORDED IN THE PHOENIX AREA DURING THE NIGHT.

THERE HAS BEEN TWO DAYS OF LOCALLY HEAVY RAINS IN NORTHEAST ARIZONA... AND WIDESPREAD GENERAL RAIN...LOCALLY HEAVY...WAS OCCURING AS OF EARLY MORNING AND IS EXPECTED THROUGH THE DAY.

SATELLITE IMAGES INDICATE A RIVER-LIKE FLOW OF MOISTURE COMING OUT OF MEXICO ACROSS THE BORDER AND NORTHWARD ACROSS THE STATE. THE HEAVIEST FLOW IS FROM THE SOUTH CENTRAL BORDER TO CENTRAL ARIZONA AND TURNING NORTHEAST ACROSS THE NORTHEAST PLATEAU. THEREFORE...THESE SAME AREAS ARE BEING INCORPORATED INTO A FLASH FLOOD WATCH FOR THE REMAINDER OF TODAY.

A FLASH FLOOD WATCH MEANS THAT CONDITIONS ARE FAVORABLE FOR HEAVY RAIN WHICH COULD LEAD TO FLASH FLOODING. PERSONS IN THE FLASH FLOOD WATCH AREA SHOULD TAKE WHATEVER PRECAUTIONS POSSIBLE TO PROTECT PROPERTY AND LIVES FROM SUDDEN FLOODING. MOTORISTS MUST REMEMBER NOT TO CROSS FLOODED HIGHWAY FLOODED BY MOVING WATER.

[illegible]

ZCZC PHXFFSPHX ALL 242130
TTAA00 KPHX DDHHMM
AZC005-007-013-019-021-023-025-242130-

FLASH FLOOD STATEMENT
NATIONAL WEATHER SERVICE PHOENIX ARIZONA
1129 AM MST FRI JUL 24 1992

...HEAVY RAINS IN THE FLASH FLOOD WATCH AREA...

THE FLASH FLOOD WATCH FOR SOUTH CENTRAL AND NORTHEAST ARIZONA TO 9 PM CONTINUES. THE WATCH INCLUDES THE COUNTIES OF SANTA CRUZ...PIMA... PINAL...MARICOPA...YAVAPAI...EASTERN COCONINO...APACHE AND NAVAJO.

MODERATE RAINS CONTINUED IN THE PHOENIX AREA IN THE MID MORNING HOURS. PHOENIX SKY HARBOR AIRPORT HAD ANOTHER 0.43 INCHES BETWEEN 8 AM AND 11

HEAVY RAINS HAVE BEEN REPORTED IN THE HOLBROOK AREA. HOWEVER...THE WIN AIRPORT REPORTED A LITTLE LESS THAN TWO TENTHS INCHES BETWEEN 8 AM AND 11 AM. THE PETRIFIED FOREST NATIONAL MONUMENT REPORTED SEVERAL FUNNEL CLOUDS BETWEEN 9 AM AND 11 AM.

RADAR AND SATELLITE OBSERVATIONS INDICATED CONTINUED MODERATE RAINS THROUGH THE MORNING HOURS FROM PHOENIX NORTH AND NORTHEAST TO NEAR THE MOGOLLON RIM. PAYSON REPORTED MODERATE RAIN AT 10 AM WITH A STORM TOTAL OF A HALF INCH UP TO 8 AM.

THUNDERSTORMS WERE DEVELOPING IN SOUTH CENTRAL ARIZONA WEST OF TUCSON AS OF 10.20 AM.

RESIDENTS IN THE WATCH AREA SHOULD TAKE WHATEVER PRECAUTIONS POSSIBLE TO PROTECT PROPERTY AND LIVES FROM THE THREAT OF FLASH FLOODING. MOTORISTS MUST AVOID TRYING TO CROSS FLOODED STREAM CROSSINGS AND HIGHWAY DIPS WHERE WATER IS MOVING AND THE DEPTH IS NOT CERTAIN.

BJOREM

ZCZC PHXFFSPHX ALL 242030
TTAA00 KPHX DDHHMM
AZZ004-007-242030-

FLASH FLOOD STATEMENT
NATIONAL WEATHER SERVICE PHOENIX ARIZONA
1227 PM MST FRI JUL 24 1992

...RAINFALL IN THE FLASH FLOOD WATCH AREA...

FOLLOWING ARE RAINFALL REPORTS RECEIVED AT THE NATIONAL WEATHER SERVICE IN PHOENIX DURING THE MORNING HOURS. MOST OF THE REPORTS WERE RECEIVED BEFORE THE RAIN HAD ENDED AND THEREFORE DO NOT NECESSARILY CONSTITUTE THE STORM TOTAL. LOCATIONS IN THE PHOENIX AREA ARE REFERRED BY THE NEAREST MAJOR CROSS STREETS.

83RD AVE AND THUNDERBIRD	1.97 INCHES
49TH AVE AND THOMAS	3.14
37TH AVE AND MONTE VISTA	4.00
43RD AVE AND THOMAS	5.40
42ND ST AND BETHANY HOME	4.15
31ST AVE AND CAMELBACK	4.00
27TH AVE AND CAMELBACK	6.25
POWER ROAD AND BASELINE	2.30
MCCLINTOCK AND BASELINE	2.60
SUN LAKES	1.54
SKY HARBOR AIRPORT	1.76
BARTLETT DAM	2.04
MORMON FLAT DAM	2.45
ROOSEVELT DAM	0.28

THE GREAT MAJORITY OF THE RAIN FELL BETWEEN 11 PM LAST NIGHT AND 8 AM THIS MORNING.

BJOREM

NNNN

ZCZC PHXFFWPHX ALL 250645
TTAA00 KPHX DDHHMM
AZC005-251245-

BULLETIN - EBS ACTIVATION REQUESTED
FLASH FLOOD WARNING
NATIONAL WEATHER SERVICE PHOENIX ARIZONA
545 PM MST FRI JUL 24 1992

THE NATIONAL WEATHER SERVICE IN PHOENIX ARIZONA HAS ISSUED A
FLASH FLOOD WARNING EFFECTIVE UNTIL FURTHER NOTICE
FOR THE FOLLOWING LOCATIONS.....

IN NORTH CENTRAL ARIZONA

...NORTHWESTERN COCONINO COUNTY

...FLASH FLOOD WARNING FOR HAVASUPAI CANYON...

A FLASH FLOOD HAS BEEN REPORTED IN HAVASUPAI CANYON. THE REPORT COMES
FROM A TOURIST AIRCRAFT FLYING OVER THE AREA...AND WAS RELAYED TO THE
PARK DISPATCHER AT GRAND CANYON NATIONAL PARK. IT IS NOT KNOWN JUST
WHERE IN THE CANYON THE FLOOD IS OCCURRING...OR WHETHER IT IS UPSTREAM
OR DOWNSTREAM FROM THE VILLAGE OF SUPAI. HOWEVER...THUNDERSTORMS IN
THE REGION FURING THE LAST 24 HOURS HAVE PRODUCED VERY HEAVY RAIN AND
MAJOR FLASH FLOODING HAS ALREADY OCCURRED IN SOME PLACES...SO THIS
REPORT MUST BE TAKEN SERIOUSLY.

ANYONE HEARING THIS ADVISORY ON THE RADIO IN SUPAI...IN THE
CAMPGROUNDS OR ON TRAILS IN THE AREA...PLEASE RELAY IT TO OTHERS.
HIKERS AND CAMPERS...AS WELL AS RESIDENTS ...SHOULD BE READY TO MOVE
TO HIGH GROUND AWAY FROM THE STREAM IF FLOODING DEVELOPS.

UNTIL MORE DETAILS ARE AVAILABLE...WE WILL LEAVE THIS WARNING IN
EFFECT FOR HAVASUPAI CANYON INDEFINATELY THIS EVENING.

TENHARKEL

NNNN

REGULAR FCSTS ARE NOT INCLUDED HERE. CALL ME IF YOU NEED MORE.

GOOD LUCK

T

APPENDIX B

Maricopa County ALERT System

Group Name		Lower Gila/Centennial				Date	Time
						7/28/92	1017
Sensor #	5000	510	670	660	640		
StatType	dif	dif	dif	dif	dif		
DataType	precip	precip	precip	precip	precip		
Units	in	in	in	in	in		
7/24/92							
1600	0.00	0.00	0.00	0.00	0.00		
1530	0.00	0.00	0.00	0.00	0.00		
1500	0.00	0.00	0.00	0.00	0.00		
1430	0.00	0.00	0.00	0.00	0.00		
1400	0.00	0.00	0.00	0.00	0.00		
1330	0.00	0.00	0.00	0.00	0.00		
1300	0.00	0.00	0.00	0.00	0.00		
1230	0.00	0.00	0.00	0.00	0.00		
1200	0.00	0.00	0.00	0.00	0.00		
1130	0.00	0.00	0.00	0.00	0.00		
1100	0.00	0.00	0.00	0.00	0.00		
1030	0.00	0.00	0.00	0.00	0.00		
1000	0.00	0.00	0.00	0.00	0.00		
0930	0.00	0.00	0.00	0.00	0.00		
0900	0.00	0.00	0.00	0.00	0.00		
0830	0.00	0.00	0.00	0.00	0.00		
0800	0.00	0.00	0.00	0.00	0.00		
0730	0.00	0.00	0.00	0.00	0.00		
0700	0.00	0.00	0.00	0.00	0.00		
0630	0.00	0.00	0.00	0.00	0.00		
0600	0.00	0.00	0.00	0.00	0.00		
0530	0.00	0.00	0.00	0.00	0.00		
0500	0.00	0.00	0.00	0.00	0.00		
0430	0.00	0.00	0.00	0.00	0.00		
0400	0.00	0.00	0.00	0.00	0.00		
0330	0.00	0.00	0.00	0.00	0.00		
0300	0.00	0.00	0.00	0.00	0.00		
0230	0.00	0.00	0.00	0.00	0.00		
0200	0.00	0.00	0.00	0.00	0.00		
0130	0.00	0.00	0.00	0.00	0.00		
0100	0.00	0.00	0.00	0.00	0.00		
0030	0.00	0.00	0.00	0.00	0.00		
7/23/92							
2400	0.00	0.00	0.00	0.00	0.00		
2330	0.00	0.00	0.00	0.00	0.00		
2300	0.00	0.00	0.00	0.00	0.00		
2230	0.00	0.00	0.00	0.00	0.00		
2200	0.00	0.00	0.00	0.00	0.00		
2130	0.00	0.00	0.00	0.00	0.00		
2100	0.00	0.00	0.00	0.00	0.00		
2030	0.00	0.00	0.00	0.00	0.00		
2000	0.00	0.00	0.00	0.00	0.00		
1930	0.00	0.00	0.00	0.00	0.00		
1900	0.00	0.00	0.00	0.00	0.00		
1830	0.00	0.00	0.00	0.00	0.00		
1800	0.00	0.00	0.00	0.00	0.00		
1730	0.00	0.00	0.00	0.00	0.00		
TOTALS:	0.00	0.00	0.00	0.00	0.00		

Mt. Oatman

Gila Bend Mtns.

Centennial RR

Saddleback FRS

Centennial Levee

Maricopa County ALERT System

Group Name: Upper Centennial | Date: 7/28/92 | Time: 1018

Sensor #	630	620	5180	5190
StatType	dif	dif	dif	dif
DataType	precip	precip	precip	precip
Units	in	in	in	in
7/24/92				
1600	0.00	0.00	0.00	0.00
1530	0.00	0.00	0.00	0.00
1500	0.00	0.00	0.00	0.00
1430	0.00	0.00	0.00	0.00
1400	0.00	0.00	0.00	0.00
1330	0.00	0.00	0.00	0.00
1300	0.00	0.00	0.00	0.00
1230	0.00	0.00	0.00	0.00
1200	0.00	0.00	0.00	0.00
1130	0.00	0.00	0.00	0.00
1100	0.00	0.00	0.00	0.00
1030	0.00	0.00	0.00	0.00
1000	0.00	0.00	0.00	0.00
0930	0.00	0.00	0.00	0.00
0900	0.00	0.00	0.00	0.00
0830	0.00	0.00	0.00	0.00
0800	0.00	0.00	0.00	0.00
0730	0.00	0.00	0.00	0.00
0700	0.00	0.00	0.00	0.00
0630	0.00	0.00	0.00	0.00
0600	0.00	0.00	0.00	0.00
0530	0.00	0.00	0.00	0.00
0500	0.00	0.00	0.00	0.00
0430	0.00	0.00	0.00	0.00
0400	0.00	0.00	0.00	0.00
0330	0.00	0.00	0.00	0.00
0300	0.00	0.00	0.00	0.00
0230	0.00	0.00	0.00	0.00
0200	0.00	0.00	0.00	0.00
0130	0.00	0.00	0.00	0.00
0100	0.00	0.00	0.00	0.00
0030	0.00	0.00	0.00	0.00
7/23/92				
2400	0.00	0.00	0.00	0.00
2330	0.00	0.00	0.00	0.00
2300	0.00	0.00	0.00	0.00
2230	0.00	0.00	0.00	0.00
2200	0.00	0.00	0.00	0.00
2130	0.00	0.00	0.00	0.00
2100	0.00	0.00	0.00	0.00
2030	0.00	0.00	0.00	0.00
2000	0.00	0.00	0.00	0.00
1930	0.00	0.00	0.00	0.00
1900	0.00	0.00	0.00	0.00
1830	0.00	0.00	0.00	0.00
1800	0.00	0.00	0.00	0.00
1730	0.00	0.00	0.00	0.00
TOTALS:	0.00	0.00	0.00	0.00

Upper Tiger Wash

Gladden

Centennial Wash 3

Smith Peak

Maricopa County ALERT System

Group Name: Lower Hassayampa | Date: 7/28/92 | Time: 1022

Sensor #	1625	1620	5220	3630	3635	3645	3625
StatType	dif	dif	dif	dif	dif	dif	dif
DataType	precip	precip	precip	precip	precip	precip	precip
Units	in	in	in	in	in	in	in
	Buckeye FRS #1	Tackrabbit Wash	Morristown 4 hrs.	Sunset FRS 2 hrs.	Sunnycove FRS ½ hr.	Vulture Mine 2.5 hrs	Sols Wash
7/24/92							
1600	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1530	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1500	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1430	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1400	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1330	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1300	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1230	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1130	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1100	0.00	0.00	0.00	0.00	0.04	0.00	0.00
1030	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0900	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0830	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0800	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0730	0.00	0.00	0.04	0.00	0.00	0.00	0.00
0700	0.00	0.00	0.08	0.00	0.00	0.00	0.00
0630	0.00	0.00	0.00	0.00	0.00	0.04	0.00
0600	0.00	0.00	0.00	0.08	0.00	0.08	0.00
0530	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0500	0.00	0.00	0.04	0.00	0.00	0.08	0.00
0430	0.00	0.00	0.08	0.04	0.00	0.12	0.00
0400	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0330	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0300	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0230	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0200	0.00	0.00	0.00	0.00	0.00	0.08	0.00
0130	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0100	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0030	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7/23/92							
2400	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2330	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2300	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2230	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2130	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2100	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2030	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1900	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1830	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1800	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1730	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTALS:	0.00	0.00	0.24	0.12	0.04	0.39	0.00

Maricopa County ALERT System

Group Name: Upper Hassayampa | Date: 7/28/92 | Time: 1023

Sensor #	5290	3660	3610	3650	5340	3670	5365	5
StatType	dif	dif	dif	dif	dif	dif	dif	
DataType	precip	precip	precip	precip	precip	precip	precip	pre
Units	in	in	in	in	in	in	in	
7/24/92								
1600	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
1530	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
1500	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
1430	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
1400	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
1330	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
1300	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
1230	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
1200	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
1130	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
1100	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
1030	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0
1000	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0
0930	0.00	0.00	0.00	0.00	0.04	0.08	0.04	0
0900	0.00	0.00	0.04	0.04	0.04	0.08	0.04	0
0830	0.16	0.08	0.04	0.04	0.08	0.08	0.08	0
0800	0.04	0.00	0.04	0.08	0.24	0.08	0.00	0
0730	0.00	0.04	0.31	0.08	0.28	0.08	0.04	
0700	0.28	0.00	0.35	0.04	0.08	0.08	0.00	
0630	0.00	0.04	0.31	0.12	0.00	0.31	0.04	
0600	0.00	0.12	0.24	0.00	0.00	0.08	0.00	
0530	0.00	0.00	0.04	0.00	0.00	0.00	0.20	
0500	0.00	0.00	0.00	0.08	0.00	0.04	0.00	
0430	0.00	0.00	0.00	0.04	0.04	0.00	0.00	
0400	0.00	0.00	0.00	0.20	0.08	0.00	0.00	
0330	0.16	0.00	0.00	0.16	0.00	0.00	0.00	
0300	0.00	0.00	0.00	0.00	0.04	0.00	0.00	
0230	0.00	0.00	0.08	0.04	0.00	0.00	0.00	
0200	0.00	0.00	0.00	0.04	0.00	0.00	0.00	
0130	0.00	0.00	0.00	0.39	0.00	0.00	0.00	
0100	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
0030	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
7/23/92								
2400	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2330	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2300	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2230	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2200	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2130	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2100	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2030	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
1930	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
1900	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
1830	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
1800	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
1730	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
TOTALS:	0.63	0.28	1.46	1.34	0.91	0.87	0.43	0

Yarnell Hill 5.5 hrs

Box Canyon 3 hrs.

O'Brian 7 hrs.

Minnehaha 8 hrs

Towers Mtn. 7 hrs.

Hassy Bridge 5.5 hrs

Wilhoit 4.5 hrs

BAD RECORD - Mt. Union

Maricopa County ALERT System

Group Name: AF1: McMicken Date: 7/28/92 Time: 1025

Sensor #	5400	1635	1615	5435	5445	5450
StatType	dif	dif	dif	dif	dif	dif
DataType	precip	precip	precip	precip	precip	precip
Units	in	in	in	in	in	in
7/24/92						
1600	0.00	0.00	0.00	0.00	0.00	0.00
1530	0.00	0.00	0.00	0.00	0.00	0.00
1500	0.00	0.00	0.00	0.00	0.00	0.00
1430	0.00	0.00	0.00	0.00	0.00	0.00
1400	0.00	0.00	0.00	0.00	0.00	0.00
1330	0.00	0.00	0.00	0.00	0.00	0.00
1300	0.00	0.00	0.00	0.00	0.00	0.00
1230	0.00	0.00	0.00	0.00	0.00	0.00
1200	0.00	0.00	0.00	0.00	0.00	0.00
1130	0.00	0.00	0.00	0.00	0.00	0.00
1100	0.00	0.00	0.00	0.00	0.00	0.00
1030	0.00	0.00	0.00	0.00	0.00	0.00
1000	0.00	0.00	0.00	0.00	0.00	0.00
0930	0.12	0.00	0.00	0.08	0.08	0.00
0900	0.28	0.00	0.00	0.04	0.04	0.00
0830	0.20	0.00	0.04	0.00	0.00	0.00
0800	0.24	0.00	0.00	0.00	0.04	0.00
0730	0.00	0.00	0.00	0.24	0.28	0.00
0700	0.00	0.00	0.00	0.16	0.16	0.00
0630	0.00	0.00	0.00	0.04	0.00	0.00
0600	0.00	0.00	0.00	0.00	0.04	0.00
0530	0.00	0.00	0.04	0.39	0.16	0.00
0500	0.00	0.00	0.00	0.16	0.35	0.83
0430	0.00	0.00	0.00	0.00	0.04	0.00
0400	0.00	0.00	0.04	0.00	0.00	0.00
0330	0.00	0.00	0.00	0.00	0.00	0.00
0300	0.00	0.00	0.00	0.00	0.00	0.00
0230	0.00	0.00	0.00	0.00	0.00	0.00
0200	0.00	0.00	0.00	0.00	0.00	0.00
0130	0.00	0.00	0.00	0.00	0.00	0.16
0100	0.00	0.00	0.00	0.00	0.00	———
0030	0.00	0.00	0.00	0.00	0.00	———
7/23/92						
2400	0.00	0.00	0.00	0.00	0.00	———
2330	0.00	0.00	0.00	0.00	0.00	———
2300	0.00	0.00	0.00	0.00	0.00	———
2230	0.00	0.00	0.00	0.00	0.00	———
2200	0.00	0.00	0.00	0.00	0.00	———
2130	0.00	0.00	0.00	0.00	0.00	———
2100	0.00	0.00	0.00	0.00	0.00	———
2030	0.00	0.00	0.00	0.00	0.00	———
2000	0.00	0.00	0.00	0.00	0.00	———
1930	0.00	0.00	0.00	0.00	0.00	———
1900	0.00	0.00	0.00	0.00	0.00	———
1830	0.00	0.00	0.00	0.00	0.00	———
1800	0.00	0.00	0.00	0.00	0.00	———
1730	0.00	0.00	0.00	0.00	0.00	———
TOTALS:	0.83	0.00	0.12	1.10	1.18	0.98

Agua Fria @ Buckeye Rd. 2 hrs

White Tanks 3

White Tanks Peak 5 hrs.

Mc Micken Floodway 5 hrs.

Mc Micken Dam 5.5 hrs

Patton Rd. BAD RECORD

Maricopa County ALERT System

Group Name: AF2: Circle City | Date: 7/28/92 | Time: 1029

Sensor #	5455	5460	5475	5490	5505	1510
StatType	dif	dif	dif	dif	dif	dif
DataType	precip	precip	precip	precip	precip	precip
Units	in	in	in	in	in	in
7/24/92						
1600	0.00	0.00	0.00	0.00	0.00	0.00
1530	0.00	0.00	0.00	0.00	0.00	0.00
1500	0.00	0.00	0.00	0.00	0.00	0.00
1430	0.00	0.00	0.00	0.00	0.00	0.00
1400	0.00	0.00	0.00	0.00	0.00	0.00
1330	0.00	0.00	0.00	0.00	0.00	0.00
1300	0.00	0.00	0.00	0.00	0.00	0.00
1230	0.00	0.00	0.00	0.00	0.00	0.00
1200	0.00	0.00	0.00	0.00	0.00	0.00
1130	0.00	0.00	0.00	0.00	0.00	0.00
1100	0.00	0.00	0.00	0.00	0.00	0.00
1030	0.00	0.00	0.00	0.00	0.00	0.00
1000	0.04	0.00	0.00	0.00	0.00	0.00
0930	0.00	0.00	0.00	0.00	0.04	0.00
0900	0.00	0.00	0.00	0.00	0.16	0.00
0830	0.00	0.00	0.00	0.00	0.39	0.00
0800	0.00	0.04	0.04	0.04	0.00	0.00
0730	0.00	0.08	0.08	0.08	0.00	0.00
0700	0.04	0.20	0.08	0.04	0.00	0.00
0630	0.00	0.04	0.00	0.20	0.00	0.00
0600	0.04	0.08	0.04	0.55	0.04	0.00
0530	0.43	0.43	0.47	0.51	0.08	0.20
0500	0.71	0.47	0.35	0.04	0.00	0.39
0430	0.00	0.00	0.00	0.00	0.24	0.31
0400	0.00	0.00	0.00	0.00	0.12	0.00
0330	0.04	0.00	0.00	0.00	0.00	0.00
0300	0.00	0.00	0.00	0.00	0.00	0.00
0230	0.00	0.00	0.00	0.00	0.00	0.00
0200	0.00	0.00	0.00	0.00	0.00	0.00
0130	0.00	0.00	0.00	0.00	0.00	0.00
0100	0.00	0.00	0.00	0.00	0.00	0.00
0030	0.00	0.00	0.00	0.00	0.00	0.00
7/23/92						
2400	0.00	0.00	0.00	0.00	0.00	0.00
2330	0.00	0.00	0.00	0.00	0.00	0.00
2300	0.00	0.00	0.00	0.00	0.00	0.00
2230	0.00	0.00	0.00	0.00	0.00	0.00
2200	0.00	0.00	0.00	0.00	0.00	0.00
2130	0.00	0.00	0.00	0.00	0.00	0.00
2100	0.00	0.00	0.00	0.00	0.00	0.00
2030	0.00	0.00	0.00	0.00	0.00	0.00
2000	0.00	0.00	0.00	0.00	0.00	0.00
1930	0.00	0.00	0.00	0.00	0.00	0.00
1900	0.00	0.00	0.00	0.00	0.00	0.00
1830	0.00	0.00	0.00	0.00	0.00	0.00
1800	0.00	0.00	0.00	0.00	0.00	0.00
1730	0.00	0.00	0.00	0.00	0.00	0.00
TOTALS:	1.30	1.34	1.06	1.46	1.06	0.91

Withmann 7 hrs

Chrysler Proving Grounds 3.5 hrs

Circle City 3.5 hrs

Castle Hot Springs 3.5 hrs

New River @ Glendale Rd. 6 hrs

ACDC @ 67TH Ave. 1.5 hrs

Tr (years) 3 4

Maricopa County ALERT System

Group Name: AF3: Adobe/New River | Date: 7/28/92 | Time: 1030

Sensor #	2650	3720	5565	2630	5595	2700	2605	5640
StatType	dif	dif	dif	dif	dif	dif	dif	dif
DataType	precip	precip	precip	precip	precip	precip	precip	precip
Units	in	in	in	in	in	in	in	in
7/24/92								
1600	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1530	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1500	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1430	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1400	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1330	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1300	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1230	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1200	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1130	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1100	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00
1030	0.04	0.04	0.00	0.00	0.00	0.00	0.00	0.00
1000	0.04	0.12	0.00	0.00	0.00	0.00	0.00	0.00
0930	0.04	0.04	0.04	0.04	0.04	0.00	0.00	0.00
0900	0.00	0.04	0.00	0.04	0.00	0.00	0.04	0.08
0830	0.00	0.00	0.00	0.00	0.00	0.04	0.04	0.00
0800	0.00	0.00	0.00	0.00	0.00	0.04	0.04	0.04
0730	0.04	0.04	0.04	0.00	0.00	0.00	0.04	0.00
0700	0.04	0.04	0.04	0.00	0.04	0.04	0.00	0.00
0630	0.04	0.04	0.00	0.00	0.08	0.04	0.00	0.00
0600	0.00	0.04	0.00	0.00	0.20	0.08	0.00	0.00
0530	0.63	0.04	0.00	0.00	0.24	0.00	0.00	0.00
0500	0.00	0.04	0.00	0.00	0.08	0.00	0.00	0.00
0430	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04
0400	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.04
0330	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0300	0.00	0.00	0.00	0.00	0.00	0.00	0.31	0.00
0230	0.00	0.00	0.00	0.20	0.00	0.00	0.24	0.04
0200	0.00	0.00	0.00	0.67	0.00	0.00	0.00	0.00
0130	0.00	0.00	0.00	0.63	0.00	0.00	0.00	0.00
0100	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0030	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7/23/92								
2400	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00
2330	0.00	0.00	0.00	0.08	0.00	0.00	0.00	0.12
2300	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2230	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2200	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2130	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2100	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2030	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1930	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1900	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1830	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1800	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1730	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTALS:	0.87	0.47	0.20	1.73	0.67	0.24	0.75	0.35

Adobe Dam 5.5 hrs

Deer Valley Airport 6 hrs.

Skunk Creek @ I-17 5 hrs.

Upper Skunk Creek 10.5 hrs.

New River @ Bell Rd. 5.5 hrs.

New River Dam 3½ hrs.

Sunup Ranch 8 hrs.

Cooks Mesa 9.5 hrs.

Maricopa County ALERT System

Group Name: AF4: Lake Pleasant | Date: 7/28/92 | Time: 1030

Sensor #	2660	4620	4635	4510	4530	4520
StatType	dif	dif	dif	dif	dif	dif
DataType	precip	precip	precip	precip	precip	precip
Units	in	in	in	in	in	in
7/24/92						
1600	0.00	0.00	0.00	0.04	0.00	0.00
1530	0.00	0.00	0.00	0.00	0.00	0.00
1500	0.00	0.00	0.00	0.00	0.00	0.00
1430	0.00	0.00	0.00	0.00	0.00	0.00
1400	0.00	0.00	0.00	0.00	0.00	0.00
1330	0.00	0.00	0.00	0.04	0.00	0.00
1300	0.00	0.00	0.00	0.00	0.00	0.00
1230	0.00	0.00	0.00	0.00	0.00	0.00
1200	0.00	0.00	0.00	0.00	0.00	0.00
1130	0.00	0.00	0.00	0.00	0.00	0.00
1100	0.00	0.00	0.00	0.00	0.00	0.00
1030	0.00	0.00	0.00	0.00	0.00	0.00
1000	0.00	0.00	0.00	0.00	0.00	0.00
0930	0.00	0.00	0.00	0.04	0.04	0.00
0900	0.00	0.00	0.00	0.04	0.04	0.04
0830	0.08	0.08	0.08	0.04	0.04	0.00
0800	0.04	0.00	0.04	0.04	0.08	0.04
0730	0.04	0.04	0.08	0.12	0.08	0.08
0700	0.00	0.12	0.12	0.00	0.08	0.00
0630	0.00	1.02	1.10	0.00	0.00	0.00
0600	0.00	0.94	0.28	0.00	0.00	0.00
0530	0.00	0.04	0.08	0.00	0.00	0.04
0500	0.00	0.00	0.00	0.00	0.00	0.00
0430	0.00	0.00	0.00	0.08	0.04	0.00
0400	0.00	0.00	0.00	0.08	0.20	0.00
0330	0.12	0.00	0.00	0.00	0.00	0.00
0300	0.00	0.00	0.00	0.00	0.04	0.12
0230	0.00	0.04	0.00	0.00	0.00	0.47
0200	0.24	0.00	0.00	0.00	0.00	0.00
0130	0.16	0.00	0.00	0.00	0.00	0.00
0100	0.00	0.00	0.12	0.00	0.00	0.00
0030	0.00	0.00	0.00	0.00	0.00	0.00
7/23/92						
2400	0.00	0.00	0.00	0.00	0.00	0.00
2330	0.00	0.00	0.00	0.00	0.00	0.00
2300	0.00	0.00	0.00	0.00	0.00	0.00
2230	0.00	0.00	0.00	0.00	0.00	0.00
2200	0.00	0.00	0.00	0.00	0.00	0.00
2130	0.00	0.00	0.00	0.00	0.00	0.00
2100	0.00	0.00	0.00	0.00	0.00	0.00
2030	0.00	0.00	0.00	0.00	0.00	0.00
2000	0.00	0.00	0.00	0.00	0.00	0.00
1930	0.00	0.00	0.00	0.00	0.00	0.00
1900	0.00	0.00	0.00	0.00	0.00	0.00
1830	0.00	0.00	0.00	0.00	0.00	0.00
1800	0.00	0.00	0.00	0.00	0.00	0.00
1730	0.00	0.00	0.00	0.00	0.00	0.00
TOTALS:	0.67	2.28	1.89	0.51	0.67	0.79

Lake Pleasant 7.5 hrs

Garfias Mtn. 6.5 hrs

Columbia Hill 8 hrs.

Horsethief Basin ≈ 10 hrs.

Crown King 7 hrs

Sunset Point 7 hrs.

Maricopa County ALERT System

Group Name: AF5: Upper Agua Fria

Date: 7/28/92

Time: 1031

Sensor #	4615	4605	4610	4600	4625	3520
StatType	dif	dif	dif	dif	dif	dif
DataType	precip	precip	precip	precip	precip	precip
Units	in	in	in	in	in	in
7/24/92						
1600	0.00	0.00	0.00	0.00	0.00	0.00
1530	0.00	0.00	0.00	0.00	0.00	0.00
1500	0.00	0.00	0.00	0.00	0.00	0.00
1430	0.00	0.00	0.00	0.00	0.00	0.00
1400	0.00	0.00	0.00	0.00	0.00	0.00
1330	0.00	0.00	0.00	0.00	0.00	0.00
1300	0.00	0.00	0.00	0.00	0.00	0.00
1230	0.00	0.00	0.00	0.00	0.00	0.00
1200	0.00	0.00	0.00	0.00	0.00	0.00
1130	0.00	0.00	0.00	0.00	0.00	0.00
1100	0.00	0.00	0.04	0.00	0.00	0.00
1030	0.00	0.00	0.04	0.00	0.00	0.04
1000	0.04	0.00	0.08	0.04	0.00	0.00
0930	0.04	0.00	0.00	0.00	0.00	0.00
0900	0.00	0.00	0.04	0.00	0.00	0.00
0830	0.00	0.00	0.04	0.00	0.04	0.00
0800	0.00	0.00	0.08	0.00	0.00	0.00
0730	0.04	0.00	0.00	0.00	0.00	0.00
0700	0.00	0.00	0.00	0.00	0.00	0.00
0630	0.00	0.00	0.00	0.00	0.00	0.00
0600	0.00	0.00	0.00	0.00	0.00	0.00
0530	0.00	0.00	0.00	0.00	0.00	0.00
0500	0.00	0.00	0.00	0.00	0.00	0.00
0430	0.00	0.00	0.00	0.00	0.00	0.00
0400	0.04	0.00	0.00	0.00	0.00	0.00
0330	0.00	0.00	0.00	0.00	0.00	0.00
0300	0.00	0.00	0.00	0.00	0.00	0.00
0230	0.00	0.04	0.00	0.00	0.00	0.00
0200	0.00	0.04	0.00	0.08	0.00	0.00
0130	0.00	0.08	0.00	0.39	0.00	0.00
0100	0.00	0.04	0.00	0.08	0.00	0.00
0030	0.00	0.00	0.00	0.00	0.00	0.00
7/23/92						
2400	0.00	0.00	0.00	0.00	0.00	0.00
2330	0.00	0.00	0.00	0.00	0.00	0.00
2300	0.00	0.00	0.00	0.00	0.00	0.00
2230	0.00	0.00	0.00	0.00	0.00	0.00
2200	0.00	0.00	0.00	0.00	0.00	0.00
2130	0.00	0.00	0.00	0.00	0.00	0.00
2100	0.00	0.00	0.00	0.00	0.00	0.00
2030	0.00	0.00	0.00	0.00	0.00	0.00
2000	0.00	0.00	0.00	0.00	0.00	0.00
1930	0.00	0.00	0.00	0.00	0.00	0.00
1900	0.00	0.00	0.00	0.00	0.00	0.00
1830	0.00	0.00	0.00	0.00	0.00	0.00
1800	0.00	0.00	0.00	0.00	0.00	0.00
1730	0.00	0.00	0.00	0.00	0.00	0.00
TOTALS:	0.16	0.20	0.31	0.59	0.04	0.04

Horseshoe Ranch 7.5 hrs

Horner Mtn. Ranch 2 hrs

Az Hunt Club 3.5 hrs

I-17 @ St. 169 9.5 hrs

Dewey .5 hrs

Prescott Valley .5 hrs

Maricopa County ALERT System

Group Name: Verde River | Date: 7/28/92 | Time: 1032

Sensor #	6690	6695	6685	5945	2600
StatType	dif	dif	dif	dif	dif
DataType	precip	precip	precip	precip	precip
Units	in	in	in	in	in
7/24/92					
1600	0.00	0.00	0.00	0.00	0.00
1530	0.00	0.00	0.00	0.00	0.00
1500	0.00	0.00	0.00	0.00	0.00
1430	0.00	0.00	0.00	0.00	0.00
1400	0.00	0.00	0.00	0.00	0.00
1330	0.00	0.00	0.00	0.00	0.00
1300	0.00	0.00	0.00	0.00	0.00
1230	0.00	0.00	0.00	0.00	0.00
1200	0.00	0.00	0.00	0.00	0.00
1130	0.00	0.00	0.00	0.00	0.00
1100	0.00	0.00	0.00	0.00	0.00
1030	0.00	0.00	0.00	0.00	0.04
1000	0.00	0.00	0.00	0.00	0.00
0930	0.00	0.00	0.04	0.00	0.04
0900	0.04	0.04	0.00	0.08	0.08
0830	0.04	0.04	0.04	0.00	0.08
0800	0.04	0.04	0.00	0.12	0.04
0730	0.08	0.04	0.04	0.04	0.12
0700	0.08	0.04	0.16	0.12	0.12
0630	0.08	0.04	0.12	0.12	0.08
0600	0.04	0.04	0.04	0.08	0.16
0530	0.08	0.04	0.04	0.04	0.16
0500	0.00	0.00	0.00	0.00	0.00
0430	0.00	0.00	0.04	0.12	0.04
0400	0.08	0.04	0.08	0.35	0.20
0330	0.00	0.04	0.47	0.00	0.12
0300	0.00	0.00	0.31	0.00	0.00
0230	0.04	0.04	0.04	0.00	0.00
0200	0.28	0.08	0.00	0.00	0.00
0130	0.12	0.04	0.00	0.00	0.00
0100	0.04	0.00	0.04	0.08	0.00
0030	0.04	0.04	0.16	0.00	0.00
7/23/92					
2400	0.08	0.00	0.00	0.00	0.00
2330	0.39	0.00	0.00	0.00	0.00
2300	0.12	0.00	0.08	0.00	0.00
2230	0.00	0.00	0.00	0.00	0.00
2200	0.00	0.00	0.00	0.00	0.00
2130	0.00	0.00	0.00	0.00	0.00
2100	0.00	0.00	0.00	0.00	0.00
2030	0.00	0.00	0.00	0.00	0.00
2000	0.00	0.00	0.00	0.00	0.00
1930	0.00	0.00	0.00	0.00	0.00
1900	0.00	0.00	0.00	0.00	0.00
1830	0.00	0.00	0.00	0.00	0.00
1800	0.00	0.00	0.00	0.00	0.00
1730	0.00	0.00	0.00	0.00	0.00
TOTALS:	1.65	0.59	1.69	1.14	1.26

Asher Hills 10.5 hrs

McDowell Mtn. Park 9 hrs

Fraesfield Mtn. 11 hrs

Thompson Peak 8½ hrs

Mt. Ord 7.5 hrs

Maricopa County ALERT System

Group Name: CCS1: Salt R. South | Date: 7/28/92 | Time: 1034

Sensor #	6000	6010	5900	6030	6040	6050	5645
StatType	dif	dif	dif	dif	dif	dif	dif
DataType	precip	precip	precip	precip	precip	precip	precip
Units	in	in	in	in	in	in	in
7/24/92							
1600	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1530	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1500	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1430	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1400	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1330	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1300	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1230	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1130	0.00	0.00	0.00	0.00	0.00	0.04	0.00
1100	0.00	0.00	0.24	0.00	0.04	0.00	0.00
1030	0.12	0.04	0.00	0.00	0.00	0.04	0.04
1000	0.20	0.04	0.00	0.04	0.00	0.00	0.04
0930	0.16	0.00	0.12	0.00	0.04	0.00	0.00
0900	0.00	0.00	0.04	0.00	0.00	0.04	0.08
0830	0.00	0.00	0.00	0.04	0.04	0.08	0.04
0800	0.00	0.04	0.04	0.04	0.00	0.04	0.08
0730	0.39	0.08	0.12	0.04	0.08	0.04	0.04
0700	0.31	0.00	0.00	0.08	0.08	0.08	0.08
0630	0.00	0.00	0.00	0.31	0.12	0.08	0.04
0600	0.00	0.00	0.00	0.35	0.12	0.39	0.00
0530	0.04	0.08	0.00	0.08	0.12	0.39	0.12
0500	0.04	0.39	0.04	0.28	0.12	0.04	0.08
0430	0.12	0.67	0.24	0.24	0.51	0.00	0.00
0400	0.00	0.16	0.16	0.59	0.51	0.00	0.00
0330	0.00	0.00	0.00	0.31	0.04	0.04	0.00
0300	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0230	0.00	0.00	0.00	0.00	0.00	0.00	0.04
0200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0130	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0100	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0030	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7/23/92							
2400	0.00	0.00	0.00	0.00	0.04	0.00	0.00
2330	0.00	0.00	0.00	0.04	0.43	0.04	0.00
2300	0.00	0.00	0.00	0.08	0.63	0.24	0.00
2230	0.00	0.00	0.00	0.00	0.00	0.08	0.00
2200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2130	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2100	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2030	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1900	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1830	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1800	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1730	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTALS:	1.38	1.50	0.98	2.52	2.91	1.65	0.67
Tr (yrs)	2	3		20	35	3	

Alvord Park 7.5 hrs

Roeser @ 2nd St. 7 hrs

Salt River @ 24th St. 7.5 hrs

Kleinman Park 11.5 hrs

Fitch Park 12 hrs

Mtn. View Park 13 hrs

Spookhill FRS 8½ hrs.

Maricopa County ALERT System

Group Name: CCS2: Indian Bend | Date: 7/28/92 | Time: 1037

Sensor #	6100	6110	6120	6130	6660	6640	6655
StatType	dif	dif	dif	dif	dif	dif	dif
DataType	precip	precip	precip	precip	precip	precip	precip
Units	in	in	in	in	in	in	in
7/24/92							
1600	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1530	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1500	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1430	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1400	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1330	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1300	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1230	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1200	0.00	0.00	0.00	0.00	0.00	0.00	0.04
1130	0.00	0.04	0.00	0.04	0.00	0.00	0.00
1100	0.04	0.00	0.00	0.00	0.08	0.08	0.00
1030	0.00	0.00	0.00	0.00	0.04	0.08	0.00
1000	0.00	0.08	0.00	0.00	0.00	0.12	0.00
0930	0.04	0.00	0.00	0.04	0.08	0.04	0.00
0900	0.00	0.00	0.00	0.12	0.08	0.04	0.04
0830	0.04	0.08	0.04	0.00	0.00	0.04	0.08
0800	0.08	0.12	0.00	0.04	0.04	0.04	0.04
0730	0.12	0.04	0.00	0.04	0.08	0.04	0.12
0700	0.08	0.04	0.00	0.00	0.00	0.04	0.08
0630	0.04	0.08	0.31	0.08	0.04	0.04	0.12
0600	0.04	0.28	0.12	0.08	0.16	0.04	0.04
0530	0.12	0.08	0.08	0.12	0.12	0.08	0.00
0500	0.00	0.12	0.55	0.98	0.24	0.00	0.04
0430	0.16	0.59	0.04	0.35	0.08	0.00	0.28
0400	0.12	0.12	0.00	0.24	0.00	0.12	0.16
0330	0.00	0.00	0.00	0.00	0.00	0.12	0.00
0300	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0230	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0200	0.00	0.00	0.00	0.00	0.00	0.00	0.04
0130	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0100	0.00	0.00	0.00	0.04	0.00	0.00	0.00
0030	0.00	0.04	0.00				
7/23/92							
2400	0.04	0.00	0.00	0.00	0.00	0.00	0.00
2330	0.00	0.04	0.00	0.04	0.00	0.00	0.00
2300	0.00	0.08	0.00	0.12	0.00	0.00	0.04
2230	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2130	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2100	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2030	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1900	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1830	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1800	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1730	0.00	0.00	0.00				
TOTALS:	0.91	1.81	1.14	2.32	1.02	0.91	1.10

IBW @ McKellips 11.5 hrs

IBW @ Indian Bend Rd. 13 hrs

IBW @ Interceptor 5 hrs

Thunderbird Academy 12.5 hrs

Sweetwater 7 hrs

Paradise Valley Park 8.5 hrs

Lost Dog Wash 13 hrs

Tr (yrs) 4 30

Maricopa County ALERT System
Group Name Date Time
CCS3: Phx Metro 1 7/28/92 1037

Sensor #	6200	6210	6220	3770	6240
StatType	dif	dif	dif	dif	dif
DataType	precip	precip	precip	precip	precip
Units	in	in	in	in	in
7/24/92					
1600	0.00	0.00	0.00	0.00	0.00
1530	0.00	0.00	0.00	0.00	0.00
1500	0.00	0.00	0.00	0.00	0.00
1430	0.00	0.00	0.00	0.00	0.00
1400	0.00	0.00	0.00	0.00	0.00
1330	0.00	0.00	0.00	0.00	0.00
1300	0.00	0.00	0.00	0.00	0.00
1230	0.00	0.00	0.00	0.00	0.00
1200	0.00	0.04	0.00	0.00	0.00
1130	0.00	0.00	0.00	0.00	0.04
1100	0.04	0.04	0.04	0.04	0.00
1030	0.08	0.08	0.04	0.04	0.04
1000	0.12	0.12	0.08	0.04	0.04
0930	0.31	0.20	0.08	0.04	0.04
0900	0.00	0.04	0.04	0.04	0.00
0830	0.00	0.04	0.00	0.00	0.00
0800	0.08	0.08	0.12	0.08	0.04
0730	0.43	0.35	0.16	0.04	0.08
0700	0.00	0.12	0.04	0.04	0.08
0630	0.16	0.00	0.00	0.00	0.08
0600	0.04	0.00	0.00	0.00	0.04
0530	0.20	0.28	0.35	0.20	0.08
0500	0.83	1.02	0.31	0.12	0.12
0430	0.28	0.28	0.39	0.20	0.20
0400	0.47	0.00	0.20	0.35	0.16
0330	0.00	0.00	0.00	0.00	0.00
0300	0.00	0.00	0.00	0.00	0.00
0230	0.00	0.00	0.00	0.00	0.00
0200	0.00	0.00	0.00	0.00	0.00
0130	0.00	0.00	0.00	0.00	0.00
0100	0.00	0.00	0.00	0.12	0.00
0030	0.00	0.04	0.00	0.12	0.08
7/23/92					
2400	0.00	0.08	0.16	0.20	0.16
2330	0.00	0.00	0.00	0.12	0.16
2300	0.00	0.00	0.00	0.20	0.04
2230	0.00	0.00	0.00	0.00	0.00
2200	0.00	0.00	0.00	0.00	0.00
2130	0.00	0.00	0.00	0.00	0.00
2100	0.00	0.00	0.00	0.00	0.00
2030	0.00	0.00	0.00	0.00	0.00
2000	0.00	0.00	0.00	0.00	0.00
1930	0.00	0.00	0.00	0.00	0.00
1900	0.00	0.00	0.00	0.00	0.00
1830	0.00	0.00	0.00	0.00	0.00
1800	0.00	0.00	0.00	0.00	0.00
1730	0.00	0.00	0.00	0.00	0.00
TOTALS:	3.03	2.80	2.01	1.93	1.42
Tr (yrs)	50	25	7	10	2

Durango Complex 7.5 hrs

Phoenix Municipal Bldg. 12.5 hrs

Thomas @ 16TH ST. 11.5 hrs

Perry Park 12 hrs.

Papago Park 12.5 hrs

Maricopa County ALERT System
Group Name Date Time
CCS4: Phx Metro 2 7/28/92 1038

Sensor #	6250	6575	1500	6280	6645
StatType	dif	dif	dif	dif	dif
DataType	precip	precip	precip	precip	precip
Units	in	in	in	in	in
7/24/92					
1600	0.00	0.00	0.00	0.00	0.00
1530	0.00	0.00	0.00	0.00	0.00
1500	0.00	0.00	0.00	0.00	0.00
1430	0.00	0.00	0.00	0.00	0.00
1400	0.00	0.00	0.00	0.00	0.00
1330	0.00	0.00	0.00	0.00	0.00
1300	0.00	0.00	0.00	0.00	0.00
1230	0.00	0.00	0.04	0.00	0.00
1200	0.00	0.00	0.00	0.00	0.00
1130	0.04	0.00	0.00	0.00	0.00
1100	0.00	0.00	0.00	0.04	0.00
1030	0.08	0.00	0.00	0.08	0.04
1000	0.00	0.04	0.00	0.12	0.12
0930	0.08	0.08	0.08	0.20	0.00
0900	0.00	0.20	0.04	0.08	0.08
0830	0.00	0.20	0.20	0.00	0.00
0800	0.08	0.35	0.20	0.12	0.08
0730	0.12	0.28	0.04	0.04	0.00
0700	0.04	0.43	0.00	0.04	0.00
0630	0.08	0.31	0.12	0.04	0.00
0600	0.00	0.47	0.28	0.12	0.08
0530	0.16	0.47	0.71	0.31	0.08
0500	0.12	0.04	0.75	0.12	0.43
0430	0.12	0.47	0.04	0.28	0.94
0400	0.16	0.35	0.00	0.16	0.20
0330	0.00	0.08	0.00	0.00	0.00
0300	0.00	0.00	0.08	0.00	0.00
0230	0.00	0.00	0.00	0.00	0.00
0200	0.00	0.00	0.00	0.00	0.00
0130	0.00	0.00	0.00	0.00	0.00
0100	0.00	0.00	0.24	0.04	0.00
0030	0.00	0.00	0.08	0.20	0.08
7/23/92					
2400	0.51	0.00	0.00	0.24	0.47
2330	0.47	0.00	0.00	0.00	0.16
2300	0.31	0.00	0.00	0.00	0.04
2230	0.00	0.00	0.00	0.00	0.04
2200	0.00	0.00	0.00	0.00	0.00
2130	0.00	0.00	0.00	0.00	0.00
2100	0.00	0.00	0.00	0.00	0.00
2030	0.00	0.00	0.00	0.00	0.00
2000	0.00	0.00	0.00	0.00	0.00
1930	0.00	0.00	0.00	0.00	0.00
1900	0.00	0.00	0.00	0.00	0.00
1830	0.00	0.00	0.00	0.00	0.00
1800	0.00	0.00	0.00	0.00	0.00
1730	0.00	0.00	0.00	0.00	0.00
TOTALS:	2.36	3.78	2.87	2.20	2.83
Tr (yrs)	20	>100	30	10	25

Thomas @ 48TH ST. 13 hrs.

Maryvale Muni Golf 7 hrs.

City of Glendale 12.5 hrs

Missouri @ 16TH ST. 11.5 hrs

Paradise Valley C.C. 12.5 hrs

Maricopa County ALERT System

Group Name: CCS5: ACDC | Date: 7/28/92 | Time: 1039

Sensor #	6300	1550	1540	1510	3750
StatType	dif	dif	dif	dif	dif
DataType	precip	precip	precip	precip	precip
Units	in	in	in	in	in
7/24/92					
1600	0.00	0.00	0.00	0.00	0.00
1530	0.00	0.00	0.00	0.00	0.00
1500	0.00	0.00	0.00	0.00	0.00
1430	0.00	0.00	0.00	0.00	0.00
1400	0.00	0.00	0.00	0.00	0.00
1330	0.00	0.00	0.00	0.00	0.00
1300	0.00	0.00	0.00	0.00	0.00
1230	0.00	0.00	0.00	0.00	0.00
1200	0.00	0.00	0.00	0.00	0.00
1130	0.00	0.00	0.00	0.00	0.00
1100	0.00	0.00	0.00	0.00	0.00
1030	0.08	0.00	0.00	0.00	0.04
1000	0.04	0.08	0.08	0.00	0.08
0930	0.08	0.16	0.04	0.00	0.00
0900	0.04	0.00	0.04	0.00	0.08
0830	0.04	0.04	0.00	0.00	0.00
0800	0.04	0.04	0.04	0.00	0.04
0730	0.04	0.00	0.00	0.00	0.00
0700	0.00	0.08	0.04	0.00	0.04
0630	0.04	0.00	0.04	0.00	0.04
0600	0.08	0.04	0.04	0.00	0.00
0530	0.12	0.04	0.31	0.20	0.04
0500	0.20	0.43	0.12	0.39	0.59
0430	0.71	0.87	0.28	0.31	0.59
0400	0.31	0.04	0.12	0.00	0.04
0330	0.00	0.00	0.00	0.00	0.00
0300	0.00	0.00	0.00	0.00	0.00
0230	0.00	0.04	0.00	0.00	0.00
0200	0.00	0.00	0.00	0.00	0.00
0130	0.00	0.00	0.04	0.00	0.00
0100	0.04	0.00	0.12	0.00	0.00
0030	0.00	0.00	0.20	0.00	0.00
7/23/92					
2400	0.08	0.00	0.00	0.00	0.00
2330	0.00	0.00	0.00	0.00	0.00
2300	0.00	0.00	0.00	0.00	0.00
2230	0.00	0.00	0.00	0.00	0.00
2200	0.00	0.00	0.00	0.00	0.00
2130	0.00	0.00	0.00	0.00	0.00
2100	0.00	0.00	0.00	0.00	0.00
2030	0.00	0.00	0.00	0.00	0.00
2000	0.00	0.00	0.00	0.00	0.00
1930	0.00	0.00	0.00	0.00	0.00
1900	0.00	0.00	0.00	0.00	0.00
1830	0.00	0.00	0.00	0.00	0.00
1800	0.00	0.00	0.00	0.00	0.00
1730	0.00	0.00	0.00	0.00	0.00
TOTALS:	1.93	1.85	1.50	0.91	1.57
Tr(yrs)	6	10	3		4

Dreamy Draw 11 hrs

Cave Creek @ Cactus 8 hrs

ACDC @ 43rd Ave. 10 hrs

ACDC @ 67th Ave. 1.5 hrs

Greenway @ 32nd Ave. 7 hrs

Maricopa County ALERT System

Group Name: CCS6: Upper Cave Creek | Date: 7/28/92 | Time: 1055

Sensor #	6620	6410	2510	6430	6440	6450
StatType	dif	dif	dif	dif	dif	dif
DataType	precip	precip	precip	precip	precip	precip
Units	in	in	in	in	in	in
7/24/92						
1600	0.00	0.00	0.00	0.00	0.00	0.00
1530	0.00	0.00	0.00	0.00	0.00	0.00
1500	0.00	0.00	0.00	0.00	0.00	0.00
1430	0.00	0.00	0.04	0.00	0.00	0.00
1400	0.00	0.00	0.00	0.00	0.00	0.00
1330	0.00	0.00	0.00	0.00	0.00	0.00
1300	0.00	0.00	0.00	0.00	0.00	0.00
1230	0.00	0.00	0.00	0.00	0.00	0.00
1200	0.00	0.00	0.00	0.00	0.00	0.00
1130	0.00	0.00	0.00	0.00	0.00	0.00
1100	0.00	0.00	0.00	0.00	0.00	0.04
1030	0.04	0.04	0.00	0.00	0.00	0.00
1000	0.08	0.00	0.00	0.00	0.04	0.00
0930	0.00	0.00	0.00	0.00	0.00	0.08
0900	0.04	0.00	0.00	0.00	0.04	0.04
0830	0.00	0.00	0.00	0.04	0.12	0.12
0800	0.00	0.00	0.00	0.00	0.12	0.16
0730	0.00	0.12	0.12	0.04	0.08	0.04
0700	0.04	0.04	0.12	0.08	0.00	0.00
0630	0.04	0.04	0.00	0.04	0.00	0.00
0600	0.00	0.00	0.04	0.00	0.00	0.00
0530	0.08	0.00	0.00	0.00	0.00	0.00
0500	0.00	0.00	0.00	0.00	0.00	0.00
0430	0.00	0.00	0.00	0.00	0.04	0.00
0400	0.00	0.08	0.00	0.04	0.00	0.00
0330	0.08	0.00	0.00	0.00	0.00	0.00
0300	0.16	0.00	0.00	0.00	0.00	0.00
0230	0.00	0.00	0.00	0.00	0.00	0.04
0200	0.00	0.00	0.00	0.00	0.00	0.00
0130	0.00	0.04	0.00	0.00	0.04	0.04
0100	0.00	0.00	0.00	0.12	0.04	0.20
0030	0.00	0.00	0.04	0.00	0.12	0.00
7/23/92						
2400	0.00	0.24	0.00	0.00	0.00	0.00
2330	0.00	0.00	0.08	0.24	0.00	0.00
2300	0.00	0.00	0.16	0.00	0.00	0.00
2230	0.00	0.00	0.00	0.00	0.00	0.00
2200	0.00	0.00	0.00	0.00	0.00	0.00
2130	0.00	0.00	0.00	0.00	0.00	0.00
2100	0.00	0.00	0.00	0.00	0.00	0.00
2030	0.00	0.00	0.00	0.00	0.00	0.00
2000	0.00	0.00	0.00	0.00	0.00	0.00
1930	0.00	0.00	0.00	0.00	0.00	0.00
1900	0.00	0.00	0.00	0.00	0.00	0.00
1830	0.00	0.00	0.00	0.00	0.00	0.00
1800	0.00	0.00	0.00	0.00	0.00	0.00
1730	0.00	0.00	0.00	0.00	0.00	0.00
TOTALS:	0.55	0.59	0.59	0.59	0.63	0.75

Cave Buttes Dam 8 hrs.

Cave Creek @ Cave Creek 11 hrs.

Grapevine Wash ≈ 9 hrs.

Carefree Ranch 9 1/2 hrs

Humboldt Mtn. 9.5 hrs

Seven Springs 10 hrs

Maricopa County ALERT System

Group Name Date Time

GQC1: South Mtn. 7/28/92 1056

Sensor #	6500	6510	6520	6530	6540	6550
StatType	dif	dif	dif	dif	dif	dif
DataType	precip	precip	precip	precip	precip	precip
Units	in	in	in	in	in	in
7/24/92						
1600	0.00	0.00	0.00	0.00	0.00	0.00
1530	0.00	0.00	0.00	0.00	0.00	0.00
1500	0.00	0.00	0.00	0.00	0.00	0.00
1430	0.00	0.00	0.00	0.00	0.00	0.00
1400	0.00	0.00	0.00	0.00	0.00	0.00
1330	0.00	0.00	0.00	0.00	0.00	0.00
1300	0.00	0.00	0.00	0.00	0.00	0.00
1230	0.00	0.00	0.00	0.00	0.00	0.00
1200	0.00	0.00	0.00	0.00	0.00	0.00
1130	0.00	0.00	0.00	0.00	0.00	0.00
1100	0.00	0.00	0.00	0.00	0.00	0.00
1030	0.04	0.04	0.00	0.00	0.00	0.04
1000	0.04	0.04	0.04	0.00	0.00	0.16
0930	0.00	0.04	0.08	0.00	0.04	0.16
0900	0.04	0.00	0.00	0.00	0.00	0.00
0830	0.04	0.00	0.04	0.04	0.08	0.00
0800	0.08	0.00	0.00	0.00	0.00	0.04
0730	0.04	0.04	0.08	0.00	0.00	0.00
0700	0.08	0.08	0.08	0.00	0.04	0.24
0630	0.08	0.16	0.12	0.00	0.08	0.00
0600	0.08	0.08	0.08	0.00	0.12	0.00
0530	0.04	0.00	0.08	0.00	0.04	0.08
0500	0.08	0.04	0.12	0.00	0.12	0.08
0430	0.00	0.04	0.20	0.00	0.16	0.04
0400	0.20	0.08	0.43	0.00	0.24	0.00
0330	0.00	0.00	0.08	0.04	0.28	0.00
0300	0.00	0.00	0.00	0.00	0.04	0.00
0230	0.00	0.00	0.00	0.00	0.00	0.00
0200	0.04	0.00	0.00	0.00	0.00	0.00
0130	0.00	0.00	0.12	0.00	0.00	0.00
0100	0.00	0.00	0.00	0.00	0.00	0.00
0030	0.00	0.00	0.00	0.00	0.00	0.00
7/23/92						
2400	0.00	0.00	0.00	0.00	0.00	0.00
2330	0.00	0.00	0.00	0.00	0.00	0.00
2300	0.00	0.00	0.00	0.00	0.00	0.00
2230	0.00	0.00	0.00	0.00	0.00	0.00
2200	0.00	0.00	0.00	0.00	0.00	0.00
2130	0.00	0.00	0.00	0.00	0.00	0.00
2100	0.00	0.00	0.00	0.00	0.00	0.00
2030	0.00	0.00	0.00	0.00	0.00	0.00
2000	0.00	0.00	0.00	0.00	0.00	0.00
1930	0.00	0.00	0.00	0.00	0.00	0.00
1900	0.00	0.00	0.00	0.00	0.00	0.00
1830	0.00	0.00	0.00	0.00	0.00	0.00
1800	0.00	0.00	0.00	0.00	0.00	0.00
1730	0.00	0.00	0.00	0.00	0.00	0.00
TOTALS:	0.87	0.63	1.54	0.08?	1.22	0.83

Guadalupe FRS 9 hrs.

South Mtn. Park 7 hrs

Carriage Lane Park 9 hrs

Pima Wash

Mesa Tower 7 hrs

South Mountain West 6.5 hrs

Maricopa County ALERT System

Group Name: GQC2: EMF Date: 7/28/92 Time: 1057

Sensor #	6565	5650	5660	6610	6625	5625	5635
StatType	dif	dif	dif	dif	dif	dif	dif
DataType	precip	precip	precip	precip	precip	precip	precip
Units	in	in	in	in	in	in	in
7/24/92							
1600	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1530	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1500	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1430	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1400	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1330	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1300	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1230	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1130	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1100	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1030	0.00	0.00	0.00	0.00	0.00	0.04	0.04
1000	0.04	0.00	0.00	0.04	0.00	0.00	0.04
0930	0.04	0.00	0.08	0.00	0.00	0.04	0.00
0900	0.00	0.00	0.20	0.04	0.08	0.04	0.04
0830	0.00	0.04	0.04	0.00	0.12	0.12	0.12
0800	0.00	0.04	0.12	0.12	0.08	0.08	0.12
0730	0.00	0.04	0.00	0.35	0.16	0.12	0.04
0700	0.00	0.20	0.12	0.39	0.04	0.04	0.04
0630	0.12	0.31	0.04	0.04	0.04	0.04	0.08
0600	0.16	0.04	0.20	0.39	0.08	0.08	0.16
0530	0.04	0.04	0.16	0.04	0.00	0.04	0.04
0500	0.12	0.00	0.04	0.08	0.00	0.04	0.04
0430	0.00	0.04	0.12	0.35	0.00	0.00	0.00
0400	0.00	0.00	0.08	0.00	0.31	0.08	0.04
0330	0.00	0.00	0.35	0.04	0.04	0.00	0.00
0300	0.00	0.08	0.28	0.16	0.00	0.04	0.00
0230	0.00	0.00	0.47	0.00	0.08	0.00	0.00
0200	0.20	0.08	0.04	0.00	0.00	0.00	0.00
0130	0.16	0.08	0.00	0.00	0.00	0.00	0.00
0100	0.35	0.08	0.00	0.00	0.00	0.00	0.00
0030	0.00	0.04					
7/23/92							
2400	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2330	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2300	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2230	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2130	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2100	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2030	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1900	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1830	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1800	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1730	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTALS:	1.22	1.10	2.32	2.05	1.02	0.79	0.79

EMF @ Broadway Rd. 9.5 hrs

EMF @ Queencreek Rd. 8.5 hrs

EMF @ Az. Ave. 8 hrs

Queen Creek Rd. 7.5 hrs

Signal Butte FRS 7 hrs

Usery Mtns. 8 hrs.

Thunder Mtn. 7 hrs

Tr (urs)

15 8

Maricopa County ALERT System

Group Name: GQC3: E. Valley Structures

Date: 7/28/92 Time: 1057

Sensor #	6670	5610	5700	6715	5600	5605
StatType	dif	dif	dif	dif	dif	dif
DataType	precip	precip	precip	precip	precip	precip
Units	in	in	in	in	in	in
7/24/92						
1600	0.00	0.00	0.00	0.00	0.00	0.00
1530	0.00	0.00	0.00	0.00	0.00	0.00
1500	0.00	0.00	0.00	0.00	0.00	0.00
1430	0.00	0.00	0.00	0.00	0.00	0.04
1400	0.00	0.00	0.00	0.00	0.00	0.00
1330	0.00	0.00	0.00	0.00	0.00	0.00
1300	0.00	0.08	0.00	0.00	0.00	0.00
1230	0.00	0.00	0.00	0.00	0.00	0.00
1200	0.04	0.00	0.00	0.00	0.00	0.00
1130	0.00	0.00	0.00	0.04	0.00	0.00
1100	0.00	0.00	0.00	0.00	0.04	0.00
1030	0.00	0.00	0.00	0.00	0.00	0.00
1000	0.00	0.00	0.00	0.00	0.00	0.00
0930	0.00	0.00	0.04	0.00	0.12	0.08
0900	0.04	0.04	0.04	0.12	0.04	0.08
0830	0.04	0.16	0.12	0.20	0.08	0.08
0800	0.12	0.00	0.16	0.16	0.12	0.12
0730	0.12	0.08	0.20	0.16	0.08	0.08
0700	0.08	0.12	0.16	0.08	0.04	0.04
0630	0.04	0.12	0.24	0.08	0.00	0.00
0600	0.04	0.12	0.16	0.00	0.00	0.04
0530	0.12	0.00	0.04	0.00	0.00	0.00
0500	0.00	0.00	0.04	0.00	0.00	0.00
0430	0.00	0.00	0.04	0.00	0.00	0.04
0400	0.04	0.00	0.08	0.00	0.12	0.51
0330	0.08	0.12	0.00	0.00	0.04	0.00
0300	0.12	0.35	0.00	0.00	0.00	0.00
0230	0.00	0.31	0.00	0.00	0.00	0.00
0200	0.00	0.00	0.00	0.00	0.00	0.00
0130	0.00	0.00	0.00	0.00	0.00	0.00
0100	0.00	0.00	0.00	0.00	0.00	0.00
0030	0.00	0.00	0.00			
7/23/92						
2400	0.00	0.00	0.00	0.00	0.00	0.00
2330	0.00	0.00	0.00	0.00	0.00	0.00
2300	0.00	0.00	0.04	0.00	0.00	0.00
2230	0.00	0.00	0.00	0.00	0.00	0.00
2200	0.00	0.00	0.00	0.00	0.00	0.00
2130	0.00	0.00	0.00	0.00	0.00	0.00
2100	0.00	0.00	0.00	0.00	0.00	0.00
2030	0.00	0.00	0.00	0.00	0.00	0.00
2000	0.00	0.00	0.00	0.00	0.00	0.00
1930	0.00	0.00	0.00	0.00	0.00	0.00
1900	0.00	0.00	0.00	0.00	0.00	0.00
1830	0.00	0.00	0.00	0.00	0.00	0.00
1800	0.00	0.00	0.00	0.00	0.00	0.00
1730	0.00	0.00	0.00	0.00	0.00	0.00
TOTALS:	0.87	1.50	1.34	0.83	0.67	1.10

Apache FRS 13 hrs

Vineyard FRS 11 hrs

Rittenhouse FRS 11 hrs

Magma FRS 5½ hrs

Rittenhouse 1 8 hrs

Kings Ranch 11.5 hrs

Maricopa County ALERT System

Group Name: Waterman Wash Date: 7/28/92 Time: 1058

Sensor #	6800	1630	6840	2820	6880	6900	6850
StatType	dif	dif	dif	dif	dif	dif	dif
DataType	precip	precip	precip	precip	precip	precip	precip
Units	in	in	in	in	in	in	in
7/24/92							
1600	0.00	0.00	0.00	0.00	0.00	0.00	
1530	0.00	0.00	0.00	0.00	0.00	0.00	
1500	0.00	0.00	0.00	0.00	0.00	0.00	
1430	0.00	0.00	0.00	0.00	0.00	0.00	
1400	0.00	0.00	0.00	0.00	0.00	0.00	
1330	0.00	0.00	0.00	0.00	0.00	0.00	
1300	0.00	0.00	0.00	0.00	0.00	0.00	
1230	0.00	0.00	0.00	0.00	0.00	0.00	
1200	0.00	0.00	0.00	0.00	0.00	0.00	
1130	0.00	0.00	0.00	0.00	0.00	0.00	
1100	0.00	0.00	0.00	0.00	0.00	0.00	
1030	0.00	0.00	0.00	0.00	0.00	0.00	
1000	0.00	0.00	0.00	0.00	0.00	0.00	
0930	0.00	0.04	0.00	0.00	0.00	0.00	
0900	0.00	0.00	0.04	0.39	0.00	0.00	
0830	0.00	0.00	0.00	0.51	0.00	0.00	
0800	0.00	0.00	0.00	0.75	0.00	0.00	
0730	0.00	0.00	0.00	0.12	0.00	0.00	
0700	0.00	0.00	0.00	0.00	0.00	0.00	
0630	0.00	0.00	0.00	0.00	0.00	0.00	
0600	0.00	0.00	0.00	0.00	0.00	0.00	
0530	0.00	0.00	0.00	0.00	0.00	0.00	
0500	0.00	0.00	0.00	0.12	0.00	0.00	
0430	0.00	0.00	0.00	0.00	0.00	0.00	
0400	0.04	0.00	0.00	0.04	0.00	0.00	
0330	0.00	0.00	0.00	0.00	0.00	0.00	
0300	0.00	0.00	0.00	0.00	0.00	0.00	
0230	0.00	0.00	0.00	0.00	0.00	0.00	
0200	0.00	0.00	0.00	0.00	0.00	0.00	
0130	0.00	0.00	0.00	0.00	0.00	0.00	
0100	0.00	0.00	0.00	0.00	0.00	0.00	
0030	0.00	0.00	0.00	0.00	0.00	0.00	
7/23/92							
2400	0.00	0.00	0.00	0.00	0.00	0.00	
2330	0.00	0.00	0.00	0.00	0.00	0.00	
2300	0.00	0.00	0.00	0.00	0.00	0.00	
2230	0.00	0.00	0.00	0.00	0.00	0.00	
2200	0.00	0.00	0.00	0.00	0.00	0.00	
2130	0.00	0.00	0.00	0.00	0.00	0.00	
2100	0.00	0.00	0.00	0.00	0.00	0.00	
2030	0.04	0.00	0.00	0.00	0.00	0.00	
2000	0.00	0.00	0.00	0.00	0.00	0.00	
1930	0.00	0.00	0.00	0.04	0.00	0.00	
1900	0.00	0.00	0.00	0.00	0.00	0.00	
1830	0.00	0.00	0.00	0.00	0.00	0.00	
1800	0.00	0.00	0.00	0.00	0.00	0.00	
1730	0.00	0.00	0.00	0.00	0.00	0.00	
TOTALS:	0.08	0.04	0.04	1.97	0.00	0.00	

Gila @ St. 85 8 hrs

White Tanks 4 .5 hr

Estrella Park .5 hr

Holly Acres 14.5 hr

Waterman Wash

Upper Waterman

Gila @ Estrella Pkwy. Not Yet Installed

Maricopa County ALERT System

Group Name Date Time

Sauceda Wash 7/28/92 1059

Sensor #	6920	6940	6960	6980
StatType	dif	dif	dif	dif
DataType	precip	precip	precip	precip
Units	in	in	in	in
7/24/92				
1600	0.00	0.00	0.00	0.00
1530	0.00	0.00	0.00	0.00
1500	0.00	0.00	0.00	0.00
1430	0.00	0.08	0.00	0.00
1400	0.00	0.08	0.00	0.00
1330	0.00	0.00	0.00	0.00
1300	0.00	0.04	0.00	0.00
1230	0.00	0.12	0.00	0.00
1200	0.00	0.00	0.00	0.00
1130	0.00	0.00	0.00	0.00
1100	0.00	0.00	0.00	0.04
1030	0.00	0.00	0.00	0.04
1000	0.00	0.00	0.00	0.00
0930	0.00	0.00	0.00	0.00
0900	0.00	0.00	0.00	0.00
0830	0.00	0.00	0.00	0.00
0800	0.00	0.00	0.00	0.00
0730	0.00	0.00	0.00	0.00
0700	0.00	0.00	0.00	0.00
0630	0.00	0.00	0.00	0.00
0600	0.00	0.04	0.00	0.00
0530	0.00	0.00	0.00	0.00
0500	0.00	0.00	0.00	0.00
0430	0.00	0.00	0.00	0.00
0400	0.00	0.00	0.00	0.00
0330	0.00	0.00	0.00	0.00
0300	0.00	0.00	0.00	0.00
0230	0.00	0.00	0.00	0.00
0200	0.00	0.00	0.00	0.00
0130	0.00	0.00	0.00	0.00
0100	0.00	0.00	0.00	0.00
0030	0.00	0.00	0.00	0.04
7/23/92				
2400	0.00	0.00	0.00	0.00
2330	0.00	0.00	0.00	0.00
2300	0.00	0.00	0.00	0.00
2230	0.00	0.00	0.00	0.00
2200	0.00	0.00	0.00	0.00
2130	0.00	0.00	0.00	0.00
2100	0.00	0.00	0.00	0.12
2030	0.00	0.00	0.00	0.04
2000	0.00	0.00	0.00	0.16
1930	0.00	0.00	0.00	0.00
1900	0.00	0.00	0.00	0.00
1830	0.00	0.00	0.00	0.00
1800	0.00	0.00	0.00	0.00
1730	0.00	0.00	0.00	0.00
TOTALS:	0.00	0.35	0.00	0.43

Sauceda Wash

Sand Tanks Wash 9 hrs

Bender Wash

Vekol Wash 15.5 hrs.

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

PROJECT Storm Report July 23-24, 1992 PAGE ____ OF ____

DETAIL Appendix C COMPUTED ____ DATE ____

CHECKED BY ____ DATE ____

FCD RAINFALL OBSERVER TOTALS

Amount (in)	Closest Major Intersection
1.03	40TH ST. / Baseline
2.11	91ST Ave / Mc Dowell
1.58	75TH Ave. / Camelback
1.80	Elliot / Alma School
1.96	Cactus / 83RD Ave
6.00	27TH Ave. / Camelback.
0.79	99TH Ave / Camelback
2.84	24TH ST. / Mc Dowell
3.80	7TH Ave / Mc Dowell
2.82	7TH St / Mc Dowell
2.63	Thomas / 32nd ST.
3.34	7TH Ave. / Glendale
2.92	24TH ST. / Glendale
3.50	19TH Ave / Encanto
2.38	27TH Ave / Northern
4.20	47TH Ave / Campbell
2.85	47TH Ave / Orangewood
3.10	43RD Ave / Glendale
1.45	35TH Ave / Broadway
2.04	College / Southern.
1.95	51ST Ave / Dunlap
1.89	Superstition / Priest
1.60	Pima / Indian Bend
2.05	Pima / Jackrabbit
2.65	Pima / Oak ST.
2.27	47TH Ave / Mtn. View
2.25	43RD Ave / Peoria
2.20	ACDC / 35TH Ave
1.63	35TH Ave / Greenway
1.70	51ST Ave / Bell Rd
1.04	Cholla / 63RD Ave.

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

PROJECT _____ PAGE 2 OF _____

DETAIL _____ COMPUTED _____ DATE _____

_____ CHECKED BY _____ DATE _____

AMOUNT (in)	Closest Major Intersection
1.91	Bell Rd. / 135 TH Ave.
1.25	CAVE CREEK / Cactus
1.50	32nd ST. / Shea Blvd.
1.28	56TH ST. / Sweetwater
2.75	Cactus / 111TH Ave
2.62	Peoria / 111TH Ave
1.07	Reems Rd / Greenway
0.55	S. Mtn. Park HQ
0.93	16TH ST. / Dobbins
1.03	40TH ST / Warner
1.83	University / Stapely
0.58	Indian School / 107TH Ave.
3.37	67TH Ave. / Indian School