

C-2.0 PROGRAM MANAGEMENT

C-2.1 Introduction

At the inception of the Orange County Stormwater Program, the Permittees in both Regional Board areas agreed that the County of Orange would be the Principal Permittee and the cities and the Orange County Flood Control District would be Co-Permittees on the permit (all parties are now collectively referred to as Permittees). Principal Permittee and Permittee responsibilities are specified in the Third Term Permits and reiterated in the NPDES Stormwater Permit Implementation Agreement (referred to as Implementation Agreement) which additionally provides a funding mechanism for the shared costs of the Program. To further support the development and implementation of a coordinated countywide program, a management framework was created during the First Permit Term. This framework has evolved into a four tier structure (Permittees, City Managers' Committee, Technical Advisory Committee and Program Committees/Task Forces) with the adoption of the Third Term Permits as described in **Section C-2.3**.

C-2.2 Permittee Responsibilities

C-2.2.1 NPDES Permit Responsibilities

The respective responsibilities of the Principal Permittee and the Permittees are defined within the Third Term Permits and the Implementation Agreement or as otherwise identified within separate funding agreements.

Principal Permittee

The role of the Principal Permittee is the same as the other Permittees with the addition of certain overall programmatic and management responsibilities. These responsibilities include the following:

- Initiating, developing and coordinating any area-wide programs and activities necessary to comply with the Third Term Permits;
- Developing and implementing mechanisms, performance standards, etc., to promote uniform and consistent implementation of BMPs among the Permittees;
- Monitoring the implementation of the plans and programs required by the Permits and determining their effectiveness in protecting beneficial uses;
- Providing administrative and technical support and informing the Permittees and the Technical Advisory Committee (TAC) of the progress of other pertinent municipal programs, pilot projects, research studies, etc.;
- Representing the NPDES Stormwater Program before appropriate agencies;
- Developing and executing inter-governmental agreements necessary for program implementation;
- Conducting chemical, biological and toxicological water quality monitoring;
- Cooperating in watershed management programs and regional and/or statewide monitoring;

SECTION C2, PROGRAM MANAGEMENT

- Preparing and submitting unified reports, plans and programs as required by the Third Term Permits including the Unified Annual Progress/Program Effectiveness Assessment Report;
- Developing budgets and fiscal analyses; and
- Coordinating the program with affected local government agencies.

The Principal Permittee has no regulatory authority over the Permittees.

Permittees

Each Permittee is responsible for implementing the NPDES Stormwater Program within its jurisdiction. The main responsibility of each Permittee includes:

- Reviewing, approving and commenting on budgets, plans, strategies, management programs and monitoring programs developed by the Principal Permittee or any sub-committee;
- Implementing the various stormwater management programs as outlined in the Permit and the DAMP within its jurisdiction;
- Establishing and maintaining adequate legal authority;
- Coordinating among internal departments and agencies, as appropriate, to facilitate the implementation of the Third Term Permits and the DAMP;
- Responding to/or arranging for response to emergency situations, such as accidental spills, leaks, illegal discharges/illicit connections, etc., to prevent or reduce the discharge of pollutants to the storm drain systems and waters of the U.S. within its jurisdiction;
- Conducting inspections of and performing maintenance on the infrastructure within its jurisdiction;
- Taking appropriate enforcement actions as necessary within its jurisdictions to ensure compliance with applicable ordinances;
- Conducting and coordinating any surveys and source identification studies necessary to identify pollutant sources and drainage areas;
- Participating in the General Permittee Committee meetings and any sub-committee meetings as necessary; and
- Preparing and submitting all reports or requests for information to the Principal Permittee in a timely fashion.

C-2.2.2 Agreement for Program Implementation

The agreement supporting County and city cooperation is the Implementation Agreement which established the responsibilities of the Permittees with respect to compliance with the Third Term Permits. The Implementation Agreement also establishes a funding mechanism for the shared costs of the Orange County Stormwater Program based on each municipality's area and resident population and includes a provision that allows newly incorporated cities to become additional parties to the Implementation Agreement.

SECTION C2, PROGRAM MANAGEMENT

This Implementation Agreement, originally entered into in December of 1990, was amended in October of 1993 to include two additional Permittees (Laguna Hills and Lake Forest) and formally establish the TAC. The Implementation Agreement was amended again and fully restated, effective June 25, 2002, to include three additional Permittees (Aliso Viejo, Laguna Woods and Rancho Santa Margarita) and to incorporate modifications to the management structure and cost-sharing formulas.

No changes were made to the Implementation Agreement in the 2004-05 reporting period. However, it was recognized that a further amendment may be required to address land areas being converted from military use to urban development.

C-2.2.3 NPDES Permit Reporting Requirements

All NPDES submittals are produced under the auspices of the Permittee Committees and the TAC before submission to the Regional Boards.

C-2.3 Management Activities

C-2.3.1 Management Framework

The USEPA defines a management framework as *a lasting process for partners working together. It's a support structure making it easier to coordinate efforts – a structure made of agreed upon standard operating procedures, timelines and for communicating with each other* (USEPA, 2002). In response to the Third Term Permit requirements, the Permittees established a four tier management framework in early 2002 to direct the development of the Orange County Stormwater Program (**Figure C-2.1**). This framework was retained in 2004-05 with the addition of a new Task Force and an Ad Hoc Group, and currently comprises:

City Manager's Water Quality Committee

The City Manager's Water Quality Committee provides budget and overall program review and governance direction. The Committee is comprised of several City Managers and is attended by County staff.

City Engineer's Technical Advisory Committee (TAC)

The TAC serves in a program advisory role and provides policy direction for the program budget, development and implementation. It is comprised of one City Engineer, or selected representative, from each of the County Supervisor Districts and a representative from the County of Orange. One responsibility of the TAC is to determine the need to create internal committees and task forces. Task forces are characterized by Permittee and business / non-governmental organization participation and are convened to bring a partnership approach to issues that would benefit from being addressed collaboratively, such as trash and debris.

SECTION C2, PROGRAM MANAGEMENT

General Permittee Committee

The General Permittee Committee is the principal forum for disseminating information for program coordinators. Participation in the General Permittee Committee is a specific requirement of the Santa Ana Regional Board Third Term Permit.

Permittee participation in the General Permittee Committee is noted in **Figure C-2.2**.

Headline Indicator – Participation in General Permittee Committee: *In 2004-05, thirty four (34) out of thirty five (35) Permittees reported 80% or higher participation in the General Permittee Committee compared to thirty two (32) Permittees reporting 80% or higher participation in 2003-04.*

Task Forces/ Sub-Committees

The *Task Forces/ Sub-Committees* which were active in 2004-05, are:

- Trash and Debris Task Force

Purpose: To foster and sustain partnership approaches to dealing with trash and debris in stormwater and urban runoff with the goal of ensuring that such materials do not become the basis for a formal designation of coastal beneficial use impairment. Progress of the Trash and Debris Task Force for this reporting period is noted in **C-2.4.2**.

- Data and Information Management Sub-Committee

Purpose: To oversee the development and implementation of information technology solutions to program data management and reporting requirements.

- Legal/Regulatory Authority Task Force

Purpose: To review the legal authorities that the Permittees have in complying with the permit requirements and recommend changes as needed and to track stormwater related litigation that may affect the Orange County Stormwater Program.

- LIP/PEA Sub-Committee

Purpose: To provide oversight and technical direction to the management of core DAMP/LIP programs, including, Municipal Activities; New Development/Significant Redevelopment; Construction; Existing Development; and Illegal Discharges/Illicit Connections (ID/IC).

SECTION C2, PROGRAM MANAGEMENT

- Public Education Sub-Committee

Purpose: To help provide regional consistency and oversight for the stormwater public education program efforts.

- Inspection Sub-Committee

Purpose: To provide a forum for the coordination, investigation, enforcement and training aspects of the existing development inspection program and ID/IC programs.

- Water Quality Sub-Committee

Purpose: To provide oversight and technical input for the revision of the water quality monitoring programs, ongoing water quality data evaluation, and special water quality investigations and BMP effectiveness studies.

- Ad-Hoc Group - Infiltration

Purpose: To provide further clarification and direction regarding the appropriate use of infiltration controls in new development/significant redevelopment.

- Water Use Efficiency Task force

Purpose: To study and support a comprehensive effort to curb urban runoff through efficient water usage in Orange County.

- Ad-Hoc Group – Wastewater Disposal

Purpose: To develop a list of BMPs for the disposal of washwater/wastewater generated by mobile businesses.

Watershed Committees

Six Watershed Committees (Laguna Coastal streams, Aliso Creek, Dana Point Coastal Streams, San Juan Creek, San Clemente Coastal Streams, and San Mateo Creek) were convened during the reporting period. The activities of these committees are reported separately in the Watershed Chapter Annual Reports (presented as Exhibits to the Unified Annual Progress Report for the San Diego Region).

Other Regional Committees/Work Groups

Many of the Permittees additionally participate in various watershed management advisory groups. These groups include: the Newport Bay Executive and Management Committees (the latter held jointly with the ACOE Study Management Team), the Fullerton Creek Permittees, the Huntington Harbour Water Quality Task Force, the

SECTION C2, PROGRAM MANAGEMENT

Dana Point Harbor Water Quality Task Force, the Coastal Coalition, and the Aliso Creek Tier I and Tier II stakeholder meetings. These watershed groups focus their activities and discussions on broader watershed issues of concern, such as habitat restoration and flood control in addition to water quality issues resulting from TMDLs and special directives.

C-2.3.2 Management Framework- Program Implementation

In addition to the countywide and watershed management framework for program development, the Permittees at a jurisdiction level have formally identified which departments have responsibility for implementation of each program elements within their jurisdictions. These organizational charts are presented in the LIPs.

C-2.4 Orange County Stormwater Program Representation

The Principal Permittee represents the Permittees on the California Stormwater Quality Association and other advisory stormwater forums.

California Stormwater Quality Association (CASQA)

Since 1989, the CASQA has assisted the State of California, the USEPA, municipalities, special districts and businesses in developing and implementing effective water quality management programs in California. CASQA is a leader in helping California comply with the municipal and industrial NPDES stormwater mandates of the federal Clean Water Act. The Principal Permittee has been active on the Board of Directors, Executive, Program Committee and Public Information - Public Participation, Effectiveness Assessment (which produced the White Paper on program effectiveness measures), Stormwater Monitoring and Science, and Policy and Permitting Sub-committees.

Southern California Coastal Water Research Project

The Permittees agreed to join the Southern California Coastal Water Research Project (SCCWRP) board and will execute a formal agreement in 2005-06.

The SCCWRP is a joint powers agency that focuses on marine environmental research, including the coordination of cooperative regional monitoring efforts to support the development of management strategies for the entire Southern California Bight. During the reporting period, the Permittees participated in the Bight '03 Southern California Regional Marine Monitoring program referred to as Bight '03. This monitoring program has three components:

- Coastal Ecology: What is the extent and magnitude of contamination and associated biological effects in the Southern California Bight? And, what is the mass of pollutants accumulated in the Bight?
- Water Quality: What is the spatial extent and duration of stormwater plumes in the coastal ocean?

SECTION C2, PROGRAM MANAGEMENT

- Shoreline Microbiology: What is the relationship between bacteria concentration in ankle deep water, where samples are collected, and the surf zone where most water contact recreation occurs?

In addition to a financial contribution to the Bight '03 program and participation on the steering committee and technical sub-committees by the Principal Permittee, the Permittees are collaborating with the National Water Research Institute, San Bernardino County and Riverside County to sponsor researchers from the University of California Irvine in a stormwater characterization study of the Santa Ana River watershed that will complement efforts by the Water Quality Committee to define stormwater plumes through remote sensing satellite imagery and efforts by the Shoreline Microbiology committee to assess the influence of stormwater flows on the shoreline and surf zone.

In addition to the Bight '03 regional efforts, the Principal Permittee also actively participated in other research activities coordinated by SCCWRP during the reporting period, including (1) the San Gabriel River Watershed Monitoring Program and (2) studies of loadings of various constituents from natural watersheds.

Trash and Debris Task Force

The Trash and Debris Task Force was inaugurated during the 2003-04 reporting year and is intended to work to reduce the impact of trash and debris on County waterbodies and beaches. The goal of the Task Force is to provide preventative actions and programmatic direction before local waterbodies suffer impairment and possible Clean Water Act 303(d) listing. During the reporting year, the Task Force comprised members from the waste management industry, the plastics industry, non government organizations, local businesses, and the Permittees. The following action items were undertaken by the Task Force in 2004-05:

- Formal recognition of the Task Force by the County Board of Supervisors.
- Initiation of a countywide strategic assessment of trash and debris controls.

Plastic Debris - Rivers to Sea Project

The Plastic Debris - Rivers to Sea Project is implemented by the Algalita Marine Research Foundation, with grant funding from the SWRCB through Proposition 13 and additional support from the California Coastal Commission. The purpose of the Project is to assess plastic debris loading and sources of plastic and trash into urban rivers and to develop an action plan of solutions. The Principal Permittee is the local government representative on the Project's advisory board.

Nitrogen and Selenium Management Program

The Nitrogen and Selenium Management Program (NSMP) was created in 2005 in response to a general NPDES permit (Order No. R8-2004-0021) issued for the Newport Bay watershed to establish waste discharge requirements for certain groundwater-related discharges and to regulate de minimus discharges. The NSMP is a collaborative

SECTION C2, PROGRAM MANAGEMENT

effort of 18 stakeholders, including various State, county, and local agencies, water districts, and private entities with the goal of developing management strategies and treatment technologies for groundwater dewatering discharges of both selenium and nitrogen for the watershed. A work plan has been developed by the NSMP and approved by the Santa Ana Regional Water Quality Control Board. The work plan will focus on the development of treatment technologies, BMPs, and an offset, trading or mitigation program. Additionally, if necessary, the NSMP will develop and recommend a site specific objective for selenium. The County of Orange is the Chair of the NSMP, providing program leadership and ensuring implementation of the work plan and compliance with the terms of the permit.

Fats, Oils and Grease (FOG) Program

The Principal Permittee has actively coordinated with the cities and sanitation districts subject to Order No. R8-2002-0014 General Waste Discharge Requirements (WDR) for Sewage Collection Agencies in Orange County within the Santa Ana Region through attendance at WDR General Meetings. This joint participation has allowed for the sharing of information and resources and has provided for a greater understanding of the respective programs and challenges.

Tustin Area Spill Containment (TASC) Demonstration Project

The Principal Permittee and Orange County Sanitation Districts are coordinating on a demonstration project for sewage spill containment (see **Section C-3.3.2**).

C-2.5 Fiscal Analysis

This Section presents a summary of the costs incurred by the Permittees in developing, implementing and maintaining programs in order to comply with the Third Term Permits and includes information on the funding sources used by each Permittee. The total cost to each Permittee is the sum of *shared costs* and *individual costs*.

C-2.5.1 Shared Costs

Shared costs are those that fund activities performed by the Principal Permittee under the stormwater program's Implementation Agreement. Each municipality's contribution to the shared costs is determined by a formula established in the Implementation Agreement, based on the population and land area of each jurisdiction. These activities include compliance program development, reporting, water quality monitoring, and countywide public education.

The program management activities handled by the Principal Permittee include development of model compliance program elements, development and execution of intergovernmental agreements, representation of the Permittees at meetings with other organizations, preparation of compliance reports, budgets and other program documentation, representation of the program before appropriate agencies such as the Regional Boards and the State Water Resources Control Board, procurement and

SECTION C2, PROGRAM MANAGEMENT

subsequent coordination of consultant studies and coordination with Permittees representatives.

2004-05 Reporting Period

The actual-shared cost expenditures for the 2004-05 reporting period were provisionally \$3,700,000.

2005-06 Reporting Period

The projected-shared cost expenditures for the 2005-06 fiscal year, as approved by the Permittees, are \$5,941,160.

C-2.5.2 Individual Costs

Individual costs are those incurred by each Permittee arising from its jurisdictional program implementation as documented in the LIPs and comprise capital and operation and maintenance costs:

- Capital Costs - refers to expenditures for land, large equipment, and structures (see **Table C-2.1**); and
- Operations and Maintenance Costs - refer to normal costs of operation including the cost of keeping equipment and facilities in working order (see **Table C-2.2**).

The sum of the capital and operation and maintenance costs is the total cost that each Permittee has incurred individually to meet the requirements of the Third Term Permits.

2004-05 Reporting Period

In 2004-05, the total cost of the activities undertaken by the Permittees implementing the DAMP programs within their jurisdictions are reported to be:

- Total Individual Permittee Costs \$ 72,693,211

This total compares to \$ 79,275,003 in 2003-04, \$54,529,161 in 2002-03 and to \$44,333,714 in the 2001-02 reporting period.

2005-06 Reporting Period

In 2005-06, the total cost of the activities to be undertaken by the Permittees implementing the DAMP programs within their jurisdictions (capital costs + operations and maintenance costs) is estimated to be:

- Total Individual Permittee Costs \$91,868,883

A historical review of costs is presented in **Figure C-2.3**.

SECTION C2, PROGRAM MANAGEMENT

C-2.5.3 Funding Sources

The funding sources used by the Permittees include: General Fund, Utility Tax, Separate Utility, Gas Tax, and Special District Fund, Others (Sanitation Fee, Fleet Maintenance, Community Services District, Water Fund, Sewer & Storm Drain Fee, Grants, and Used Oil Recycling Grants) (see **Figure C-2.4, 2004-05 Funding Sources**, and **Figure C-2.5, 2005-06 Projected Funding Sources**). The contributions of volunteer groups like the Boy Scouts of America and Surfrider (i.e. storm drain stenciling) are not included in this assessment.

SECTION C2, PROGRAM MANAGEMENT

Table C-2.1: Total Capital Costs

Grand Totals Fiscal Analysis Summary		CAPITAL COSTS			
		(land, large equipment, and structures)			
LIP Program Elements		FY 2002-03 Costs	FY 2003-04 Costs	FY 2004-05 Costs	Projected Costs FY 2005-06
Supportive of Program Administration (LIP Section 2.0)		\$404,000	\$567,710	\$90,724	\$95,800
Plan Development (LIP Section 3.0)		NR	NR	\$108,284	\$200,000
MUNICIPAL ACTIVITIES (LIP Section 5.0)	Litter Control	\$361,479	\$512,973	\$396,409	\$227,600
	Recycling	\$455,000	\$1,003,000	\$100,040	\$12,200
	Drainage Facility Maintenance	\$1,945,925	\$3,219,979	\$3,165,615	\$5,127,200
	Catch Basin Stenciling	\$13,443	\$21,412	\$37,900	\$48,260
	Street Sweeping	\$247,000	\$1,489,916	\$1,048,000	\$902,607
	Environmental Performance	\$480,708	\$958,527	\$3,103,578	\$5,897,130
	Public Property & Street Chemical Spill Response	\$13,361	\$142,777	\$7,600	\$17,200
	Trash Boom Design	\$50,000	\$100,000	NR	NR
	Pesticide & Fertilizer Management	\$7,700	\$158,534	\$10,510	\$8,245
PUBLIC INFORMATION (LIP Section 6.0)	Nonpoint Source Pollution Awareness	\$2,000	\$15,779	\$12,000	\$12,500
	Household Hazardous Waste Collection	\$20,000	NR	\$5,000	\$5,000
REQUIRING NEW DEVELOPMENT BMPS (Supportive of Planning, etc.)		\$1,061	\$29,082	\$76,103	\$306,125
REQUIRING CONSTRUCTION BMPS (Supportive of Plan Check & Inspection)		\$4,500	\$41,538	\$62,213	\$72,235
Existing Development (LIP Section 9.0)		NR	\$66,082	\$75,000	\$80,000
ILLICIT CONN/ DISCHARGE ID & ELIMINATION (LIP Sec. 10.0)	Facility Inspection	\$68,574	\$1,228,214	\$80,000	\$90,000
	Other Efforts to Identify & Eliminate Illicit Connections	\$3,805	\$7,250	\$30,000	\$33,500
STRUCTURAL BMPS (DESIGN AND CONSTRUCTION)	Low Flow Diversions/CDS Units	\$1,800,000	\$2,668,997	NR	NR
	Treatment Facility	\$700,000	\$4,300,000	NR	NR
Water Quality Monitoring (LIP Section 11.0)		NR	\$18,517	NR	NR
BMPS INCORPORATED INTO PUBLIC WORKS CAPITAL PROJECTS		\$1,849,690	\$2,020,992	NR	NR
Household Hazardous Waste Facility		NR	NR	NR	NR
Others		NR	NR	\$4,863,357	\$13,028,893
TOTALS		\$8,428,246	\$18,571,279	\$13,272,333	\$26,164,495

NR = Not Recorded

SECTION C2, PROGRAM MANAGEMENT

Table C-2.2: Total Operations and Maintenance Costs

Grand Totals Fiscal Analysis Summary		OPERATIONS AND MAINTENANCE			
		FY 2002-03 Costs	FY 2003-04 Costs	FY 2004-05 Costs	Projected Costs FY 2005-06
Supportive of Program Administration (LIP Section 2.0)		\$4,819,838	\$5,402,420	\$6,825,130	\$8,217,313
Plan Development (LIP Section 3.0)		NR	NR	\$878,329	\$1,439,888
MUNICIPAL ACTIVITIES (LIP Section 5.0)	Litter Control	\$3,246,027	\$2,839,824	\$2,747,912	\$3,124,548
	Recycling	\$6,973,931	\$14,046,145	\$12,595,204	\$13,034,437
	Drainage Facility Maintenance	\$5,548,955	\$6,089,813	\$6,438,617	\$7,207,464
	Catch Basin Stenciling	\$135,540	\$177,525	\$111,263	\$139,681
	Street Sweeping	\$13,019,752	\$15,687,198	\$16,251,018	\$17,485,501
	Environmental Performance	\$858,373	\$2,005,620	\$1,477,112	\$1,421,559
	Public Property & Street Chemical Spill Response	\$1,978,748	\$2,515,482	\$2,564,006	\$2,789,106
	Pesticide & Fertilizer Management	\$1,144,187	\$2,157,786	\$1,319,499	\$1,501,022
	Inspection and Support	NR	\$12,898	NR	NR
PUBLIC INFORMATION (LIP Section 6.0)	Nonpoint Source Pollution Awareness	\$3,415,047	\$386,557	\$591,708	\$748,541
	Household Hazardous Waste Collection	\$382,334	\$462,918	\$475,963	\$506,670
REQUIRING NEW DEVELOPMENT BMPS (Supportive of Planning, etc.)		\$465,817	\$528,076	\$790,684	\$875,536
REQUIRING CONSTRUCTION BMPS (Supportive of Plan Check & Inspection)		\$1,280,147	\$1,883,538	\$1,399,117	\$1,464,402
Existing Development (LIP Section 9.0)		NR	\$430,374	\$1,055,158	\$1,205,471
ILLICIT CONN./ DISCHARGE ID & ELIMINATION (LIP Sec. 10.0)	Facility Inspection	\$1,388,310	\$1,929,914	\$1,133,925	\$1,379,247
	Other Efforts to Identify & Eliminate Illicit Connections	\$314,165	\$1,458,034	\$1,323,466	\$1,526,261
	Dry Weather Monitoring	\$20,000	\$20,000	NR	NR
	Special Investigations	\$15,000	\$30,000	NR	NR
Water Quality Monitoring (LIP Section 11.0)		\$0	\$1,118,647	NR	NR
BMPS INCORPORATED INTO PUBLIC WORKS CAPITAL PROJECTS		\$1,094,744	\$1,520,956	NR	NR
Others		NR	NR	\$1,442,768	\$1,637,741
TOTALS		\$46,100,915	\$60,703,725	\$59,420,878	\$65,704,388

NR = Not Recorded

Figure C-2.1: Orange County Municipal NPDES Management Framework

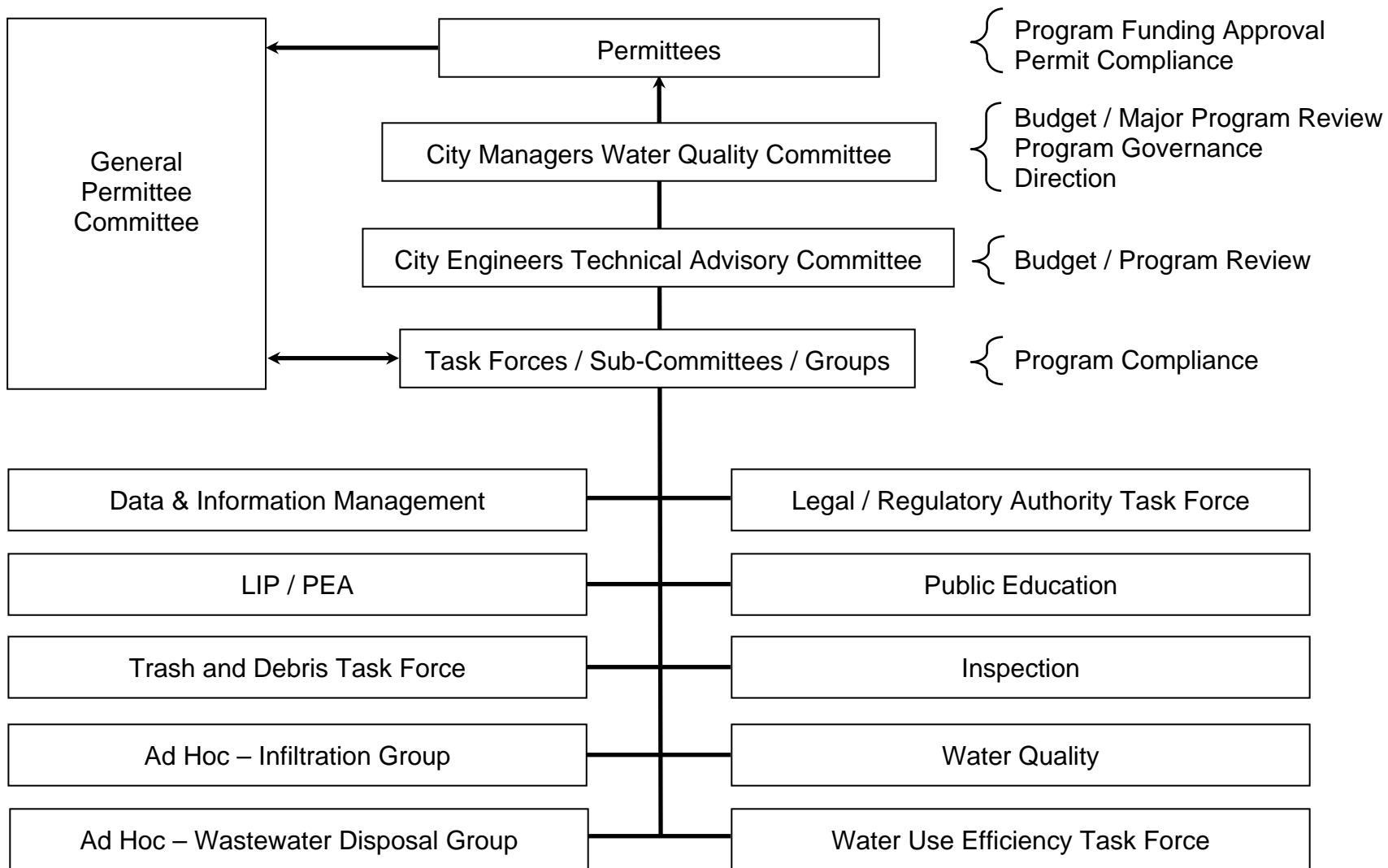


Figure C- 2.2: General Permittee Meeting Attendance

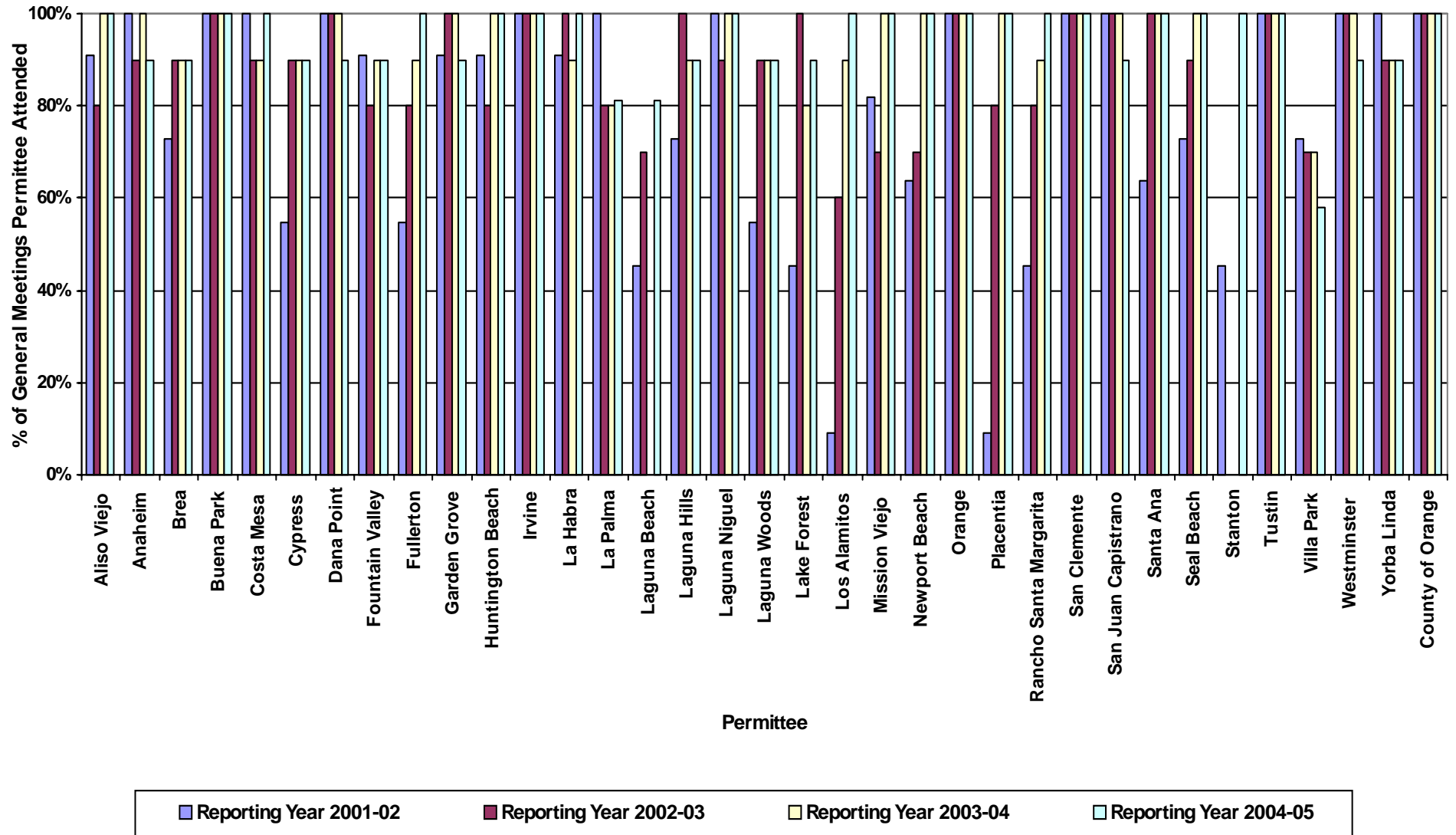


Figure C-2.3: Historical Review of Total Individual Permittee Costs

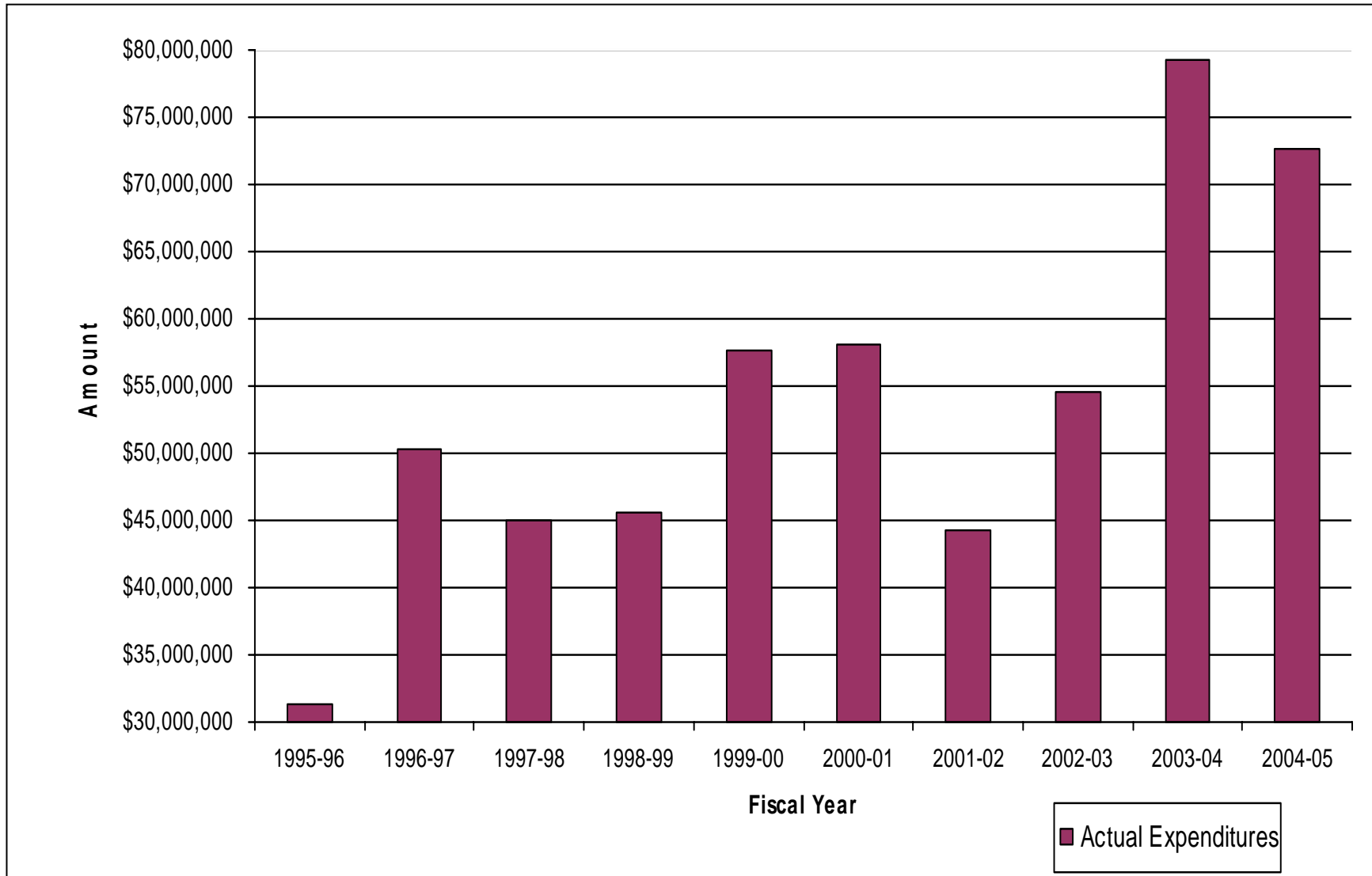


Figure C-2.4: 2004-05 Funding Sources

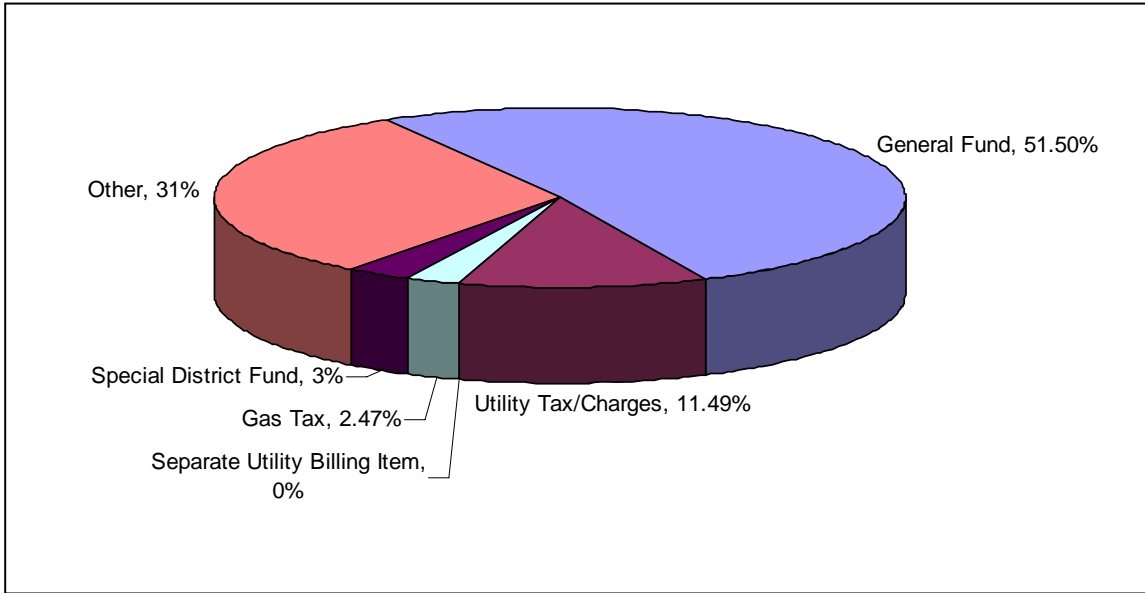


Figure C-2.5: 2005-06 Projected Funding Sources

