



2007/2008 ANNUAL REPORT 

REGIONAL FLOOD CONTROL DISTRICT

 PIMA COUNTY, ARIZONA

PIMA COUNTY ADMINISTRATION

2007/2008

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MESSAGE from the CHIEF ENGINEER

On behalf of the Board of Directors of the Pima County Regional Flood Control District, I am pleased to present the District's Annual Report for fiscal year 2007/2008. The following are a few of this year's highlights, which are described in more detail later in this report:

In 2006, we received record rainfall events in June, July and August with 8.6 inches of rainfall; two inches more than the average. FEMA approved \$8 million in funding for emergency work and repair projects for the flood damage. Construction of flood damage repairs and the design of improvements for the Pantano Wash continued in fiscal year 2007/08.

The District worked with the City of Tucson, Town of Sahuarita, and Arizona State Land Department on flood hazard mapping for the Lee Moore Wash Basin Management Study. This study is a multi-year comprehensive study that estimates flood and erosion potential for the watershed, maps watercourses, identifies existing and potential problems and develops preliminary solutions and standards for sound floodplain and stormwater management. The total watershed project is approximately 213 square miles including parts of unincorporated Pima County, the

City of Tucson, Town of Sahuarita, Coronado National Forest and Arizona State Land.

Our Capital Improvement Program continues to be successful resulting in the completion of several flood safety projects:

Ajo Curley School Detention Basin for the Community of Ajo to protect the downtown business center;

Columbus Storm Drain project in which the District cooperated with the City of Tucson and provided \$6.2 million; and

Swan Wetlands Environmental Restoration Project along the Rillito River.

I hope you'll take some time to read this year's annual report, which details our programs, CIP projects and other District activities. This year's report and all previous annual reports are also available at: www.rfcd.pima.gov.

Suzanne Shields, P.E.



Chief Engineer and Director
Regional Flood Control District



Regional Flood Control District

Pima County, Arizona

Vision

The District will continue to be a leader in providing quality flood protection and floodplain management services within Pima County.

Mission

The Pima County Regional Flood Control District is a regional agency whose mission is to protect the health, safety, and welfare of Pima County residents by providing comprehensive flood protection programs and floodplain management services. These services emphasize fiscal responsibility, protection of natural resources, and a balanced multi-objective approach to managing regional watercourses, floodplains, and stormwater resources.



OVERVIEW of the DISTRICT

Establishment of the District



Drainageway Maintenance

To comply with federal law, the State of Arizona passed the Floodplain Management Act of 1973. This act authorized Arizona counties to adopt rules and regulations concerning management of floodplain areas. The Arizona State Legislature subsequently authorized flood control districts to levy taxes on real property to finance district operating expenses. The Pima County Board of Supervisors, which sits as the Pima County Flood Control District Board of Directors (Board), organized the Pima County Flood Control District (District) on June 5, 1978. The District first became operational on July 1, 1978.

Provisions of state legislation also allow incorporated cities and towns within Pima County to undertake their own floodplain management duties and regulatory functions. In Pima County, the incorporated areas of the City of Tucson, the Town of Oro Valley, the Town of Marana, and the Town of Sahuarita have elected to assume floodplain management duties in their respective jurisdictions. The District is responsible for floodplain management activities for the remainder of unincorporated Pima County (with the exception of national forests, parks, monuments, and Indian Nations) and for the City of South Tucson.

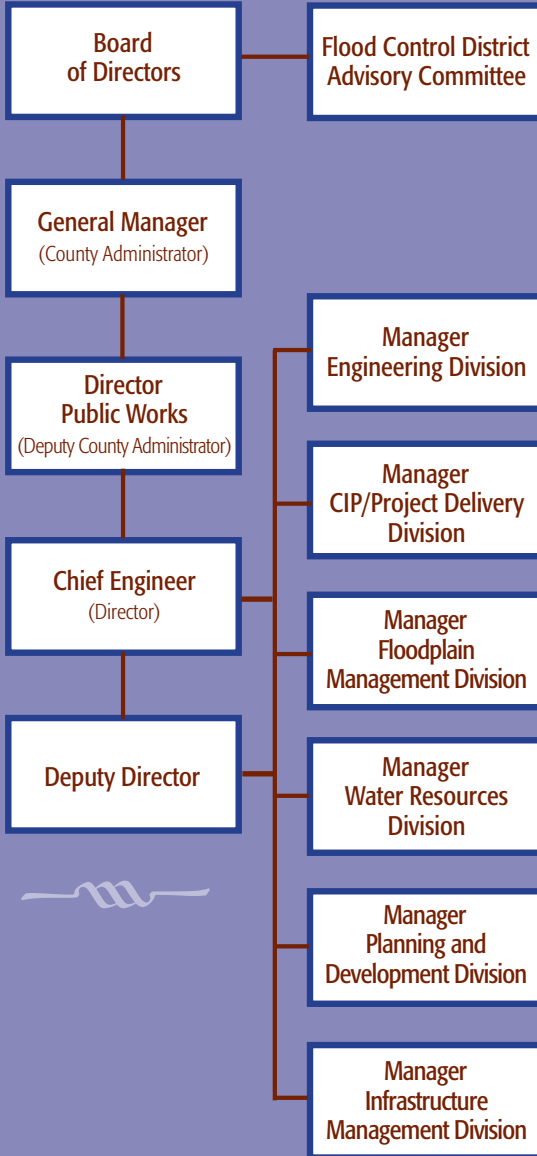
Goals and Objectives

The goals and objectives of the District represent both flood control and resource protection. The District's approach varies from traditional flood control approaches because of a multi-benefit public philosophy. The District recognizes that it is necessary and desirable to maintain a balanced relationship between human communities and the land and resources that sustain them. To that end, the following policy goals and objectives have been adopted by the Board as part of the District's Floodplain and Erosion Hazard Management Ordinance:

- Minimize flood and erosion damages.
- Meet or exceed state and federal requirements relating to floodplain management.
- Establish minimum flood protection elevations and damage protection requirements for structures and other types of development.
- Regulate encroachment and building development within areas subject to flooding or erosion.
- Encourage the most effective expenditures of public money for flood control projects.
- Minimize damage to public facilities, utilities and streets located in regulatory floodplain and erosion hazard areas.
- Help maintain a stable tax base by providing for the protection of regulatory flood and erosion hazard areas.
- Inform the public when property is in a regulatory floodplain or erosion hazard area.
- Encourage the preservation of natural washes and enhancement of the riverine environment.
- Emphasize overall watershed management.
- Protect, preserve and enhance groundwater recharge.



District Organization



DISTRICT ACTIVITIES

Service Programs

Customer Service

The District encourages residents to become familiar with flood related hazards that may impact their properties or properties they are considering for purchase. In order to assist in this research, the District maintains an abundant amount of information at our customer service counter which includes detailed hydrologic and hydraulic studies, historic and current aerial photos, and topographic information.

Residents may discuss any of this information with a hydrologist who can provide additional information regarding any limitations on the property or requirements that may apply for proposed improvements due to the extent of flooding or erosion hazards.



Floodplain Management also provides an efficient Special Flood Hazard Area Identification service. This information is conveniently provided in writing via a Flood Hazard Information Sheet. This form identifies whether the property is located in or out of the federal floodplain and/or floodway and whether the structure is in or out of the floodplain. This service can be provided at our customer service counter. During 07/08 the District created an online Flood Hazard Map service. By going to <http://rfcd.pima.gov/fpm/hazrd.html> a user can enter a parcel id or address and download or print a Flood Hazard Map.

Another customer service component provided by Floodplain Management includes performing field investigations in response to constituent complaints and concerns. Through these field investigations, Floodplain Management is able to ensure that property owners are not being adversely affected by improvements that they or their neighbors construct, and can provide advice regarding improvements that can be made in order to minimize the potential of flood damage. If non-compliant improvements are observed, Floodplain Management personnel will proceed with compliance enforcement actions.

Flood Protection Assistance

Floodplain Management

The goal of Floodplain Management is to provide floodplain information, establish development requirements and provide assistance to Pima County residents with drainage questions in order to minimize the threat to life and property from flooding and erosion hazards. This includes ensuring that any new development within the floodplain is safe from flooding and erosion hazards, does not adversely impact adjacent properties, and maintains the integrity of the floodplain.

Another important goal is protecting natural resources within floodprone areas. Floodplains typically support important riparian ecosystems and associated wildlife. These riparian areas are also important for their role in mitigating flood hazards by maintaining stable flood flow conditions, providing natural erosion control, as well as promoting recharge into underground aquifers. As such, it is beneficial to all residents of Pima County that these critical resources are protected and maintained.

One of the ways Floodplain Management accomplishes these goals is by implementing floodplain regulations contained in the Pima County Floodplain and Erosion Hazard Management Ordinance (Ordinance). The Ordinance was developed to conform to the National Flood Insurance Program administered by the Federal Emergency Management Agency (FEMA), which allows residents of Pima County to purchase flood insurance. In addition, the Ordinance includes provisions regarding the construction of buildings and other man-made structures within regulatory floodplains. The Ordinance applies only to those areas prone to flooding where the peak discharge is 100 cubic feet per second or greater, or prone to sheet flooding. In other areas, the Ordinance does not apply; however, other ordinances may apply, such as the Grading Ordinance administered by the Development Services Department.



ALERT

One of our most used services is the District's Automated Local Evaluation in Real Time (ALERT) system, which has been providing precipitation and stream flow data from a series of gauges located throughout Pima County since 1981. The ALERT system was established as part of a three-way agreement with the National Weather Service (NWS), the Arizona Department of Water Resources and the District. The ALERT system was initially installed to provide advanced warning of potential flood flows on the upper Cañada del Oro watershed as a result of the Golder Dam breach. Federal and state financial assistance combined with funding from the District has allowed us to expand the ALERT system. The system of gauges now covers most of the large watersheds in eastern Pima County and currently includes 93 precipitation gauges, 36 stream gauges, and four weather sites.

The precipitation gauges relay rainfall or snowfall amounts and intensities, stream gauges measure the depth of flow in streams, and weather stations provide precipitation information plus wind speed, temperature, relative humidity and barometric pressure. This network of automated gauges transmits data in real time using radio telemetry transmitted directly to the District, NWS, and the Arizona Department of Water Resources office in Phoenix. The NWS uses this data to produce flash flood watches and warnings and to ground-truth radar estimates of precipitation. District personnel utilize the information to assist emergency response agencies including the Pima County Department of Transportation's Maintenance Operations staff during storm events. Data generated by these sites may be viewed at the District's rfcd.pima.gov/wrd/alertsys/index.htm



INTERNAL BUSINESS PROCESSES

Drainage Maintenance Process Improvement

The Department of Transportation Maintenance Operations and the newly formed District Infrastructure Management divisions work together to resolve drainage problems affecting public infrastructure and safety. There are many causes for drainage problems that staff diligently works toward understanding and correcting to ultimately prevent future problems.

Process improvements enable better communication between staff. Multi-departmental meetings are held to resolve large watershed or development problems, to improve drainage design and construction methods for development projects, and to reduce maintenance needs and costs. These ongoing discussions integrate small projects, which remedy the smaller problems, with capital improvement projects.

District GIS staff develops an integrated land and infrastructure data structure within the Counties multi-user geodatabase environment. When completed the structure will store geometry representative of district maintained properties and related infrastructure. Emphasizing document storage and retrieval the proposed system will allow faster access to District records via online maps and documents.



MANAGEMENT PROGRAMS

Lee Moore Wash Basin Management Study

In Fiscal Year 2007/08, the District initiated the Lee Moore Wash Basin Management Study to identify the regulatory flood and erosion hazards within the watershed and develop alternatives to address those hazards. This study, one of the largest planning efforts ever undertaken by the District, is a comprehensive study that estimates flood and erosion potential for the watershed, maps watercourses, identifies existing and potential future problems and develops preliminary solutions and standards for sound floodplain and stormwater management.

The Lee Moore Wash basin was selected for this study based on the high-level of development activity that is expected to occur in this watershed over the next few decades. The total project watershed is approximately 213 square miles including parts of unincorporated Pima County, the City of Tucson, Town of Sahuarita, Coronado National Forest and Arizona State Land.

During the past year's effort to collect data, known flooding hazards were identified including researching historical flooding data and current land use plans, map floodplains, as well as soliciting input from stakeholders and the public.

Based on this information, the District has formulated a floodplain management approach consisting of structural and non-structural alternative solutions to reduce or eliminate flooding hazards and erosion. Those alternatives will be further compared and evaluated to develop a set of preferred alternatives during the next fiscal year.



The comprehensive basin management study is expected to be completed in the fall of 2009. Upon completion, the District will have a comprehensive assessment of flood and erosion hazards and, once implemented, the strategies in the plan should reduce damage to property, loss of life from drainage issues and stormwater flooding.

Lee Moore Wash Basin

Water Resources and Riparian Habitat Management

This program consists of activities intended to prevent flooding, erosion and riparian habitat loss by means other than constructing structural flood control improvements. The District promotes and supports regional riparian restoration with the intent that it will result in some level of recovery of natural functions within riverine systems.

Mitigation Guideline Revisions

The Floodplain and Erosion Hazard Management Ordinance (Ordinance) requires compensatory mitigation for disturbances to regulated riparian habitat. The Regulated Riparian Habitat Mitigation Standards and Implementation Guidelines (Guidelines) were developed as a supplement to Ordinance Number 1999-FC1 to provide guidance for applicants going through the mitigation process. Since its inception in 1994, the riparian protection regulations of the Ordinance have been revised twice, first in 1998 (Number 1999-FC1) and again in 2005 (Number 2005-FC2). In a continuing effort to meet the goals of the Ordinance and to ensure that requirements are being met, the District began revising the Guidelines in FY 2007-08 to make them more responsive to the modifications incorporated into Ordinance.

The District selected a project team to conduct technical studies which would determine the effectiveness of the current Guidelines, study offsite mitigation opportunities, and assist them with the public participation process. Because of the complexity of offsite mitigation issues, the revision process was split into two efforts, revision of the Onsite Mitigation Guidelines and development of an Offsite Mitigation Program.

Public participation is an essential aspect in revising the onsite Guidelines and development of the offsite mitigation program. The Mitigation Working Group (MWG) was created to assist the District in the process of revising the Guidelines, and members were selected to represent a broad spectrum of the community.

MWG Members

- Southern Arizona Home Builders Association (SAHBA)
- Tucson Audubon Society
- Coalition for Sonoran Desert Protection
- Rincon Institute
- American Society of Landscape Architects
- Metropolitan Pima Alliance
- Westland Resources
- Diamond Ventures
- Pima County Resident

A series of MWG meetings were held in FY 2007-08. These occurred on July 17, 2007, August 29, 2007 and November 14, 2007, focusing on revising the onsite guidelines. The revisions to the Guidelines were not completed at the end of FY 2007-08 and are continuing.

Information regarding this effort can be viewed at: <http://rfcd.pima.gov/wrd/riparian/std-srevision.htm>. The webpage will be periodically updated throughout the revision process to include MWG meeting agendas and minutes, presentations, progress, and other information relating to the development process.



"Habitat loss contributes to flooding erosion hazards."



"Healthy habitat absorbs floodwater."

NATIONAL FLOOD INSURANCE PROGRAM

Map Modernization

The national response to flood disasters prior to 1968 was to install dams, levees, and seawalls; however, this approach failed to reduce flood losses. Flood victims were often left destitute because homeowners and business owners could not purchase private flood insurance. Insurers were either unwilling to offer flood insurance or premiums were too costly—consequently flood disaster costs and the number of flood victims continued to increase over time.

In 1968, Congress created the National Flood Insurance Program (NFIP). The three basic goals of the program are to:

1) Promote sound floodplain management to reduce future flood losses, 2) Provide flood insurance, and 3) Identify flood hazards and create floodplain mapping. The Federal Emergency Management Agency (FEMA) identifies flood hazard areas by publishing Flood Insurance Rate Maps (FIRMs). The first FIRMs for Pima County became effective in 1983, however, revising the FIRMs to accurately reflect flood hazards is a never-ending process. Watercourses move and watersheds change over time, so the maps are continually being updated.

Digital FEMA Data

After the devastating flooding occurred from Hurricane Katrina due to the failure of the levees that protected the city of New Orleans, FEMA developed strict levee design and maintenance standards. To meet these new

FEMA standards, in fiscal year 2007/08, the District undertook improvement efforts. The levees were analyzed for flood resistance (the ability to withstand the hydraulic and hydrostatic forces of floods), freeboard (the height of the levee above the 100-year flood level), interior drainage (the ability to drain the area behind the levee), and embankment foundation stability (levees must be designed to address slumping, settling and rotation). The District also rewrote the Operations and Maintenance Plan for levees to address both routine inspections and flood responses. During the levee assessment period, additional maintenance issues were resolved including the replacement of erosion protection, repairs to flap gates and in some locations additional freeboard was added to ensure levee integrity during major floods.

Levees are critical flood control structures. A levee is a type of dam that runs along the bank of a river and is designed to hold back flood waters from low lying areas. There are 10 levee systems maintained by the District:

- The Lower Santa Cruz River Levee in Marana
- Big Wash Levee, Canada Del Oro Wash Levee, Rams Canyon Levee, and Canyon Shadows Levee in Oro Valley,
- Santa Cruz Levee at Grant Road, and the Roger Road Sewage Treatment Plant Levee in the City of Tucson, and
- Sotomayor Ranch Levee, Mission West Floodwall, and Riverside Crossing Levee in the unincorporated areas.



Sotomayor Ranch Levee



Lower Santa Cruz Levee

Community Rating System: Pima County a Top 3% Community

The Community Rating System (CRS) is a voluntary incentive program that rates local communities participating in the National Flood Insurance Program (NFIP) who are interested in providing a level of service that is above and beyond the minimum NFIP requirements. Participating communities receive discounted flood insurance premium rates in increments of 5%. For example, a Class 1 community, whose service is considerably above the minimum, would receive a 45% premium discount, while a Class 9 community whose service is nominally above the minimum would receive a 5% discount. A Class 10 community only meets the minimum level required, which in turn

would not receive a discount for their constituents.

The CRS classes for local communities are based on 18 activities and are organized under four categories: 1) Public Information, 2) Mapping and Regulations, 3) Flood Damage Reduction, and 4) Flood Preparedness.

In recognition of the excellent level of floodplain management performed by the District, Pima County is a Class 5 Community, which yields a 25% discount in flood insurance premiums for our constituents. Pima County ranks in the top 3% of all participating communities nationwide.



FLOODPRONE LAND ACQUISITION PROGRAM

FLAP provides relocation assistance to property owners and purchases flood damaged land, whether it is improved property or vacant land. Specific criteria used to rank FLAP applications and determine eligibility include the extent of flood damage or severity of potential flood and erosion hazards on the property. The highest priority is given to improved properties that have or may suffer significant damage as a result of flooding.

This program is completely voluntary and is designed to assist property owners who are likely to experience, or have experienced, flooding which resulted in severe damage and flood hazards. The community also benefits from these acquisitions, which increase open space for overbank storage, enhance groundwater recharge, and provide riparian habitat preservation, wildlife corridors, passive recreation opportunities and protects cultural resources. FLAP also protects emergency responders and county resources from harm by reducing potential rescue needs.

Additional grant monies to purchase additional floodprone and damaged property became available after subsequent disasters because Pima County had an established floodprone land acquisition program.



Before Flood



After Acquisition

In 1986, after voters approved general obligation bond sales of \$20 million for flood-prone land acquisition, a land acquisition plan was adopted by the Pima County Board of Supervisors outlining criteria to guide the District's overall acquisition efforts and allow the dedication of tax levy revenues to be used for acquisition of floodprone lands. This newly adopted plan aided in the expansion of the program to include purchasing undeveloped land to prevent future floodplain development in sensitive riparian areas and to meet the open space goals of the community.

In fiscal year 2007/2008 the District spent \$1,558,225 and added 190.05 acres of land to the FLAP inventory bringing the total of District-owned property to 9,431 acres at a cost of \$62,911,860 since the program's inception.



CAPITAL IMPROVEMENTS PROGRAM

Fiscal Year

July 1, 2007-June 30, 2008

CIP No.	PROJECT NAME	COMPLETION DATE	TOTAL COST
FC-04-502	Ajo Curley School Detention Basin	May 1, 2008	\$1,440,193
FC-04-502	Green Valley Erosion Control Phase II	December 1, 2007	\$1,234,630
FC-04-502	Columbus Wash Phase II Drainage Improvement	May 1, 2008	\$11,000,000
FC-03-002	Navajo Wash: Oracle Rd. to Mountain Ave.	June 15, 2008	\$267,418
FC-03-002	Camino Verde Box Culvert	February 28, 2008	\$866,322
FC-03-002	Carmack Wash at Shannon Road	July 16, 2007	\$119,800
FC-92-004	Highland Wash	December 31, 2007	\$969,330
FC-04-001	Canada del Oro Flood Hazard Mitigation Project (FEMA Grant)	June 9, 2008	\$1,758,370
4FRRSW	Swan Wetlands Ecosystem Restoration	April 2008	\$4,000,000
TOTAL			\$21,656,063

Ajo Curley School Detention Basin

The town of Ajo experienced a severe flood on July 29, 2003 that flooded homes and businesses along Gibson Arroyo and the tributaries located south of Gibson Arroyo. To reduce future flood problems in the town of Ajo, the Curley School Detention Basin has been developed and constructed on the largest sub-water shed to the tributaries. The 4-acre site was undeveloped lands that had previously served as the football field for the old and now abandoned Curley School. The Curley School detention basin reduces a peak flow of flood waters during a 100-year event. Construction of the project was performed by Rummell Construction at a cost of approximately \$875,000. Work began in February 2008 and was completed ahead of schedule on May 1, 2008. The project design was done by DMJM Harris.

Swan Wetlands Ecosystem Restoration Project

Phase 2 of the Swan Wetlands project consists of land surface and stormwater channel recontouring to enhance passive water harvesting, and planting with native vegetation. Construction was started in September, 2007 and was completed in April, 2008. Project cost was shared with the U.S. Army Corps of Engineers at a 75%/25% ratio. Total project cost was approximately \$4 million of which \$1 million was from the Flood Control District Tax Levy.



Swan Wetlands Area 3 before recontouring and vegetation planting



Swan Wetlands Area 3 after recontouring and vegetation planting

Columbus Wash Phase II Drainage Improvement

The Columbus Wash Storm Drain project Phase II consisted of constructing a major storm drain between Speedway Boulevard and 5th Street. The City of Tucson started construction of Phase II in February 2007 and the construction was completed in May 2008 at a total construction cost of \$11 million, of which \$4.4 million was from the 2004 General Obligation Bonds FC5.02 Urban Drainage and \$2.0 million from the Flood Control District Tax Levy. The remainder of the funds came from the City of Tucson Drainage Bonds.

**Per \$100 assessed value*

DISTRICT FINANCIAL OVERVIEW

Flood Control District Tax Levy Rate 1981 to 2008

FISCAL YEAR ENDING	*LEVY RATE	TAX
1981.....	0.5143.....	\$4,637,000
1982.....	0.4683.....	\$5,342,000
1983.....	0.5072.....	\$6,882,000
1984.....	0.4739.....	\$7,652,000
1985.....	0.5269.....	\$9,243,000
1986.....	0.5102.....	\$9,969,000
1987.....	0.5346.....	\$11,713,000
1988.....	0.7630.....	\$17,272,000
1989.....	0.5592.....	\$13,730,000
1990.....	0.5985.....	\$14,663,000
1991.....	0.5985.....	\$14,058,000
1992.....	0.5871.....	\$13,689,000
1993.....	0.5871.....	\$13,767,000
1994.....	0.5398.....	\$12,678,000
1995.....	0.4623.....	\$11,379,000
1996.....	0.3596.....	\$9,368,000
1997.....	0.3596.....	\$9,467,000
1998.....	0.3296.....	\$10,392,000
1999.....	0.3246.....	\$10,411,000
2000.....	0.3046.....	\$10,327,151
2001.....	0.3046.....	\$10,414,427
2002.....	0.3546.....	\$13,713,102
2003.....	0.3546.....	\$14,467,389
2004.....	0.3546.....	\$14,467,389
2005.....	0.3546.....	\$14,467,389
2006.....	0.3746.....	\$19,720,839
2007.....	0.3746.....	\$22,620,303
2008.....	0.3446.....	\$25,331,448

Revenues

Although the District receives assistance from state and federal agencies to construct major capital facilities, most of the District's funding is generated from the property tax levy along with general obligation bond sales authorized by the electorate. Information on the District tax levy rate is shown in the table at left

Expenditures

The table on Page 18 provides information on capital project expenditures for projects completed during Fiscal Year 2007/08. The remainder of District expenditures goes toward debt service and operating expenses, which include funds allocated for maintenance of flood control structures, floodplain management, planning and administration activities.

FINANCIAL HIGHLIGHTS

Fiscal Year 2007/2008

Revenues

The primary source of revenue is the District's secondary property tax levy of \$0.3446 per \$100 of real property assessed valuation (this figure represents a drop in the rate from \$0.3746 in FY 2006/2007). In 2007/08, the District received approximately \$25.3 million dollars in tax levy revenue. Other local sources of revenue include revenue for capital improvements from the sale of general obligation (GO) bonds (\$6.9M) and reimbursements for other funds (\$1.3 M). The total revenue from all sources in FY 2007/08 was \$33.6 million.

Property Tax RFCD	\$25,331,448	75.5%
Bond Proceeds	6,916,851	20.6%
Federal Participation	918,943	2.7%
Interest and other	393,906	1.2%
	\$33,561,148	100.0%

Expenditures

The total expenditures for the District in FY 2007/08 were approximately \$39.0 million. The Capital Improvement Program expenditures of nearly \$23.5 million were direct capital expenses. The annual operating budget for the District was approximately \$14.7 million. The other significant expenditure was \$837,000 for debt service on flood control bonds and our contribution to the Pima Association of Government.

Capital Improvements	\$23,492,953	60.2%
Operating Budget	14,698,771	37.7%
Debt Service, PAG	837,961	2.1%
	\$39,029,685	100.0%

Breakdown of Expenditures

Capital Improvements

The expenditures for capital improvements include engineering service costs for

planning and design; construction costs; right-of-way acquisition costs; and other costs such as preparing new FEMA Flood Insurance Rate Maps once a capital project is completed. The Corps also began construction on Arroyo Chico – Cherry Field Detention Basin in July 2007 and is anticipated to be completed in December 2008. The federal dollars contributed to this project totals \$19,400,000.

Planning	\$1,442,762	6.1%
Design	2,568,863	10.9%
ROW Acq & Imps	3,829,002	16.3%
Construction	15,623,449	66.5%
Other	28,887	.2%
	\$23,492,963	100.0%

Operating Budget

The District's operating budget includes administrative, personnel, supplies and service costs associated with Flood Control Support, Flood Prevention and Riparian Protection. Flood Control Support Services include programs such as customer service, permits, public education, and financial management. Flood Prevention Services include maintenance, flood warning, emergency preparedness, and enforcement activities. Riparian Protection Services include the environmental restoration, water resources and riparian habitat management programs.

FC Support Services	\$4,572,630	31.1%
Flood Prevention	8,668,168	59.0%
Riparian Protection	1,457,971	9.9%
	\$ 14,698,769	100.0%

COORDINATION with other AGENCIES

Pima County Department of Transportation

The District contracts with Pima County for services from divisions within the Department of Transportation:

- Field Engineering Division
- Maintenance Operations Division
- Real Property Division
- Technical Services Division
- Administrative Services Division

Other Pima County Departments

The District cooperates with other Pima County Departments on various projects and exchanges information as needed:

- Pima County Attorney's Office
- Development Services Department
- Department of Environmental Quality
- Health Department
- Natural Resources, Parks and Recreation Department
- Tucson-Pima County Office of Emergency Management
- Regional Wastewater Reclamation Department (RWRD)

Local Governments

The District has entered into intergovernmental agreements (IGAs) to provide specific flood control or floodplain management services to, or to jointly fund flood control activities with, the following:

- City of Tucson
- City of South Tucson
- Town of Oro Valley
- Town of Marana
- Town of Sahuarita

Pima Association of Governments (PAG)

PAG facilitates coordination among local government agencies, including the District, on environmental matters affecting the community.

State Agencies

The District coordinates activities with the following state agencies:

- Arizona Department of Water Resources (ADWR)
- Arizona Department of Environmental Quality (ADEQ)
- Arizona Game and Fish (AGFD)
- Arizona State Land Department

Federal Government

Several federal agencies participate in local flood control projects, as listed below:

- U. S. Army Corps of Engineers (USACE)
- Federal Emergency Management Agency (FEMA)
- Federal Highway Administration (FHWA)
- U. S. Bureau of Reclamation (USBR)
- U. S. Natural Resource Conservation Service (NRCS)
- National Weather Service (NWS)
- U. S. Geological Survey (USGS)
- U. S. Fish and Wildlife Service (USFWS)

Nongovernmental Organizations

Other nongovernmental agencies that the District works with include:

- The Nature Conservancy (TNC)
- Cortaro-Marana Irrigation District (CMID)
- Central Arizona Water Conservation District (CAWCD)
- Metropolitan Domestic Water Improvement District (MDWID)
- University of Arizona (UA)



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