

C-2.0 PROGRAM MANAGEMENT

C-2.1 Introduction

The County of Orange is the Principal Permittee and the cities and the Orange County Flood Control District are Co-Permittees on the MS4 Permits (all parties are subsequently collectively referred to as Permittees). Principal Permittee and Permittee responsibilities are specified in the MS4 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 enable the development and implementation of a coordinated countywide program, a management framework was created during the First Term Permit. This management framework has evolved into a four tier structure (Permittees, City Managers' Water Quality Committee, Technical Advisory Committee (TAC) and Program Committees/Task Forces/Ad Hoc Groups) (see **Section C-2.3**).

C-2.2 Permittee Responsibilities

C-2.2.1 NPDES Permit Responsibilities

Principal Permittee

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

- Initiating, developing and coordinating any area-wide programs and activities necessary to comply with the Fourth 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 of the progress of other pertinent municipal programs, pilot projects, research studies, etc.;
- Representing the Program before appropriate agencies;
- Developing and executing inter-governmental agreements necessary for program implementation;
- Conducting chemical, biological and toxicological water quality monitoring;
- Conducting countywide public education and outreach;
- Participating in watershed management programs and regional and/or statewide monitoring;
- Preparing and submitting reports, plans and programs as required by the permits including the Unified Annual Progress/PEA Report;
- Developing budgets and fiscal analyses; and
- Coordinating the program with affected local government agencies.

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The Principal Permittee has no regulatory authority over the Permittees.

Permittees

Each Permittee is responsible for ensuring permit compliance within its jurisdiction. The main responsibilities of each Permittee include:

- 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 Fourth and Fifth 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 receiving waters 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-2.3 Accomplishments

C-2.3.1 Agreement for Program Implementation

The Implementation Agreement establishes the responsibilities of the Permittees with respect to compliance with the Permits. The Implementation Agreement also establishes a funding mechanism for the Shared Costs¹ 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.

The Implementation Agreement was originally entered into in December of 1990 and 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

¹ See Section C-2.5.1 for explanation of *Shared Costs*.

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(Aliso Viejo, Laguna Woods and Rancho Santa Margarita) and to incorporate modifications to the management structure and cost-sharing formulas.

C-2.3.2 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 forums for communicating with each other” (USEPA, 2002²). A four tier management framework was established in early 2002 to direct the development of the Orange County Stormwater Program (**Figure C-2.1**). This framework was retained in the 2016-17 reporting period. It 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 supported by County staff.

City Engineer’s Technical Advisory Committee and Technical Advisory Committee/Planning Advisory Committee (TAC/PAC)

The TAC serves in a program advisory role and provides policy direction for the program budget, development and implementation. It is comprised of one Public Works Director/City Engineer, or selected representative, from each of the County Supervisor Districts and a representative from the County of Orange. The PAC is comprised of one Planning Director, or selected representative, from each of the County Supervisor Districts and a representative from the County of Orange. The TAC/PAC is convened to address matters related to land development regulation. The PAC does not meet separately from the TAC.

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 Fourth Term Permit (see **Figure C-2.2**).

Task Forces/ Sub-Committees

The Task Forces/ Sub-Committees which were active in 2016-17, are:

- Trash and Debris Task Force

Purpose: To foster and sustain partnership approaches for dealing with trash and debris in stormwater and urban runoff with the goal of ensuring that such

² <http://www.epa.gov/watertrain/watershedmgt/principle2b.html>

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materials do not become the basis for a formal designation of coastal beneficial use impairment.

- 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 rule-making and litigation that may affect the 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.

- Public Education Sub-Committee

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

- 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 Monitoring and Science 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.

Other Regional Committees/Work Groups

Many of the Permittees additionally participate in various watershed management advisory groups. These groups include: the Newport Bay Watershed Executive and Management Committees, the Coastal Coalition, and the South Orange County Management Area Executive, Management and Integrated Regional Water Management Plan (IRWMP) stakeholder meetings. These watershed groups focus their activities and discussions on broader watershed issues of concern, such as habitat restoration, integration with water supply and flood control in addition to water quality issues resulting from TMDL requirements and special directives.

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C-2.3.3 Management Framework - Permittee Program Implementation

In addition to the countywide and watershed management framework for program development, the Permittees formally identify the departments with responsibility for implementation of each program element within their jurisdictions. These organizational charts are presented in the LIPs.

C-2.3.4 Orange County Stormwater Program Representation

The Principal Permittee represents the Permittees at the California Stormwater Quality Association (CASQA), Stormwater Monitoring Coalition (SMC), Southern California Coastal Water Research Program (SCCWRP) and other advisory stormwater forums. The Principal Permittee also participates in Orange County Transportation Authority's (OCTA) Measure M2 Environmental Clean-up Advisory Committee (ECAC).

CASQA

Since 1989, CASQA has assisted the State of California, USEPA, municipalities, special districts and businesses in developing and implementing effective water quality management programs in California in support of the stormwater mandates of the federal Clean Water Act. The Principal Permittee has been active on the Board of Directors, Executive, Program Committee, Conference Planning and Policy and Permitting Sub-Committee.

SMC

The SMC was formed in 2001 by cooperative agreement of the Phase I municipal stormwater NPDES principal permittees, the NPDES regulatory agencies in southern California, the State Water Board, Caltrans and SCCWRP. The goal of the SMC is to develop the technical information necessary to better understand stormwater mechanisms and impacts, and then develop the tools that will effectively and efficiently improve stormwater decision-making. The SMC continued to make progress implementing its Research Agenda (see **Section C-3.2.3** for details) in 2016-17. The Principal Permittee served as the SMC's Vice Chair for the 2016-17 reporting period.

SCCWRP

SCCWRP is a research institute focusing on the coastal ecosystems of Southern California from watersheds to the ocean. It was formed in 1969 to enhance the scientific understanding of linkages among human activities, natural events, and the health of the Southern California coastal environment; to communicate this understanding to decision makers and other stakeholders; and to suggest strategies for protecting the coastal environment. In 2016-17, the Principal Permittee participated as a Commissioner on SCCWRP's governing board and as the Program's representative on the Commission Technical Advisory Group (CTAG).

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CTAG acts as the primary link between the SCCWRP Commission and member agencies and SCCWRP staff. It fulfills this purpose by providing guidance on the SCCWRP research plan, transferring scientific and technical information to member agencies, and collaborating closely with SCCWRP staff on special projects that require a high level of integration of managerial, technical, and scientific issues. There has been a CTAG focus on updating the SCCWRP research plan with many projects of value to stormwater interests including BMP effectiveness.

OCTA Environmental Cleanup Program

OCTA's Environmental Cleanup Program, provides for the allocation of approximately \$300 million to improve overall water quality in Orange County from transportation-generated pollution. The Environmental Cleanup Program was approved under Orange County Measure M2, the half-cent sales tax for transportation improvements approved by Orange County voters in 2006.

Program funds are allocated on a countywide competitive basis to assist jurisdictions with control of transportation-generated pollution. Eligible applicants include city and county agencies. Funds are awarded to the highest priority projects that improve water quality in streams, harbors, and other waterways that have a nexus to transportation generated pollution. The Environmental Cleanup Allocation Committee (ECAC) is responsible for developing the program and making funding recommendations to the Board and was co-chaired by the Principal Permittee during the reporting period.

The Tier 1 Grant Program is designed to mitigate more visible forms of pollutants, such as litter and debris that collects on roadways and in storm drains prior to being deposited in waterways and the ocean. Tier 1 provides funding for equipment purchases and upgrades to existing catch basins and related BMPs, such as screens, filters, inserts and other street-scale low-flow diversion projects. Thus far, seven rounds of Tier 1 funding have been allocated, and approximately \$20.1 million was awarded to 150 projects from 33 cities and the County.

The Tier 2 Grant Program funds regional, potentially multijurisdictional, capital-intensive projects, such as constructed wetlands, detention and infiltration basins and bioswales, which mitigate pollutants including litter, debris, heavy metals, organic chemicals, sediment and nutrients. Thus far, two rounds of Tier 2 funding have been allocated, and approximately \$28 million has been awarded to 22 projects from 12 cities and the County.

The Principal Permittee worked closely with OCTA on the development of a Structural BMP Prioritization and Analysis Tool (SBPAT) to inform future decisions regarding the disbursement of Tier 2 project funds. SBPAT is a GIS-based decision support tool that was used to prioritize and select the structural BMP retrofit project proposals to be provided with grant funding.

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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 effort of 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. During the reporting period, documentation for a Selenium TMDL was provided to the Santa Ana Regional Board, which subsequently approved it. The Program continued monitoring of fish and bird egg tissue throughout the watershed; and the evaluation of novel selenium treatment technologies. Ongoing projects to divert flows in Peters Canyon Channel (completed and now operating) and Santa Ana Delhi Channel to the sanitary sewer are being carried out by subsets of the NSMP participants (see **Section C-12.0** for details).

C-2.4 Assessment

C-2.4.1 Implementation Agreement

Since the inception of the Program, the Implementation Agreement has been amended to provide for the incorporation of new cities and to formally recognize the role of the TAC. The structure of the Agreement has accommodated the expansion of the Program and the significant escalation of shared costs with the adoption of the Third Term Permits and subsequent Fourth Term Permits. It has also served as a model for cost sharing collaboration related to the Newport Bay TMDL compliance effort (including the related NSMP), Regional Harbor Monitoring Program, Aliso Creek 13255 Directive and south Orange County Bacteria TMDLs. No amendments to the Agreement are planned.

C-2.4.2 Management Framework

The management framework is reviewed annually to ensure it meets program needs. All of the committees, sub-committees and task forces have been effective in bringing forward initiatives to meet the requirements of the Fourth and Fifth Term Permits and to address program needs under a consensus building process. However, Fourth and Fifth Term Permit requirements for the inclusion of LID and hydromodification approaches into local planning approval processes have necessitated changes to the framework. The management framework was first revised in mid-2009 to enable a TAC/PAC to provide policy direction and oversight in matters related to land development and land regulation. During the reporting period, the joint PAC/TAC did not meet. The members of the TAC at the end of the reporting period were:

<u>District</u>	<u>TAC Members</u>	<u>TAC Alternates</u>
1st District	William Galvez, City of Santa Ana	Taig Higgins, City of Santa Ana
2nd District	Temo Galvez, City of Fountain Valley	David Webb, City of Newport Beach
3rd District	Frank Sun, City of Orange	Mark Carroll, City of Irvine
4th District	Keith Linker, City of Anaheim	Don Hoppe, City of Fullerton

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5th District	Vacant (Member retirement)	Tom Bonigut, City of San Clemente
OC Public Works	Khalid Bazmi	Nardy Khan

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 Fourth Term Permits. It also includes information on the funding sources used by each Permittee. The analysis distinguishes between *shared costs* and *individual costs*.

C-2.5.1 Shared Costs

Shared Costs comprise those that fund activities performed by the Principal Permittee under both the Program's Implementation Agreement and separate cost share agreements related to TMDL compliance. The program management activities handled by the Principal Permittee are discussed in **Section C-2.2.1**. Each municipality's contribution to shared costs is determined by a formula established in the Implementation Agreement, based on the population and land area of each jurisdiction.

The shared cost budget for the program for 2016-17, as approved by the Permittees, was \$6,289,969. The actual shared cost expenditures for the Program for 2016-17 are provisionally \$5,199,085. In addition, TMDL cost-share agreement expenditures for 2016-17 include: \$201,737 (Sediment TMDL), \$771,836 (Nutrients, Fecal Coliform and Toxics TMDLs), \$89,746 (Coyote Creek Metals TMDL), \$351,581 (Aliso Creek Watershed Agreement), and \$303,878 (San Juan Creek Watershed Agreement).

The shared cost budget for the program for 2017-18 is \$5,966,301.

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 Fourth and Fifth Term Permits. The guidance - *Fiscal Analysis Guidance Manual: Orange County Stormwater Program* - provides the Permittees with an accurate and auditable basis for compiling and reporting the fiscal impact of the stormwater mandate.

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In reviewing **Table C-2.1** and **Table C-2.2**, it should be noted that purchases of small equipment, with a life of less than 5 years and a value lower than \$5,000, are now included in the operations and maintenance costs. Also, "Capital Costs" now covers longer-life equipment and fixed facilities/BMPs and includes a category that captures an allowance for the cost of construction BMPs for projects implemented as a part of a municipal capital program.

In 2016-17, 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 \$111,742,782

This total compares to \$108,000,558 in 2015-16, \$103,369,884 in 2014-15, \$93,105,122 in 2013-14, and \$97,336,120 in 2012-13 (see **Figure C-2.3**). A historical review of costs is presented in **Figure C-2.4**.

In 2017-18, 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 \$126,182,618

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-2.5, 2016-17 Actual Funding Sources**, and **Figure C-2.6, 2017-18 Projected Funding Sources**). The contributions of volunteer groups are not included in this assessment.

Table C-2.1: Total Capital Costs

LIP Program Elements	FY 2016-17	Projected Costs FY 2017-18*
Public Projects - BMPs	\$19,188,515.25	\$25,029,642.13
Construction BMPs for Public Construction Projects	\$2,685,861.53	\$6,048,803.00
Other Capital Projects / Major Equipment Purchases	\$5,756,570.13	\$8,143,000.00
TOTALS	\$27,630,946.91	\$39,221,445.13

Note: Some LIP Program Elements are tracked differently by each City and have been combined for Unified Reporting. Please see individual City PEA's for a discussion of their costs and projected costs.

*** Totals do not include the City of Lake Forest.**

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Table C-2.2: Total Operations and Maintenance Costs

LIP Program Elements	FY 2016-17	Projected Costs FY 2017-18*
Supportive of Program Administration (LIP Section 2.0)	\$9,367,261.16	\$11,248,760.67
Municipal Activities (LIP Section 5.0) Trash & Debris Control (formerly "Litter Control")	\$9,001,311.54	\$9,198,031.91
Municipal Activities (LIP Section 5.0) Drainage Facility Maintenance	\$22,492,201.26	\$22,263,948.50
Municipal Activities (LIP Section 5.0) Street Sweeping	\$17,687,945.81	\$17,959,320.15
Municipal Activities (LIP Section 5.0) Environmental Performance (BMP Implementation)	\$3,107,479.72	\$3,327,567.35
Municipal Activities (LIP Section 5.0) Pesticide & Fertilizer Management	\$2,514,537.10	\$2,007,602.86
Public Information (LIP Section 6.0) Nonpoint Source Pollution Awareness	\$1,130,957.32	\$956,626.48
Public Information (LIP Section 6.0) Household Hazardous Waste Collection	\$4,805,127.18	\$5,022,443.23
Requiring New Development BMPs (Supportive of Planning, etc) (LIP Section 7.0)	\$1,997,531.99	\$2,550,236.09
Requiring Construction BMPs (Supportive of Plan Check & Inspection) (LIP Section 8.0)	\$2,753,101.18	\$2,830,516.76
Existing Development (LIP Section 9.0) Industrial/Comm./HOA Inspections	\$2,131,293.36	\$2,109,172.53
Illicit Connections/Discharge Ident. & Elimination (LIP Section 10.0) Investigations	\$1,465,425.06	\$1,327,250.84
Agency Contribution to Regional Program	\$5,375,074.91	\$5,763,846.76
Other - Household Hazardous Waste	\$150,519.90	\$214,748.64
Other	\$132,068.00	\$181,100.00
TOTALS	\$84,111,835.50	\$86,961,172.76

Note: Some LIP Program Elements are tracked differently by each City and have been combined for Unified Reporting. Please see individual City PEA's for a discussion of their costs and projected costs.

***Totals do not include the City of Lake Forest.**

Figure C-2.1: Orange County Municipal NPDES Management Framework (2016-17 Reporting Period)

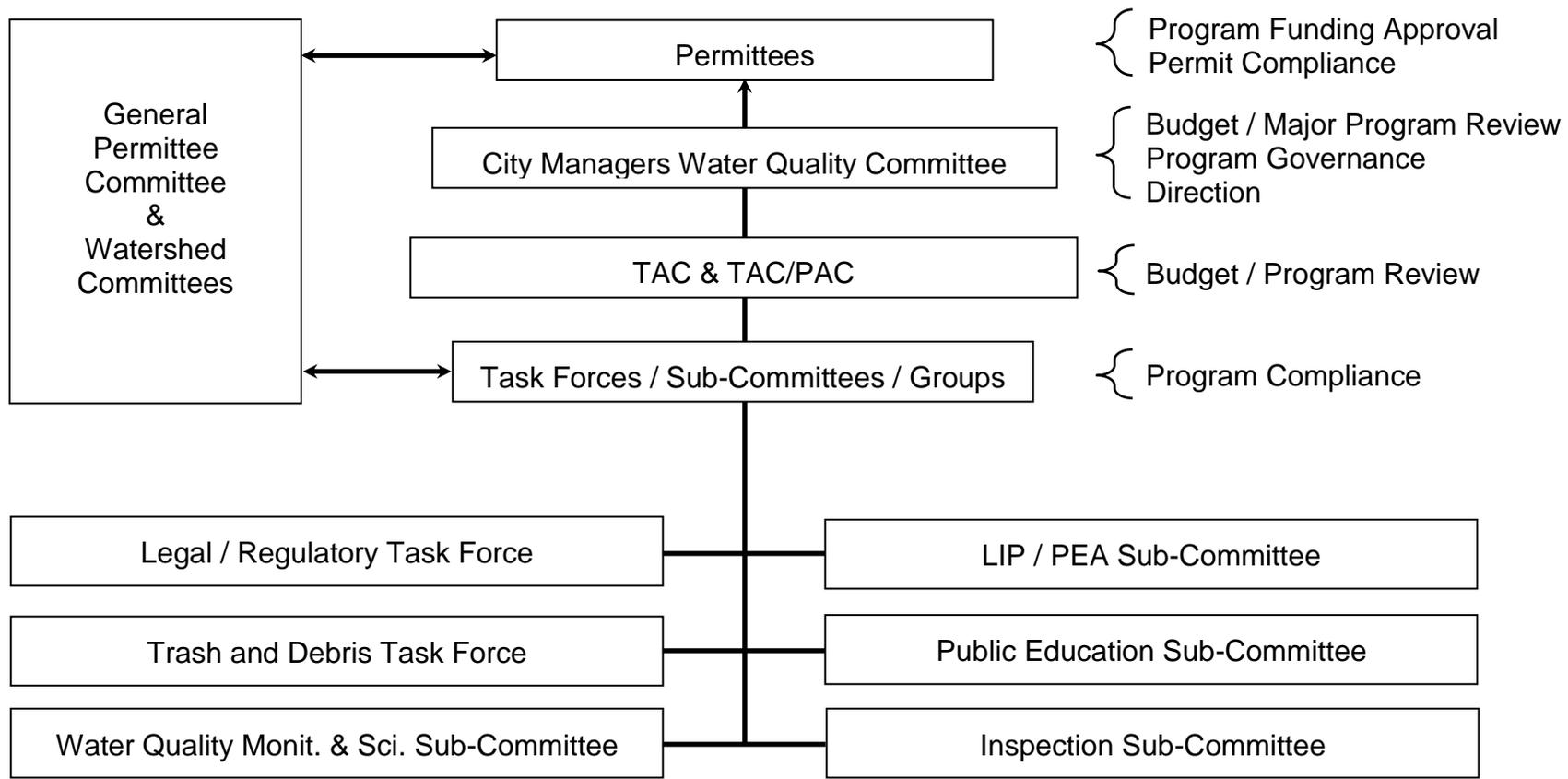


Figure C- 2.2: 2016-17 General Permittee Meeting Attendance (Only Santa Ana Region Permittees shown)

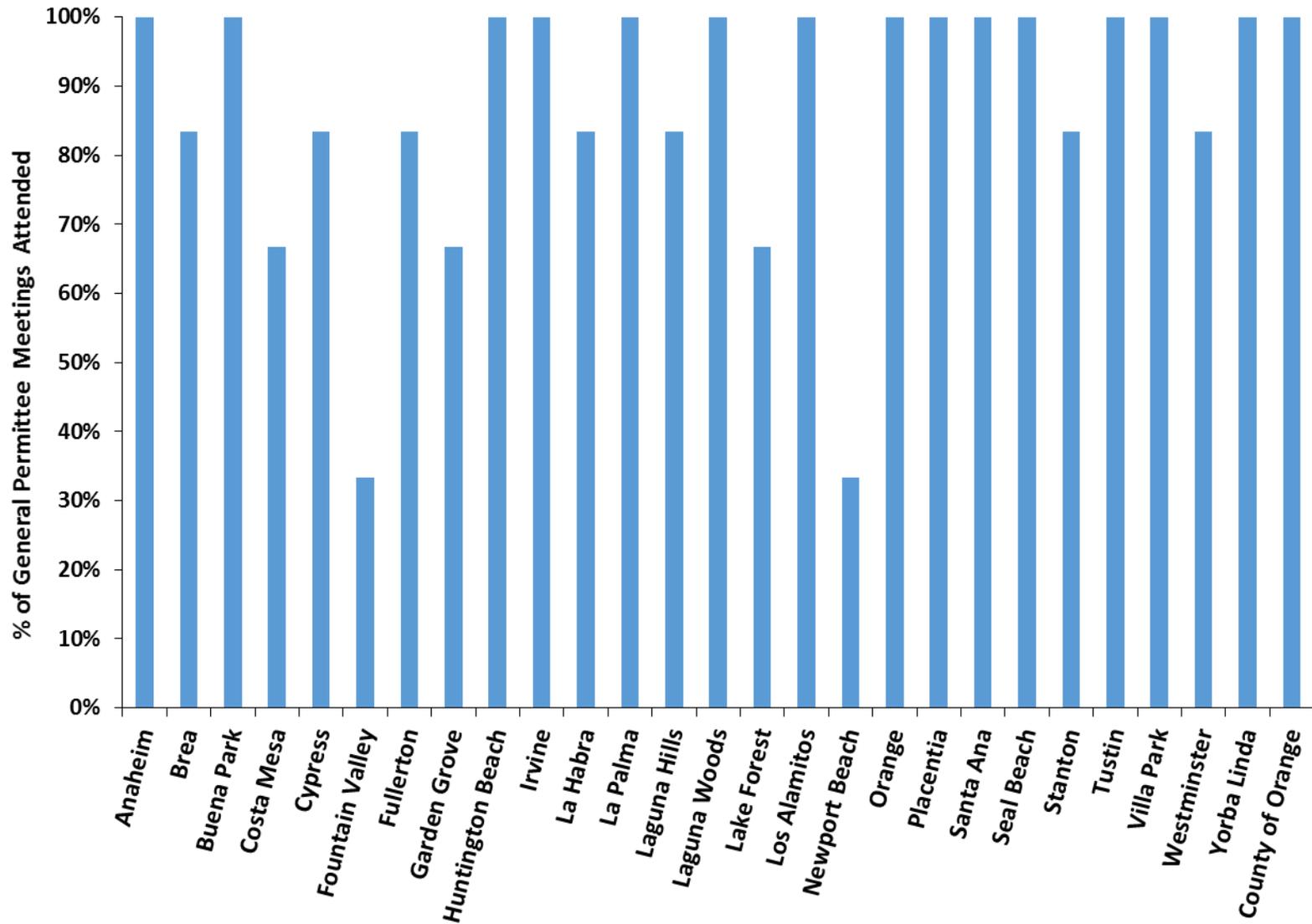


Figure C-2.3: Total Individual Permittee Costs

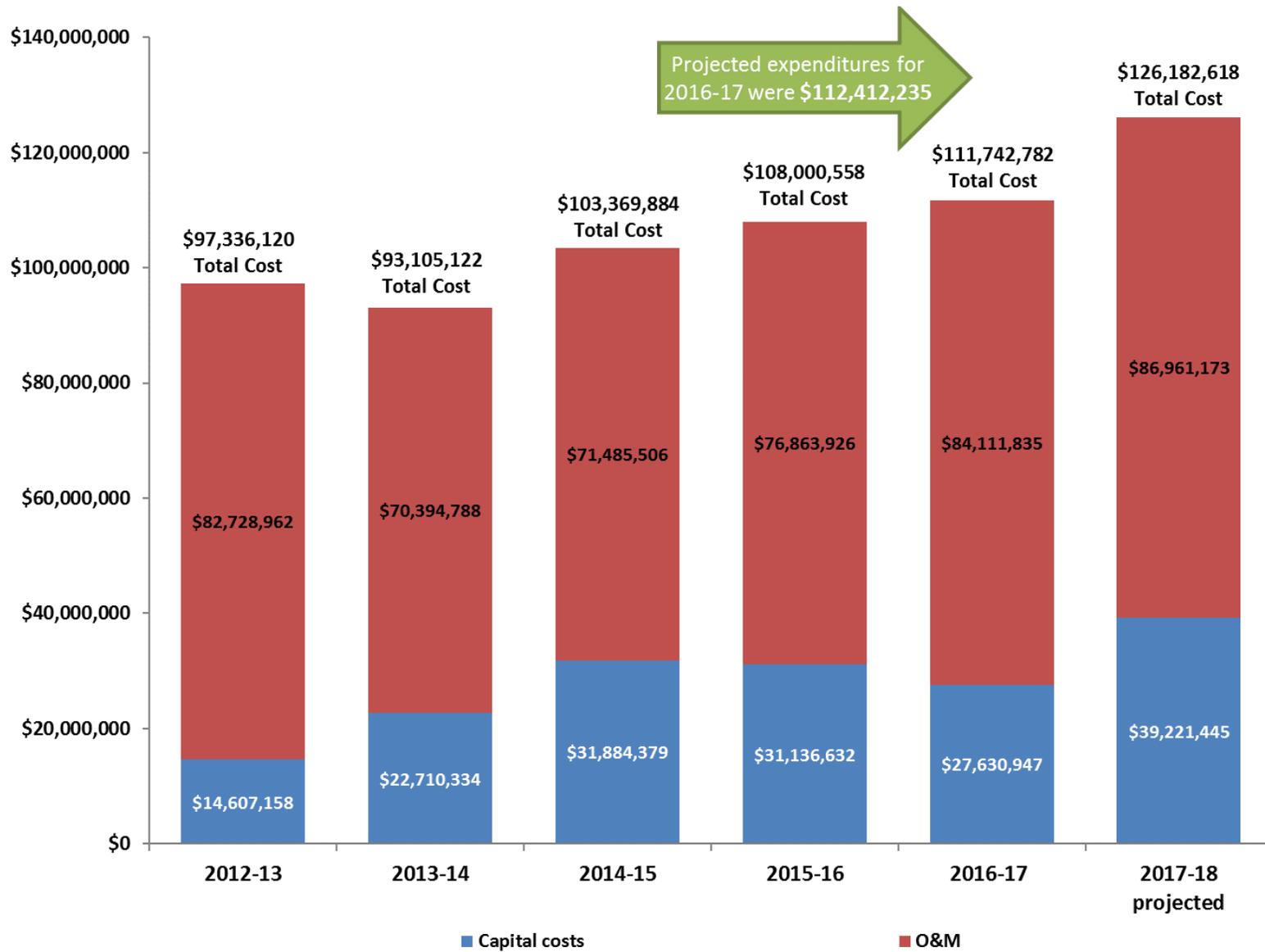


Figure C-2.4: Historical Review of Total Individual Permittee Costs

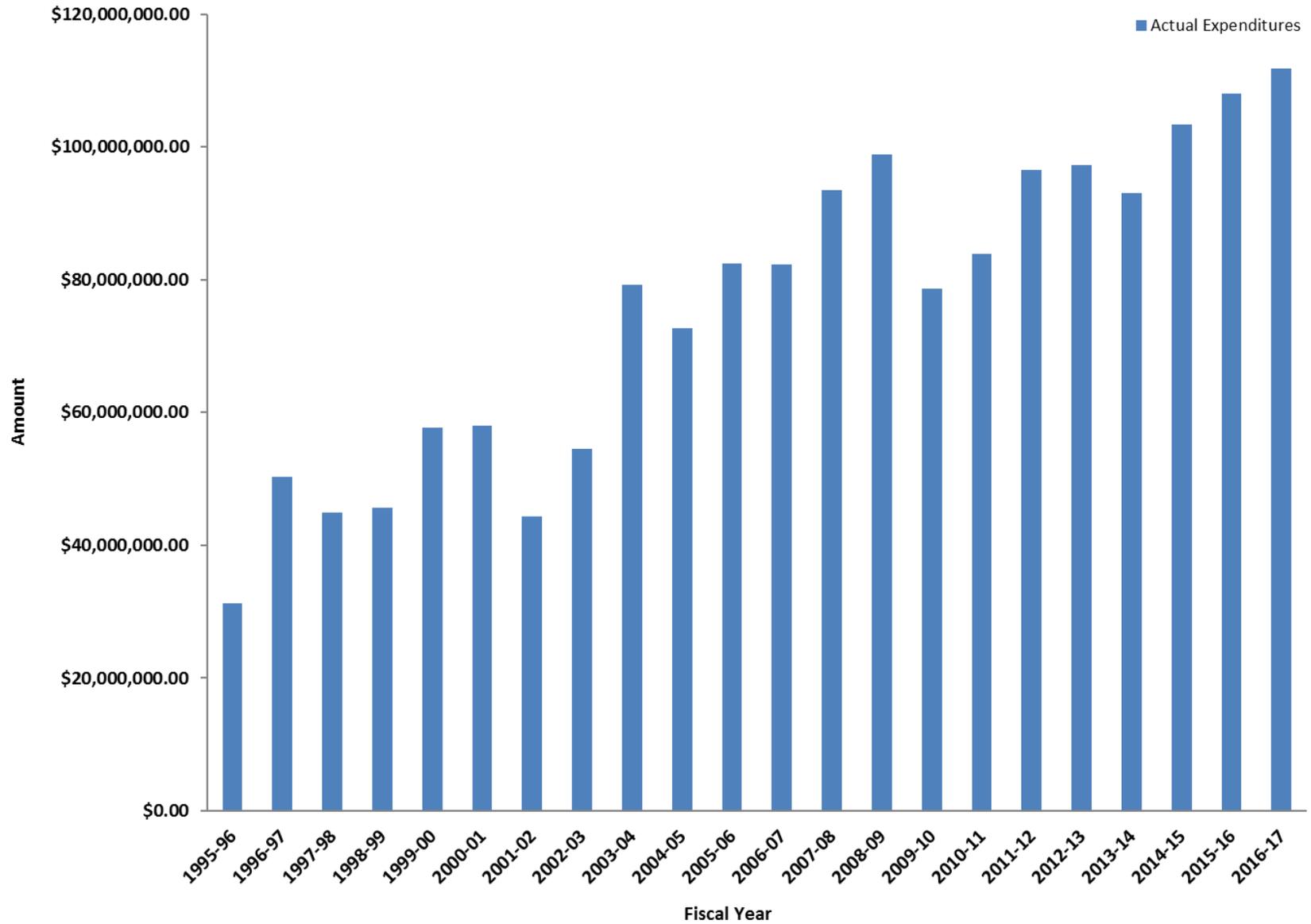


Figure C-2.5: 2016-17 Actual Funding Sources

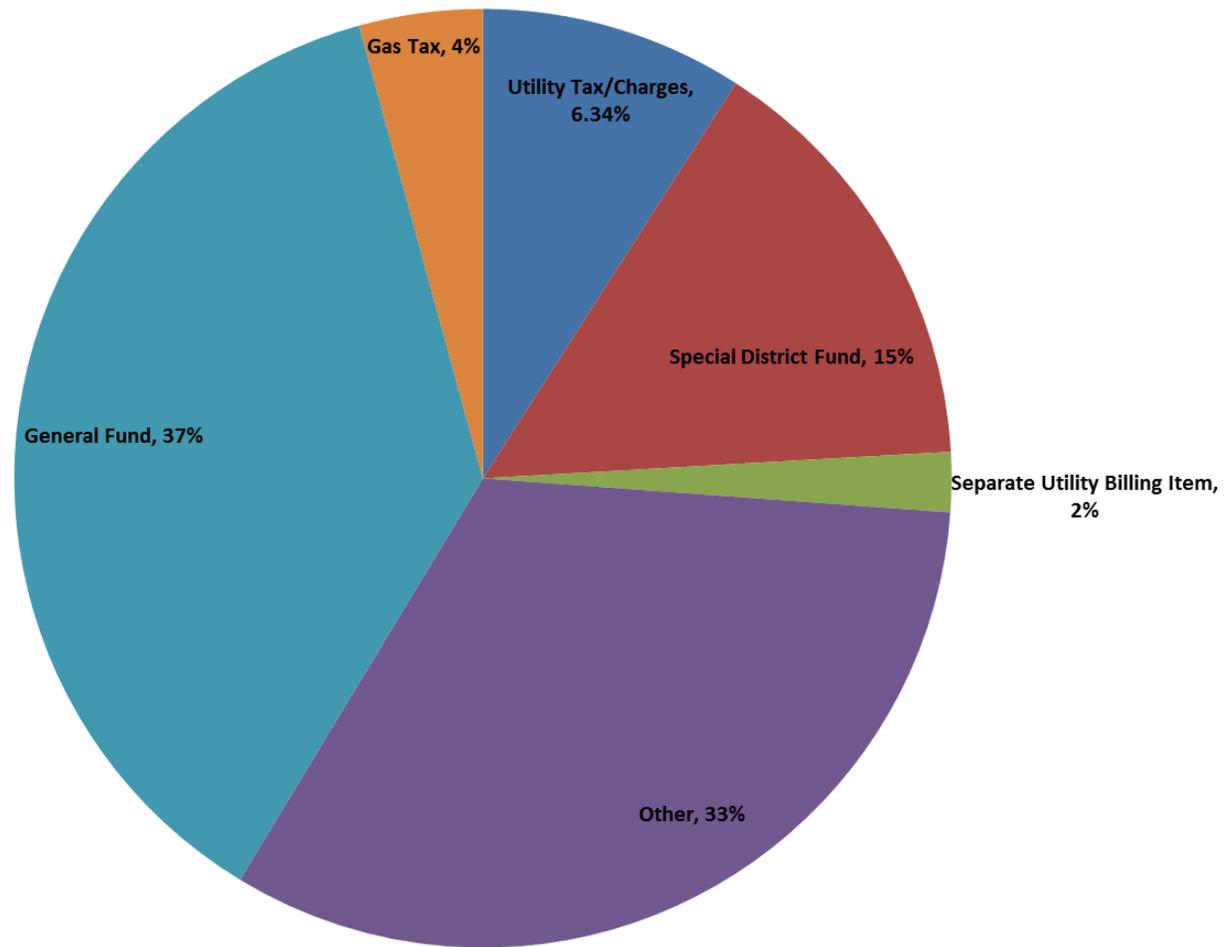


Figure C-2.6: 2017-18 Projected Funding Sources

