

Five-Year Capital Improvement Program



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2801 W. Durango
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for Fiscal Years 2001/2002 to 2005/2006



Construction of Central Arizona Project (C.A.P.) Basins in Mesa

Construction Manager: Noel Nunley
Resident Engineer: Shewa Shivaswamy, P.E.
Partners: City of Mesa
Designer: Dibble & Associates
Contractor: Basins 1-4 CS&W, Inc.
Basin 5 Valley Rain Construction

**Construction
completed FY
00/01**

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developed by Kelly Presson

Alphabetical Listing of CIP Projects

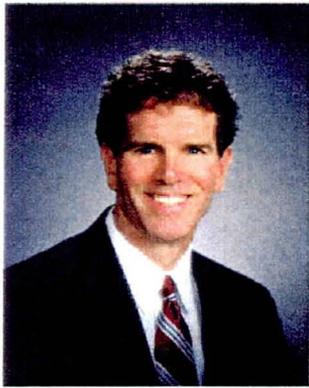
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24 th Avenue/Camelback Basin	625	85
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New River Bank (Paradise Shores)	400	57
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Northern Avenue Channel & Basin	470	74
Northern/Orangewood Storm Drain	450	66

Alphabetical Listing of CIP Projects

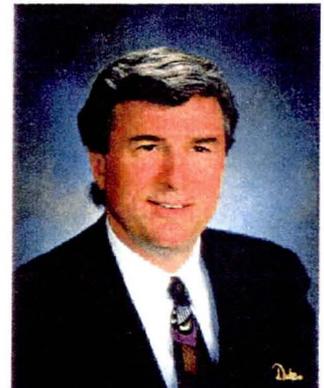
Project Name	Act #	Page
Osborn Road Storm Drain	027	33
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Board of Directors

The Board of Supervisors for Maricopa County also serves as the Board of Directors for the Flood Control District of Maricopa County. There is one elected official from each of the five County districts. The Board of Directors makes the final decision regarding projects to be included in the Capital Improvement Program.



*Fulton Brock
District 1*



*Don Stapley
District 2*



*Andrew Kunasek
District 3*



*Jan Brewer
District 4*



*Mary Rose-Wilcox
District 5*

Flood Control Advisory Board



*Scott Ward
District 1*



*Mike Saager
District 2*



*Hemant Patel, P.E.
District 3*



*Shirley Long
District 4*



*Melvin Martin
District 5*

The Flood Control Advisory Board (FCAB) acts in an advisory role to the Board of Directors on flood control, floodplain management, drainage, and related matters. The FCAB reviews planning, operations, and maintenance of flood control facilities, and recommends an annual budget, which includes a Five-Year Capital Improvement Program (CIP) to the Board of Directors. The FCAB, in close coordination with the District staff, reviews program priorities and new policies, and provides their recommendations to the Board of Directors. The FCAB members also serve the District as members of the Floodplain Review Board and the Drainage Review Board. The Advisory Board consists of seven members, five are appointed by the Board of Supervisors to five-year terms. At least one member shall be a resident of the City of Phoenix. In addition to those five members, the Salt River Project and the City of Phoenix appoint representatives who are ex-officio members of the FCAB with all rights and privileges granted to other members. Regular FCAB meetings are held on the 4th Wednesday of each month, and/or the first Wednesday in December. These meetings begin at 2:00pm in the Flood Control District Administrative Building. Please contact the Flood Control District at (602) 506-1501 to confirm that a meeting is scheduled to occur.



*Paul Cherrington, P.E.
Salt River Project
Ex Officio Member*

If you have any questions or need further information regarding the Flood Control Advisory Board, please E-mail Kathy Smith, Executive Secretary (kks@mail.maricopa.gov) or call (602)506-4708.



*Thomas Callow, P.E.
City of Phoenix
Ex Officio Member*

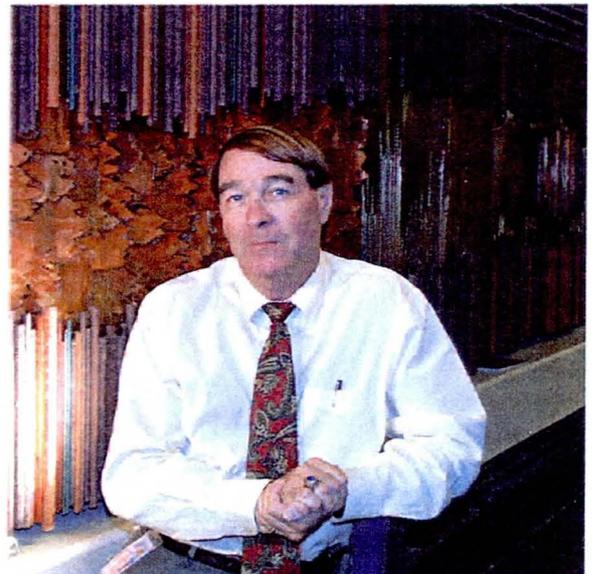
Principal Staff



Mike S. Ellegood, P.E.
Chief Engineer / General Manager

Mr. Ellegood is a Registered Professional Engineer in Arizona, California, and New Jersey. He earned a Bachelor of Science degree in Civil Engineering from Carnegie Mellon and a Masters of Science in Civil Engineering from the Polytechnic Institute of New York. He served as commissioned officer in the U.S. Army Corp of Engineers and is a Vietnam Veteran. Mr. Ellegood is a member of the American Society of Civil Engineers, the American Public Works Association, and the Society of American Military Engineers.

Mr. Johnson is a graduate of the University of Kentucky with a BS degree in Civil Engineering and a graduate of ASU with an MSE degree in Civil Engineering. He is currently the Deputy Chief Engineer of the Flood Control District of Maricopa County where he is responsible for the planning, design, and construction of all the District's Capital Improvement projects. In addition, he is responsible for the District's Dam Safety Program. Mr. Johnson was commissioned in the U.S. Army upon graduation from Kentucky and served 30 years in Combat and Construction Engineers within the Army Corps of Engineers and the Arizona National Guard, four of which were spent overseas. Mr. Johnson is the President of the Phoenix Post Society of American Military Engineers and is a member of the American Public Works Association.



Thomas D. Johnson, P.E., R.L.S.
Deputy Chief Engineer

Evaluation Committee

The Project Evaluation Committee, comprised of senior District managers, make CIP recommendations to the Chief Engineer and General Manager and the FCAB Program and Budget Committee. Their recommendations are developed using a system that allocates points to individual projects based on specific criteria. For more information, see section 2.4 Prioritization Criteria on Page 14.



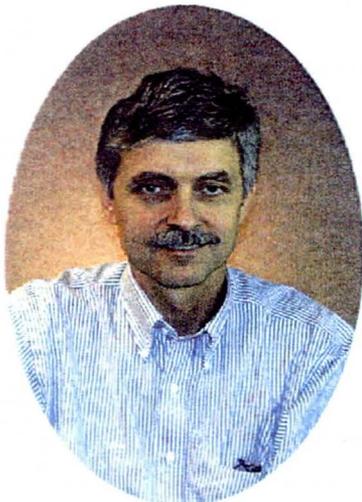
*George Lindop, Manager
Inspections Branch*



*Amir Motamedi, Manager
Hydrology & Hydraulics Branch*



*Dick Perreault, Manager
CIP/Policy Branch*



*Ed Raleigh, Manager
Engineering Division*



*Jim Schwartzmann, Manager
Land Management Division*

Flood Control District of Maricopa County

Mission

To reduce the risks of flood loss; minimize the impacts of floods on human safety, health, and welfare; and restore and preserve the natural and beneficial values served by floodplains.

Vision

To be recognized throughout North America as an agency that is unsurpassed in its dedication to accomplishing its missions, and being responsive to its clients in an efficient, effective, and fiscally responsible manner. We will be known as stewards of the environment and the public trust, and for our concern about the effect of our actions for not only the current, but future generations.

Pledge

We pledge to show personal integrity and professionalism in all our actions, and to display continuous improvement, innovative thinking, and technical excellence in all our work.

Introduction

1.1 FCD Description and General Context

The Flood Control District was formed on August 3, 1959, following passage of State legislation empowering counties to set up special districts to provide flood protection. Flood control districts are political subdivisions of the State and have the same powers, privileges and immunities generally given to incorporated cities and towns. The District is governed by a Board of Directors who is also the elected Board of Supervisors for Maricopa County. This Board, in turn, is advised by a seven-member Flood Control Advisory Board. The activities of the District are funded primarily by a flood control tax levy assessed on real property within Maricopa County and a variety of cost-sharing arrangements with federal, state, county and local governments. The tax levy rate for the previous fiscal year (2000/2001) was \$0.2534 per \$100 of assessed value. The tax levy rate for Fiscal Year 2001/2002 has been set at \$0.2319 per \$100 of assessed value.

The District is organized into seven functional areas arranged in the following divisions: Administration, Operations & Maintenance, Engineering, Regulatory, Land Management, Information Technology, and Planning & Project Management. The Capital Improvement Program (CIP) serves as the cornerstone of the District's efforts to resolve flooding problems in Maricopa County. This booklet provides information on the anticipated expenditures for flood control projects and programs for the next five years, from July 2001 through June 2006.

1.2 What is the Capital Improvement Program?

The Capital Improvement Program (CIP) for the Flood Control District is a Five-Year Plan that identifies spending for anticipated capital projects. The Plan addresses both modification and replacement of existing infrastructure as well as the development of new facilities to accommodate future growth. This Plan also enables the District and its stakeholders to identify needed capital projects and coordinate financing and construction timing. To increase effectiveness, the CIP consists of two crucial segments; an administrative process to identify and prioritize future capital projects (the Prioritization Procedure) and the fiscal plan to provide for the funding of those projects.

The CIP links the planning and budget activities of the District. It can support not only past policy decisions by establishing priorities between existing and competing projects, but can also measure and evaluate the merits of new proposals. Typically, a CIP describes each capital project proposed for development over the forthcoming five-year period by listing the year that it is to be started, the cost per year, and, when applicable, the proposed method of cost-sharing. Based on these details about each project, the District has developed annual cost schedules for capital expenditures. Thus, the capital improvement program presents

both the cost and funding for all the project requirements for flood control purposes as tempered by current and future financial capability.

1.3 What is the Difference between the Capital Budget and the CIP?

The capital budget represents the first year of the capital improvement plan. The primary difference between the capital budget and the CIP is that the capital budget gives the District staff authority to spend funds and proceed with specific projects. The CIP includes both first-year projects as well as future projects for which financing has not been secured or authorized. The "out years" of the plan are projected, but not authorized and hence are subject to change. Every item in the capital budget must be approved by the Board of Directors and is closely reviewed by the Maricopa County Office of Management and Budget to ensure that it meets with the fiscal policies of the County. As a result, the capital budget must be prepared with great care owing to the need for accuracy as well as consistency with County revenue and expenditure forecasts for the upcoming year(s). The Five-Year CIP is developed and managed by the Planning and Project Management Division for the Chief Engineer and General Manager, the Flood Control Advisory Board, and the Board of Directors. Because it is not formally tied to the County's budgeting process, it can be altered to reflect future requirements and expectations associated with capital projects more easily than the one-year capital budget.

1.4 Why Undertake CIP Planning?

The CIP process is dynamic and is continually reviewed and adjusted to account for revised forecasts for major expenditures in the future and adjusted project schedules. The CIP's five-year perspective allows projects to be planned and programmed ahead of actual authorization. But the yearly repetition of the Prioritization Procedure and the CIP process ensures that each project undergoes several stages of review before it is finally approved and funded. This approach to capital planning is particularly meaningful in the rapid growth environment of Maricopa County. It ensures that new facilities will be evaluated within the context of County and municipal land use plans and weighed against safety and maintenance requirements for existing structures.

Among its many advantages, an effective capital improvement program:

- Focuses attention on goals, needs, and objectives. It ensures that the District's capital projects are consistent with changing community objectives, anticipated growth, and financial capabilities.
- Requires the scheduling of major investments and reduces the possibility of costly mistakes. It provides specific project information that assists the Flood Control Advisory Board and the Board of Directors in making sound budget decisions.
- Facilitates more efficient administration and management. Focused review of necessary capital improvements can reduce scheduling problems, conflicting and overlapping projects, and overemphasis on any single function or geographic area.

- Promotes cooperation with other jurisdictions. The capital planning process gives all jurisdictions the opportunity to coordinate location, timing, and financing of related projects.
- Allows leveraging of FCD funds with other funding sources.
- Maintains a sound and stable financial program. Dramatic changes in the County's tax structure can be avoided when capital projects are planned and implemented over several years.

Flood Control Planning & the CIP

2.1 Overview

The District maintains the Five-Year Capital Improvement Program (CIP) as called for in state statutes and directed by the District's General Policies. The Five-Year CIP includes all costs associated with the implementation of projects or elements of projects that have been proposed by federal, state, District or local programs. The selected projects are reviewed through the District's Prioritization Procedure that was approved by the Board of Directors in 1993 and put into effect for the Fiscal Year 1994/1995. These procedures were amended in 1995 and 1997, and 2001. The prioritization process solicits project requests from the District's client communities and other agencies. The process allows comparisons to be made between competing projects to ensure that CIP expenditures are allocated toward the greatest need.

Following the allocation of funds necessary for maintenance and other mandatory programs, the District budgets its remaining revenues for capital improvement projects and the related planning programs. When possible, multi-purpose uses of flood control projects and property are promoted and accommodated. This is possible provided the use does not diminish the flood control projects' primary purposes. In addition, the project costs and the facility's maintenance requirements should not be significantly increased.

2.2 The Planning Process

The Planning Program promotes the District's mission of "...reducing flood risks for the people of Maricopa County..." by preparing comprehensive regional studies and analyses identifying locations and property at risk from potential flooding. Following an analysis of flooding problems, alternative solutions are developed to determine the most cost effective and publicly acceptable project. Recommended projects are then prioritized for inclusion in the District's CIP. The CIP allocates resources and provides a timetable for the implementation of individual projects. This process usually includes the project design, relocation of conflicting facilities, acquisition of property and construction phases.

The combined Planning Program and Capital Improvement Program account for approximately 75% of the total Flood Control District annual budget. During FY 2000/2001, the District, in cooperation with other agencies and municipalities, completed twelve major long-term flood control capital projects and continued or initiated capital operations on thirty other projects. At the outset of Fiscal year 2001/2002, ten CIP projects are in the construction stage, three are being designed, while eleven are in the planning and/or land acquisition stage. In addition, the District will initiate effort on seven new projects during the year by pursuing Board of Director Authorization and consummating Inter-Governmental Agreements with other agencies and municipalities. Activities in the Planning Program include: Area Drainage Master Studies (ADMSs); Watercourse Master Plans; the Comprehensive Flood Control Master Report; as well as, project pre-design studies; and the coordination of interagency cooperative projects and agreements. The District will continue to maintain to protect the close historical working relationship it presently enjoys with the other municipal, county, state and federal agencies involved in furthering the District's mission.

Information on flooding and flood-prone areas is generated through the Area Drainage Master Study (ADMS) Program. The ADMS program was conceived in 1983 to provide the District with a proactive and leadership role in developing uniform, comprehensive inventories and models of the features influencing rainfall-runoff in selected areas. There are forty-eight ADMS areas ranging from 15 to 580 square miles. Area Drainage Master Plans (ADMPs) are then undertaken for each of the ADMS areas. These plans utilize the information provided by ADMSs and recommend specific, project-oriented solutions for flooding problems. The ADMPs, along with requests from cities, towns and other agencies, are the primary sources of projects for the CIP.

The ADMS Program supports the planning effort by providing the physical characteristics and hydrology for a specific area. This Program utilizes a comprehensive watershed perspective, which is used to identify drainage and flooding problems reported by individual communities. Selected and approved alternatives to solve these problems are identified through the ADMPs and are implemented through the CIP. Watercourse Master Plans (WCMP) are similar to ADMPs, except that a WCMP has more of a focus on the management of a particular river, stream, creek or wash and its banks and nearby flood zones, while an ADMP focuses on flooding issues over a wider drainage area.

The proposed FY 2001/02 planning program will continue nine studies initiated during Fiscal Year 2000-01; eight (8) Master Plan studies (Spook Hill, White Tanks/Loop303, Laveen, Durango, North Peoria, Scottsdale Road, Granite Reef, and Carefree), and one (1) Watercourse Master Plan (Agua Fria). The proposed planning program for FY 2001/02 also includes seven Master Plan studies which will be initiated during the Fiscal Year; five (5) new Master Plan studies (Wittmann Update, Buckeye/Sun Valley, Skunk Creek, Sols Wash, and Aguila); and two (2) new Watercourse Master Plans (El Rio - Gila River from Agua Fria to MC85 and Hassayampa).

The proposed planning program also includes planning studies: (1) Existing Structures Multi-use and Aesthetic Evaluation Project for evaluation of existing structures completed prior to the Landscaping and Aesthetic Policy; (2) Candidate Assessment Reports to develop information for candidate projects to the District's Capital Improvement Program and (3) Updates of ADMS hydrology models within developing and/or changing watersheds.

2.3 *Prioritization Procedure*

The Prioritization Procedure, employed by the District, was initially implemented for the FY 1994/1995 budget cycle and has been used since that time. It serves as the mechanism for evaluating new projects for possible inclusion into the CIP. Potential CIP projects are identified either by local cities, towns and other agencies, or through other District programs. The potential projects are evaluated on an annual basis for inclusion in the latter years of the CIP.

An important aspect of the Prioritization Procedure is the District's cooperation with its client communities in defining the criteria for project reviews. Tables included in Appendix 1 show the specific criteria and weights used in identifying project priorities, as determined through workshops attended by participating agencies and approved by the FCAB. The most recent workshop was held in May 2001.

The primary benefits of the Prioritization Procedure have been its ability to:

- Reduce uncertainty by applying District-approved and community-reviewed criteria during the project review process;
- Improve fiscal efficiency by requiring concurrent review of all project proposals annually and timing this review with the District's budget cycle;
- Eliminate duplication and improve community commitment by focusing planning efforts on projects approved for pre-design/feasibility analysis; and,
- Provide a means for reconstructing or reprioritizing the budget and Five-Year CIP with a minimum of disruption to ongoing activities by using an objective rank ordering system.

The prioritization procedure is accomplished in two major steps. First, all newly proposed projects are evaluated according to predetermined and weighted criteria by a committee of senior District staff members. The selected projects are included in a District-funded and prioritized pre-design study program. Requesting agencies may complete prioritized pre-design studies using consultants or in-house resources, provided the information produced meets the minimum requirements of District-sponsored studies. The purpose of the pre-design study program is to develop more detailed information on potential CIP projects. This includes design and construction costs, land acquisition requirements, required permits, mitigation and multiple-use potential.

The second step includes the evaluation and prioritization of projects for inclusion in the District's Five-Year CIP. For projects requiring an Intergovernmental Agreement (IGA), the information developed in the pre-design study will serve as the basis for negotiations. When ADMPs are completed, a number of future pre-design studies and CIP project requests are identified. Input regarding the priorities for projects identified within these plans, will continue to be provided to local cities, towns and other agencies. When a CIP project has progressed to the stage where the engineering design, plans and construction specifications are being prepared, its place in the Five-Year CIP is generally maintained. The stability and timeliness of CIP project implementation are important to the timing of interrelated projects.

2.4 Prioritization Criteria

The Project Evaluation Committee that makes recommendations to the Chief Engineer and General Manager and the FCAB Program and Budget Committee develops their recommendations using a system that allocates points to individual projects based on specific criteria. These criteria include:

- Submitting Agency Priority
- Master Plan Element
- Hydrologic/Hydraulic Significance
- Level of Protection
- Area Protected
- Environmental Quality
- Area-Wide Benefits
- Total Project Cost
- Level of Partner(s) Participation
- Operation and Maintenance Costs
- Operation and Maintenance Responsibility

The prioritization criteria were developed with the goal of promoting a balanced approach to the evaluation of proposed projects. The District tries to identify and support flood control and regional drainage projects that not only provide long-term protection to individuals and property from flash floods and seasonal flooding, but that contribute to community development, protection of natural habitat, and maintenance of watercourse flow paths. The District also leverages its limited resources by entering into joint efforts with other agencies, municipalities or the private sector to fund flood control projects, and this is reflected in the prioritization criteria. Higher scores are given to projects that involve cost-sharing partnerships for the construction phase and/or that involve agreements by other agencies or municipalities to take responsibility for post-construction operations and maintenance.

Although the relative weighting given to each criterion (total points per category) and the points actually assigned to each criterion for a given project by an Evaluation Committee member is somewhat subjective in nature, the evaluation procedure provides a uniform

degree of objectivity to the process. The costs and benefits of the proposed projects are explicitly identified and documented. Proposed projects can be more easily compared once individual types of benefits and costs are separately quantified or otherwise evaluated. The inclusion of at least five senior staff representing different functional competencies on the Evaluation Committee further reduces the degree of subjectivity by ensuring that no one individual's personal biases excessively influence the evaluation process.

2.5 Integrating Projects into the Natural & Urban Environment

The District has made an additional commitment to ensuring that new flood control projects not only protect people and property from flooding threats, but also provide additional benefits. These benefits can include increased protection for natural habitat, new recreational facilities and open space, and aesthetically pleasing designs that contribute to the revitalization of urban areas. Although Maricopa County is located in a largely desert environment, much of the County is subdivided by canals, rivers, creeks and washes, and these linear attributes are a significant feature of the physical character of the area. Dams, retention basins, channels and outfalls can also be found throughout the County, and can have a major beneficial or negative impact on adjacent neighborhoods and natural areas depending on the design and management of these facilities.

The District is a partner in a number of efforts such as the **Marathon Trail** and the Phoenix Rio Salado Project, where flood control facilities are included as part of major urban redevelopment, environmental restoration and/or large scale recreational facility development. If resources are available, many existing flood control systems and facilities in established urban areas could be retrofitted or altered to allow for additional benefits or activities. Many District rights-of-way or facilities offer the potential to also provide bicycle/walking paths, habitat for native species, or attractions for local businesses, without threatening the underlying flood control role of these projects.

The **Phoenix Rio Salado Project** is a joint project among the Flood Control District, the City of Phoenix and the Corps of Engineers to restore the Salt River and provide improved conveyance capacity of the river within the reach of the project limits from 19th Avenue to I-10. The project will be designed and constructed in three phases, two low flow channel phases and a habitat restoration phase.

The Low Flow Channel Project Phase 1 was the first step in the construction of the Rio Salado-Phoenix Reach environmental restoration project. The Low Flow Channel Project Phase 2 construction will begin in September 2001 and be completed early in 2002. The habitat restoration phase of the project will follow completion of the low flow channel. A component of the low flow channel construction phases will be the removal of hundreds of tons of trash from the riverbed that had been randomly dumped in the riverbed since the 1920's. The objective of the project is to change the dry riverbed into a Sonoran greenbelt from 19th Ave. to I-10. "The terrible scar that the southern part of the Salt River has become will now

disappear and in its place will be a natural greenbelt that will enhance the central and southern areas of Phoenix” said County Supervisor Mary Rose Wilcox (D-Dist. 5).

Controlling flooding is a major component of the Phoenix Rio Salado Project, as this is one of the metropolitan area’s major riverways. The City of Phoenix plans to use this corridor as a focal point for economic development, parks, and trails. The Flood Control District, by charter, cannot build recreational facilities, but it can work with cities to engineer plans that accommodate their needs.

“This is part of the District’s move toward kinder and gentler flood control,” said Chief Engineer and General Manager Michael S. Ellegood, P.E. “There is no reason that our projects cannot have multiple uses. In Maricopa County, we receive so little rain that most of the time our rivers and washes are dry so they can provide recreational amenities and open space. If our city partners, in this case the City of Phoenix, want to take advantage of the opportunities our projects present, we are delighted, as are most county residents.” The low flow channel portion of the project will be constructed by the District at an estimated cost of \$16,500,000.

The **Laveen Area Conveyance Channel (LACC) Project** represents a cooperative effort among the Flood Control District (FCD), City of Phoenix (COP), Salt River Project (SRP), Maricopa County Department of Transportation (MCDOT) and local landowners, to develop, design and construct a project that will provide a multi-use regional flood control and linear park facility. As lead sponsoring agency, FCD is developing the design for the 5.8 mile long flood control channel and 16 acre detention basin. The Project will include a 200-foot wide corridor for a grassed channel and adjoining park area. The channel will convey the 100-year flood and include a low-flow channel, which will convey existing irrigation tailwater to the Salt River. The COP is developing agreements with the Project landowners, to acquire the land needed for the Project at no cost, and provide incentives such as open space credits and relief of retention requirements. The low flow channel will convey water that currently is conveyed in SRP’s tailwater ditch known as the Maricopa Drain. SRP will maintain the low flow channel upon Project completion. COP will maintain the flood control channel. MCDOT will provide funding to the Project, which will facilitate their planned upgrade of Baseline Road. FCD and COP are working together to incorporate low-cost aesthetic treatments of project features into the design. Construction of the basin is expected to begin in the fall of 2001, and channel construction is expected to begin in early 2002, with completion by early 2004.

The **Elliot Road Channel and Basins** are projects that are identified in the East Mesa Area Drainage Master Plan. The East Mesa ADMP identifies drainage problems and develops solutions for a storm water collection and basin system for eastern Maricopa County including portions of the City of Mesa, the Town of Gilbert, the Town of Queen Creek, and unincorporated Maricopa County. The Elliot Road Basins are located at the corner of Elliot Road and the Crismon Road alignment. They collect runoff from the Crismon Channel, which extends along Crismon Road north of Elliot Road and from the Elliot Road Channel extending along Elliot Road to the East. The basins attenuates peak flows to reduce the size and cost of required downstream improvements. The channel conveys discharge from the Elliot Road Basins, from

the Elliot Road Channel, Phase 2 (extending east along Elliot Road to a basin at Meridian Road) and from the Elliot Road Basins. The Elliot Road Channel, Phase 1A, extends west along Elliot Road, daylighting east of Ellsworth Road in natural washes. The future Phase 1B will extend from this point to the EMF. This area in East Mesa is developing quickly, increasing the need for flood control and street drainage.

Through cooperation with the General Motors Proving Ground, the project provides flood protection along the north boundary of the Proving Ground while removing an ongoing maintenance problem. General Motors' Facility Operations Staff have had increased maintenance of a drainage channel along their northern border for several years, due to sediment and vegetation buildup in the channel. The project relieves General Motors of this problem. In exchange, General Motors has donated the rights-of-way for the project adjacent to their Proving Ground, saving the taxpayer several hundred thousand dollars.

The detention basins will become joint use facilities, being improved and maintained as City of Mesa parks. City of Mesa Parks' staff have indicated a great need in the City for recreation fields for soccer and other youth sports. By designing and grading the basins in a manner that can accommodate recreation fields, both flood control and recreation needs in the community can be met. The design of the detention basins allows smaller storm flows to bypass the detention basins, keeping them dry as often as possible.

Financial Issues & the CIP

3.1 Balancing Future Revenues & Expenditures – Budgetary Challenges

The District operates on a "pay-as-you-go" basis. This means that the District's entire capital budget is funded from current revenues, and that no borrowing takes place to finance capital projects like dams, channels and levees. The major advantages of this are that the District carries no debt load, that County taxpayers do not have to pay for interest charges on District structures, and that there is no need to try to match future debt and interest repayments with future revenues. Since a majority of the District's revenues are spent on the CIP and long-term capital expenditures on flood control protection, taxpayers are in effect investing in the future of the County and their property and safety. This policy is quite different from that utilized by most government entities, which usually spend current revenues on operating expenses and debt repayment associated with past capital expenditures.

Most large government and private sector organizations that plan and construct very large projects over extended periods of time borrow funds to finance these large projects, and then pay for them over many years. Because these principal and interest costs can be distributed over many years, and the necessary funds are obtained from lenders at the beginning of projects, it is relatively easy for these organizations to plan their long-term capital budgets. The majority of the District's revenue is derived from a secondary tax

whose revenues can be difficult to predict because tax valuations based on property values and tax rates can fluctuate from year to year. The rate of growth in urban areas, and thus total tax revenues, can also have a major impact on total District revenues obtained in any given year. A strong economy, high levels of residential, commercial and industrial development, and rising property values will all lead to higher District revenues; conversely a poor economy and falling property values would lead to reduced tax revenue for the District, for a given tax rate.

Because the District's capital spending is affected by strong fluctuations in tax revenue, the CIP must be constantly reviewed and altered to reflect the most recent information on current revenues and expected revenues over the coming years. In the early 1990's, a weak economy led to lower District tax revenues, and capital spending had to be reduced to reflect this reality. More recently, high levels of housing, industrial and commercial development and rising property values have led to increased needs for flood control projects and increased assessment values. This has necessitated an expansion in the capital budget to initiate required projects while funds are available. The members of the Board of Directors, who are also the members of the County Board of Supervisors, sometimes alter the secondary tax rate to meet overall County fiscal objectives, and this too can have a major financial impact on the District.

3.2 Revenue Trends and Issues

Funding availability for the CIP is based on estimates that combine anticipated revenues from numerous sources with the District's anticipated flood control tax revenues. The District's tax revenues are a function of the tax rate, which is set annually by the Board of Directors. The Flood Control District tax applies to the assessed real property valuations, which are also set annually by the County Board of Supervisors. The majority of the District's Operating and CIP revenues come from the flood control tax that is levied County-wide.

Additional revenue results from the sale or lease of District rights-of-way and reimbursements from project cost-share partners. Over the past ten years, the inflation-adjusted revenues provided by the Secondary Tax to the District have fallen significantly, and when the increased size of the County's population and increased flood control needs associated with this larger urban area are taken into account, it is apparent that the District is being asked to do more with less. It is anticipated that the District's tax revenues will need to be increased above the current \$45 million level if projects in the CIP are to be funded and schedules are to be maintained.

Table 1—FCD Tax Rates by Fiscal Year

	Fiscal Year Tax Rate	Tax Revenue
'01/02	0.2319	\$45,323,000(est)
'00/01	0.2534	\$43,874,335
'99/00	0.2858	\$43,992,461
'98/99	0.3270	\$44,995,000
'97/98	0.3425	\$42,697,000
'96/97	0.3413	\$38,501,000
'95/96	0.3632	\$36,085,500
'94/95	0.3332	\$35,300,000
'93/94	0.3632	\$35,400,000
'92/93	0.3901	\$39,715,000
'91/92	0.4447	\$46,879,000
'90/91	0.4235	\$45,797,000
'89/90	0.4303	\$46,408,000
'88/89	0.5000	\$51,345,000
'87/88	0.5000	\$46,059,000

The CIP amounts shown in Table 2 reflect the District's FY 01/02-05/06 CIP forecasts. Annually, District staff will recommend that the Board of Directors set the secondary Flood Control tax rate sufficient to generate the required tax revenue to accomplish the CIP.

Table 2—Estimated 5-Year CIP Funding

Fiscal Year	Tax Revenue	CIP Amount
01/02	\$45,323,000	\$57,946,000
02/03	\$52,164,000	\$56,550,000
03/04	\$55,304,000	\$53,000,000
04/05	\$56,577,000	\$54,000,000
05/06	\$58,450,000	\$54,000,000

3.3 Increased Cost Sharing with Municipalities

Throughout the history of the Flood Control District of Maricopa County, the District has had to adapt to the evolution of the fiscal, political and institutional environment in which it operates. For most of the 1970s and 1980s, the District was heavily involved in cost-sharing partnerships with the Federal and State governments, initiating and participating in flood control projects that were planned and funded in large part by higher levels of government. With the virtual end of large-scale participation in regional flood control activities by the Federal Government and the State, the District was left in the position of being the primary source of technical expertise and financial resources for flood control in Maricopa County. As a result, the District must deal with a wide range of regional flood control challenges with a limited budget.

More recently, the District has adopted a number of strategies to address regional flood control problems while minimizing financial requirements. Under the direction of the Board of Directors and Flood Control Advisory Board, District staff have made a concerted effort to make maximum use of every dollar spent. A strategy used to obtain the "most bang for the buck" has been to leverage District capital program expenditures with contributions from municipalities and other agencies. One of the selection criteria for potential projects is the degree to which the projects will be paid for by other government entities; if a higher level of cost sharing can be negotiated, the projects are given a higher priority ranking by the District. A District goal is that it should only have to pay for half to two-thirds of the design and construction costs and that a municipality or other agency will be responsible for the remainder of those costs and for future operations and maintenance

Reviewing the total dollar amount of reimbursements provided by the District's partners during the 1980s, it is clearly evident that the trend is towards rising reimbursements. While total reimbursements were only approximately \$2.4 million in FY 1992/93, they had grown to approximately \$7 million by FY 1996/97, and are projected to rise \$17.0 million in FY 2001/2002 (some future year projects do not have signed IGAs; projected reimbursements could still change). Similarly, an examination of reimbursements as a percentage of total capital program expenditures indicates that the long-term trend is towards higher levels of cost-sharing. While in FY 1992/93 less than 10% of the District's capital program was funded by reimbursements from municipalities and other agencies, in FY 2001/2002 almost a third of the capital program budget will be provided by other government entities.

Expenditures made by the District to operate and maintain flood control structures and adjacent property are substantial; in FY 00/01 these operations and maintenance (O&M) costs were approximately \$3.76 million, or about 4.7% of the total budget. One of the most important strategies of the District in recent years in terms of minimizing future expenditures and of providing the most regional flood control protection at the least cost has been to enter into partnerships on projects where the District is responsible only for capital costs and not for O&M costs. To date, the District has been very successful in negotiating cost-sharing agreements in which the District is absolved of any responsibility for future maintenance or

operations. A large number of new projects involve intergovernmental agreements (IGAs) that restrict District involvement to only initial capital costs. More simply put, by following a policy of not assuming O&M on most projects since the early 1990s, the District will spend a smaller percentage of its budget on O&M annually.

3.4 The CIP: Implementing FCD Financial Strategies and Priorities

The District's capital spending utilizes the majority of the District's overall revenues, and the District's capital spending is directed by the Five-Year CIP. As a result, the Five-Year CIP must incorporate the District's strategies and priorities, and facilitate the achievement of the District's mission and objectives. Among the District strategies/priorities that are reflected in planned expenditures included in the Five Year CIP are:

- An increased emphasis on cost-sharing and partnerships so that the District is best able to leverage its limited financial resources into the most long-term flood control protection possible throughout the County. Partner contributions should be concurrent with District expenditures.
- A preference for partnerships in which the other partners (e.g. municipalities, agencies) assume full responsibility for operations and maintenance activities once the project has been completed.

A continuing commitment to balance expenditures between newly-developing areas on the fringe of the urban metropolis, and existing older communities where retrofitting, repairs and project improvements are needed.

- A commitment to avoid the construction of new conventional hard structures when non-structural approaches such as flood plain delineation and management, natural watercourse improvements, and/or minor improvements to natural drainage patterns can be used just as effectively from an economic perspective to protect lives and property.
- A focus on minimizing project costs and streamlining the contract tendering and management processes using information systems that track project progress and analyze engineering, land, and construction costs.
- Use of District-developed hydrological and flood control planning information by other entities so that private development infrastructure is built to District standards.

How to Use This Document

Included in this document are narrative descriptions and location maps for the four dozen projects that the Flood Control District of Maricopa County proposes to implement during the next five years (FY 2001/2002 through FY 2005/2006) and summaries of the CIP budget that show projected expenditures by "Area" (groupings of projects) and by "Project" (individual facilities and systems). Table 3 (Final) from FY 2001/2002 provides a summary of the results of the FY 2001/2002 Prioritization Procedure. Included in these tables are each of the projects recommended for CIP consideration through previous prioritization procedures. The Prioritization Procedure section includes a description of the procedures and criteria used in evaluating potential CIP projects.

The CIP budget in the Summary and Detailed Spreadsheet is provided in two different formats. Each summarizes estimated expenditures for all projects proposed for the District's Five-Year Capital Improvement Program for fiscal years 2001/2002 through 2005/2006. The first format is a summary of all of the CIP expenditures by "Area". Every Project Control Number (PCN) is made up of a seven digit code that is used for tracking financial costs. The first three digits identify the "Area", or clustering or family of projects, and this is the level of detail that is used in the summary of CIP expenditures. For example, the White Tanks "Area" code includes five "Projects" that originated from the White Tanks Area Drainage Master Plan. In the summary, these individual "Projects" and their "Components" are not shown. The second format provides a more detailed listing of expenditures by individual projects, which are shown with both the three digit "Area Code" and the two digit "Project Code".

The figures in both tables are shown in thousands of dollars (i.e. 10 equals \$10,000), for ease of display, and are shown by fiscal year for each of the five years. A "Total" column sums all of the expenditures, by project, proposed during the five-year period. It is important to note that although most of the projects are scheduled to be completed in five years, those identified with an asterisk (*) will be continued beyond the five-year period. Possible reasons include: availability of funding; status of design or construction plans; or incompatible schedules of other related activities. Also included in the tables are columns showing supervisor districts and the municipality where the project is located.

A description and details are provided for every project name and associated project control number appearing in the Five-Year CIP. Each project can thus be found in this document. Every project description includes basic information such as project name, project control number, the municipality or municipalities in which the project is located, partners involved with the design, administration, construction and/or funding of the project, anticipated beneficial results of the project, and the timing and cost of the project. The projects are listed in order of their project control numbers, or PCNs. An alphabetical list of projects is also provided at the beginning of this document that provides the PCN and page number for each project. The project managers responsible for each project and how to contact them is

listed with the project descriptions. The project managers may also be contacted through the general District switchboard at (602)506-1501.

In some cases, such as those in which the planning and design work is complete and construction is already underway, the scope and cost of the project are almost entirely known. In others, a project might only be in the planning and design stage, and the exact physical design, geographical location, and total cost of the project are still unknown. As a result, the further along the project is, the more likely the project description is to be a complete and dependable guide to the specifics of the project. It should be noted that projects still in the early stages of the development process will be subject to change, and that significant increases or decreases in project costs do occur well into the design stage. In some cases District projects can be combined with other projects undertaken by ADOT or MCDOT, leading to major reductions in project costs, while in others, unforeseen land acquisition or project engineering costs can greatly increase project costs.

Questions or comments concerning this document or the District's 5-year Capital Improvement Program may be sent to:

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or

K. L. Presson, CIP Decision Support Analyst
klp@mail.maricopa.gov (602)506-4489

This information is available on the District web site at:
<http://www.fcd.maricopa.gov>

Project Forecast/Schedule

Summary				Five-Year CIP x \$1,000					
City	Dist.	Act#	Description	FY 01/02	FY 02/03	FY 03/04	FY 04/05	FY 05/06	5-Yr Total
Tax Rate:				0.2319					
Multiple	All	C001	FCD Operations	154	0	0	0	0	154
Chandler	1	C022	Central Chandler Area Drainage System	1,673	805	1,635	1,269	0	5,382
Scottsdale	2	C027	City of Scottsdale	542	0	0	0	0	542
Guadalupe	5	C035	Town of Guadalupe	1,621	2,700	0	375	0	4,696
Carefree	2	C041	Town of Carefree	275	0	0	0	0	275
Multiple	All	C050	Dam Safety Project	1,308	1,250	1,100	1,100	6,100	10,858 *
Multiple	All	C051	Candidate Assessment Reports	100	100	100	100	100	500
Mesa/SRP	1	C102	Alma School Drain	100	0	0	0	0	100
Mesa	2	C108	Sossaman Channel	82	0	0	0	0	82
Phoenix, UMC	5	C117	South Phoenix Drainage Improvement	10,985	7,800	150	2,500	2,500	23,935 *
Scottsdale	2	C120	PVSP	150	150	1,000	2,100	0	3,400
Gilbert/Mesa/UMC	1	C121	East Maricopa Floodway	3,197	3,461	4,000	6,000	6,000	22,658 *
Phoenix	5	C124	Phoenix Rio Salado	8,386	0	0	0	0	8,386
Tempe/Mesa	2	C125	Tempe/Mesa Habitat Mitigation	250	0	1,000	0	0	1,250 *
Buckeye/UMC	4	C211	Buckeye/Sun Valley ADMP	600	1,200	0	0	0	1,800
Surprise/UMC	4	C344	Wittmann ADMP Update	600	1,200	0	0	0	1,800
Aguila	4	C345	Aguila ADMP	1,212	0	0	0	0	1,212
Multiple	4	C400	Skunk Creek/New River	450	1,550	2,300	0	0	4,300
Mesa/UMC	2	C420	Spook Hill ADMP	414	0	0	800	5,000	6,214 *
Mesa/UMC	1,2	C442	East Mesa ADMP	8,081	9,135	5,555	5,000	1,500	29,271 *
Multiple	4	C450	Glendale/Peoria ADMP	239	0	0	0	1,385	1,624
Peoria/UMC	4	C452	North Peoria ADMP	205	0	0	0	0	205
Phoenix	3	C460	East Fork Cave Creek ADMP	1,000	0	0	0	0	1,000
Multiple	4	C470	White Tanks ADMP	3,504	6,480	15,400	13,600	10,600	49,584 *
Queen Creek	1	C480	Queen Creek ADMP	960	1,050	300	2,000	2,700	7,010 *
Chandler	1	C490	Gilbert/Chandler ADMP	74	0	0	0	0	74
Multiple	1,2	C491	Higley ADMP	2,178	415	250	4,000	5,000	11,843 *
Phoenix/UMC	3,4	C520	Adobe Dam ADMP	1,100	500	0	0	0	1,600
Multiple	5	C565	Durango ADMP	2,293	4,700	8,200	6,900	4,000	26,093 *
Paradise Valley	2	C580	ACDC ADMP	0	0	0	0	0	0
Phoenix/Glendale	4,5	C620	Maryvale ADMP	995	8,099	6,000	6,000	6,000	27,094 *
Phoenix	3	C625	Metro ADMP	0	3,500	3,500	0	0	7,000
Phoenix	1	C630	Foothills ADMP	41	0	0	0	0	41
Fountain Hills	2	C670	Fountain Hills ADMP	0	0	0	0	700	700
Estimated External Expense				\$52,769	\$54,095	\$50,490	\$51,744	\$51,585	\$260,683
CIP Project Contingency				\$2,551	\$2,455	\$2,510	\$2,256	\$2,415	
Force				\$2,626					
Projects Total				\$57,946	\$56,550	\$53,000	\$54,000	\$54,000	

*Projects not completed during the five year CIP

Flood Control District of Maricopa County
CIP Budget/Schedule FY 01-06

July 1, 2001				Five Year CIP (x\$1000)					5-Yr TOTAL
CITY	DIST.	ACT #	DESCRIPTION	FY 01/02	FY 02/03	FY 03/04	FY 04/05	FY 05/06	
			Tax Rate:						
Phoenix/UMC	5	C117	SOUTH PHOENIX DRAINAGE IMPROVEMENT	10,985	7,800	150	2,500	2,500	23,935
Phoenix/UMC	5		South Phoenix/Two Basins	0	0	150	2,500	2,500	5,150
Phoenix/UMC	5		Laveen ADMP	212	0	0	0	0	212
Phoenix/UMC	5		Baseline Road Storm Drain	1,790	0	0	0	0	1,790
Phoenix/UMC	5		43rd Avenue Southern Basin	2,400	0	0	0	0	2,400
Phoenix/UMC	5		Laveen Area Conveyance Channel	6,583	7,800	0	0	0	14,383
Scottsdale	2	C120	PVSP	150	150	1,000	2,100	0	3,400
Scottsdale	2		Scottsdale Road Corridor Drain	150	150	1,000	2,100	0	3,400
UMC/Mesa/Gilbert	1	C121	EAST MARICOPA FLOODWAY	3,197	3,461	4,000	6,000	6,000	22,658
UMC/Mesa/Gilbert	1		EMF Rittenhouse & Chandler Heights Basin	2,947	3,211	4,000	6,000	6,000	22,158
UMC/Mesa/Gilbert	1		EMF Channel Improvements	250	250	0	0	0	500
Phoenix	5	C124	RIO SALADO	8,386	0	0	0	0	8,386
Phoenix	5		Phoenix Rio Salado	8,386	0	0	0	0	8,386
Tempe/Mesa	2	C125	SALT RIVER	250	0	1,000	0	0	1,250
Tempe/Mesa	2		Tempe/Mesa Habitat Mitigation	250	0	1,000	0	0	1,250
Buckeye/UMC	4	C211	BUCKEYE/SUN VALLEY ADMP	600	1,200	0	0	0	1,800
Buckeye/UMC	4		Buckeye/Sun Valley ADMP	600	1,200	0	0	0	1,800
UMC	4	C344	WITTMANN ADMP UPDATE	600	1,200	0	0	0	1,800
UMC	4		Wittmann ADMP Update	600	1,200	0	0	0	1,800
Aguila	4	C345	AGUILA ADMP	1,212	0	0	0	0	1,212
Aguila	4		Hazard Mitigation Grant Program	162	0	0	0	0	162
Aguila	4		Aguila ADMP	350	0	0	0	0	350
Aguila	4		Floodplain Delineation	700	0	0	0	0	700

**Flood Control District of Maricopa County
CIP Budget/Schedule FY 01-06**

July 1, 2001				Five Year CIP (x\$1000)					5-Yr TOTAL
CITY	DIST.	ACT #	DESCRIPTION	FY 01/02	FY 02/03	FY 03/04	FY 04/05	FY 05/06	
			Tax Rate:						
Multiple	4	C400	SKUNK CREEK/NEW RIVER	450	1,550	2,300	0	0	4,300
Peoria	4		New River (Grand - Skunk Creek)	0	200	2,300	0	0	2,500
Glendale/Peoria	4		83rd Ave. GCS/Bell Park	150	1,350	0	0	0	1,500
Peoria	4		New River (Paradise Shores)	300	0	0	0	0	300
Mesa/UMC	2	C420	SPOOK HILL ADMP	414	0	0	800	5,000	6,214
Mesa/UMC	2		Spook Hill ADMP	414	0	0	800	5,000	6,214
Multiple	1,2	C442	EAST MESA ADMP	8,081	9,135	5,555	5,000	1,500	29,271
Mesa/U.M.C.	2		Hawes Road Channel	25	2,000	2,000	0	0	4,025
Mesa/U.M.C.	1		Elliot Basin and Channel	7,883	15	0	400	0	8,298
Mesa/U.M.C.	1		Elliot Channel (Ellworth to EMF)	32	1,800	3,000	4,200	0	9,032
Mesa/U.M.C.	1		Ellsworth Channel	141	5,320	555	0	0	6,016
Mesa/U.M.C.	1		Powerline Detention Basin	0	0	0	400	1,500	1,900
Mesa	2		Southern Avenue Channel	0	0	0	0	0	0
Multiple	4	C450	GLENDALE/PEORIA ADMP	239	0	0	0	1,385	1,624
Peoria/Glendale	4		Northern / Orangewood Storm Drain	239	0	0	0	0	239
Glendale/Peoria	4		Glendale/Peoria ADMS Update	0	0	0	0	0	0
Glendale	4		67th Ave. Storm Drain	0	0	0	0	1,385	1,385
Peoria/UMC	4	C452	NORTH PEORIA ADMP	205	0	0	0	0	205
Peoria/UMC	4		North Peoria ADMP	205	0	0	0	0	205
Phoenix	3	C460	EAST FORK CAVE CREEK WASH ADMP	1,000	0	0	0	0	1,000
Phoenix	3		Greenway Parkway Channel	1,000	0	0	0	0	1,000

**Flood Control District of Maricopa County
CIP Budget/Schedule FY 01-06**

July 1, 2001			Five Year CIP (x\$1000)					5-Yr TOTAL	
CITY	DIST.	ACT #	DESCRIPTION	FY 01/02	FY 02/03	FY 03/04	FY 04/05		FY 05/06
			Tax Rate:						
Multiple	4	C470	WHITE TANKS ADMP	3,504	6,480	15,400	13,600	10,600	49,584
UMC	4		White Tanks #3 FRS Modification	1,870	4,280	5,000	5,600	0	16,750
Buckeye/UMC	4		Loop 303 Corridor/White Tanks ADMP Update	434	0	0	0	0	434
Surprise	4		Reems Rd Channel	800	400	3,000	0	0	4,200
Glendale/Surprise	4		Northern Avenue Channel and Basin	0	600	1,400	1,000	3,600	6,600
Goodyear	4		Bullard Wash Phase II	400	1,200	6,000	7,000	7,000	21,600
Queen Creek	1	C480	QUEEN CREEK ADMP	960	1,050	300	2,000	2,700	7,010
Queen Creek	1		Queen Creek Channelization	960	650	0	0	0	1,610
Queen Creek	1		Sanokai Wash Channelization	0	400	300	2,000	2,700	5,400
Chandler	1	C490	GILBERT/CHANDLER ADMP	74	0	0	0	0	74
Chandler	1		San Tan Collector Channel Phase III	74	0	0	0	0	74
Multiple	1,2	C491	HIGLEY ADMP	2,178	415	250	4,000	5,000	11,843
Gilbert	2		Greenfield/Warner Park Basin	0	165	0	0	0	165
Mesa/Gilbert/Chandler	1		RWCD Tailwater Analysis	48	0	0	0	0	48
Mesa/Gilbert/UMC	1,2		Higley ADMP	2,130	250	250	4,000	5,000	11,630
Multiple	3	C520	ADOBE DAM ADMP	1,100	500	0	0	0	1,600
Phoenix/UMC	3		Adobe Dam ADMP	1,100	500	0	0	0	1,600
Multiple	5	C565	DURANGO ADMP	2,293	4,700	8,200	6,900	4,000	26,093
Toll/Phx/Avon/UMC	5		Durango ADMP	93	400	1,500	3,200	0	5,193
Tolleson	5		Durango Regional Outfall	2,200	4,300	5,000	3,200	0	14,700
Avondale/Phx/UMC	5		Durango Regional Convenyance Channel	0	0	1,700	500	4,000	6,200
Paradise Valley	2	C580	ACDC ADMP	0	0	0	0	0	0
Paradise Valley	2		Doubletree Ranch Rd System	0	0	0	0	0	0
Multiple	4,5	C620	MARYVALE ADMP	995	8,099	6,000	6,000	6,000	27,094
Glendale/Phoenix	4,5		Bethany Home Outfall Channel	995	8,099	6,000	6,000	6,000	27,094

Flood Control District of Maricopa County
CIP Budget/Schedule FY 01-06

July 1, 2001			Five Year CIP (x\$1000)					5-Yr TOTAL	
CITY	DIST.	ACT #	DESCRIPTION	FY 01/02	FY 02/03	FY 03/04	FY 04/05		FY 05/06
			Tax Rate:						
Phoenix	3	C625	METRO ADMP	0	3,500	3,500	0	0	7,000
Phoenix	3		24th Ave./Camelback Basin	0	3,500	3,500	0	0	7,000
Phoenix	1	C630	FOOTHILLS ADMP	41	0	0	0	0	41
Phoenix	1		SE Phoenix Regional Drainage System	41	0	0	0	0	41
Fountain Hills	2	C670	FOUNTAIN HILLS ADMP	0	0	0	0	700	700
Fountain Hills	2		Ashbrook / Balboa Wash Improvements	0	0	0	0	700	700
SUBTOTAL PROJECTS				52,769	54,095	50,490	51,744	51,585	260,683
CIP PROJECT CONTINGENCY				2,551	2,455	2,510	2,256	2,415	12,187
FORCE				2,626	2,679	2,732	2,787	2,842	13,666
PROJECTS TOTAL				57,946	59,229	55,732	56,787	56,842	286,536

CIP Project Reimbursements Forecast/Schedule

Summary				Five-Year CIP x \$1,000					
City	Dist.	Act#	Description	FY 01/02	FY 02/03	FY 03/04	FY 04/05	FY 05/06	5-Yr Total
			Tax Rate:						
Scottsdale	All	C001	FCD Operations	(199)	(76)	0	0	0	(275)
Scottsdale	2	C027	City of Scottsdale	(1,869)	(1,984)	0	0	0	(3,853)
Phoenix, UMC	5	C117	South Phoenix Two Basins	0	0	(75)	(1,250)	(1,250)	(2,575)
Phoenix, UMC	5	C117	Laveen Area Conveyance Channel	(3,600)	(2,600)	(2,915)	0	0	(9,115)
Scottsdale	2	C120	PVSP	(75)	(75)	(500)	(1,050)	0	(1,700)
Aguila	4	C345	Aguila ADMP	(632)	0	0	0	0	(632)
Glendale, Peoria	4	C362	Skunk Creek	(680)	(606)	0	0	0	(1,286)
Multiple	4	C400	Skunk Creek/New River	(180)	(640)	(1,150)	0	0	(1,970)
Mesa/UMC	2	C420	Spook Hill ADMP	0	0	0	(400)	(2,000)	(2,400)
Mesa/UMC	1,2	C442	East Mesa ADMP	(4,820)	(2,100)	(5,400)	(2,300)	0	(14,620)
Multiple	4	C450	Glendale/Peoria ADMP	(2,837)	0	0	0	0	(2,837)
Peoria/UMC	4	C452	North Peoria ADMP	(50)	0	0	0	0	(50)
Multiple	4	C470	White Tanks ADMP	(2,775)	(6,205)	(7,750)	(7,640)	(4,800)	(29,170)
Queen Creek	1	C480	Queen Creek ADMP	0	(200)	(150)	0	(1,350)	(1,700)
Chandler	1	C490	Gilbert/Chandler ADMP	0	0	0	0	0	0
Multiple	1,2	C491	Higley ADMP	(125)	(125)	(125)	(2,000)	(2,500)	(4,875)
Multiple	5	C565	Durango ADMP	(1,125)	(1,700)	(3,600)	(2,950)	(2,000)	(11,375)
Phoenix/Glendale	4,5	C620	Maryvale ADMP	(718)	(5,400)	(3,000)	(3,000)	(3,000)	(15,118)
Phoenix	3	C625	Metro ADMP	0	(1,750)	(1,750)	0	0	(3,500)
Phoenix	1	C630	Foothills ADMP	(1,633)	0	0	0	0	(1,633)
Fountain Hills	2	C670	Fountain Hills ADMP	0	0	0	0	(350)	(350)
Reimbursement Total				(\$21,318)	(\$23,461)	(\$26,415)	(\$20,590)	(\$17,250)	(\$109,034)

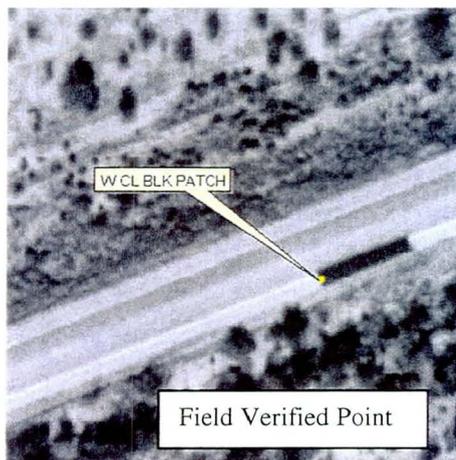
Flood Control District of Maricopa County
CIP Budget/Schedule FY 01-06

July 1, 2001			Five Year CIP (x\$1000)					5-Yr TOTAL	
CITY	DIST.	ACT #	DESCRIPTION	FY 01/02	FY 02/03	FY 03/04	FY 04/05		FY 05/06
			Tax Rate:						
Multiple	All	C001	FCD OPERATIONAL FACILITIES	154	0	0	0	0	154
Multiple	All		Ortho Aerial Photography	154	0	0	0	0	154
Chandler	1	C022	CITY OF CHANDLER	1,673	805	1,635	1,269	0	5,382
Chandler	1		Central Chandler Area Drainage System	1,673	805	1,635	1,269	0	5,382
	2	C027	CITY OF SCOTTSDALE	542	0	0	0	0	542
	2		Osborn Road Storm Drain System	542	0	0	0	0	542
Guadalupe	5	C035	TOWN OF GUADALUPE	1,621	2,700	0	375	0	4,696
Guadalupe	5		Town of Guadalupe	1,621	2,700	0	375	0	4,696
Carefree	2	C041	TOWN OF CAREFREE	275	0	0	0	0	275
Carefree	2		Carefree Town Center Drainage	275	0	0	0	0	275
Multiple	All	C050	DAM ASSESSMENT PROJECT	1,308	1,250	1,100	1,100	6,100	10,858
Multiple	All		Dam Assessment Project	1,308	1,250	1,100	1,100	6,100	10,858
Multiple	All	C051	CIP CARS	100	100	100	100	100	500
Multiple	All		CIP Candidate Assessment Reports	100	100	100	100	100	500
Mesa	1	C102	ALMA SCHOOL DRAIN	100	0	0	0	0	100
Mesa	1		Alma School Drain	100	0	0	0	0	100
Mesa	2	C108	SOSSAMAN CHANNEL	82	0	0	0	0	82
Mesa	2		Sossaman Channel - US 60 to Baseline	82	0	0	0	0	82

CIP Budget

x \$1,000

FY 01/02	FY 02/03	FY 03/04	FY 04/05	FY 05/06	5-Yr CIP
\$154	0	0	0	0	\$154



The District is acquiring digital aerial ortho-photography for the whole of Maricopa County. During previous years, the District has acquired semi-rectified aerial photography with a horizontal accuracy of +/- 25 feet in urban areas and +/- 300 feet in rural areas. This accuracy has presented a problem when depicting floodplains or overlaying any other available data at the District. It has been determined that a better accuracy is necessary for the District's regulatory and technical responsibilities. An ortho-photography digital aerial contract was specified with horizontal accuracy of +/- 5 feet and vertical accuracy of +/- 5 feet. Aerial photographs of Maricopa County were taken during the months of December 2000 and January 2001. The ground control used for the project is the Geodetic Densification and Cadastral Survey generated by the

Maricopa County Department of Transportation. Airborne GPS was used to control the project. A ground size pixel of 1 sq. foot was specified. When the project is completed it will be used for Zone A floodplain determinations, for accurately depicting features on the ground and for floodplain determination on the District web site.

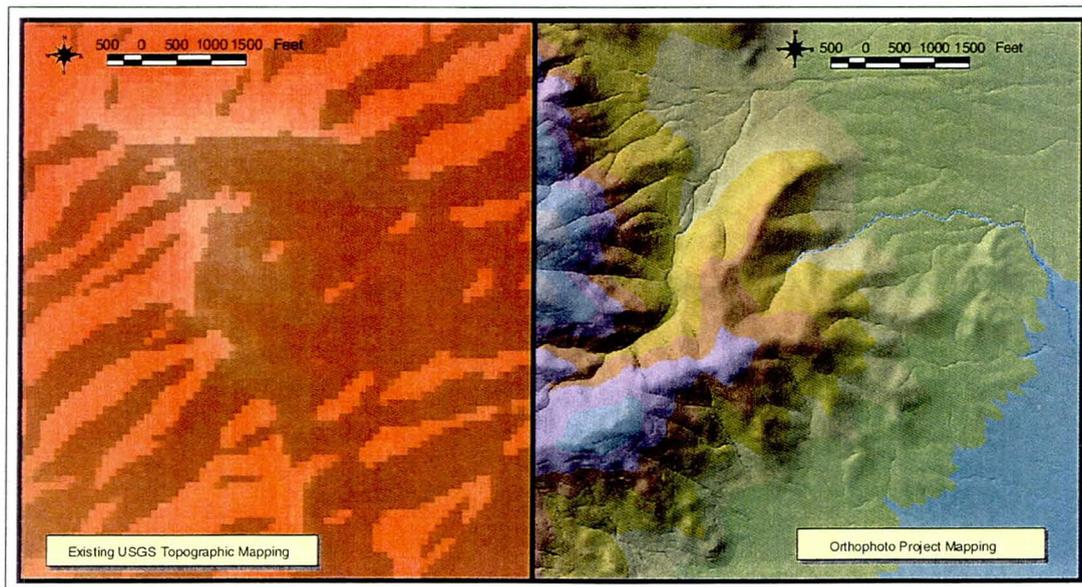
Supervisorial District: All

PCN: 001.04.31

Ortho-Aerial Photography

**Municipality:
Multiple**

**PM: Marta Dent
602-506-8612
mld@mail.maricopa.gov**



CIP Budget

x \$1,000

FY 01/02	FY 02/03	FY 03/04	FY 04/05	FY 05/06	5-Yr CIP
\$1,673	\$805	\$1,635	\$1,269	\$0	\$5,382

The City of Chandler’s central area was developed prior to the implementation of required drainage standards. The City of Chandler previously developed and implemented a storm water master plan for the central area. The City updated the plan and has requested that the District cooperate and cost share the modification and enhancement of the existing facilities to provide a 100-year level of protection and a regional outfall for the system.

The City is the lead agency for design, rights of way acquisition, utility relocation, construction, construction management, and operation and maintenance of the system. The District’s role is to participate in the consultant selection process, pre-construction meetings, provide technical assistance, and review the design and construction phases for the Project.

Five improvements have been identified that would help the City accomplish its goal of alleviating the flooding problems in the Chandler’s central area. Total project cost is estimated at approximately \$ 12.2 million with the District’s contribution of \$ 6.1 million.

- Phase 1 – Ivanhoe and Erie Storm Drains
- Phase 2 – Arrowhead Pump Station and Force Main
- Phase 3 – Galveston Basin and Erie Drains
- Phase 4 – Denver Basin Pump Station
- Phase 5 – Hartford Force Main and Pecos Road Drain

Phase 1 is complete. The design of Phase 2 is complete; construction is scheduled for FY 01/02. The design of Phase 3 is scheduled for FY 01-03.

Supervisorial District: 1

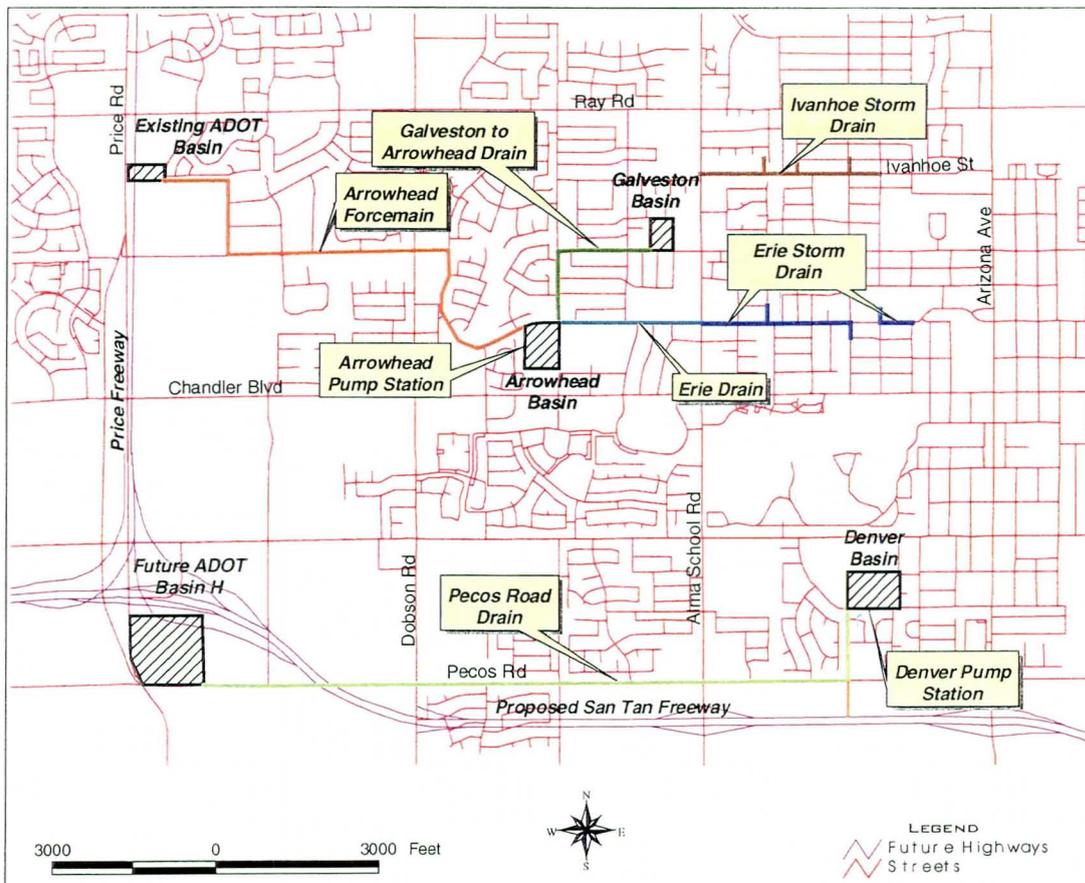
PCN: 022.01.31

Central Chandler Area Drainage System

Municipality:
Chandler

PM: Paul Stears, P.E.
602-506-4768
pjs@mail.maricopa.gov

T1S R5E S28-33;
T2S R5E S4-6



CIP Budget

x \$1,000

FY 01/02	FY 02/03	FY 03/04	FY 04/05	FY 05/06	5-Yr CIP
\$542	\$0	\$0	\$0	\$0	\$542

This project consists of approximately 2.5 miles of storm drain beginning at 60th Street and Thomas proceeding north along 61st Place, east along Catalina Drive, north along 64th Street, east into Paiute Park Basin, north out of the Basin up to Osborn Road, south along 71st Street and east along Earll Drive into the Indian Bend Wash. The outfall will provide a storm drain with 10-year level of protection for contributing areas and will reduce the required pipe sizes for the downstream storm drain, will augment the storm drain. The estimated construction cost of the storm drain system is \$8 million. The District along with the Cities of Phoenix and Scottsdale are cost-sharing the project. The District is responsible for the design, construction, and construction management of the project after completion. Construction began in August, 2000 and is scheduled for completion in September, 2001.

Supervisory District: 2

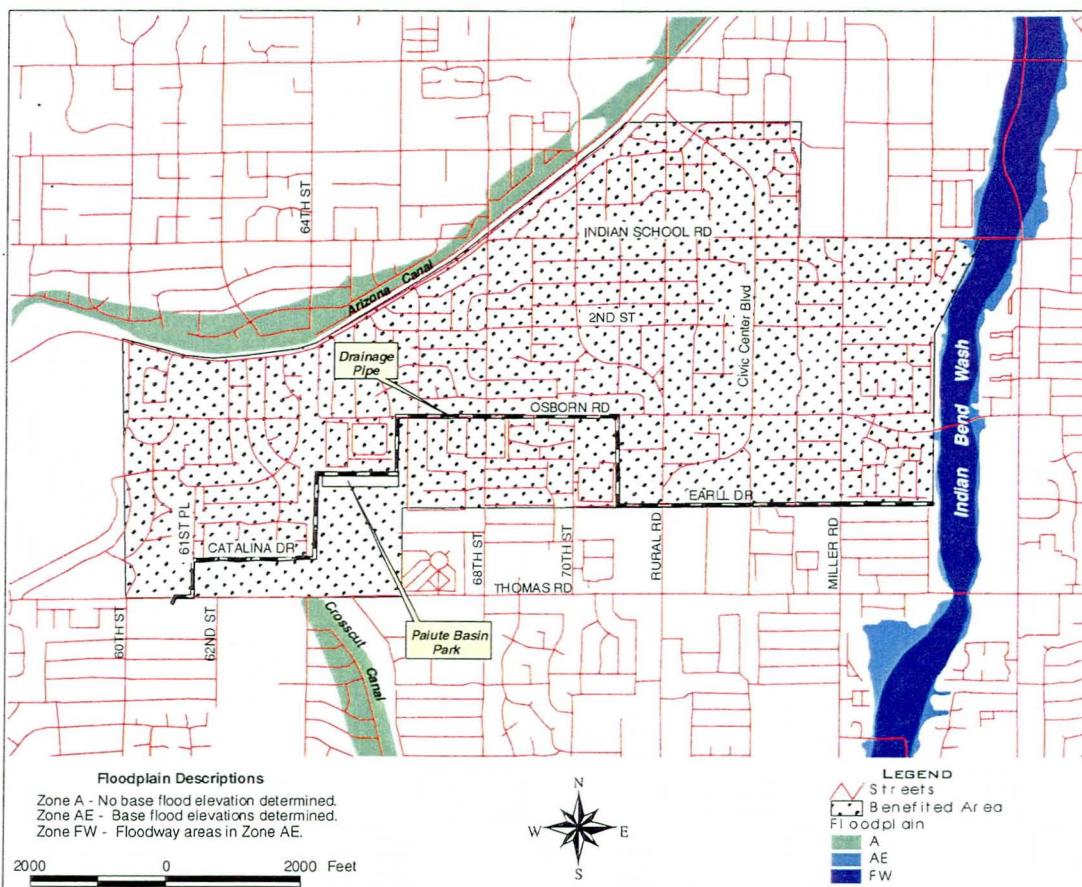
PCN: 027.04.30

Osborn Road Storm Drain System

Municipality:
Scottsdale

PM: Don Rerick, P.E.
602-506-4768
djr@mail.maricopa.gov

T2N R4E



CIP Budget

x \$1,000

FY 01/02	FY 02/03	FY 03/04	FY 04/05	FY 05/06	5-Yr CIP
\$1,621	\$2,700	\$0	\$375	\$0	\$4,696

The project will provide a storm drain collection system and four retention basins located along the Highline Canal that will capture and convey the 10-year storm event within the Town and east of Avenida Del Yaqui. Runoff from within the Town results in flooding of low-lying houses and collects along the Highline Canal where it eventually overtops the canal and causes damage to downstream properties within Tempe. Three of the basins are located within the Town, and one along the east side of the canal in Tempe. The three basins within the Town will be landscaped and become Town parks after construction. The basin in Tempe, because of its small size and its depth will be landscaped and fenced. The project costs for design, right-of-way acquisition, utility relocation, environmental studies and construction of the project are estimated to be \$7 million. Land acquisition for three of the basins has been completed. The Town is not able to contribute financially to the project but will own, operate and maintain for the storm drain system and the four basins. Additionally, the Town will seek grants and other means to participate in the construction of street drainage improvements. The Town also is actively pursuing advance excavation of the basins at no cost to the project.

Supervisory District: 5

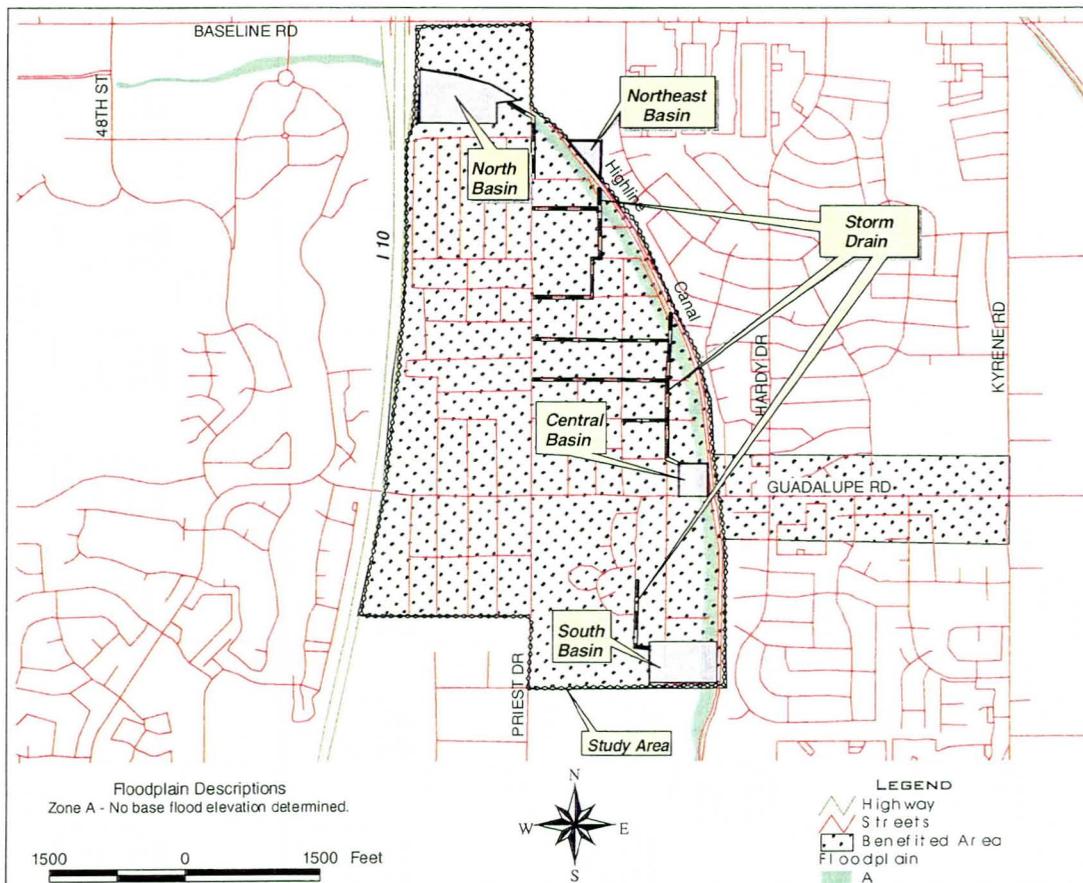
PCN: 035.02.31

Town of Guadalupe

Municipality:
Guadalupe

PM: Don Rerick, P.E.
602-506-4878
djr@mail.maricopa.gov

T1S R4E S9



CIP Budget

x \$1,000

FY 01/02	FY 02/03	FY 03/04	FY 04/05	FY 05/06	5-Yr CIP
\$275	\$0	\$0	\$0	\$0	\$275

Flooding within the Town of Carefree's Town Center has resulted in damage to existing commercial buildings. Improvements to the existing drainage facilities are required to protect existing and future buildings and streets. The Town developed and designed a drainage system, consisting of storm drains and a landscaped restored wash to provide 100-year flood protection for the area. The District was asked to cost share the construction of the system. The Town and the District have signed a cooperative project agreement and the \$1.1 million construction commenced in early 2001 and should be completed in late 2001. The Town is the lead agency for the project and will operate and maintain the completed facilities. The District reviewed the construction plans and is monitoring the construction. The District will fund up to \$550,000 of the project cost.

Supervisorial District: 2

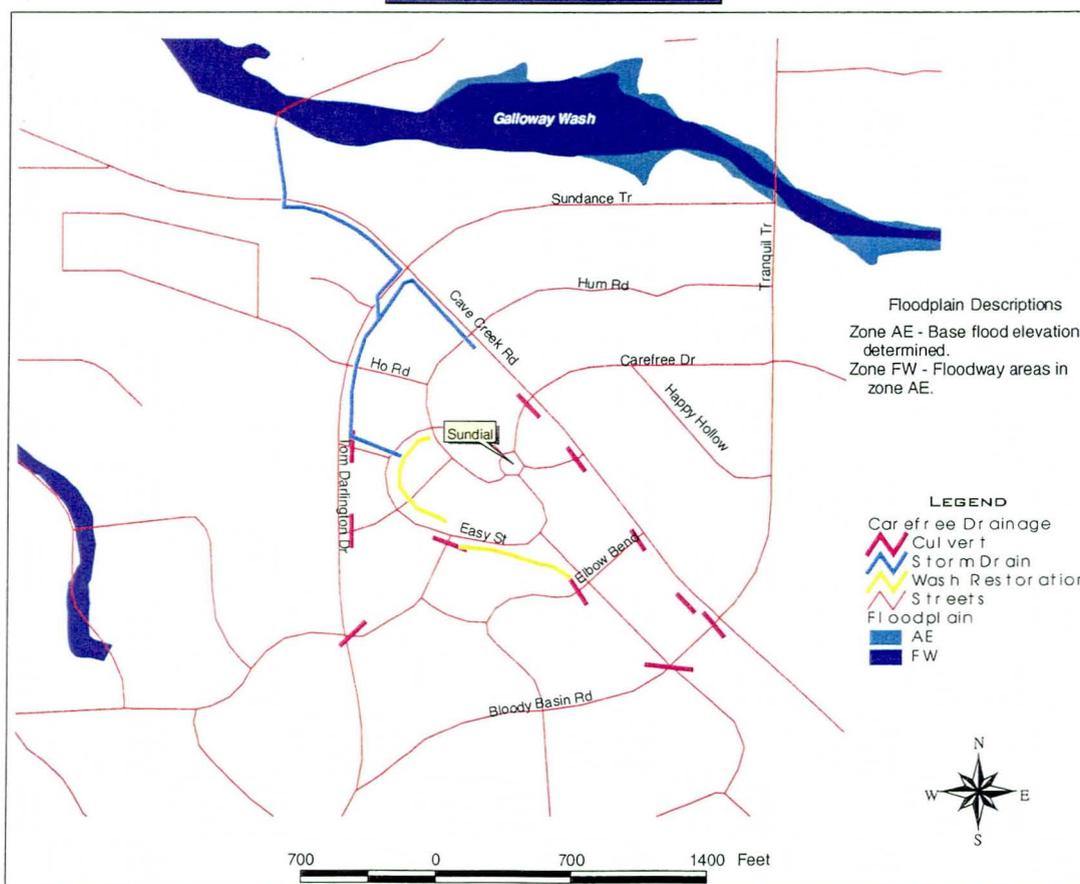
PCN: 041.02.31

Carefree Town Center Drainage

Municipality:
Carefree

PM: Geza Kmetty, P.E.
602-506-4592
gek@mail.maricopa.gov

T6N R4E



CIP Budget

x \$1,000

FY 01/02	FY 02/03	FY 03/04	FY 04/05	FY 05/06	5-Yr CIP
\$1,308	\$1,250	\$1,100	\$1,100	\$6,100	\$10,858

The Flood Control District of Maricopa County (District) owns, operates and maintains 22 Flood Control Dams and is mandated by state and federal law to comply with dam safety regulations. The District has initiated a program called the Structures Assessment Program to assess and evaluate these structures and related features due to an ever-increasing urbanized environment and to assure continued compliance with current standards and guidelines. The Structures Assessment Program is intended to address issues related to urbanization and dam safety as well as to enhance and improve the District's ongoing Dam Safety Program.

The Structures Assessment Program will be conducted in three Phases. Phase I Assessments primarily involve collection and review of records, field inspections of dams, risk assessments and the development of preliminary structural and non-structural alternatives to address dam safety and urbanization issues. Phase I Assessments for seven District dams are ongoing. Two additional contracts to conduct Phase I Assessments of the remaining District dams are to be initiated in August 2001.

Supervisorial District: All

PCN: 050....

Structures Assessment Program

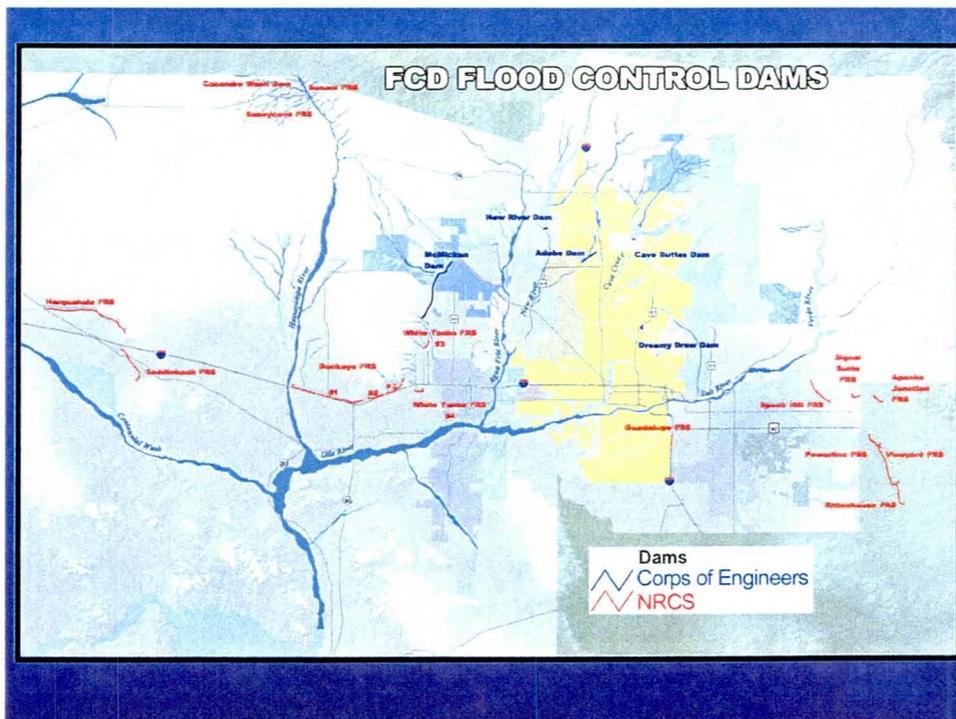
Municipalities:
Multiple

PM: Tom Renckly, P.E.
602-506-8610
trr@mail.maricopa.gov

Phase II work, under future contracts, will involve development of detailed alternatives and pre-design work to develop structural and non-structural solutions to address issues related to urbanization and dam safety. It is currently anticipated this work will be performed under consultant contracts upon completion of the individual Phase I Assessments. Phase I Assessments will be completed in approximately two years.

Phase II also involves geotechnical field investigations, analysis and development of site specific corrective actions as needed to address potential dam safety issues identified in Phase I. This Phase II work is currently in progress on three District dams

Phase III will primarily involve the implementation of authorized dam safety modifications and projects designed to mitigate or eliminate issues related to impoundment areas, spillway discharges and urbanization.



CIP Budget

x \$1,000

FY 01/02	FY 02/03	FY 03/04	FY 04/05	FY 05/06	5-Yr CIP
\$100	\$100	\$100	\$100	\$100	\$500

Annually, Cities and Towns within Maricopa County submit requests to the District for inclusion of proposed projects into the District’s Capital Improvement Program (CIP). The District has developed a process that includes evaluation and ranking of the candidate projects based upon specific evaluation criteria. A Candidate Assessment Report (CAR) is recommended when the review committee feels that the material submitted for the proposed project is insufficient to support the ranking or there is insufficient project detail to implement the project. The CAR studies are used to document the project requirements, benefits and costs. The studies are generally limited to an assessment of existing data. The study purpose is to confirm or expand on the information provided for the project prioritization and to document the requirements for implementation of the project.

Upon completion of the annual CIP prioritization, the list of projects submitted which require a CAR study is completed and the CAR studies initiated. If the CAR findings indicate that the project benefits or cost are substantially different than the project data originally submitted for the CIP prioritization, the project may be resubmitted for another evaluation and ranking by the CIP review committee.

CAR studies were completed for two projects identified during the FY 2000-01 CIP Prioritization process, the Scottsdale – Upper Camelback Walk and the New River Channel Improvement - Modification. Additional projects for which CAR studies are to be completed during FY 2002 will be identified by January 2002 with completion of the FY 2002-03 CIP Prioritization process.

Supervisorial District: All

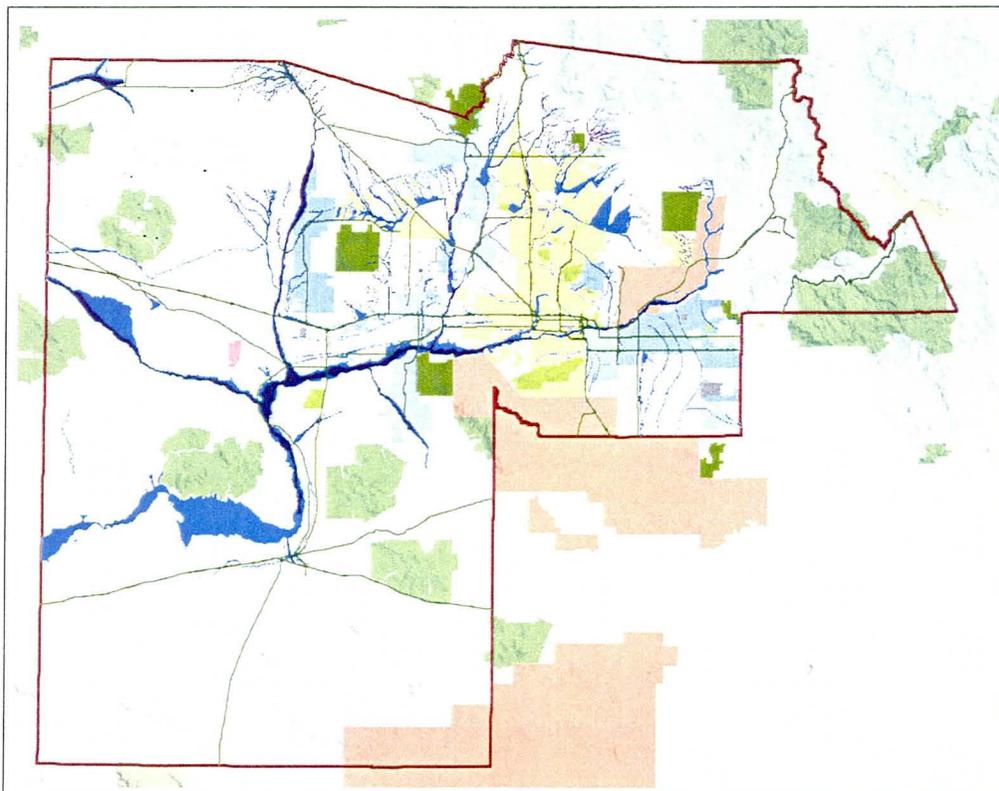
PCN: 051....

Candidate Assessment Reports

Municipality:
Multiple

PM: Russ Miracle, P.E.
602-506-2961
rum@mail.maricopa.gov

T1N R5E



CIP Budget

x \$1,000

FY 01/02	FY 02/03	FY 03/04	FY 04/05	FY 05/06	5-Yr CIP
\$100	\$0	\$0	\$0	\$0	\$100

The District, the City of Mesa, SRP, and the Arizona Highway Department (now known as the Arizona Department of Transportation (ADOT)) entered into IGA 371-67-F. on November 16, 1967. This agreement defined the responsibilities for the cost sharing, design, and construction of improvements, and the operations and maintenance for, a drainage-way called the Alma School Drain, from the Tempe Canal to the Salt River located in Section 17, T1N, R5E, in Maricopa County, State of Arizona. The Alma School Drain is used by SRP to discharge flows from the Tempe Canal to the Salt River, and is also used by the City of Mesa as an outfall for its municipal storm drains. The initial cost to construct the Alma School Drain was shared by the City of Mesa and SRP.

IGA 371-67-F does not adequately define specific responsibilities for future improvements and reconstruction of the Alma School Drain. IGA 371-67-F also does not reflect the physical changes made to the Alma School Drain as a result of the construction of the Red Mountain Freeway, and does not meet the current legal requirements for agreements of this type. Therefore, the District, SRP, and the City of Mesa have decided to enter into IGA FCD 2000A010 to supercede and replace IGA 371-67-F, and to define the future responsibilities for cost-sharing the design, rights-of-way acquisition, construction, reconstruction, major repair, construction management and operation and maintenance of the Alma School Drain. IGA FCD2000A010 was approved by the FCAB on September 27, 2000.

Future plans for the Alma School Drain include lining the invert of the un-lined reach of the channel, to be cost-shared equally by District, Salt River Project, and City of Mesa, and reconstructing the lined reach of the channel, to be cost-shared equally by Salt River Project and City of Mesa. The IGA defines responsibilities for maintenance and major repairs of the Alma School Drain.

Supervisory District: 1

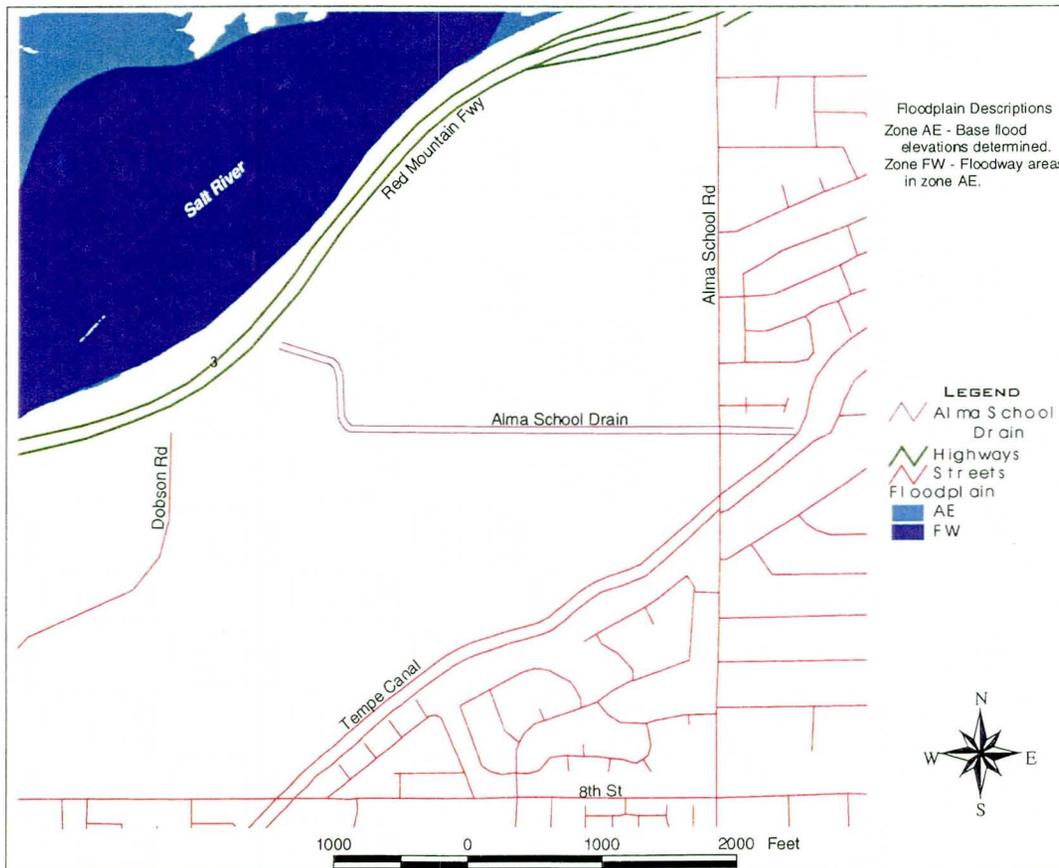
PCN: 102.08.31

Alma School Drain

Municipality:
Mesa

PM: Bobbie Ohler, P.E.
602-506-2943
bao@mail.maricopa.gov

T1N R5E



CIP Budget
x \$1,000

FY 01/02	FY 02/03	FY 03/04	FY 04/05	FY 05/06	5-Yr CIP
\$82	\$0	\$0	\$0	\$0	\$82

The channel is located in east Mesa between Sossaman Road and Hawes Road and the Superstition Freeway (U.S. 60) to Baseline Road. The channel construction was completed in January 1999. The previous channel section did not have sufficient capacity to convey the 100-year peak discharge. The project improved the channel from U.S. 60 to Baseline Road. This project completed the Sossaman drainage system. The portions north of the Freeway and south of Baseline Road were previously constructed by the District. The landscaping element of this project has been designed and will be installed by Fall of 2001.

Supervisory District: 2

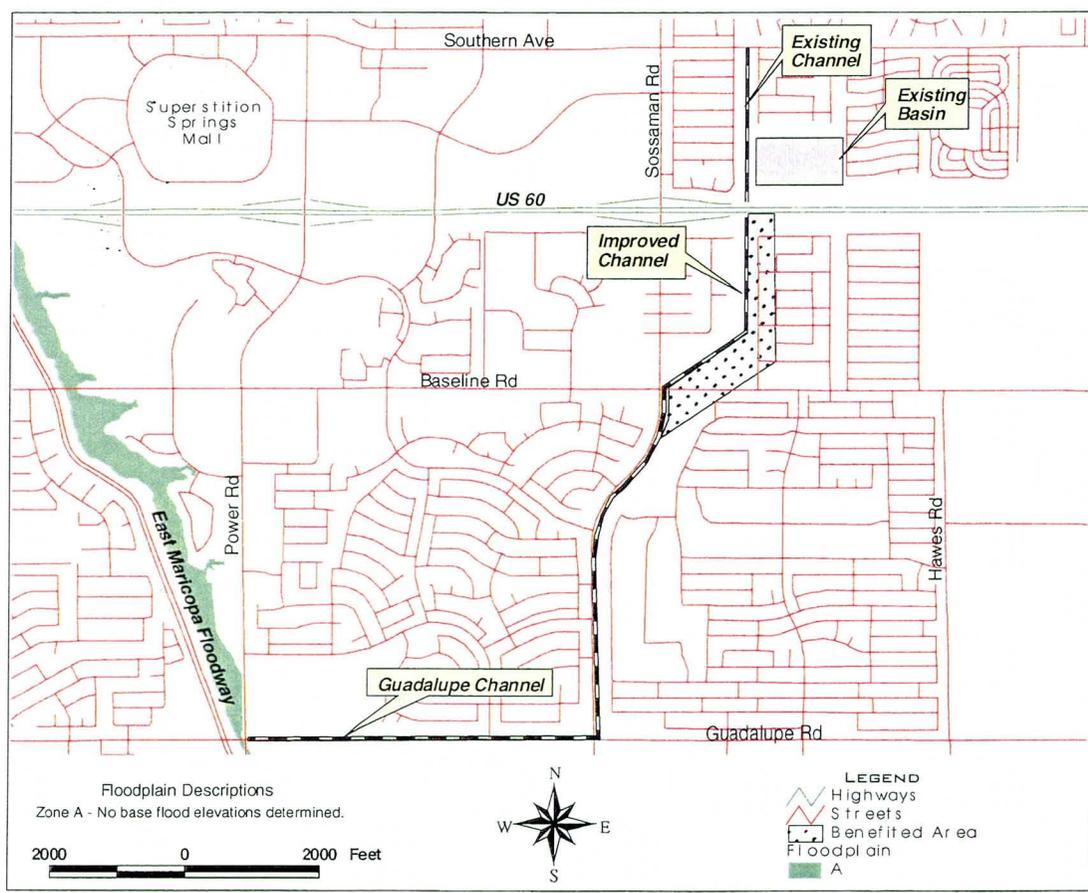
PCN: 108.01.30

Sossaman Channel

Municipality:
Mesa

PM: Paul Stears, P.E.
602-506-4768
pjs@mail.maricopa.gov

T1N R7E S32



CIP Budget

x \$1,000

FY 01/02	FY 02/03	FY 03/04	FY 04/05	FY 05/06	5-Yr CIP
\$2,400	\$0	\$0	\$0	\$0	\$2,400

The 43rd Avenue and Southern Avenue Detention Basin was originally included as part of the South Phoenix Drainage Improvement Project. The detention basin has been designed by the Flood Control District. The detention basin site has been acquired by the Flood Control District, and is located at the southeast corner of 43rd Avenue and Southern Avenue. The basin is now an integral component of and will be constructed as a part of the Laveen Area Conveyance Channel, and construction will be cost-shared among the District, City of Phoenix, and MCDOT. The basin will have 5:1 side slopes and will be surfaced with grass for erosion control and aesthetic purposes. The City of Phoenix plans to use the basin as a park facility, and will own and maintain the basin upon completion of construction. The basin includes an inlet structure, an inlet spillway, an outlet spillway, and an outlet structure which will carry flood water to the existing 43rd Avenue storm drain, which outfalls to the Salt River.

Supervisory District: 5

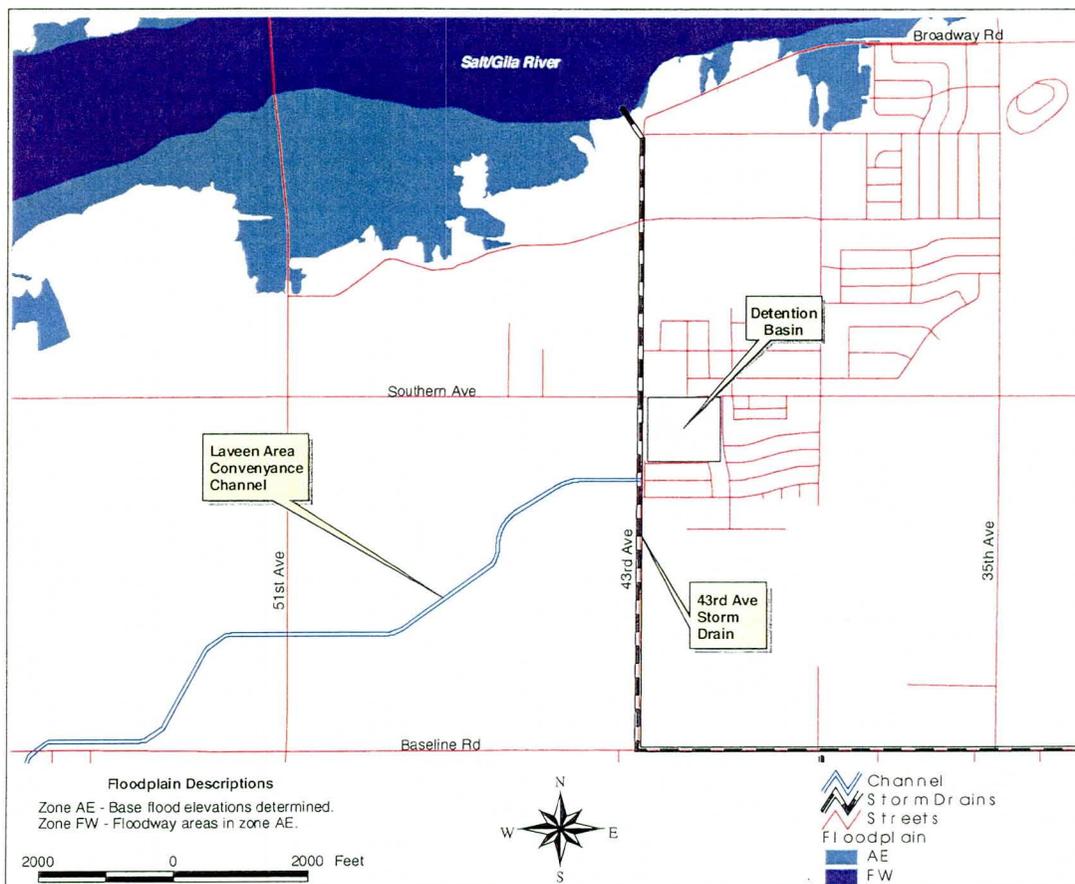
PCN: 117.02.30

43rd Avenue/Southern Avenue Basin

Municipality:
Phoenix

PM: Bobbie Ohler, P.E.
602-506-2943
bao@mail.maricopa.gov

T1N R2E



CIP Budget

x \$1,000

FY 01/02	FY 02/03	FY 03/04	FY 04/05	FY 05/06	5-Yr CIP
\$1,790	\$0	\$0	\$0	\$0	\$1,790

Residents in the South Phoenix area have been flooded during relatively minor events, including those considered to be less than 10-year flood storms. The South Phoenix Drainage Improvement Project will provide protection from a 100-year flood event to residences and farmland within the City of Phoenix. In addition, the project will provide flood protection to a proposed high school and an elementary school that are currently being constructed within the project area. The project will be built in phases to maximize the potential for cost sharing with other agencies. The proposed system is composed of underground pipes, located within existing rights-of-way, and basins that will help to minimize the project's cost. It is estimated that the project will cost \$24 million to design and build. Elements of the project will be constructed in phases through a joint partnership among the District, the City of Phoenix, and the Maricopa County Department of Transportation. Design and construction management for the Baseline Road Storm Drain will be provided by MCDOT and cost-shared by the District and MCDOT. The City of Phoenix will take over operation and maintenance. In addition, the District will design the detention basin at 27th Avenue and Baseline Road, for construction in the future. The goal is for the District to contribute approximately 50% of the project cost of the South Phoenix Drainage Improvements. Depending on funding participation, some project elements may be deleted, downsized or deferred, possibly resulting in a reduced level of protection.

Supervisorial District: 5

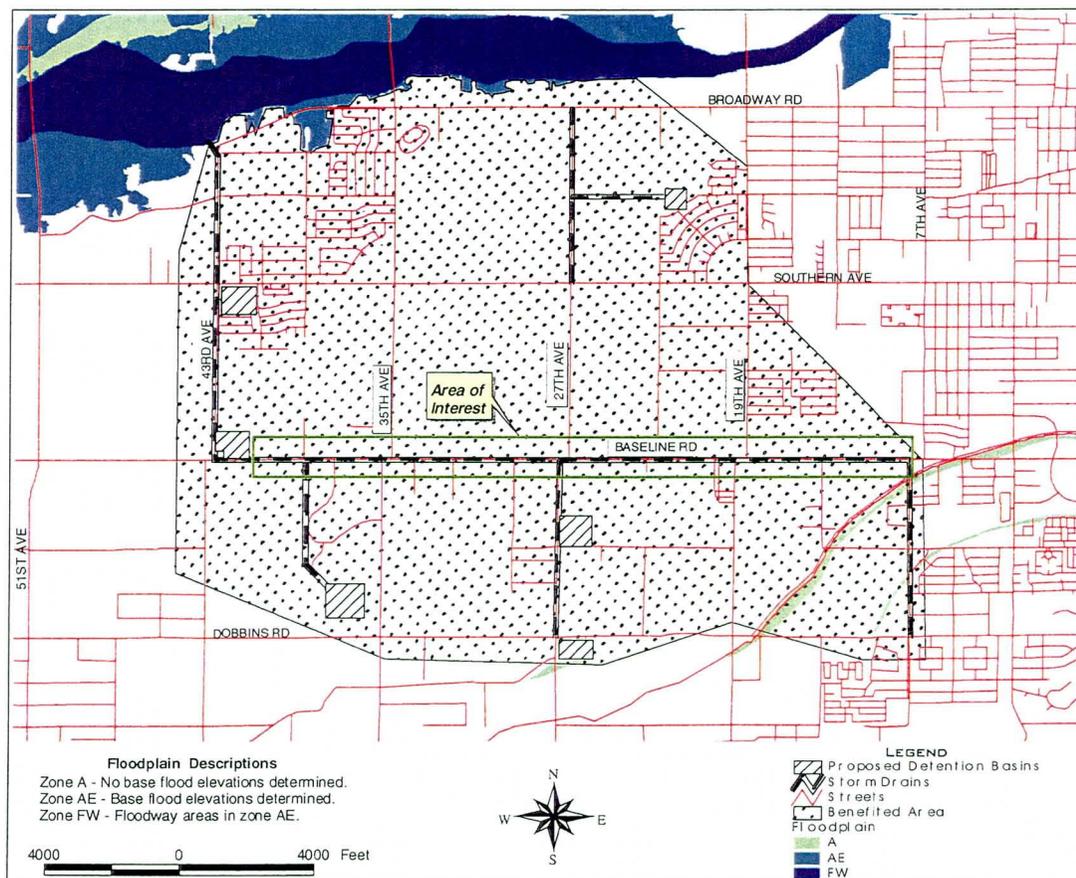
PCN: 117.03.30

Baseline Road Storm Drain

Municipality:
Phoenix

PM: Scott Vogel, P.E.
602-506-4771
csv@mail.maricopa.gov

T1N R2E
T1N R3E



CIP Budget

x \$1,000

FY 01/02	FY 02/03	FY 03/04	FY 04/05	FY 05/06	5-Yr CIP
\$212	\$0	\$0	\$0	\$0	\$212

The purpose of the Laveen Area Drainage Master Plan is to quantify the extent of flooding problems, to identify and evaluate alternative solutions to flooding problems, with public input, and determine a recommended plan to mitigate flooding hazards within the Laveen watershed. Pending development has increased significantly within the watershed requiring the need to evaluate potential flooding and ponding particularly along the existing Maricopa Drain. The major objectives of the study are:

- 1) Develop a plan to control runoff to prevent flood damage within the watershed,
- 2) Develop a plan for a flood channel along the Maricopa Drain alignment to convey flows to the Gila River, and,
- 3) Develop a plan for flood control facilities to convey flood flows within the watershed to the Maricopa Drain

The total area is approximately 16 square miles. The Laveen ADMP will be completed by the end of 2001.

Supervisorial District: 5

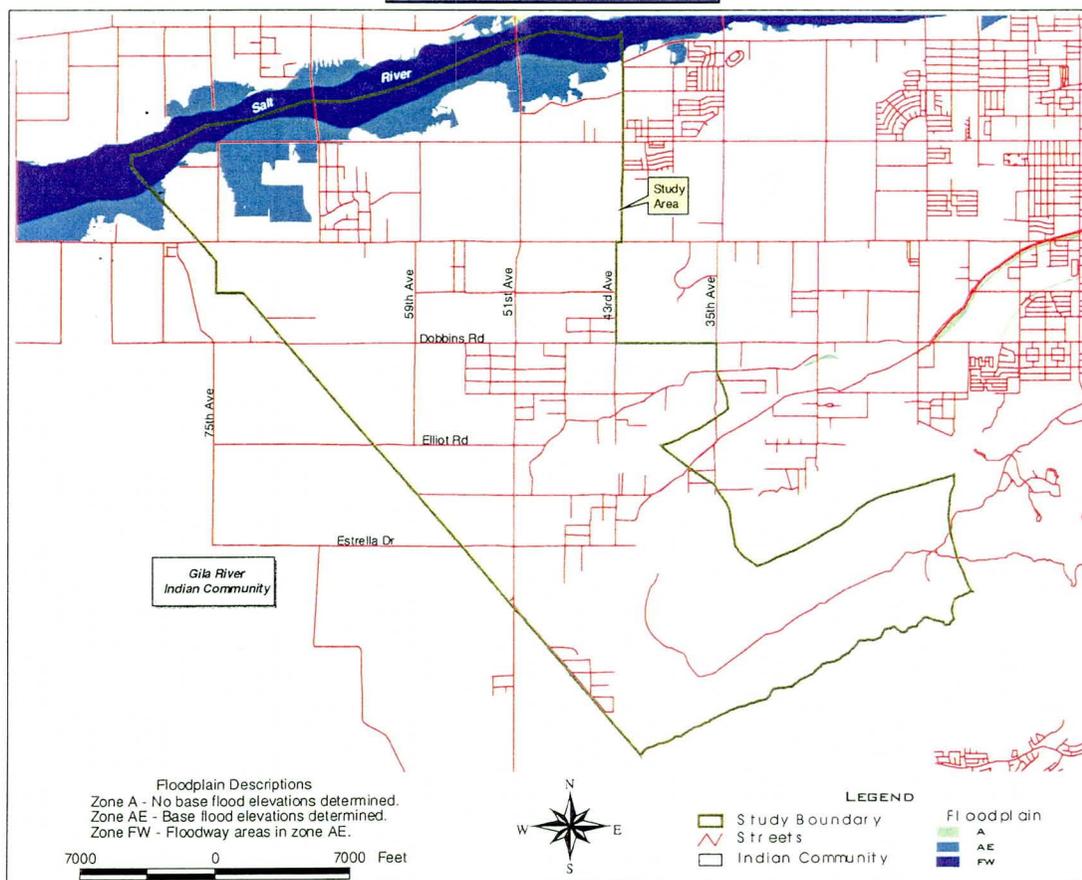
PCN: 117.07.31

Laveen Area Drainage Master Plan

Municipalities:
Phoenix

PM: Tim Phillips, P.E.
602-506-4718
tsp@mail.maricopa.gov

T1S R1-3E
T1N R1-3E



CIP Budget

x \$1,000

FY 01/02	FY 02/03	FY 03/04	FY 04/05	FY 05/06	5-Yr CIP
\$6,583	\$7,800	\$0	\$0	\$0	\$14,383

This project includes the design and construction of a conveyance channel capable of containing a 100-year flood event in the vicinity of the existing Maricopa Drain from 43rd Avenue to the Salt River for a length of approximately 5.8 miles. A flood detention basin at 43rd Avenue and Southern Avenue will mitigate peak flood flows getting to the conveyance channel.

Based on previous evaluations of flood hazards within this area, significant flood water from large storm events pond along the existing Maricopa Drain. This project will eliminate the potential flood hazard and reduce and/or eliminate potential flood damages.

This project consists of channel excavation, road crossings, drop structures, tiling and filling in the existing Maricopa Drain, and construction of an earthen low-flow channel. The channel and basin will be grass-lined to reduce and/or eliminate erosion and sediment transport and to provide landscaping and aesthetics.

The peak discharge at the outfall of the channel for the 100-year storm event is estimated to be 2800 cfs. The existing Maricopa Drain has the capacity for about 20-50 cfs. The existing Maricopa Drain carries agricultural tailwater continually to the Gila River Indian Reservation, and some of this water outfalls to the Salt River. This water will be carried in the Project's low-flow channel, and outfall near the existing outfall location.

The IGA between the District, City of Phoenix, MCDOT, and SRP was approved by the FCAB on May 23rd, 2001. Construction for the Project is anticipated to commence in fall/winter 2001.

Supervisorial District: 5

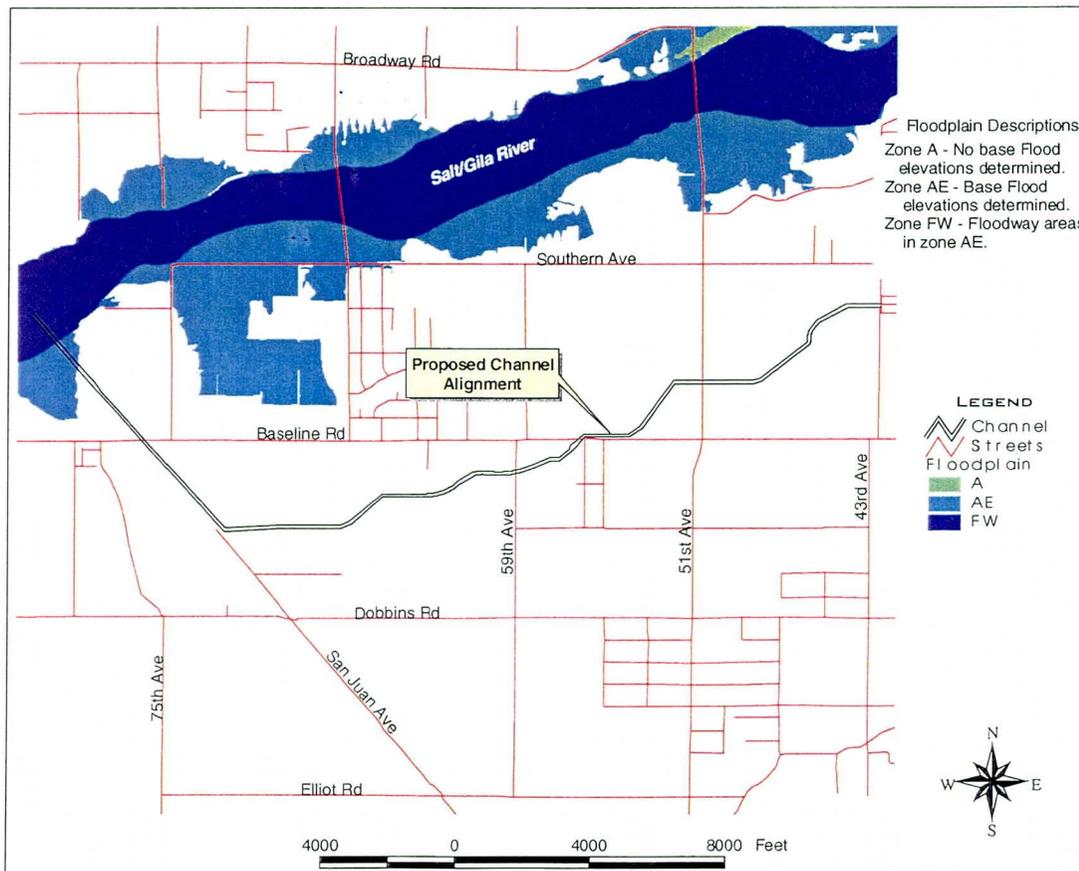
PCN: 117.08.31

Laveen Area Conveyance Channel

Municipality:
Phoenix

PM: Bobbie Ohler, P.E.
602-506-2943
bao@mail.maricopa.gov

T1N R1E, T1S R1E
T1N R2E, T1S R2E



CIP Budget

x \$1,000

FY 01/02	FY 02/03	FY 03/04	FY 04/05	FY 05/06	5-Yr CIP
\$0	\$0	\$150	\$2,500	\$2,500	\$5,150

Residents in the South Phoenix area have been flooded during relatively minor events, including those considered to be less than 10-year flood storms. The South Phoenix Drainage Improvement Project will provide protection from a 100-year flood event to residences and farmland within the City of Phoenix. In addition, the project will provide flood protection to a proposed high school and an elementary school that are currently being constructed within the project area. The project will be built in phases to maximize the potential for cost sharing with other agencies. The proposed system is composed of underground pipes, located within existing rights-of-way, and basins that will help to minimize the project's cost. It is estimated that the project will cost \$24 million to design and build. Elements of the project will be constructed in phases through a joint partnership among the District, the City of Phoenix, and the Maricopa County Department of Transportation. The South Phoenix Two Basins are located at 43rd Avenue and Baseline Road, and 27th Avenue and South Mountain Avenue. The Two Basins were submitted by the City of Phoenix in the 1999 Prioritization Process, and approved by the Prioritization Committee. The goal is for the District to contribute approximately 50% of the project cost of the South Phoenix Drainage Improvements. Depending on funding participation, some project elements may be deleted, downsized or deferred, possibly resulting in a reduced level of protection.

Supervisorial District: 5

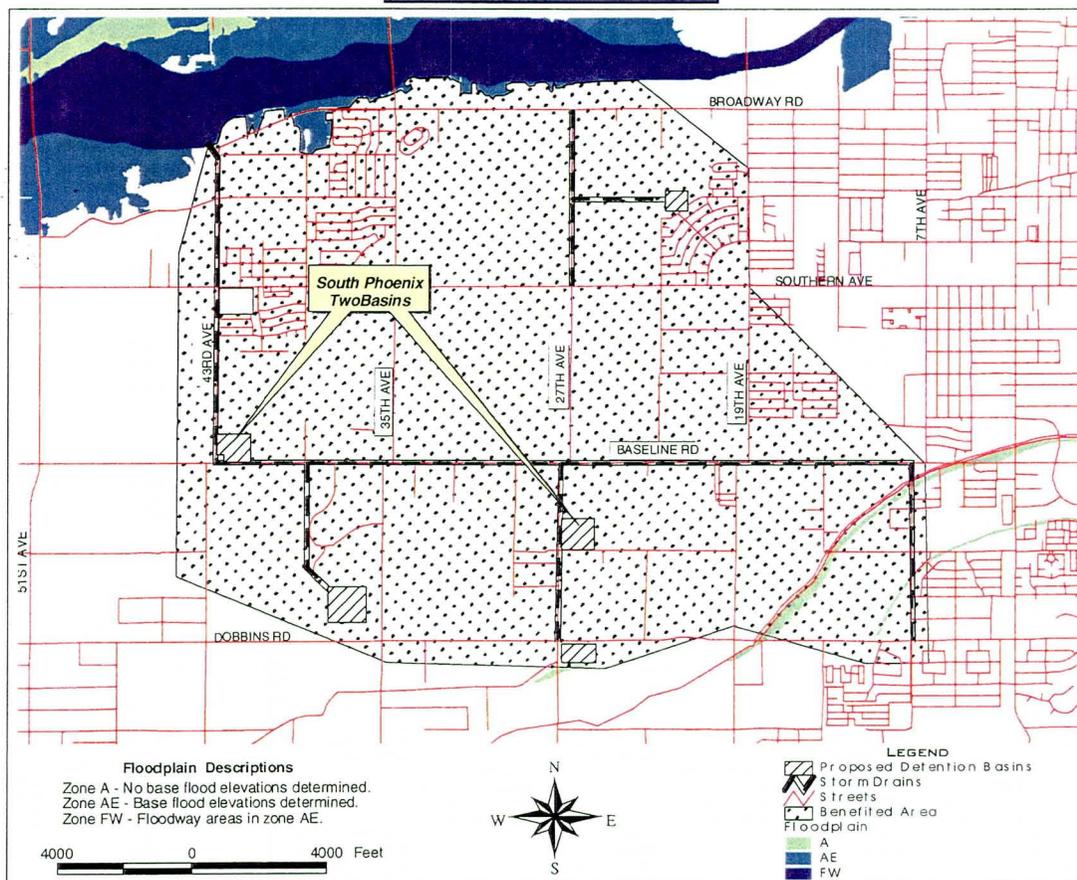
PCN: 117.xx.xx

South Phoenix Two Basins

Municipality:
Phoenix

PM: Scott Vogel, P.E.
602-506-4771
csv@mail.maricopa.gov

T1N R2E
T1N R3E



CIP Budget

x \$1,000

FY 01/02	FY 02/03	FY 03/04	FY 04/05	FY 05/06	5-Yr CIP
\$150	\$150	\$1,000	\$2,100	\$0	\$3,400

The first phase of this project is to identify the drainage problems and develop cost effective solutions for a storm water collection system for the Scottsdale Road corridor area from Thunderbird Road and Mountain View Roads. Based on the preferred alternative, the project will move forward into the design and construction phase. When completed, approximately 417 acres of residential and commercial development (140 acres within the City of Phoenix) will be protected. The benefited area contains approximately 300 residences and 70 commercial structures. The total project cost is estimated at \$3.3 million, with 50% funding supplied by the District. Scottsdale will be responsible for the future operation and maintenance of the facility.

Supervisorial District: 2

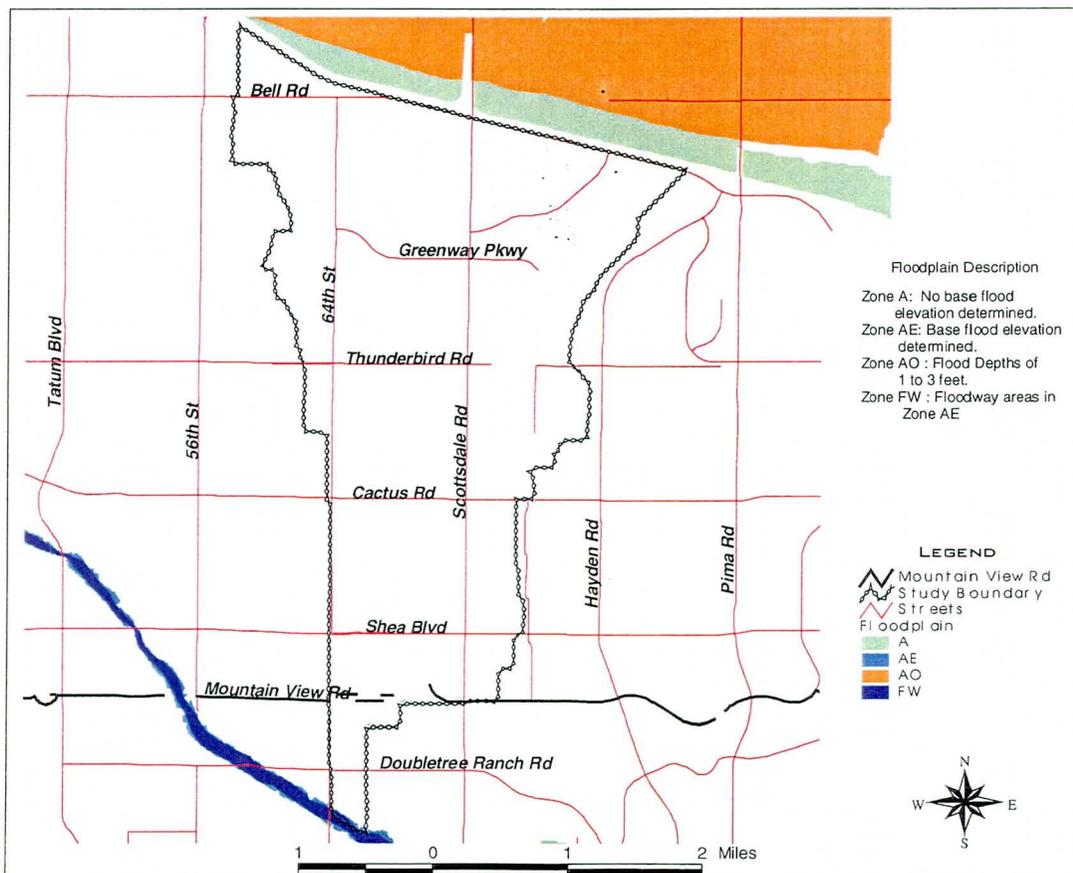
PCN: 120.02.30

Scottsdale Road Corridor Drainage

Municipality:
Scottsdale

PM: Afshin Ahouraiyan, EIT
602-506-4519
afa@mail.maricopa.gov

T3N R4E



CIP Budget

x \$1,000

FY 01/02	FY 02/03	FY 03/04	FY 04/05	FY 05/06	5-Yr CIP
\$250	\$250	\$0	\$0	\$0	\$500

The East Maricopa Floodway (EMF) Capacity Mitigation Plan will increase the capacity of the Floodway to convey the 100-year flows originating within the East Mesa watershed. The plan includes in-line and/or off-line detention basins (see EMF Basins Design – Chandler Heights and Rittenhouse Basins, PCN 121.03.31) with channel improvements between Broadway Road and Main Street. The channel improvements, scheduled to be completed during FY 2002-03, will include increasing the bank height by raising the maintenance roads on both sides of the channel between Rittenhouse Road and Warner Road.

Supervisory District: 1

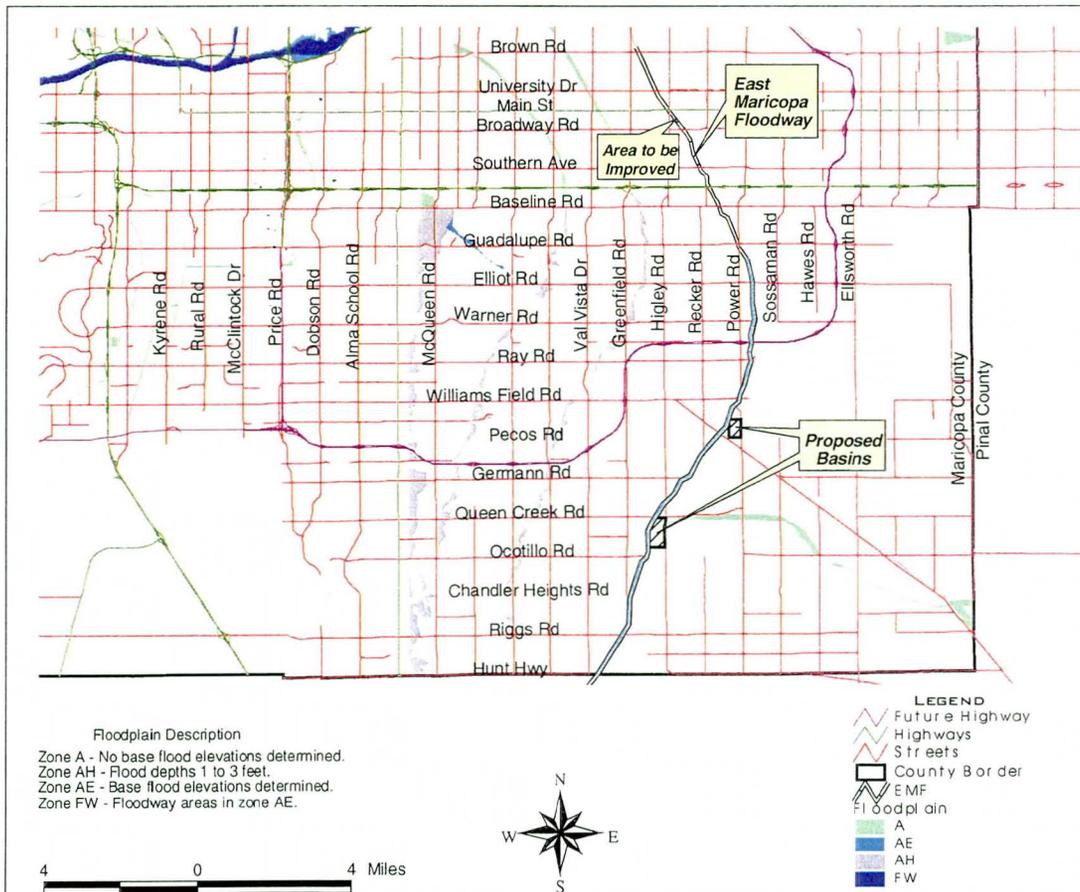
PCN: 121.02.31

EMF Channel Improvements

Municipalities:
Gilbert, Mesa, Queen Creek

PM: Paul Stears, P.E.
602-506-4768
pjs@mail.maricopa.gov

T1N R6E; T1S R6E;
T1S, R7E; T2S R6E



CIP Budget

x \$1,000

FY 01/02	FY 02/03	FY 03/04	FY 04/05	FY 05/06	5-Yr CIP
\$2,947	\$3,211	\$4,000	\$6,000	\$6,000	\$22,158

The District has completed the East Maricopa Floodway (EMF) Mitigation Study. The study identified several drainage and flooding problems along the EMF. The capacity of the EMF is at about 8,000 cfs. The existing condition 100-yr. is about 16,000 cfs. The study proposed to mitigate the problem by constructing two large off line retention basins. The Chandler Heights Basin is planned as an off line basin to mitigate flows from the Sanokai Wash, Queen Creek Wash, and the EMF. Rittenhouse Basin is also planned as an off line basin to mitigate flows from the Rittenhouse Channel and the EMF.

The project consists of a pre-design, and a final design to include; preparation of construction plans, special provisions and engineer's estimates. The design cost is currently estimated at \$2 million. The preliminary construction cost is estimated to be \$26 million.

Supervisory District: 1

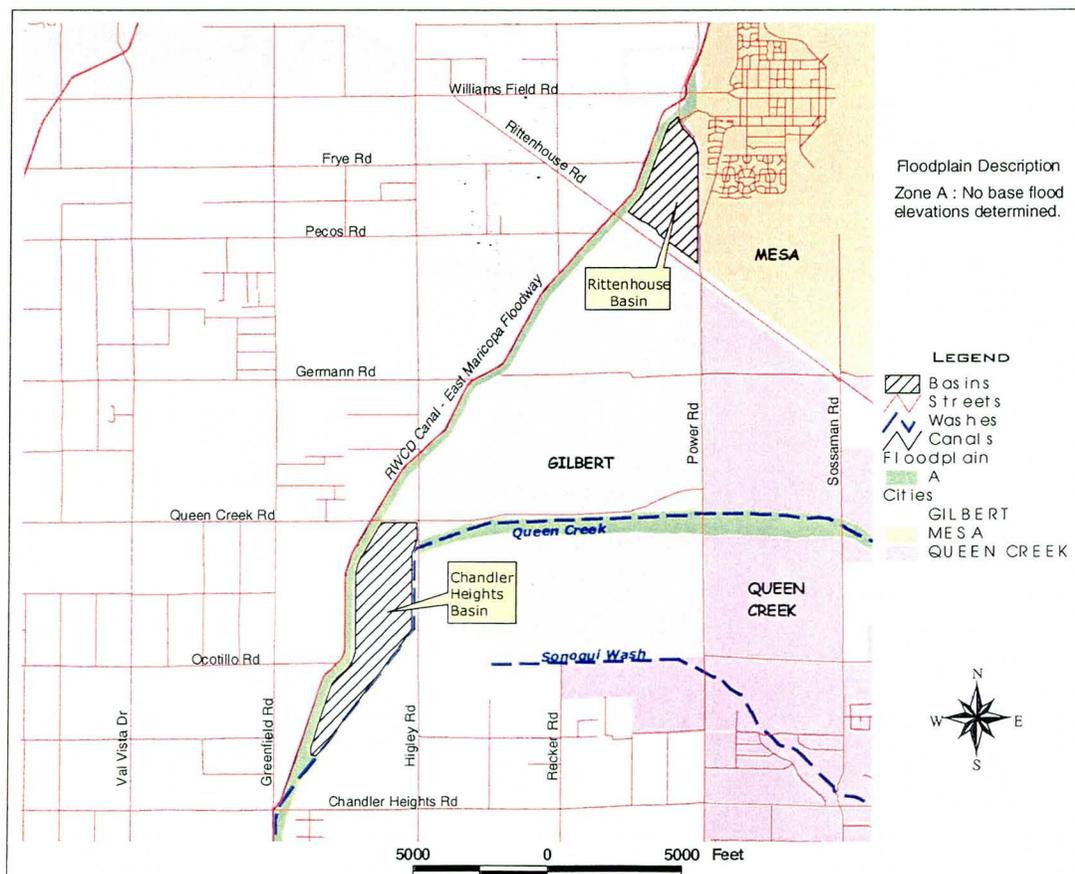
PCN: 121.03.31

EMF Rittenhouse & Chandler Heights Basin

Municipalities:
Gilbert, Mesa, Queen Creek

PM: Paul Stears, P.E.
602-506-4768
pjs@mail.maricopa.gov

T1S R6E
T2S R6E



CIP Budget

x \$1,000

FY 01/02	FY 02/03	FY 03/04	FY 04/05	FY 05/06	5-Yr CIP
\$8,386	\$0	\$0	\$0	\$0	\$8,386

This project involves the environmental restoration of approximately 5 miles of the Salt River within the City of Phoenix from the I-10 Bridge to 19th Avenue. The project will provide riparian habitat restoration and include channel stabilization, river bank protection, water quality improvements, aesthetic improvements and recreational opportunities. In 1998 the District recommended or its participation in the construction of the low flow channel feature of the of the project. On December 16, 1998, the BOD approved project IGA FCD 98040 and Resolution FCD 98-08. In March 2001 the BOD approved an Amendment to the IGA authorizing additional District funding for the low flow channel. The low flow channel will stabilize the river gradient, safely convey frequent flood flows and reduce the frequency of inundation of channel vegetation from flood events. The low flow channel and main bank channel stabilization system will also limit scour and erosion of the channel banks and reduce the potential for disturbing landfill material that may be present adjacent to the channel. Project design requirements will insure that the current level of flood protection and river channel capacity in the 5 mile reach is not decreased by the environmental restoration features. The total project cost is estimated at \$83 million. The District's cost share for construction of the low flow channel flood control features is now estimated to be \$18 million. Design has been completed by the United States Army Corps of Engineers. Construction of Phase 1 of the low flow channel has been completed. Phase 2 construction will begin in August, 2001.

Supervisorial District: 5

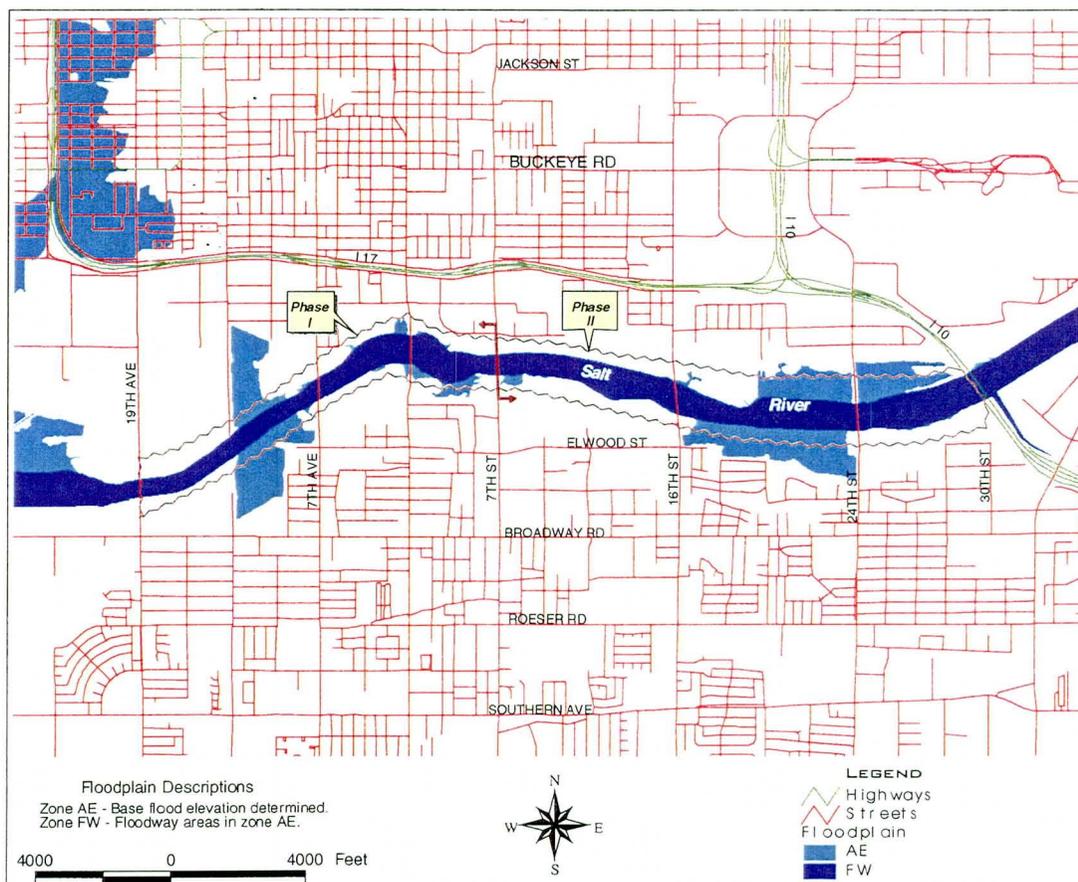
PCN: 124.01.30

Phoenix Rio Salado

Municipality:
Phoenix

PM: Don Rerick, P.E.
602-506-4768
djr@mail.maricopa.gov

T1N R3E



CIP Budget

x \$1,000

FY 01/02	FY 02/03	FY 03/04	FY 04/05	FY 05/06	5-Yr CIP
\$250	\$0	\$1,000	\$0	\$0	\$1,250

This project includes a study of the vegetation maintenance alternatives to maintain conveyance capacity of the Salt River Channel upstream of the existing Tempe Town Lake. Possible environmental and recreational amenities that could be incorporated into the reach of the Salt River will also be studied. Urban runoff from wastewater treatment facilities and urban storm water drainage accumulates in the Salt River Channel upstream of the Tempe Town Lake resulting in increased vegetation growth in the area. The increased vegetation could result in decreased capacity of the channel to convey flood flows. Without adequate maintenance, the study will also evaluate the potential for incorporating multi-use activities into the Salt River Channel at this location.

Supervisory District: 2

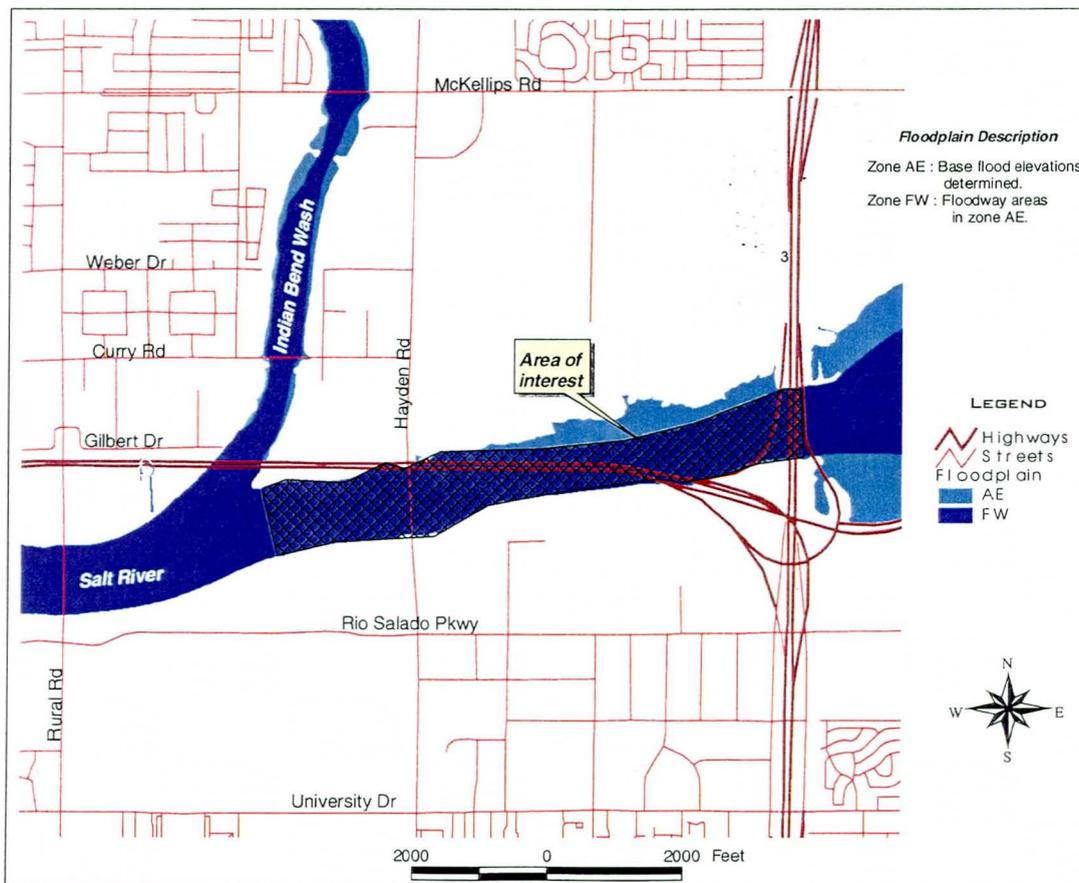
PCN: 125.05.31

Tempe/Mesa Habitat Mitigation

Municipality:
Tempe, Mesa

PM: Tim Phillips, P.E.
602-506-4718
tsp@mail.maricopa.gov

T5N, R4E
T5N, R5E



CIP Budget

x \$1,000

FY 01/02	FY 02/03	FY 03/04	FY 04/05	FY 05/06	5-Yr CIP
\$600	\$1,200	\$0	\$0	\$0	\$1,800

Current and projected District CIP expenditures can be divided into two parts: a planning study that will lay the groundwork for further flood control activities; and a design and construction phase that will address flooding issue. The planning study consists of providing professional engineering services necessary for developing an area drainage master plan to determine guidelines for stormwater management and mitigate flooding for the Buckeye/Sun Valley area. The study will include analysis of approximately 280 square miles of watershed for the eastern contributing watershed for the Hassayampa River from approximately the Morristown Highway (SR 74) south to the Gila River and from the White Tank Mountains west to the Hassayampa River. The study will identify drainage problems, update the existing hydrology due to development and new hydrologic methodology, and develop cost effective solutions for a storm water collection and disposal system and will further identify potential outfall alternatives. The planning study is budgeted at \$ 1.8 million dollars and is included in the CIP Budget for FY 01/02 and 02/03. The design and construction phase will involve the implementation of solutions to flooding that are identified once the planning and conceptual design phases have been completed, and remedial actions have been specified. Future CIP budgets may include projects identified in the study.

Supervisorial District: 4

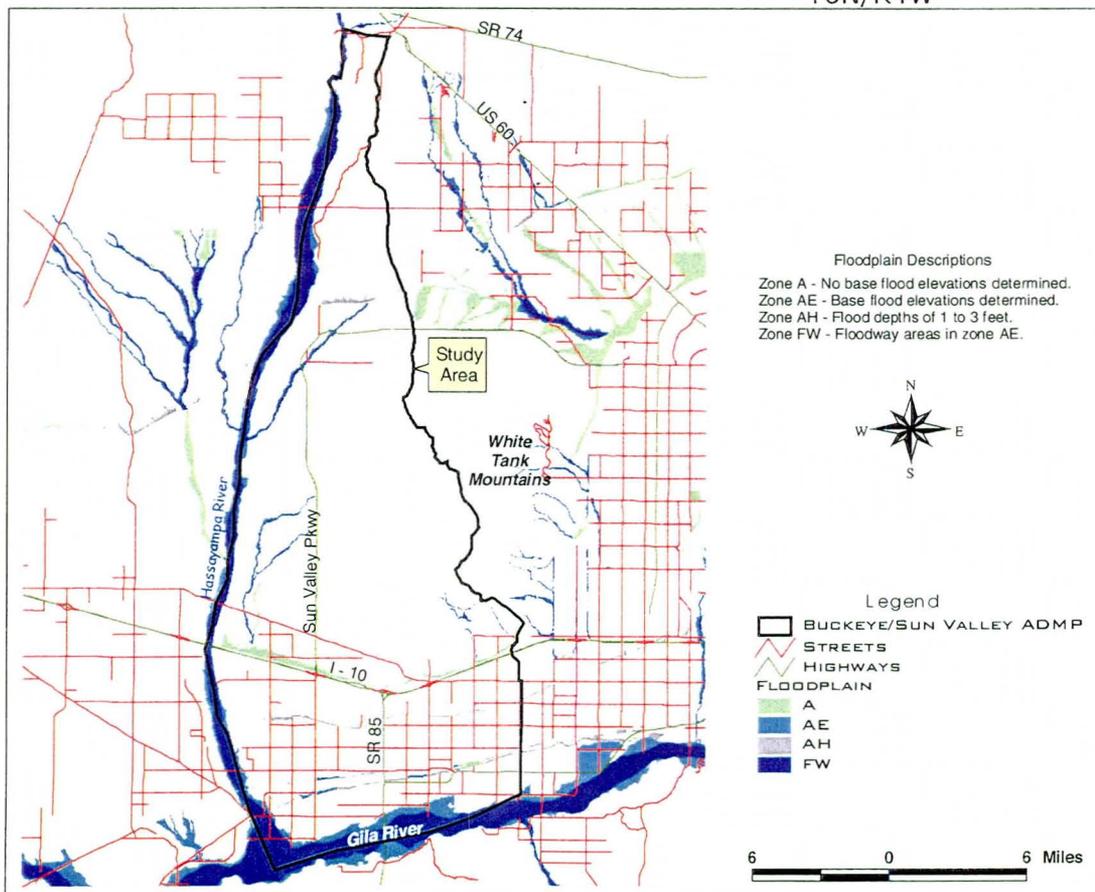
PCN: 211.01.31

Buckeye/Sun Valley ADMS/ADMP

Municipality:
Buckeye

PM: Valerie Swick, CFM
602-506-2929
vas@mail.maricopa.gov

T1S/R3W-R5W; T1N/R3W-R5W;
T2N/R3W-R5W; T3N/R3W-R5W;
T4N/R3W-R5W; T5N/R4W;
T6N/R4W



CIP Budget

x \$1,000

FY 01/02	FY 02/03	FY 03/04	FY 04/05	FY 05/06	5-Yr CIP
\$600	\$1,200	\$0	\$0	\$0	\$1,800

Current and projected District CIP expenditures can be divided into several parts: a drainage mapping, a structures study, a planning study that will lay the groundwork for further flood control activities, and a design and construction phase that will address flooding issues. The planning study consists of providing professional engineering services necessary for developing an area drainage master plan to determine guidelines for stormwater management and mitigate flooding within the Wittmann area. The study will include analysis of approximately 300 plus square miles of watershed. The study will identify drainage problems, update the existing hydrology due to development and new hydrologic methodology, and develop cost effective solutions for a storm water collection and disposal system and will further identify potential outfall alternatives. The planning study is budgeted at \$ 1.9 million dollars and is included in the CIP Budget for FY 01/02 and FY 02/03. The design and construction phase will involve the implementation of solutions to flooding that are identified once the planning and conceptual design phases have been completed, and remedial actions have been specified.

Supervisorial District: 4

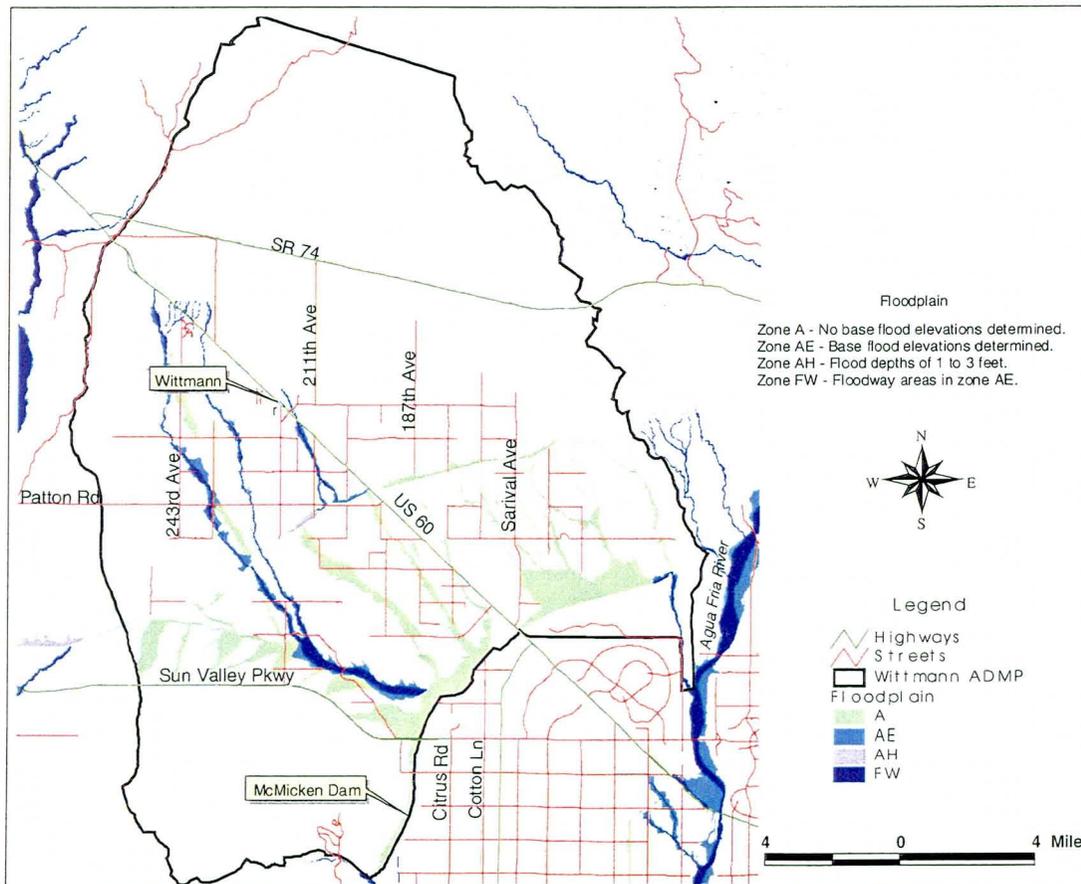
PCN: 344.01.31

Wittmann ADMP Update

Municipality:
Buckeye, Peoria, Surprise

PM: Kelli Sertich, AICP
 602-506-0867
 kas@mail.maricopa.gov

T3N/R2W-R4W
T4N/R1W,R3W
T6N/R1W-R4W
T7N/R2W-R3W



CIP Budget

x \$1,000

FY 01/02	FY 02/03	FY 03/04	FY 04/05	FY 05/06	5-Yr CIP
\$162	\$0	\$0	\$0	\$0	\$162

This project is being managed by the Flood Control District of Maricopa County (District) in conjunction with the Federal Emergency Management Agency (FEMA) to purchase and relocate approximately ten (10) to twenty (20) residences located in the floodplain in the Town of Aguila, Arizona. The town is located in the extreme northwest corner of Maricopa County about 25 miles west of Wickenburg, Arizona along U.S. Highway 60/70.

On November 21, 2000 a severe rainstorm flooded the area, which caused extensive damage to homes and placed lives in danger. As a result of the flooding, the District and FEMA conducted a study of the flooded areas that surrounded the town, and on the Grass Wash area, which runs through Aguila. An assessment of the damage was made and then the decision to acquire the property and relocate the residents.

The District submitted an application to FEMA asking for a grant to acquire and relocate the residents. The Aguila Hazard Mitigation Grant was approved and FEMA awarded the District the sum of \$ 815,000. The estimated cost of the project is \$977,300; the District pledged the additional money or about 10% so that the project could be completed.

Acquisition, relocation, and then demolition of the homes in the floodway will be a 2-year project scheduled to be completed in late 2002. After the residences have been demolished and the area cleared, the land will then be preserved as open space and could someday be utilized as a community park.

Supervisorial District: 4

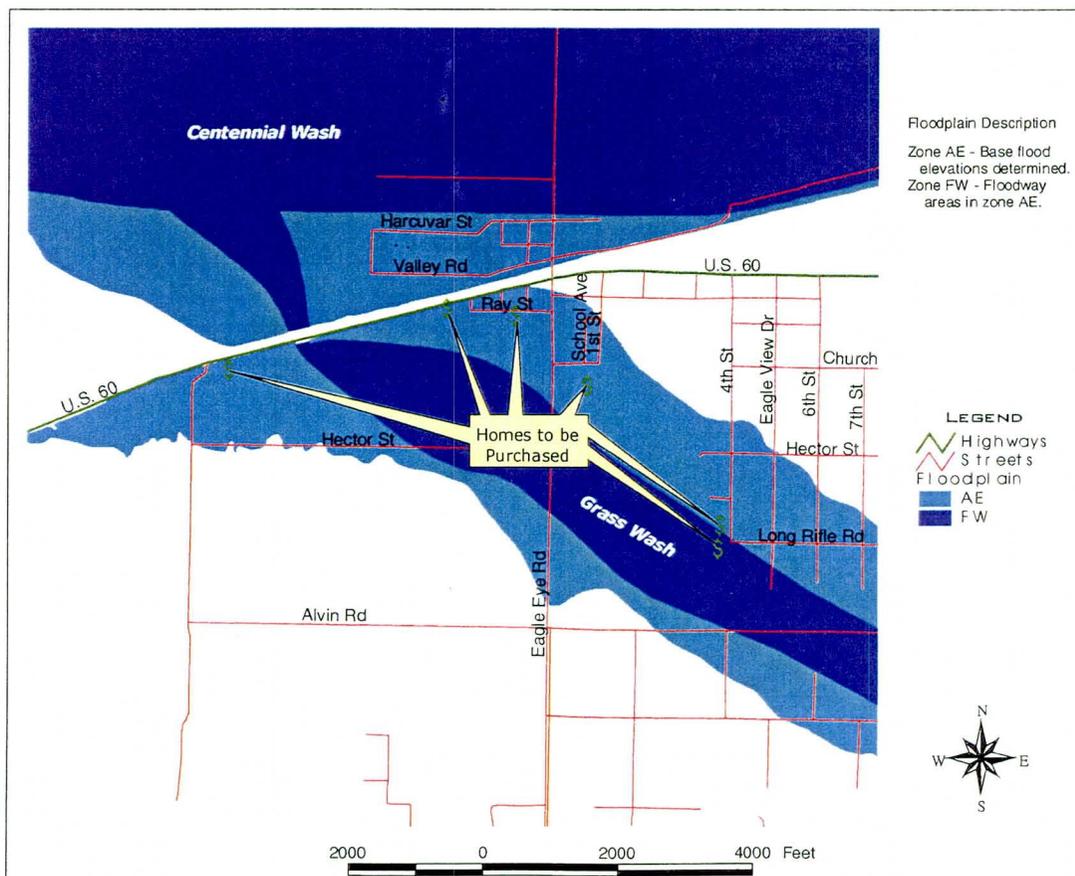
PCN: 345.01.31

Aguila Hazard Mitigation Grant Program

Municipality:
Aguila

PM: Gene Arnold
602-506-4744
ega@mail.maricopa.gov

T7N, R8-10W



CIP Budget

x \$1,000

FY 01/02	FY 02/03	FY 03/04	FY 04/05	FY 05/06	5-Yr CIP
\$350	\$0	\$0	\$0	\$0	\$350

The purpose of the ADMP is to develop solutions to damaging flooding similar to the floods that occurred in this area in September 1997 and again in October 2000. Numerous homes were flooded and streets were washed out due to the excessive flow. The ADMP limits will be the Yavapai County boundary limits to the north, approximately Effus Ranch Road alignment to the east, the Vulture Mountains to the south and La Paz County boundary limits to the west. Structural and non-structural alternatives will be evaluated to determine the best solution for the area. A budget of \$350,000 has been allocated for FY 2001/2002. This project may be expanded to include a portion of La Paz County if funding from La Paz County is procured.

Supervisory District: 4

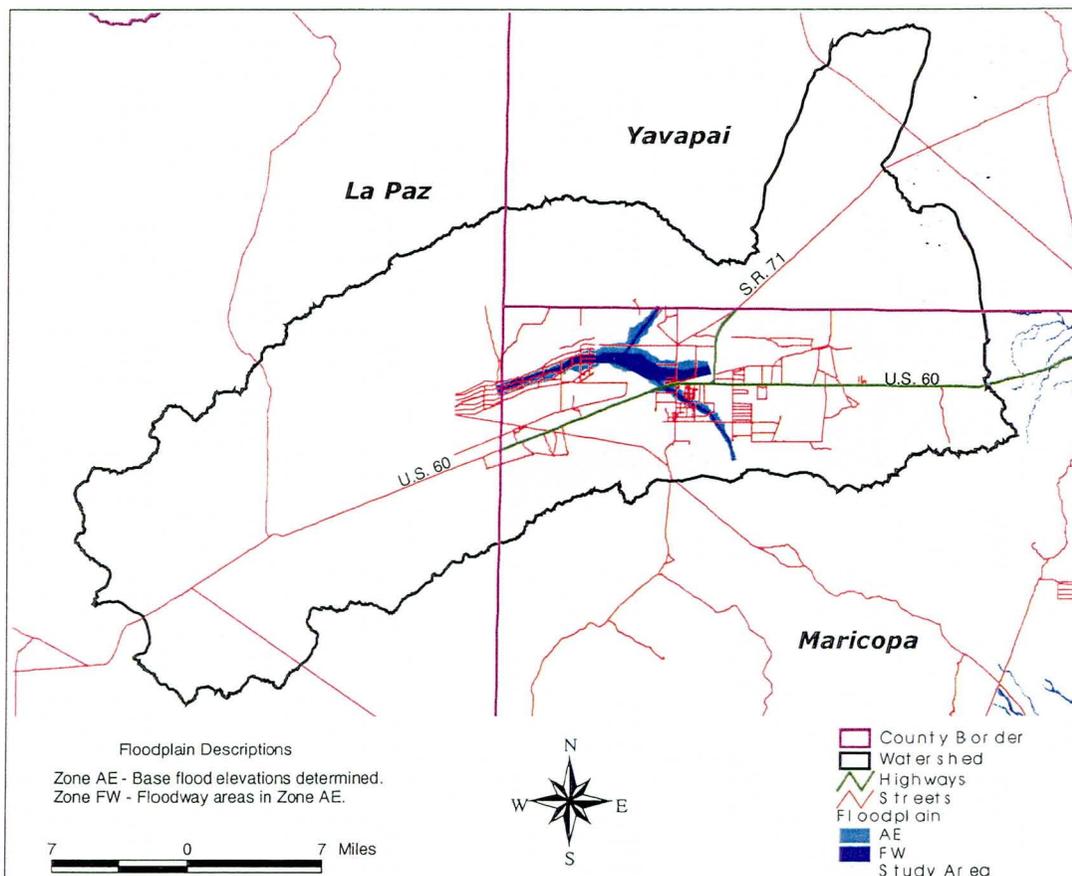
PCN: 345.02.31

Aguila ADMP

Municipality:
Aguila

PM: Felicia Terry, P.E.
602-506-8111
fet@mail.maricopa.gov

T7N, R8-10W



CIP Budget

x \$1,000

FY 01/02	FY 02/03	FY 03/04	FY 04/05	FY 05/06	5-Yr CIP
\$700	\$0	\$0	\$0	\$0	\$700

This study was identified after homes, that were located in a non-flood hazard area (Zone X), were flooded in a storm that occurred in October of 2000. This storm equated to approximately a 100-year storm. Flooding occurred in areas that were shown to be outside of the existing floodplain limits on the FEMA Flood Insurance Rate Map. A re-delineation of the floodplain limits for Upper Centennial Wash, Grass Wash and the Aguila Farm Channel is considered necessary to more accurately reflect flooding that would occur during a 100-year storm. New hydrology will need to be produced for this study. Currently the limits of the delineation will follow the existing floodplain study, but will extend approximately one-mile upstream of SR-71. This project has a budget of \$700,000 for Fiscal Year 2001/2002.

Supervisory District: 4

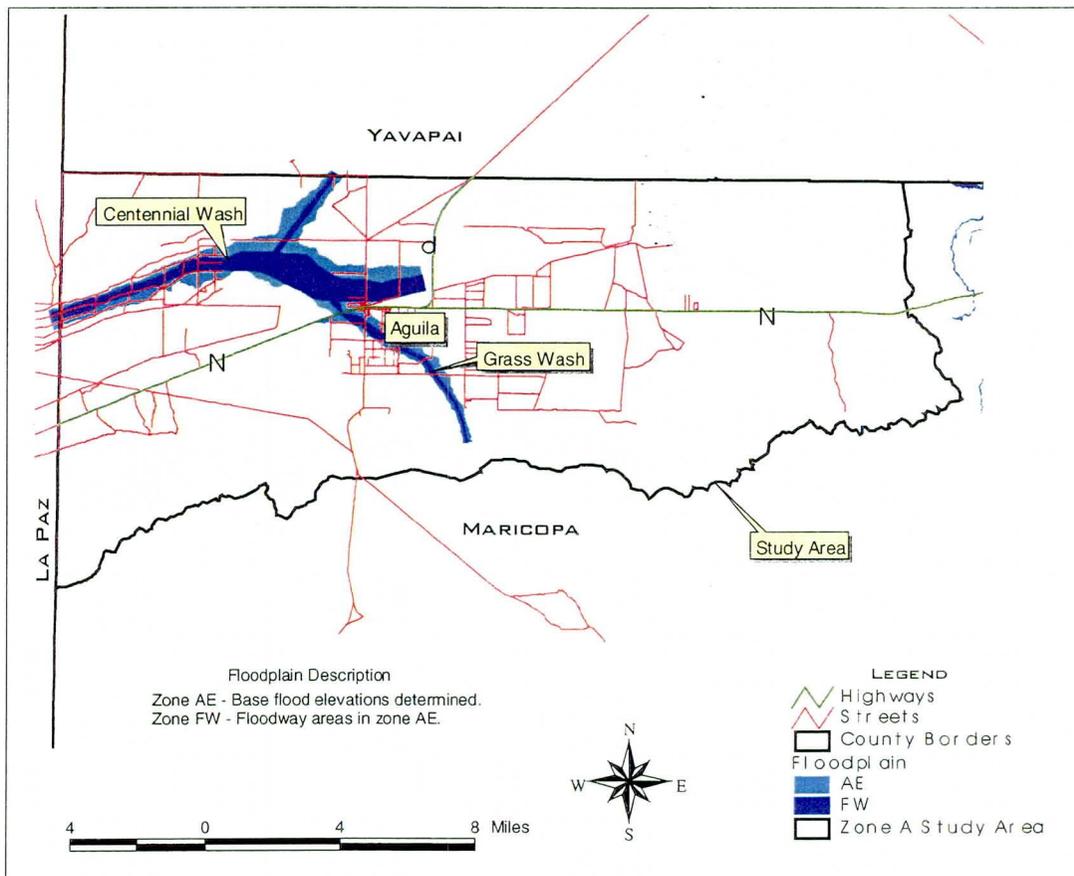
PCN: 345.03.31

Aguila Floodplain Delineation

Municipality:
Aguila

PM: Felicia Terry, P.E.
602-506-8111
fet@mail.maricopa.gov

T7N, R8-10W



CIP Budget

x \$1,000

FY 01/02	FY 02/03	FY 03/04	FY 04/05	FY 05/06	5-Yr CIP
\$0	\$200	\$2300	\$0	\$0	\$2,500

The Middle New River Watercourse Master Plan (MNRWCMP) study undertaken by the District identified projects to improve the conveyance capacity and provide bank protection along the New River. One of the recommended project areas is the reach of New River from the Outer Loop 101 and Skunk Creek confluence with New River, south to Grand Avenue. Recommended improvements include channelization and bank protection. Potential project partners include the City of Peoria and ADOT. The City and ADOT, along with the District are property owners along and within the New River alignment. The northerly portion of this project reach, along the west bank would include improvements along the Desert Harbor development that would be accomplished by the City. Further analysis of the recommendations and development of intergovernmental agreements are necessary before the project(s) can move forward.

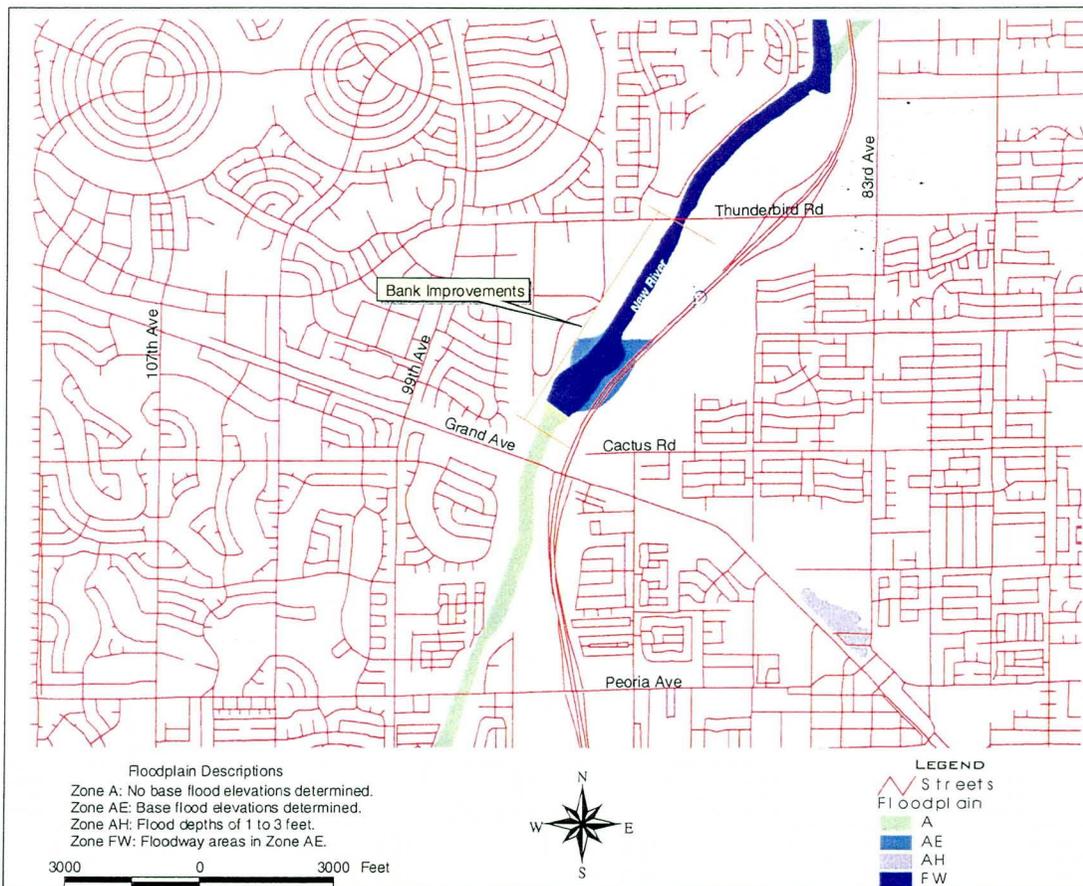
Supervisorial District: [REDACTED]

PCN: 400.06.31

New River (Grand – Skunk Creek)

Municipality:

PM: Paul Stears, P.E.
602-506-4768
pjs@mail.maricopa.gov



CIP Budget

x \$1,000

FY 01/02	FY 02/03	FY 03/04	FY 04/05	FY 05/06	5-Yr CIP
\$150	\$1350	\$0	\$0	\$0	\$1,500

The Middle New River Watercourse Master Plan (MNRWCMP) study undertaken by the District identified projects to improve the conveyance capacity and provide bank protection along the New River. One of the recommended projects is channel improvements near the 83rd Avenue New River crossing. The constructed improvement would be a grade control structure and channelization near the 83rd Avenue crossing. Glendale had already identified the need for a bridged crossing at 83rd Avenue and New River. The need for channel improvements associated with the bridge, and the MNRWCMP recommendation for channel improvements, resulted in a project partnership between the District and the City of Peoria and the City of Glendale. Intergovernmental Agreement were developed among these three partners to identify project responsibilities for the design and construction of the bridge, grade control structure and channel improvements. The City of Glendale will provide for design and construction of the bridge and the grade control structure and associated channel improvements. The District will provide construction management services for the project. All three partners will share in the total project costs with the City of Glendale funding 50% of the costs, and the City of Peoria and the District funding 25% each of the costs. Construction is expected to begin in 2002.

Supervisorial District:

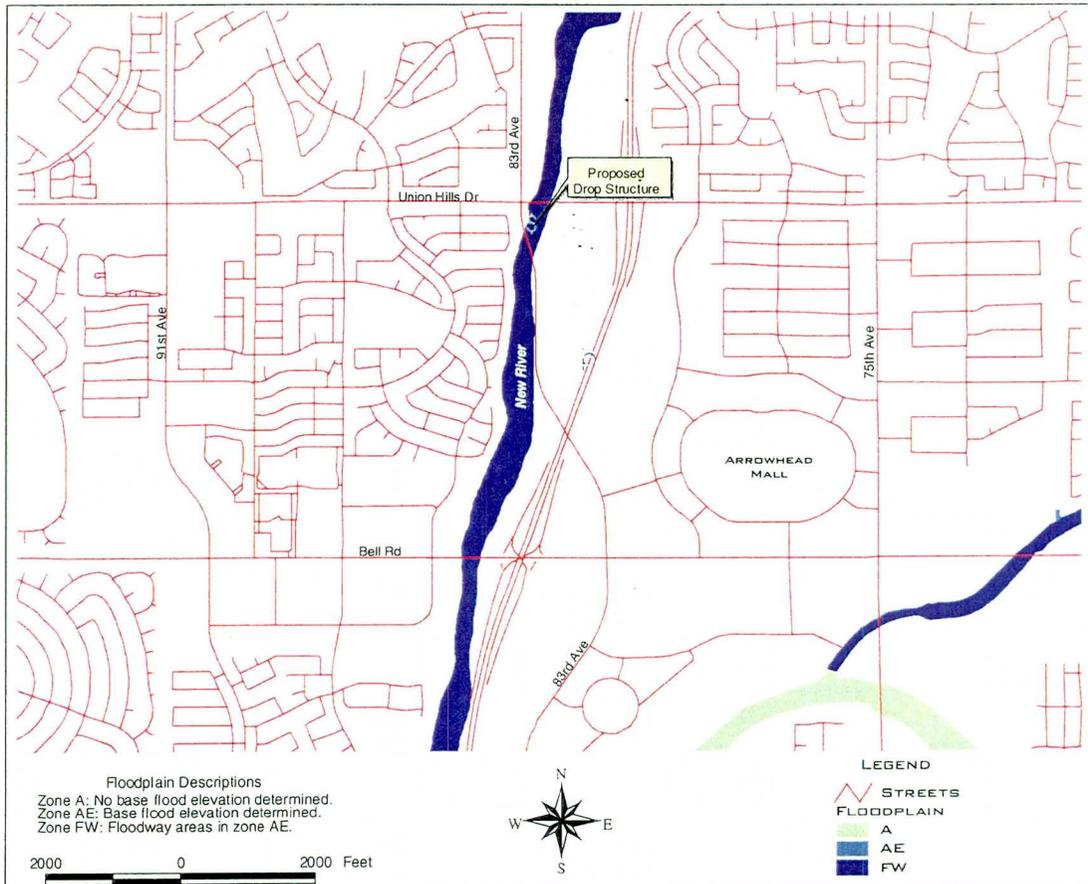


PCN: 400.07.31

New River (83rd Ave. GCS to Bell Park)

Municipality:

PM: Paul Stears, P.E.
602-506-4768
pjs@mail.maricopa.gov



CIP Budget

x \$1,000

FY 01/02	FY 02/03	FY 03/04	FY 04/05	FY 05/06	5-Yr CIP
\$300	\$0	\$0	\$0	\$0	\$300

The goal of the Paradise Shores / New River Bank Protection Project is to provide bank stabilization and armoring along the west bank of New River immediately adjacent to the Paradise Shores Subdivision. Under existing conditions, the segment of the west bank adjacent to the subdivision is the only portion of the west bank unprotected between Bell Road and the New River Confluence with Skunk Creek.

The improvements will consist of minor channel excavation and armoring of the west channel slope with wire-tied, rock filled mattresses. This project was identified in the Middle New River Watercourse Master Plan. The project was requested by the City of Peoria and approved for inclusion in the District's CIP. Peoria will cost share the project with the District.

Supervisory District: 4

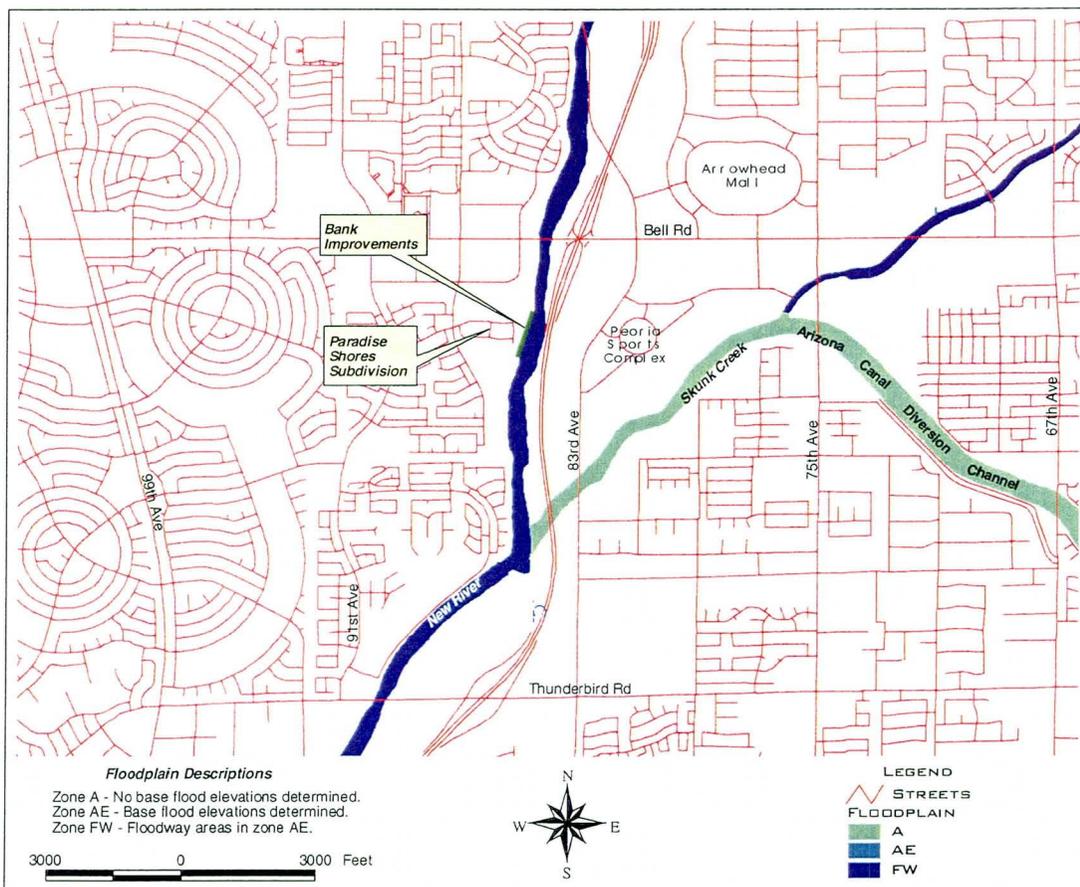
PCN: 400.08.31

New River (Paradise Shores)

Municipality:
Peoria

PM: Paul Stears, P.E.
602-506-4768
pjs@mail.maricopa.gov

T3N R1E



CIP Budget

x \$1,000

FY 01/02	FY 02/03	FY 03/04	FY 04/05	FY 05/06	5-Yr CIP
\$414	\$0	\$0	\$800	\$5,000	\$6,214

The purpose of the Spook Hill Area Drainage Master Plan is to update and expand the existing Spook Hill Area Drainage Master Study conducted in 1987. The study will quantify the extent of flooding problems, incorporate existing drainage structures into the model and develop alternative solutions to flooding problems for the entire Buckhorn-Mesa Watershed.

The two major objectives of the study are:

- 1) Develop a plan to control runoff to prevent flood damage within the watershed, and,
- 2) Mitigate the potential increase in runoff due to development in order to preserve the ability of the Buckhorn-Mesa Projects to provide protection to lands downstream from future 100-year flood damages. The approximate watershed area is 16 square miles. The planning study is budgeted at \$1.56 million and is included in the CIP budget with a construction budget of \$ 5,800,000 for FY 2003/2004 and 2004/2005.

Supervisorial District: 2

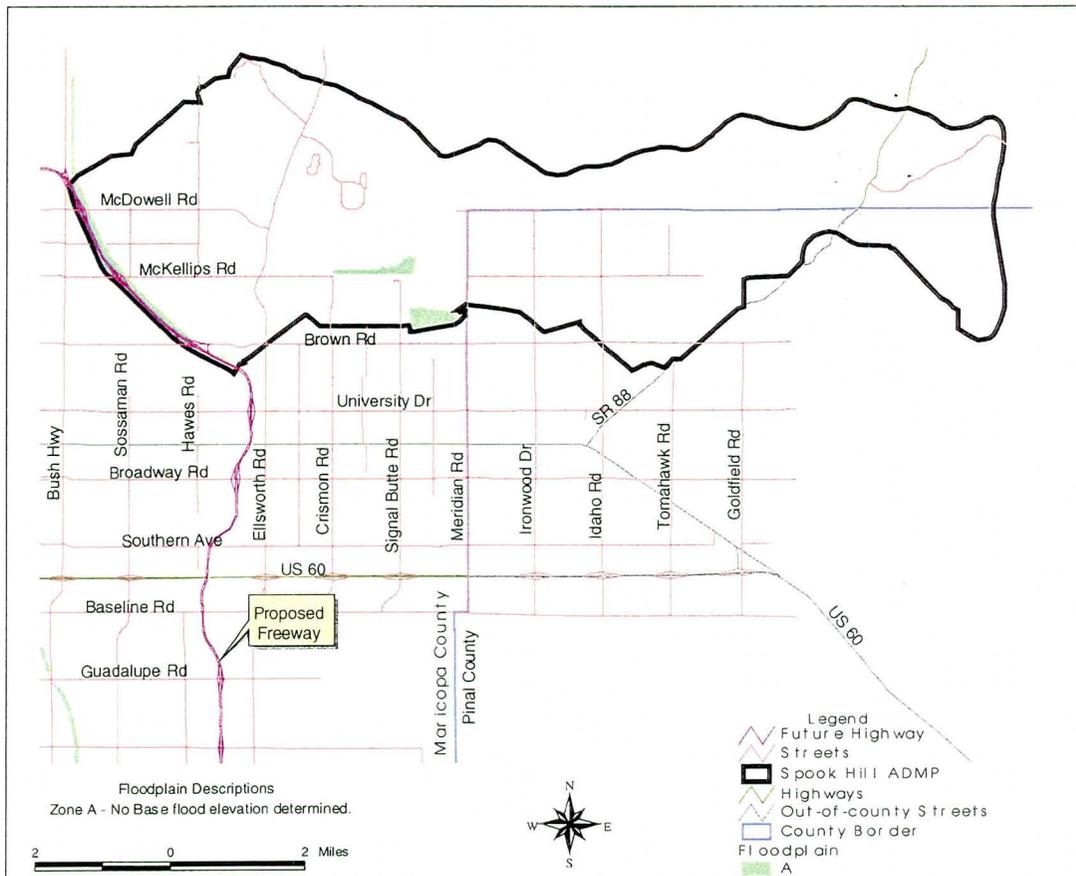
PCN: 420.01.31

Spook Hill ADMP

Municipality:
Mesa

PM: Afshin Ahouraiyan, EIT
602-506-4519
afa@mail.maricopa.gov

**T2N R7E, T1N R7E
T1N R8E, T2N R8E**



CIP Budget

x \$1,000

FY 01/02	FY 02/03	FY 03/04	FY 04/05	FY 05/06	5-Yr CIP
\$7,883	\$15	\$0	\$400	\$0	\$8,298

The Elliot Road Channel and Basins are projects that are identified in the East Mesa Area Drainage Master Plan. The East Mesa ADMP identifies drainage problems and develops solutions for a storm water collection and basin system for eastern Maricopa County including portions of the City of Mesa, the Town of Gilbert, the Town of Queen Creek, and unincorporated Maricopa County. The Elliot Road Basins are located at the corner of Elliot Road and the Crismon Road alignment. They collect runoff from the Crismon Channel, which extends along Crismon Road north of Elliot Road and from the Elliot Road Channel extending along Elliot Road to the east. The basins attenuate peak flows to reduce the size and cost of required downstream improvements. The basins are anticipated to become a multi-use facility, being improved and maintained as City of Mesa parks. The channel conveys discharge from the Elliot Road Basins, from the Elliot Road Channel, Phase 2 (extending east along Elliot Road to a basin at Meridian Road). The Elliot Road Channel, Phase 1A, extends west along Elliot Road, day-lighting west of Ellsworth Road in six natural washes. The future Phase 1B will extend from this point to the East Maricopa Floodway. The City of Mesa may be interested in creating a joint use for the channel as a linear park.

Supervisory District: 1,2

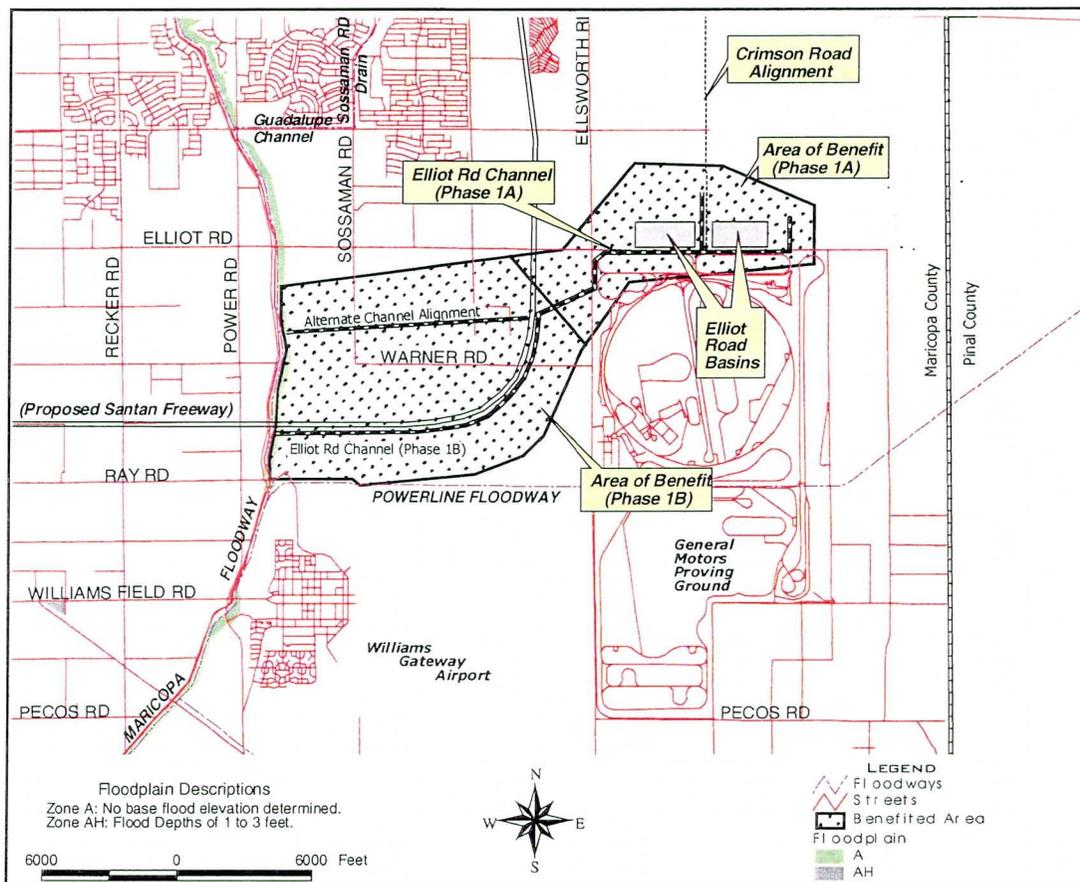
PCN: 442.04.31

Elliot Detention Basin & Outfall Channel

Municipality:
Mesa

PM: Scott Vogel, P.E.
602-506-4771
csv@mail.maricopa.gov

T1S R7E



CIP Budget

x \$1,000

FY 01/02	FY 02/03	FY 03/04	FY 04/05	FY 05/06	5-Yr CIP
\$25	\$2,000	\$2,000	\$0	\$0	\$4,025

The Hawes Road Drainage Improvements Project (Project) is a project that is identified in the East Mesa Area Master Drainage Master Plan (ADMP). The East Mesa ADMP identifies drainage problems and develops solutions for eastern Maricopa County, which includes portions of Mesa, Gilbert, and Queen Creek. The Project will resolve many of the existing drainage problems along Hawes Road within the City of Mesa.

The Project will consist of channel and culvert improvements from Apache Trail to Emelita Avenue, which is approximately 0.4 miles north of Southern Avenue. The length of the Project is approximately 1.1 miles and will tie into an existing improved gunite lined channel on the west side of Hawes Road.

The estimated cost for the Project is \$4,000,000 which, includes the, design, rights-of way acquisition, utility relocations, construction, and construction management. The City will fund non-flood control features. The City will assume ownership and the operation and maintenance for the completed Project. The Project will be cost shared by the City of Mesa and the District as follows: The City shall contribute 35% of the Project cost (estimated to be \$1,400,000), and the District shall contribute 65% of the Project cost (estimated to be \$2,600,000).

Supervisorial District: 2

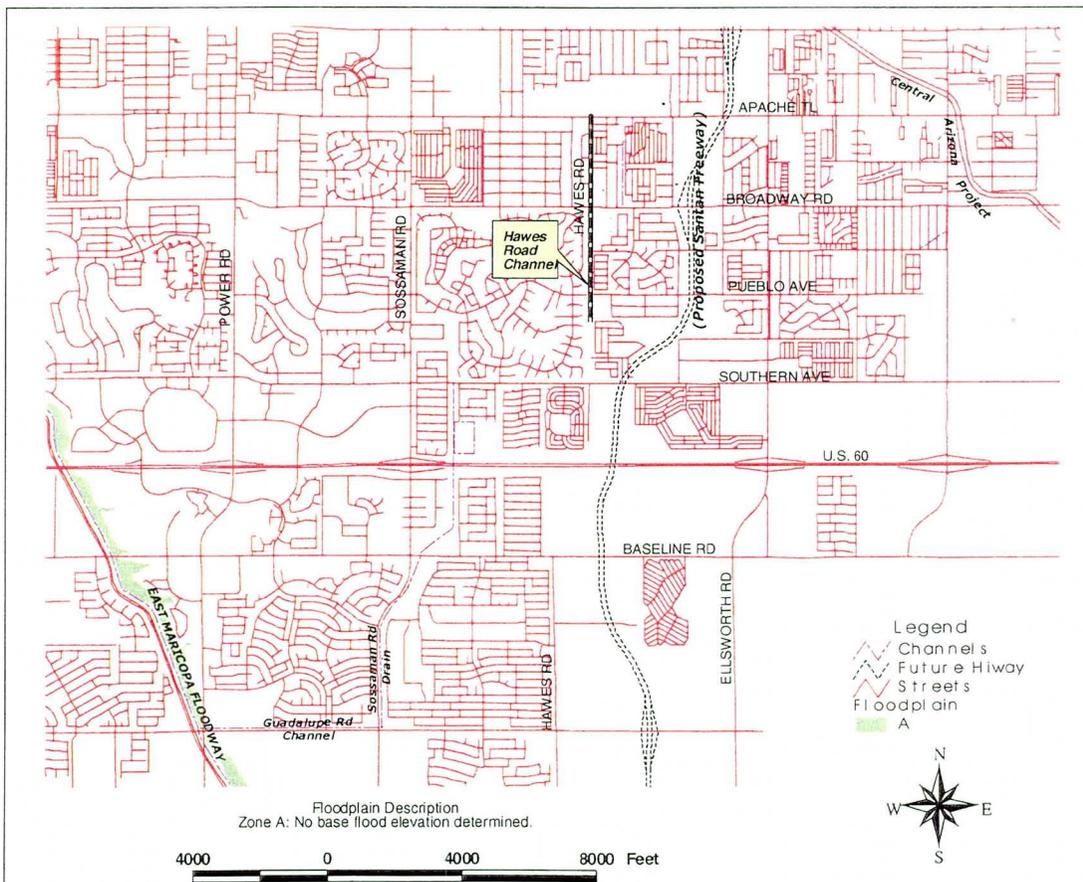
PCN: 442.05.30

Hawes Road Channel

Municipality:
Mesa

PM: Paul Stears, P.E.
602-506-4768
pjs@mail.maricopa.gov

T1N R7E



CIP Budget

x \$1,000

FY 01/02	FY 02/03	FY 03/04	FY 04/05	FY 05/06	5-Yr CIP
\$32	\$1,800	\$3,000	\$4,200	\$0	\$9,032

The project includes a study to evaluate potential for combining flows from the proposed Elliot Road Channel and Basin with drainage facilities for the proposed San Tan Freeway. The Elliot Basin and Channel project (see Elliot Basin and Channel, PCN 442.04.31) will cross the alignment of the proposed San Tan Freeway. ADOT is conducting a study to evaluate a drainage channel located along the eastern side of the Freeway alignment that would convey flows from the Elliot Basin and Channel project and the flows intercepted by the Freeway. The District will share in the cost of the study to be completed during FY 2001-02.

Supervisorial District: [Redacted]

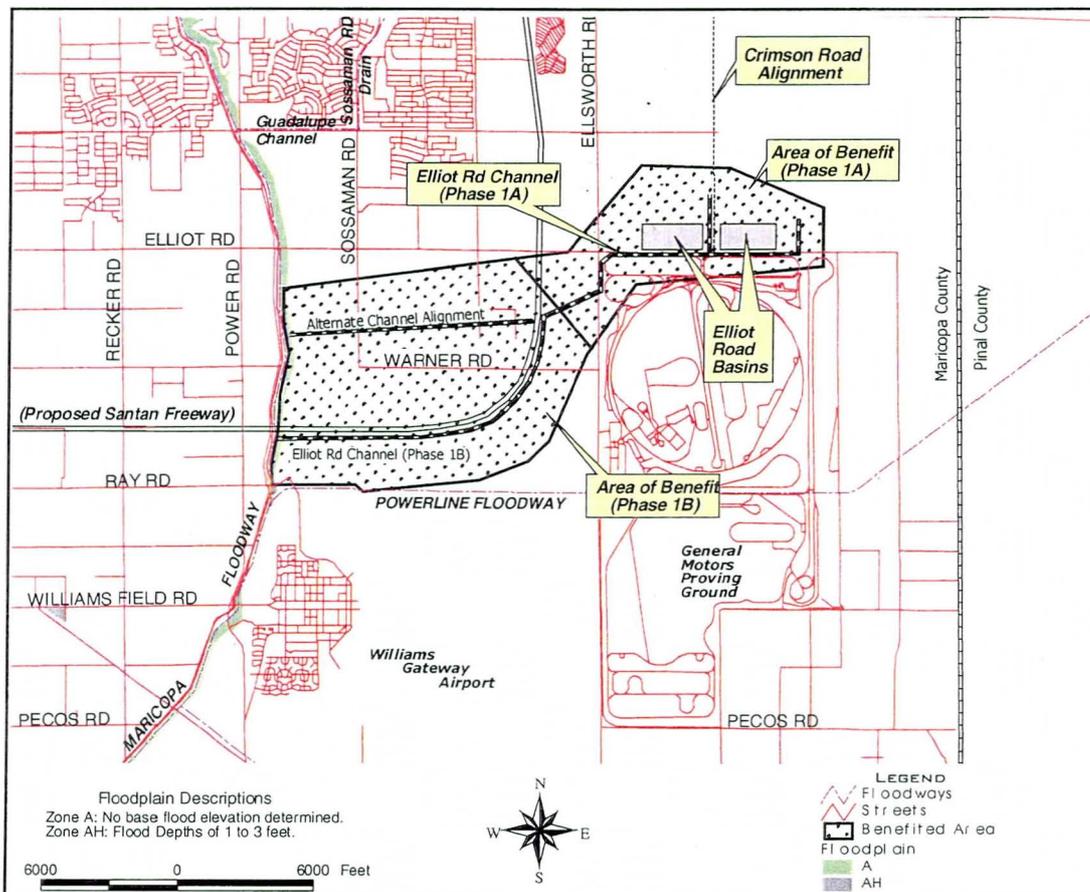
PCN: 442.09.31

Elliot Channel (Ellsworth to EMF)

Municipality:
Mesa

PM: Tim Phillips, P.E.
602-506-4718
tsp@mail.maricopa.gov

T1S R7E



CIP Budget

x \$1,000

FY 01/02	FY 02/03	FY 03/04	FY 04/05	FY 05/06	5-Yr CIP
\$141	\$5,320	\$555	\$0	\$0	\$6,016

This project was prioritized in the East Mesa Area Drainage Master Plan, and includes construction of a flood control channel to mitigate existing and future flooding along Ellsworth Road, adjacent to General Motors Proving Ground and Williams Gateway Airport. Flooding occurs frequently at five dip crossings on the existing roadway. The channel project will be constructed in conjunction with MCDOT's upgrades to Ellsworth Road from Germann Road to 1/3 mile south of Guadalupe Road, and will provide drainage for the road and capacity for the 100-year flood.

On June 21st, 2000, the Board of Directors approved IGA FCD 2000A002, among the District, MCDOT, and Mesa, to design and construct the Ellsworth Road Channel Project. The design for the channel includes an alternatives analysis, and the recommended alternative is as shown on the map below. The design for the channel will include reconstruction of 1-1/2 miles of the existing Powerline Floodway. The design for the roadway upgrades and channel is scheduled to be complete by April 2002, and the Project is scheduled to begin construction by December 2002.

The cost for the channel project is estimated to be \$8,000,000, with the District's share equal to 50 percent or \$4,000,000.

Supervisorial District: 1

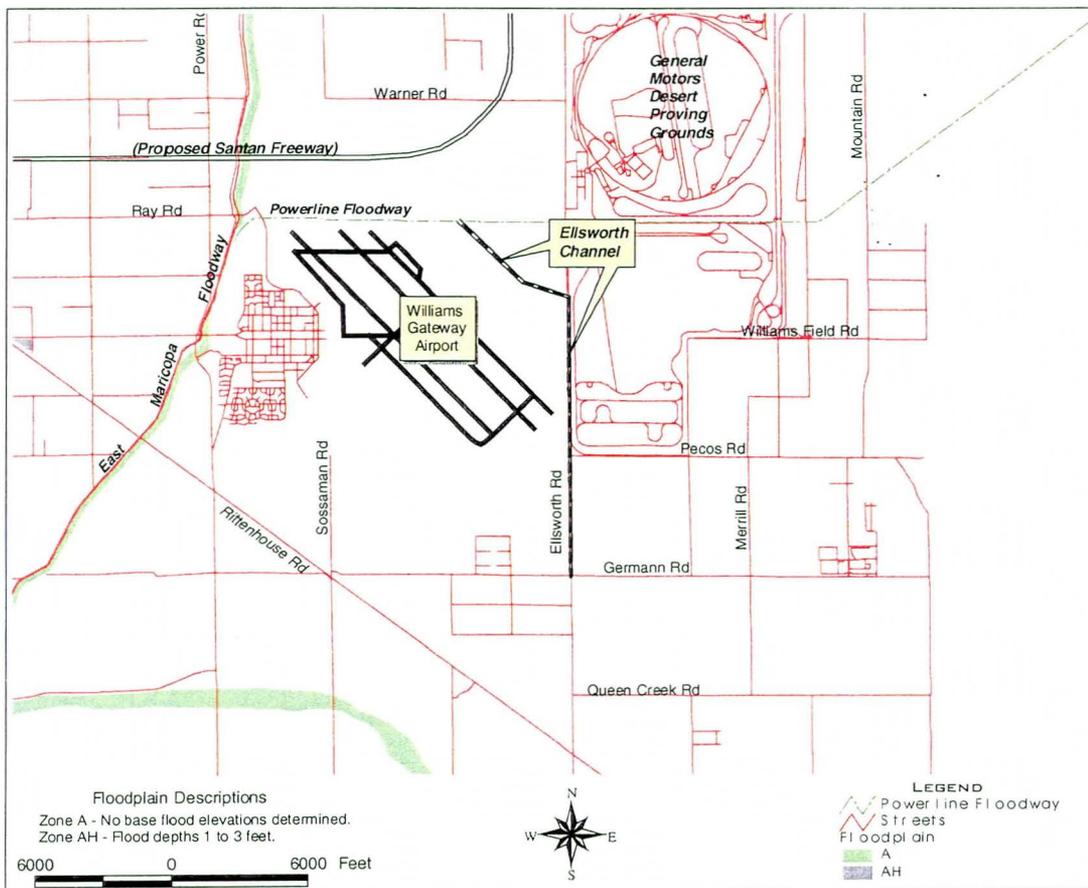
PCN: 442.08.31

Ellsworth Channel

Municipality:
Mesa

PM: Bobbie Ohler, P.E.
602-506-2943
bao@mail.maricopa.gov

T1S R7E
T2SR7E



CIP Budget

x \$1,000

FY 01/02	FY 02/03	FY 03/04	FY 04/05	FY 05/06	5-Yr CIP
\$0	\$0	\$0	\$0	\$0	\$0

Current and projected District CIP expenditures can be divided into two parts: a planning study that will lay the groundwork for further flood control activities, and a design and construction phase that will address flooding issues in the Glendale/Peoria Area. The planning study consists of providing professional engineering services necessary to update the existing area drainage master plan and identify guidelines for stormwater management and flooding mitigation for the Glendale/Peoria Area. The study will include analysis of approximately 85 square miles of watershed from the New River Dam south to the Agua Fria River and New River confluence and from approximately the 51st Avenue alignment west to the Agua Fria River. The study will identify drainage problems and develop cost effective solutions for a stormwater collection and disposal system and will further identify potential outfall alternatives. The planning study is budgeted at \$1.4 million and is included in the CIP budget. The design and construction phase may involve flooding solutions at various strategic locations once the planning and conceptual design phases have been completed. The study will be complete in FY 01/02.

Supervisorial District: 4

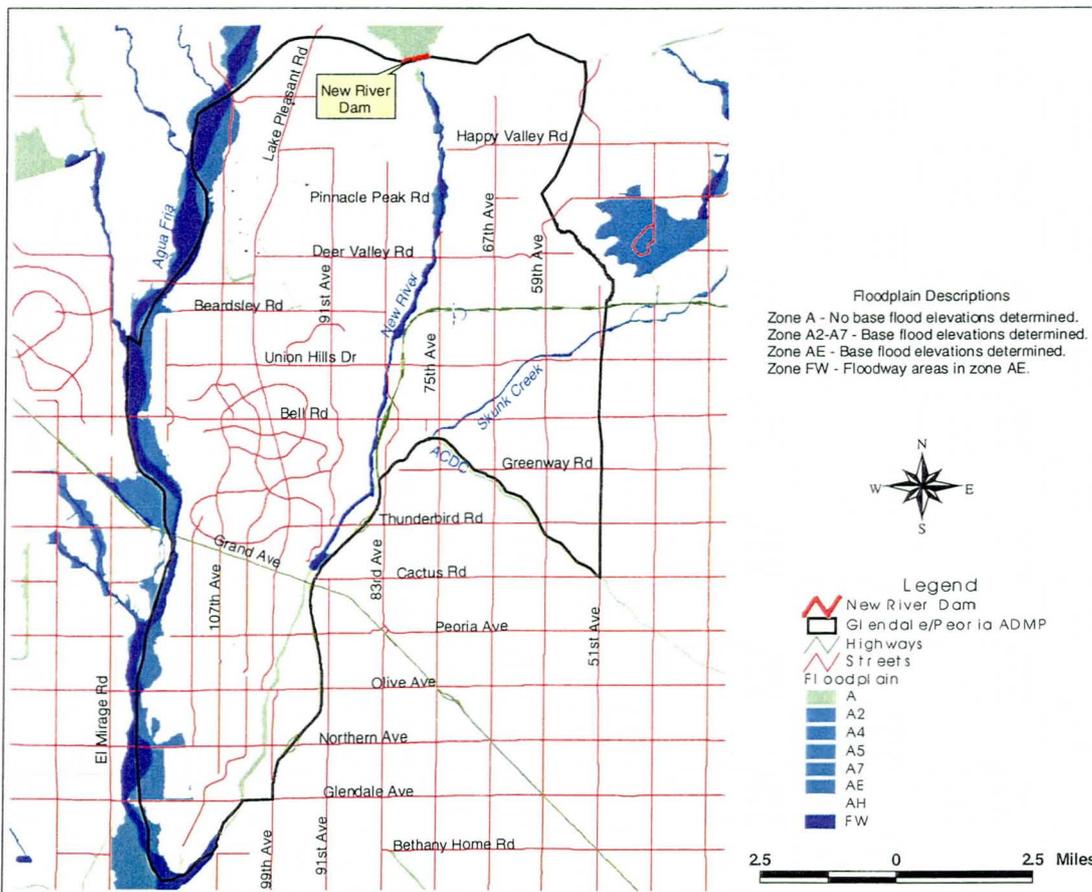
PCN: 450.02.31

Glendale / Peoria ADMS Update

Municipality:
Glendale, Peoria
Surprise, Youngtown

PM: Marilyn DeRosa, R.G.
602-506-4766
mdr@mail.maricopa.gov

T3N, T4N, R1E



CIP Budget
x \$1,000

FY 01/02	FY 02/03	FY 03/04	FY 04/05	FY 05/06	5-Yr CIP
\$0	\$0	\$0	\$400	\$1,500	\$1,900

The proposed project involves construction of a detention basin located adjacent to the Powerline Floodway near Meridian Road and the Warner Road alignment. The proposed basin was identified as a component of the recommended plan in the East Mesa Area Drainage Master Plan. The basin will reduce peak flows in the existing Powerline Floodway and intercept surface runoff from Pinal County. The project will attenuate flows in the Powerline Floodway to alleviate under capacity problems in the EMF and consequently reduce the size and cost of downstream drainage improvements.

Supervisory District: [REDACTED]

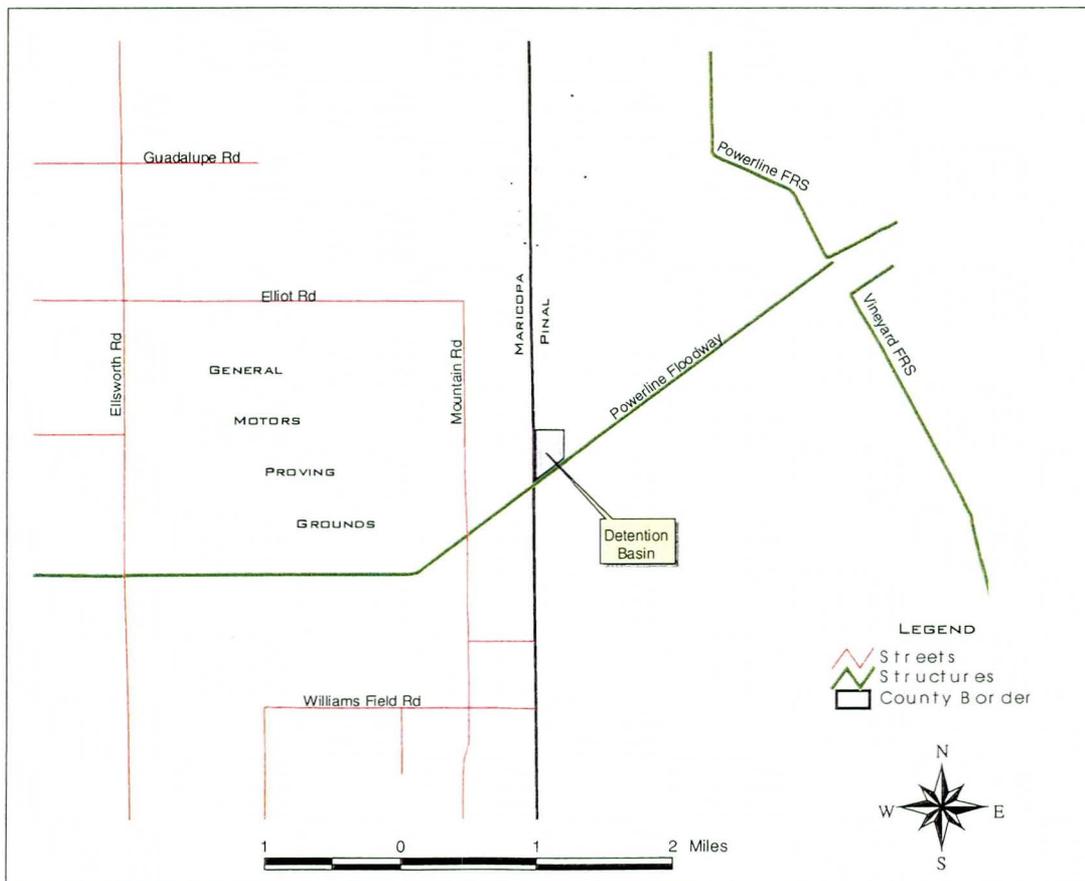
PCN: 442.xx.xx

Powerline Detention Basin

Municipality:
Mesa

PM: Tim Phillips, P.E.
602-506-4718
tsp@mail.maricopa.gov

T1S R8E



CIP Budget

x \$1,000

FY 01/02	FY 02/03	FY 03/04	FY 04/05	FY 05/06	5-Yr CIP
\$0	\$0	\$0	\$0	\$1,385	\$1,385

The Project being proposed by the City of Glendale will provide 10-year storm drainage protection for a three square mile area lying within jurisdictional boundaries of both the cities of Glendale and Peoria. The project will consist of drainage pipes and catch basins and will be constructed in rights-of-way provided by Glendale. The outfalls for the project were constructed by the District along Cactus Road and Olive Avenue and are presently owned and operated by the City of Peoria. There is a 50% cost sharing with the District for the project. The estimated cost for the project is \$3 million which includes the design, land acquisition, utility relocations, construction and construction management. Glendale will design and construct the project and provide for the operation and maintenance of the completed project. The Phases of the project include:

Phase 1 – 200’ Storm Drain Installation at Intersection with Peoria Avenue

Phase 2 – Remainder of Storm Drain Installation to Cactus

Phase 1 is complete. Phase 2 is scheduled for FY 04/05.

Supervisorial District: [REDACTED]

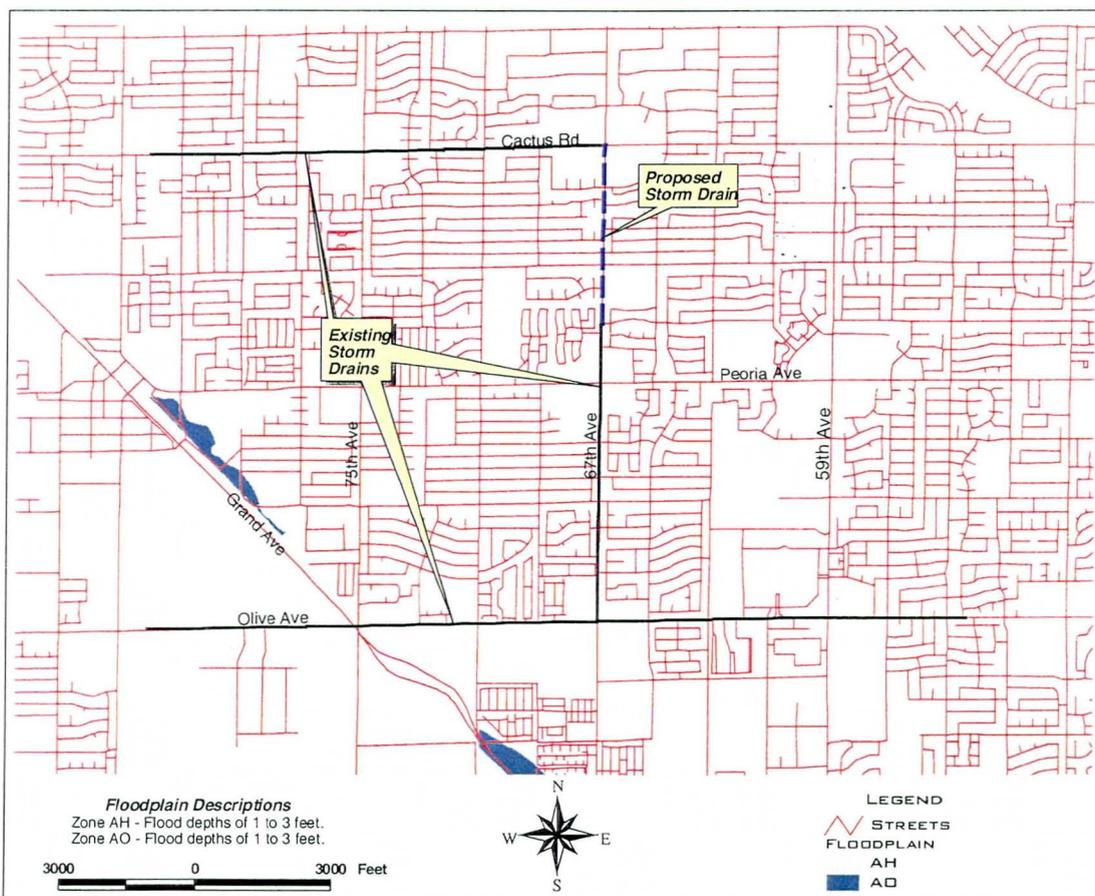
PCN: 450.05.30

67th Avenue Storm Drain

Municipality:
Glendale

PM: Paul Stears, P.E.
602-506-4768
pjs@mail.maricopa.gov

T3N R1E
T3N R2E



CIP Budget

x \$1,000

FY 01/02	FY 02/03	FY 03/04	FY 04/05	FY 05/06	5-Yr CIP
\$239	\$0	\$0	\$0	\$0	\$239

This project includes 10-year storm drains, running west between the Butler Drive and Glendale Avenue alignments, from 63rd Avenue to the Agua Fria Freeway. The project will benefit 14 square miles of existing development in Glendale, Peoria and unincorporated County lands that have been subjected to flood events in the past several years. The drain will also provide an outlet for future municipal storm drains and MCDOT's Northern/75th/83rd Avenue projects as well as ADOT's Grand Avenue project. Three detention basins (two in Glendale and one in Peoria) have been constructed to reduce pipe costs while increasing the future level of protection and providing water quality and recharge benefits. ADOT excavated the basins, saving the District and ADOT an estimated \$2 million each. Total project costs are estimated at \$17 million (50% District, 50% by Glendale and Peoria). The Glendale Storm Drain project and the Orangewood Storm Drain project components of the overall project have been completed. MCDOT is currently underway with construction of the final project component, the Northern/Butler Storm Drain project, construction of which will be completed in 2001. Glendale will provide O&M for the portions of the project in Glendale and the unincorporated County, while Peoria will provide operations and maintenance for the portions within its city limits. An IGA with the cities was approved in April 1994.

Supervisory District: 4

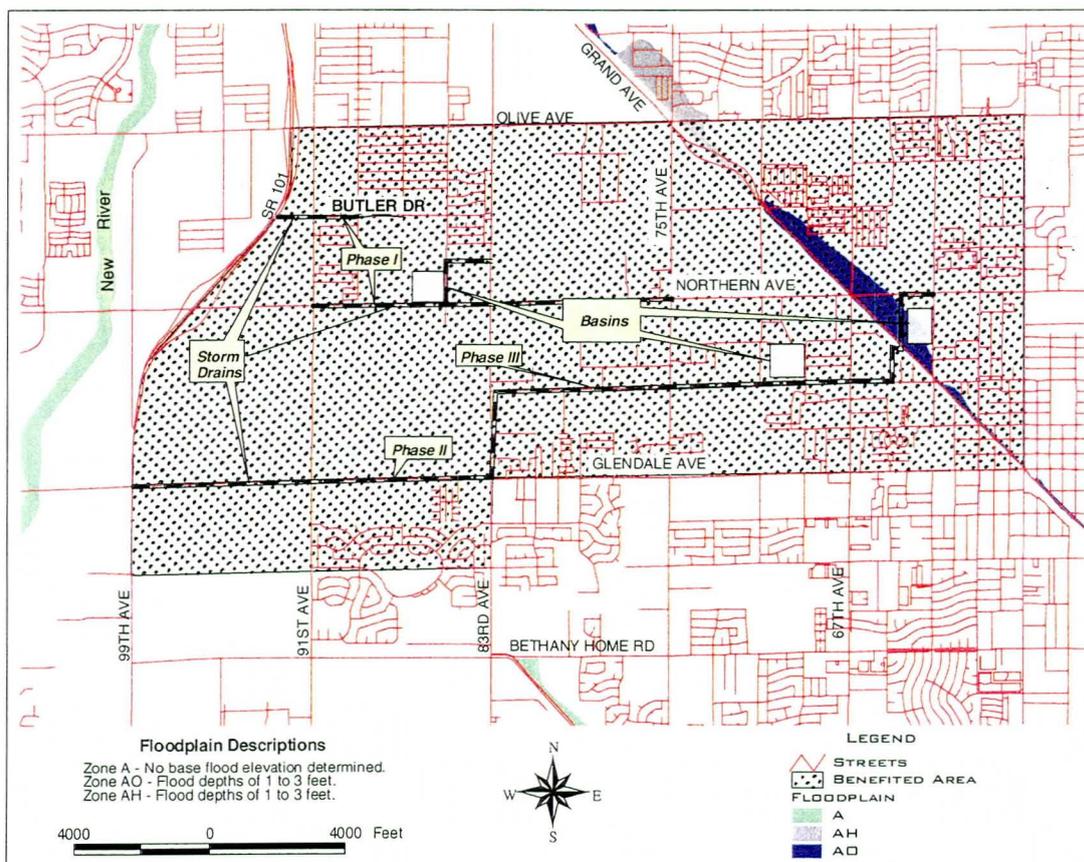
PCN: 450.03.33

Northern/Orangewood Storm Drain

Municipality:
Peoria

PM: Don Rerick, P.E.
602-506-4878
djr@mail.maricopa.gov

T3N R1E, T3N R2E
T2N R1E, T2N R2E



CIP Budget

x \$1,000

FY 01/02	FY 02/03	FY 03/04	FY 04/05	FY 05/06	5-Yr CIP
\$1,000	\$0	\$0	\$0	\$0	\$1,000

The District and the City of Phoenix have collaborated in the design and construction of projects, consisting of basins, channels and storm drains, to collect and convey storm waters and to significantly reduce the 100-year floodplain on the Upper East Fork of Cave Creek. The City of Phoenix has also completed installation of additional basins and storm drains to convey storm water from the basins to the Greenway Parkway Channel. Engineering studies and analysis preparatory to the City of Phoenix submitting an application to FEMA for a Conditional Letter of Map Revision (CLOMR) for the East Fork of Cave Creek, have determined that certain modifications need to be made to the existing channel in order to meet FEMA criteria. Modifications include lowering the invert and widening the existing channel in various reaches between Cave Creek Road and Ninth Street. These modifications will allow for the removal of over 400 homes and numerous commercial establishments along Bell Road from the current FEMA delineated floodplain. The costs for this project are estimated to be \$4.5 million. The District will share 50% of the costs not to exceed \$2.25 million. The City of Phoenix will own, operate and maintain the completed project. A Section 404 permit has been obtained and construction is underway by the City. Construction completion is scheduled for August 2001.

Supervisorial District: 3

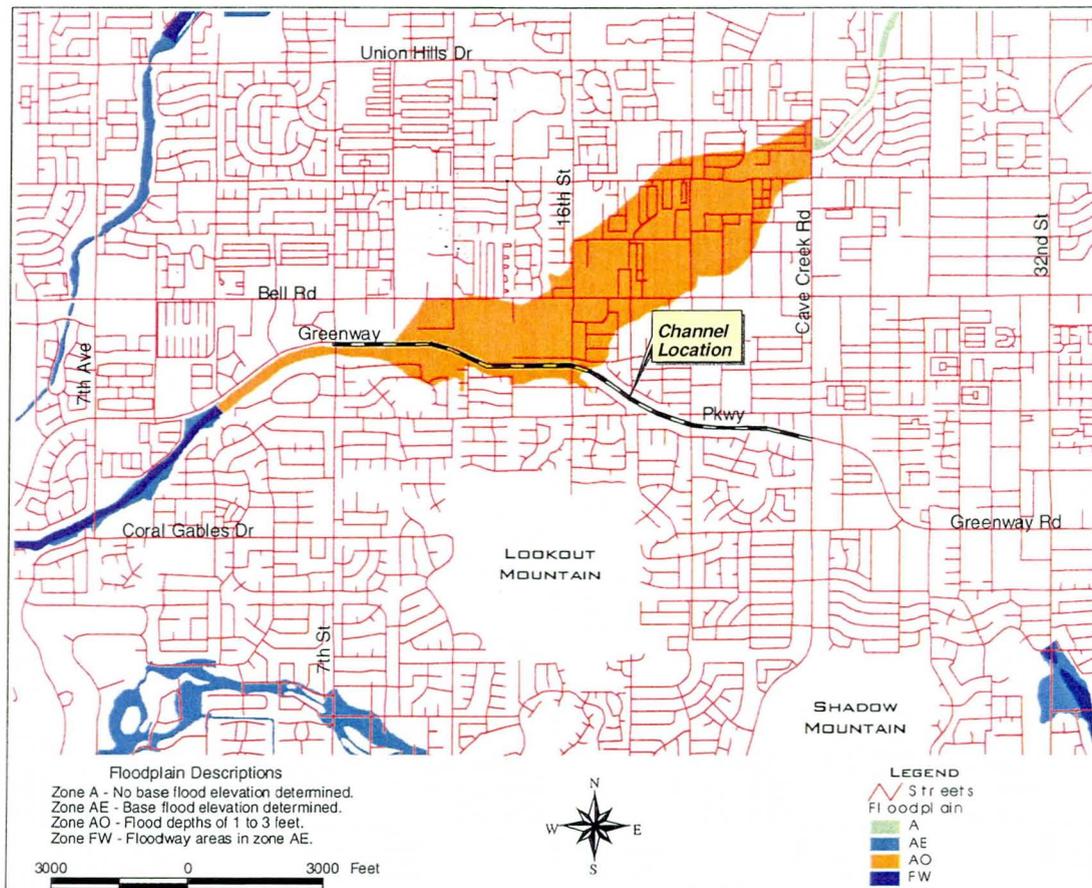
PCN: 460.01.31

Greenway Parkway Channel

Municipality:
Phoenix

PM: Don Rerick, P.E.
602-506-4878
djr@mail.maricopa.gov

T3N R3E



CIP Budget
x \$1,000

FY 01/02	FY 02/03	FY 03/04	FY 04/05	FY 05/06	5-Yr CIP
\$205	\$0	\$0	\$0	\$0	\$205

The North Peoria ADMP study is a planning effort that will lay the groundwork for flood control activities in the largely unurbanized North Peoria area. The study's implementation plan will address potential flooding issues in the Morgan City Wash area and areas south of SR 74 and the CAP Canal with development guidelines, strategies, and policies. The goal is to minimize the need for future CIP expenditures by developing a drainage master plan for the City of Peoria and Maricopa County prior to urbanization. The planning study consists of providing professional engineering services necessary for developing a master plan to maintain the areas pre-development drainage characteristics. The study will include approximately 73 square miles of watershed from the Maricopa County line south to the Twin Buttes Wash and Agua Fria River confluence and from Lake Pleasant Road west to approximately Twin Buttes Wash and the Morgan City Wash southern watershed boundary. The study includes approximately 22.5 miles of floodplain delineation work and 40 miles of erosion hazard setback analyses. The study will be utilized as a tool to monitor and control development in the rapidly urbanizing watershed by the City of Peoria and Maricopa County and to maintain the areas pre-development drainage characteristics to the extent possible. The planning study is budgeted at \$1,328,000 and will be completed in FY 01/02. An additional task was added to this project to look at feasibility and location of SR303L where it will cross the Agua Fria River and washes. Some design or construction CIP expenditures may be expected from this study.

Supervisorial District: 4

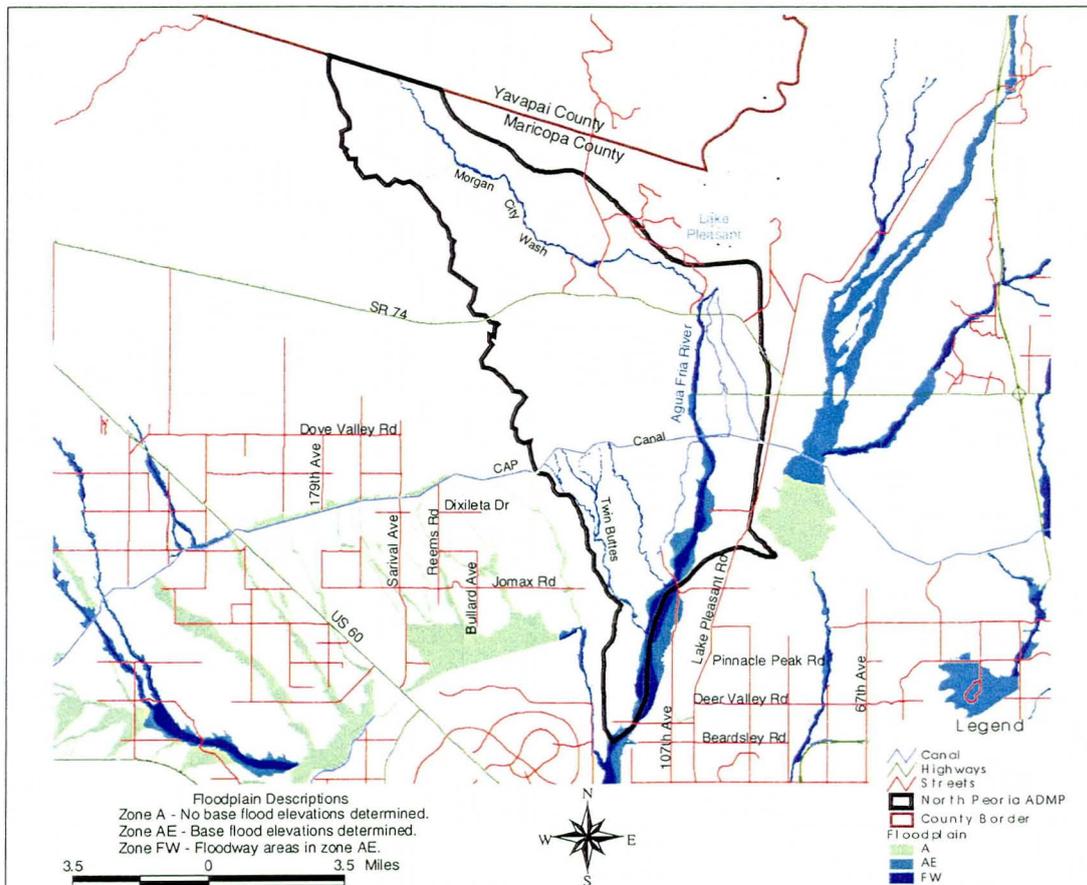
PCN: 452.01.31

North Peoria ADMP

Municipality:
Peoria

PM: Kelli Sertich, AICP
602-506-0867
kas@mail.maricopa.gov

T4,5,6N R1W & R1E



CIP Budget

x \$1,000

FY 01/02	FY 02/03	FY 03/04	FY 04/05	FY 05/06	5-Yr CIP
\$434	\$0	\$0	\$0	\$0	\$434

Current and projected District CIP expenditures can be divided into two parts: a planning study that will lay the groundwork for further flood control activities; and a design and construction phase that will address flooding issue. The planning study consists of providing professional engineering services necessary for developing an updated area drainage master plan to determine guidelines for stormwater management and mitigate flooding for the White Tanks Area. The study will include analysis of approximately 220 square miles of watershed from the McMicken Dam south to Gila River and from the White Tank Mountains east to the Agua Fria River. The study will identify drainage problems, update the existing hydrology due to development and new hydrologic methodology, and develop cost effective solutions for a storm water collection and disposal system and will further identify potential outfall alternatives. The planning study is budgeted at \$1.3 million and is included in the CIP. The design and construction phase will involve the implementation of solutions identified in the study once these planning and conceptual design phases have been completed, and remedial actions have been specified. Total drainage infrastructure expenditures in the watershed are now estimated at \$400 million.

Supervisory District: 1

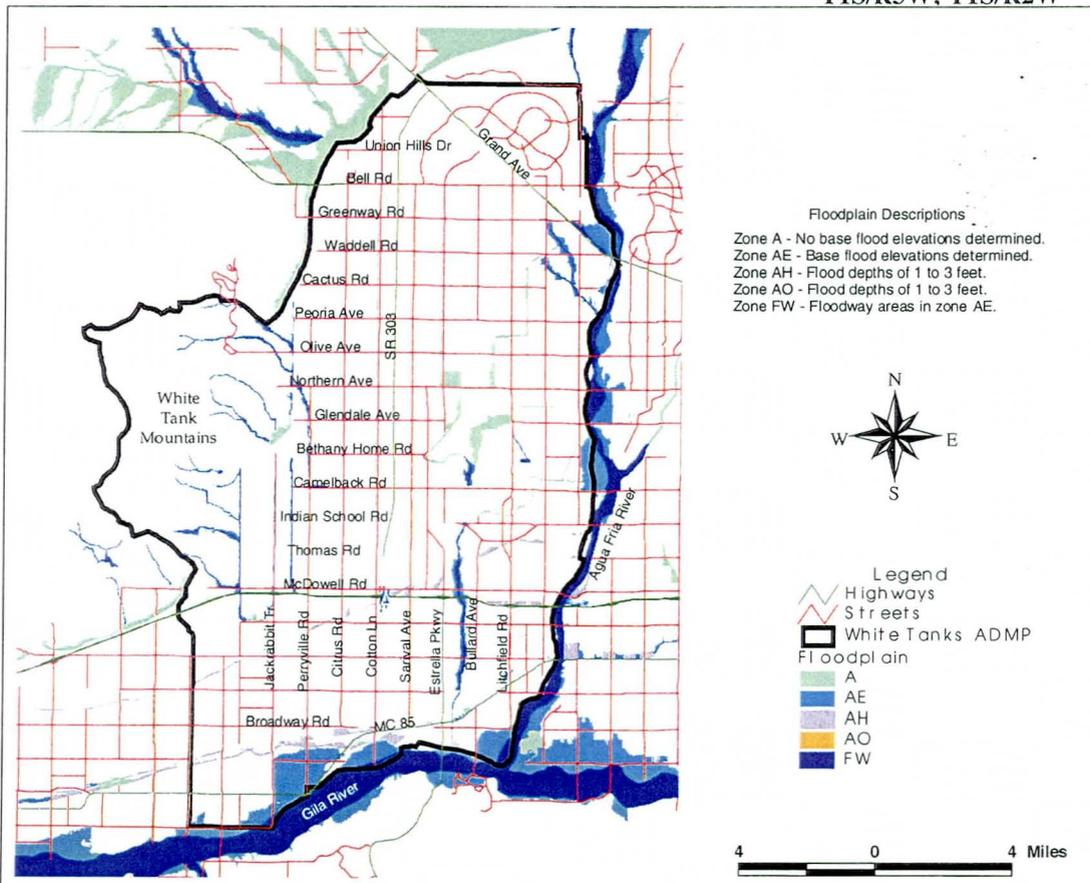
PCN: 470.10.31

Loop 303 Corridor/White Tanks ADMP Update

Municipalities :
Avondale, Buckeye, El Mirage,
Glendale, Goodyear,
Litchfield Park, Surprise

PM: Greg Jones, P.E.
602-506-5537
glj@mail.maricopa.gov

T3N/R2W; T3N/R1W;
T4N/R2W; T4N/R1W/
T3N/R3W; T2N/R3W-
R1W; T1N/R3N-R1W;
T1S/R3W; T1S/R2W



CIP Budget

x \$1,000

FY 01/02	FY 02/03	FY 03/04	FY 04/05	FY 05/06	5-Yr CIP
\$1,870	\$4,280	\$5,000	\$5,600	\$0	\$16,750

The White Tanks Flood Retarding Structure #3 (White Tanks #3), owned and operated by the District, requires corrective action to bring the structure into compliance with dam safety standards and requirements. Dam modification studies completed by the Flood Control District under Contract FCD 98-11 have estimated the total project cost to rehabilitate the dam at \$13 million. This estimate includes land acquisition costs. Alternatives to dam rehabilitation have recently been completed by the District involving various combinations of large regional flood control basins, flood control channels and upstream channel improvements. All of these alternatives would allow for removal of the dam while replacing the flood control function provided by the existing dam. Opportunities for multi-use features were evaluated primarily based on the potential for others to develop recreational components. The total project cost for a basin project to replace the dam is estimated at \$20 million. Although more costly, it appears that a basin project provides significant long term advantages over dam rehabilitation. Replacement of the dam would eliminate the high hazard dam classification, eliminate required dam monitoring and maintenance activities and provide more opportunities for community based multi-use activities.

The District is currently seeking federal funding participation for this project. The schedule for implementation is contingent upon and timing of federal funding assistance under an agreement with the Natural Resources Conservation Service. Several interim corrective measures at the dam are scheduled to be constructed in calendar year 2001.

Supervisorial District: 4

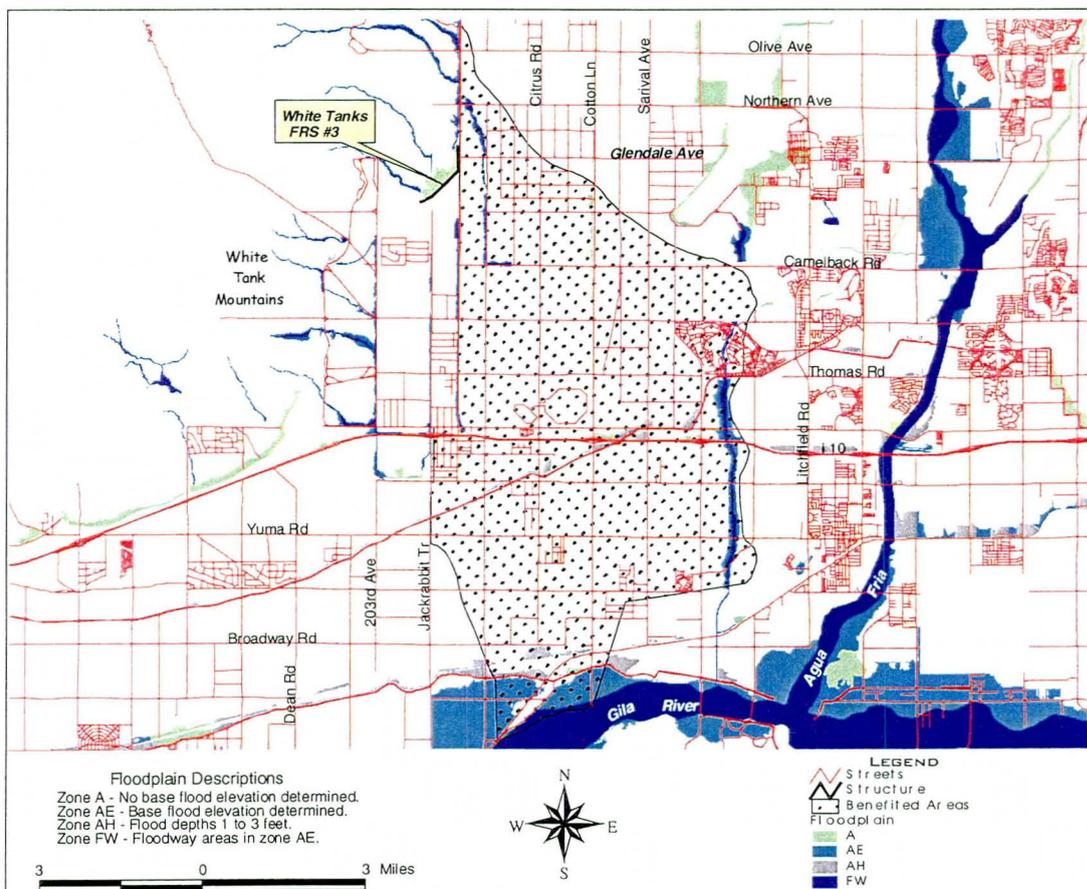
PCN: 470.04.30

White Tanks #3

Municipality:
Buckeye

PM: Tom Renckly, P.E.
602-506-8610
trr@mail.maricopa.gov

T2N R2W



CIP Budget

x \$1,000

FY 01/02	FY 02/03	FY 03/04	FY 04/05	FY 05/06	5-Yr CIP
\$400	\$1,200	\$6,000	\$7,000	\$7,000	\$21,600

Bullard Wash is included within the Loop 303 Corridor/White Tanks Area Drainage Master Plan (ADMP), which recommends improvements be made to the wash. Phase I of the Bullard Wash Improvements Project was constructed as a previous District/City of Goodyear project. Phase I included construction of an earthen and gabion basket lined channel from the Gila River to Lower Buckeye Road. Phase II includes an earthen/greenbelt channel along the Bullard Wash alignment from Lower Buckeye Road to McDowell Road. A diversion channel will take high storm flows from Bullard Wash south of McDowell Road through detention basins north of I-10 and west of Dysart Road, with an outlet to the Agua Fria River. Landscaping, fencing and other multi-use facilities are anticipated along the channel alignment and within the basins.

The estimated cost of the PROJECT for the design, rights-of-way acquisition, public involvement, utility relocations, construction, and construction management is \$25 million, based on current estimates. The project will channelize the floodplain north of the Phoenix-Goodyear Airport. It will reduce the floodplain width and protect the Phoenix-Goodyear Airport and nearby development from flooding. For the area north of I-10, the project will collect and convey storm-water currently draining by sheet flow to Bullard Wash. This storm water will otherwise collect in streets, businesses, farm fields, and residential areas.

Supervisory District: 4

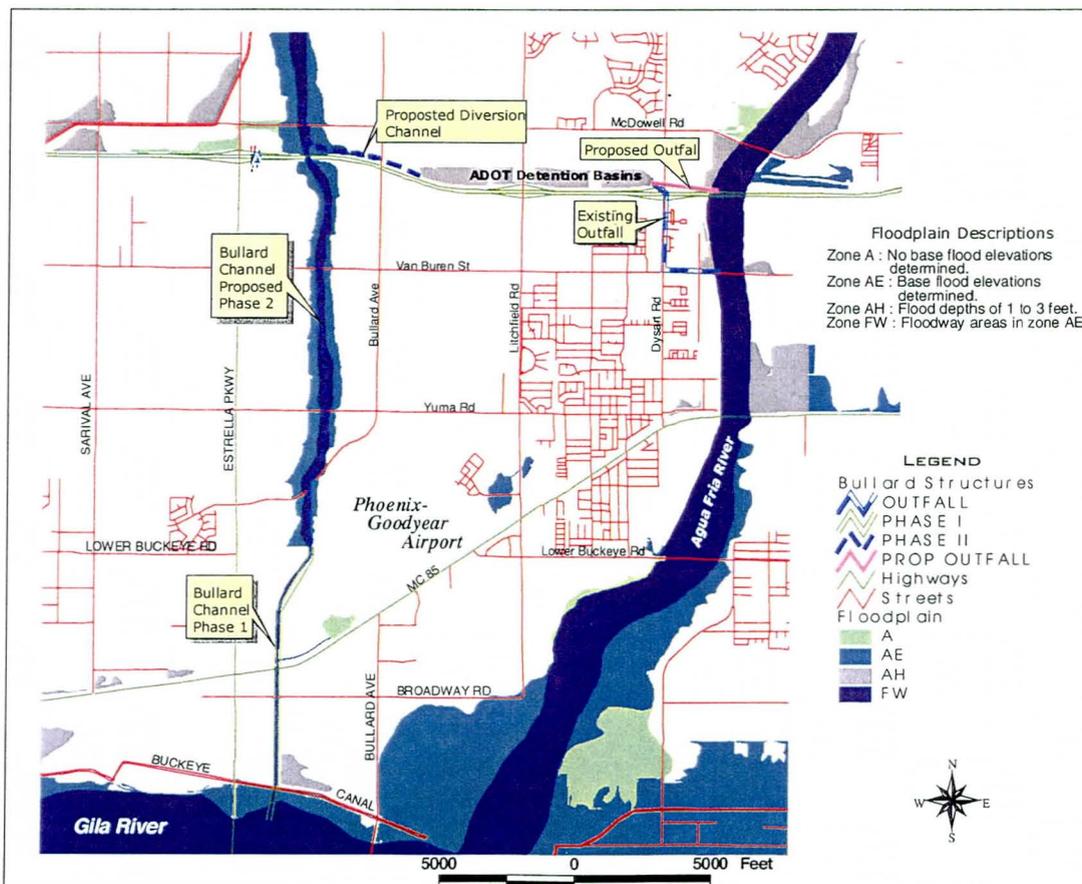
PCN: 470.13.31

Bullard Wash Improvements Project, Phase II

Municipality:
Avondale, Goodyear

PM: Scott Vogel, P.E.
602-506-4771
csv@mail.maricopa.gov

T1N R1W



CIP Budget

x \$1,000

FY 01/02	FY 02/03	FY 03/04	FY 04/05	FY 05/06	5-Yr CIP
\$800	\$400	\$3,000	\$0	\$0	\$4,200

The Reems Road Storm Drainage Project was submitted by the City of Surprise for inclusion in the District's 2000-2001 CIP Prioritization Procedure. The proposed project included the construction of a channel along Reems Road to convey offsite drainage, for the 100-year storm water event to the Luke Air Force Base Basin. Reems Road currently carries a majority of the storm water within the roadway prism, however large flows will overtop and breakout of the existing farm berms adjacent to the roadway and flow across the farmland in a southwesterly direction. The project would protect one arterial roadway, three collector roadways, the City's wastewater treatment plant, and various utilities. Additionally, this project was identified in District's White Tanks Area Drainage Master Plan.

The District intends to cost-share the Reems Road Storm Drainage Project. As a component to the project, the outfall to the Luke AFB Basin may be done in phasing, due to the lack of an identified partner south of Peoria Avenue. The Project may include upgrades to the Luke AFB Basin and/or upgrades to the inlet channels to the Luke AFB Basin, and/or additional detention basins. The Project is currently being refined and is included in all of the Recommended Alternatives from the ongoing Loop 303/White Tanks AMDP Update Study. Total expenditures are now estimated at \$8 million for this project with \$800,000 currently programmed in the CIP for advanced right-of-way acquisitions.

Supervisorial District: 4

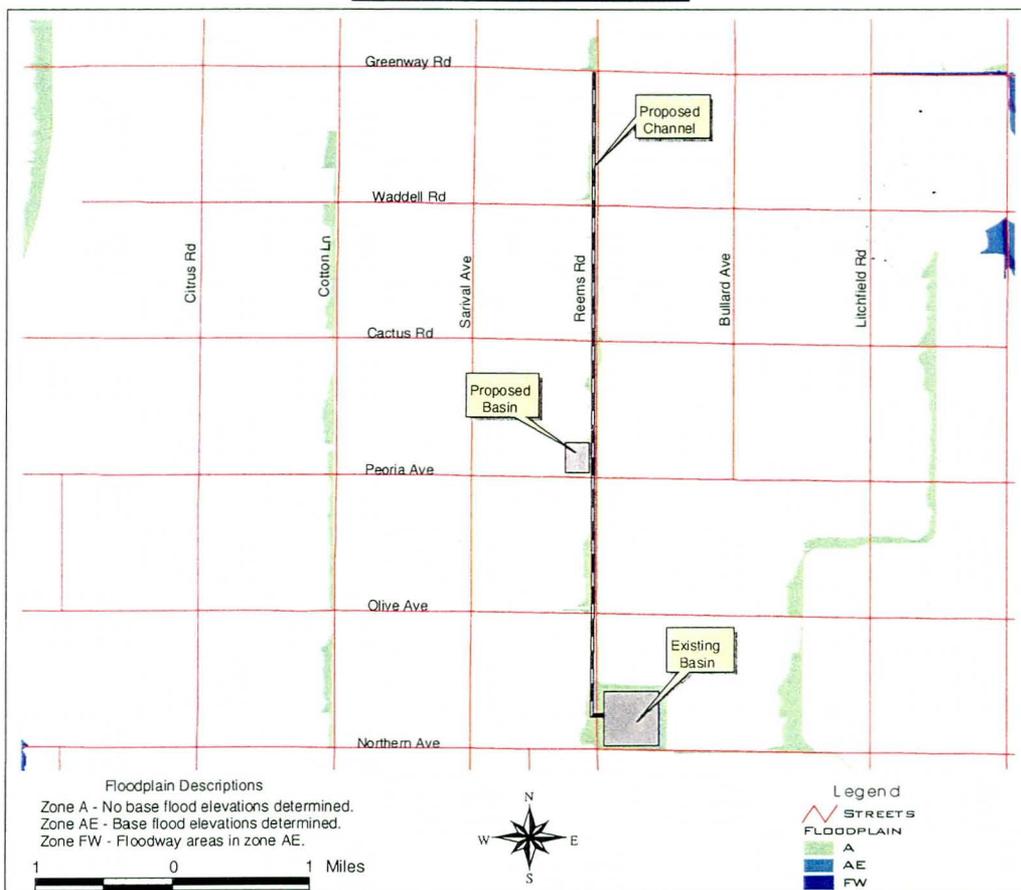
PCN: 470.12.31

Reems Road Channel

Municipality:
Surprise

PM: Greg Jones, P.E.
602-506-5537
glj@mail.maricopa.gov

T1N R1W
T1N R1E



CIP Budget

x \$1,000

FY 01/02	FY 02/03	FY 03/04	FY 04/05	FY 05/06	5-Yr CIP
\$960	\$650	\$0	\$0	\$0	\$1,610

The proposed plan is to channelize Queen Creek Wash from Hawes Road northwesterly to Power Road for a distance of approximately two and one half- (2.5) miles. Based on the Flood Insurance Study on Queen Creek Wash, there are areas of significant breakouts particularly along the north bank of this reach of the wash. The most feasible solution for preventing the breakouts from occurring along Queen Creek Wash in this area is to increase the cross section of the wash to contain the 100-year flows. This Project consists of channel construction and improvement of the Sossaman Road Crossing.

The Town will be the lead agency for design, rights-of-way acquisition, utility relocation, construction, construction management and operation and maintenance of the Project. The Town is to complete all the phases of the Project. The District shall review and approve the design plans and the bid and construction documents prior to bid. The District shall also approve any future landscape amenities to assure hydraulic conveyance within the Project. The total cost of the project is estimated at \$6.0 million with District's contribution of \$2.42 million for this project

Supervisorial District: 1

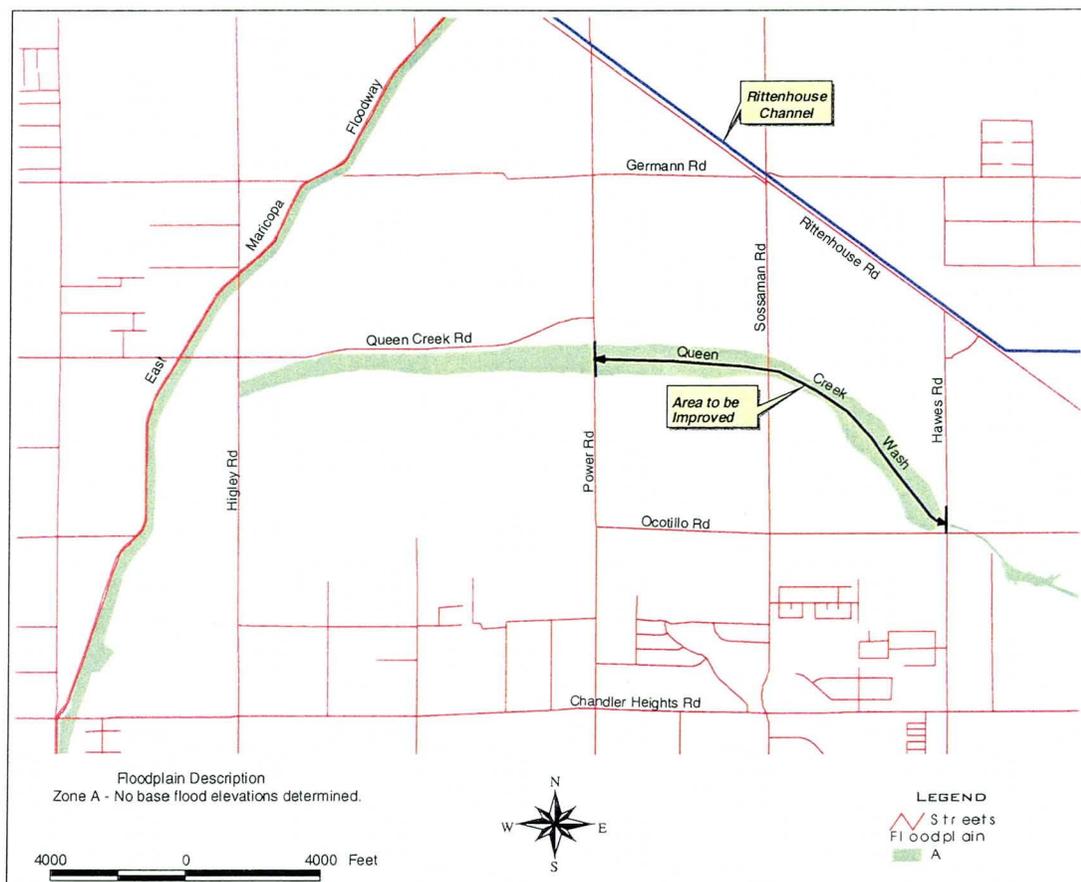
PCN: 480.02.31

Queen Creek Channelization

Municipality:
Queen Creek

PM: Paul Stears, P.E.
602-506-4768
pjs@mail.maricopa.gov

T2S R7E



CIP Budget

x \$1,000

FY 01/02	FY 02/03	FY 03/04	FY 04/05	FY 05/06	5-Yr CIP
\$0	\$600	\$1,400	\$1,000	\$3,600	\$6,600

This project consists of a principal outlet channel located north of Northern Avenue from the Beardsley Canal westward to the existing Luke AFB Basin. Additionally, the project will include two basins. The basins will be sited along the principal channel to reduce the storm water peak. The design and construction of the project is estimated to cost \$13.5 million dollars. Currently the project has funding for \$6.6 million dollars and is included in the CIP Budget for FY 02/03, 03/04, 04/05, and 05/06.

Supervisorial District: 4

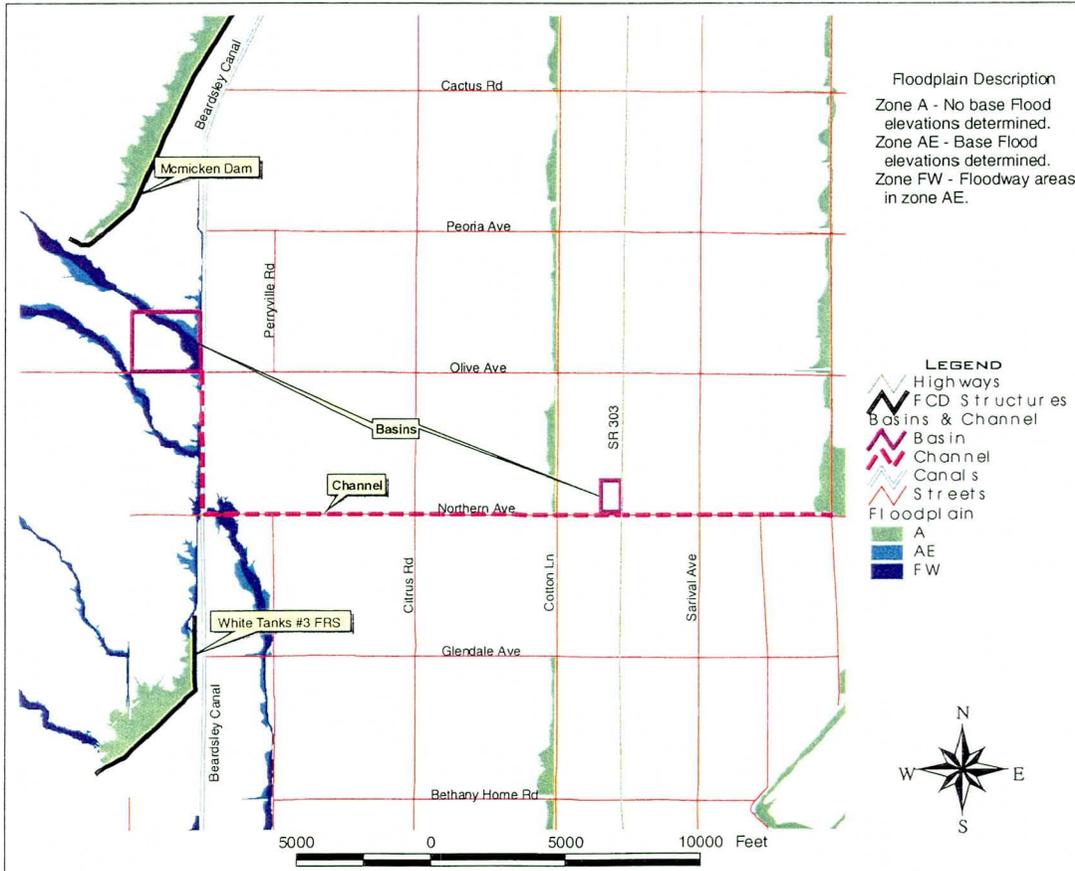
PCN: 470.xx.xx

Northern Avenue Channel & Basin

Municipality:
Glendale, Surprise

PM: Greg Jones, P.E.
602-506-5537
glj@mail.maricopa.gov

T3N R2W
T3N R1W



CIP Budget

x \$1,000

FY 01/02	FY 02/03	FY 03/04	FY 04/05	FY 05/06	5-Yr CIP
\$960	\$650	\$0	\$0	\$0	\$1,610

The proposed plan is to channelize Queen Creek Wash from Hawes Road northwesterly to Power Road for a distance of approximately two and one half- (2.5) miles. Based on the Flood Insurance Study on Queen Creek Wash, there are areas of significant breakouts particularly along the north bank of this reach of the wash. The most feasible solution for preventing the breakouts from occurring along Queen Creek Wash in this area is to increase the cross section of the wash to contain the 100-year flows. This Project consists of channel construction and improvement of the Sossaman Road Crossing.

The Town will be the lead agency for design, rights-of-way acquisition, utility relocation, construction, construction management and operation and maintenance of the Project. The Town is to complete all the phases of the Project. The District shall review and approve the design plans and the bid and construction documents prior to bid. The District shall also approve any future landscape amenities to assure hydraulic conveyance within the Project. The total cost of the project is estimated at \$6.0 million with District's contribution of \$2.42 million for this project

Supervisorial District: 1

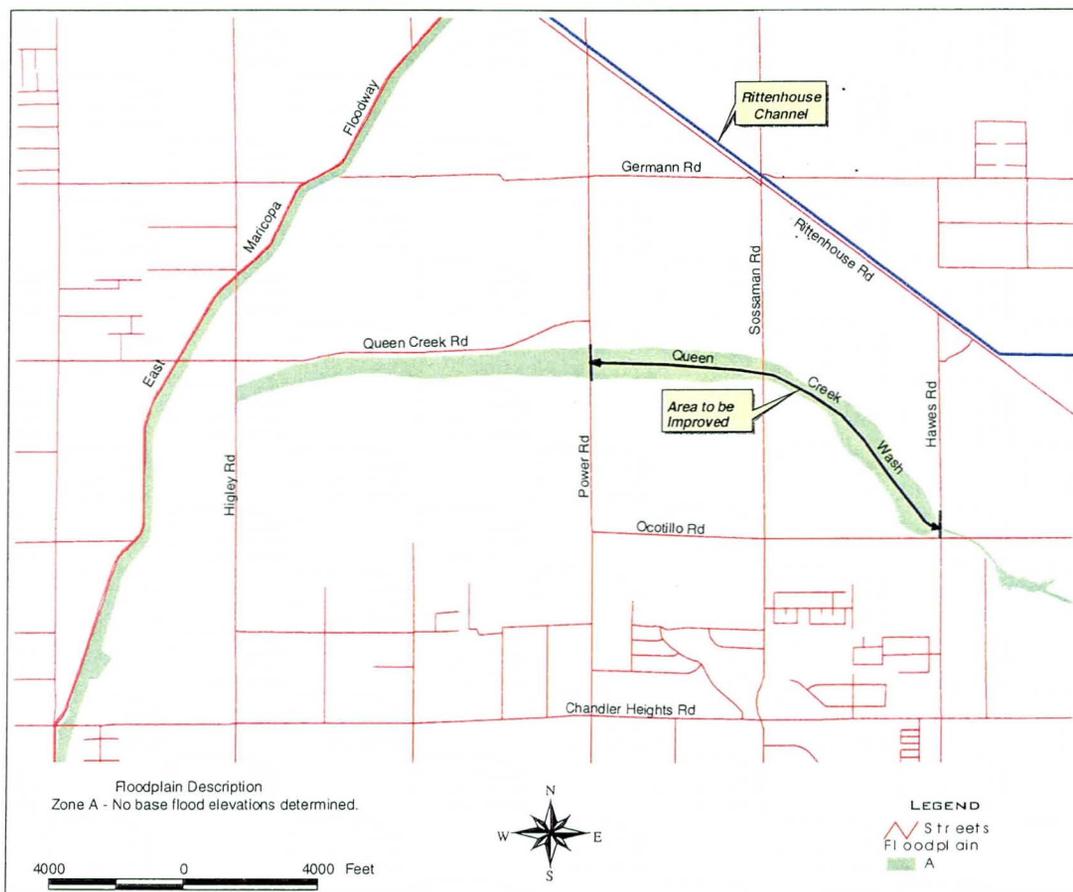
PCN: 480.02.31

Queen Creek Channelization

Municipality:
Queen Creek

PM: Paul Stears, P.E.
602-506-4768
pjs@mail.maricopa.gov

T2S R7E



CIP Budget

x \$1,000

<i>FY 01/02</i>	<i>FY 02/03</i>	<i>FY 03/04</i>	<i>FY 04/05</i>	<i>FY 05/06</i>	<i>5-Yr CIP</i>
\$0	\$400	\$300	\$2,000	\$2,700	\$5,400

The planning study of Queen Creek and Sanokai Wash Hydraulic Master Plan developed a master plan to maintain the hydraulic conveyance capacity of both Queen Creek and Sanokai Wash. The Sanokai Wash was analyzed from Ellsworth Road and Riggs Road to its outfall into Queen Creek. Channelization of portions of Sanokai Wash was recommended. Developers will construct portions of Sanokai Wash and the remaining portions will be completed by the District jointly with the Towns of Gilbert and Queen Creek. Design and construction of the portion to be completed jointly is currently scheduled to begin FY 2002-03.

Supervisorial District: 1

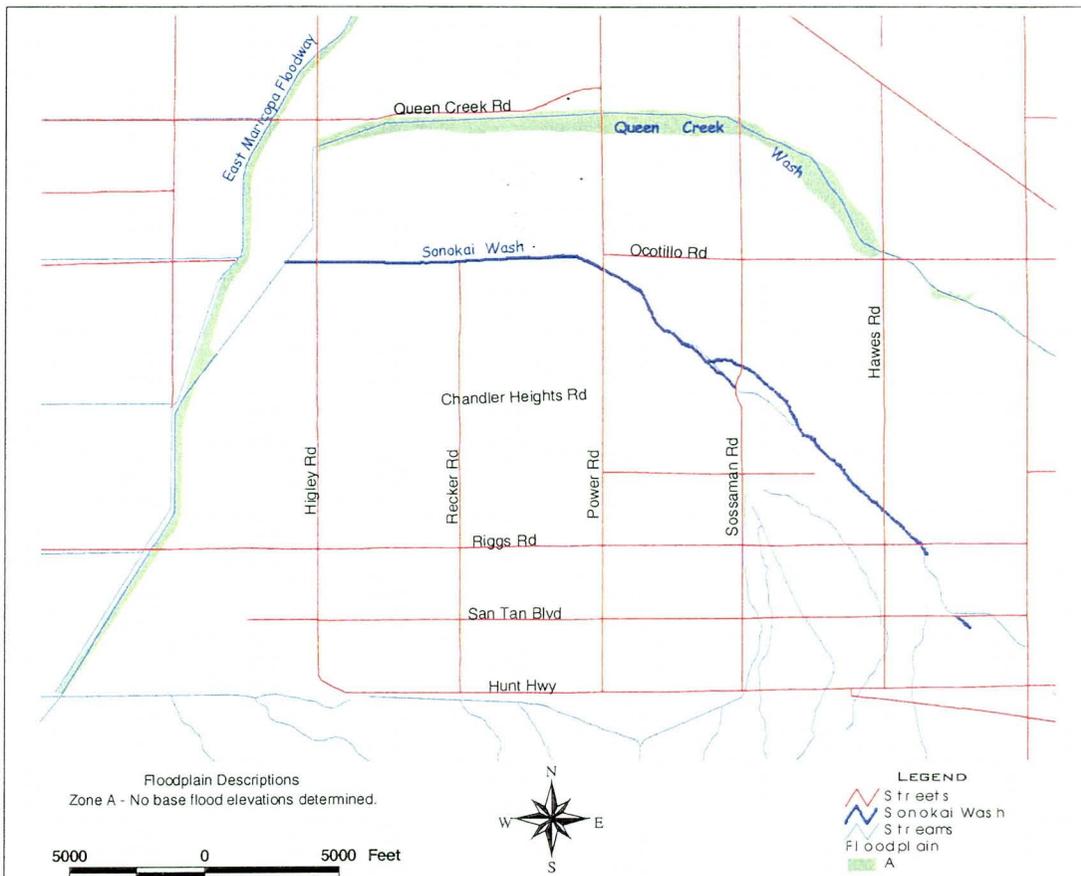
PCN: 480.04.31

Sanokai Wash Channelization

**Municipality:
Queen Creek**

**PM: Tim Phillips, P.E.
602-506-4718
tsp@mail.maricopa.gov**

**T2S R6E
T2S R7E**



CIP Budget

x \$1,000

FY 01/02	FY 02/03	FY 03/04	FY 04/05	FY 05/06	5-Yr CIP
\$74	\$0	\$0	\$0	\$0	\$74

This project consists of approximately 2.5 miles of storm drain beginning at 60th Street and Thomas proceeding north along 61st Place, east along Catalina Drive, north along 64th Street, east into Paiute Park Basin, north out of the Basin up to Osborn Road, south along 71st Street and east along Earll Drive into the Indian Bend Wash. The outfall will provide a storm drain with 10-year level of protection for contributing areas and will reduce drainage problems. Basins at Marriott's Brighton Gardens and Paiute Park, which will reduce the required pipe sizes for the downstream storm drain, will augment the storm drain. The estimated construction cost of the storm drain system is \$8 million. The District, along with the Cities of Phoenix and Scottsdale, are cost-sharing the project. The City of Scottsdale will be responsible for operation and maintenance of the project after completion. Construction began in August 2000 and is scheduled for completion in September 2001.

Supervisorial District: 2

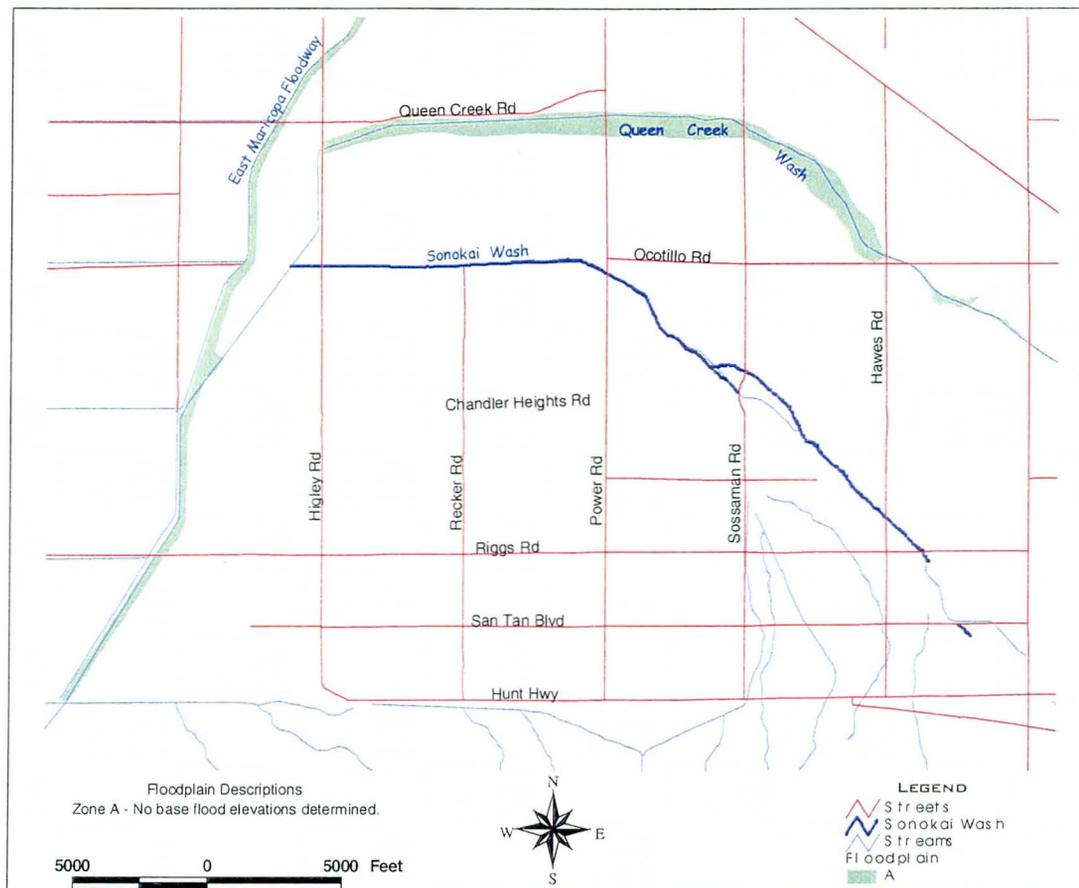
PCN: 490.01.33

San Tan Collector Channel Phase III

Municipality:
Scottsdale

PM: Tim Phillips, P.E.
602-506-4718
tsp@mail.maricopa.gov

T2N R4E



CIP Budget

x \$1,000

FY 01/02	FY 02/03	FY 03/04	FY 04/05	FY 05/06	5-Yr CIP
\$2,130	\$250	\$250	\$4,000	\$5,000	\$11,630

The Higley Outfall Channel is a project that was identified in the Higley Area Drainage Master Plan. Runoff reaching the Eastern and Consolidated Canals accumulates along the upstream face of the embankments and is diverted southerly. The Higley ADMP has identified features to mitigate the flooding along the Eastern Canal, the Consolidated Canal, and the Southern Pacific railroad adjacent to Arizona Ave. as well flooding west of these features caused by overtopping of the canal or railroad. The recommended plan in the southern portion of the study area includes channels along the eastern side of the Eastern and Consolidated Canals extending south from the proposed San Tan Freeway. The proposed channels will convey flood flows across the Gila River Indian Community southerly to the East Maricopa Floodway. Five detention basins are also proposed to reduce the size of the channels. Acquisition of land for the channel and basins is currently scheduled to begin during FY 2001-02.

Supervisorial District: 1

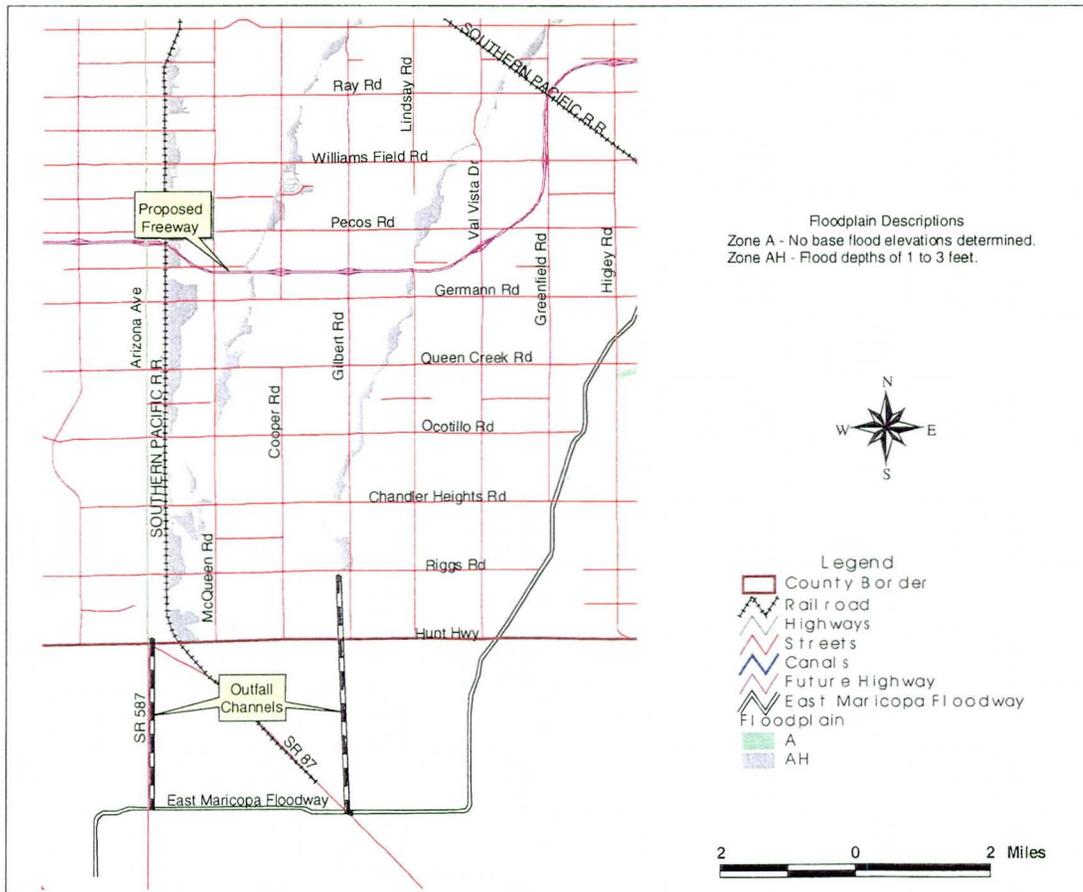
PCN: 491.01.31

Higley ADMP

Municipality:
Chandler, Gilbert, Mesa

PM: Tim Phillips, P.E.
602-506-4718
tsp@mail.maricopa.gov

T1N, R6E, T1S, R6E
T1S, R7E, T2S, R6E
T2S, R5E



CIP Budget

x \$1,000

FY 01/02	FY 02/03	FY 03/04	FY 04/05	FY 05/06	5-Yr CIP
\$0	\$165	\$0	\$0	\$0	\$165

The project site is 1.8 acres in size and is bounded by the SRP Eastern Canal on the west, Greenfield Road on the east and Warner Road on the south. The property is within a mapped 100-year floodplain caused by ponding and flows along the Eastern Canal. This site can accommodate passage of flows along the eastside of the canal to the Crossroads Park Basin. The Higley Area Drainage Master Plan has identified the need for a conveyance corridor through this property. The total project is estimated at \$330,000 with the District's contribution of \$165,000. The Town is to acquire the 1.8-acre parcel and remove any and all property improvements and will own, operate, maintain, and secure the property at no cost to the District. The Town is also responsible to fund any recreational improvements to the property.

Supervisorial District: 2

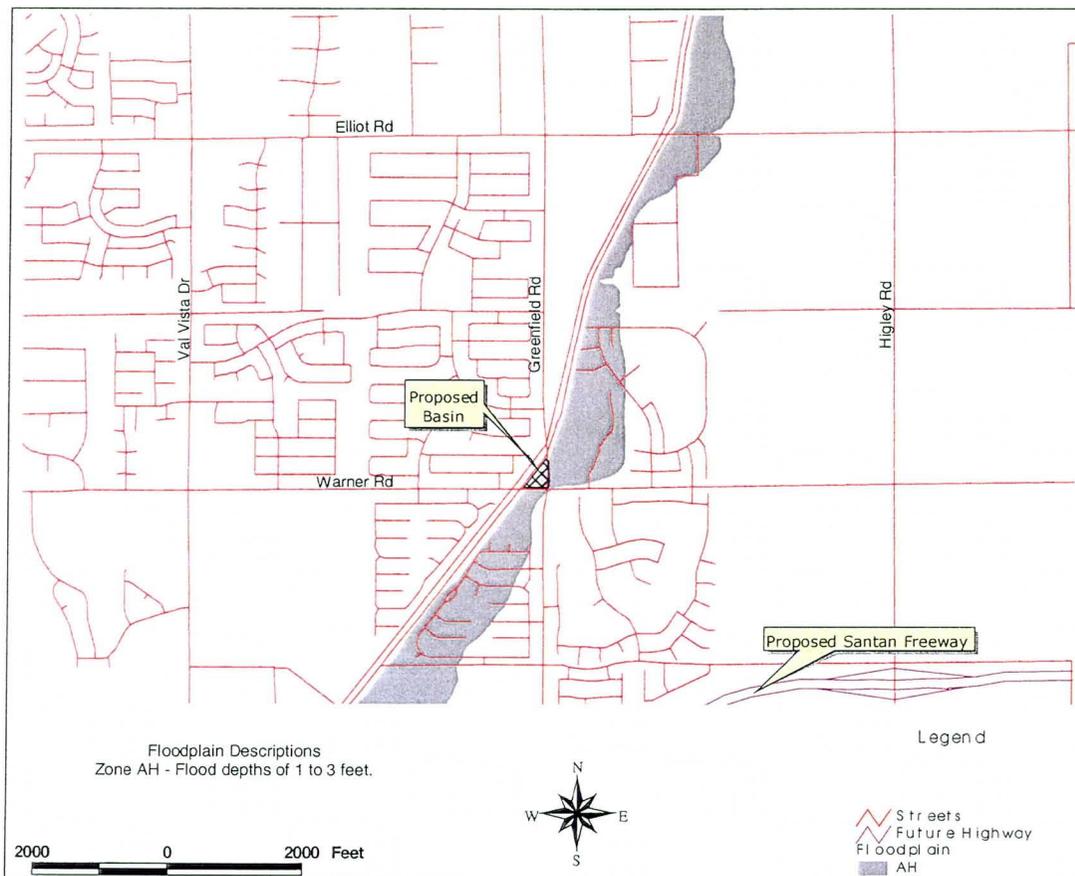
PCN: 491.02.31

Warner/Greenfield Park Basin

Municipality:
Gilbert

PM: Afshin Ahouraiyan, EIT
602-506-4519
afa@mail.maricopa.gov

T1S R6E



CIP Budget

x \$1,000

FY 01/02	FY 02/03	FY 03/04	FY 04/05	FY 05/06	5-Yr CIP
\$48	\$0	\$0	\$0	\$0	\$48

This project is a study to evaluate the conveyance capacity of the existing RWCD Tailwater Ditch located adjacent to the Eastern Canal under existing and future development conditions and will evaluate alternatives to increase the capacity of the channel to convey flood water along the Eastern Canal. The study limits are from the Superstition Freeway to Riggs Road. The Roosevelt Water and Conservation District (RWCD) operates an irrigation tailwater collection ditch located along the Eastern Canal alignment. The study will evaluate the potential of increasing the capacity of the existing Tailwater Ditch to convey flood flows.

Supervisory District: 1

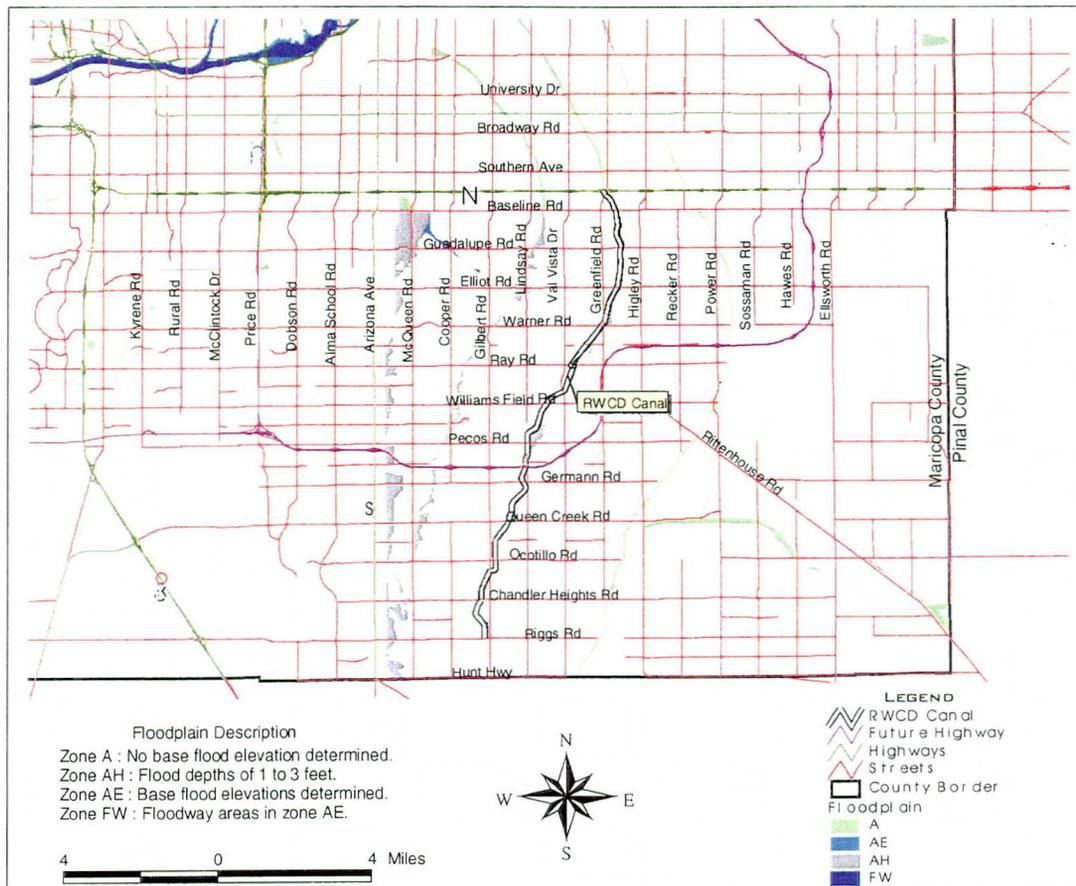
PCN: 491.03.31

RWCD Tailwater Analysis

Municipality:
Chandler, Gilbert, Mesa

PM: Tim Phillips, P.E.
602-506-4718
tsp@mail.maricopa.gov

T1S, R6E, T2S, R6E
T2S, R5E



CIP Budget

x \$1,000

FY 01/02	FY 02/03	FY 03/04	FY 04/05	FY 05/06	5-Yr CIP
\$1,100	\$500	\$0	\$0	\$0	\$1,600

The purpose of the Adobe Dam/Desert Hills Area Drainage Master Plan (ADMP) is to identify flooding risks and establish prudent policies for the Adobe Dam/Desert Hills ADMP area. The study will be done to quantify the extent of flooding problems, incorporate existing drainage structures into the model and develop alternative solutions to flooding problems for the entire Adobe Dam/Desert Hills Watershed. In addition, successful implementation of the Skunk Creek Watercourse Master Plan (WCMP) is dependent upon prudent and ongoing management of the watershed through the Adobe Dam/Desert Hills ADMP and Cave Creek/Apache Wash WCMP.

The Adobe Dam/Desert Hills ADMP will also link management of the watershed to implementation of the Skunk Creek and Cave Creek/Apache Wash WCMPs. The Adobe Dam/Desert Hills ADMP will provide a tool to assess proposed development and identify existing and future public safety problems and recommend solutions. The Adobe Dam ADMP will provide the critical link between the Skunk Creek and Cave Creek/Apache Wash WCMPs and the watershed to assure effective floodplain management.

The two major objectives of the study are to develop a plan to control runoff to prevent flood damage within the watershed, and to mitigate the potential increase in runoff due to development and to preserve the ability of Skunk Creek and Apache and Paradise Washes to convey storm water. This must be accomplished while providing protection to lands downstream and maintaining the low impact structural implementation strategy established in the Skunk Creek WCMP and the non-structural implementation strategy established in the Cave Creek/Apache Wash WCMP. The approximate watershed area is more than 73 square miles. The planning study is budgeted at \$1,600,000 and is included in the CIP budget allocation of \$1,100,000 FY 2001/2002, and \$500,000 for FY 2002/03.

Supervisory District: 3,4

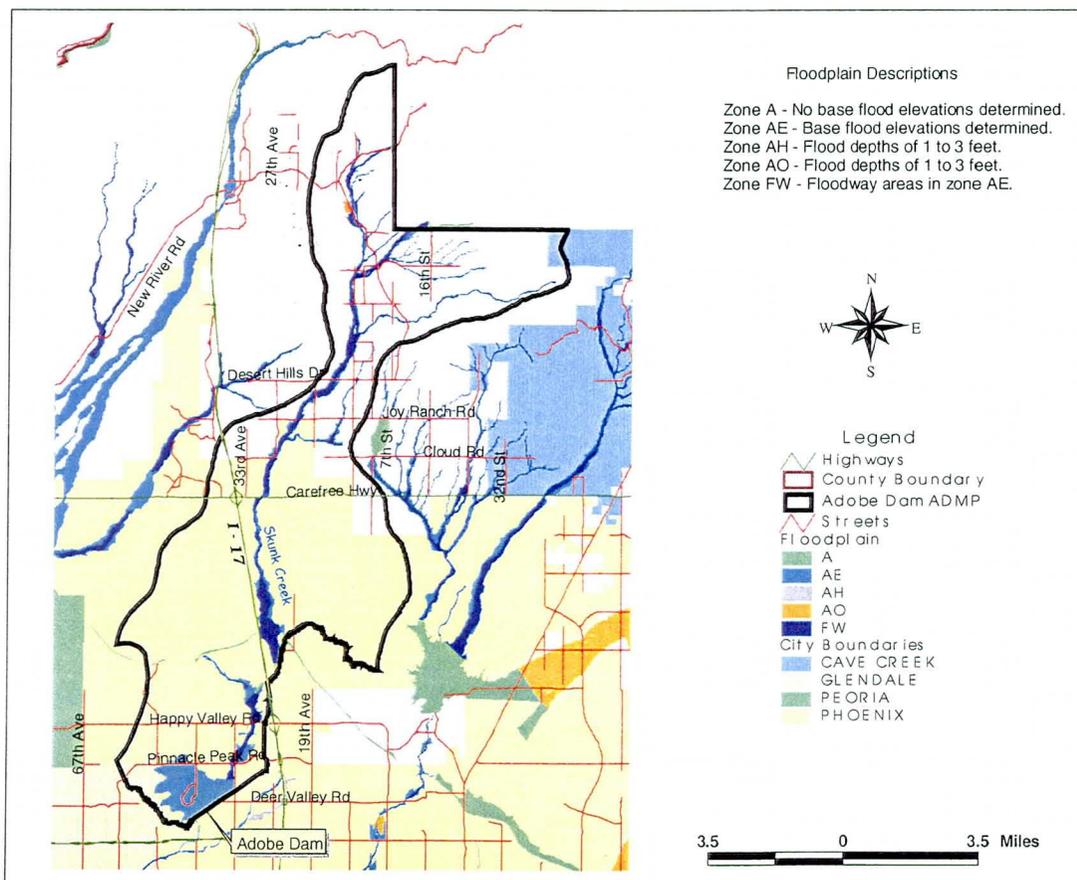
PCN: 520.01.31

Adobe Dam/Desert Hills ADMP

Municipality:
Cave Creek, Phoenix

PM: Marilyn DeRosa, R.G.
602-506-4766
mdr@mail.maricopa.gov

T4N R3E



CIP Budget

x \$1,000

FY 01/02	FY 02/03	FY 03/04	FY 04/05	FY 05/06	5-Yr CIP
\$93	\$400	\$1,500	\$3,200	\$0	\$5,193

Current and projected District CIP expenditures can be divided into two parts: a planning study that will lay the groundwork for further flood control activities; and a design and construction phase that will address flooding issue. The planning study consists of providing professional engineering services necessary for developing an area drainage master plan to determine guidelines for stormwater management and mitigate flooding for the Durango Study area. The study will include analysis of approximately 68 square miles of watershed, which extends from I-10 south to the Salt/Gila Rivers, and from approximately 27th Avenue west to the Agua Fria River. The study will identify drainage problems, update the existing hydrology due to development and new hydrologic methodology, and develop cost effective solutions for a storm water collection and disposal system and will further identify potential outfall alternatives. The planning study is budgeted at \$ 0.9 million dollars and is included in the CIP Budget for FY 01/02. The design and construction phase will involve the implementation of solutions to flooding that are identified once the planning and conceptual design phases have been completed, and remedial actions have been specified. Total expenditures in the CIP are now estimated at \$130 million for identified projects, which includes the costs for the Durango Regional Outfall Project.

Supervisorial District: 5

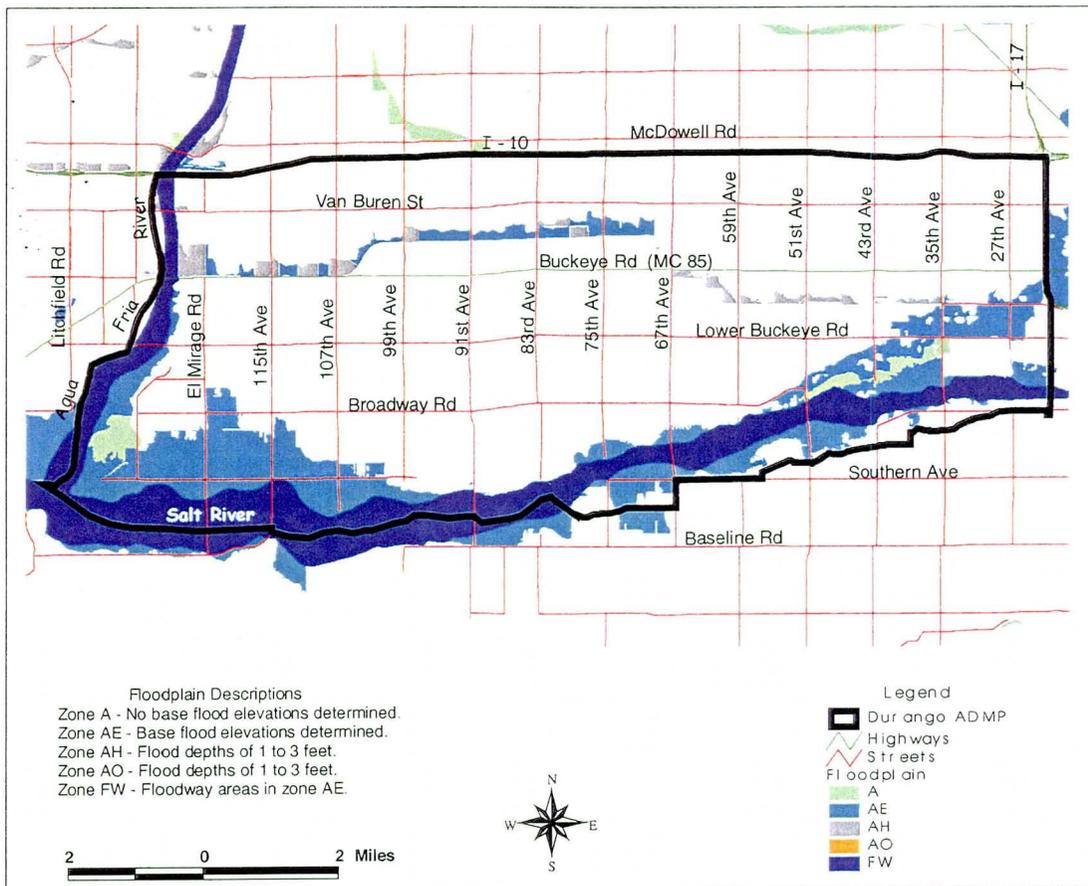
PCN: 565.02.31

Durango ADMP

Municipalities:
Avondale, Phoenix, Tolleson

PM: Greg Jones, P.E.
602-506-5537
glj@mail.maricopa.gov

T1N/R1W; T1N/R1E;
T1N/R2E



CIP Budget

x \$1,000

FY 01/02	FY 02/03	FY 03/04	FY 04/05	FY 05/06	5-Yr CIP
\$2,200	\$4,300	\$5,000	\$3,200	\$0	\$14,700

This project consists of a principal outlet channel located north of the Union Pacific Rail Road (just north of MC 85) from approximately 85th Avenue westward to the Agua Fria River. Additionally, the project will include three basins and two auxiliary channels. The auxiliary channels located on 91st Avenue and 99th Avenue will intercept and divert the storm water runoff, which accumulates and floods Van Buren Street. The basins will be sited along the principal channel to reduce the storm water peak flows. Currently the project has funding for \$14.7 million dollars in the CIP Budget.

Supervisory District: 5

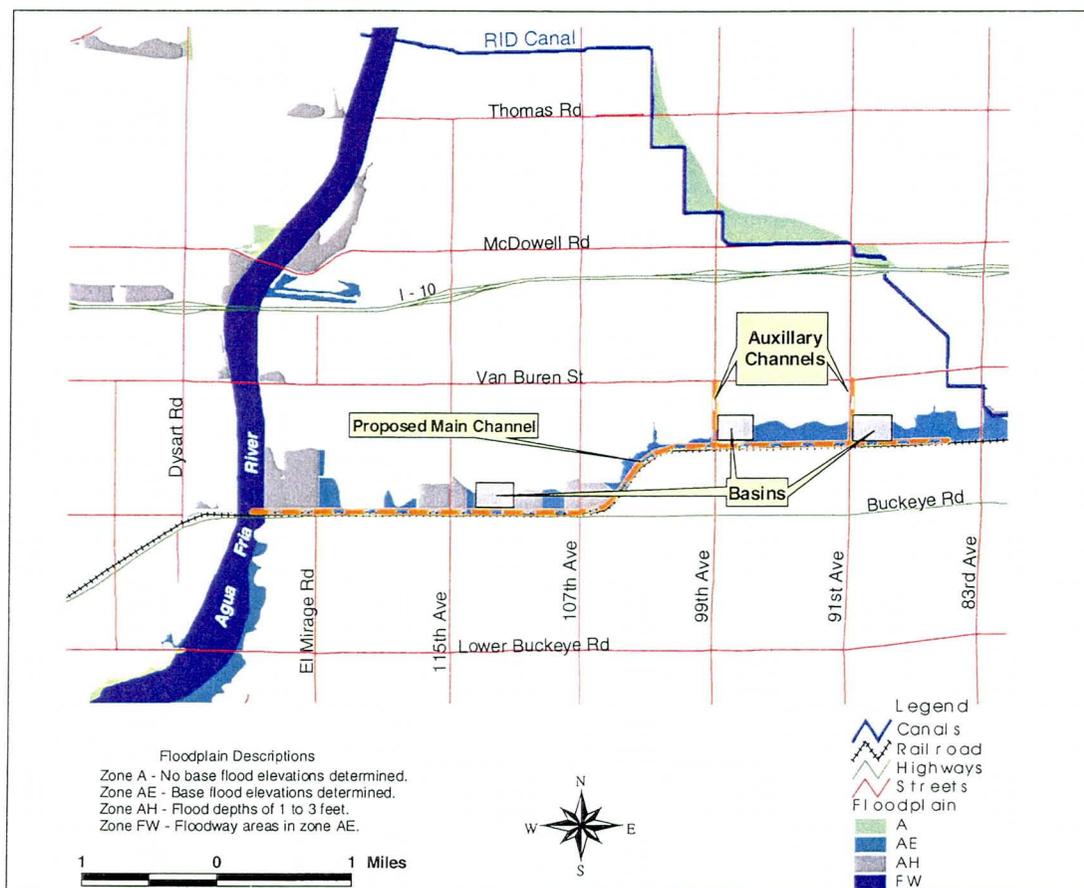
PCN: 565.03.31

Durango Regional Outfall Project

Municipality:
Avondale, Tolleson

PM: Greg Jones, P.E.
602-506-5537
glj@mail.maricopa.gov

T1N/R1W
T1N/R1E



CIP Budget

x \$1,000

FY 01/02	FY 02/03	FY 03/04	FY 04/05	FY 05/06	5-Yr CIP
\$0	\$0	\$1,700	\$500	\$4,000	\$6,200

This project consists of a principal outlet channel located east of 75th Avenue from just north of the Union Pacific Railroad (just north of MC 85) southward to approximately Broadway Road and then extends westward to the Agua Fria River. Additionally, the project will include three basins. The basins will be sited along the principal channel to reduce the storm water peak. The design and construction of the project is estimated to cost \$60 million dollars. Currently the project has funding for \$6.2 million dollars and is included in the CIP Budget for FY 03/04, 04/05, and 05/06.

Supervisorial District: 5

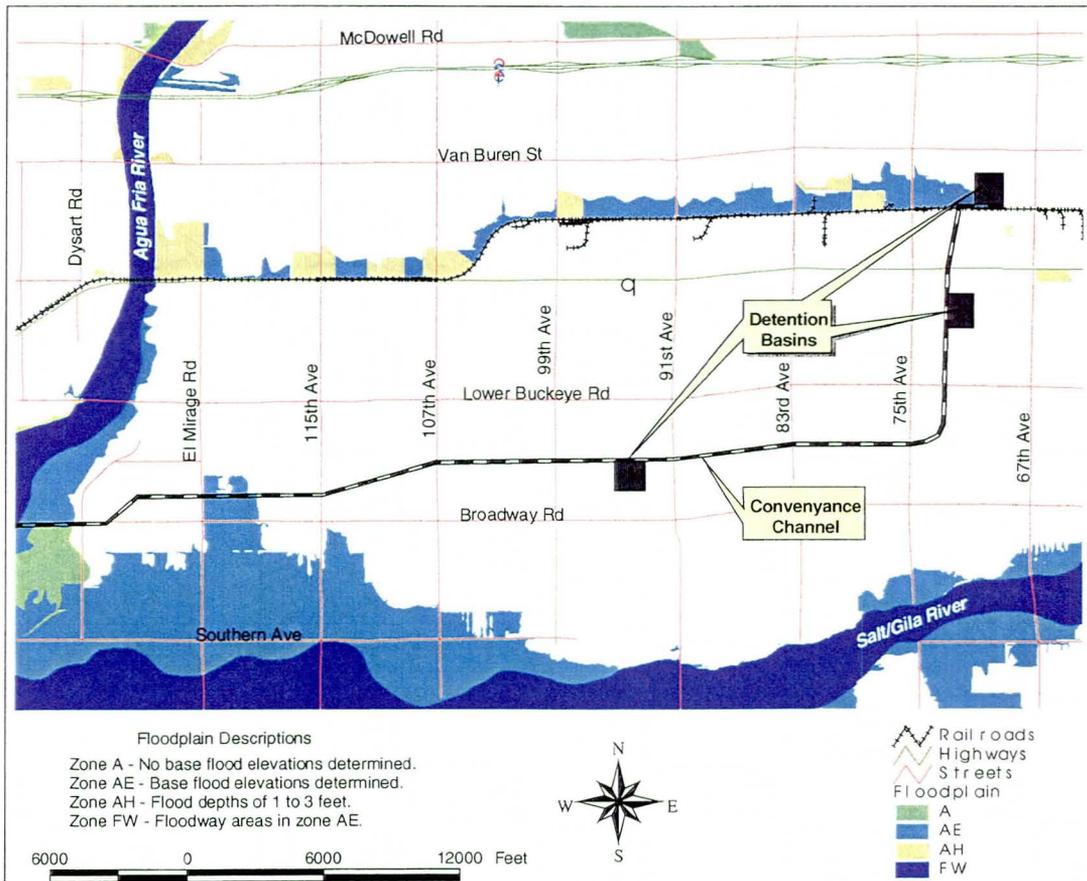
PCN: 565.xx.xx

Durango Regional Conveyance Channel

Municipality:
Avondale, Phoenix

PM: Greg Jones, P.E.
602-506-5537
glj@mail.maricopa.gov

T1N R1W
T1N R1E



CIP Budget

x \$1,000

FY 01/02	FY 02/03	FY 03/04	FY 04/05	FY 05/06	5-Yr CIP
\$995	\$8,099	\$6,000	\$6,000	\$6,000	\$27,094

The Bethany Home Road Outfall Channel was identified in the Maryvale Area Drainage Master Plan (ADMP). The project includes a linear basin and channel along the Grand Canal extending westerly from 64th Avenue to the New River. The project will have a 100-year capacity removing approximately 745 structures from the floodplain. The channel will receive storm water from portions of Peoria, Glendale, Phoenix, and unincorporated Maricopa County. The channel alignment (Phase I and II) is in Phoenix, Glendale, and unincorporated Maricopa County. Phase I of the project has been completed by ADOT, with District participation. This reach extends west from the Agua Fria Freeway to the New River following the Bethany Home Road Alignment. ADOT increased the size of their channel to accommodate additional flows from the Maryvale area. Phase II of the project will extend along Bethany Home Road easterly from the Agua Fria Freeway and along the Grand Canal to 64th Avenue. This phase of the project will include a channel from the Agua Fria Freeway alignment to 73rd Avenue and an earthen, linear, on-line detention basin from 67th Avenue to 73rd Avenue. The ADMP also recommends ten year capacity storm drains, located within Bethany Home Road and Camelback Road, extending from 59th Avenue to the Outfall Channel. Preliminary estimates indicate that the cost to construct this 100-year channel and 10-year storm drains is approximately \$67 million. The Cities of Glendale and Phoenix will be required to cost share the project and sign IGAs with the District. The project is currently being designed and rights of way have been acquired.

Supervisory District: 4,5

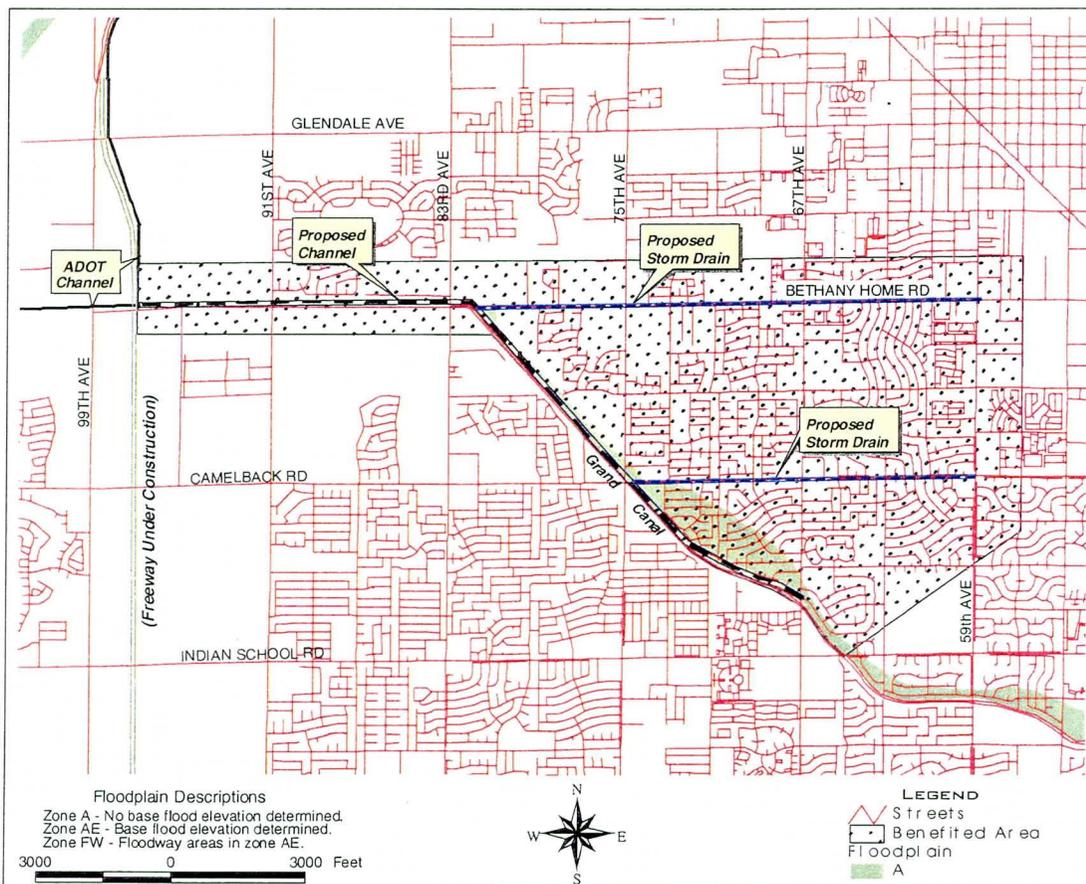
PCN: 620.03.32

Bethany Home Outfall Channel

Municipality:
Glendale, Phoenix

PM: Scott Vogel, P.E.
602-506-4771
csv@mail.maricopa.gov

T2N R1E
T2N R2E



CIP Budget

x \$1,000

FY 01/02	FY 02/03	FY 03/04	FY 04/05	FY 05/06	5-Yr CIP
\$0	\$3,500	\$3,500	\$0	\$0	\$7,000

The purpose of the Drainage Study is to identify the extent of flooding problems, and to provide flood protection and public safety of the local residents and adjacent businesses, in the vicinity of 24th Avenue and Camelback Road. There are two major objectives of the study. The first is to develop a comprehensive list of known flooding problems impacting the study area to document need and necessity for the project, and public information. The second is to develop a plan to reduce the flooding for the area. The City of Phoenix funding is included in its recently passed bond program. The District and Phoenix will cost share this project and responsibility will be included in a future IGA.

Supervisorial District: 3

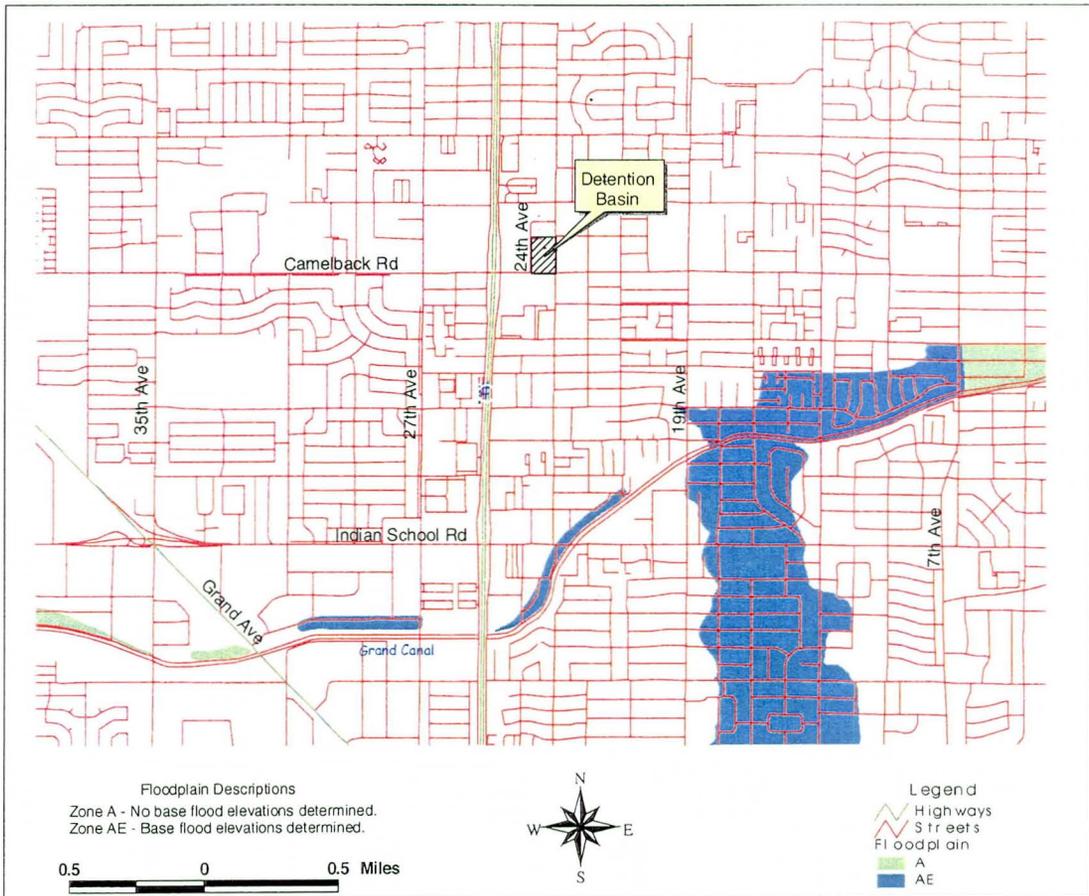
PCN: 625.02.01

24th Avenue/Camelback Basin

Municipality:
Phoenix

PM: Geza Kmetty, P.E.
602-506-4592
gek@mail.maricopa.gov

T2N R3E



CIP Budget

x \$1,000

FY 01/02	FY 02/03	FY 03/04	FY 04/05	FY 05/06	5-Yr CIP
\$41	\$0	\$0	\$0	\$0	\$41

The project was developed within the Foothills ADMP area and will create a 100-year outfall system for a 4.5 square mile watershed. The area impacted by the project is bounded by Interstate-10 (E), Pecos Road (S), 40th Street (W) and Ray Road (N). Improvements will be located within a corridor located between 48th Street and Interstate-10. Flows will be discharged to the Southeast Valley Regional Drainage System (SEVRDS) outfall channel prior to its final discharge into the Gila Drain Floodway on the Gila River Indian Community. The watershed is rapidly developing, with the remainder primarily in agricultural production. Currently, there are many manmade channels in the upper watershed, but these waterways terminate at development boundaries, and stormwater is typically dispersed back to pre-development flow patterns. Opportunities for water quality and groundwater enhancement have been given full consideration in the detention basin. The City will use the basin as a park site. Additional inflows to the Gila Drain Floodway may complement the GRIC's plan for wetlands and a natural open-space corridor. Costs for design, right-of-way, and construction are estimated to be \$7 million, and will be shared 50/50 between Phoenix and the District with District costs capped at \$3.5 million. The City has acquired the basin site and has completed design. IGA FCD 98035 identifies the District's role in the project as responsible for construction and construction management. Construction began in June, 2000 and will be completed in September 2001. Future operation and maintenance of this facility will be the responsibility of the City of Phoenix.

Supervisorial District: 1

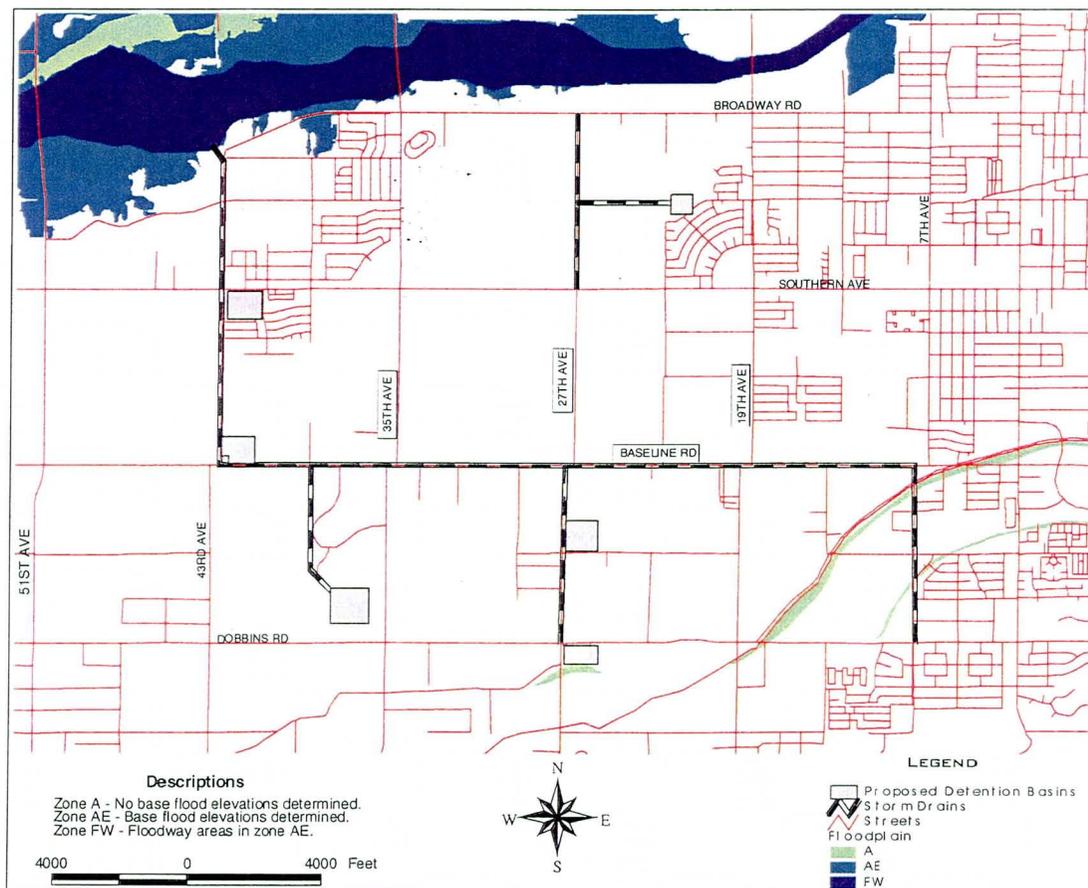
PCN: 630.01.30

SE Phoenix Regional Drainage System

Municipality:
Phoenix

PM: Don Rerick, P.E.
602-506-4878
djr@mail.maricopa.gov

T1S R4E



CIP Budget

x \$1,000

FY 01/02	FY 02/03	FY 03/04	FY 04/05	FY 05/06	5-Yr CIP
\$0	\$0	\$0	\$0	\$700	\$700

Ashbrook Wash and its tributaries (including Balboa Wash) are the largest wash system in Fountain Hills. Downstream of an existing series of dams, 100-year flows of 3,190 cfs affect three major problem areas (Ashbrook Wash, Del Cambre west for 900 feet; Ashbrook Wash, Saguaro Boulevard to Bayfield Dr.; Balboa Wash, and Kings Way to west of Fairlynn Drive). These areas contain sixteen single-family and twenty-three multi-family residences. The 100-year flows may also threaten the Fountain Hills Sewage Treatment Plant. The project is proposed to provide 100-year protection for the thirty-nine residences and the treatment plant. It will also improve conditions for nine roadway segments and enhance implementation of the Town's recreational Trails Plan. The project area is within the Fountain Hills ADMS (completed in FY 96-97). Cost for design and construction have been estimated by Town staff at \$1.3 million (60% by FCD, 40% by Fountain Hills). Rights-of-way are to be donated to the Town by development interests. The Town of Fountain Hills will provide future operation and maintenance.

Supervisory District: 2

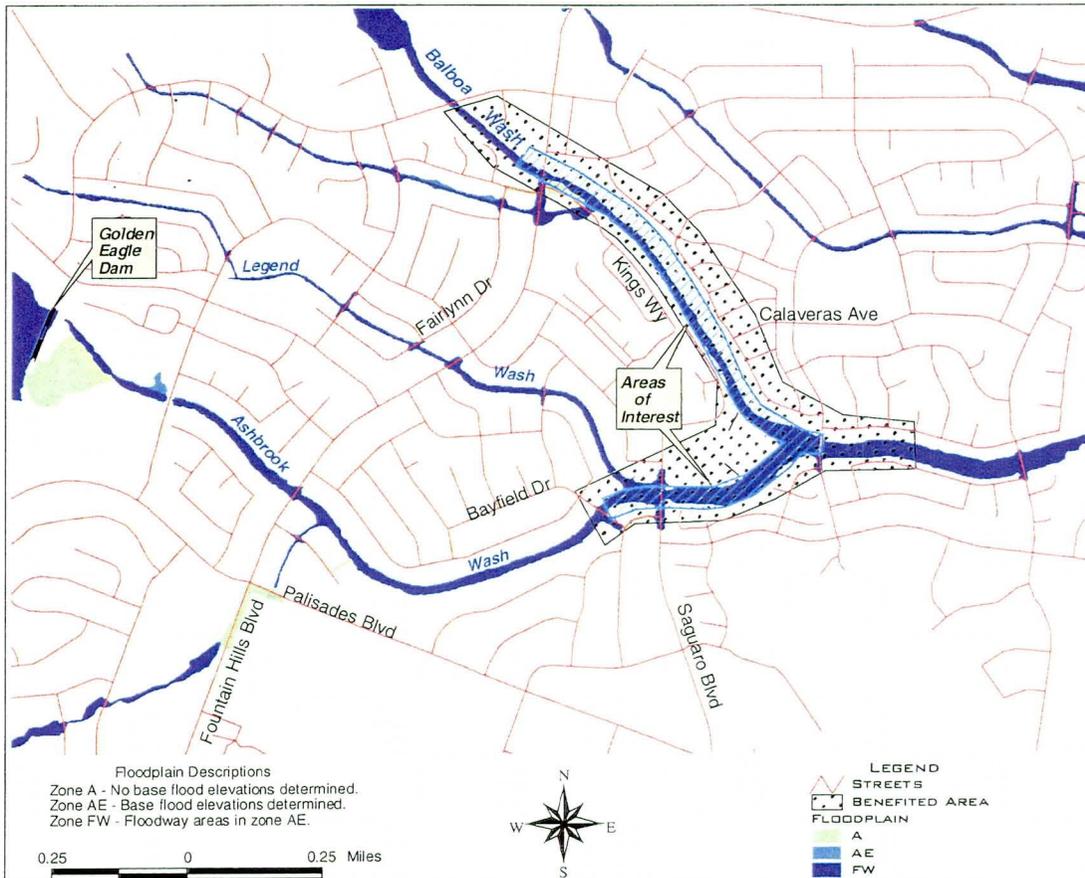
PCN: 670.xx.xx

Ashbrook/Balboa Wash Improvements

Municipality:
Fountain Hills

PM: Tom Renckly, P.E.
602-506-8610
trr@mail.maricopa.gov

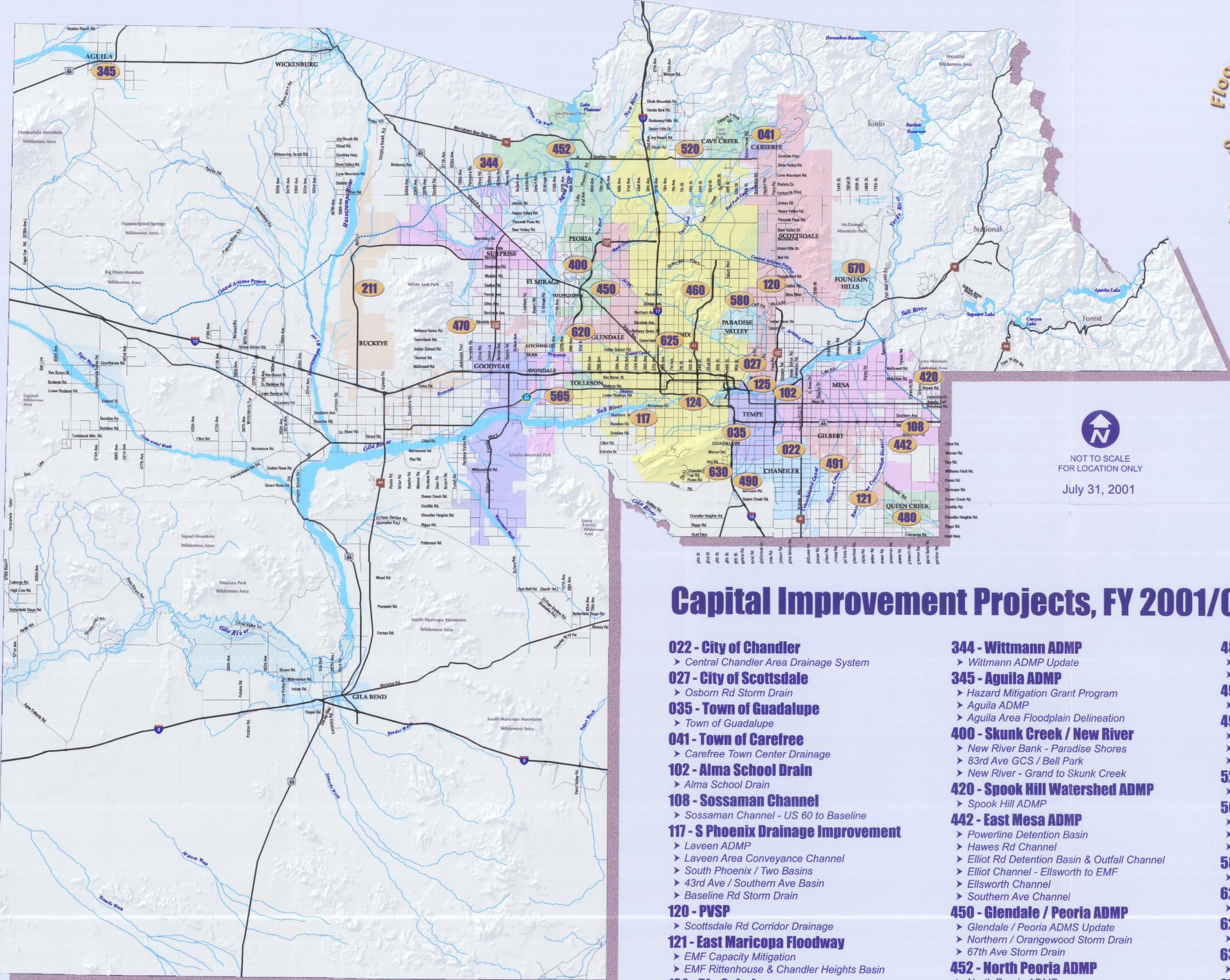
T3N R6E



FIVE-YEAR CAPITAL IMPROVEMENT PROGRAM



Planning and Project Management Division



NOT TO SCALE
FOR LOCATION ONLY
July 31, 2001

Capital Improvement Projects, FY 2001/02 - 2005/06

- 022 - City of Chandler**
 - Central Chandler Area Drainage System
- 027 - City of Scottsdale**
 - Osborn Rd Storm Drain
- 035 - Town of Guadalupe**
 - Town of Guadalupe
- 041 - Town of Carefree**
 - Carefree Town Center Drainage
- 102 - Alma School Drain**
 - Alma School Drain
- 108 - Sossaman Channel**
 - Sossaman Channel - US 60 to Baseline
- 117 - S Phoenix Drainage Improvement**
 - Laveen ADMP
 - Laveen Area Conveyance Channel
 - South Phoenix / Two Basins
 - 43rd Ave / Southern Ave Basin
 - Baseline Rd Storm Drain
- 120 - PVSP**
 - Scottsdale Rd Corridor Drainage
- 121 - East Maricopa Floodway**
 - EMF Capacity Mitigation
 - EMF Rittenhouse & Chandler Heights Basin
- 124 - Rio Salado**
 - Phoenix Rio Salado
- 125 - Salt River**
 - Tempe / Mesa Habitat Mitigation
- 211 - Buckeye / Sun Valley ADMP**
 - Buckeye / Sun Valley ADMP
- 344 - Wittmann ADMP**
 - Wittmann ADMP Update
- 345 - Aguila ADMP**
 - Hazard Mitigation Grant Program
 - Aguila ADMP
 - Aguila Area Floodplain Delineation
- 400 - Skunk Creek / New River**
 - New River Bank - Paradise Shores
 - 83rd Ave GCS / Bell Park
 - New River - Grand to Skunk Creek
- 420 - Spook Hill Watershed ADMP**
 - Spook Hill ADMP
- 442 - East Mesa ADMP**
 - Powerline Detention Basin
 - Hawes Rd Channel
 - Elliot Rd Detention Basin & Outfall Channel
 - Elliot Channel - Ellsworth to EMF
 - Ellsworth Channel
 - Southern Ave Channel
- 450 - Glendale / Peoria ADMP**
 - Glendale / Peoria ADMS Update
 - Northern / Orangewood Storm Drain
 - 67th Ave Storm Drain
- 452 - North Peoria ADMP**
 - North Peoria ADMP
- 460 - East Fork Cave Creek ADMP**
 - Greenway Parkway Channel
- 470 - White Tanks ADMP**
 - White Tanks FRS #3 Modifications
 - Loop 303 Corridor / White Tanks ADMP Update
 - Reems Rd Channel
 - Bullard Wash Phase II
 - Northern Ave Channel & Basin
- 480 - Queen Creek ADMP**
 - Queen Creek Channelization
 - Sanokai Wash Channelization
- 490 - Gilbert / Chandler ADMP**
 - San Tan Collector Channel Phase III
- 491 - Higley ADMP**
 - Higley ADMP
 - Warner / Greenfield Park Basin
 - RWCD Tailwater Analysis
- 520 - Adobe Dam ADMP**
 - Adobe Dam / Desert Hills ADMP
- 565 - Durango ADMP**
 - Durango ADMP
 - Durango Regional Outfall Channel
 - Durango Regional Conveyance Channel
- 580 - ACDC ADMP**
 - Doubletree Ranch Rd System
- 620 - Maryvale ADMP**
 - Bethany Home Outfall Channel
- 625 - Metro ADMP**
 - 24th Ave / Camelback Basin
- 630 - Foothills ADMP**
 - SE Phoenix Regional Drainage
- 670 - Fountain Hills ADMP**
 - Ashbrook / Balboa Wash Imp.