

# THE FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

Year-In-Review

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MICHAEL S.  
ELLEGOOD, P.E.  
CHIEF ENGINEER  
AND GENERAL  
MANAGER



During the past year the Flood Control District of Maricopa County lost one of its mainstays. Stan Smith retired as Chief Engineer and General Manager after nineteen years of service to the District and the people of Maricopa County. Stan personified the dedication, spirit and technical excellence of the agency. We will miss Stan as he shaped much of what the District is today.

To face and overcome the challenges of the coming years, we will require the Flood Control District of Maricopa County to demonstrate again that we are competent, accountable, and highly competitive. We have to show that we can do the job faster, better and cheaper than other alternative measures.

We are going to sharpen our business acumen by implementing a comprehensive project control system. Each activity will have a distinct account that will have direct and indirect costs assigned to it. Projects will be closely monitored and costs will be compared constantly against budget projections. Our managers will be expected to continuously oversee their activities so that if costs start to rise, they will be identified quickly and changes implemented to reduce them. All of us, not only management, will search continuously to find newer and more innovative methods to keep costs at a minimum in order to survive in an increasingly competitive environment.

Second, we have to increase our presence in the community. The Flood Control District of Maricopa County must become a household word. To this end we must conduct more community education programs and become more visible at fairs, meetings, and other activities where community and other groups congregate.

Finally, we have to learn to be proactive and anticipate what our constituents will want and require. We have to provide "knock your socks off" customer service. We have to be so good at what we do and how we do it that other government agencies and private companies say they want to emulate us. We will be the leader!

These are our challenges for the twenty-first century. Meeting them will place us firmly in the position of being number one, a leader among government agencies, one that is truly competitive and excels at what it does.



**Guadalupe**-- A five-acre area purchased by the Flood Control District for use as a retention basin has been the focus of community interest in the Town of Guadalupe.

Site inspection of the area revealed that one of the properties was a dumping site for large piles of trash, construction debris and environmentally hazardous materials. Additionally, drug use was rampant on the property.

The District had the hazardous materials removed and then took on the task of removing the remaining trash. During this process, District personnel observed drug use which they reported to the Sheriff's Office, leading to three drug busts in two hours.

Clean-up of the site was budgeted at \$200,000 and estimated to take 21 days. District staff monitored the removal and hauling of the trash and came in **\$117,000 under budget** in 13 fewer days than was originally estimated.

Guadalupe residents and business owners were glad to have the eye-sore removed and the criminal activity stopped. Due to a group effort by the employees of the District and the citizens of the Town, Guadalupe has made a major step in its efforts to revitalize their community.



## YEAR-IN-REVIEW ON THE WEB

For an expanded version of this Report, please visit us on the World Wide Web at:

<http://www.fcd.maricopa.gov>

Or from the County home page (<http://www.maricopa.gov>), choose *Public Works* and then *Flood Control*.

The Internet can be accessed at the following County libraries:

Headquarter Library  
17811 North 32nd Street  
(602) 506-2957

Gila Bend  
202 N. Euclid Avenue  
(520) 683-2061

Queen Creek  
22407 S. Ellsworth  
(602) 987-3600

Aguila  
51321 Ray Street  
(520) 685-2214

Guadalupe  
9401 S. Avenida del Yaqui  
(602) 831-5967

Sun Lakes  
9666 E. Riggs Road  
(602) 895-5123

El Mirage  
14010 N. El Mirage Road  
(602) 583-1030

Laveen  
9401 S. 51st Avenue  
(602) 237-2904

Surprise  
15844 N. Hollyhock St.  
(602) 583-0626

Fountain Hills  
16836 E. Palisades Blvd.  
(602) 837-9793

Litchfield Park  
101 W. Indian School Road  
(602) 935-4118

## BOARD OF DIRECTORS

The Flood Control 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 of 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.

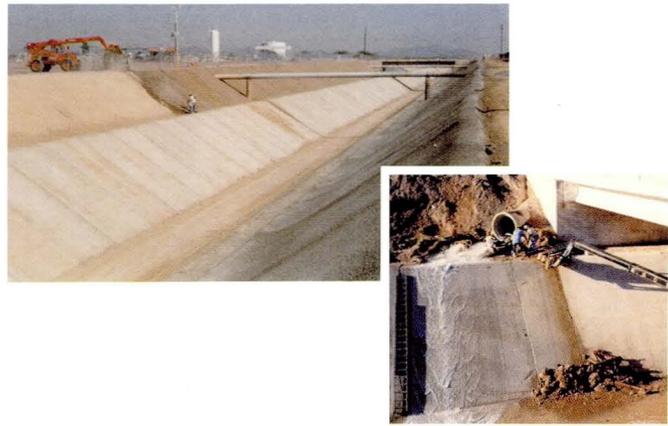
- ◆ Don Stapley, District 2, Chairman
- ◆ Fulton Brock, District 1
- ◆ Betsey Bayless, District 3
- ◆ Jan Brewer, District 4
- ◆ Mary Rose Garrido Wilcox, District 5

## FLOOD CONTROL ADVISORY BOARD

The Flood Control Advisory Board (FCAB) works closely with staff and the Board of Directors to accomplish the District's mission of protecting the 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.

- ◆ Melvin Martin, District 5, Chairman
- ◆ Gilbert Rogers, District 1
- ◆ Samuel K. Wu, District 3
- ◆ Russell G. Stephens, District 4
- ◆ John E. Miller, District 2
- ◆ Paul Cherrington, Salt River Project
- ◆ James Matteson, City of Phoenix

## DYSART DRAIN IMPROVEMENTS PROJECT



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 relieve the flooding, the District recommended the 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 intercepts flood flows from north of the base and conveys them safely to the Agua Fria River.

The District was responsible for the design, construction, and operation and maintenance of the Dysart Drain Improvements Project. LAFB is responsible for all operation and maintenance of the project with the exception of one small channel component at the northeast corner of the basin. The District gave the deeds to all project rights-of-way to the Air Force upon completion of the project.

## GROUNDWATER RECHARGE

The Flood Control District is supportive of innovative techniques for managing storm water and conserving water resources. To this end, the District has developed a policy regarding the use of District land for groundwater recharge.

The policy establishes a procedure to allow the lease of District property for groundwater recharge while protecting the District's mission and structures. The policy addresses technical issues, liability and indemnification, the lease application process, notification and monitoring, and fee structures.

Some of the benefits of 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.

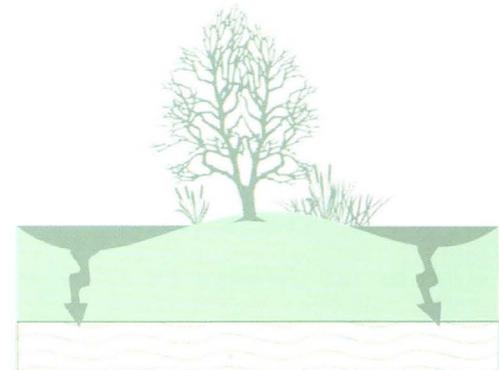


Illustration by P. Baker

## CASANDRO WASH DAM AND OUTFALL



Casandro Wash Dam and Outfall, dedicated on August 29, 1996, is the first dam that the District designed and built without federal assistance.

The outlet was designed in-house by the Civil Branch of the Engineering Division and 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.

The structure was constructed to protect residents in the Town of Wickenburg who live adjacent to Casandro Wash, from a 100-year flood event. There are approximately 100 residents along Casandro Wash who have been removed from the floodplain as a result of this project. The District is responsible for the operation and maintenance of the dam.

## METEOROLOGICAL SERVICES PROJECT



The District has been involved in an exciting venture with other County agencies and jurisdictions which could possibly save lives and property in the case of a flood emergency.

A contract with a meteorological firm for a period of two years was established. The contract provides customized, detailed forecasts of heavy rainfall and severe weather to agencies within the District's jurisdiction. The project will result in more timely and specific weather forecast information than available through any other source. This results in greater lead-time to respond to flood emergencies.

The County and surrounding contributing areas were divided into nine "forecast zones." The firm provides zone-specific forecast products via fax delivery and phone confirmation to participating agencies within the zones. The project operated during two rainy seasons each year, December 1 through March 30 and June 15 through October 15.

## FINANCIAL HIGHLIGHTS

Fiscal Year Ended June 30, 1997

Preliminary and Unaudited

Revenues	Dollars
Flood Control Tax	\$ 38,712,000
Local Participation	7,091,000
Interest Income	1,640,000
Land Sales and Rental	1,251,000
Miscellaneous	1,711,000
Total Revenue	<u>50,405,000</u>

Expenditures	
Operating	15,205,000
Flood Control Capital Improvements	32,925,000
Vehicles and Equipment	803,000
Total Expenditures	<u>48,933,000</u>

Excess (deficiency) of revenues over expenditures 1,472,000

Transfer from Vehicle Replacement Fund 2,830,000

Fund Balance July 1, 1996 16,479,000  
 Fund Balance June 30, 1997 \$ 20,781,000

**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.

**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.

## PROGRAMS

### PLANNING PROGRAM

Identifies regional drainage and flooding problems and develops alternative solutions to protect life and property.

- Entered into 7 IGA's with other agencies
- Began pre-design work on 5 projects
- Completed 4 Area Drainage Master Studies
- Began 3 Area Drainage Master Studies
- Completed 1 Area Drainage Master Plan

### CAPITAL IMPROVEMENT PROGRAM

Implements flood control and stormwater management projects identified through the planning process and recommended for inclusion in the 5-year CIP approved by the Board of Directors.

- Completed Price Drain, Cactus Road Neighborhood (Scottsdale and Cactus), Salt River Channel - Dobson to Country Club, New River Area Drainage Master Plan (Upper New River Mitigation), Agua Fria Flowage Easements, East Fork Cave Creek, Squaw Peak LOMR, 10th Street Wash Basins, Dysart Drainage Improvements Project, Casandro Wash Dam and Outfall in Fiscal Year 96/97.

### PROPERTY MANAGEMENT PROGRAM

Manages all aspects of District real property interests

- \$1,035,500 in sales at public auction
- \$132,400 in leases
- \$136,600 in easements
- \$37,500 in IGAs
- 6 Properties were sold

### FLOODPLAIN MANAGEMENT PROGRAM

Administers the Floodplain Regulation for the unincorporated areas of Maricopa County, plus 13 municipalities. Maintains good standing in the National Flood Insurance Program. Delineates areas subject to the 100-year floodplain.

- 3 floodplain delineation studies were begun
- 12 floodplain delineation studies were completed
- 80 floodplain use permits were reviewed
- 1671 phone requests for general information were handled
- 429 walk-in customers were assisted
- 5376 flood hazard information requests were handled
- 198 flood hazard information notices were recorded



### DRAINAGE ADMINISTRATION PROGRAM

Administers the County Drainage Regulation to reduce existing and potential flooding caused by local stormwater drainage.

- 8195 inspections conducted
- 135,463 inspector's miles driven
- 3960 drainage clearances issued
- 1629 drainage clearances reviewed
- 599 total plan review completed
- 962 drainage complaints investigated

### ENVIRONMENTAL PROGRAM

Provides guidance and coordination in meeting federal stormwater quality regulations.

- Began Mitigation Banking Program
- Continued environmental outreach efforts
- Continued negotiating land leases for Groundwater Recharge

### FLOOD DETECTION AND 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 studies.

- 15 new rain gages were installed for a total of 196
- 6 water-level sensors were installed for a total of 86
- 1 weather station was installed totaling 13
- 2 temperature/humidity sensors were installed at existing rain gages for a total of 8

### MAINTENANCE PROGRAM

Maintains over 70 flood control structures and facilities.

- Channel maintenance: 151,137.65 acres
- Access roads maintenance: 527.43 miles
- Property fencing and signage: 1,836,558 linear feet

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