Annual Report
Fiscal Year 2008-2009

Celebrating 50 Years of Flood Protection and Service to Maricopa County

The Flood Control District of Maricopa County has been devoted to protecting county residents from flooding hazards since its creation by the county's Board of Supervisors on August 3, 1959. The District was born in response to decades of flooding which plagued county residents in the early 20th century. Stormwater runoff overtopped the banks of rivers and washes, causing damage to agricultural land, homes, businesses and critical infrastructure. By the mid-1950s, community leaders and concerned citizens began lobbying for organized protection from this flooding. In March 1959, the Arizona Senate passed a bill authorizing the formation of special flood control districts in the county. When the District was established later that year, just a handful of employees served approximately 600,000 residents of the county. Today, nearly 200 employees provide flood control identification, remediation, regulation and education to 3.5 million citizens.

An original, commissioned painting depicting the damaged Tempe-Phoenix railroad bridge during the Salt River flood of February 1891.
Artist: Loretta Musgrave, 2009
Original Photo: Courtesy of Arizona State University Library Archives and Special Collections

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Board of Directors

Per Arizona Revised Statute 48-3602, the Flood Control District is governed by a five-member Board of Directors that also serves as the Board of Supervisors for Maricopa County. The Board of Directors exercises all the powers and duties as ordinarily exercised by governing bodies in the acquisition and operation of property, contracting, and regulatory functions. Board members elect a new chairman each year:

- Max Wilson, Chairman, District 4
- Fulton Brock, District 1
- Don Stapley, District 2
- Andrew Kunasek, District 3
- Mary Rose Wilcox, District 5

Flood Control Advisory Board

The Flood Control Advisory Board (FCAB) advises to the Board of Directors on flood control, floodplain management, drainage and related matters. The FCAB reviews the District's planning studies, projects and operations/maintenance activities, and recommends to the Board of Directors an annual budget, including the five-year Capital Improvement Program (CIP).

The FCAB consists of seven members. Five of the seven members are appointed by the Board of Directors for five-year terms. The final two members are ex officio representatives from Salt River Project and the City of Phoenix. FCAB members also serve the District as members of the Floodplain Review Board and Board of Hearing Review.

- Hemant Patel, Chairman, District 3
- Kent Cooper, Vice Chairman, District 2
- Scott Ward, Secretary, District 1
- DeWayne Justice, District 4
- Melvin Martin, District 5
- Wylie Bearup, Ex Officio, City of Phoenix
- Paul Cherrington, Ex Officio, Salt River Project

Engineering

Over the past 50 years, the responsibilities of the Engineering Division have evolved with the District's operations and strategic goals. Staff members are currently responsible for computer-aided design and drafting (CADD), floodplain mapping and surveying, hydrology and hydraulics (quantity, depth and flow of stormwater), regulation of construction materials, water quality management, sand & gravel mining inspections, and the operation of flood warning/weather data collection gages throughout Maricopa County.

From 1959 through the 1980s, the District was the local sponsor of federal flood control projects constructed by the U.S. Army Corps of Engineers and U.S. Soil Conservation Service. During this period the Engineering Division staff ensured these federal dams and channels satisfied technical design requirements.

In 1980, on the heels of a string of severe flooding events in Maricopa County, the Engineering Division built a countywide network of 24-hour rain, stream and weather gages which provides real-time information about rainfall, weather conditions and potential flooding to the District, National Weather Service, municipalities and other agencies.

By the 1990s, the federal government was no longer constructing flood control structures in Maricopa County. At the same time, the District shifted its emphasis to non-structural approaches to solving flooding hazards. Engineering staff engaged in mapping and delineating floodplains in advance of future development through the formulation of survey and hydrologic data.

In sum, the Engineering Division has its hands on virtually every District flood control project and plays a direct role in protecting every Maricopa County citizen from flooding hazards.

Planning and Project Management

Fifty years ago, in the infancy of the Flood Control District of Maricopa County, there wasn't even a glimmer in the eye of the District for a Planning and Project Management (PPM) Division. The evolution of the PPM Division as we know it today occurred over the past 10 to 25 years, gradually bringing together the five distinct branches in operation today: Planning, Project Management, Capital Improvement Program (CIP) Policy, Construction Management, and Structures Management.

Twenty-five years ago, most projects undertaken by that part of the District organization that would become the PPM Division primarily included federal projects with the District as the local sponsor. These projects included Indian Bend Wash and the "Phoenix and Vicinity including New River" mega projects featuring four dams and the Arizona Canal Diversion Channel (ACDC) project. As the local sponsor, the District acquired rights-of-way and relocated or constructed new infrastructure improvements in support of the federal projects.

Today we participate in very few federal projects, focusing our efforts primarily on local projects, working with our local agency and municipal customers, generally with the District serving as the lead agency. As recently as 25 years ago, the District's CIP was funded through revenues generated by a 50-cent tax rate. Today the District implements the CIP, primarily relying on the efforts of the PPM Division, through numerous design and construction projects each fiscal year with an approximately $60 million CIP budget funded by a tax rate of only 14 cents. Capital projects and the evolution and involvement of the PPM Division have come a long way in 50 years.

Fifty-Year History of Maricopa County's MAJOR FLOOD DAMAGE

August 1963 **$2.9 million**

1963—A severe storm causes water to breach the Grand Canal, leading to flooding in Glendale and the Maryvale neighborhood of Phoenix. This dog takes refuge on the hood of a Corvette at 70th Avenue and Campbell Avenue.

Winter 1965-1966 **$6 million**
September 1970 **$590,000**

1970—The remnants of Tropical Storm Norma causes significant rainfall and 23 flood-related deaths during Labor Day weekend. Here is the view at 48th Street and Van Buren Street in Phoenix.

June 1972 **$10.6 million**
March 1978 **$37 million**
December 1978 **$51.8 million**
February 1980 **$63.7 million**
January 1993 **$38 million**
February 2005 **$6.5 million**

2005—The governor declares a state of emergency in the Town of Wickenburg after rainfall exceeding 1.5 inches per hour falls during Feb. 11 and 12. The Hassayampa River erodes its banks near the town, washing away two mobile homes and two vehicles. The Sheriff's Office rescues 21 individuals in 11 separate floodwater incidents.

Operations and Maintenance

A little more than 30 years ago, the Operations & Maintenance (O&M) Branch of the Construction and Operations Division boasted six employees, four trucks, one concrete mixer, one 400-gallon water tank, one water pump and one chain saw. Today, a more sophisticated level of effort is required to maintain the District's flood control structures and facilities.

In the 1980s, the O&M Branch split its maintenance crews into separate yards in the West and Southeast Valley to reduce travel time between maintenance jobs. Additional savings were realized by establishing a four-day work week. New flood control projects brought new challenges. The addition of 60,000 landscape plants along Reach 1 of the Arizona Canal Diversion Channel (ACDC) in 1989 signaled a significant change in maintenance duties as O&M crews began learning tree and irrigation maintenance techniques.

By 1991, the O&M Branch had 92 employees maintaining 56 flood control facilities including 21 dams. The North Yard maintenance facility opened in 1992. Two years later a second satellite yard was added in the East Valley. By 1994, a Work Control Center was created to coordinate inspections, schedule work, track maintenance costs and manage resources for 65 structures, 95 full-time employees and an $8 million budget. In 1997 the Construction and Operations Division was reorganized to become the new Operations and Maintenance Division.

Today, the O&M Division has 57 employees maintaining both aging infrastructure and new projects, including multi-use projects which offer recreational opportunities and wildlife habitat preservation. The Division focuses on educating its employees to comply with a multitude of strict environmental regulations, including air quality, water quality and habitat management.

Floodplain Management and Services

Over the past 35 years, floodplain management and regulation has played an increasingly important role in the successful accomplishment of the Flood Control District's mission.

1974: The first Floodplain Regulations for the Unincorporated Area of Maricopa County were adopted.

1979: The Maricopa County Board of Directors adopted the first Flood Insurance Rate Maps for the District.

1983: Drainage review functions were transferred to the District.

1990: The District formally applied for participation in the National Flood Insurance Program's Community Rating System program (CRS), managed by the Federal Emergency Management Agency (FEMA).

1994: The Regulatory Division was born.

1999: Maricopa County's One Stop Shop opened for development permitting. In 2005, District employees at the One Stop Shop contracted with the county's Planning and Development Department to process drainage permits.

2004: Drainage review functions were transferred back to the county's Planning and Development Department.

2006: Revisions to the Floodplain Regulations for Maricopa County and new fee schedule were adopted by the Board of Supervisors.

2008: The District received a CRS program Class 5 rating for unincorporated Maricopa County. This rating reduces flood insurance rates for residents in the unincorporated county. Only 50 communities in the nation have a Class 5 rating or better.

2007-2010: The Regulatory Division name changed to Floodplain Management & Services Division.

2009 Financial Highlights

Preliminary and Unaudited

Revenue Collection Status

	Full Year Revised Budget	Collections Full Year	Collections Remaining
Property Taxes	$74,096,526	$72,672,487	$1,424,039
Licenses & Permits	746,000	4,311,552	(3,565,552)
Partnership Reimbursements	–	51,729	(51,729)
Payments in Lieu	133,384	132,102	1,282
Interest Earnings	900,000	1,377,433	(477,433)
Miscellaneous Revenue	7,609,868	26,903,923	(19,294,055)
	$83,485,778	**$105,449,226**	**$(21,963,448)**

Operating Budget – Financial Comparative

	Full Year Budget	Full Year Actual	Funds Remaining
Net Payroll	$14,737,201	$14,985,839	$(248,638)
Net Supplies	2,228,541	1,412,517	816,024
Net Services	15,906,363	12,830,735	3,075,628
Net Capital	1,559,217	1,149,433	409,784
Intergovernmental Payments	1,530,966	2,889,910	(1,358,944)
	$35,962,288	**$33,268,435**	**$2,693,853**

Capital Improvement Program

	Full Year Budget	Full Year Actual	Funds Remaining
Force Account Payroll	$2,695,969	$2,152,288	$543,681
Land Acquisition	8,357,000	4,901,078	3,455,922
Construction	48,947,031	47,212,331	1,734,700
	$60,000,000	**$54,265,697**	**$5,734,303**

Fund Balance Reserves

	Operating Fund	CIP Fund	Total Fund Reserve
Beginning Fund Balance	$16,152,622	$23,950,675	$40,103,297
Total Revenue Collected	105,449,226	11,889,325	117,338,551
Less Expenses	(33,268,435)	(54,265,697)	(87,534,132)
Transfer Out/In	(44,709,458)	44,709,458	0
	$43,623,955	**$26,283,761**	**$69,907,716**