



2012/2013 ANNUAL REPORT 

# REGIONAL FLOOD CONTROL DISTRICT

 PIMA COUNTY, ARIZONA

# PIMA COUNTY ADMINISTRATION

2012/2013

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# MESSAGE

## from the CHIEF ENGINEER

**O**n 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 2012/2013. The following are a few of this year's highlights, which are described in more detail later in this report.

The District continues its program of updating floodplain studies. During FY12/13 studies completed included:

- Pegler Wash
- Unnamed #12 in the River Road and Craycroft area
- Tucson Mountains Unnamed #02 and #03

In addition to improved floodplain mapping and risk identification, our Capital Improvement Program continues to be successful resulting in the completion of many flood safety projects each of which provide multiple benefits including flood control, recreation and neighborhood stabilization including:

- CDO River Park Thornydale to Magee
- SCR Continental Ranch Remediation
- City of South Tucson Urban Drainage
- Los Reales Wash at SCR Channel Extension
- Dakota Wash Erosion Control
- Catalina Estate Drainage Way Improvements

- Lower SCR Levee at Tangerine Rd
- Pantano Wash Speedway to Tanque Verde
- Julian Wash Kolb Rd Pathway Underpass
- Pantano Wash Watershed Study
- Santa Cruz to Julian Connection
- SCR Grant Camino del Cerro River Park Drainage Improvements
- Tucson Mall Linear Park

Despite the benefit of such a large CIP, perhaps most significantly this year the District released for review Design Standards for Stormwater Detention and Retention (Manual) to supersede the Pima County/City of Tucson Stormwater Detention/Retention Manual. The Manual contains substantive changes.

I hope you'll take some time to read this year's annual report, which summarizes 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](http://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



*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.

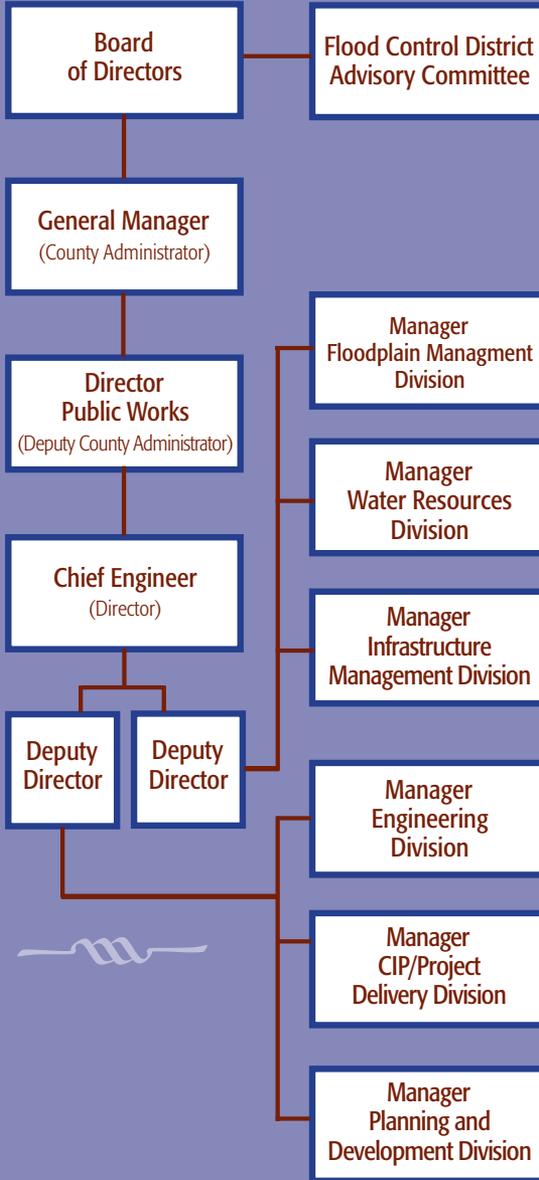
# Goals and Objectives

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

## Customer Service Programs

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 floodplain maps, elevation certificates, 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. Alternatively, by going to: <http://rfcd.pima.gov/fpm/hazard.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*

# ALERT

One of our most used services is the District's Automated Local Evaluation in Real Time (ALERT) Flood Threat Recognition 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 94 precipitation gauges, 36 stream gauges, and five 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 online at <http://alert.rfcd.pima.gov/perl/pima.pl>.

In fiscal year 2012/2013, one additional precipitation gauge was installed and one precipitation site was retrofitted with weather sensors to provide additional information for the NWS. The ALERT web page was updated to resolve problems with newer browser technology.

Large rainfall events resulted in flooding of residential areas, numerous road closures, roadway damage, and one fatality. This required close communication with the Pima County Office of Emergency Management, the Pima County Department of Transportation, and the NWS.

The event that generated the greatest amount of flooding occurred on September 6-7, 2012. During this period deep moisture combined with atmospheric instability resulted in strong thunderstorms in the Avra Valley. By early afternoon on September 6 storm development began over the Sierrita Mountains east of Green Valley spreading north into the Black Wash area. Early in the morning of September 7, thunderstorm activity west of the Tucson Mountains and flow from earlier storms generated flooding in the Black Wash and downstream in the Brawley Wash. Rain gauges and Doppler radar indicated rainfall amounts in the range of two to four inches southwest, west, and northwest of the Tucson Mountains. The highest intensity measured by an ALERT gauge on September 6 was 2.09 inches in 55 minutes. This site registered 3.50 inches of rain over the 18 hour period.

The maximum depth on the Brawley Wash at Milewide Road was approximately 5.95 feet with a peak discharge of 3,678 cubic feet per second.

During these storm events, information provided by the ALERT system aided the

NWS and emergency teams with their decisions to warn the public of potential flooding. It also aided in their response to emergency situations where people and infrastructure were in danger from the rising floodwaters



## *Stormwater Detention/Retention Manual Revision*

The District currently regulates stormwater detention/retention through the Stormwater Detention/Retention Manual developed in coordination with the City of Tucson. The District is currently working on revisions to this manual, as discussed below.

The Planning and Development Division of the Pima County Regional Flood Control District has begun a review of The Pima County/City of Tucson Stormwater Detention/Retention Manual. The revised Manual proposes to make some substantive changes, including replacement of the threshold retention requirement with a first flush retention requirement (retaining the first 0.5 inches of rainfall), introduction of the use of integrated

site planning and other Low Impact Development practices, description of acceptable methodology for hydrologic and hydraulic analysis, more specific design standards, and a description of the maintenance responsibilities and expectations.

This draft version of the manual and associated appendices were open for review and comment generally and were published to the District's website in September of 2012. The District has specifically requested comments from the other jurisdictions and certain consulting engineers, most of whom have had previous floodplain management responsibilities in addition to a formal stakeholder process.

# *Foothills Washes Hydraulic and Hydrology Studies*

In 2006, Pima County received record rainfall events in June, July and August with 8.6 inches of rainfall; two inches more than the average. With these events large amounts of debris including sediment flowed from the National Forest headwaters of the canyon washes into the foothills residential area and more intense development within the geologic floodplains of the desert basin floor. Since that time the District had focused attention on repairing damages including restoring channel capacity along the major watercourses and where damages were the most severe.

In addition to bank stabilization and sediment removal projects reflected in our CIP the debris flows, erosion and deposition associated with these floods as well as changes over time necessitated the restudy of numerous foothills floodplains. Furthermore a significant rainfall event in 2007 flooded homes along the Valley View Wash and highlighted the need for updated mapping and hydraulic studies. During FY 2011/12, District staff continued developing floodplain mapping studies needed in the following foothills washes:

- Pegler Wash
- Unnamed #12 in the River Road and Craycroft Area
- Tucson Mountains Unnamed #02 and #03

These studies, conducted in-house by District staff utilized approved local, state and federal methodologies to determine discharge rates and floodplains limits and have in most cases been used to submit Letters of Map Revision for approval by FEMA. These “Technical Data Notebooks” use better topographic, hydrologic and hydraulic data than was available when the original FEMA maps were created. Furthermore these studies identified specific infrastructure including culverts, dip sections and bridges which may restrict flow. Notices have been sent to every impacted property owner specifically explaining if their buildings or land has been determined to be within or not within the floodplain.

# 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**

On October 23, 2008, FEMA announced its intent to discontinue distribution of paper maps and initiate of the distribution of DFIRMs. In anticipation of this

announcement the District has been working with FEMA to create a digital GIS library that includes hyperlinks to all map change documents such as Letters of Map Revision, and Letters of Map Amendments. In fiscal year 2008/09, the District obtained digital map documents for all of the incorporated communities in Pima County that participate in the National Flood Insurance Program (NFIP). We also made available digital map products in the form of ESRI shape files or AutoCAD files to engineering companies to assist them in preparing map revision applications to FEMA. Conversion of the paper to DFIRMs facilitated comparison to recent aerial photography. This enabled District engineers and landowners to work together in submitting more accurate information for FEMA approval. In FY 09/10 we created a Mapguide comparison site so that property owners could look to see how the map changes would impact them. Stakeholder review of these maps continued throughout FY 10/11 and the DFIRMs became effective on June 16, 2011. During FY 2011/12 outreach was conducted to impacted residents, realtors and insurance agents. This included direct mailers, press releases and website applications.

This year these maps were fully operational within all county GIS systems and products.



# Riparian Habitat Protection

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 goal of recovering natural functions within riverine systems and establishing habitat for native wildlife. Two policies have been adopted by the County to direct these activities, the Regulated Riparian Habitat Mitigation Guidelines adopted in 2011, and the Water Element of the Pima County Comprehensive Plan.

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 incorporate the Ordinance revisions adopted in 2005.

In November 2011, Pima County Board of Supervisors unanimously approved the revised Regulated Riparian Habitat Mitigation Standards and Implementation Guidelines (Onsite Guidelines) and Regulated Riparian Habitat Offsite Mitigation Guidelines for Unincorporated Pima County (Offsite Guidelines). The adopted guidelines provide the regulated community with a variety of onsite and offsite options to mitigate impacts to riparian habitat, outline best management practices for the establishment and maintenance of mitigation areas and require long-term monitoring to allow for adaptive management, if needed. By providing the tools required to adequately mitigate impacts to riparian habitat, the guidelines strive to prevent loss of habitat in Pima County. The mitigation guidelines can be viewed at: [www.rfcd.pima.gov](http://www.rfcd.pima.gov).



*Examples of Xeroriparian Habitat*

# *Water Resources Protection*

The District implements Board of Supervisors Resolution 2008-72 and related requirements of the Comprehensive Plan Water Resources Element and Rezoning Site Analysis Requirements. This includes providing Water Supply Impact Reviews associated with Comprehensive Plan Amendments, Water Resource Impacts Assessments associated with Rezoning requests, and review of Preliminary integrated Water Management Plans submitted by rezoning applicants, and finally reviews of Final Integrated Water Management Plans associated with plats and development plans for which there has been a rezoning.

The Water Resources Division's (WRD) works to preserve, protect, and restore riparian ecosystems by designing, implementing, monitoring and managing riparian restoration projects, and providing stewardship for the lands owned by the District.

Our land stewardship efforts provide protection of natural resources on approximately 10,000 acres of lands throughout Pima County. The thousands of acres managed provides for species diversity, biological productivity, and ecological connectivity. These lands provide multiple benefits to people and the environment by protecting the natural functions of the floodplain that prevent erosion, protect water quality, attenuate flood flows, increase groundwater recharge, and provide wildlife with shelter and forage and movement corridors necessary to maintain their populations. Stewardship challenges include impacts from bank erosion, livestock grazing, invasive plant and animal species encroachment, off-road vehicle use, fencing, trash, and unauthorized uses stemming from surrounding urban areas.

During FY 2012/13 WRD began development of an In-Lieu Fee (ILF) program for Southern Arizona to provide compensatory mitigation for impacts to lands falling under jurisdiction of Section 404 of the Clean Water Act administered by the USACE. The primary goal of the proposed District sponsored ILF program is to provide a mechanism for local government to effectively mitigate for unavoidable losses to aquatic resources in the Santa Cruz Basin within a cohesive, integrated, locally-managed ILF Program. Mitigation activities under the ILF will include preservation, enhancement, and restoration. This office also oversaw construction of a new ecosystem restoration and erosion mitigation project located along the West Branch Santa Cruz River on formerly agricultural land located upstream of Silverlake Road. The project goals include erosion and headcut mitigation, protection of rare plant species, creation sustainable mesquite bosque vegetation, and creation of ephemeral toad breeding habitat. The project was constructed using District funds and labor partnerships with Department of Transportation, Stadium District and others. The Sherriff Department Inmate work crew was used for irrigation and container plant installation.

## *Community Rating System: Pima County a Top 6% 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.

While we recertify our rated activities each year FEMA utilizes auditors from the Insurance Services Organization (ISO) to verify our performance. During March of 2011 the District was audited by FEMA contractors to verify our performance. This audit includes preparation of documentation, and a "cycle verification visit" conducted by the ISO. For Class 5 communities these visits are conducted every five years and require extensive follow up submittals.

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 6% of all participating communities nationwide.

While the County's performance did not change other communities improved and therefore our percentage ranking decreased from the top 3% reported in fiscal year 2008/09.



# *Floodprone Land Acquisition Program*

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 2012/13 the District spent \$1,330,450.00 and added 1197.0546 acres of land to the FLAP inventory bringing the total of District-owned property to 12,764.8646 acres at a cost of \$71,223,202.44 since the program's inception.



# Completed Capital Improvements

| Number       | Name   | Date Completed | Cost                   |
|--------------|--|----------------|------------------------|
| CFC.5CDOPK   | FC - CDO River Park Thornydale to Magee                        | 06/28/2012     | \$3,966,982.12         |
| CFC.5CRLFR   | FC - SCR Continental Ranch Remediation                         | 07/27/2012     | \$795,661.15           |
| CFC.5UDSTU   | FC - City of South Tucson Urban Drainage                       | 10/30/2012     | \$1,521,282.04         |
| CFC.5LOSRLW  | FC - Los Reales Wash at SCR Channel Extension                  | 11/29/2012     | \$52,600.00            |
| CFC.5DAKOT   | FC - Dakota Wash Erosion Control                               | 12/21/2012     | \$ -                   |
| CFC.5CATET   | FC - Catalina Estate Drainage Way Improvements                 | 01/23/2013     | \$ -                   |
| CFC.5TMALL   | FC - Tucson Mall Linear Park                                   | 01/23/2013     | \$17,461.00            |
| CFC.5SCRLT   | FC - Lower SCR Levee at Tangerine Rd                           | 01/24/2013     | \$61,820.00            |
| CFC.5PWSTV   | FC - Pantano Wash Speedway to Tanque Verde                     | 02/05/2013     | \$6,228,868.01         |
| CFC.5JWKRP   | FC - Julian Wash Kolb Rd Pathway Underpass                     | 03/29/2013     | \$599,995.08           |
| CFC.5PWSS    | FC - Pantano Wash Watershed Study                              | 04/23/2013     | \$664,575.87           |
| CFC.5JUCON   | FC - Santa Cruz to Julian Connection                           | 06/22/2013     | \$175,597.00           |
| CFC.5SCRGF   | FC - SCR Grant Cmno del Cerro River Park Drainage Improvements | 06/30/2013     | \$4,117,828.20         |
| <b>Total</b> |  |                | <b>\$18,202,670.47</b> |



## *Pantano Wash Phase 2- Speedway to Tanque Verde Road*

Construction started November 2011 and was completed in February 2013. The project consists of the construction of 4,300 linear feet of new soil cement bank protection and paved river park pathways, landscaping, irrigation and a new underpasses at Tanque Verde Road and on the west bank at Speedway Boulevard. The project is located between on the Pantano Wash between Speedway Boulevard and Tanque Verde Road.

## *Canada del Oro River Park Thornydale to Magee*

This section of the Cañada del Oro Wash is bank protected from the Union Pacific Railroad on the south bank and from just west of Thornydale on the north bank to the Omni Tucson National Golf Resort. The project provided a river linear park between Thornydale Road and Magee Road plus a paved bike path connection to the Rillito River Park via Thornydale Road. It includes a paved pathway on both sides, landscaping, irrigation, and six pedestrian bridges. There are also underpass ramps at Thornydale and Ina Road, a parking node at Magee Road with ramadas and a restroom, a parking easement at Thornydale, as well as a reclaimed water irrigation system.



## *Santa Cruz River: Grant to Camino del Cerro*

Construction for this project has been extended to include installation of pedestrian bridges and paved pathway on the east bank from Grant Road to Camino del Cerro.



# FINANCIAL OVERVIEW

## Flood Control District Tax Levy Rate 1981 to 2012

| 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 |
| 2009.....          | 0.2935..... | \$25,145,000 |
| 2010.....          | 0.2635..... | \$23,142,303 |
| 2011.....          | 0.2635..... | \$22,220,943 |
| 2012.....          | 0.2635..... | \$20,256,258 |
| 2013.....          | 0.2635..... | \$19,111,261 |

## 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 2012/13. 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.



Pantano Crumble

# FINANCIAL HIGHLIGHTS

## Fiscal Year 2012/2013

### Revenues

The primary source of revenue is the District's secondary property tax levy of \$0.2635 per \$100 of real property assessed valuation (this rate was the same in FY2000/10). In 2012/13, the District received approximately \$19,111,261 in tax levy revenue reflecting declining property values. Other minor sources of revenue include interest, rent and reimbursements. The total revenue from all sources in FY2012/13 was over \$19,497,564.

#### Revenues FY 12/13

|                       |                     |               |
|-----------------------|---------------------|---------------|
| Property Tax          | \$19,111,261        | 98%           |
| Federal Participation | \$-                 | 0.0%          |
| State Participation   | \$-                 | 0.0%          |
| General Gov't         | \$164,673           | 0.8%          |
| Interest Income       | \$126,105           | 0.6%          |
| Rents & Royalties     | \$56,490            | 0.2%          |
| Misc.                 | \$39,035            | 0.1%          |
| Bond Proceeds         | \$-                 | 0%            |
|                       | <b>\$19,497,564</b> | <b>100.0%</b> |

### Expenditures

The total expenditures for the District in FY 2012/2013 were over \$35 million. The Capital Improvement Program expenditures of over \$12 million were direct capital expenses. The annual operating budget for the District was approximately \$11 million. The other significant expenditure was \$49,536 for our contribution to the Pima Association of Governments.

### Expenditures FY 12/13

|                        |                     |               |
|------------------------|---------------------|---------------|
| Capital Improvements   | \$12,097,821        | 52.1%         |
| Operating Budget       | \$11,063,251        | 47.5%         |
| PAG                    | \$30,266.00         | 0.1%          |
| PimaCore/Debt Services | \$-                 | 0.2%          |
|                        | <b>\$23,240,874</b> | <b>100.0%</b> |

### Breakdown of Expenditures

#### Capital Improvements

The expenditures for capital improvements include engineering service costs for planning and design; construction costs; right-of-way acquisition and utility costs; and other costs such as preparing new FEMA Flood Insurance Rate Maps once a capital project is completed.

#### CIP Expenditures FY 11/12

|              |                        |               |
|--------------|------------------------|---------------|
| Right of Way | \$6,381,561            | 52.7%         |
| Planning     | \$787,327              | 6.5%          |
| Design       | \$1,424,813            | 11.8%         |
| Construction | \$3,233,273            | 26.7%         |
| Utility      | \$21,183               | .2%           |
| Public Art   | \$249,664              | 2.1%          |
|              | <b>\$11,121,058.00</b> | <b>100.0%</b> |

### Operating Budget

The Districts 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.

# 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)



**Pima County Regional Flood Control District**  
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