ANNUAL REPORT

1995 - 1996

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FINANCIAL HIGHLIGHTS

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

Budgeted and Actual for the Fiscal Year Ended June 30, 1996

Preliminary and unaudited.

	DOLLARS	PERCENT
REVENUES		
Flood Control Tax	$36,118,000	79
Local Participation	4,965,000	11
Rental Income	192,000	1
Interest Income	1,114,000	2
Other Land Revenue	2,815,000	6
Miscellaneous	408,000	1
Total Revenue	45,612,000	100
EXPENDITURES		
Operating	14,850,000	35
Flood Control Capital Improvements	27,577,000	64
Vehicles and Equipment	410,000	1
Total Expenditures	42,837,000	100
EXCESS (DEFICIENCY) OF REVENUES OVER EXPENDITURES	2,775,000	
FUND BALANCE JULY 1, 1995	14,081,000	
FUND BALANCE JUNE 30, 1996	$16,856,000	

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

Published by:

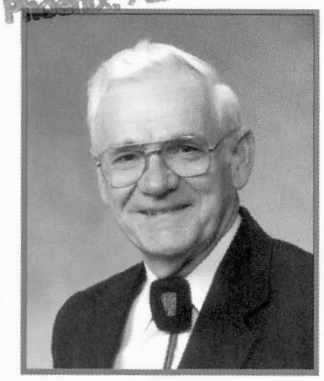
Flood Control District of Maricopa County
2801 W. Durango St.
Phoenix, Arizona 85009

Tel. 602-506-1501

Letter from Interim Chief Engineer
and General Manager...

Facing the Challenges

by Stanley L. Smith, Jr., P.E.



In last year's annual report, Dan Sagramoso, the District's Chief Engineer and General Manager, cited FY1995/1996 as the year of *Continuing Challenges*, and indeed it has been. District staff has met the challenge and succeeded, as has the County.

During this year we lost the services of several people who have made significant contributions to the success of the District. Dan Sagramoso retired in September 1995. David Meinhart, a planner who developed the CIP Prioritization Process, left in November 1995. Catesby Moore who developed and nurtured our environmental program left us in February 1996 for a similar position with the City of Tucson. Leonard Coleman, an Equipment Operator retired in April 1996 after 30 years of County service, 17 years with FCD. Leanna Cumberland, our Contracts Administrator retired, and Jim Phipps, our personable Public Involvement Coordinator and master of many ceremonies, left us in June 1996 for the private sector. There were others who left, and we miss them all and thank them for the years of dedicated service and contribution on behalf of the citizens of Maricopa County. Yet, in the face of personnel losses and other challenges, the District staff came through and accomplished a lot while continuing to focus on the needs of our customers.

If there was a theme for this year, it was **Focus on the Needs of the Customer**. We have learned that the public involvement process works, but it is costly. Costly in terms of both time and dollars. We are committed to using the public involvement process to the maximum, while pressing to keep projects on schedule and within budget. The following are examples of how we did things right, and the lessons we learned from our mistakes.

- Beardsley Road Regional Drainage system was a guide for improving our process of informing clients of what we are doing and why we are doing it. In the lessons learned category, our good intention of providing flood protection years before the freeway construction was lost because we did not effectively communicate the trade-off of early flood protection for landscaping and aesthetic considerations.

- 10th Street Wash Basins set the standard for working with a community/ neighborhood committee to clearly identify the needs and concerns of all the parties resulting in facilities that will provide flood protection and become an amenity to the neighborhood.

- Dysart Drain improvements gave us the opportunity to work with and receive recognition from the Air Force for the quality and timeliness of our project management efforts, and for the cost control effectiveness of our construction management.

- Casandro Wash Dam and Outfall provided us with another opportunity to focus on the needs of our customer, and has earned good marks for public involvement, and also recognition from the construction contractor for resolving issues quickly and effectively avoiding delays and cost increases.

The new fiscal year will present other challenges, and I am confident that the District's staff will deal with them in the professional manner that is our standard. We have demonstrated our ability to provide a quality product. The next challenge is continuing quality improvement to achieve our quality vision to "Be the Best."

About the District

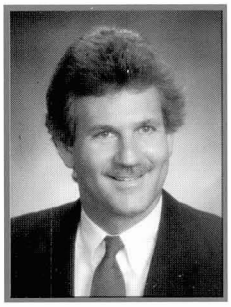
In March 1959, legislation was passed which empowered counties to set up special districts for the purpose of providing flood protection for their residents. As a result of this legislation, the Flood Control District of Maricopa County was formed on August 3, 1959.

Flood control districts are political subdivisions of the State and have all the powers, privileges, and immunities generally given to incorporated cities and towns. The elected Board of Supervisors of Maricopa County serve as the District's Board of Directors, who are advised by a seven member Flood Control Advisory Board.

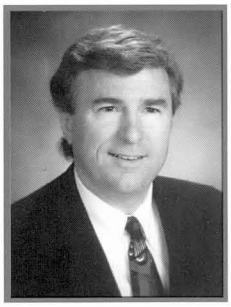
District activities are funded by a flood control tax levy assessed on all real property within Maricopa County and a variety of cost-sharing arrangements with federal, state, county and local governments. The tax levy rate for Fiscal Year 1995/96 was $.3332 per $100 of assessed value.

The District is organized into six functional areas comprised of the following divisions: Administration, Construction & Maintenance, Engineering, Regulatory, Land Management and Planning & Project Management.

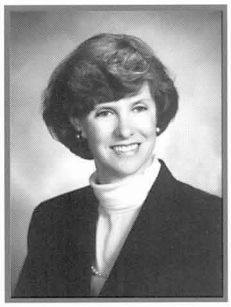
Board of Directors



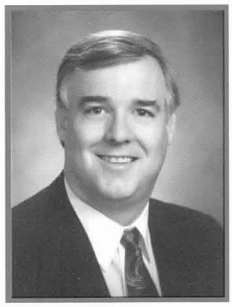
Ed King
District 4
Chairman



Don Stapley
District 2



Betsey Bayless
District 3



Tom Rawles
District 1

Mary Rose Wilcox
District 5

The District is governed by a Board of Directors which also serves as the elected Board of Supervisors for Maricopa County. The Board of Directors exercises all the powers and duties in the acquisition and operation of District properties, contracting, and in carrying out regulatory functions as ordinarily exercised by governing bodies.

Flood Control Advisory Board

Ron Wheat
Chairman
District 4

Gilbert "Shag" Rogers
District 1

John E. Miller, Jr.
District 2

Samuel K. Wu
District 3

Melvin Martin
District 5

Paul Cherrington
Salt River Project

James Matteson
City of Phoenix

The Flood Control Advisory Board (FCAB) works closely with staff and the Board of Directors to accomplish the District's mission of protecting county residents and their property from flooding. The FCAB reviews proposed flood control projects and studies and makes recommendations as to their scope, necessity and priority. These recommendations are forwarded to the Board of Directors for action. Board members also recommend an annual budget to the Board of Directors and serve the District as members of the Floodplain Review Board and the Drainage Review Board.

The FCAB consists of seven members, five of whom are appointed by the Board of Supervisors to five year terms. The City of Phoenix and the Salt River Project appoint representatives who are ex-officio members of the FCAB.

Mission

To reduce flood risks for the people of Maricopa County by providing comprehensive flood and stormwater management services.

These services are provided through regulatory activities, master planning, regional coordination, technical assistance, and implementation and maintenance of non-structural and structural projects. Our clients include citizens, municipalities, and other government agencies.

Examples of Structural and Non-Structural Projects are:

Structural	Non-Structural
Dams	Floodplain Management
Channels	Drainage Management
Storm Drains	Water Quality Management
Bank/Bed Stabilization	Vegetative Management
Basins	Acquisition of Flood-prone Property
Levees	Development Review
	Flood Detection & Data Collection

Vision

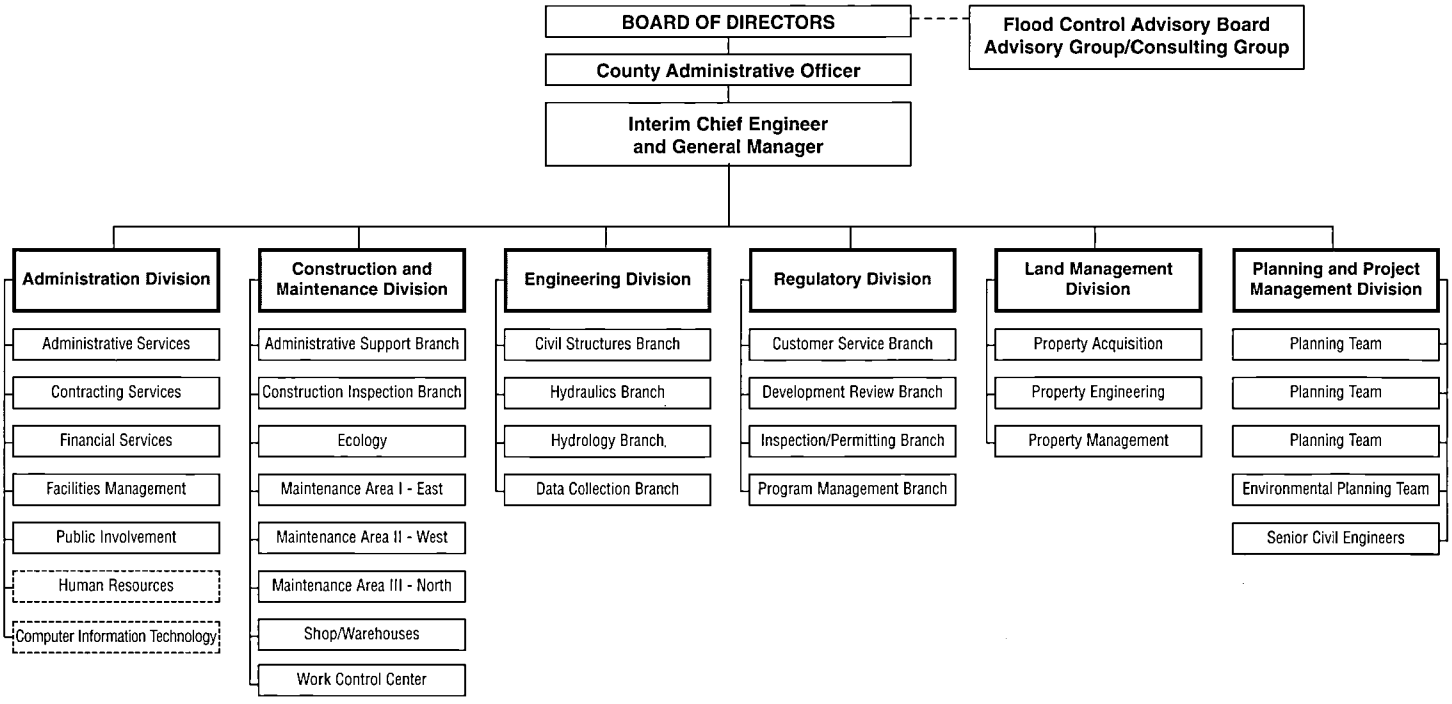
We will be known and supported by our customers and employees as the agency of choice for accomplishing our mission.

Values

The Flood Control District values are: fiscal stability, efficient management, appropriate organization size, technical proficiency, quality orientation, high ethics, visionary thinking, environmental responsibility, and aesthetic awareness.

FLOOD CONTROL DISTRICT ORGANIZATIONAL CHART

(241 total authorized positions as of June 30, 1996)



A Focus on the Future

Maryvale Flood Mitigation Project

Flooding along the north bank of the Grand Canal, between 43rd and 64th Avenues, results in frequent flooding of approximately 150 houses. Approximately 350 homes are within the 100-year flood plain in this area.

In 1994, the District initiated a study to evaluate alternatives to eliminate or reduce the flooding within two neighborhoods in Maryvale.

The project includes construction of two detention basins discharging into existing storm drains and modifications to existing streets and storm drains to divert flows into the basins. The proposed basins will be designed to store runoff from a 10-year storm. A basin located at 51st Avenue and the Grand Canal will be constructed as a multi-use facility. It will incorporate flood water storage into a Cactus League stadium development by depressing a parking lot and practice field(s). The 63rd Avenue basin will require removal of 35 existing houses, relocation of existing residents, construction of a detention basin, and modification of existing streets and storm drains. Each basin's estimated cost is approximately $4.5 million.

Southeast Valley Regional Drainage System

The Southeast Valley Regional Drainage System (SEVRDS) includes a 100-year drainage system to be built within the Santan Freeway corridor, Price Road to 56th Street and a connecting channel from the basin near 56th Street to the Gila Drain Floodway West of I-10. When combined with contributing flows from the Price Freeway drainage system (south of Ray Road), the SEVRDS will intercept and convey municipal and freeway drainage from 58 square miles in Chandler, Tempe, Gilbert and Maricopa County. The project will also protect areas of the Gila River Indian Community located south of Pecos Road and west of Price Road off-community flows.

Open Space Plan

The Flood Control District cost-shared with the Maricopa County Department of Transportation and the Maricopa Association of Government (MAG) for the Development of an Open Space Plan for the County. This Plan, also termed the Desert Spaces Plan, is a regional open space plan designed to guide jurisdictions within Maricopa County to establish and protect suitable open space areas. The Plan is intended to be utilized by Federal, State, County, and local jurisdictions as a framework for decision-making and coordination. The overall goal of the Open Space Plan is to identify a regional system of integrated open space along with a mechanism to establish and manage the system.

The concept behind the Plan is to conserve and enhance environmentally sensitive areas such as floodplains and mountains throughout the County. The Plan identifies rivers and washes as an important component in providing a regional trail system. Many of the goals and policies within the Plan support the Drainage Regulations presently enforced by the District. One of the Plan's major points of focus is the provision of recreational opportunities adjacent to floodplains or flood control structures. Currently, some jurisdictions are actively pursuing a multiple-use concept in the development of proposed flood control facilities.

The District on the Internet

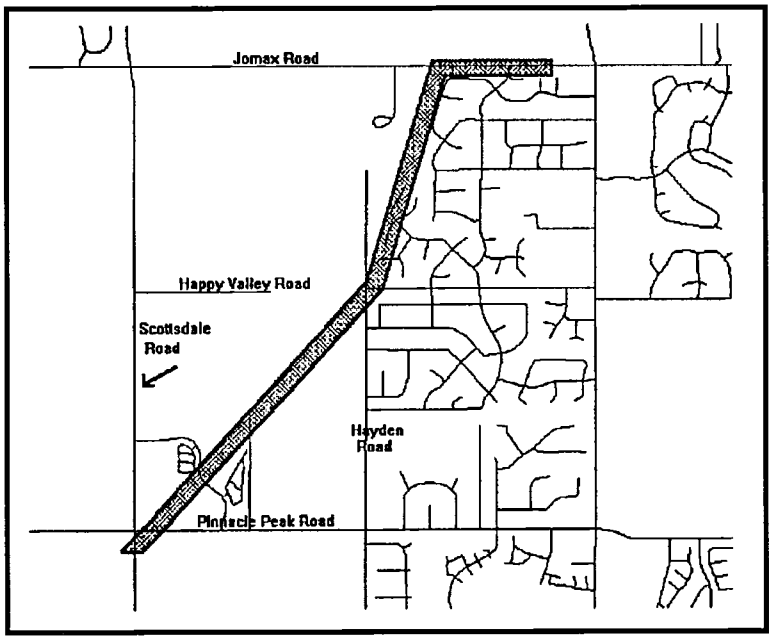
The District has been working on making information including flood ALERT data and weather conditions available to the public on the Internet. The information on the Internet includes:

- Information about the Chief Engineer of the District;
- Announcement of the Employee of the Quarter;
- Information about the Board of Directors;
- Names of the Flood Control Advisory Board;
- A copy of the annual report;
- Information on District projects;
- Downloadable documents and software applications;
- Public meeting schedules;
- Access to the ALERT system reports.

The District has received e-mail from people visiting the District's website. The response has been favorable and recommendations and concerns are being accommodated.

Scottsdale Desert Greenbelt Project

Due to tremendous growth, the City of Scottsdale has been looking into methods to effectively manage stormwaters, while providing passive recreational opportunities for the community. The Desert Greenbelt System will utilize natural washes and preserve the desert landscape while containing the 100-year flooding hazard, north of the CAP canal.



SCOTTSDALE DESERT GREENBELT RAWHIDE WASH IMPROVEMENTS

Planning estimates have indicated that the 52 square mile drainage area, bounded by the Central Arizona Project (CAP) to the south, McDowell Mountains to the east, Desert Mountain to the north, and Cave Creek Road to the west, will reach build out in 20 to 40 years. Due to these estimates, the City of Scottsdale, the Flood Control District of Maricopa County, and the State of Arizona are developing a concept that combines effective flood control and open space amenities within the landscape, while balancing homeowner concerns, development objectives, public landholder requirements and City goals.

The District is cost-sharing on right-of-way, design costs and construction costs for improvements to Reata Pass/Beardsley Wash, Rawhide Wash, and Pima Road Channel. The City of Scottsdale will operate and maintain the completed facilities.

FCD Quality Initiative

As part of the District's continuing effort to improve services to our customers, District top management has developed a quality initiative vision to *Be the Best*, and an action plan detailing how to impart this vision to all employees. Management established a schedule of events to be implemented during the 1996-97 fiscal year to support the change process. The Quality Initiative was a result of a planning session facilitated by The Richard-Rogers Group, Inc. with the purpose of preparing a strategic plan to implement the "quality initiative" at the Flood Control District. All managers and supervisors will be trained in a method to achieve measurable, work-related quality results. This program builds on the existing Leadership Academy and TQM programs. Employees will participate in a one day session to celebrate quality initiative results. The "Results Forum" will allow teams to report the implementation of improvements including practices and user results. The Forum will ensure accountability, celebrate team efforts, evaluate the implementation strategy, and focus on future direction and continuous improvement.

Flood Control District Goals for FY 1996/97

- Strategic Plan
- Comprehensive Flood Control Program Report
- Management and Leadership Training
- Customer Communications
- Safety
- Employee Morale
- Alternative Work Hours
- Utilization of Technology
- Privatization
- Long Term Strategy

PROGRAMS

Eight important programs work together to accomplish the District's mission:

Planning Program:

- Identifies regional drainage and flooding problems and develops alternative solutions to protect life and property.
- This is accomplished through Area Drainage Master Studies, the Comprehensive Plan, Watercourse Master Plans, and a formal project prioritization process that ranks candidate projects.

Capital Improvement Program:

- Implements flood control and stormwater management projects identified through the planning process and recommended for inclusion in the Five-Year Capital Improvement Program (CIP) approved by the Board of Directors.
- The CIP includes acquisition of rights-of-way, relocation of utilities, design and construction of drainage and flood control facilities, including aesthetic features.
- Coordinates public involvement and insures compliance with environmental laws and regulations integral to all CIP projects.

Property Management Program:

- Manages all aspects of District real property interests.
- Prepares leases, joint use agreements, licenses for access, and selling excess property (after project construction).

Floodplain Management Program:

- Administers the Floodplain Regulation for the unincorporated areas of Maricopa County, plus 13 municipalities.
- Delineates areas subject to the 100-year flood, evaluates applications and issues permits for use of the floodplain, and identifies violators.
- Provides floodplain information to real estate and insurance agents and the general public.
- Maintains good standing in the National Flood Insurance Program to insure eligibility for Federal Disaster Relief so that citizens may purchase federally-sponsored flood insurance.
- Participates in the Community Rating System that provides flood insurance discounts to citizens.

Drainage Administration Program:

- Administers the County Drainage Regulation to reduce existing and potential flooding caused by local stormwater.
- Coordinates with County Planning, Transportation, Public Health and Building Safety to insure that new development will not increase runoff, divert flows, or backwater onto another property.

Environmental Program:

- Provides guidance and coordination in meeting federal storm water quality regulations.
- Performs research and provides educational outreach and technical assistance to local municipalities, County agencies and industries impacted by these regulations.

Flood Detection & Data Collection Program:

- Designs, implements and maintains a rainfall and stream gage system to monitor flood control structures and to provide data for use in floodplain studies, computer modeling of watersheds and design of flood control structures.
- Provides information used by the National Weather Service in issuing flood watches and warnings and by the County Emergency Management Department for flood event planning and evacuations.
- Operates and maintains nine stormwater quality sampling sites, along with the inspection and sampling of illicit connections and hazardous spills impacting our structures and the water in them.

Maintenance Program:

- Maintains over 70 flood control structures and facilities, including 23 dams and numerous channels, basins, levees, culverts, storm drains, and washes.
- Provides erosion and vegetation control and maintenance of roads, landscaping, fencing, gates and signage.
- Monitors structures and provides emergency services during flood events.

Flood Control District of Maricopa County Program Summary-Expenditures

Fiscal Year Ended June 30, 1996
Preliminary and Unaudited

Program	Personnel Services Budget	Personnel Services Actual	Supplies and Services Budget	Supplies and Services Actual	Travel Budget	Travel Actual	Vehicles and Equipment Budget	Vehicles and Equipment Actual	Total Budget	Total Actual
Maintenance	$3,698,000	$3,489,000	$ 4,338,000	$ 2,877,000	$ 17,000	$ 27,000	$303,000	$168,000	$ 8,356,000	$ 6,561,000
Environmental	467,000	489,000	709,000	498,000	6,000	10,000	25,000	18,000	1,207,000	1,015,000
Floodplain Management	624,000	720,000	1,276,000	1,240,000	10,000	9,000	36,000	23,000	1,946,000	1,992,000
Drainage Administration	950,000	910,000	366,000	344,000	12,000	9,000	53,000	55,000	1,381,000	1,318,000
Property Management	319,000	334,000	212,000	150,000	4,000	4,000	16,000	12,000	551,000	500,000
Flood Detection and Data Collection	598,000	584,000	885,000	587,000	8,000	14,000	32,000	29,000	1,523,000	1,214,000
Planning	759,000	735,000	1,253,000	632,000	10,000	11,000	39,000	25,000	2,061,000	1,403,000
Capital Improvement	1,784,000	1,374,000	27,625,000	27,355,000	24,000	25,000	106,000	80,000	29,539,000	28,834,000
Total Program Expenditures	$9,199,000	$8,635,000	$36,664,000	$33,683,000	$ 91,000	$109,000	$610,000	$410,000	$46,564,000	$42,837,000

NOTE: Administrative expenditures are included in program expenditures.

Planning and Capital Improvement Programs

The Planning Program identifies regional drainage and flooding problems and develops alternative solutions to identify locations and facilities that are presently at risk from flooding, or could be in the future to protect life and property. Public Involvement and environmental assessment are integral parts of the planning process.

Once the flooding problems have been quantified, alternative solutions are developed to determine a cost effective and locally supported project. Recommended projects are then prioritized for inclusion in the District's Capital Improvement Program (CIP).

The Five Year CIP is prepared by District staff and reviewed and approved by the Board of Directors annually. The CIP consists of two elements. The first year is the budget which identifies funding for specific capital improvement projects and the last four years indicate staff proposed funding required for continuation of on-going projects or for the implementation of new projects.

Cactus Road Storm Drain

CIP projects are identified by the District's customers (client cities and towns) and District staff based upon their knowledge of flooding problems and from the results of Area Drainage Master Studies (ADMSs). All potential projects are processed and rated based on criteria included in the District's *Procedure for Identifying and Prioritizing Potential 5-Year CIP Projects*. Once the prioritization rating has been determined, a management decision is made to initiate the planning process which moves the project toward inclusion in the CIP. Projects in areas with significant threat to loss of life may circumvent the process as an exception to policy.

Activities included in the Planning Program include ADMSs, Watercourse Master Plans, the Comprehensive Flood Control Program Report, pre-design studies, and the coordination of interagency cooperative projects and agreements. The combined Planning Program and CIP account for approximately 75% of the District's annual budget.

Approximately 30% of the CIP budget is utilized for property acquisition. The District acquired 81 properties for various projects throughout the County and 7 businesses and families were relocated this fiscal year. Of the property rights obtained, 430.52 acres were purchased in fee, 60.64 acres were in permanent easements, and 102.89 acres were temporary construction easements. The total cost for acquiring the necessary land and easements was $6,084,539. The acquisition program also generated over $50,000 in appraisal. Cost savings totaling over $1.5 million were realized as a result of settling condemnation actions on terms favorable to the District. The District has been able to avoid expensive litigation exposure this year by extensive research prior to making offers of purchase, to ensure that the offer is reasonable and equates to just compensation without paying unjust enrichment.

Major Projects Completed During FY 95/96	Major Projects Under Construction (as of June 30, 1996)
Salt River Channel (McClintock Dr. to Pima Freeway)	Casandro Wash Dam and Outfall
New River Channel (Grand Ave. to Greenway Rd.)	Old Crosscut Canal
Outlet for Casandro Wash Dam	Price Drain
Colter Channel	Upper New River Mitigation
Beardsley Road Regional Drainage System	Cactus Road Storm Drain
Skunk Creek Improvements	East Fork Cave Creek ADMP
10th Street Wash Basin #1	10th Street Wash Basin #2
Dysart Drain Basin and Bridges	Dysart Drain

August 1959

Flood Control District of Maricopa County established

1967

Powerline Dam completed

1968

Powerline Floodway and Vineyard Dam completed

1968

Congress passed the National Flood Insurance Act

1969

Rittenhouse Dam completed

1973

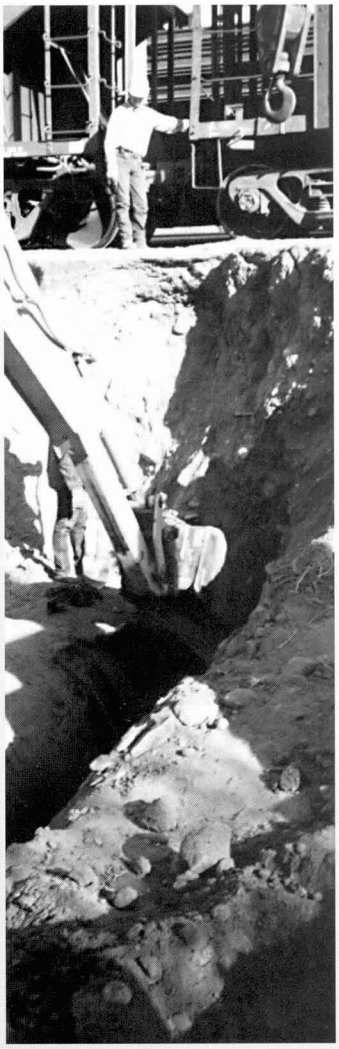
Dreamy Draw Dam completed

Casandro Wash Dam and Outfall

The District entered into a landmark Intergovernmental Agreement (IGA) with the Town of Wickenburg in May 1994 for the purpose of design, construction, and operation and maintenance of the Casandro Wash Dam. The Town of Wickenburg was responsible for granting easements for use of town owned right-of-way and utility easements at no cost to the District. The District was responsible for the design, utility relocation and construction and management of the project as well as obtaining all permits required for the construction.

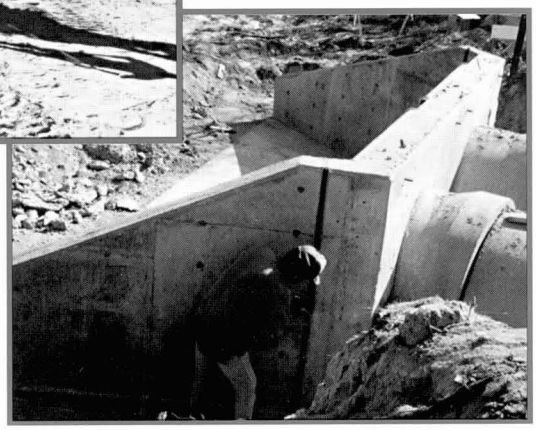
This is the first dam that the District has been involved in all phases including construction. The outlet was designed in-house by the Civil Branch of the Engineering Division. The construction of the dam was overseen by the Construction and Maintenance Division of the District. Having District personnel on-site at all times allowed for problems to be clarified with minimal downtime and was instrumental in meeting the schedule and budget for this project.

Project Features	
Flood Storage Capacity	143 Acre Feet
Dam Height	32.50 Feet
Crest Length	350 Feet
Peak Inflow	1769 CFS
Peak 100 Year Discharge	150 CFS
Spillway Length	80 Feet
Contractor	Roy E. Ladd, Inc.
Designer	CH2M Hill



This project presented some challenges in obtaining the necessary land rights through a residential area, under a railroad, and through a horse boarding facility. A number of residents and businesses had to be relocated out of the basin site and the horses temporarily moved for construction. The Town of Wickenburg has expressed its enthusiasm for the project and formal dedication is expected in August 1996.

The dam has been constructed to protect residents in the Town of Wickenburg who live adjacent to Casandro Wash from a 100-year flood event. There are about 100 residents along Casandro Wash who will be removed from the floodplain upon completion of the project. The District is responsible for the operation and maintenance of the dam. The dam will be dedicated on August 29, 1996.



Dysart Drain Improvements Project

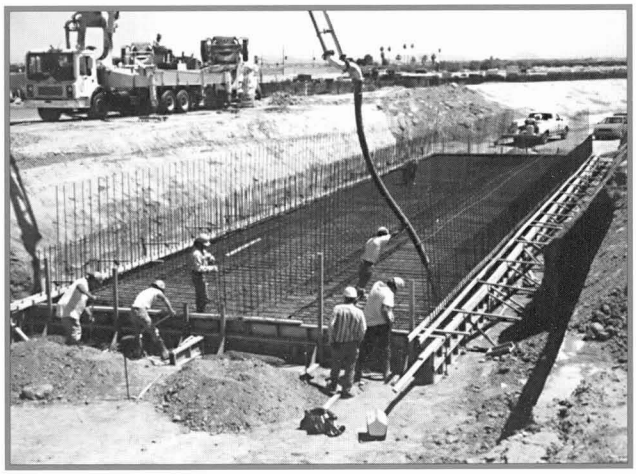
The District entered into an Intergovernmental Agreement (IGA) with the U.S. Air Force in April 1994 for the purpose of design, construction, and operation and maintenance of the Dysart Drain Improvements Project. The Luke Air Force Base (LAFB) has experienced significant flooding in the past, and most recently in 1992 and 1993. At the request of LAFB, the District was invited to evaluate the flooding problems and recommend solutions to the problems. The IGA was then developed for the purpose of implementing a recommended solution. This included construction of a large detention basin, the reconstruction of the entire length of the existing Dysart Drain channel from Reems Road on the west to the Agua Fria River on the east, and the reconstruction of three existing bridges across the channel. The project will intercept flood flows from north of the base and convey them safely to the Agua Fria River (AFR).

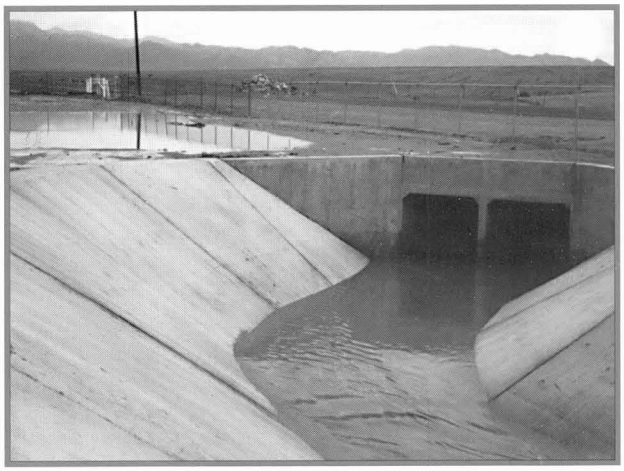
The IGA designated the District to be the lead agency for the design and the construction of all improvements. The LAFB would be responsible for all operation and maintenance after completion of the project with the exception of one small channel component at the northeast corner of the basin. The IGA also required that the District deed all project rights-of-way to the Air Force upon completion of the project.

To date the basin has been constructed and the three bridges have been reconstructed. The channel improvements are underway at this time with completion expected by the end of 1996. The project will provide 100-year protection to the LAFB and areas south and east of LAFB. The project has encountered few problems and has necessitated only minor change orders to date.

Project particulars include -

Detention basin capacity
550 acre-feet
Detention Basin outflow
550 cfs
Total basin and spoil area
156 acres
Depth of basin
10 feet (avg.)
Channel length
20,750 feet (+/-)
Channel lining
Reinforced concrete
Peak channel discharge at the AFR 3,900 cfs





Contractors –

Basin
Ames Construction

Bridges
Sema Construction

Channel
Pulice Construction

Designer
NBS Lowry

May 1973

State HB-2010 approved empowering cities, towns and counties to adopt floodplain regulations

December 1973

Congress passed the Flood Disaster Protection Act

1975

Buckeye Dam 1, 2 and 3, Old Cross Cut Canal and Guadalupe Dam completed

1976

Sunset and Sunny Cove Dams completed in Wickenburg area

1979

Spook Hill Dam completed

Tenth Street Wash Improvements Project

The Tenth Street Wash Improvements Project was developed to resolve flooding problems along the wash from just north of Cheryl Drive to its outlet into the ACDC channel. The project goal is to remove or significantly reduce the existing FEMA 100-year floodplain. This project involved extensive participation by the local community in the Sunnyslope area of Phoenix. In particular, a Citizen's Advisory Committee (CAC), consisting of citizens from the various neighborhood and city planning groups, was formed to work directly with the District and the City to develop the final project concepts. The project evolved in two phases, development of construction plans for two detention basins, and a study to develop potential concepts for improvements to the wash itself.

10th Street Wash Improvements Project

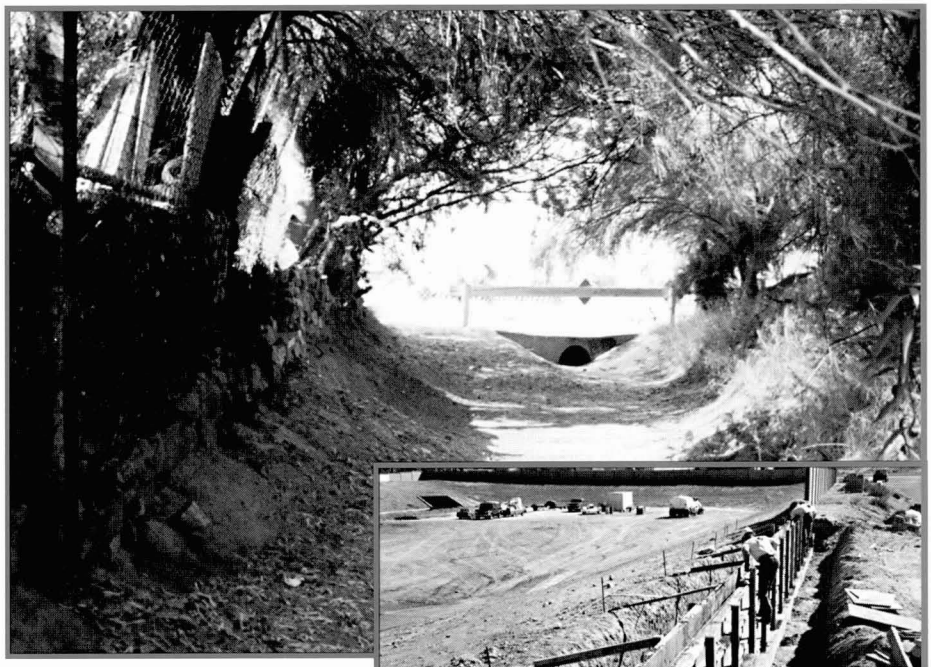
Principal Project Features:

Basin #1
15 acre-feet

Basin #2
75 acre-feet

60″ storm drain pipe

Double 6′ x 4′ box culvert



It was decided that the basins would be constructed at this time. The CAC prefers that the wash remain in its "natural" condition. Basin #1 has been constructed north of Cheryl Drive with inlets from the east and west forks of the wash into the basin. Basin #2 has been designed to accommodate future use as a city park, and is now being constructed between Alice and Townley Avenues. Construction of the basin is expected to be completed in late 1996.

In cooperation with the City Parks Department, Basin #2 will be landscaped as part of the District's project. The Parks Department will then master plan recreational uses for the basin and incorporate the basin into the city park system.

Property Management Program

The Property Management Program manages all aspects of District real property interests, including leases, joint use agreements, license for access, and selling excess property when market conditions are favorable. This program is managed in the Land Management Division with contributions from all Divisions.

The District owns or controls over 50,000 acres of real estate for its projects. The Property Management Program is responsible for leasing, selling, and managing this property in the best interest of the District. Management typically entails issuing easements and pursuing trespass violations on District property. It also includes preparation and completion of Intergovernmental Agreements (IGA) and other land right documents to enable local jurisdictions and private parties to use District property.

The Property Management Branch serves a wide variety of both internal and external customers by making land available for parks, recreation, farming, utility easements, commercial and residential development, golf courses and other multiple land uses. Property Management staff work with municipalities, utility companies, non-profit organizations, and private corporations to promote the concept of multiple-use by various right-of-way documents.

Property Management Branch Activity Summary

Sale at public auction	$2,800,000
Leases	$ 127,000
Easements	$ 24,000
IGAs	$ 31,000

The Property Engineering Branch has heavily supported property management operations during the past fiscal year as follows:

1) Mapping of District projects has continued and is now 80% complete.

2) Property Engineering has conducted 4,031 measurable tasks while providing services or support for District divisions, Attorneys, and Public Inquiry. These tasks include but are not limited to geometric calculation of property, creating legal descriptions and maps of right-of-way acquisition, reviewing title reports, and creating exhibits and display maps for District projects such as Skunk Creek Channel, Casandro Wash Dam, Camelback Ranch Levee, RID Canal Overchute, and New River Mitigation.

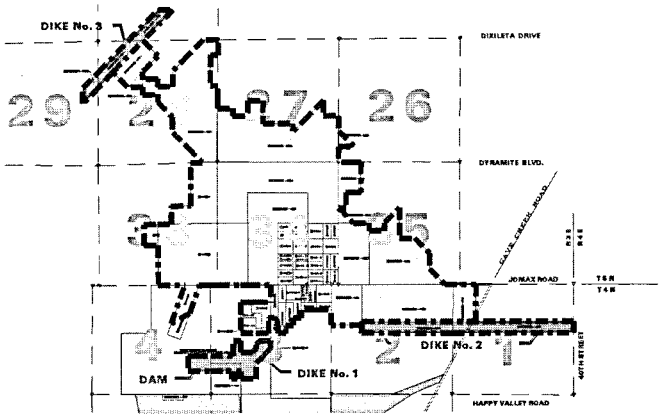
3) Provided management of on-call survey contracts totaling $104,525. Contracts include property surveys on parcels of excess lands to be sold at public auction or acquired for District projects, and an interagency survey service for the Solid Waste Department of the Northwest Regional Landfill.

4) Spearheaded push to obtain computer link with County Recorder resulting in a savings of both time and money. Recent documents can now be searched and obtained immediately at no cost rather than paying for service from title companies and waiting three days for documents.

5) Continued enhancement of information system programming. Property Engineering programs now have capability to place easements granted by District into database which can be viewed graphically in correct relationship to District property.

6) Provided special display maps for project proposals, legal functions, studies, and property development schemes. Projects such as a 2,300 acre recreational IGA with the City of Phoenix, Camelback Ranch development, and Adobe Dam have required special display maps to clarify right-of-way, create recreation areas, and determine locations of excess lands.

An IGA with the City of Phoenix Parks Department for the recreational development of the Cave Buttes Dam Reservoir was completed in June 1996. This IGA was finalized during this fiscal year, adding over 2,300 acres of land to the City Parks system at no initial cost to Phoenix.



Cave Buttes Recreation Development

The Property Management staff has been actively involved in the disposition of excess lands by public auction. A significant amount of revenue, nearly $3 million, was generated as a result of an aggressive and opportunistic property management program. $2.2 million was generated by a public auction sale of property located near 75th Avenue and Bell Road. Several luxury home sites and a Circle K facility were also sold at public auction.

The Pendergast School District, which is located on the west side of Phoenix, was in need of an elementary school site near 107th Avenue and Campbell. The District was able to sell about 20 acres to the school district to help alleviate an overcrowding situation at an adjacent school site. The public auction generated $375,000 for use in future flood control projects.

Floodplain Management Program

The components of Maricopa County's Floodplain Management Program consist of floodplain delineation and mapping of the 100-year floodplains, the Community Rating System (CRS), the National Flood Insurance Program (NFIP), drainage standards and development review.

In the County, the District regulates floodplains in the unincorporated areas and in the communities of Buckeye, Carefree, Cave Creek, Chandler, El Mirage, Fountain Hills, Gila Bend, Guadalupe, Litchfield Park, Queen Creek, Surprise, Tolleson and Youngtown.

National Flood Insurance Program

The NFIP is a federal program administered by the Federal Emergency Management Agency (FEMA), which establishes rules and guidelines for regulating land uses within delineated 100-year floodplains. The federal guidelines are incorporated into local regulations, which were adopted by the County Board of Supervisors in 1974. County citizens are eligible for flood insurance and flood disaster assistance provided that these guidelines are adhered to.

Under the NFIP and CRS programs, more emphasis is being given to two areas; 1) identifying and protecting natural and beneficial functions of floodplains, and 2) pre-flood or pre-damage mitigation projects.

Multiple Objective Management (MOM) of floodplains encourages placing a premium on floodplain uses with an emphasis on protecting or improving an environmentally sensitive area's natural and beneficial uses. The study of vegetative and wildlife habitat to identify such areas and place them in categories for various levels of needed protection is on the horizon for state and local floodplain jurisdictions.

The federal government is moving toward a pro-active stance in mitigation of flood damage and protection. Rather than waiting for a flood to happen before assisting with projects or programs that would prevent a repeat occurrence, the NFIP is taking steps to provide assistance to communities who have specific proposals to remove or reduce a significant flood threat before a disaster occurs. Future District activities will be looking to take advantage of these new initiatives.

Floodplain Delineation

Floodplain delineations of the 100-year floodplain are performed on areas where floodplains have not been defined as well as on boundaries of existing floodplains that have been reduced or eliminated by flood control projects. Among the flood delineation studies performed by the District, the program delineated four miles of floodplains in the vicinity of Luke Air Force Base and six miles in the Rio Verde area, last year.

Community Rating System

The CRS is a federal program which rewards a community's efforts to reduce flood losses by awarding flood insurance premium credits to its residents. The ratings are based on communities' effectiveness in reducing flood losses.

The County maintained the second highest rating in the United States, earning residents of unincorporated areas a 20 percent discount on their flood insurance premiums. Residents of Phoenix and other incorporated communities also received lower insurance rates thanks to District activities performed on a regional or inter-jurisdictional basis.

Program Activity Highlights – Fiscal Year 1995/1996

2	New floodplain delineations approved by FEMA
85	Floodplain use permits reviewed
90	Clearances issued
1	Variance approved
6	Violations investigated
557	Walk-in customers assisted
2467	Phone requests for general information handled
5216	Flood hazard information provided
140	Flood hazard information notices recorded

Floodplain Delineation Studies Started in FY 95/96

- Tolleson Ponding Study
- Eastern Canal
- Cave Creek above Carefree Highway
- Cave Creek below Carefree Highway to Cave Buttes Dam
- Granite Reef Wash
- Skunk Creek North
- Upper East Maricopa Floodway
- Agua Fria Restudy

Flood Delineation Studies Completed in FY 95/96

- Fountain Hills North
- Fountain Hills South
- White Tanks Wash
- Christown Mall
- Rio Verde North
- Rio Verde South

Drainage Administration Program

The District administers the County Drainage Regulations, to reduce existing and potential flooding caused by local stormwater.

The District coordinates with the County Planning Department, the Maricopa County Department of Transportation and the Maricopa County Public Health and Building Safety Departments to ensure that new developments will not increase runoff, divert flows to another property, or cause backwater to pond onto property. Additionally, citizen reports of flooding and possible flood hazards are investigated. This program is managed in the Regulatory Division, with contributions from Engineering, Administration, and Planning and Project Management.

This Program has a substantial community impact. It provides a safer environment for individuals and their property while reducing the potential for litigation when developing. It assists planning efforts by providing well designed development drainage in areas that may be annexed in the future while ensuring compatibility with drainage plans and features in incorporated areas.

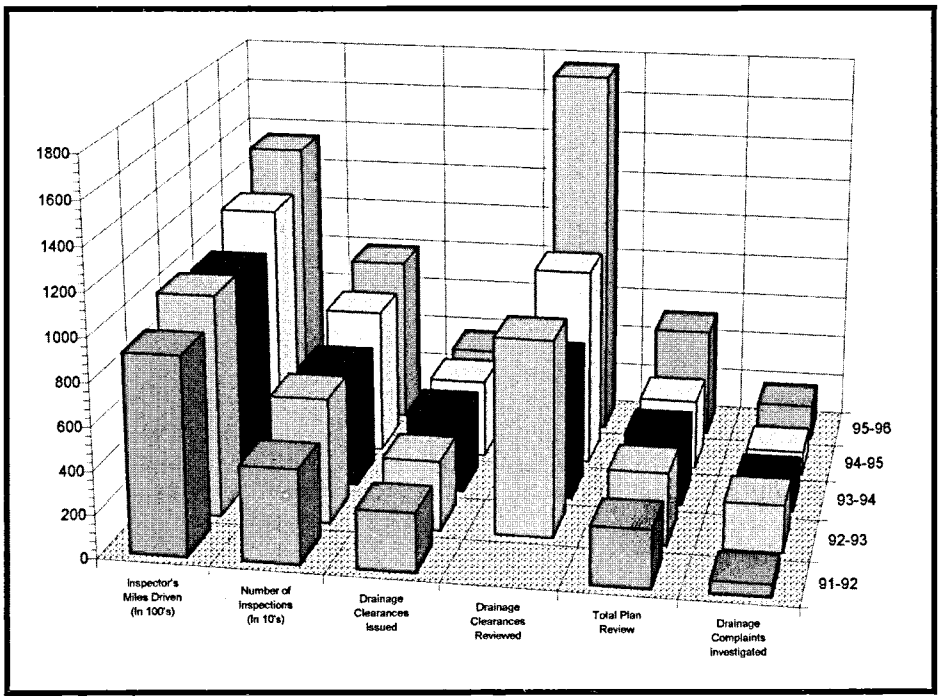
The Drainage Administration Program results in benefits to the District by reducing costs for future flood control facilities, flood damage and maintenance costs to District, and flood and drainage complaint response costs, while enabling the District to coordinate development drainage with area drainage master plans on a regional basis.

Development Review

The District reviews development plans, issues permits, corrects violations, and educates property owners in appropriate floodplain uses as well as regulates the use of floodplains.

The increase in the housing industry has resulted in an increase in the number of drainage plans submitted to the District for review.

Program Activity Highlights for Fiscal Years 91/92 – 95/96



1980

Cave Buttes Dam completed

1981

Saddleback Dam and Diversion Channel completed

1982

Harquahala Dam and Floodway Channel completed

1983

Skunk Creek Channels and Levee completed

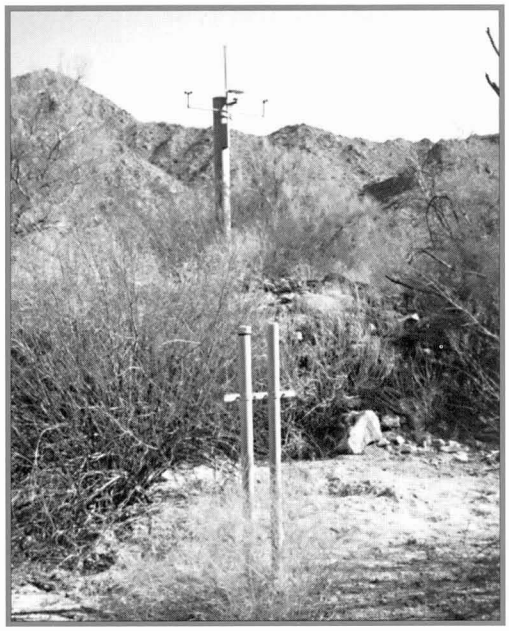
1984

Adobe Dam and Signal Butte Floodway Channel completed

Flood Detection and Data Collection Program

The Flood Detection and Data Collection Program designs, implements and maintains a real-time system to monitor flood control structures and to provide data to the County Emergency Management Department for flood event planning and evacuation. The system information is used by the National Weather Service, U.S. Bureau of Reclamation, U.S. Geological Survey, Pinal and Yavapai Counties, and a number of state, municipal, and Maricopa County agencies. The Program develops warning and evacuation plans and disseminates rainfall and stream gage data for use by various agencies and the public. The Program is managed in the Engineering Division, with contributions from all Divisions.

The District provides current information about rainfall and runoff across the County by operating and maintaining a network of rain gages, stream gages, and weather stations. This information is automatically transmitted via radio waves to the District via the ALERT (Automated Local Evaluation in Real Time) system. The data is used to monitor flood control structures during storm events and to calibrate hydrologic computer models used in studies. The National Weather Service also uses this data when issuing flood forecasts and advisories. Decisions to evacuate flood-prone areas may also occur based on ALERT data.



Weather stations and crest stage gages are used to collect data.

The Flood Control District serves all of the citizens of Maricopa County and some surrounding counties. A study conducted by the District indicates that the expected annual benefits from the comprehensive flood warning system, from reduced flood damages alone, could range from $500,000 to $2,600,000 per year.

A yearly exercise is held County-wide to assure that staff is familiar with the structures and observation sites. The District not only receives credit towards a portion of the Federal Emergency Management Agency's Community Rating System for the exercise, but also for having the system. Credit in the Community Rating System is used to lower flood insurance premiums for residents within the County.

ALERT Sensor Installation Statistics		
	FY 95/96	Total
Rain Gages	13	181
Water-level Sensors	4	80
Weather Stations	1	12
Temperature/Humidity Sensors at existing rain gages	6	6

Involvement in State-wide Projects

The District, in cooperation with Salt River Project, the U.S. Army Corps of Engineers, the Arizona Department of Water Resources and the National Weather Service (NWS) and other agencies, has been developing a statewide flood warning system. A prototype has been developed with the District having access to NWS satellite and forecast products.

Additionally, the District is working with the Arizona Floodplain Management Association (AFMA) to develop Uniform Standards for the Development of Flood Warning Systems. These standards will guide small communities who are considering implementing a flood warning system on issues such as gage permitting and radio licensing, and how to establish documentation such as warning plans and exercises, etc.

The District on Channel 5 KPHO

The District has been supplying KPHO-TV Channel 5 with temperature and rainfall data. The data is aired four times per day during newscasts. The District hopes to improve flood warning throughout the Valley by cooperating with local media to disseminate rain and stream flow information during weather events.

Crest Stage Program

The Hydrology Branch of the Engineering Division desired an additional method to calibrate their hydrologic models in the study of urban runoff. To serve this need, a crest stage gage was installed at the 91st Avenue Drain. This will provide the District with data on the stage of the runoff. A study to determine other gage sites is ongoing in Sun City and Sun City West.

Environmental Program

The goal of the District's Environmental Program is to ensure that all District activities, including the operation, maintenance and construction of flood control structures, comply with federal and state environmental regulatory requirements. In addition, the program includes several strategies to minimize the potential for adverse environmental impacts due to District activities. Several aspects of the program include regional storm water management, legislative and regulatory review, storm water quality control, and environmental site assessments for real property acquisition. This program is managed by the Planning and Project Management Division, with contributions from Engineering, Administration and Construction and Maintenance.

Regional Storm Water Management

The District receives storm water runoff from more than 9,000 square miles of watersheds within central Arizona. The water the District receives in its structures from watersheds throughout the County exhibits varying levels of quality. Consequently, conveyance and discharge of this storm water runoff from District structures has resulted in potential environmental impacts.

To address the potential impacts related to storm water pollutants, the National Pollutant Discharge Elimination System (NPDES) storm water permit regulations under the Clean Water Act require that municipalities with populations over 100,000 implement programs to control pollutants in storm water. A primary objective of the Storm Water Management Program has been to establish a regional storm water monitoring network. To this end, the District has cooperated with the U.S. Geological Survey and the cities of Phoenix, Mesa and Tempe to establish a regional network of sampling stations for characterization of storm water quality. Additionally, the District assists the cities in collecting samples and characterizing storm water quality to comply with the requirements of their NPDES storm water permit regulations. A total of 16 land-based monitoring stations and five in-stream stations are currently in place.

A secondary objective of this program is the development of a strategy to comply with the Environmental Protection Agency's (EPA) storm water quality regulations. A major component of this strategy is a research study to assess potential environmental impacts of storm water quality regulations.

Legislative and Regulatory Review

The District regularly reviews pending legislation that effect NPDES regulations and water quality standards in order to assess potential federal and state regulatory impacts to District structures. The District has completed review and comment of the State water quality standards, including review of proposed techniques for testing toxicity of storm water.

Storm Water Quality Control

The District is evaluating the feasibility of Best Management Practices (BMPs) that provide cost effective methods of controlling the discharge of pollutants within storm water. BMPs are being evaluated for Capital Improvement Projects and existing structures that receive and convey storm water. The District is currently monitoring the performance of a constructed wetland designed to remove oil and grease from storm water runoff at a County vehicle maintenance yard.

Environmental Site Assessments and Cultural Resources

Prior to purchase or sale of any real property, the District conducts an environmental site assessment to establish the presence of any environmental hazards connected with the property. This program is mandated by EPA under the Superfund Amendments and Reauthorization Act (SARA) under which the liability for clean up of environmental hazards is transferred with property ownership. Archeological and historic resources are also evaluated during the planning of projects to determine if any sensitive cultural resources may be disturbed. Surveys are conducted, and if necessary, archeological testing is conducted to determine the extent of resources that may be disturbed. Sensitive resources are mitigated in accordance with the National Historic Preservation Act.

Environmental Services Provided — Fiscal Year 95/96

• Archeological Surveys	7
• Archeological Testing Projects	2
• Phase I Environmental Site Assessments	18
• Phase II Environmental Site Assessments	3
• Asbestos Abatement Projects	4

1985

Holly Acres Levee and Bank Stabilization, New River Dam, Indian Bend Wash completed and Salt-Gila Clearing Project implemented

1987

Signal Butte Dam and Pass Mountain Diversion Channel completed

1989

East Maricopa Floodway Channel completed

DECEMBER 1990

District formally applied for participation in the Community Rating System (CRS) Program

OCTOBER 1992

15% flood insurance premium reduction effective for unincorporated Maricopa County through the CRS Program

OCTOBER 1994

20% flood insurance premium reduction for unincorporated Maricopa County becomes effective through CRS program

Maintenance Program

The District maintains over 70 flood control structures and facilities, including 23 dams and over 50 miles of major underground conduits and improved channels to acceptable function and aesthetic standards. This program is managed in the Construction and Maintenance Division, with contributions from all divisions.

Maintenance on structures includes erosion control, vegetation control, maintenance of outflow devices, rodent control, low flow channel maintenance, and the maintenance of upstream ponding areas. The District also maintains rights-of-way such as roads, fencing, gates, landscaping, mitigation areas, rental property and signage.

During flood situations, the maintenance staff provides both emergency response and storm monitoring services. When an emergency exists, staff is dispatched to monitor the functions of the structures and in some cases operate the outflow devices to control the release of water. Maintenance personnel also operate heavy equipment which is used to protect public and private property during emergencies. They also provide manpower and supplies to protect both public and private property when structures are damaged or flows exceed the design capacity of the structures.

The Maintenance Program now has responsibility for the Africanized Bee Program. The bee program is a result of a probe into methods to reduce costs and provide worker and public safety. The bees often establish themselves in valve boxes, stand pipes and outlet structures. By training ten District employees in bee eradication, the response time for a call has been improved and the cost of the call has been reduced by 50%.

Program Workload Indicators			
Indicator	Unit of Measurement	1995-1996 Estimated	1996-1997 Forecast
Landscape & Erosion Control Maintenance	acres	9,588	9,788
Plants Replaced	each	19,888	19,888
Erosion Control Restoration	acres	1,190	1,190
Channel Maintenance	acres	3,996	3,996
Inspections Performed	each	420	420
Access Roads Maintenance	miles	620	620
Property Fencing and Signage	linear feet	1,286,839	1,286,839

Operation Noah's Ark

In December 1995, the Construction and Maintenance Division conducted its first flood emergency exercise. The purpose of this exercise was to familiarize new employees and refresh veteran employees in flood event procedures. Employees were assigned to storm surveillance areas and given a scenario of major storm events that lead to the flood event. These employees were then called upon to respond to a series of simulated incidents that were a result of the flood event. The exercise ran for two work shifts and consisted of both day and night operations. The exercise proved to be an excellent training aid and numerous suggestions for improving procedures were adopted.

Happenings at the New River Mitigation Area

The District owns and maintains a 28-acre parcel of land in Avondale which is home to many species of wildlife.

Ben Ganados, a Public Works Generalist with the Ecology Branch, Construction and Maintenance Division, has taken on as his main duty the care and maintenance of the District's New River Wildlife Mitigation area at Southern and 130th Avenue. He helped plant and cultivate over 3,000 trees in the 28-acre habitat, which was cultivated to replace riparian areas that were destroyed during the channelization of New River. Ben has carefully watered and nurtured the fragile eco-system for the past four years, often giving up his weekend mornings and late evenings to check on the irrigation, or, perhaps, to observe the variety of wildlife that have begun to call the habitat "home." In doing so, Ben has become a familiar figure to the residents of the remote area in Avondale.

It was concern for the well-being of his wildlife charges as well as his neighbors that led Ben to become a somewhat reluctant public figure.

After watching illegal hunters enter the mitigation area to shoot or attempt to trap or kill some of the birds and wildlife who call the area home, Ben decided to take action.

Ben and the concerned neighbors brought the shootings to the attention of FCD Administration to see what could be done to limit vehicular and pedestrian traffic into the sensitive area.

Within a matter of two weeks, an agreement was worked out between the FCD, the Salt River Project (who maintains one of the roadways into the habitat) and area landowners, that has allowed the District to install security gates and close off all public access to the mitigation area.

COMMITMENT TO CUSTOMERS

Public Involvement

In response to our customers' requests for more public involvement in District projects, the District has revamped its Public Involvement Office, increasing staff and providing additional resources to more effectively include residents in the decision-making process.

Area Drainage Master Studies (ADMSs), floodplain delineations, and Capital Improvement Projects (CIP) provide for a full range of public comment and input before they are taken to the Flood Control Advisory Board (FCAB) for approval.

The ADMS program analyzes watersheds to identify flooding and drainage problems. This is the first step in developing solutions to reduce or eliminate flood hazards, and without broad public involvement from the affected property owners, it becomes much harder to pinpoint existing problems or identify acceptable solutions.

Before scheduling any construction projects, the District has a series of neighborhood informational meetings, planning workshops, site visits and open houses to familiarize local residents with the potential solutions to their flood problems. Projects like the Old Cross Cut Canal have benefited significantly through the public involvement process, and have encountered little, if any, public opposition.

In addition, District policy now requires that an Aesthetics Committee, including neighborhood representatives, be formed for appropriate projects, further empowering the public, and producing the best in flood control structures that enhance the quality of life in the County.

North Maintenance Yard

The Construction and Maintenance Division opened up a satellite office at 9601 North 21st Drive on February 26. Maintenance staff now report directly to the site which is located adjacent to the Arizona Canal Diversion Channel. This has eliminated a great deal of travel time to and from the main operations site.

District personnel conducted the renovation, including, building a block wall, reconditioning a chain link fence, painting walls, laying tiles and more. North yard personnel worked diligently to prepare the building.

As a result of this new yard, the Hatcher Yard was closed. There had been many problems with the Hatcher yard including theft and vandalism despite the fact that it was guarded by security forces. The new North Yard uses guard dogs for protection at a reduction in cost of $2100. per month. This form of security has been extremely effective in preventing thefts and vandalism.

Project Scrub

Project Scrub "Stop Crime, Remove Urban Blight" has completed its first year of existence. The program targets juvenile graffiti offenders. The teams of no more than five minors paint over graffiti, and pick up litter at District structures.

In addition to working off the community service hours, each juvenile is required, sometimes with their parents, to attend an educational seminar delivered by police and probation officers. The theme of the session is "to instill values of civic and neighborhood pride along with explaining the full consequences of social and economic impact of the damage caused by graffiti." Juvenile offenders learn what it takes to repair the vandalism they might have had a hand in creating.

Cacti for the University

To facilitate the demolition of homes in the New River Floodplain Mitigation Project, it was necessary to relocate the native vegetation planted close to building foundations. Saguaros, barrel cacti, ocotillos and agaves were salvaged by Arizona State University (ASU). ASU completed the salvage in March and was able to use the plants for an area near the student activity center and a new desert arboretum area located near Sun Devil Stadium.

Cacti go to college.

The project, which is located just North of the Town of New River in Maricopa County, consisted of the purchase of 16 properties that were either within the floodway or inaccessible during periods of high flow.

The project covers over 28 acres and includes a small wetland area and a riparian community dominated by Goodding Willow and several acres of mesquite bosque. The area has been identified as critical habitat for the Cactus Ferruginous Pygmy-Owl which has been proposed for listing as an endangered species. Currently the District is discussing the possible use of these acquired properties as a mitigation bank with the United States Army Corps of Engineers.

Prioritization of Floodplain Delineation Studies

The Hydraulics Branch of the Engineering Division has developed a procedure for prioritizing floodplain delineation studies. The procedure development consisted of identifying attributes of the floodplain that could be used to rank all of the competing floodplains and then quantifying those attributes. A point system has been developed to assign points to the identified attributes, which are then added up to determine a ranking of the floodplain studies.

LEADERSHIP

District Wins NACo Awards

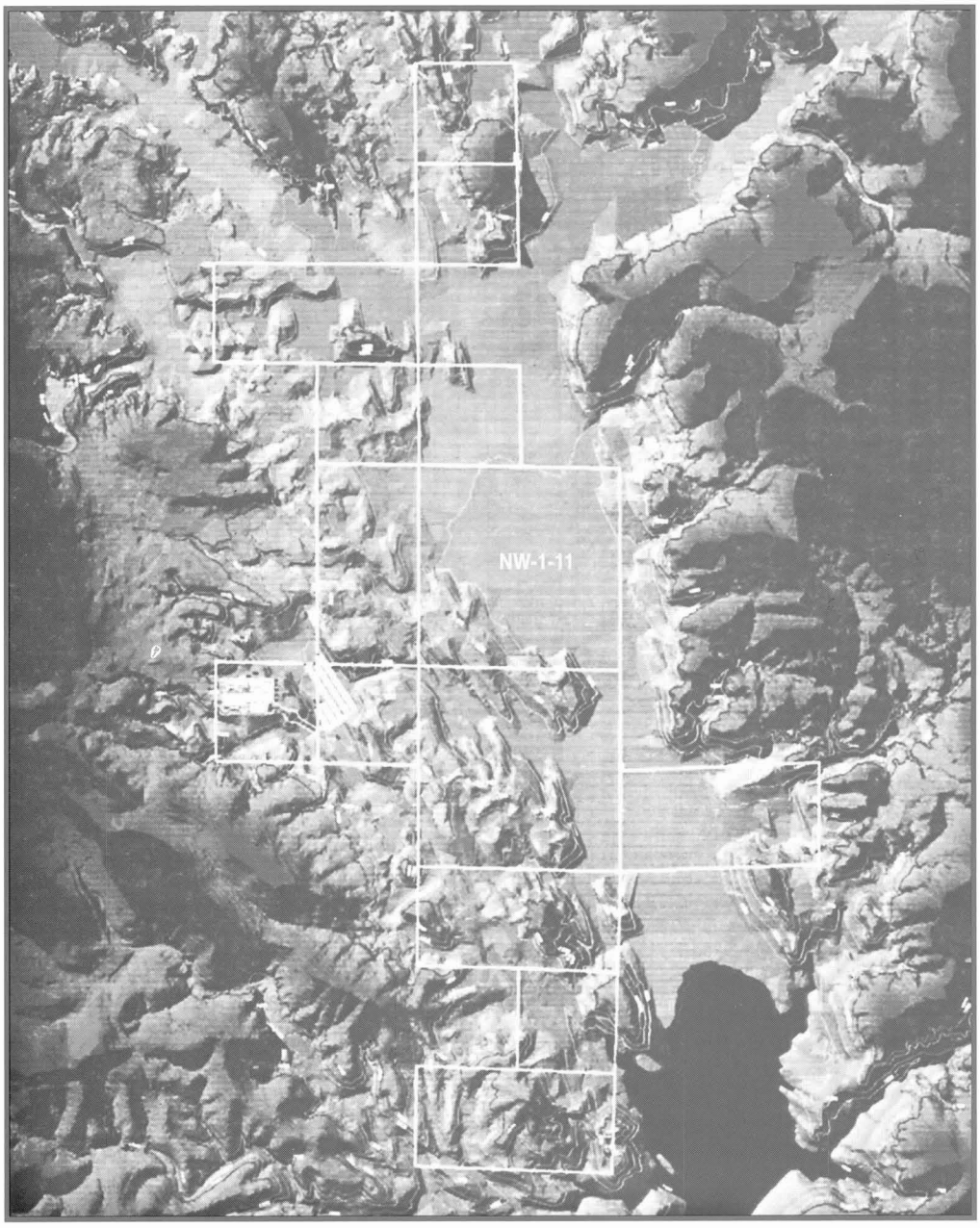
The National Association of Counties (NACo) awarded 1996 NACo Achievement Awards to Marta Dent and Joe Tram for their submittal *Use of 3-D GIS Mapping to Establish Land Value* and Greg Rodzenko for his submittal *Agency/Developer Contract for Flood Hazard Mitigation*.

Use of 3-D GIS Mapping to Establish Land Value

Due to the technology and efforts of the GIS Branch, the County was awarded $3.75 million in an out-of-court settlement involving Lake Pleasant and the U.S. Bureau of Reclamation.

At issue was the value of 1500 acres of County property inundated by the larger Lake Pleasant after construction of New Waddell Dam. The Bureau claimed the land was worth $400,000 and paid the County this amount when forcing the sale through condemnation proceedings. The County placed the property's worth at several million dollars, claiming the land could have been developed into a 300-slip boat marina.

The District's expertise in GIS technology and knowledge of water resources were used to prove the worth of the land. The GIS Technology Branch plotted contours and imported data files to display average lake elevations over a 30-year period, photos were scanned depicting historical water levels and 3-D mapping of a hypothetical marina, as outlined in the appraiser's documentation, was created and dropped on the map. In order to see the data in 3-D, special glasses were used in conjunction with the plotted display map. Additionally, historical photos and information regarding historical water level elevations at Lake Pleasant were compiled to refute doubts of access to the site and studies were conducted to demonstrate the availability of resources needed to raise parking areas above the high water mark.



Agency/Developer Contract for Flood Hazard Mitigation

When a proposal for a large housing development surfaced just as the District was completing a flood hazard study on undeveloped land, new procedures were sought to reduce/eliminate unnecessary fees, documentation processes, and flood insurance costs.

An agreement was negotiated with the developer. The flood hazard information involving the developer's property would not be submitted to FEMA if the District could be assured that flood control measures would be incorporated into the project along the way. This, in effect, eliminates the flood hazard areas as development occurs.

This agreement has eliminated the homebuilder's cost of hiring an engineering consultant to prepare map revision documentation, staff technical review costs at the local level, and the staff technical review at the federal level to un-do the flood hazard for a total savings of $108,800 over the 7-year construction period.

Rewarding Ideas

The Employee Suggestion Program has been renamed and revamped. The concept of the program is to provide a mechanism for rewarding employees who submit ideas that result in cost reduction, increased revenues, improved procedures, and/or eliminated duplication and waste. The program has yielded over $10 million in savings for the County since 1984. The renewed program has undertaken some changes including a reduced cycle time and a raise in the reward from 10% of the first year's savings to 20% of the first year's savings.

Employee Satisfaction Survey

In November, a survey was conducted of all Maricopa County employees to determine levels of employee satisfaction. The survey went into detail, asking employees about their levels of satisfaction with their departments and the County as a whole. Results of the survey indicated that District employees are more satisfied than employees in other County departments.

In order for District management to address the concerns of employees, Causes Forums were held to validate the causes of dissatisfaction that were identified by the survey. District employees were asked to indicate whether the issues were valid or invalid; whether they were high priority, somewhat high priority, or low priority; and whether they were an easy, complex, or simple fix.

The District has already initiated a number of programs to remedy many of the areas of dissatisfaction.

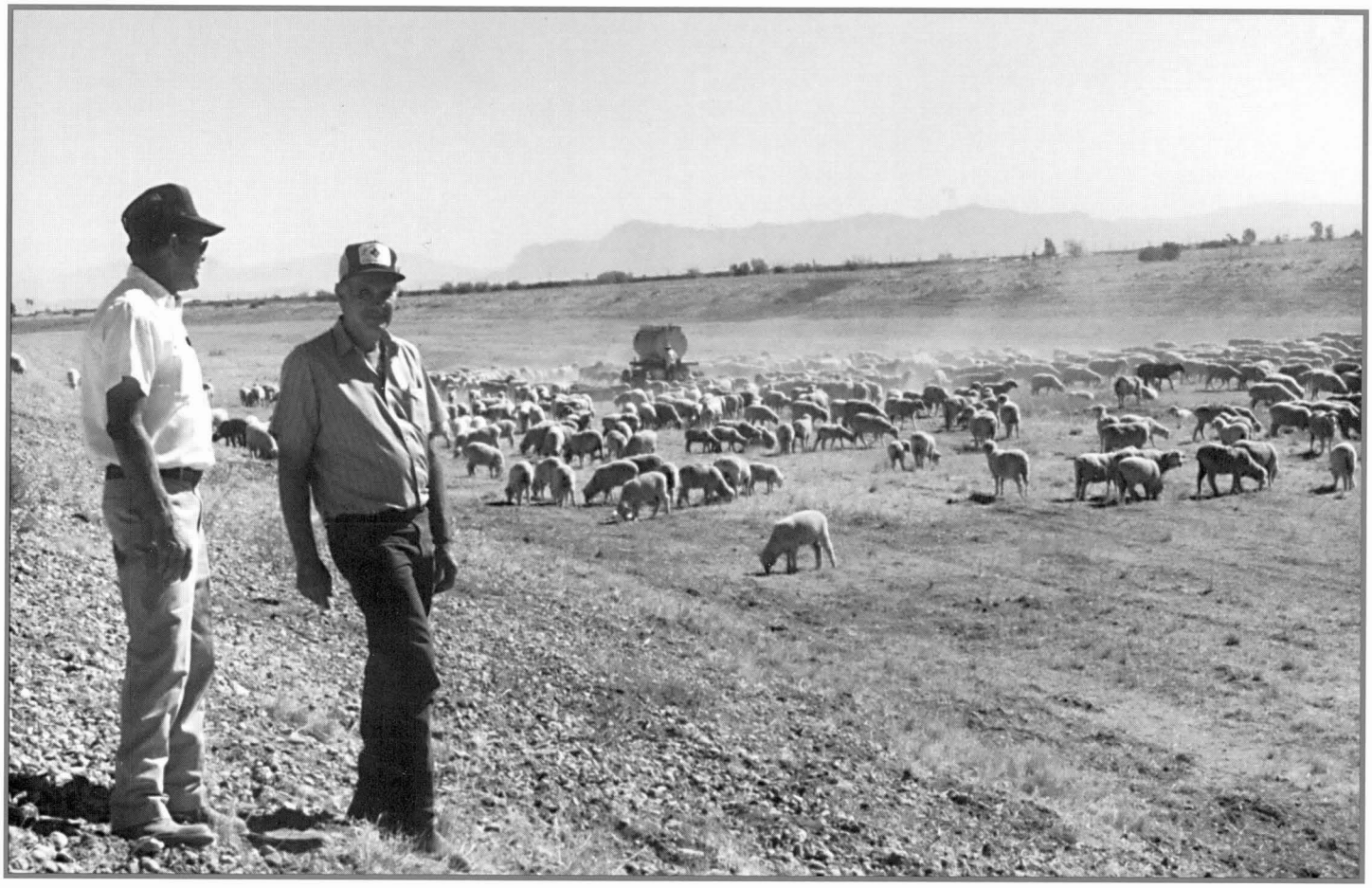
Sheep on the East Maricopa Floodway

Gregg Watts, C&M Equipment Operator, recommended grazing sheep on appropriate flood control structures to save on mowing costs, through the Maricopa County Employee Suggestion Program. As a result of his suggestion, Sheep Springs Sheep Company placed about 500 ewes and lambs onto the East Maricopa Floodway on April 23rd.

The District evaluated the suggestion carefully, and it was realized that with the rampant urbanization taking place in the County, available land is at a premium and the project would provide the benefits of using less fossil fuels, in turn creating less air pollution. Concerns included: overgrazing, nitrate contamination, soil compaction, liability, and grazibility of the channel. There was also uncertainty that the sheep would adequately "mow" the grasses and other weeds growing in the channel. It was determined that a trial evaluation would be the best method to answer these questions.

Representatives from the Engineering and Lands Management Divisions assisted with licensing and liability, and the sheep grazed the channel for six weeks until they were transferred to higher elevations.

The sheep did a great job of "mowing" the channel from Guadalupe Road to Hunt Highway. The grass regrowth and other environmental aspects will be closely monitored during the summer to help determine the feasibility of leasing these types of areas in the future.



Environmentally friendly lawn maintenance.

Reward and Recognition

The District's Strategic Plan Issue, Quality Work Force, contains a goal of reducing the impacts of employee turnover. To meet that tasking, a Reward and Recognition Committee was established. The Committee inventoried the programs in place at the District, and a number of County departments as well as other municipalities within the County. A program has been approved by the Flood Control Advisory Board and the Board of Directors and will be implemented in the next fiscal year.

Leadership Academy

The Leadership Academy, *Frontline Leadership* and *Working to Win*, was designed to help employees develop or enhance the leadership skills they need to fill the demanding role they perform at the District. The Academy provides a unique opportunity for employees to grow both personally and professionally.

Frontline Leadership is a skill building program which provides supervisors and managers with practical tools to meet the expanding demands of their jobs, focusing on the fundamental skills of good supervision and leadership. These skills help supervisors build collaborative, interdependent and supportive teams, initiate new ideas and direction and build good leaders throughout the organization.

Working to Win provides the basic human interaction skills that everyone needs to succeed in business today by providing practical skills for overcoming obstacles on the job. Such skills have a critical impact on an organization's ability to meet and exceed customer expectations.

New Employee Orientation

The Flood Control District's Training Policy Committee developed and implemented New Employee Orientation and Out Processing programs. The New Employee Orientation program's goal is to insure that new employees are informed of the District's purpose and mission, oriented to administrative policies and work environments, and thoroughly prepared with the tools and information necessary to successfully perform new position duties.

The Out Processing Checklist outlines steps to be followed by various District representatives to insure that office materials and equipment are inventoried and redistributed upon an employee's termination.

Cover Art...

The District held a contest for the design of the cover of the annual report. The design featured on the cover was submitted by Shon Wu, Engineering Drafting Specialist, of the Engineering Division. The design featured on the inside front cover of the report was submitted by Chris Banks, Land Management Specialist, of the Land Management Division.

Special thanks to Jim Smith, Steve Bruffy, Doug Williams, Marta Dent and the GIS Branch for the maps contained in this report.

Safety Policy

The District has developed a Safety Policy with the goal of providing a safe environment to work in. Special emphasis is being placed on the categories of personal injury, property damage, occupational health, fire loss, and emergency preparedness. The Policy includes the measurement and evaluation of the safety and property conservation performance of each District employee. The District's safety record is well above-average.

Groundwater Recharge

The District has developed a policy regarding the use of District land for groundwater recharge. The newly approved policy develops a procedure to allow the lease of District property for groundwater recharge while protecting the District's structures and mission. The policy addresses technical issues, liability and indemnification, the lease application process, notification and monitoring, and fee structures.

Benefits of artificial groundwater recharge include the restoration of continually decreasing local groundwater levels and the commensurate slowing of land subsidence, assurance of a future water supply for the community which in turn allows for increased residential development, and the cost savings realized over that of construction and operation of conventional surface water treatment plants.

As of July 1996, the City of Surprise is operating the only groundwater recharge facility on District land. The city began operation of a one acre pilot project in April 1996, within the impoundment area of McMicken Dam. In the first three months of operation, the recharge pond has performed well and the overall project has had good results.

Africanized Bee Management

District staff members, Donna Ellsworth, Ben Ganados, Pete Martinez, Tom Siegfried, Danny Upshaw, Gary Drake, Joe Eppinger, John Ruiz, and Jose Molina participated in training specializing in management and eradication of Africanized bees. Bees and other insects are sometimes found on District property.

ACHIEVEMENTS

EMPLOYEE OF THE QUARTER

Lenora Webb – 7/95
Afshin Ahouraiyan – 9/95
Michael Rosiewicz – 1/96
Kevin LaVallee – 4/96

REWARDING IDEAS

Robert Crawford: Graffiti Removal System
Pete Martinez: Revegetation of Skunk Creek Channel
Bob Panasewicz: Vegetation Removal
Laurence Spanulescu and Shewa Shivaswamy: Beardsley Road Detention Basin
Randy Elson: Automated Resetting Process for Precipitation Gages
Brit Purifoy and Gary Schwartz: Purchase through less expensive vendor

CERTIFICATION AND PROFESSIONAL REGISTRATION

Engineer in Training (E.I.T.)

Amir Motamedi
Joe Tram

Registered Professional Engineer (P.E.)

Pedro Calza
Ning Mao
Hasan Mushtaq
Donald Rerick
Greg Rodzenko

Certified Public Manager (Level IV)

Betty Dickens

Certified Public Account (CPA)

Bethany Loudenslager

Certified Government Financial Manager

Michael Cuneo

Certified General Real Estate Appraiser

Al Dickie

Zenger-Miller Leadership Development Certification

Chris Banks
Gwen Loving

CONTINUING EDUCATION ACHIEVEMENTS

Arizona Governmental Training Service (AGTS)

Supervisors/Manager/Trainers Academy

Paul Britenfeldt
Robert Luera
Glen Morford
Ivan Bryant
Mark Swinderman
Carlos Rivera
Mike Ramirez
Bill Craig
Dick Perreault
Hedy Hall
Steven Tucker
Lenora Webb
Diane Johnson
William Craig

Masters Degree in Organizational Management

Tom LaMarche

Leadership Academy Graduates

Marc Abramowitz
Donna Adams
Gloria Adams
Afshin Ahouraiyan
Roy Arnold
Susan Attiah
Kofi Awumah
Brent Ayers
Charles Baker
Perry Baker
William Baker
Michael Baldenegro
Carolyn Banks
Celeste Bautista
Margaret Bejarano
Laynie Bell
James Bening
Paul Breitenfeldt
Mark Brewer
Charles Brokschmidt
Darry Brown
Shelby Brown
Dave Brozovsky
Steven Bruffy
Ivan Bryant
Timothy Burkeen
Albert Buruato
Pedro Calza
Jerry Carbajal
Glenn Card
Thomas Caroll
Donna Carroll
William Casenhiser
Nancy Cavallo
Salvatore Cerbone
Rick Church
John Coleman
Roberta Combs
Jerry Corder
William Craig
Francis Crosby
Mike Cuneo
Danny Davis
Antonio DeHerrera
Juan DeLaGarza
Terrel Delaney
Marta Dent
Marilyn DeRosa
Maximo DeVera
Frank Dick
Betty Dickens
Richard Dickie
Gary Drake
Arthur DuBois
Kevin DuBose
Donna Ellsworth
Randy Elson
Joseph Eppinger
Eric Feldman
Corazon Fernandez
Chuck Feuquay
Robin Fowler
Fred Fuller
Robert Gallup
Benito Ganados
David Gardner
Robert Glenn
Ana Gorbenko
Ken Green
Ben Gregg
John Greisiger
Anthony Guzak
Monique Hafler
Hedy Hall
Ernest Hamer
Linda Hannan
Kumar Hanumaiah
Richard Harris
Herman Hitzelberger
Kathryn Holappa
Jonathan Hughes
Barbara Hummell
Dave Johnson
Diane Johnson
Thomas Johnson
Magnus Jolayemi
David Jones
William Kenyon
Geave Khatiblou
Thomas Kiefer
Clarice Kimball
Dortha Klaahsen
Charles Klenner
William Knight
Thomas LaMarche
John Lang
Kevin LaVallee
Ted Lehman
Steven Linderman
Paul Lindgren
George Lindop
Gregory Long
Kathy Longoria
Michael Lopez
Bethany Loudenslager
Gwen Loving
Edward Loy
Robert Luera
Ning Mao
Pete Martinez
Cindy Lu Mayo
Douglas McLaughlin
Michael Meng
Ramona Merkevicius
Gary Meyer
Daniel Michael
Bert Miller
Russell Miracle
Jose Molina
Glenn Morford
Amir Motamedi
Timothy Murphy
Hasan Mushtaq
Robert Naud
Robert Naud III
Sylvia Nelson
Lawrence Neumann
Ron Nevitt
Noel Nunley
Frank Nutter
Arnold Ontiveros
Timothy Osolin
John Palmieri
Robert Panasewicz
Earl Pearcy
Dick Perrault
David Pettijohn
Stanley Pirog
William Poppe
Brit Purifoy
Ed Raleigh
Joseph Ramirez
Mike Ramirez
Donald Rerick
Leoborn Richards
Carlos Rivera
Greg Rodzenko
Warren Rosebraugh
Michael Rosiewicz
John Ruiz
John Sanchez
Gary Schwartz
Jim Schwartzmann
Gary Shapiro
Raymond Schaffer
Hosakote Shivaswamy
Ray Shobe
Tom Siegfried
Cynthia Slaughter
Chuck Smith
James Smith
Stan Smith
Jerry Soria
Laurence Spanulescu
Ralph Spencer
James Stewart
Sandra Story
Douglas Stroup
James Sutton
Olin Sutton
Valerie Swick
Mark Swinderman
James Taylor
Sam Taylor
John Townsend
Joe Tram
Steven Tucker
Danny Upshaw
Gabriela Varadi
Raymond Warriner
Stephen Waters
Greg Watts
Lenora Webb
Michael Welch
Douglas Williams
Mike Winkler
Shon Wu
Shanna Yager
Connie Yanez
Ray Ybarra
Joseph Young
Lisa Young
Bing Zhao
Heather Zozaya

FINANCIAL STATEMENT

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY
STATEMENT OF REVENUES, EXPENDITURES, AND CHANGES IN FUND BALANCE

Budgeted and Actual for the Fiscal Year Ended June 30, 1996

Preliminary and unaudited. Amounts are rounded to nearest thousand.

	BUDGET	ACTUAL	VARIANCE FAVORABLE (UNFAVORABLE)
REVENUE			
FLOOD CONTROL TAX	$ 36,476,000	$ 36,118,000	$ (358,000)
LOCAL PARTICIPATION	4,580,000	4,965,000	385,000
RENTAL INCOME	199,000	192,000	(7,000)
INTEREST INCOME	625,000	1,114,000	489,000
OTHER LAND INCOME	2,365,000	2,815,000	450,000
MISCELLANEOUS	400,000	408,000	8,000
TOTAL REVENUES	44,645,000	45,612,000	(967,000)
OPERATING EXPENDITURES			
PERSONNEL SERVICES	7,440,000	7,797,000	(357,000)
SUPPLIES AND SERVICES			
PROFESSIONAL SERVICES	3,840,000	2,261,000	1,579,000
MAINTENANCE SUPPLIES AND SERVICES	2,131,000	1,248,000	883,000
INTERNAL SERVICES	3,401,000	3,140,000	261,000
EDUCATION AND TRAVEL	91,000	108,000	(17,000)
OTHER SUPPLIES AND SERVICES	549,000	296,000	253,000
TOTAL OPERATING EXPENDITURES	17,452,000	14,850,000	2,602,000
CAPITAL OUTLAY			
PERSONNEL SERVICES	1,759,000	839,000	920,000
REAL ESTATE	4,114,000	6,869,000	(2,755,000)
ENGINEERING	2,200,000	1,329,000	871,000
CONSTRUCTION	20,429,000	18,540,000	1,889,000
VEHICLES AND EQUIPMENT	610,000	410,000	200,000
TOTAL CAPITAL OUTLAY	29,112,000	27,987,000	1,125,000
TOTAL EXPENDITURES	45,564,000	42,837,000	3,727,000
EXCESS (DEFICIENCY) OF REVENUES OVER EXPENDITURES	(1,919,000)	2,775,000	(4,694,000)
FUND BALANCE JULY 1, 1995	14,081,000	14,081,000	
FUND BALANCE JUNE 30, 1996	$ 12,162,000	$ 16,856,000	$ (4,694,000)

FINANCIAL STATEMENT

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY
CAPITAL IMPROVEMENT PROJECTS – EXPENDITURES

Fiscal Year ending June 30, 1996

Preliminary and unaudited.

PROJECT	ENGINEERING	LAND	RELOCATION & CONSTRUCTION	WAGES	TOTAL
FCD FACILITY	$ 25,000	$	$ 1,662,000	$	$ 1,687,000
STORMWATER MONITORING			8,000	4,000	12,000
BEST MANAGEMENT PRACTICES					0
FLOOD WARNING			48,000	14,000	62,000
CITY OF SCOTTSDALE					0
TOWN OF GUADALUPE	54,000	1,117,000		22,000	1,193,000
OLD CROSS CUT CANAL	128,000	39,000	2,803,000	73,000	3,043,000
SALT/GILA CONTROL WORKS		1,113,000		18,000	1,131,000
SOUTH PHOENIX DRAINAGE	121,000	2,000		6,000	129,000
ACDC		127,000	62,000	10,000	199,000
SALT RIVER CHANNEL		14,000		37,000	51,000
APACHE JUNCTION			58,000		58,000
WICKENBURG ADMP	80,000	67,000	1,917,000	79,000	2,143,000
SKUNK CREEK	28,000	397,000		28,000	453,000
NEW RIVER ADMP		1,934,000		44,000	1,978,000
SKUNK CREEK/NEW RIVER	170,000	127,000	94,000	31,000	422,000
AGUA FRIA		33,000		8,000	41,000
SOUTHEAST MESA ADMP	13,000			4,000	17,000
GLENDALE/PEORIA ADMP	185,000	1,266,000	4,906,000	142,000	6,499,000
EAST FORK CAVE CREEK		2,000		2,000	4,000
WHITE TANKS ADMP	102,000	323,000	4,560,000	117,000	5,102,000
QUEEN CREEK ADMP	37,000	264,000		32,000	333,000
ACDC ADMP	320,000	41,000	2,423,000	150,000	2,934,000
MARYVALE ADMP	66,000	3,000		15,000	84,000
2 Others less than $1,000				2,000	2,000
	$ 1,329,000	$ 6,869,000	$ 18,541,000	$ 838,000	$ 27,577,000

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY
AREA DRAINAGE MASTER STUDIES – EXPENDITURES

Fiscal Year Ending June 30, 1996

Preliminary and unaudited.

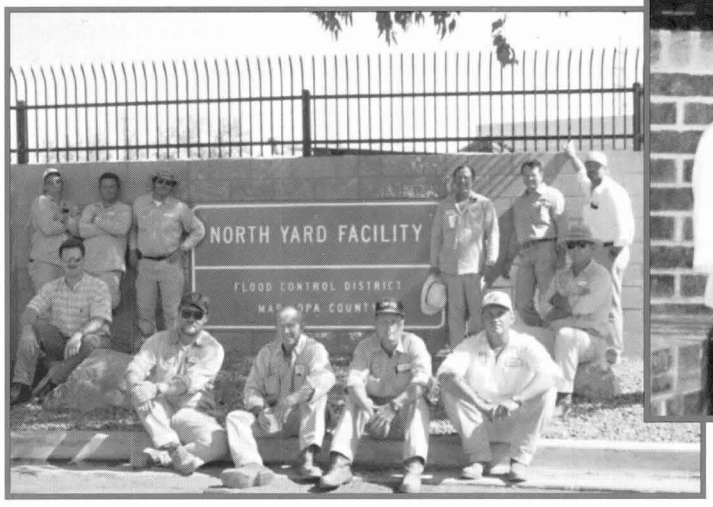
DESCRIPTION	ADMINISTRATION	HYDROLOGY	ENGINEERING	TOTAL
Salt/Gila Master Plan	$ 7,000			$ 7,000
Wickenburg ADMS	3,000		1,000	4,000
New River ADMS	2,000			2,000
East Maricopa ADMS	9,000			9,000
Southeast Mesa ADMS	14,000		8,000	22,000
Glendale/Peoria ADMS	2,000		4,000	6,000
White Tanks/Agua Fria ADMS	10,000	8,000	20,000	38,000
Queen Creek ADMS	9,000			9,000
Gilbert/Chandler ADMS	1,000		10,000	11,000
ACDC ADMS	19,000	3,000	8,000	30,000
Maryvale ADMS	11,000	2,000	281,000	294,000
Gila Drain Floodway	2,000		18,000	20,000
Fountain Hills ADMS	4,000		147,000	151,000
Upper Indian Bend Wash ADMS	4,000		60,000	64,000
7 Others less than $1,000	1,000		1,000	2,000
TOTAL	$98,000	$13,000	$558,000	$669,000

Regulatory Division

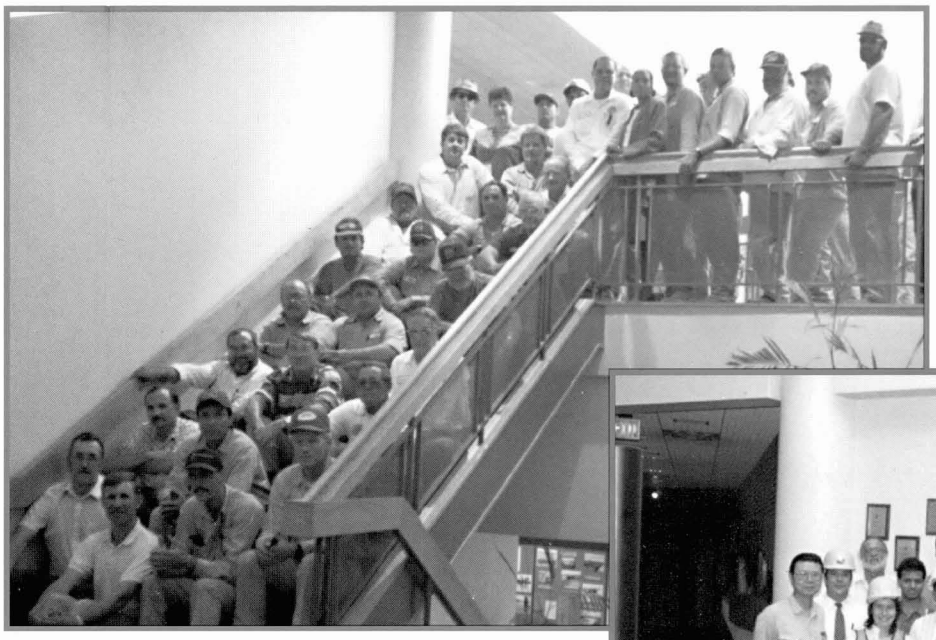
Land Management Division

Planning & Project Management Division

Construction & Maintenance North Yard



Information Systems



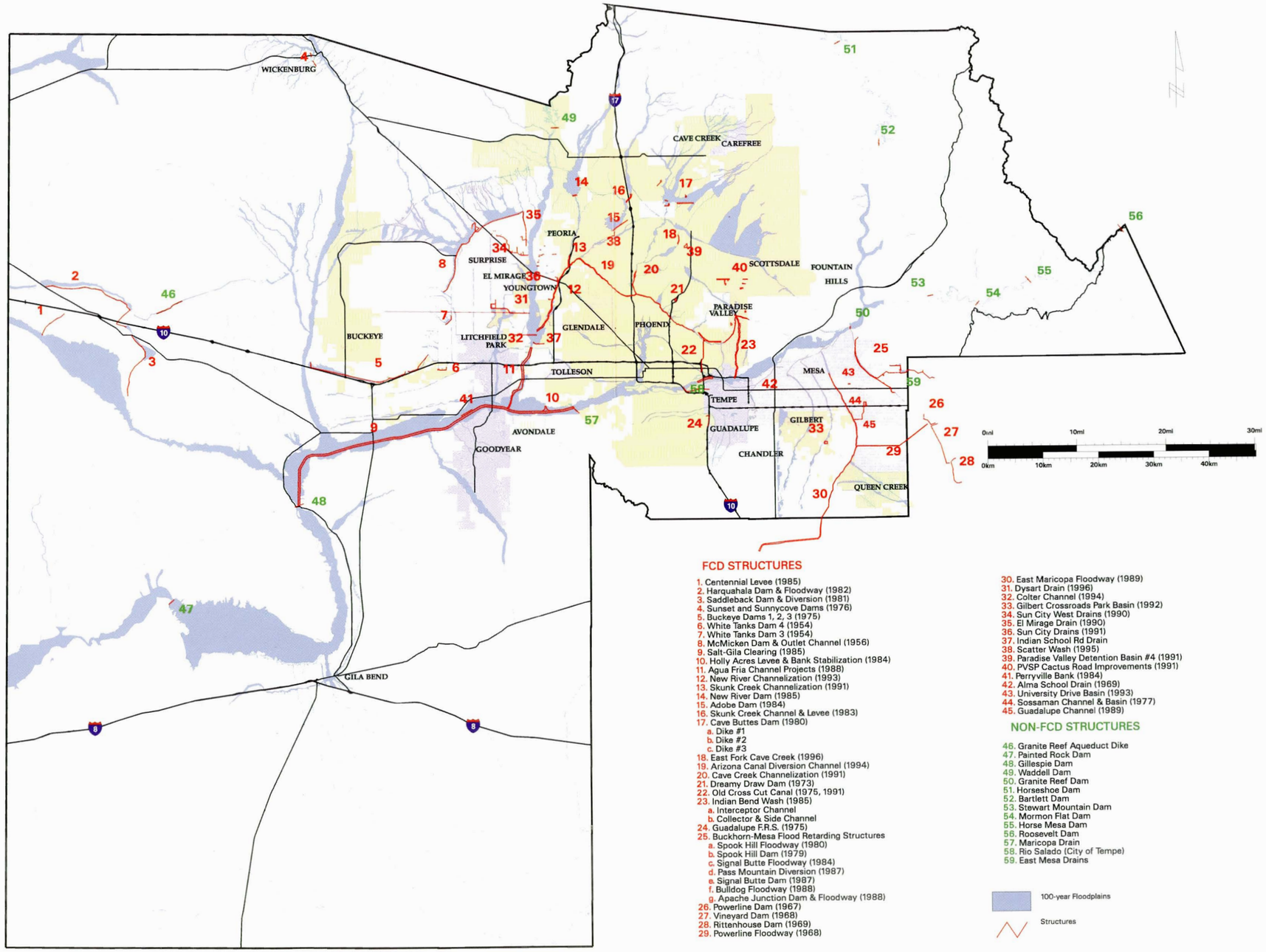
Construction & Maintenance Division

Engineering Division

Construction & Maintenance East Yard

Administration Division

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY
PROJECTS AND STRUCTURES



FCD STRUCTURES

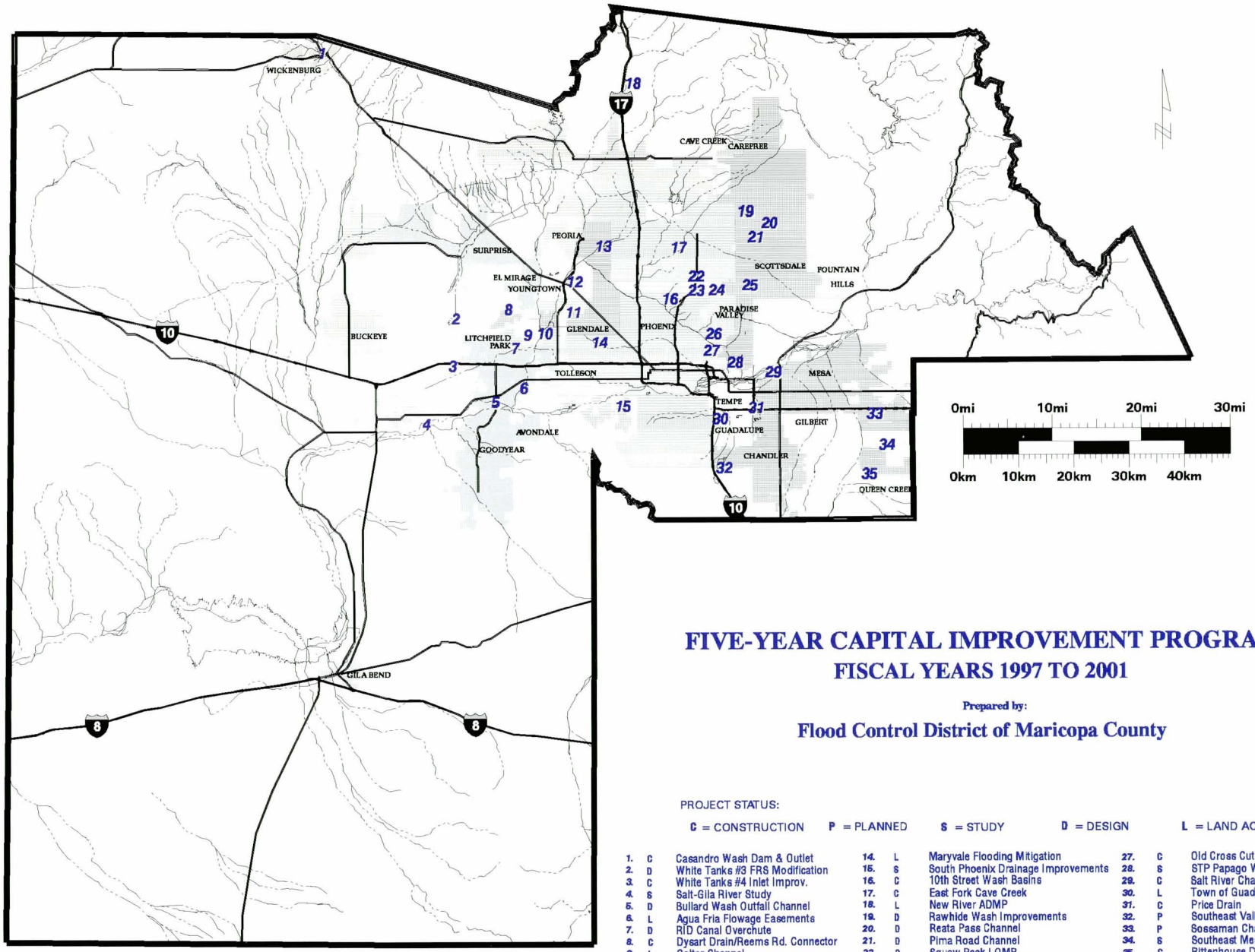
1. Centennial Levee (1985)
2. Harquahala Dam & Floodway (1982)
3. Saddleback Dam & Diversion (1981)
4. Sunset and Sunnycove Dams (1976)
5. Buckeye Dams 1, 2, 3 (1975)
6. White Tanks Dam 4 (1954)
7. White Tanks Dam 3 (1954)
8. McMicken Dam & Outlet Channel (1956)
9. Salt-Gila Clearing (1985)
10. Holly Acres Levee & Bank Stabilization (1984)
11. Agua Fria Channel Projects (1988)
12. New River Channelization (1993)
13. Skunk Creek Channelization (1991)
14. New River Dam (1985)
15. Adobe Dam (1984)
16. Skunk Creek Channel & Levee (1983)
17. Cave Buttes Dam (1980)
    a. Dike #1
    b. Dike #2
    c. Dike #3
18. East Fork Cave Creek (1996)
19. Arizona Canal Diversion Channel (1994)
20. Cave Creek Channelization (1991)
21. Dreamy Draw Dam (1973)
22. Old Cross Cut Canal (1975, 1991)
23. Indian Bend Wash (1985)
    a. Interceptor Channel
    b. Collector & Side Channel
24. Guadalupe F.R.S. (1975)
25. Buckhorn-Mesa Flood Retarding Structures
    a. Spook Hill Floodway (1980)
    b. Spook Hill Dam (1979)
    c. Signal Butte Floodway (1984)
    d. Pass Mountain Diversion (1987)
    e. Signal Butte Dam (1987)
    f. Bulldog Floodway (1988)
    g. Apache Junction Dam & Floodway (1988)
26. Powerline Dam (1967)
27. Vineyard Dam (1968)
28. Rittenhouse Dam (1969)
29. Powerline Floodway (1968)
30. East Maricopa Floodway (1989)
31. Dysart Drain (1996)
32. Colter Channel (1994)
33. Gilbert Crossroads Park Basin (1992)
34. Sun City West Drains (1990)
35. El Mirage Drain (1990)
36. Sun City Drains (1991)
37. Indian School Rd Drain
38. Scatter Wash (1995)
39. Paradise Valley Detention Basin #4 (1991)
40. PVSP Cactus Road Improvements (1991)
41. Perryville Bank (1984)
42. Alma School Drain (1969)
43. University Drive Basin (1993)
44. Sossaman Channel & Basin (1977)
45. Guadalupe Channel (1989)

NON-FCD STRUCTURES

46. Granite Reef Aqueduct Dike
47. Painted Rock Dam
48. Gillespie Dam
49. Waddell Dam
50. Granite Reef Dam
51. Horseshoe Dam
52. Bartlett Dam
53. Stewart Mountain Dam
54. Mormon Flat Dam
55. Horse Mesa Dam
56. Roosevelt Dam
57. Maricopa Drain
58. Rio Salado (City of Tempe)
59. East Mesa Drains

100-year Floodplains

Structures



FIVE-YEAR CAPITAL IMPROVEMENT PROGRAM
FISCAL YEARS 1997 TO 2001

Prepared by:

Flood Control District of Maricopa County

PROJECT STATUS:

C = CONSTRUCTION **P** = PLANNED **S** = STUDY **D** = DESIGN **L** = LAND ACQUISITION

1.	C	Casandro Wash Dam & Outlet	14.	L	Maryvale Flooding Mitigation	27.	C	Old Cross Cut Canal
2.	D	White Tanks #3 FRS Modification	15.	S	South Phoenix Drainage Improvements	28.	S	STP Papago Watershed Study
3.	C	White Tanks #4 Inlet Improv.	16.	C	10th Street Wash Basins	29.	C	Salt River Channel
4.	S	Salt-Gila River Study	17.	C	East Fork Cave Creek	30.	L	Town of Guadalupe
5.	D	Bullard Wash Outfall Channel	18.	L	New River ADMP	31.	C	Price Drain
6.	L	Agua Fria Flowage Easements	19.	D	Rawhide Wash Improvements	32.	P	Southeast Valley Reg. Drainage
7.	D	RID Canal Overchute	20.	D	Reata Pass Channel	33.	P	Sossaman Channel
8.	C	Dysart Drain/Reems Rd. Connector	21.	D	Pima Road Channel	34.	S	Southeast Mesa ADMP
9.	L	Colter Channel	22.	C	Squaw Peak LOMR	35.	C	Rittenhouse Drainage Improv.
10.	S	Camelback Ranch	23.	S	Tatum Wash Channel			
11.	D	Northern/Orangewood Storm Drain	24.	S	Doubletree Ranch Rd. Drain			
12.	C	Cactus Road Storm Drain	25.	C	84th St/Cholla Basin & Drain			
13.	L	Skunk Creek Improvements	26.	S	Arcadia Area Drainage Project			