

034 - WATERSHED & COASTAL RESOURCES DIVISION

Operational Summary

Description:

RDMD created this function in 2000 to provide regional leadership and coordination of public agencies engaged in water quality and watershed protection efforts. Its mission is to preserve, protect, and enhance coastal resources and surface waters throughout Orange County. The function serves as the lead agency for all 34 cities in Orange County and the Orange County Flood Control District in complying with the countywide municipal stormwater program and water quality regulations specific to various watersheds within the

County. In addition to federal and state mandates, greater public awareness and environmental activism has created a new level of expectation on local government to address water quality and watershed protection issues. Pollutants degrade surface waters making them less able to support drinking water supply, fishing, swimming, and other activities. State and federal water quality regulations are unfunded mandates on local government.

At a Glance:

Total FY 2006-2007 Actual Expenditure + Encumbrance:	16,662,805
Total Final FY 2007-2008	25,244,842
Percent of County General Fund:	0.831418%
Total Employees:	45.00

Strategic Goals:

- Provide leadership to County agencies/departments, cities, other agencies, and the public on protecting the beneficial uses of surface waters throughout Orange County. Implement best management practices, strategic outreach, and public education activities within Orange County. Comply with and enforce water quality laws and regulations that support the County's #1 Strategic Priority.

Key Outcome Indicators:

Performance Measure	2006 Business Plan	2007 Business Plan	How are we doing?
	Results	Target	
PERCENTAGE OF TIME BEACHES IN ORANGE COUNTY MEET STATE WATER QUALITY STANDARDS DEFINED BY AB 411 What: Beaches with higher counts of bacterial indicators by law must be posted to warn the public. Why: Indicates level achieved in protecting human health at local beaches & Clean Water Act.	AB 411 reporting period (April to October 2006): 99.0%; calendar year 2006: 98.5%.	AB 411 reporting period: 99.2%; calendar year 2007: 99%.	Experiencing slight improvement each year.
NUMBER OF ENFORCEMENT ACTIONS. What: Regional Board's enforcement actions against cities, County or OC Flood Control District. Why: Indicates levels achieved in preserving, protecting, and enhancing surface waters in the County.	No Notices of Violation issued to municipal stormwater program permittees.	No Notices of Violation issued to municipal stormwater program permittees.	Excellent.



Key Outcome Indicators: (Continued)

Performance Measure	2006 Business Plan	2007 Business Plan	How are we doing?
	Results	Target	
CUSTOMER SATISFACTION RATINGS FOR MUNICIPAL STORMWATER PROGRAM. What: Survey on 28 aspects of our role as lead permittee managing the countywide stormwater program. Why: Indicates partners' satisfaction with various aspects of County administration of regional program.	Biennial survey in 2006 with overall rating of 3.9 on 5-point scale.	Satisfaction rating of 4.2 on 5-point scale.	Well.

FY 2006-07 Key Project Accomplishments:

- Orange County Stormwater Program: 2006 was the last year of the current five-year stormwater permits issued to the County, the Orange County Flood Control District, and all 34 cities. Over the past five years, substantial revisions were made to the program in order to meet the requirements of the NPDES permits issued in 2002. Significant new components of the program included 34 Local Implementation Plans, a formal training program, a program effectiveness assessment, and seven Watershed Action Plans. Two highly interdependent planning processes were developed targeting the control of pollutants in urban runoff and studies were completed to evaluate the effectiveness and applicability of various source control and treatment control Best Management Practices. A Model Municipal Activities program was developed and implemented for 2,055 municipal facilities; new Model Integrated Pest Management Guidelines reduced municipal fertilizer and pesticide use; and a performance reporting program confirmed the increased effectiveness of street sweeping and trash and debris collection practices.
- The public education program provides substantial outreach efforts, produces measurable and positive changes in public awareness and behavior over the three-year period of the public education program. Over 558 Water Quality Management Plans were reviewed and approved for new development and redevelopment. Some 1,305 enforcement actions were taken against construction projects found to be violating water quality regulations. Over 30,000 commercial and industrial facilities have been subject to review for water quality regulations, uncovering 2,158 violations for which enforcement actions were taken.
- South Orange County Integrated Regional Water Management Plan (IRWMP): Watershed and Coastal Resources successfully lead the effort to write an IRWMP for south Orange County, garnering a grant of \$25 million. The IRWMP group of 23 partners includes the County of Orange and the 22 cities and special districts serving the water and wastewater needs of the southerly watersheds of the County. The \$25 million will partially fund the seven highest priority water resource projects from the IRWMP, one of which is the County-led Aliso Creek Water Quality SUPER (Stabilization, Utility Protection & Environmental Restoration) Project. This implementation project, identified in the Aliso Creek Watershed Management Study, is the result of more than ten years of partnering with the U.S. Army Corps of Engineers and stakeholders.
- Munger Drain Sand Filter: This project was built as a demonstration project to evaluate the potential of sand filter technology in the removal of bacteria from urban runoff, and its corresponding protection of water quality in Aliso Creek. System construction was completed in September 2006 and is now operational.
- Newport Bay Urban Nutrient Special Investigations: The Newport Bay Urban Nutrient Project completed three special investigations that would provide guidance for implementing the Newport Bay Nutrient Total Maximum Daily Load (TMDL) regulations: 1) a characterization of the nature and magnitude of nutrient loading from watershed urban runoff; 2) a performance evaluation of a vegetated wetland channel for nutrient removal; and 3) outreach and education of independent gardeners on responsible landscape fertilization practices in the watershed.



- **Beach Water Quality Improvement Projects:** Two projects were implemented to improve beach water quality at Baby Beach in Dana Point Harbor. Dry weather runoff into the storm drain was diverted to the local sanitary sewer plant for treatment and the fencing was installed on the pier to prevent birds roosting. A bacteria source tracking investigation was completed for Poche Beach in 2006. Results pinpointed several drainage pipes entering the main flood control channel that accounted for over 90 percent of the total bacterial load entering Poche Beach.
- **Upper Newport Bay Ecosystem Restoration Project:** Phase I of this project began construction. The State of California awarded a \$12.5 million grant for the local cost share. Additional federal funds need to be allocated by Congress to complete construction. Approximately 2.3 million cubic yards of sediment will be dredged, helping to meet sediment TMDL requirements as well as improving ecosystem functions in Newport Bay.

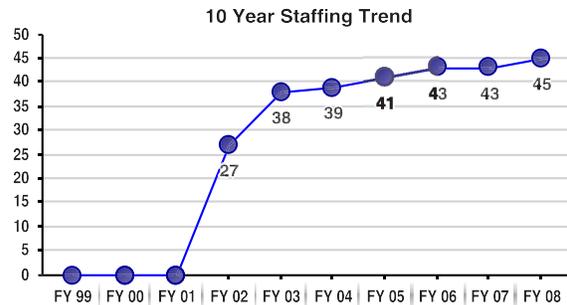
Watershed & Coastal Resources - Countywide Municipal Stormwater Program: Coordinate regional compliance with the National Pollutant Discharge Elimination System (NPDES) program. The County, serving as the lead permittee for the 36 municipal stormwater co-permittees, will conduct countywide water quality monitoring of creeks, channels, bays, and harbors; inspect illegal connections; and conduct water pollution investigations and spill abatement. The County will also coordinate an Internal Stormwater Quality Program with the various County agencies and departments to ensure the County's own compliance, including conditioning all new development with water quality protection requirements.

Total Maximum Daily Load (TMDL) Program: These regulations are adopted by state and federal agencies to address water quality impairments in specific watersheds. TMDLs adopted to date include sediment, nutrient, and fecal coliform reductions in the Newport Bay watershed. An additional TMDL for toxics has been approved by the U.S. Environmental Protection Agency with implementation plans to be developed by the Santa Ana Regional Water Quality Control Board. The San Diego Regional Water Quality Control Board will soon adopt a bacteria TMDL for all south Orange County watersheds.

Technical support to County agencies and departments: Includes operation of the Countywide Hydrologic and Meteorological Data Collection System, an automated flood detection system that employs a network of over 100 rainfall, flood channel, and reservoir water-level sensors located throughout Orange County. Watershed & Coastal Resources also conducts hazardous materials investigations on behalf of all agencies and departments as well as other environmental and technical services as required.

Planning & Engineering Section: Focuses on watershed and water quality activities with interested stakeholders on a broad watershed basis. In FY 2007-08, this section will complete implementation of Watershed Management Areas, with integrated water resource plans developed for each, and begin project implementation. Coastal engineering provides technical engineering services on near-shore oceanography, marine geology, and civil engineering for in-house projects and for RDMD-Harbors Beaches & Parks. Activities include regional sand management, safe harbor navigation, coastal water quality, and shoreline protection and preservation.

Ten Year Staffing Trend:



Ten Year Staffing Trend Highlights:

- Although the Watershed & Coastal Resources Function was created in 2000, Fund-Agency 100-034 was not created until 2001. Fiscal Year 2007-2008 will be the seventh full budget year for this fund. Two positions were added for FY 2007-08 to bring the total position count to 45.



Budget Summary

Plan for Support of the County's Strategic Priorities:

Water Quality and Watershed Protection was ranked as the #1 funding priority in the 2006 Strategic Financial Plan. Some 80% of our budget is offset by revenues from cost-sharing agreements, grants, and charges for services. The remaining 20% represents the County's share of the program costs, totaling \$4.7 million for FY 2007-08. Since Fund 100-034 was created, however, General Fund appropriations have been supplemented by operating transfers from the Orange County Flood Control District to cover the County's share of

program costs. As a result of the 2006 Strategic Financial Plan, an additional \$1.3 million in net cost was approved to reduce the operating transfer from Orange County Flood Control District by \$1.3 million for FY 2007-08 through FY 2016-17.

Changes Included in the Base Budget:

Addition of \$1 million in appropriations to begin engineering design for the Aliso Creek SUPER Project; fully offset by grant revenues. Addition of \$100,000 for the SUPER Project Environmental Impact Report; funded by General Fund. Contributions to Others (U.S. Army Corps of Engineers) will decrease from \$7 million to \$4.2 million from the prior year based on Corps' schedule for construction; fully offset by grant revenues.

Approved Budget Augmentations and Related Performance Results:

Unit Amount	Description	Performance Plan	BRASS Ser.
Add 1 Limited Term (3 years) Environmental Engineering Specialist for Nitrogen & Selenium Program Amount:\$ 66,730	Working Group requested that a County of Orange position be created to oversee this project.	Compliance with the order specified by the SARWQCB will serve as the performance measure.	1995
Add 1 Environmental Resources Specialist III Position for Bacteria Total Max Daily Load Compliance Amount:\$ 57,276	Position to assist with TMDL reports, compliance and monitoring programs for all South County area.	Compliance with requirements specified by the SDRWQCB will serve as the performance measure.	1997
Increase Net County Cost Funding Amount:\$ 0	An additional \$750,000 of General Fund appropriations is requested for FY 2007-08.	Meet Federal/State water quality mandates.	1998
Increase Net County Cost for Serrano Creek Feasibility Study Amount:\$ 500,000	Provide appropriations for the Serrano Creek Feasibility Study.	Develop scope of work for the Feasibility Study then develop funding agreement by 2008.	2734
Increase Net County Cost for Poche Beach Ultraviolet Light Bacteria Disinfection System Amount:\$ 550,000	Reduce major source of bacteria runoff entering Poche Beach.	Reduce high levels of bacterial concentrations from flood control channel and Poche Beach.	2976

Final Budget History:

Sources and Uses	FY 2005-2006		FY 2006-2007		FY 2006-2007		Change from FY 2006-2007		
	Actual	Exp/Rev	Budget	As of 6/30/07	Actual Exp/Rev ⁽¹⁾	As of 6/30/07	FY 2007-2008 Final Budget	Actual Amount	Percent
Total Positions		43	43	43	43	43	45	2	4.65
Total Revenues	10,849,600		19,059,455		13,066,718		21,939,217	8,872,499	67.90
Total Requirements	14,907,580		22,351,363		16,540,014		25,244,842	8,704,828	52.63
Net County Cost	4,057,980		3,291,908		3,473,296		3,305,625	(167,671)	-4.83

(1) Amounts include prior year expenditure and exclude current year encumbrance. Therefore, the totals listed above may not match Total FY 2006-07 Actual Expenditure + Encumbrance included in the "At a Glance" section.

Detailed budget by expense category and by activity is presented for agency: Watershed & Coastal Resources Division in the Appendix on page A47



Highlights of Key Trends:

- Municipal stormwater permits are issued jointly to the County, Orange County Flood Control District, and 34 cities by the Santa Ana and San Diego Regional Water Quality Control Boards every five years. The current permits expire in 2007 and new permits will be issued. The regulations define these renewal cycles as the opportunity to review current water quality conditions and municipalities' stormwater programs in order to improve and refine the programs in each new permit. Although it is too early to project what cost increases might result, each permit cycle has substantially increased the requirements and costs of compliance.
- The U.S. Environmental Protection Agency in conjunction with state government, via the Regional Water Quality Control Boards, assesses water bodies for water quality impairments every two years. For each impaired water body, a Total Maximum Daily Load (TMDL) regulation will be developed to correct the impairment. In 2006, the number of water quality impairments increased from 44 to 77. There are currently four adopted TMDLs in Orange County. A new TMDL for bacteria in south Orange County watersheds will be adopted in May 2007, necessitating an additional Environmental Resource Specialist position in FY 2007-08 to manage the compliance program and cost-sharing agreement. TMDLs for the remaining impairments are scheduled by the Regional Boards for development over the next 13 years.
- In January 2007 the State Department of Water Resources awarded a Proposition 50 block grant of \$25 million for seven projects in the San Juan Hydrologic Unit Integrated Regional Water Management Plan. The County of Orange will serve as the grant administrator to six cities and special districts in addition to one project of our own. Two percent of the block grant will cover administrative expenses. The Department of Water Resources and the State Water Resources Control Board plan to issue more block grants to regional entities as funding becomes available from voter-approved bond measures.
- Watershed Management Areas were recommended in the water quality strategic plan as endorsed by the Board of Supervisors as a mechanism for increasing cost-sharing opportunities. Initial planning and cooperative agreements were begun in FY 2006-07 but most implementation will be completed in FY 2007-08. WMAs will serve as the mechanism for development of additional IRWMPs, increasing eligibility of Orange County projects for state grants, and steering the use of Measure M Environmental Cleanup Funds while avoiding inter-agency conflicts.

034 - Watershed & Coastal Resources Division

Summary of Final Budget by Revenue and Expense Category:

Revenues/Appropriations	FY 2005-2006	FY 2006-2007	FY 2006-2007	FY 2007-2008	Change from FY 2006-2007	
	Actual Exp/Rev	Budget As of 6/30/07	Actual Exp/Rev ⁽¹⁾ As of 6/30/07	Final Budget	Actual Amount	Percent
Revenue from Use of Money and Property	\$ 2,767	\$ 0	\$ 0	\$ 0	\$ 0	0.00%
Intergovernmental Revenues	6,920,285	13,734,036	9,905,760	16,048,563	6,142,803	62.01
Charges For Services	3,288,410	3,895,292	3,130,249	4,420,914	1,290,665	41.23
Miscellaneous Revenues	140	0	6,644	0	(6,644)	-100.00
Other Financing Sources	637,999	1,430,127	24,065	1,469,740	1,445,675	6,007.49
Total Revenues	10,849,600	19,059,455	13,066,718	21,939,217	8,872,499	67.90
Salaries & Benefits	3,370,931	3,772,477	3,404,258	4,113,767	709,509	20.84
Services & Supplies	10,598,952	17,267,720	12,721,651	18,325,021	5,603,370	44.05
Other Charges	747,341	950,166	392,638	457,054	64,416	16.41
Fixed Assets	192,176	361,000	21,835	2,349,000	2,327,165	10,657.89
Intrafund Transfers	(1,818)	0	(368)	0	368	-100.00
Total Requirements	14,907,580	22,351,363	16,540,014	25,244,842	8,704,828	52.63
Net County Cost	\$ 4,057,980	\$ 3,291,908	\$ 3,473,296	\$ 3,305,625	\$ (167,671)	-4.83%

(1) Amounts include prior year expenditure and exclude current year encumbrance. Therefore, the totals listed above may not match Total FY 2006-07 Actual Expenditure + Encumbrance included in the "At a Glance" section.