

# Proposed Budget

Fiscal Years 2016-17 and 2017-18

Orange County Sanitation District, California



**ADOPTED  
JUNE 22, 2016**

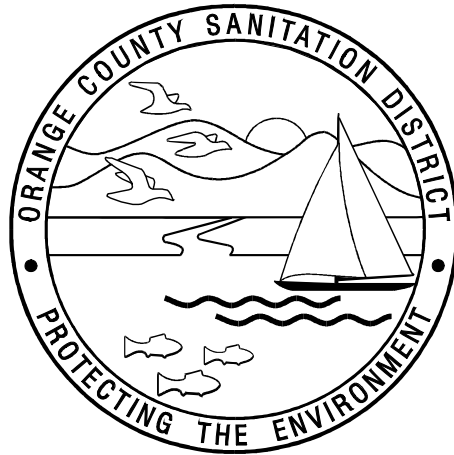


BACK OF FRONT COVER

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# Orange County Sanitation District, California FY 2016-17 & FY 2017-18 Proposed Budget

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## MISSION STATEMENT

**“To protect public health and the environment by providing effective wastewater collection, treatment, and recycling.”**

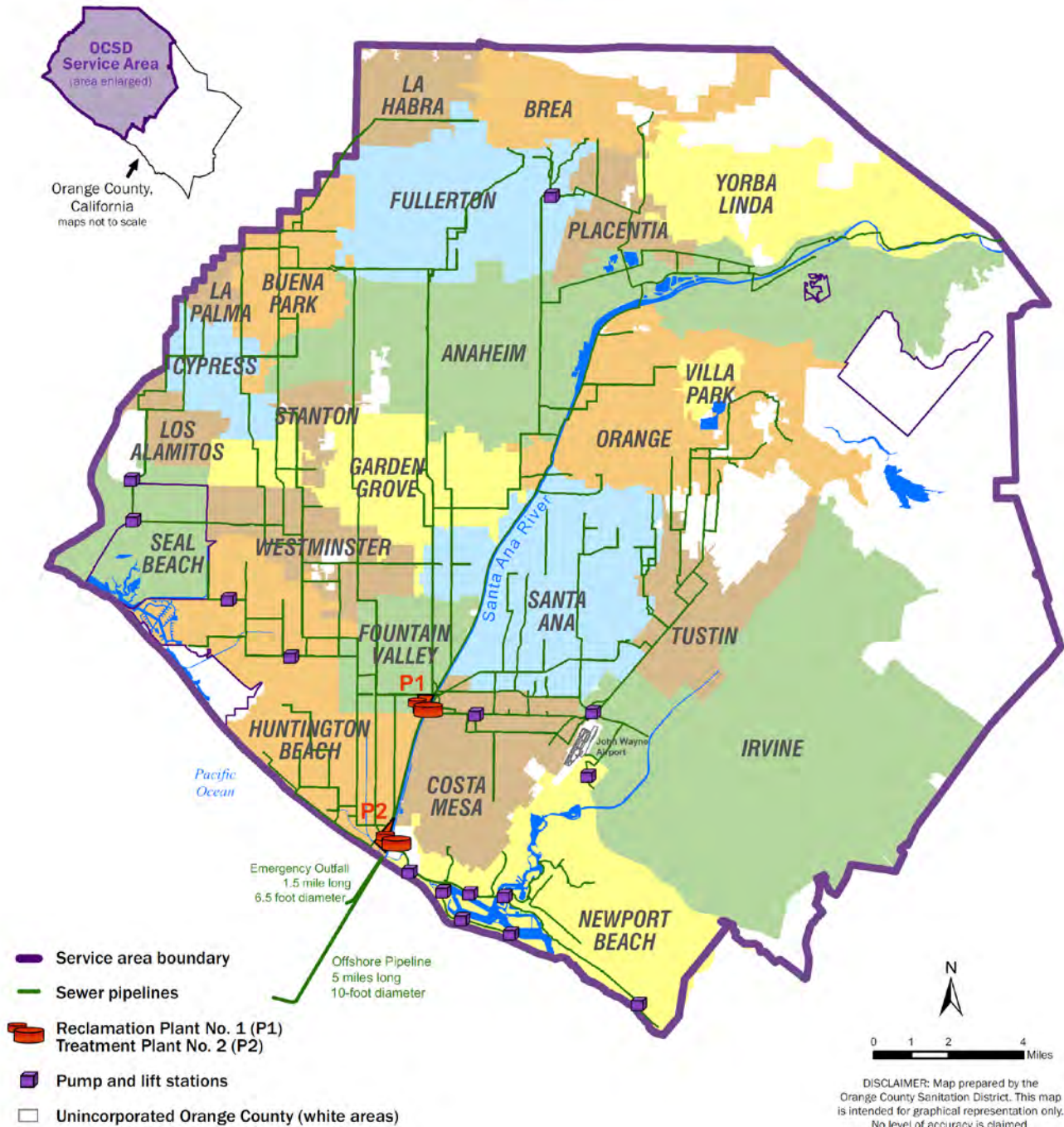
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***For Fiscal Years  
July 1, 2016 through June 30, 2017 and  
July 1, 2017 through June 30, 2018***



# 2016-17 & 2017-18 Budget

## Orange County Sanitation District Service Area and Treatment Plant Locations in Orange County, California



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# GFOA Budget Presentation Award

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GOVERNMENT FINANCE OFFICERS ASSOCIATION

*Distinguished  
Budget Presentation  
Award*

PRESENTED TO

**Orange County Sanitation District  
California**

For the Biennium Beginning

**July 1, 2014**

A handwritten signature in black ink, appearing to read "Jeffrey R. Emmer".

Executive Director

The Government Finance Officers Association of the United States and Canada (GFOA) presented a Distinguished Budget Presentation Award to the Orange County Sanitation District, California, for its biennial budget for the biennium beginning July 1, 2014.

In order to receive this award, a government unit must publish a budget document that meets program criteria as a policy document, as an operations guide, as a financial plan, and as a communication device.

The award is valid for a period of two years only. We believe our current budget continues to conform to the program requirements, and we are submitting it to GFOA to determine its eligibility for another award.

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# 2016-17 & 2017-18 Budget

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# OCSD Board of Directors

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## Orange County Sanitation District Board of Directors

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### AGENCY / CITIES

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### ACTIVE DIRECTOR

Anaheim	Lucille Kring
Brea	Glenn Parker
Buena Park	Fred Smith
Cypress	Mariellen Yarc
Fountain Valley	Steve Nagel
Fullerton	Greg Sebourn
Garden Grove	Steve Jones
Huntington Beach	Jim Katapodis
Irvine	Steven Choi
La Habra	Tom Beamish
La Palma	Peter Kim
Los Alamitos	Richard Murphy
Newport Beach	Keith Curry
Orange	Teresa Smith
Placentia	Chad Wanke
Santa Ana	Sal Tinajero
Seal Beach	Ellery Deaton
Stanton	David Shawver
Tustin	John Nielsen
Villa Park	Greg Mills

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### Sanitary Water Districts

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Costa Mesa Sanitary District (CMSD)	James Ferryman
Midway City Sanitary District (MCSD)	Joy Neugebauer
Irvine Ranch Water District (IRWD)	John Withers
Yorba Linda Water District (YLWD)	Robert Kiley

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### County Areas

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Member of the Board of Supervisors

Michelle Steel

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# 2016-17 & 2017-18 Budget

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## Board Committees

### STEERING COMMITTEE

John Nielsen, Board Chair  
Greg Sebourn Board Vice-Chair  
John Withers, Chair, Operations Committee  
Keith Curry, Chair, Administration Committee  
Lucille Kring, Member-At-Large  
David Shawver, Member-At-Large  
Tom Beamish, Member-At-Large

### ADMINISTRATION COMMITTEE

Keith Curry, Chair (Newport Beach)  
Lucille Kring Vice-Chair (Anaheim)  
Steven Choi (Irvine)  
James Ferryman (CMSD)  
Jim Katapodis (Huntington Beach)  
Peter Kim (La Palma)  
Greg Mills (Villa Park)  
Joy Neugebauer (MCSD)  
Glenn Parker (Brea)  
Teresa Smith (Orange)  
Sal Tinajero (Santa Ana)  
John Nielsen, Board Chair (Tustin)  
Greg Sebourn, Board Vice-Chair (Fullerton)

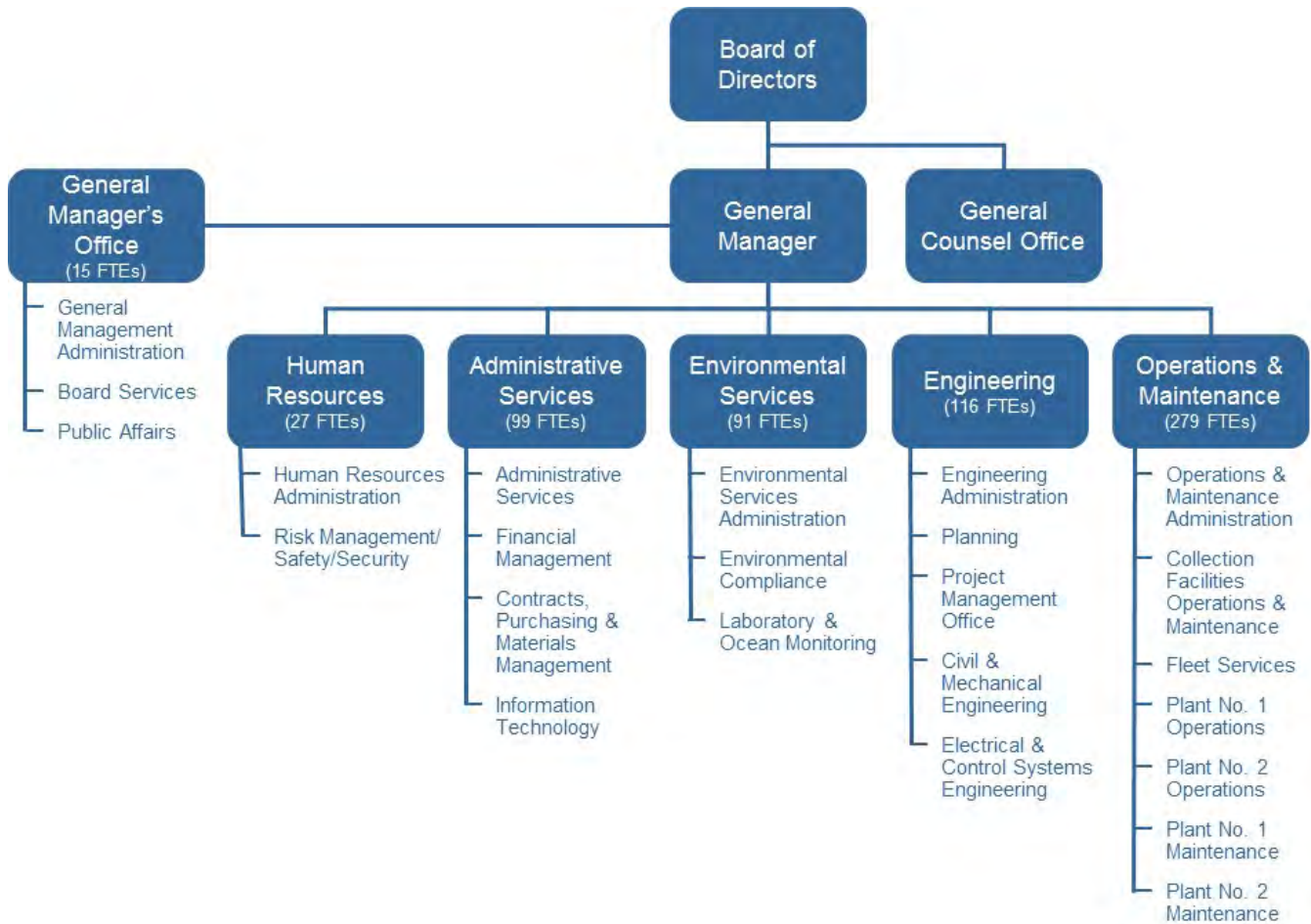
### OPERATIONS COMMITTEE

John Withers, Chair (IRWD)  
David Shawver, Vice-Chair (Stanton)  
Tom Beamish (La Habra)  
Ellery Deaton (Seal Beach)  
Steve Jones (Garden Grove)  
Robert Kiley (YLWD)  
Richard Murphy (Los Alamitos)  
Steve Nagel (Fountain Valley)  
Fred Smith (Buena Park)  
Michelle Steel (Board of Supervisors)  
Chad Wanke (Placentia)  
Mariellen Yarc (Cypress)  
John Nielsen, Board Chair (Tustin)  
Greg Sebourn, Board Vice-Chair (Fullerton)

### LEGISLATIVE AND PUBLIC AFFAIRS COMMITTEE

Tom Beamish (La Habra)  
Peter Kim (La Palma)  
Robert Kiley (YLWD)  
Lucille Kring (Anaheim)  
John Nielsen, Board Chair (Tustin)  
Greg Sebourn, Board Vice-Chair (Fullerton)  
John Withers (IRWD)

# District's Organizational Chart



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# 2016-17 & 2017-18 Budget

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## *Administrative Officials*

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### **Departments**

General Manager	James Herberg
Assistant General Manager	Robert Ghirelli
Director of Engineering	Robert Thompson
Director of Environmental Services	James Colston
Director of Finance and Administrative Services	Lorenzo Tyner
Director of Human Resources	Celia Chandler
Director of Operations & Maintenance	Edward Torres
General Counsel	Bradley Hogin

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# Reader's Guide to the Budget

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## Reader's Guide to the Budget

This guide is intended to help the reader understand what information is available in the budget and how it is organized. This budget document is broken down into ten sections including a Budget Glossary and Index. The Administrative Services Department invites your suggestions on ways to make the budget document more understandable.

The General Manager's Budget Message and a summary of the District's Core Values follow this guide. The General Manager's budget message introduces the budget to the reader.

Following is an explanation of the major sections of this budget:

### **Section 1 – Executive Summary**

The Executive Summary highlights critical issues and financial information regarding the District's FY 2016-17 & FY 2017-18 Budget.

### **Section 2 – Introduction**

- **Financial Overview and Budget Issues** - This section highlights the issues impacting the FY 2016-17 & FY 2017-18 Budget.

### **Section 3 – Policies and Practices**

- **Fiscal Policies** describe the District's financial goals along with policies addressing the operating budget; revenues and expenses; service fees; capital improvement program; long- and short-term debt; reserves; investments; and accounting, auditing and financial reporting.
- **GFOA Recommended Practices** lists all of the Accounting, Auditing, and Financial Reporting; Cash Management; Governmental Budgeting and Fiscal Policy; Debt Management; and Retirement and Benefits Administration practices that are recommended by the Government Finance Officers Association of the United States and Canada. Included within this list of best financial practices for states and local governments is the District's status as to whether we are in compliance, in progress towards compliance, or whether the practice is applicable to this agency.

- **The Budget Process** provides an overview of the budget development process and budget calendar.
- **Budget Assumptions** are decided on as a foundation for developing the budget, and they guide the District in determining the level of wastewater treatment services that will be provided to the community.
- **Accounting Systems and Budgetary Control** provides an overview of the District's accounting systems and the level at which budgetary control is maintained.

### **Section 4 - District Summary**

This summary section is a comprehensive overview of the FY 2016-17 & FY 2017-18 Budget with a focus on all consolidated District funds. Included are tables and graphs for both revenues and expenses.

### **Section 5 – Operations Overview**

This section is a comprehensive overview of the District's operating costs and related revenues for FY 2016-17 and FY 2017-18. The District's operations include collection, treatment, and disposal activities. Tables are included for revenues and expenses to assist the reader in interpreting the data.

### **Section 6 – Operating Divisions**

This section includes operating programs for the District's basic organizational units which provide collection and essential wastewater treatment services to the community. Divisional budgets are presented in the following format:

- **Organization Chart** - An organization chart by position is provided for each division.
- **Authorized FTE Positions**- The total number of full-time equivalent positions assigned to each division is included in this table.
- **Staffing Trends** - A multi-year staffing trend chart is provided to show the changes that have occurred in each division over time.
- **Service Description** - A description of the services or functions provided by each division.
- **2015-16 Performance Objectives** - This section represents the objectives defined by the division for the previous fiscal year.



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# 2016-17 & 2017-18 Budget

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- **2015-16 Performance Results** - A summary of major accomplishments and objectives that were actually met during the previous fiscal year.
- **2016-17 & 2017-18 Performance Objectives** - A list of projected goals to be accomplished during the 2016-17 and 2017-18 fiscal years.
- **Performance Measures** - A listing of the measures that will be used to evaluate the success of the budgeted fiscal years.
- **Budget Overview** - This section provides an overview of changes from the FY 2015-16 Budget to the FY 2016-17 & FY 2017-18 Budget. Additionally, the significant impacts of budgetary changes are outlined along with dollar amounts.
- **Expenses by Category** - A chart comparing the FY 2014-15 actual expenses and the FY 2015-16 budgeted and projected expenses against the proposed budget for FY 2016-17 & FY 2017-18. The percent change from the FY 2015-16 Budget compared to the FY 2016-17 Budget is also included.
- **Expenditure Trends** - This graph provides a multi-year historical trend of divisional expenses.

## ***Section 7 - Self-Insurance Program***

This section presents an overview of the self-insurance program, including program descriptions and revenue and expense detail.

## ***Section 8 - Capital Improvements***

This section of the budget gives an overview of the District's Capital Improvement Program (CIP), CIP project summaries, and detailed CIP project sheets. The project sheets outline project descriptions, project location, project type, projected costs, and funding sources.

## ***Section 9 - Debt Financing Program***

This section describes the District's Debt Financing Program including a listing of the outstanding debt issues, a description of the purpose of each issue, a debt service retirement schedule, and Debt Service Requirements, including principal and interest, over the life of the outstanding debt issues.

## ***Section 10 – Appendix***

- **Staffing** - Includes charts of staffing by department and category, charts of the historical staffing by department, a historical summary and detail schedules of authorized positions and full-time equivalent employees by department and by division.
- **Appropriations Limit** - The calculation of the District's California Constitutional appropriation limit.
- **Budget Glossary**
- **Miscellaneous Statistics**
- **Service Area Population Information**
- **Index**

## Serving:

Anaheim  
Brea  
Buena Park  
Cypress  
Fountain Valley  
Fullerton  
Garden Grove  
Huntington Beach  
Irvine  
La Habra  
La Palma  
Los Alamitos  
Newport Beach  
Orange  
Placentia  
Santa Ana  
Seal Beach  
Stanton  
Tustin  
Villa Park  
County of Orange  
Costa Mesa  
Sanitary District  
Midway City  
Sanitary District  
Irvine Ranch  
Water District  
Yorba Linda  
Water District

June 1, 2016

Honorable Chair and Board of Directors:

I am pleased to submit the Orange County Sanitation District's (OCSD) Proposed Budget for fiscal year 2016-17 and 2017-18. This document lays out the framework for OCSD's activities during the next two years, and serves as a source of information for OCSD's Board of Directors, our ratepayers and our employees. This budget includes the operational, capital and debt service expenditures necessary to cost-effectively support our mission and execute the Strategic Plan adopted by our Board of Directors in December 2015. Our work plan focuses on four distinct program areas:

- Expanded Water Recycling – In partnership with the Orange County Water District (OCWD), our agency recycles enough water to supply the needs of 850,000 people. Recognizing the need for a reliable, affordable and high quality water supply, our Board of Directors has set a goal of recycling 100 percent of our wastewater flows. We will be working with OCWD on the planning and design of the ultimate expansion of the Groundwater Replenishment System over the next two years.
- Infrastructure Reliability and Operational Sustainability – We will continue to improve our planned maintenance program to include civil assets in addition to electrical and mechanical systems. Our long term facilities Master Plan will also be updated during the next two years and will serve as a basis for our new rate structure that will take effect in 2018. Recognizing the importance of resiliency in the event of a disaster, we will complete our business continuity plan and establish offsite backup infrastructure. In fiscal year 2016-17, we will complete the transfer of local sewers in the Tustin area to a local provider, which will allow us to focus on regional services.
- Safety and Security – Capital projects, maintenance activities, and training to address safety in our workplace are included in our work plan. We are also enhancing our physical and electronic security measures.



- **Workforce Succession Planning – Recognizing the ongoing retirement wave, we will continue to invest in our employees focusing on planning, leadership training and improved recruitment strategies.**

I would like to take this opportunity to highlight some of the important revisions to next year's budget:

- **Departmental Restructuring – OCSD restructured its departments to strategically align our engineering, operating, and environmental functions to better meet the challenges of the future. The business units within the Facilities Support Services Department were merged into other departments. The Collections Operations and Maintenance and Fleet Services divisions were moved into the Operations and Maintenance Department. This change will allow for better coordination and standardization of our maintenance efforts for all of OCSD's infrastructure. The Source Control inspection team merged with the Pretreatment Compliance team in a newly created Environmental Services Department. This new department will lead OCSD's environmental and regulatory efforts and will also include the Environmental Sciences Laboratory, Ocean Monitoring, Compliance, Air Quality, and Biosolids Programs. The reorganization also consolidated project management functions in the Engineering Department to form an agency wide Project Management Office. These changes will allow us to more efficiently and effectively deliver service to internal and external customers.**
- **Operating Expense Cost Containment – Despite inflationary increases on many external costs such as chemicals and utilities, we will minimize the impact on rate-payers by aggressively negotiating our contracts, ensuring a competitive bidding environment, prudently managing debt and implementing efficiencies. The 2016-17 Operating Budget represents only a 3.5 percent increase from the current year projected actuals. Operating efficiencies such as the reduction of long-term liabilities, operational improvements and general cost containment have allowed OCSD to reduce ongoing expenses and the need for additional resources.**



Reduction in Long-term Liabilities – Many government agencies are faced with growing long-term liabilities, particularly in the area of pensions. OCSD has been aggressive in reducing its liability and developed a plan to address this issue. By making advanced payments, as I have included in this budget, OCSD has eliminated its unfunded pension liability, saving tens of millions of dollars in premium payments.

- Rate & Sewer Service Planning – Our current rate structure expires on June 30, 2018. During this budget period, we will establish and present to the board a sound financial plan in line with the goals of the agency.

While addressing rising treatment and chemical costs, aging infrastructure, and increased regulatory requirements, this budget displays our commitment to efficiency as it includes only minimal staffing and operating cost increases; and rate increases averaging less than 2 percent per year.

OCSD will continue to provide wastewater treatment, recycling, sewer and facilities maintenance, ocean monitoring and many other services while maintaining one of the lowest rates in the state. I believe this budget fully supports the goals included in the Orange County Sanitation District's Strategic Plan and positions us well to address challenges in the coming years.



James D. Herberg  
General Manager  
Orange County Sanitation District

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# 2016-17 & 2017-18 Budget

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## ORANGE COUNTY SANITATION DISTRICT CORE VALUES

### MISSION STATEMENT

The Mission Statement is the basic foundation that defines why the Orange County Sanitation District exists.

“To protect public health and the environment by providing effective wastewater collection, treatment, and recycling.”

### VISION STATEMENT

The Vision Statement supports the Mission Statement by expressing a broad philosophy of what the Orange County Sanitation District strives to achieve now and in the future in the delivery of services to our customers, vendors, other agencies, the general public and each other.

“ORANGE COUNTY SANITATION DISTRICT **WILL BE A LEADER** IN:

- Providing reliable, responsive and affordable services in line with **customer** needs and expectations.
- **Protecting** public health and the environment utilizing all practical and effective means for wastewater, energy, and solids resource recovery.
- Continually seeking **efficiencies** to ensure that the public’s money is wisely spent.
- **Communicating** our mission and strategies with those we serve and all other stakeholders.
- **Partnering** with others to benefit our customers, this region, and our industry.
- Creating the best possible **workforce** in terms of safety, productivity, customer service, and training.”

### Core Values

The Core Values support the Mission and Vision Statements by expressing the values, beliefs, and philosophy that guides our daily actions. They help form the framework of our organization and reinforce our professional work ethic.

- **HONESTY, TRUST and RESPECT**  
We aspire to the highest degree of integrity, honesty, trust, and respect in our interactions with each other, our suppliers, our customers, and our community.
- **TEAMWORK and PROBLEM SOLVING**  
We strive to reach OCSD goals through cooperative efforts and collaboration with each other and our constituencies. We work to solve problems in a creative, cost-effective and safe manner, and we acknowledge team and individual efforts.
- **LEADERSHIP and COMMITMENT**  
We lead by example, acknowledging the value of our resources and using them wisely and safely to achieve our objectives and goals. We are committed to act in the best interests of our employees, our organization, and our community.
- **LEARNING/TEACHING - Talents, Skills and Abilities**  
We continuously develop ourselves, enhancing our talents, skills, and abilities, knowing that only through personal growth and development will we continue to progress as an agency and as individuals.
- **RECOGNITION/REWARDS**  
We seek to recognize, acknowledge and reward contributions to OCSD by our many talented employees.



**EXECUTIVE SUMMARY**  
**SECTION 1**

BACK OF SECTION 1 DIVIDER

# Executive Summary

This FY 2016-17 and FY 2017-18 budget represents a consolidation of two one-year proposed operating and capital budgets. The District's FY 2016-17 operating and capital improvement budget is proposed at \$475.2 million, a 1.2 percent increase over the prior year budget of \$469.7 million. This overall increase is primarily attributable to an increase of one-time reduction of long-term obligations in the amount of \$15 million mostly offset by decreases of \$5.1 million in debt service, \$3.7 million in net CIP Outlay, and \$3.0 million in operating costs.

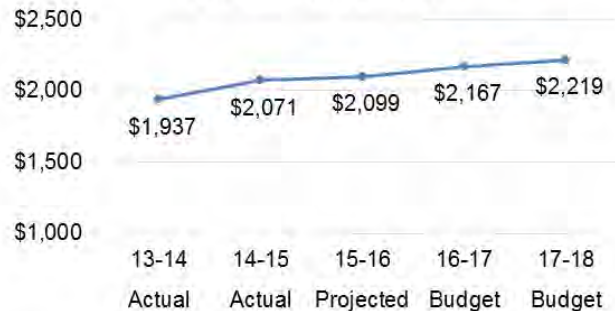
The proposed budget for FY 2016-17 includes the funding of \$65 million of long-term obligations consisting of the transfer of \$40 million in local sewer reserves as part of the ownership transfer of 174 miles of local sewers to a local sewer service provider and the current unfunded accrued actuarial pension liability of \$25 million.

The District's FY 2017-18 operating and capital improvement budget is proposed at \$375.2 million, an 8.5 percent decrease from the FY 2016-17 proposed budget after excluding the one-time long-term obligation reduction. This overall decrease is mostly comprised of a \$33.4 million, or 19.5 percent net decrease in cash outlays for construction projects and a \$3.6 million, or 4.2 percent decrease in debt service requirements. These decreases are slightly offset by a \$3.6 million, or 2.5 percent increase in operating expense. The fluctuation in capital outlay requirements over the next two years is attributable to the timing of the construction schedule on the implementation of the overall combined ten-year, \$2.4 billion CIP.

This FY 2016-17 and 2017-18 budget continues to reflect the agency's ongoing efforts to streamline operations. Staffing levels are being proposed at 627.0 full time equivalent (FTE) positions, an increase of 3.0 FTE positions, or 0.5 percent over the 624.0 FTE staffing level that was approved for FY 2015-16.

Additionally, service level increases in ocean monitoring, discharge and treatment, water reclamation and conservation, urban runoff diversions, biosolids management, and CIP expansion have resulted in a corresponding increase in cash flow requirements. Considering the CIP alone, the \$190.3 million approved CIP outlay for FY 2016-17 is part of the \$3.3 billion for active and future projects identified within the recently completed Annual CIP Validation Process.

**Cost to Collect, Treat, and Recycle  
One Million Gallons**



## Budget Overview

The agency's two treatment plants, located in Fountain Valley and Huntington Beach, process a combined 185 million gallons of wastewater each day generated by approximately 2.6 million people in central and northwest Orange County.

The FY 2016-17 proposed budget to operate, maintain and manage our sewage collection, treatment and disposal system is \$146.4 million, a decrease of 2.0 percent, or \$3.0 million, from the prior year budget.

Personnel costs are budgeted to decrease \$5.5 million, or 5.8 percent, primarily due to the decrease in budgeted retirement premiums of \$5.8 million or 34.5 percent. This expected decrease is due to the pay down of the District's unfunded actuarial accrued pension liability of \$125 million in FY 2014-15 and another \$50 million in FY 2015-16. As a result of these pay downs, the District's employer premium retirement contribution rate decreased 36.9 percent in the FY 2016-17 proposed budget over the prior year.

Overhead cost allocation out to the CIP has been increased by \$2.3 million, or 13.7 percent due to the proposed increase in CIP outlay over the previous year.

Somewhat offsetting these positive impacts on operating costs, repairs and maintenance costs are proposed to increase \$1.9 million or 15.4 percent. This increase is mostly attributable to increases in basic repairs and maintenance costs including the scheduling of one digester cleaning and one central generation engine overhaul at an estimate of \$1.3 million each.

Electrical power is proposed to increase \$1.0 million, or 15.9 percent, due to anticipated unit cost rate increases of 20 percent.

# 2016-17 & 2017-18 Budget

Contractual services and professional services are proposed to increase \$0.9 million, or 3.7 percent; and \$0.7 million, or 19.7 percent; respectively to support the new Civil Assets Maintenance Program for asset assessment, industrial cleanings and coatings, as well as specialized heating, ventilation and air conditioning (HVAC) support services.

Lastly, property and liability insurance premiums are proposed to increase \$0.6 million, or 124.0 percent, due to the drawdown of excess reserves in prior years and to provide for a steady and predictable cost going forward.

The FY 2017-18 proposed operations budget is \$149.9 million, an increase of \$3.5 million, or 2.4 percent over the FY 2016-17 proposed budget.

Personnel costs are proposed to increase \$1.3 million, or 1.5 percent increase due primarily to a \$0.8 million, or 1.2 percent increase in salaries. Group medical cost is increasing \$497,400, or 5.1 percent. Staffing is being proposed to remain unchanged from the 627.0 FTE positions proposed for FY 2016-17.

Repairs and maintenance costs are being proposed to increase \$1.9 million or 13.3 percent, primarily due to the scheduled overhaul of two central generation engines at Plant No. 2 for a total estimated cost of \$2.6 million.

Utilities are proposed to increase \$1.3 million, or 14.8 percent in FY 2017-18. This increase is primarily due to expected increases in electricity

power usage associated with the sludge dewatering and odor control facilities anticipated to be operational in March 2017.

The cost per million gallons of wastewater treated, an industry-wide performance measurement is expected to increase in fiscal year 2016-17 to \$2,167, a \$122, or 6.0 percent increase over the prior year budget of \$2,045, and an increase in fiscal year 2017-18 to \$2,219, a \$52, or 2.4 percent increase over the FY 2016-17 proposed budget. The 6.0 percent increase in FY 2016-17 is primarily due to the projected decrease in wastewater flows through the treatment system from the FY 2015-16 budget of 200 million gallons per day (MGD) to 185 MGD projected for FY 2016-17, or a decrease of 7.5 percent. Wastewater flows have an inverse relationship to the cost per million gallons; the lower the flows, the higher the cost. Wastewater flows are expected to remain flat at 185 MGD in fiscal year 2017-18.

The District's Capital Improvement Program (CIP) net cash flow budget for FY 2016-17 is \$171.3 million, an increase of \$31.1 million from the prior year estimated total. The CIP cash flow budget for FY 2017-18 is \$138.0 million, a decrease of \$33.3 million from the FY 2016-17 proposed CIP cash flow. This CIP two-year cash flow budget finances collection system, joint treatment works and disposal system improvement projects. These CIP cash flows are attributable to the additional infrastructure needs identified in the December 2009 Master Plan and in the 2016 validation of the CIP.

## FY 2016-17



### How Resources Are Used

# Executive Summary

District resources are used to fund the cost of providing wastewater collection, treatment and recycling service, including employees' salaries and benefits, debt service, capital improvements and the cost of self-insurance.

## Summary of Operating & Maintenance Expenses

### Collections, Treatment & Recycling Operations

	2014-15 Actual	2015-16 Budget	2016-17 Proposed	2017-18 Proposed
Salaries, Wages & Benefits	\$94,206,016	\$94,802,400	\$89,289,800	\$90,617,400
Administrative Expenses	1,409,104	1,624,570	1,752,650	1,865,480
Printing & Publication	267,347	412,020	284,340	368,960
Training & Meetings	835,764	1,050,500	1,158,070	1,182,210
Operating Materials & Supplies	15,364,441	17,191,000	16,698,250	17,369,600
Contractual Services	22,183,465	23,938,480	24,831,420	22,648,530
Professional Services	3,168,796	3,476,580	4,160,830	4,162,000
Research & Monitoring	810,854	831,000	800,000	872,400
Repairs and Maintenance	11,649,253	12,362,440	14,265,930	16,160,160
Utilities	7,157,617	7,787,080	8,912,240	10,233,670
Other Materials, Supplies & Services	1,701,945	2,708,370	3,385,020	3,768,540
Cost Allocation - CIP	(17,276,525)	(16,877,500)	(19,182,030)	(19,394,560)
<b>Net Operating &amp; Maintenance Expenses</b>	<b>\$141,478,077</b>	<b>\$149,306,940</b>	<b>\$146,356,520</b>	<b>\$149,854,390</b>

### Facilities Planning

In October 1999, the District adopted a new Facilities Strategic Plan to define the District's goals, responsibilities, and requirements over the next twenty years. It includes projections through the assumed "build-out" of the District's service area to the year 2050. This update to the 1989 30-year "2020 Vision" Master Plan was necessary because many of the assumptions used then have now changed. Critical factors such as population growth, new construction, the volume of wastewater delivered to the plants and viable water conservation and reclamation programs have been reevaluated.

In June 2002, the District completed the Interim Strategic Plan Update which further updated these critical factors and developed revised cost estimates and user fee projections for upgrading the District's level of treatment to meet secondary standards. On July 17, 2002, after reviewing: (1) the Interim Strategic Plan Update treatment alternatives, (2) ocean monitoring data, (3) public input, (4) regulatory issues, and (5) financial considerations, the Board of Directors made the decision to upgrade our facilities to meet secondary treatment standards.

The December 2009 Master Plan reaffirmed the need for the completion of three CIP projects totaling \$627 million to upgrade the District's treatment plants to meet secondary treatment standards. Implementation of secondary treatment standards was completed, as scheduled, by December 31, 2012.

The FY 2016-17 proposed cash flow budget of \$190.3 million is part of the overall CIP budget of \$3.3 billion for active and future projects identified within the recently completed Annual CIP Validation Process.

### Wastewater Recycling

In partnership with the Orange County Water District (OCWD), our agency recycles enough water to supply the needs of 850,000 people. Recognizing the need for a reliable, affordable and high quality water supply, the District's Board of Directors has set a goal of recycling 100 percent of all wastewater flows. The District has committed 168,000 acre-feet per year of secondary effluent to the OCWD's Groundwater Replenishment System (GWRS) for replenishment of the Orange County Groundwater



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## 2016-17 & 2017-18 Budget

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Basin. The District will be working with OCWD on the planning and design of the ultimate expansion of the Groundwater Replenishment System over the next two years.

### **Sewer Service Fee Increases**

In March of 2013, the Board approved rate increases for each year over the next five years. These increases are necessary for compliance with the District's debt fiscal policy of balancing the funding of new capital improvements with current revenues and existing debt, and to minimize the increase in rates over an extended period of time.

The impact of this five-year sewer fee schedule has increased the single family residence user fee rate, on average, 2.9 percent a year from \$294 in FY 2012-13 to \$339 in FY 2017-18. Following the first two years of this rate plan, the Board of Directors approved a reduction of the rate increase for the last three years of the plan, lowering the average of these increases from 2.4 percent to 1.6 percent, or to \$327 in FY 2016-17 and \$331 in FY 2017-18. These rate increases by the District are still well below the average annual sewer rate of \$475 being charged throughout the State according to the 2015 California Wastewater Charge Survey by the State Water Resources Control Board.

### **Staffing**

Authorized staffing levels are being proposed at 627 FTE positions over the next two-fiscal years, three FTE positions higher than the approved staffing level for FY 2015-16. However, staffing is still 51 FTE positions below the agency's all time high of 678 positions approved in FY 1995-96.

The District budgets staffing levels by FTE positions in order to provide a realistic estimate of actual staffing levels since not all employees are full-time employees. The part-time positions are funded at 1,040 hours. Part-time employees receive a prorated share of personnel benefits. The reductions from fiscal year 1995-96 are a result of this agency's effort in striving to provide wastewater treatment as efficiently and effectively as possible while lowering operational and maintenance costs to more closely match those agencies that are "best in class" for wastewater treatment facilities.

### **Strategic Planning**

In December 2015, the Strategic Plan was updated to cover a new five-year horizon. Following a similar process used in the prior year updates, the General Manager's Office initiated the planning effort with the Executive Management Team, then solicited input

and ideas from managers and supervisors. In December 2015, the staff-generated ideas were presented to the Board of Directors during a workshop, where Board Members discussed and deliberated changes and additions to the plan.

Driven by our Mission, Vision and Core Values, this Strategic Plan continues the District's aggressive efforts to meet the sanitation, health, and safety needs of the 2.6 million people we serve while protecting the environment where we live.

Since implementation of the first strategic plan in 2007, 40 strategic goals has been established and completed. In December 2015, the District updated the Five-Year Strategic Plan and, as part of the strategic planning process, reaffirmed the following goals:

- **Odor Control Master Plan** – Future process systems will produce the benefits intended.
- **Future Biosolids Management Options** – Develop biosolid disposal options, including third-party contracts and onsite capital facilities, for mid and long-term strategies.
- **Energy Efficiency** – Research new energy efficiency and conversion technologies to maximize energy efficiency, reduce operating costs, and minimize environmental impact.
- **Ownership Transfer of Local Sewers** – Complete the transfer of 174 miles of local sewers to a local sewer agency.
- **Future Water Recycling** – Determine partnerships, needs, strategies, and the cost vs. benefit of recycling of Plant No. 2 effluent water.
- **Workforce Planning and Development** – An ongoing workforce planning and development initiative to ensure that the District has the right people with right skills and abilities, in the right place.

This Strategic Plan continues to chart a focused roadmap of success for the future of the District. It addresses critical operations and construction issues, financial and budgeting challenges, and gives a clear and concise direction to staff, ratepayers, regulatory agencies, and the general public.

**INTRODUCTION**  
**SECTION 2**

BACK OF SECTION 2 DIVIDER

# Financial Overview & Budgetary Issues

## Financial Overview and Budgetary Issues

This section of the budget is a financial overview and an outline of issues affecting the development of the budget, as listed below:

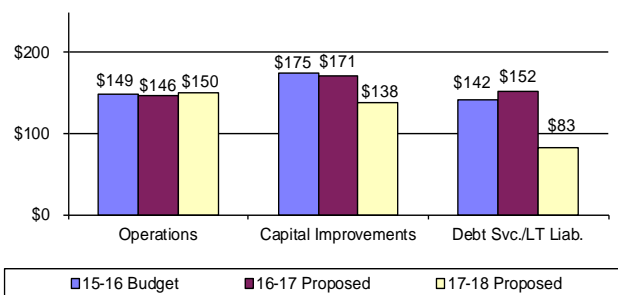
- Proposed Consolidated Cash Flow Budget
- Proposed Operating Budget
- Proposed Capital Improvement Cash Outlay
- Debt Service Requirements
- Sewer Service Fees & Property Tax Revenues
- Budget Highlights
- Reserves
- Staffing
- Business Plan
- OCSD Long-Term Planning Process
- OCSD Fiscal Policies
- GFOA Best Practices and Advisories

### Proposed Consolidated Cash Flow Budget

The total proposed cash flow budget for FY 2016-17 is \$475.2 million, a 1.2 percent increase over the prior year total cash flow budget of \$469.7 million. The total proposed cash flow budget for FY 2017-18 is \$375.2 million, a 21.0 percent decrease from the total proposed cash flow budget for FY 2016-17. The decrease in FY 2017-18 in comparison to the previous two years is due to the one-time reductions in long term obligations of \$50 million in FY 2015-16 and \$65 million in FY 2016-17. Excluding this one-time reduction of \$65 million in FY 2016-17, the total proposed cash flow budget in FY 2017-18 of \$375.2 is an 8.5 percent decrease from FY 2016-17.

The table below shows the comparisons of the FY 2015-16 Budget, and the FY 2016-17 and FY 2017-18 Proposed Budgets by major budget category.

**Budget Comparison**  
(in millions)

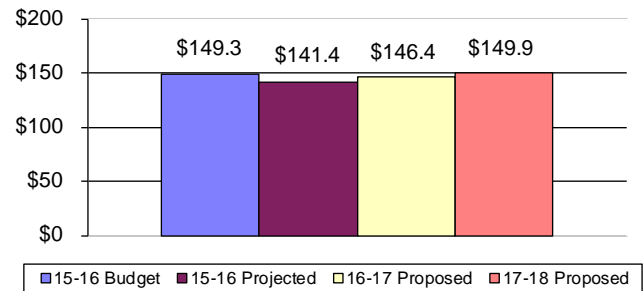


### Proposed Operating Budget

The Operating program accounts for the costs to operate, maintain, and manage the District's two treatment plants, with a secondary treatment design capacity of 332 million gallons a day, and the 570 miles of collection systems. All the personnel costs for the District are initially recorded as an Operating cost. Costs chargeable to the capital improvement program are allocated for the work done through a job cost system. These charges are shown as reductions in the line item Operating program budget. Costs remaining in the Operating program are ultimately allocated to the two individual revenue areas that make up the District, the Consolidated Revenue Area and Revenue Area 14, based on flows.

Operational cost, comprised of collections, treatment plant, and recycling operations and maintenance, and administration, are projected to come in under budget for FY 2015-16 Budget by \$7.9 million, or 5.3 percent. The FY 2016-17 Budget is being proposed with a decrease of \$3.0 million or 2.0 percent from the prior year budget, and the FY 2017-18 Budget is being proposed with an increase of \$3.5 million, or 2.4 percent over the FY 2016-17 Proposed Budget.

**Operations Budget Comparison**  
(in millions)



Analysis on the year-to-year change is provided from three perspectives. First, the FY 2015-16 Budget is compared to the FY 2015-16 year-end projections. Secondly, the FY 2015-16 year-end projections are compared to the FY 2016-17 Proposed Budget, and lastly, the FY 2016-17 Proposed Budget is compared to the FY 2017-18 Proposed Budget.

### FY 2015-16 Operations – Budget vs. Projected

As depicted by the chart above, operating expenses are projected to come in under the FY 2015-16 Budget by \$7.9 million, or 5.3 percent. The major categories that comprised most of the underage include personnel cost, or salaries and benefits, and

# 2016-17 & 2017-18 Budget

other operating costs, as well as the overage in the costs being allocated out of the operating budget to CIP. Somewhat offsetting these shortfalls includes an overage in repairs and maintenance.

Personnel costs are expected to come in under budget by \$4.9 million, or 5.1 percent primarily due to the retirements of many long-term employees, as there were 28 retirees in FY 2015-16 and 23 retirees in FY 2014-15, and the time it has taken to refill these vacant positions. As of March 31, 2016, there were 53 vacant positions, or 8.5 percent of total staffing.

Other operating costs are expected to come in under budget by \$1.1 million, or 40.2 percent due primarily to the unneeded and unspent budgeted contingency and prior year re-appropriation funds totaling \$0.9 million.

Increased cost allocation out to CIP is expected to enhance these operating savings by \$1.4 million, or 8.5 percent due to the overall increase in CIP outlays.

Repairs and maintenance costs are expected to exceed budget by \$1.1 million, or 8.6 percent as a result of Plant No. 2 Central Generation engine and digester C overhauls and Plant No. 1 primary clarifier effluent piping repairs.

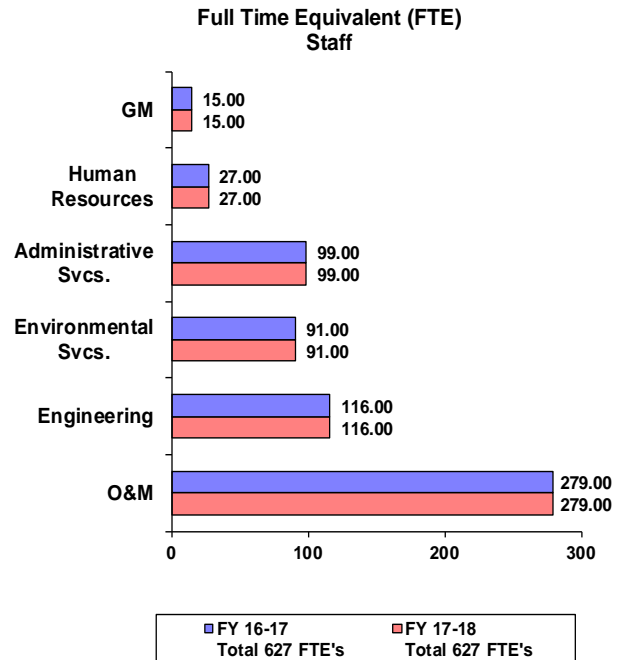
## FY 2015-16 Projected Operating Expense vs. FY 16-17 Proposed Operating Budget

The FY 2016-17 operating budget is a \$5.0 million, or 3.5 percent increase over the FY 2015-16 projected operating requirements. Increases in the proposed operating requirements are primarily attributable to increases in contractual services, professional services, and other operating costs.

However, personnel costs are being proposed at a 0.7 percent, or \$0.6 million decrease over the prior year projection. Retirement premiums are proposed to decrease \$4.6 million, or 29.6 percent over the prior year projected as the District's required employer contribution rate has been decreased by the Orange County Employees Retirement System from 20.75 percent in FY 2015-16 to 13.09 percent in FY 2016-17 as a result of the District paying down \$50 million of its Unfunded Actuarial Accrued Liability (UAAL) in FY 2015-16.

Mostly offsetting this \$4.6 million savings in retirement are a \$3.7 million, or 5.9 percent increase in salaries that are based primarily on existing

bargaining unit agreements as no salary adjustments have been included for periods beyond expiration of current agreements. Adding to the salaries increase is the addition of three new full time equivalent (FTE) staff positions bringing the proposed total FTE count in FY 2016-17 and 17-18 to 627.0 FTE's.



Contractual services and professional services are proposed to increase \$1.4 million, or 5.8 percent; and \$1.1 million, or 37.1 percent; respectively due primarily to increasing support for the new Civil Assets Maintenance Program for asset assessment, industrial cleanings and coatings, as well as specialized HVAC support services.

Repairs and maintenance costs are proposed to increase \$0.8 million or 6.2 percent over the prior year projection. Major changes from year-to-year are basically from the timing of when large facilities are scheduled for maintenance. In FY 2016-17, one central generation engine is scheduled for overhaul and one digester is scheduled for cleaning at an estimate cost of \$1.3 million each.

## FY 2017-18 Proposed Operations Budget vs. FY 2016-17 Proposed Operations Budget

In FY 2017-18, the second year of this two-year operating budget, staff is proposing a 2.4 percent, or \$3.5 million increase over the FY 2016-17 proposed operating requirements. Increases in the proposed

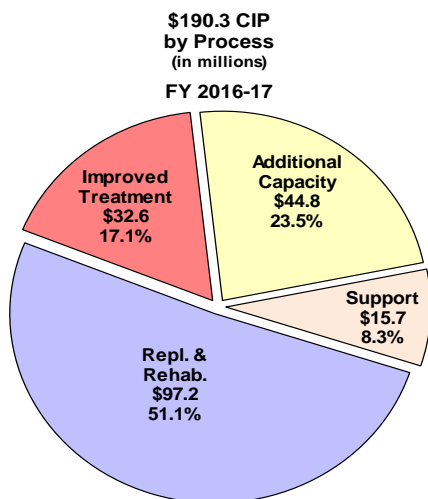
# Financial Overview & Budgetary Issues

operating requirements are primarily attributable to increases in personnel costs, repairs and maintenance, and utilities.

Personnel costs are being proposed at a 1.5 percent, or \$1.3 million increase in FY 2017-18 over the FY 2016-17 proposed budget. This increase is mostly attributable to the increases in salaries, group medical insurance and retirement premiums based on existing bargaining unit agreements as no salary adjustments have been included for periods beyond expiration of current agreements. Staffing is being proposed to remain at the same level as in the prior year at 627.0 FTEs. Salaries are expected to increase by 1.2 percent, or \$819,000, group medical insurance is proposed to increase 5.1 percent, or \$497,000, and retirement premiums are proposed to increase 0.8 percent, or \$84,000.

Repairs and maintenance costs are being proposed to increase \$1.9 million or 13.3 percent, primarily due to the scheduled overhaul of two central generation engines at Plant No. 2 for a total estimated cost of \$2.6 million.

Utilities are proposed to increase \$1.3 million, or 14.8 percent in FY 2017-18. This increase is primarily due to expected increases in electricity power usage associated with the sludge dewatering and odor control facilities anticipated to be operational in March 2017.



**Proposed Capital Improvement Cash Outlays**  
Proposed capital improvement outlays approximate one-third of the overall proposed budget and provide for the construction of facilities at the two treatment

plants, including the utility systems, administrative facilities, and the ocean disposal system and the rehabilitation, replacement and expansion of the 570 miles of the collection system. Projects over \$35,000 require formal bidding per the California Public Works Construction Act, and any project over \$100,000 requires Board approval in accordance with the District's procurement ordinance.

The budget has been prepared under assumptions included in the Facilities Master Plan adopted by the Board of Directors in December 2009 and in accordance with the Board approved 2015 Five-Year Strategic Plan Update.

The FY 2015-16 projected cash outlay for the CIP is expected to reach 74.7 percent of budget, or \$140.2 million. The FY 2016-17 proposed cash flow budget of \$190.3 million is part of the overall CIP budget of \$3.3 billion for active and future projects identified within the recently completed Annual CIP Validation Process.

In December 2009, the District adopted a new Facilities Master Plan to define District's goals, responsibilities, and requirements over the next twenty years. It includes projections through the assumed "build-out" of the District's service area to the year 2050. Critical factors such as population growth, new construction, the volume of wastewater delivered to the plants, and viable water conservation and reclamation programs were reevaluated.

The Asset Management Program within the Engineering Planning Division continues to assess the condition of the District's existing assets and systems to ensure that these assets and systems can provide the necessary level of service. The Planning Division will continue to review and update the ongoing and future CIP to appropriately manage the risks associated with asset or system failure. This year several projects were delayed, consolidated and re-scoped to help ensure that the CIP is delivered in the most efficient way possible. The Asset Management Program will continue these efforts and will continue to define the future CIP project requirements not currently included on the CIP list but are anticipated within the long-term financial plan to ensure effective and efficient operations in the future.

In conjunction with preparation for the FY 2016-18 Budget, District staff has developed and reviewed with the Board of Directors a capital program to deliver the levels of service desired by the Board of Directors. These levels of service and resulting

# 2016-17 & 2017-18 Budget

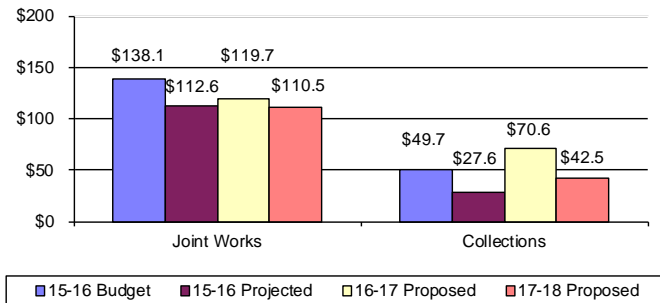
capital projects are included in the District's Five-Year Strategic Plan.

In addition, District staff has reviewed each CIP project to ensure that the scope of the project was appropriate, and that the cost estimates were accurate. The validated CIP includes 81 active and future capital projects with a 10-year outlay of \$2.4 billion.

The proposed 2016-17 CIP budget is organized by treatment process. The funds requested for the current cash flow budget total \$190.3 million, an increase of 1.3 percent over last year's cash flow budget of \$187.8 million.

Joint Works, or Treatment Plant Construction, projected outlay for FY 2015-16 is expected to reach 74.7 percent of the annual CIP cash flow budget of \$187.8 million. The FY 2016-17 and FY 2017-18 Joint Works proposed CIP cash flow budgets are \$190.3 million and \$153.0 million, respectively.

**CIP Program Budget**  
(Net of Joint Works Equity Transfers)  
(in millions)



Large treatment system projects include Sludge Dewatering & Odor Control at Plant No. 1 and Plant No. 2 with total proposed project budgets of \$188.3 million and \$90.5 million, respectively. Proposed cash outlays for these two projects in FY 2016-17 and FY 2017-18 are \$18.4 million and \$9.7 million and \$23.5 million and \$16.8 million, respectively. Other treatment plant projects with significant cash outlays over the next two years include Headworks Rehabilitation and Expansion at Plant No. 1 (\$6.7 million and \$7.6 million), the Headquarters Complex, Site Security, and Entrance Realignment Project at Plant No. 1 (\$5.9 million and \$11.0 million), and the Ocean Outfall System Rehabilitation (\$4.6 million and \$5.4 million).

The Collection System Capital Program projected outlay for FY 2015-16 is expected to reach 55.4 percent of the annual cash flow estimate, or

\$27.6 million. The Collection System FY 2016-17 and FY 2017-18 proposed CIP cash flow budgets are \$70.6 million and \$42.5 million, respectively. These proposed improvements are needed in order to keep the 570 miles of collection systems free from failure. Three large Collection System related projects include the Rehabilitation of Western Regional Sewers, the Newhope-Placentia Trunk Replacement, and the Gisler-Red Hill System Improvement project at Reach B with total project costs of \$217.1 million, \$99.5 million, and \$25.2 million; and FY 2016-17 and FY 2017-18 proposed cash outlays of \$16.0 million and \$6.4 million, \$20.9 million and \$14.2 million, and \$12.0 million and \$6.9 million, respectively. The Capital Improvement Program is described in more detail in Section 8 of this document.

### Debt Service Requirements

The District's long-term debt fiscal policy restricts long-term borrowing to capital improvements that cannot be financed from current revenue. Before any new debt is issued, the impact of debt service payments on total annual fixed costs will be analyzed.

The District issued the \$80.0 million Wastewater Revenue Obligation, Series 2010A in May 2010 and the \$157.0 million Wastewater Revenue Obligation, Series 2010C in December 2010, both as "Build America Bonds" (BABs) fixed rate debt and the last of the "new" money debt issuances. The American Recovery and Reinvestment Act of 2009 created a new financing product, BABs, for the municipal issuer. BABs are issued as higher interest taxable bonds; however, the U.S. Treasury provides a 35 percent subsidy on interest payments. The net cost, after accounting for the 35 percent subsidy payment, frequently results in lower net costs to the issuer, specifically in the maturity years beyond ten years. Based on the market conditions at the time of these issuances in comparing the back-loaded BABs new money borrowing to a back-loaded tax-exempt structure, Series 2010A resulted in present value savings to the District of \$15.2 million, as the debt was issued at an all-in true interest cost of 3.68 percent; and Series 2010C resulted in present value savings to the District of \$20.0 million, as the debt was issued at an all-in true interest cost of 4.11 percent.

On March 1, 2013, the federal government implemented certain automatic spending cuts known as "the sequester". As a result of the sequester, federal subsidy payments on BABs have been reduced annually from a high of 8.7 percent for the



# Financial Overview & Budgetary Issues

federal fiscal year ended September 30, 2013 to a low of 6.8 percent for the federal fiscal year ended September 30, 2016.

In March 2016, the District issued \$145.9 million of Wastewater Refunding Revenue Obligations, Series 2016A to refund \$162.8 million of Certificates of Participation, Series 2009A at a net present value savings of \$18.8 million. As a result of having an adequately funded reserves policy, experienced management, and prudent planning, the District was again able to secure “AAA” credit rating from both Fitch Ratings and Standard and Poor’s on this latest debt issuance.

This two-year budget proposes no additional new money debt issuances as the \$2.4 billion in future replacement, rehabilitation, and refurbishment projects anticipated over the next ten years will be adequately funded through current sewer service fee charges and existing reserves. The FY 2016-17 debt service requirements are proposed at \$86.7 million, an increase of \$2.7 million, or 3.2 percent from FY 2015-16 projected. Total Debt Service requirements for the second year of this two-year budget will fall to \$83.1 million, a \$3.5 million or 4.1 percent decrease.

The District’s Debt Financing Program is described in more detail in Section 9 of this budget.

## Sewer Service Fees

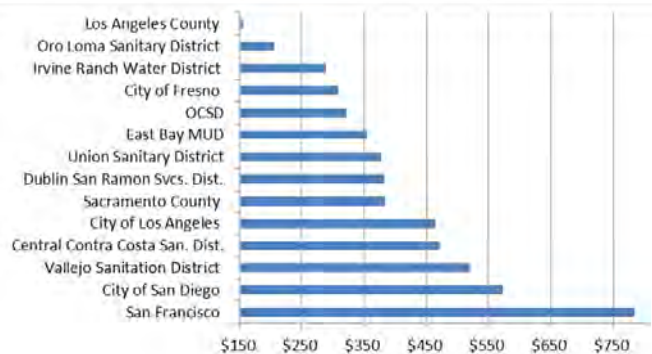
The Consolidated Revenue Area has an adopted Sanitary Sewer Service Fee to provide funding for operating the sewer systems in accordance with the Clean Water Act and the District’s Revenue Program. Revenue Area No. 14 is funded through user fee charges to the IRWD. Sewer service fees are set annually by the District after a review of projected needs.

In the fall of 2007, District staff conducted strategic planning workshops with the Board of Directors to lay out a capital program to deliver the levels of service desired by the Board of Directors. These levels of service and resulting capital projects are included in the District’s Five-Year Strategic Plan. This effort was reinforced through the adoption of a new Master Plan in December 2009, a planning effort to define the District’s goals, responsibilities, and requirements over the next twenty years, and includes projections through the assumed “build-out” of the District’s service area to the year 2050. Incorporating the 2009 Master Plan into the CIP validation update for FY 2016-17, the current CIP

includes 81 active and future capital projects with a 10-year outlay of \$2.4 billion.

In March 2013, following a Proposition 218 notice process, the Board approved sewer rate increases for each year over the next five years averaging approximately 2.9 percent a year. These increases are necessary to provide needed capital improvements, to meet additional treatment and disinfection requirements, and to minimize future rate increases.

The impact of this five-year sewer fee schedule has increased the single family residence user fee rate, the underlying rate for all sewer service user fees, an average of 2.9 percent a year from \$294 in FY 2012-13 to \$339 in FY 2017-18. Following the first two years of this rate plan, the Board of Directors approved a reduction of the rate increase for the last three years of the plan, lowering the average of these increases from 2.4 percent to 1.6 percent, or to \$327 in FY 2016-17 and \$331 in FY 2017-18.



Even with these increases, the OCS D rates are still well below the average annual sewer rate of \$475 being charged throughout the State according to the 2015 California Wastewater Charge Survey conducted by the State Water Resources Control Board.

In FY 1997-98, the District’s Rate Advisory Committee, made up of elected city officials, community, business and industry leaders, and District staff analyzed the District’s rate structure to determine whether user fees were equitable among residences and industry. In May of 1998, the Board approved the proposed revisions to the Sewer Service User Fee rate structure that more equitably charged consumers based on actual usage while remaining revenue neutral. Significant changes in the rate structure included:

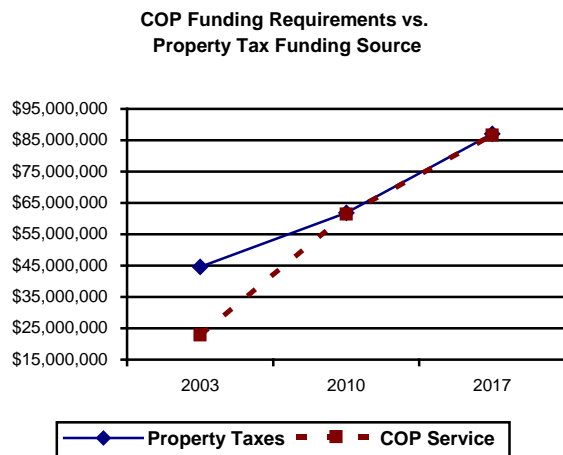
# 2016-17 & 2017-18 Budget

- Non-residential user charge will be based upon typical quantity and strength of discharge per 1,000 square feet.
- Fees for users who discharge high quantities or high-strength waste, including former Class III permittees such as restaurants and laundromats, will be based on the assumed flow and strength per 1,000 square feet.
- Discontinuation of the Class III permit process because of the implementation of the expanded and more accurate rate structure. This resulted in simplification of the billing and collection process for these two hundred users.
- The revised rate structure resulted in a greater number of decreases in charges (22,000) for non-residential users than increases (13,000).

Overall, the total fees collected remained essentially the same as those generated by the old structure.

## Property Taxes

The District's share of the one percent ad valorem property tax is dedicated for the payment of COP debt service. The apportionment of the ad valorem tax is pursuant to the Revenue Program adopted in April 1979 to comply with regulations of the Environmental Protection Agency and the State Water Resources Control Board and in accordance with COP documents and Board policy.



Historically, the District's property tax revenues were at a higher level than necessary to support the District's debt service obligations. However, capital improvement needs averaging \$200.0 million a year over the last ten years has required new COP debt issuances that have increased future debt service

payments that more closely matches property tax revenues.

Property tax revenues have increased from \$75.1 million in FY 2013-14 to a projected \$91.4 million in FY 2017-18, primarily due to the rebound from the economic decline and the collapse in the housing and commercial property markets beginning in 2008. Property tax revenues are now being projected to increase 5.0 percent a year through FY 2017-18.

Any property tax revenue shortfalls in meeting debt service obligations may require adjustments to user fees, as making debt service payments are legally mandated.

## Budget Highlights

This section briefly outlines the proposed major changes in all departments and Revenue Areas over the next two years. All Joint Works Operations, or plant operating costs and collection system costs are consolidated into the individual department budgets for better accountability and control. However, separate accounting is maintained between Joint Works Operation activities (treatment and recycling operational costs) and collection operational activities since each Revenue Area is directly responsible for their own collection operating costs. The Joint Works Operation activities are allocated to the Revenue Areas based on their individual contributions to the annual sewage flow. Likewise, the Joint Works Capital Improvements are allocated to the Revenue Areas on a three-year average of sewage flows called the "joint works equity percentage", and each Revenue Area is responsible for their own collection system capital improvements.

Details for each department can be found in "Section 6 – Operations" of this document. Complete staffing schedules are located in the Appendix.

## General Manager's Office

- An amount equaling 0.5 percent of the Operating materials and services budget is included within the General Manager's Re-appropriation line item for each of the next two fiscal years. Since the current year's budget lapses each year, re-appropriation of funds is needed to pay for goods or services ordered at the end of one budget year but not provided until the following year. The General Manager reviews and approves all departmental re-appropriation requests to ensure that prior year funding was available and has not been spent.

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# Financial Overview & Budgetary Issues

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- An amount equal to 0.85 percent of the Operating materials and services budget is included within the General Manager's contingency account for each of the next two fiscal years.

## *Human Resources*

- A decrease in retirement costs of \$1.0 million in FY 2016-17 that is reflective of the pay down of the District's unfunded actuarial accrued liability pension liability in prior years.
- An increase in property and general liability insurance premiums are anticipated to increase \$615,000 and \$320,000 in FY 2016-17 and FY 2017-18, respectively.
- No net change in FTE over the next two years.

## *Administrative Services*

- A decrease in retirement costs of \$808,000 in FY 2016-17 that is reflective of the pay down of the District's unfunded actuarial accrued liability pension liability in prior years.
- An increase in service maintenance agreements of \$552,000 in FY 2016-17.
- A combined increase in other professional services and printing services in FY 2017-18 for the anticipated rate study and mailing of Proposition 218 notices for potential rate increases.
- A net increase of 1.0 FTE beginning in FY 2016-17.

## *Environmental Services*

- A new department that is a conglomerate of divisions from previous departments with a total budget of \$17.2 million in FY 2016-17 and \$17.6 million in FY 2017-18.
- This new department will begin with a total FTE count of 91.0 in FY 2016-17 that is comprised of FTE's from the previous Facilities Support Services Department and from the Engineering and Operation & Maintenance departments.

## *Engineering*

- A decrease in retirement costs of \$1.5 million in FY 2016-17 that is reflective of the pay down of the District's unfunded actuarial accrued liability pension liability in prior years and the decrease in staffing.
- FY 2016-17 Proposed CIP outlays of \$190.3 million, an increase of 1.3 percent over last year's cash flow budget of \$187.8 million.

- FY 2017-18 proposed CIP outlays of \$153.0 million is a decrease of \$37.3 million, or 19.6 percent, from FY 2016-17 proposed budgeted CIP cash outlays.
- A net decrease of 11.0 FTE beginning in FY 2016-17.

## *Operations & Maintenance*

FY 2016-17 increases over FY 2015-16 budget:

- An increase in odor control costs of \$6.9 million.
- An increase in contractual services of \$2.3 million, which was partially mitigated by a decrease of \$401,000 in solids removal costs.
- An increase in repair and maint. of \$2.0 million.
- An increase in electricity costs of \$1.3 million.
- A decrease in personnel costs due to the transfer of employees to the Environmental Services department of \$5.0 million.
- A decrease in research and monitoring of \$745,000 as this service was transferred to the Environmental Services department.
- A net decrease of 15.0 FTE beginning in FY 2016-17.

FY 2017-18 increases over FY 2016-17:

- An increase in electricity costs of \$1.1 million.
- An increase in repairs and maintenance of \$1.8 million.
- An increase in personnel costs of \$602,000.
- An increase in odor control costs of \$565,000.
- A decrease in solids removal of \$3.3 million.

## *Individual Collection System*

Operating- reflects costs of operating and maintaining each Revenue Area's collection system, utilities, and Directors' fees. Industrial/commercial monitoring costs reflecting the expense of enforcing the Uniform Use Ordinance and EPA's pre-treatment standards are also included. The largest operating cost is the Revenue Area's flow-based share of the Joint Works Operating expenses.

Capital Facilities- accounts for each Revenue Area's share of the Joint Works Capital Improvement projects and for individual Revenue Area trunk sewer or pump station projects. The entire collection system has a sewer construction program Master Plan in progress as a result of the 1999 Strategic Plan. Other line items in these funds are accumulated reserves for future capital improvements in accordance with Master Plans and

# 2016-17 & 2017-18 Budget

federal and state requirements and annual purchase or sale of equity in the jointly-owned treatment works as provided for in the Joint Ownership, Operation, and Construction Agreement.

Debt Service/COP- accounts for the proceeds from and service of the Capital Improvement Program Certificates of Participation (COPs). The District's share of the one percent basic levy ad valorem property tax is dedicated to provide for COP principal and interest payments. See Section 9 for additional information on the District's debt financing program.

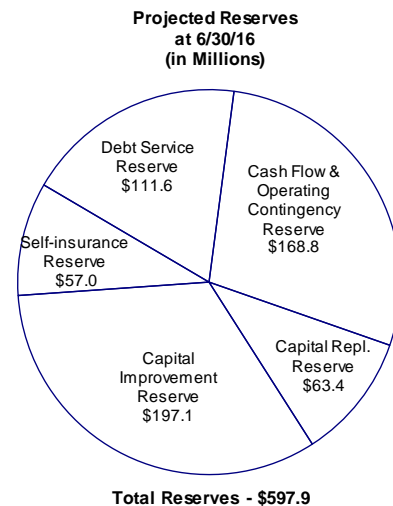
## Reserves

In 1998, the District conducted an in-depth review of the agency's reserve policies. This review included a survey of the reserve policies of 23 other public agencies as a tool to assist in the evaluation of the underlying economic reasons supporting the District's reserve policies. Based on this review, the Directors approved the following reserve policies:

- Cash Flow Reserve has been established at a level to fund operation, maintenance and certificates of participation debt service expenses for the first half of the fiscal year. The first installment of property tax revenues and sewer service user fees that is collected by the County through the property tax bill is not available until late December each year.
- Operating Contingency Reserve has been established to provide for non-recurring expenditures that were not anticipated when the annual budget and sewer service fees were considered and adopted. The level of this reserve will be established at an amount equal to ten percent of the annual operating budget.
- Capital Improvement Reserve has been maintained to fund annual increments of the capital improvement program. The long-term goal is to fund one half of the capital improvement program from borrowing and the other half from current revenues and reserves. With this program in mind, the target level of this reserve has been established at one half of the average annual cash outlay of the capital improvement program through the year 2020. Levels higher and lower than the target can be expected while the long-term financing and capital improvement programs are being finalized. Proceeds from any debt issuance targeted for construction are also included in this reserve until spent.
- Catastrophic Loss, or Self-Insurance Reserves has been maintained for property damage including fire, flood and earthquake, for general

liability and for workers' compensation. These reserves are intended to work with purchased insurance policies, FEMA and State disaster reimbursements. Based on the plant infrastructure replacement value, the level of this reserve has been set to fund the District's non-reimbursed costs, estimated to be \$57 million.

- Capital Replacement/Refurbishment Reserve will be established to provide thirty percent of the funding to replace or refurbish the current collection, treatment and recycling facilities at the end of their useful economic lives. The current replacement value of these facilities is estimated to be \$6.2 billion. The initial reserve level had been established at \$50 million, and is augmented by interest earnings and a small portion of the annual sewer user fee, in order to meet projected needs through the year 2030.
- Debt Service Reserve is required to be under the control of a Trustee by the provisions of the certificate of participation (COP) issues. These reserve funds are not available for the general needs of the District and must be maintained at specified levels.
- Rate Stabilization Reserve will be used to accumulate all available funds exceeding the targets for all other reserves. These funds will be applied to future years' needs in order to maintain rates or to moderate annual fluctuations. There is no established target for this reserve.

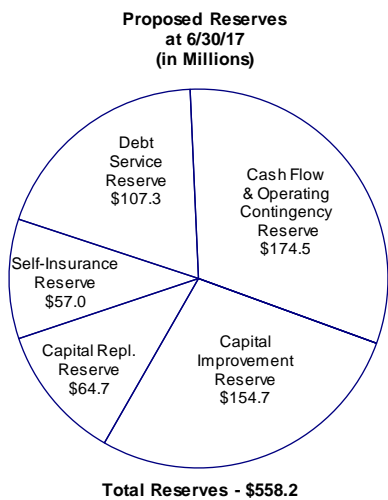


The FY 2015-16 total projected year-end reserve is \$597.9 million, \$78.3 million greater than the FY 2015-16 reserve requirement of \$519.6 million.

# Financial Overview & Budgetary Issues

The excess reserve buildup is due to the timing of the actual CIP outlays. As previously noted, the projected CIP outlay for FY 2015-16 is only \$140.2 million, or 74.7 percent of the total capital outlay cash flow budget of \$187.8 million. In addition, \$200 million of the previous overall projected outlays through fiscal year 2017-18 have now been pushed out into future years.

As a result of the CIP program being rescheduled out into future years and the receipt of unexpected one-time revenues, the proposed budget for FY 2016-17 includes the funding of \$65 million of long-term obligations consisting of the current unfunded accrued actuarial pension liability of \$25 million and the transfer of \$40 million in local sewer reserves as part of the ownership transfer of 174 miles of local sewers to a local sewer service provider, the East Orange County Water District.



Following the funding of \$65 million of long-term obligations and the funding of the FY 2016-17 spending plan, total year end reserves are projected to fall to \$558.2 million at June 30, 2017, within \$36.0 million of the consolidated reserve policy of \$522.2 million.

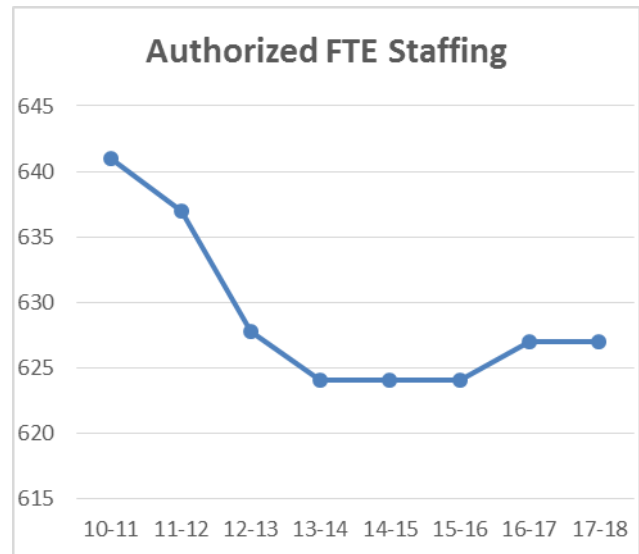
Collectively, these individual reserve requirements average \$600 million a year over the current ten-year cash flow forecast, approximately nine percent of OCSD's total \$6.2 billion in assets.

### Staffing Levels

Authorized staffing levels are being proposed at 627 FTE positions over the next two-fiscal years, three FTE positions higher than the approved staffing level for FY 2015-16. However, staffing is still 51 FTE positions below the agency's all time high of 678 positions approved in FY 1995-96.

The District budgets staffing levels by FTE in order to provide a realistic estimate of actual staffing levels since not all employees are full-time employees. The part-time positions are funded at 1,040 hours per year. Part-time employees receive a prorated share of personnel benefits.

The staffing reductions from 1995-96 are a result of this agency's effort in striving to provide wastewater treatment as efficiently and effectively as possible while lowering operational and maintenance costs to more closely match those agencies that are "best in class" for wastewater treatment facilities. However, as the result of new initiatives in the areas of water reclamation and conservation, and the expansion of the Capital Improvement Program (CIP), the existing staffing plan was no longer sufficient to meet the District's needs.



The Appendices within Section 10 provide a Staffing History Summary (by Department and Division) and Detail (by position title within each Department and Division).

### Business Plan

The District began development of a comprehensive annual Business Plan that was first included within the FY 2005-06 Budget document, and has been updated in every biennium budget since, including this update following the Board acceptance of the Five-Year Strategic Plan in December 2015. This Business Plan includes the funding resources necessary to support the Board approved strategic goals including providing exceptional customer service, protecting public health, stakeholder



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## 2016-17 & 2017-18 Budget

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understanding and support, and organizational effectiveness. Also included in this updated business plan is the business planning process and the current and projected key performance indicators (levels of service). The following topics are included within the FY 2016-18 Business Plan:

- Strategic Goals
- Levels of Service
- Performance Indicators and Results
- Two-Year Staffing Plan
- Updated Financial Model
- Risk Assessment & Mitigation Analysis
- Updated Asset Management Plan

A more detailed description of the FY 2016-17 Business Plan is provided within Section 2 – Page 15 through Page 27.

### ***OCSD Long-Term Planning***

The District's current efforts in regard to long-term planning include the December 2009 Master Plan, which focuses on the District's long-term capital improvement facilities and rehabilitation projects that will be needed annually out to the year 2030, and re-organizing the operations of the District in order for this agency to maintain "best in-class" wastewater treatment facilities.

### ***CIP Strategic Planning***

In October 1999 the District completed its CIP Strategic Plan, an update of the 1989 30-year "2020 Vision" Master Plan. Many of the assumptions used to develop the original plan, such as inflation, the projected service population, the level of building activity, and the volume of wastewater treated, were quite different from what was assumed nearly ten years earlier. If the assumptions of the Master Plan were not updated, the District could be constructing unnecessary facilities and charging higher fees than would be needed.

In addition to updating the population and flow assumptions, the Strategic Plan provides for an operations and financial plan and includes a review of the collection, treatment and recycling facilities, and ocean outfalls.

In June 2002, a new, or interim, CIP Strategic Plan Update was completed that revised many of the assumptions used to develop our previous planning documents, including population and land-use projections, the level of building activity in our service area and the volume of wastewater to be treated. This information was needed for the Board's consideration of secondary treatment the following

month. The Interim Strategic Plan Update also provides an operations and financial plan including a review of our collection, treatment and recycling facilities, and a study of our ocean outfall system.

In December 2009, the District adopted a new Facilities Master Plan to define the capital projects needed to meet the agency's level of service requirements over the next twenty years. It includes projections through the assumed "build-out" of the District's service area to the year 2050. Critical factors such as population growth, new construction, the volume of wastewater delivered to the plants and viable water conservation and reclamation programs were reevaluated.

The budget has been prepared under assumptions included in the Facilities Master Plan adopted by the Board of Directors in December 2009 and in accordance with the Board approved 2015 Five-Year Strategic Plan Update.

The FY 2015-16 projected cash outlay for the CIP is expected to reach 74.7 percent of budget, or \$140.2 million. The FY 2016-17 proposed cash flow budget of \$190.3 million is part of the overall CIP budget of \$3.3 billion for active and future projects identified within the recently completed Annual CIP Validation Process.

In conjunction with preparation for the FY 2016-18 Budget, District staff has developed and reviewed with the Board of Directors a capital program to deliver the levels of service desired by the Board of Directors. These levels of service and resulting capital projects are included in the District's Five-Year Strategic Plan.

In addition, District staff has reviewed each CIP project to ensure that the scope of the project was appropriate, and that the cost estimates were accurate. The validated CIP includes 81 active and future capital projects with a 10-year outlay of \$2.4 billion.

Over the next ten years, the CIP cash flow needs, including rehabilitation and replacement projects, will approximate \$2.4 billion, or annual average outlays of \$240.0 million.

### ***Five-Year Strategic Plan***

In November 2007, the Board of Directors adopted a new comprehensive strategic plan to steer the District's efforts and engage the organization to envision service levels and operational needs for the

# Financial Overview & Budgetary Issues

next five years. This strategic plan has been reviewed and updated each year since.

In December 2015, the Strategic Plan was updated to cover a new five-year horizon. Following a similar process used in the prior year updates, the General Manager's Office initiated the planning effort with the Executive Management Team, then solicited input and ideas from managers and supervisors. The resulting staff-generated ideas were presented to the Board of Directors during a workshop, where Board Members discussed and deliberated changes and additions to the plan.

Driven by our Mission, Vision and Core Values, this Strategic Plan continues the District's aggressive efforts to meet the sanitation, health, and safety needs of the more than 2.6 million people we serve while protecting the environment where we live.

Since implementation of the first comprehensive strategic plan in 2007, 40 strategic goals has been established and completed. In December 2015, the District updated the Five-Year Strategic Plan and, as part of the strategic planning process, reaffirmed the following goals:

- Completion of the Odor Control Master Plan;
- Development of Future Biosolids Management Options;
- Research new energy efficiency and conversion technologies;
- Complete the transfer of 174 miles of local sewers to a local agency;
- Determine partnerships, needs, strategies, benefits and costs associated with recycling of Plant No. 2 effluent water; and
- Workforce planning and development to ensure that the right people with the right skills and abilities, are in the right place, at the right time.

This Strategic Plan continues to chart a focused roadmap of success for the future of the District. It addresses critical operations and construction issues, financial and budgeting challenges, and gives a clear and concise direction to staff, ratepayers, regulatory agencies, and the general public.

## *Biosolids Management*

As a resource recovered through the wastewater treatment process, the District treats nutrient-rich,

organic matter (solids) to produce biosolids. Biosolids can be recycled through composting or fertilizing farm fields (non-food crops via land application) or disposed in a landfill for methane gas recovery. The District's goal is to ensure that biosolids management strategies align with existing market conditions and continue a sustainable, reliable, and economical biosolids management program that provides environmentally sound practices and meets the stringent federal, state, and local regulatory requirements.

The District's biosolids averaged about 756 tons per day ("tpd") in FY 2014-15, with an average cost per ton of \$62.38 for managing at offsite locations, as described in the table below. The FY 2016-17 budget for biosolids management is \$17.2 million, with a decrease of 19.2 percent anticipated in FY 2017-18 to \$13.9 million due to the completion of the \$188 million Sludge Dewatering and Odor Control facility that is projected to come online in March 2017. This facility will reduce the water content contained within the solids that will reduce hauling costs. The District's biosolids tonnage will begin trending down as new solids management facilities complete construction.

- IRWD is constructing solids processing facilities and will stop sending their solids to the District by the end of 2018.
- Plant No. 1 centrifuges are currently under construction and anticipated to start creating drier solids and reducing hauling costs by mid-2017.
- Plant No. 2 centrifuges will begin operating by early 2019.

The District currently manages its biosolids as follows:

<u>Contractor</u>	<u>Location</u>	<u>Product</u>	<u>Tons Per Day &amp; Avg. Cost / Ton (April 2016)</u>
Synagro	Kern County, CA	Compost	250 tpd – \$74.67
Synagro	La Paz County, AZ	Compost	70 tpd – \$59.95
Tule Ranch	Yuma County, AZ	Land application	350 tpd – \$54.50
O. C. Waste & Recycling	Orange County, CA	Local Landfill	70 tpd - \$41.19
Inland Empire Regional Composting	Rancho Cucamonga, CA	Compost	35 tpd - \$56.00



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## 2016-17 & 2017-18 Budget

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The District's contractors provide back-up biosolids management capacity in California and Arizona that include composting, land application, and landfill. Together, these options have the additional available capacity to manage more than ten times the District's daily biosolids production to ensure sustainable, consistent, and reliable operations.

The District anticipates issuing a new compost contract in 2016 as the current Synagro contract expires in December 2016. In 2015, the District began a project (PS15-01) to develop a Biosolids Master Plan (Plan). This Plan will meet one of the goals in the District's Five-Year Strategic Plan, which is to recommend future biosolids management options and capital facilities improvements for a 20-year planning period. The Plan will identify offsite biosolids management alternatives for the District to generate biosolids product that meet a sustainable biosolids beneficial reuse market. In addition, the Plan will include an evaluation of the existing District solids handling facilities, study solids treatment alternatives, and make recommendations for future capital facilities improvements.

In 2000, the District started using a management system to run its biosolids program, for which it was certified in 2003 by the National Biosolids Partnership. Certification requires regular third-party audits and a robust internal management system based on the ISO 14001 Environmental Management System standard. In late 2015, the District transitioned its biosolids management system to an internal standard, as outside certification is not required for the District's biosolids program. The District's internal standard is intended to maintain sound practices while allowing the District to streamline areas to increase efficiency and redirect staff resources. The District is committed to a diverse biosolids program to help ensure a sustainable, reliable, and economical program pursuant to an adopted Biosolids Policy.

### *Urban Runoff*

Recognizing that County beaches were being affected by pollution carried by urban runoff, the Board of Directors adopted a number of resolutions agreeing to accept dry weather urban runoff into the sewer system. In June 2002, Assembly Bill 1892 amended the District's charter to formally allow the diversion and management of dry weather urban runoff flows. Resolution No. 01-07, adopted March 28, 2001, declared that the District will initially waive fees and charges associated with authorized discharges of dry weather urban runoff to the sewer system until the total volume of all runoff discharges

exceeds four MGD calculated on a monthly average. For the first 12 years of the Urban Runoff Program, the average monthly flow averages remained less than the four MGD threshold thus avoiding user fee costs being assessed to the diversion permittees. In 2012, OCSD received a number of diversion proposals to deal with bacteria and selenium loading to the upper Newport Bay. The discharge from the additional proposed diversions combined with the existing diversion flows would eventually exceed the four MGD fee threshold. On June 12, 2013, the Board adopted Resolution No. 13-09 expanding the waiver of fees or charges on the treatment of dry weather urban runoff from four MGD to ten MGD. According to the Board, the change was necessary not only to protect the County's coastal resources, but also to provide an economic benefit to the local economy by helping to keep our beaches open.

The Dry Weather Urban Runoff Program is administered by the District's Environmental Compliance Division, which issues a discharge permit for each of the diversion structures. The permit functions as a control mechanism that specifically prohibits storm runoff and authorizes discharge only during periods of dry weather. The permit also establishes specific discharge limits, constituent monitoring, and flow metering requirements. In addition, the District conducts quarterly sampling and analysis of the urban runoff discharges to ensure discharge limit compliance with the various regulated constituents.

There are currently 19 active urban runoff diversion structures, three owned and operated by the County of Orange, 11 owned and operated by the City of Huntington Beach, two owned and operated by the City of Newport Beach, two owned and operated by the IRWD, and one owned and operated by PH Finance (present owner of the Pelican Point Resort). In 2015, the City of Newport Beach added their second diversion on Big Canyon Creek, an upper Newport Bay tributary. IRWD is currently constructing a pipeline to divert the Peters Canyon Wash, the biggest contributor of selenium in the San Diego Creek watershed in dry weather. The diversion of the Peters Canyon Wash is expected to be completed in 2016. The City of Santa Ana is proposing three additional urban runoff diversions to deal with bacteria and selenium loading to the Newport Back Bay Watershed: the Delhi, Santa Fe and Lane flood control channels. The total flow for the proposed urban runoff diversions could result in an additional three MGD of urban runoff discharge to the sewer.

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## Financial Overview & Budgetary Issues

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Since 1999, the District has treated a total of 8.5 billion gallons of dry-weather urban runoff that would otherwise have been discharged into the ocean with no treatment. During fiscal year 2015, the daily average urban runoff flow ranged between 0.36 and 1.33 MGD with a cumulative total diversion of 307 million gallons for this period. At the existing operations and maintenance cost per million gallons of \$1,697 and \$1,738 for FY 2014-15 and FY 2015-16, respectively, the District's cost for treating the urban runoff discharge for this period is estimated at \$568,005. The diversion flows temporarily decreased in the second half of 2015, perhaps due to the drought, but they are expected to increase again in the second half of 2016 when the Peters Canyon Diversion begins.

### *Groundwater Replenishment System*

The District has taken a multi-jurisdictional approach to planning for capital facilities because many of the methods for reducing or managing flows involve other jurisdictions. One such project is the Groundwater Replenishment System (the "GWRS").

In March 2001, the District entered into an agreement with the Orange County Water District (OCWD) to design and construct Phase I of the GWRS. The capital cost of this Phase was shared equally (50% shares) by each agency. The GWRS is a joint effort by the two agencies to provide reclaimed water for replenishment of the Orange County Groundwater Basin and to augment the seawater intrusion barrier. The GWRS became operational in January of 2008 with a production target of 70,000 acre-feet per year of potable water.

The GWRS Initial Expansion, funded solely by OCWD, broke ground in January 2012 to increase potable water production to approximately 103,000 acre-feet per year. The GWRS Initial Expansion was completed in June 2015, resulting in purifying 100 percent of the treated wastewater from the District's Fountain Valley Plant No. 1.

In April 2015, the District and the OCWD approved a \$2 million joint study to explore the possibility of using flows from the District's Plant No. 2, which may require additional infrastructure and treatment. The study is identifying an implementation plan to convey secondary effluent from the District's Plant No. 2 using new and existing infrastructure to support the GWRS Final Expansion. The District and OCWD will finalize the results of the study in July 2016. Board approval for the implementation plan is required before the GWRS Final Expansion can proceed.

The GWRS Final Expansion will be funded solely by the OCWD. The District will supply Plant No. 2 secondary effluent to support the GWRS Final Expansion. The District does not anticipate dedicating capital funding for the GWRS Final Expansion.

### ***Fiscal Policies***

Included within Section 3 – Pages 1 through 8 is a listing of the District's Board Adopted Fiscal Policies.

These fiscal policies were established for the purpose of:

- sustaining a financially viable Sanitation District;
- having the flexibility to adapt to local and regional economic changes; and
- maintaining and enhancing sound fiscal condition of the District.

Included within the District's fiscal policies are specific policies for Budgeting, Revenues, Expenses, Capital Improvements, Vehicles, Short-term Debt, Long-term Debt, Reserves, Investment, and Accounting, Auditing and Financial Reporting.

### ***GFOA Best Practices and Advisories***

Included in the budget within Section 3 – Pages 9 through 17 is a listing of accounting, auditing, financial reporting, cash management, budgetary and fiscal policy, debt management, retirement and benefit administration, and economic development and compliance planning practices recommended by the Government Finance Officers Association of the United States and Canada. Included within this list of best financial practices for state and local governments is the District's status as to whether we are in compliance or in progress towards compliance, or whether the practice is applicable to this agency. Out of the 154 practices identified, the District is in compliance with 103, 43 are not considered applicable to the District, and we are in the process of complying with the remaining eight.

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# Business Plan

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The District's Business Plan is intended to be an overarching plan based on sound decision making that provides direction on the work that the District will take on during the next two-year budget cycle and what will be deferred. This Business Plan is the underlying foundation for the development of the District's Budget.

During the process of developing the Business Plan, the District's Executive Management Team reviewed the proposed work for the upcoming year, balanced it with the staffing and funding resources needed and either approved the plan or made reductions. Reductions in work or resource commitment for the coming year will be considered in light of the Level of Service that the agency is committed to and appropriate levels of risk.

Updates to the Business Plan are performed on an on-going basis, to be developed ahead of the bi-annual budgeting process, and has a five-year horizon.

Each year, it is staff's intent to build upon the foundation of the previous Business Plan and to make each succeeding one more detailed and comprehensive. Elements included in the Business Plan for this two-year budget includes: (1) the Business Planning Process; (2) Strategic Goals, including the timeframe, milestones, and resources required for the completion of each step; (3) performance results pertaining to the Current and Projected Key Performance Indicators (Level of Services); (4) business accountability performance objectives and measures, that are aligned with the updated Five-Year Strategic Plan (these are detailed for each division within the departments in Section 6 of this document); (5) Two-Year Staffing Plan; (6) Financial Model Update; (7) Risk Assessment & Mitigation Analysis; and (8) 2015-17 Asset Management Plan Update.

## **Business Plan Process**

The framework for the Business Plan is developed as part of the process of updating the Five-Year Strategic Plan. The process for updating the Strategic Plan requires the assistance from all levels of the organization, and includes updating the Mission Statement, Vision Statement and Core Values; and addresses the major objectives and critical challenges facing the District now, in the next five-years, and further into the future. This Strategic Plan also lays down the foundation for the development of the Business Plan as it addresses critical operations and construction issues, financial and budgeting challenges, and gives a clear and

concise direction from the Board of Directors to staff, ratepayers, regulatory agencies, and the general public.

The Business Plan development process started with the goals and direction identified within the Strategic Plan. Staff from across the agency further defined these goals in terms of level of service, business risk exposure, capital and operational costs, staffing, and long-term financial impacts. The Business Plan identifies the required resources and prioritizes projects and goals, with recommendations for which goals should go forward for inclusion in the District budget, and which should be deferred or dropped from consideration.

## **Strategic Goals**

Over the next two years, the District will begin and complete many activities central to the goals of the organization. In December 2015, the District updated the Five-Year Strategic Plan and, as part of the strategic planning process, reaffirmed the following goals:

- Completion of the Odor Control Master Plan;
- Development of Future Biosolids Management Options;
- Research new energy efficiency and conversion technologies;
- Complete the transfer of 174 miles of local sewers to a local agency;
- Determine partnerships, needs, strategies, benefits and costs associated with recycling of Plant No. 2 effluent water; and
- Workforce planning and development to ensure that the right people with the right skills and abilities, are in the right place, at the right time.

Resources have been reallocated from lower priority activities within the organization to support these strategic goals.

Staff will report quarterly to the General Manager on the progress of each goal.

## **Level of Service**

In 2005, the Orange County Sanitation District first developed a summary of the District's present and future Levels of Service requirements as part of its Asset Management Program. These Levels of

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# 2016-17 & 2017-18 Budget

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Services were further developed with the Business Plan along with measurable outcomes, or key performance indicators, that the District is committed to meeting. This Business Plan documents that the Levels of Service provided by the District will increase significantly, requiring \$2.4 billion in identifiable capital improvements and millions in increased maintenance and operations costs over the next ten years.

No modifications were made to the District's Level of Service as a result of the December 2015 Five-Year Strategic Plan update. Levels of service have been identified for the following goals:

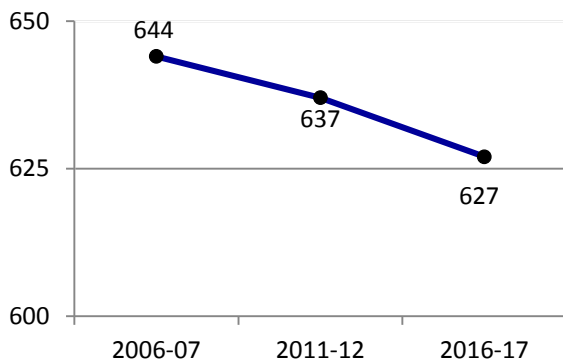
- Providing Exceptional Customer Service.
- Protecting the Public Health and the Environment.
- Managing and Protecting the Public's Funds.
- Stakeholder Understanding and Support.
- Organizational Effectiveness.

These existing Levels of Service targets, along with maintaining the existing performance levels, require a series of annual rate increases and borrowing to ensure that the District maintains the reserves and debt coverage ratios that are included in the Business Principle Key Performance Indicators. The District's present and projected Levels of Service are shown within this section on page 26 and 27.

## Staffing Plan

A comprehensive review was completed on the District's staffing levels for the next two fiscal years. This undertaking began with a review of the District's vision, mission, goals and objectives as part of the development of the Five-Year Strategic Plan.

### Authorized FTE Staffing



This analysis included identification and development of over 100 business units in the District with discreet duties and responsibilities.

Based on the needs of the agency over time, the total FTE requirement has declined steadily from 644 authorized FTEs in FY 2006-07 to the proposed staffing of 627 FTEs over the next two fiscal years. Staffing levels are proposed at minimum levels that are necessary to support the operation and maintenance of newly constructed secondary treatment facilities in an efficient manner to meet all compliance requirements.

Staff has focused on the reallocation of existing resources in order to balance the needs within the business units of this agency to ensure that core business operations are met, levels of service are maintained, and that strategic initiative elements are accomplished.

The proposed two-year staffing plan contains a significant level of analysis on how existing resources can be utilized in consideration of the increased demands placed on this agency by secondary treatment standards and in support of the \$2.4 billion capital improvement program over the next ten years without increasing staffing levels. A detailed breakdown on the proposed reallocation of FTEs can be found within the Appendix section of this budget.

## Financial Model Update

The District's most recent regional rate study was completed in January 2013 by Carollo Engineers. The purpose of the study was to update sewer service rates and to equitably distribute costs among utility customers and to support the District's regional rate structure over a five-year period from FY 2013-14 through FY 2017-18. Previously, the District had completed regional rate studies in 2008, 2006, 2002 and 1999. The following two drivers necessitated that a rate study be completed in 2013, and be incorporated into the Business Plan:

1. **The Necessity of Updating the Regional Sewer Service Fee and the Net Cost of Service Methodology for Industrial Rates** - The District provides regional sewage collection, treatment, and disposal services to approximately 550,000 customers located in central and northwest Orange County and collects fees for these services through a special assessment on the Orange County property tax bill. In addition, the District also

# Business Plan

maintains, repairs, and replaces the local sewers for approximately 17,000 of the above 550,000. High strength dischargers, or industrial customers, pay sewer fees based upon a net cost of service. A rate study was required to determine the equitable rates for these three types of users.

- 2. Five-Year Proposition 218 Notice** - The District's last California Proposition 218 Notice notifying rate payers of potential sewer rate increases over the past five-years had expired and a new 5-year Proposition 218 Notice approved by the Board and the justification of the new sewer service fee rates over the next five years needed to be supported by an updated sewer rate study.

In their Financial Model Update Report for the District issued in January of 2013, Carollo Engineers recommended that the District:

- Based on current operational and capital project assumptions, implement annual increases of 4.8%, 2.6%, 2.5%, and 2.4%, respectively, over a five-year period ending in FY 2017-18 (Following the first two years of this rate plan, the Board of Directors approved a reduction of the rate increase for the last three years of the plan, lowering the average of these increases from 2.4 percent to 1.6 percent, or to \$327 in FY 2016-17 and \$331 in FY 2017-18).
- Increase to the unit costs to high strength discharges for FY 2016-17 and FY 2017-18, as follows:

	<u>Industrial Discharge Sewer Rates</u>		
	<u>\$/ 1,000</u>	<u>\$/ lbs</u>	<u>\$/ lbs</u>
	<u>gallons</u>	<u>B.O.D.</u>	<u>T.S.S.</u>
Unit Cost - FY 2016-17	\$1.3611	\$0.6470	\$0.6882
Unit Cost - FY 2017-18	\$1.3776	\$0.6548	\$0.6965
% Increase	1.2%	1.2%	1.2%

All recommendations from the January 2013 Financial Model Update Report were approved by the Board to ensure that the funding required for the additional capacity projects required for new users would be available at the time of construction.

Capital facilities capacity charges (CFCC) and local sewer service fees are based on the Financial Model Update Report from April 2008 that increases the CFCC and the supplemental CFCC

by the change in the Engineering News Record Construction Cost (ENR) Index annually.

In December of 2009, the 2009 Facilities Master Plan was adopted, and because, the CFCC fees are based upon the most recently completed capital strategic plan, staff was directed to perform a new rate study on CFCCs in 2010.

It was determined, as a result of the new Master Plan, that future build-out is now projected to be less than what was anticipated in the previous master plan. In addition, the District has experienced a shift in its customer base resulting in an increase in residential versus non-residential customers. Staff believes the shift has occurred due to recent annexations that were primarily residential and new residential construction that was completed in recent years. The shift towards residential has resulted in a decrease to the residential CFCCs and an increase to the non-residential CFCCs.

Based on the CFCC rate study in 2010, CFCC and Supplemental CFCC fees were established in FY 2012-13 that have been adjusted by the ENR annually since, and are as follows for FY 2016-17:

	<u>CFCC Rates</u>	
	<u>Residential</u>	<u>Commercial/</u>
	<u>CFCC</u>	<u>Industrial CFCC</u>
Unit Cost - FY 2015-16	\$3,588	\$1,862
Unit Cost - FY 2016-17	\$3,710	\$1,925
% Increase	3.4%	3.4%

	<u>Supplemental CFCC Rates</u>		
	<u>\$/ 1,000</u>	<u>\$/ lbs</u>	<u>\$/ lbs</u>
	<u>gallons</u>	<u>B.O.D.</u>	<u>S.S.</u>
Unit Cost - FY 2015-16	\$1.802	\$0.38638	\$0.20720
Unit Cost - FY 2016-17	\$1.863	\$0.39952	\$0.21425
% Increase	3.4%	3.4%	3.4%

## Risk Assessment Analysis

Many leading organizations are formally applying risk management processes to identify and manage risks across many aspects of their business. The formalization of risk management processes is a logical step towards increased accountability and transparency placed on the Board and District management.

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## 2016-17 & 2017-18 Budget

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Risk assessment and mitigation includes the following steps:

- Identify and assess strategic and organization-wide risks facing the District and develop a high level risk register;
- Identify mitigation measures that the District currently has in place;
- Propose additional mitigation measures that the District considers appropriate to manage; and
- Develop an action plan of responsibilities and timeframes for follow-up.

The Risk Register is a compilation of the various risks facing the Orange County Sanitation District, as seen and described annually by District managers and senior management. Business Risk is defined as a threat that an event, action or inaction, will adversely affect the District's ability to achieve its business objectives and execute its strategies successfully. The District first created the Risk Register in 2006 and subsequently updated it at least bi-annually through 2015.

The Risk Register Update in 2015 identified top risks: (1) liquefaction from an earthquake that may cause pipeline damage or other system failures and (2) the ability to attract future qualified employees following the retirement of existing employees. Managers and executive management continue to review these issues and various ways to address those that might impact OCSD.

### **Asset Management**

In December 2002 the Orange County Sanitation District (OCSD) Board adopted their "Asset Management Strategic Plan and Framework Analysis" (Strategic Plan). The Strategic Plan defined Asset Management for OCSD as; "to create and acquire, maintain, rehabilitate, replace and augment these valuable wastewater assets in the most cost effective (lowest life cycle cost) sustainable manner at the level of service required by present and future generations of regulators and customers at an acceptable level of risk."

The District is committed to providing services for its rate payers to reliably meet our regulatory mandates and levels of service approved by the Board of Directors, and will provide these services using sustainable engineering principles that result

in the lowest responsible lifecycle cost. The District installs, operates, maintains, refurbishes and disposes of assets with lifecycles measured from years to decades, so an approach which balances long, medium and short-term needs is necessary.

Asset management has evolved into a comprehensive decision-making framework that encompasses engineering planning, design and construction of quality facilities, optimized operation, proper maintenance, and planned refurbishment and disposal that will meet the District's changing needs. This coordinated decision making process will allow the District to consistently meet mandated levels of service to the rate payers at the lowest lifecycle cost.

The District's Asset Management Plan focuses on the long-term modeling of systems to ensure the proper rate structure is in place to support sustainable operations and to prioritize condition assessment studies based on service life and service conditions. These are important starting points and have yielded tangible benefits in reduced risk levels and an improved capital planning approach. The results of the long-term modeling are completely dependent on the data quality of the databases supplying information to the TeamPlan Software. Staff continues to improve the data quality of the source systems to improve the accuracy of the long-term model. The implementation of the Maximo Computer Maintenance Management System (CMMS) is an example of an effort to improve OCSD's Asset Register. CMMS Technicians and the Asset Engineers continue to work to update the database information including installation date, asset cost, condition and criticality in the new system.

While the TeamPlan Software projects future renewal cash flow requirements in the long-term, OCSD has been striving to more accurately identify medium to short-term capital cash flow requirements. Specifically, the Engineering Planning Division has been working on developing a medium to long-term (up to 20-year) Capital Improvement Program (CIP) by creating specific project plans for the refurbishment, rehabilitation or replacement for each asset area.

This medium-term management is important for several reasons. By moving away from narrowly focused projects to solve individual problems, to more comprehensive projects refurbishing entire



processes, OCSD benefits by having less operational disruption and more efficient project delivery, better cash flow estimation, and better operations and maintenance decision-making framework. This is a huge undertaking based on the number of asset and facilities, but over time the undefined future rehabilitation capital estimates within the 20-year window are expected to be drastically reduced and replaced by more specific estimated capital needs.

Complementing the medium-term planning are the short-term efforts to coordinate maintenance actions that can reduce risks, actively defer the larger refurbishment projects, and reduce asset consumption rates to minimize the need for replacement of structures and conveyance systems when projects are executed. The Planning Division asset engineers are constantly reviewing their area scopes of work, utilizing their criticality and condition information and engineering judgment, to identify opportunities for operational adjustments or maintenance activities that cost effectively extend the life of key assets which may allow for deferral of the larger overall project. This may be a targeted equipment replacement or pipeline repair that is more urgent than the need of the overall facility. These engineers may also identify opportunities to reduce asset consumption through coating systems, atmosphere improvements or small structure repairs before major damage is done. These actions can drastically reduce the cost of future projects by preventing the need to demolish and replace entire structures.

The District is committed to continuous improvement of the process by which it manages the assets and facilities that are required to reliably deliver its level of service commitments. The additional resources and individual accountability for specific areas has improved, and will continue to improve our capital planning, project packaging, project execution and delivery, plant operability and maintenance planning.

The average age and value of the assets OCSD owns is increasing steadily over time, the latent asset replacement obligation is rising, and as a consequence, OCSD needs to plan for decreased capital projects for expansion and increased renewal expenditures in the future relative to past expenditure levels. Additional focus will need to be given to ensuring that appropriate operation and maintenance strategies are being applied that

consider the different ages of assets being maintained.

### Asset Valuation

The replacement valuation for all of OCSD's assets has been updated. The table below presents the current replacement and depreciated values of OCSD's assets. The replacement value represents the cost in December 2009 dollars to completely rebuild all the assets to a new condition. The depreciated value is the book value of the assets based on their age, which is a prediction of their current condition.

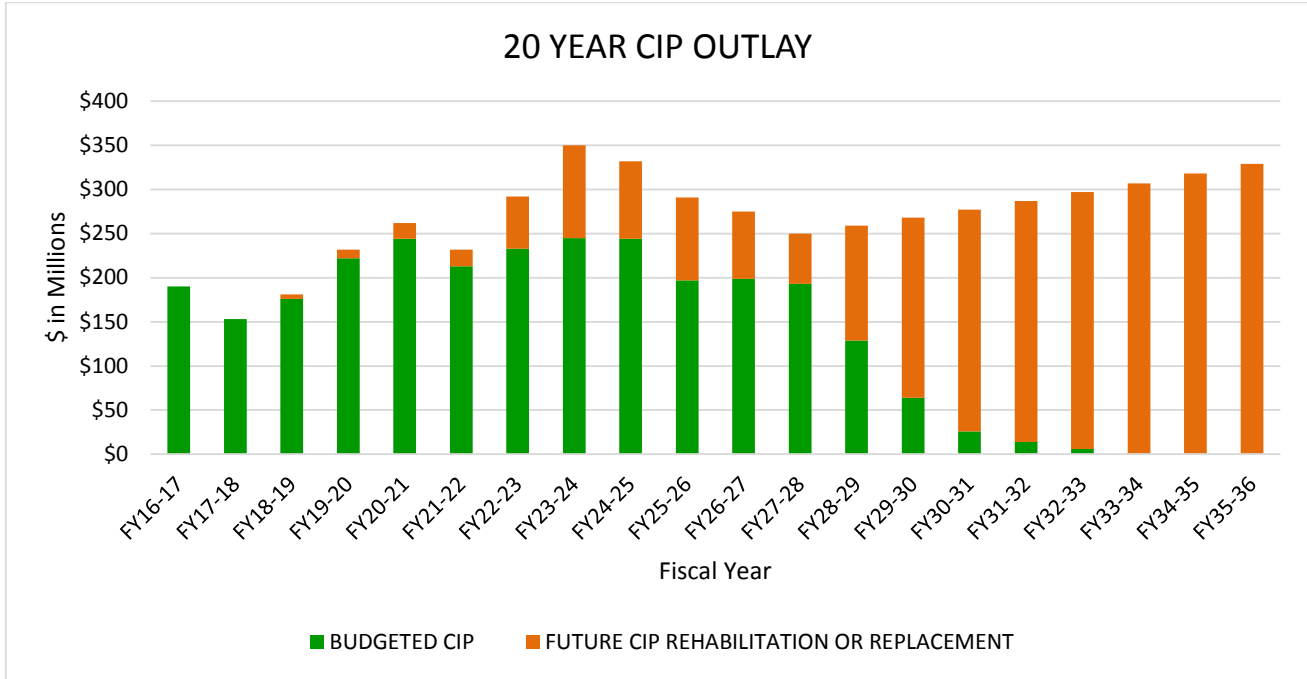
<b>Valuation</b>	<b>Plants</b>	<b>Collection</b>	<b>Total</b>
Replacement Value (in billions)	\$3.11	\$3.09	\$6.20
Depreciated Value (in billions)	\$1.88	\$1.88	\$3.76

The 2012 replacement value is estimated to be \$6.20 billion. In 1998 the prediction was \$2.03 billion, which was based on original purchase cost. It is projected that the replacement value will increase by approximately \$7.1 billion when all of the existing three billion dollar CIP has been captured in the District's database. The major reasons for this increase are all the new assets added to the asset register and the increased replacement costs due to now having to performing construction in a more urbanized Orange County than in the past.

### Planned CIP Outlays

The chart on the following page shows the 20-year CIP outlay which includes current and predicted future Capital Improvement Program projects.

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## Infrastructure Asset Management

With the completion of the \$537 million full secondary treatment expansion program, our capital improvement and maintenance programs are now more focused on maintaining our infrastructure to ensure that our mission is delivered reliably and that our facilities are managed in a way that minimizes overall life cycle costs.

Below is a status of the fiscal year 2015-16 infrastructure maintenance activities and planned activities for fiscal year 2016-17.

### Collection System:

OCSD's collection system consists of 570 miles of sewers broken down by approximately 170 miles of large regional sewers currently not on a cleaning schedule due to their size, 230 miles of regional sewers on a cleaning schedule and 170 miles of local sewers in Area 7 scheduled to be transferred to the East Orange County Water District in August 2016; and 15 pump stations and three metering locations that must be maintained, repaired, and upgraded to maintain wastewater service and to convey sewage to our treatment facilities. Typical collection system maintenance activities consist of: televising, inspecting, and cleaning sewer lines; operating, maintaining and cleaning pump stations with associated facilities; and chemical conditioning of the sewage to reduce corrosion and control odors. Maintenance activities are based on

established levels of service to ensure compliance with our Sewer System Management Plan, reducing spills, increasing reliability and safety, and ensuring that our facilities are managed, operated and maintained to minimize overall life cycle costs and need for repairs. The cleaning frequencies are based on data from pipe inspections, closed-circuit television (CCTV) work, historical records, and industry best practices. The planned activities help extend the useful life of the assets and minimize nuisance odors.

Maintenance activity tracking will change during the 2016-17 fiscal year to reflect various changes and best practices within our system. In addition, the Area 7 local sewers are tentatively scheduled for transfer starting August 2016. The Area 7 local sewer data will be excluded from the metrics values.

During fiscal year 2015-16 the following maintenance activities were completed:

- Cleaned 41 miles of regional sewer lines.
- Completed rapid manhole inspection of 860 regional manholes.
- Completed 2,900 inspections of 15 pump stations and 3 metering facilities.
- Completed 57 facility safety inspections.
- Completed 56 pump station wet well and 12 Plant No. 2 headwork cleanings.

- Completed 296 pump station preventative pump cleanings.
- Completed 487 pump station mechanical preventative maintenance tasks.
- Cleaned 70 trouble spots and 346 inverted siphons.
- Cleaned 94 miles of local sewer pipelines.
- Repaired 2,380 feet of local sewer lines.
- Completed 260 miles of pipeline video inspections.
- Completed 213 manhole video inspections.
- 1,277 dry tons of caustic soda slug dosed.
- 2,450 dry tons of magnesium hydroxide continuously dosed.
- 4,000 dry tons of ferrous chloride continuously dosed.
- 180,000 gallons of calcium nitrate continuously dosed.

Total costs: \$6,792,304

The following activities and goals are planned for fiscal year 2016-17:

- Clean 60 miles of regional sewer lines on a cleaning schedule.
- CCTV video inspection of 500 regional system manholes.
- CCTV video inspection of 80 miles of regional sewer pipeline.
- Complete at least 95% of scheduled pump station preventative maintenance work.
- Clean 95% of trouble spot and scheduled inverted siphon work.
- Manage odor control chemical expenditures to between 95-102% of budget.

Estimated total costs: \$8,864,300

### Collection System Capital Improvement Projects

The District's collections projects go through an intensive planning and design process to ensure all elements of the project are thoroughly assessed. These projects typically renew or replace aging pipelines and pump stations, upgrade facilities to meet current codes and standards, and in some instances increase flow capacity due to growth in localized portion of our service area.

We are currently planning and executing a comprehensive program to renew our collection system. One of the larger projects is the Newhope-

Placentia Trunk Replacement (Project No. 2-72) which is taking place in the cities of Fullerton and Anaheim. Seven miles of sewer along State College Boulevard, from Yorba Linda Boulevard to Orangewood Avenue, will be upsized to handle the flow necessary to allow the abandonment of the Yorba Linda Pump Station which has reached the end of its useful life. After analyzing the system, it is not practical to update the facility due to the high costs of rehabilitation and the limitation to utilize the flow for reclamation. Currently, flow is diverted into the Santa Ana River line instead of the Newhope-Placentia line due to the existing insufficient capacity, thus preventing the use of flow for the Groundwater Replenishment System. The project will also include modifications to existing diversion structures to add flexibility to the collection system to divert other reclaimable flow. This project also provides adequate capacity for future development, minimizing the risk of sewer spills in the future. Construction efforts started in May 2016 and the first phase of the project is scheduled to be completed by fall 2017. The project has a current budget of \$99 million.

Another large scale project is the Rehabilitation of the Western Regional Sewers (Project No. 3-64) which covers approximately 17 miles of sewers in the cities of Anaheim, Buena Park, Cypress, La Palma, Los Alamitos, Seal Beach and unincorporated areas of the County of Orange referred to as Rossmoor. This large project is required to rehabilitate or replace pipes that were installed 45 to 55 years ago. The sewers have multiple deficiencies which have allowed the intrusion of ground water primarily at the joints, but also sporadically along the pipe segments. In some cases, hard calcium deposits have developed, making the pipe difficult to clean, and may, over time, impede the wastewater flow. Portions of the project will be relined and others will be replaced with larger diameter pipelines. Also, over 150 manholes will be replaced. In addition, the Westside Pump Station will undergo some improvements, the aging pump station needs a new wetwell and odor control measures. This project budget is \$217 million.

At the southern edge of the previously mentioned project, the Seal Beach Pump Station (Project No. 3-62) also needs to be rehabilitated to properly support the western region of our service area. Not only are the electrical and safety codes significantly different from when the station was first constructed in the early 1970s, but many of the electrical, mechanical, and control system components are

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becoming obsolete, so long-term maintenance is no longer an option. The two force mains downstream of the pump station will also need to be addressed. One force main will be replaced and the other rehabilitated to properly support the updated facility. Odor control facilities will be added to reduce system corrosion and minimize public impacts. This project is currently in the design phase with construction anticipated for 2018. The budget for this project is \$61 million.

In the cities of Santa Ana, Tustin, and Irvine, we have the Gisler-Red Hill Trunk Improvements (Project No. 7-37) which is rehabilitating or replacing aging parallel sewer lines. The current pipes, which run along Red Hill Avenue between McGaw Street and Mitchell Avenue, are not large enough to handle the high flows associated with wet weather events which create the risk of spills. The manholes are also deteriorated and corroded and must also be replaced or rehabilitated to avoid failure. The two-mile project has a current budget of \$25 million and began construction in May 2016.

In Newport Beach, we have developed a comprehensive program to coordinate the various projects scheduled to take place in the city in the next few years. We recently completed construction of the Newport Force Main Rehabilitation Project (No. 5-60), which rehabilitated and replaced parallel pipes in Pacific Coast Highway between Dover Drive and just west of Superior Avenue. The project was sequenced in two phases to minimize public impacts by avoiding construction in the busy summer months. The 50-year steel pressurized mains were in poor condition and one of the pipelines was undersized to convey predicted wet weather flows. Now completed, the system should provide another 50 years of service. The project had a budget of \$64 million.

Also in the City of Newport Beach and in portions of Costa Mesa, we have the District 6 Trunk Sewer Relief Project (No. 6-17). This project is replacing the sewer that extends from Pomona Avenue to Newport Boulevard ending near Pacific Coast Highway. These improvements will increase capacity to properly handle the projected increase in flow from planned developments. These improvements will extend the life of the sewer by 30 years. Once the project is completed, the risk of sewer spills during dry weather events and common wet weather events will significantly diminish. The current budget for the project is \$8 million.

### **Reclamation Plant No. 1:**

Flow from Reclamation Plant No. 1 is delivered to the Orange County Water District (OCWD) for recycling via the Ground Water Replenishment System (GWRS). During 2015 the expanded plant came on line, with capacity to deliver an additional 30 million gallons per day for a total of 130 million gallons per day.

During FY 2015-16 more than 4,200 Preventative Maintenance Activities were performed at Plant No. 1. In addition to these routine activities, the following maintenance and repair activities were completed during the year:

- Completed the arc flash evaluation project to ensure the safety of workers servicing electrical equipment.
- Continued assessment and evaluation of proper settings of protective relays to ensure the safety of workers servicing electrical equipment
- Initiated steps to replace the foul air scrubber atmospheric analyzer units that monitor compliance with South Coast Air Quality Management District (SCAQMD) requirements and feed chemicals into the scrubbers including completing a service contract to optimize installation and purchasing analyzer units.
- Rebuilt one of the four Steve Anderson Lift Station pumps that transfer flow tributary to Treatment Plant No. 2 into Reclamation Plant No. 1.
- Completed major service on four of nine blowers that provide oxygen to the microorganisms in the secondary treatment process.

Replacement of the control system for emergency back-up power generators that service our activated sludge secondary treatment facilities, originally planned for fiscal year 2015-16, was made part of the Headworks Rehabilitation Capital Improvement Project scheduled for construction in 2020. Additionally, replacement of outdated atmospheric monitoring equipment in the digesters and central generation facility areas originally scheduled for this year was deferred to fiscal year 2016-17 due to changing priorities.

Total costs: \$3,827,885

During fiscal year 2016-17 there are more than 4,900 preventative maintenance activities that are scheduled to be completed at Plant No.1. This includes typical time or cycle based maintenance

tasks such as adjustments and mechanical alignments, cleaning and tightening of electrical equipment, calibration of sensors and meters, changing of lubricants and filters, exercising equipment, rebuilds and regulatory testing. In addition, staff will be utilizing predictive technologies such as vibration analysis to measure imbalance in rotating equipment, thermography to measure excessive heat, oil analysis to predict failure of lubricants, and ultrasonic to detect leaks as well as deterioration and short-circuiting in electrical equipment. Other major planned activities for fiscal year 2016-17 at Reclamation Plant No. 1 include:

- Completion of the arc flash and protective relay work, including labeling of assets and acting on recommendations from the evaluation completed last year, to ensure the safety of workers servicing electrical equipment.
- Replacement of eight foul air scrubber atmospheric analyzer units that monitor compliance with South Coast Air Quality Management District (SCAQMD) requirements and feed chemicals into the scrubbers.
- Major overhaul of one Central Generation (CenGen) Engine.
- Overhaul of one cake conveyor and one belt press for biosolids dewatering.
- Major service on two blowers that service the AS1 secondary treatment facility.
- Replacement of the vane bushings on three of the AS1 blowers.
- Servicing of emergency generators to ensure continuity of operations.
- Replacement of 23 outdated atmospheric monitoring equipment in the digester facility areas.

Total estimated costs: \$5,105,970

#### Reclamation Plant No. 1 CIP:

These projects are intended to rehabilitate or reconstruct major components of our treatment process to ensure compliance with regulatory permits, enhance water recycling and safety.

One of the largest projects currently being designed is the Headwork Rehabilitation at Plant No. 1 (Project No. P1-105). The facility is almost 30 years old, so a comprehensive refurbishment is required in order to extend the life of the facility. The project will rehabilitate systems including the metering and diversion structure, the bar screen building, the bin loading building, the main sewage pump station, the

grit basins, the primary influent channels, the headworks odor control scrubbers, and electrical power distribution and control systems. This project will also replace the emergency pumping capacity that has been provided by the original headworks pumping system dating back to the 1950s. The total budgeted cost for this project is \$275 million.

While the Sanitation District generally has adequate hydraulic treatment capacity, additional solids handling capacity is needed. The Sludge Dewatering and Odor Control Project (No. P1-101) is necessary to support the need for more capacity to thicken and dewater sludge due to the conversion to full secondary treatment as well as increased flow to support the expansion of the GWRS. The 40-year old system has reached the end of its useful life and as such will be replaced with a new and improved facility that will increase cake dryness which will reduce biosolids management cost. This will in turn improve sludge thickening to optimize the use of existing digesters thus eliminating the need to construct new digesters. The project will also help us meet our level of service goal by reducing odors. The project budget is \$188 million.

A project closely tied to the solids dewatering facility is the Digester Rehabilitation (Project No. P1-100) which is rehabilitating 12 digesters. The project will refurbish aged storage tanks, as well as handle the increased volume of solids more efficiently and with greater reliability. The sludge pumping, heating, structural, mechanical, and electrical and control systems will all be rehabilitated which will increase the quality of the sludge production. By rehabilitating our existing digesters we reduce the risk of failure and extend the life of the assets, minimizing future expenditures. The total project budget is \$67 million.

#### Treatment Plant No. 2:

All flows entering Treatment Plant No. 2 are treated to full secondary standards and then discharged four miles offshore through our ocean discharge outfall. During fiscal year 2015-16 the number of process units in service at Treatment Plant No. 2 was reduced as additional flow was diverted to Reclamation Plant No. 1 in support of the expanded GWRS. Average flow treated at Plant No. 2 was 65 million gallons per day. In addition to more than 3,600 preventative maintenance activities completed during fiscal year 2015-16, the following major activities were also completed at Treatment Plant No. 2 during the year:

- Completed the arc flash evaluation project to

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ensure the safety of workers servicing electrical equipment.

- Continued assessment and evaluation of proper settings of protective relays to ensure the safety of workers servicing electrical equipment.
- Completed major overhaul on one of five central generation engines that supply two-thirds of the power for the treatment plant.
- Overhauled two of the three gas compressors that provide digester gas to the central generation facility for producing electrical power and heat.
- Initiated steps to replace the foul air scrubber atmospheric analyzer units that monitor compliance with South Coast Air Quality Management District (SCAQMD) requirements and feed chemicals into the scrubbers including completing a service contract to optimize installation and purchasing analyzer units.
- Cleaned and replaced mechanical equipment on two digesters to improve mixing and detention time to ensure best possible reclamation of the biosolids.
- Removed debris from the by-pass flap gate discharge point into the Santa Ana River to ensure availability of this discharge in the event of an emergency.

Replacement of outdated atmospheric monitoring equipment in the digesters and central generation facility areas originally scheduled for this year was deferred to fiscal year 2016-17 due to changing priorities.

Total costs: \$5,124,823

During fiscal year 2016-17 there are more than 4,300 preventative maintenance activities that are scheduled to be completed at Plant No. 2. This includes typical time or cycle based maintenance tasks such as adjustments and mechanical alignments, cleaning and tightening of electrical equipment, calibration of sensors and meters, changing of lubricants and filters, exercising equipment, rebuilds and regulatory testing. In addition, staff will be utilizing predictive technologies such as vibration analysis to measure imbalance in rotating equipment, thermography to measure excessive heat, and oil analysis to predict failure of lubricants. In addition to planned preventative maintenance, other major planned

activities at Treatment Plant No. 2 for fiscal year 2016-17 include:

- Completion of the arc flash and protective relay work, including labeling of assets and acting on recommendations from the evaluation completed last year, to ensure the safety of workers servicing electrical equipment.
- Replacement of foul air scrubber atmospheric analyzer units that monitor compliance with South Coast Air Quality Management District (SCAQMD) requirements and feed chemicals into the scrubbers as required.
- Clean and replace mechanical equipment on two digesters to improve mixing and detention time to ensure best possible reclamation of the biosolids.
- Replacement of five outdated atmospheric monitoring equipment in the digesters facility areas, as required, and complete replacement in the central generation facility areas.

Total estimated costs: \$4,291,204

Treatment Plant No. 2 CIP Projects:

The Primary Treatment Rehabilitation Project (P2-98) will rehabilitate the primary clarifiers, influent pipes, construct new primary effluent pipes, and rehabilitate and upgrade the odor control systems. These facilities date back to the late 1950s and are in need of seismic and condition based upgrades. By replacing old structures and installing new systems, we will improve the resiliency of our infrastructure and thus improve our ability to provide service. This is anticipated to be a very long duration project because the need to maintain treatment operations during the project. The total project budget is \$428 million.

Treating 100 percent of our influent to full secondary treatment standards means there are more solids to manage which has generated several projects to address that need. A few are currently underway such as the Solids Thickening and Processing Upgrades (Project No. P2-89) which will be completed at the end of the year. The Sludge Dewatering and Odor Control project (No. P2-92) has started construction to replace the current belt press dewatering system with a centrifuge dewatering facility that will remove a greater amount of water from the sludge resulting in reduced disposal costs for the Sanitation District. This \$90 million project will be in construction through 2018.



As we make improvements throughout the plant, it is imperative we pay attention to our ocean outfall systems. Many components of the system such as the pipeline assets have already been addressed, so now we turn our attention to the pumping systems. Project No. J-117, the Ocean Outfall System Rehabilitation, will refurbish the Ocean Outfall Booster Station. This includes rehabilitation of the mechanical, electrical, and civil systems which will extend the life of the facility and increase the efficiency of the system. In addition, a low flow pump station will be added due to our increased water recycling rates, which will reduce our outfall flows below the capacity of the current very large pumps. The budget for this project is \$88 million.

As part of the long-term CIP planning efforts, several studies are currently underway evaluating various areas of the plants and the collection system to determine their condition, and identify deficiencies or improvements needed. These studies include the Primary Treatment Area Study and the Bay Bridge Pump Station Relocation Study to help identify how to best address and manage the improvements for these two important components of our system. We also have studies focusing on topics such as: Effluent Reuse, which coincides with Board of Director's strategic goal for future water recycling; the Odor Control Master Plan, which will help identify areas of improvement to better define our level of service; and the Biosolids Master Plan. As these studies evolve, projects will be refined or created to improve our systems.

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	FY 14-15 Results	Level of Service Target
<b>Protecting Public Health</b>		
Protecting public health and the environment utilizing all practical and effective means for wastewater, energy, and solids resource recovery.		
Accept dry weather runoff diversion flows without imposing fees.	1.4 MGD	Up to 10 MGD
Air emissions health risk to community and employees, per one million people (for each treatment plant).	9	<10
Notices of violation (NOV) with air, land, and water permits	0	0
Respond to collection system spills within 1 hour	100%	100%
Sanitary sewer spills per 100 miles	1.2	< 2.1
Contain sanitary sewer spills within 5 hours	100%	100%
Meet secondary treatment standards	BOD 4.8 mg/L TSS 5.7 mg/L	BOD 25 mg/L TSS 30 mg/L
Frequency of unplanned use of emergency one-mile (78-inch diameter) outfall (per year during dry weather).	0	0
Tons of biosolids to landfill through 2017 Peak Production period.	60	100
Compliance with core industrial pretreatment requirements	100%	100%
<b>Stakeholder Understanding and Support</b>		
Communicating the District's mission and strategies with those we serve and all other stakeholders.		
Meet GWRS specification requirements for Plant No. 1 secondary effluent	2.7 NTU	5 NTU
Provide specification effluent available to the Groundwater Replenishment System to maximize production of purified water.	100%	100%
<b>Managing and Protecting the Public Funds</b>		
Continually seeking efficiencies to ensure that the public's money is wisely spent.		
Annual user fees sufficient to cover all O&M Requirements	100%	100%
Actual collection, treatment, and disposal costs per million gallons	3% under	≤ 10% of budget
Maintain AAA Bond Rating	100%	100%

# Business Plan

	FY 14-15 Results	Level of Service Target
<b>Providing Exceptional Customer Service</b>		
Providing reliable, responsive and affordable services in line with customer needs and expectations.		
Treatment plants odor complaint response within 1 hour.	100%	100%
Collection system odor complaint response within 1 working day.	98%	100%
Number of odor complaints:		
• Reclamation Plant No. 1	8	0
• Treatment Plant No. 2	9	0
• Collection System	27	12
*Under normal operating conditions		
Respond to public complaints or inquiries regarding construction projects within 1 day.	100%	100%
New construction permits processed within 1 working day.	100%	100%
Respond to all biosolids contractor violations within a week of violation notice.	100%	100%
<b>Organizational Effectiveness</b>		
Creating the best possible workforce in terms of safety, productivity, customer service, and training.		
Employee injury incident rate – per 100 employees	1.7	<3.3 Industry Average
Meet mandatory OSHA training requirements	100%	>95%
Hours worked since last lost work day	430,000	>1,000,000
Achieve annual agency target of days away from work, days of restricted work activity, or job transferred as a result of a work-related injury or illness	0.8	<2.5
Training hours per employee	45.23	45 per year

## 2016-17 & 2017-18 Budget

<b>Strategic Goals for FY 2016-17 &amp; FY 2017-18</b>			
<b>Goals</b>	<b>Strategic Importance</b>	<b>Desired Outcome</b>	<b>Next Steps</b>
1. Develop Biosolids Management Options	Contract to dispose of one-half of total Bio-solids expires in 2016.	Develop a mid and long-term strategy for bio-solids disposal prior to the expiration of current contracts.	Study available bio-solids disposal options and identify practical and reasonable alternatives.
2. Update Odor Master Plan	Results of process performance and new odor measurement technologies compel the review of current standards.	Limiting offsite odor impacts in an efficient and cost effective manner.	Reassess whether dilution to threshold is the most appropriate measurement system.
3. Review the Utilization of Renewable Energy in Wastewater Management	The District is a significant consumer of energy and seeks to minimize energy usage and maximize the conversion of sludge to energy.	Maximize energy efficiency and conversion from organic sludge to electricity, gas, and useful heat.	Search for research opportunities to improve conversion of organic sludge to energy and to optimize process and hauling energy.
4. Development Future Water Recycling Options	Water demand in service area is projected to increase 16 percent by 2035. About one-half of District treated wastewater is lost to ocean disposal.	Develop a plan for the best utilization of Plant No. 2 effluent water currently discharged out to the ocean.	Create an evaluation methodology to weigh the benefit, cost, and risk of each treatment and utilization alternative for Plant No. 2 effluent.
5. Transfer of Local Sewers to Member Cities and Sewer Agencies	District's core business is wastewater treatment and disposal, and maintaining sewer pipes of the regional collection system.	Obtain Board support for transferring the ownership of all local sewers to the member cities and sewer agencies.	The Board and the Orange County Local Agency Commission has approved transfer of 174 miles of local sewers to the East Orange County Water District effective 8/1/16.
6. Workforce Planning & Development (WFPD)	Ensure that the right people with the right skills and abilities, are in the right place, at the right time.	Integrate WFPD efforts to ensure workforce capabilities match work required to meet the mission and levels of service.	Develop and implement workforce plans that ensure critical work is performed, identify new ways to perform work, and meet future workforce needs.

# Long-Term Planning

## OCSD Long-Term Planning

	<b>Type of Planning Process</b>	<b>Description of Process</b>	<b>Budget Impacts</b>
<b>Update of the Five-Year Strategic Plan</b>	Maintaining a rolling 5-year comprehensive strategic plan that addresses the sanitation health and safety needs of the 2.6 million people we serve.	In November 2007, the District's Board approved a 5-Year Strategic Plan that updated the District's Mission, Vision, Levels of Services, and Business Plan. Also included are the strategic objectives listed below. This plan is now updated annually.	The levels of service identified within the 2015 Strategic Plan Update were the foundation for the development of this two-year budget.
<b>Plan for Capital Improvements out to 2050</b>	Plan, design, and build capital improvement projects (CIP) out to 2050 to meet the regulatory, environmental, health, and safety needs of a growing population.	In December 2009, the Board approved a new Master Plan that lays out a capital program to deliver and maintain the levels of service desired by the Board of Directors.	The 2016 CIP Validation, based on the 2009 Master Plan, includes an overall CIP budget of \$3.3 billion for active and future.
<b>Biosolids Management</b>	Aggressively pursue biosolid disposal alternatives following the expiration of the 2016-17 disposal contract.	The study of biosolids options will include offsite an onsite facilities, and new and established technologies.	Biosolids production will decrease by one-third when IRWD discontinues sending us biosolids and centrifuges come online.
<b>Odor Control</b>	Direct sufficient resources and investigate new technologies to effectively deal with odor issues.	Design all new processes so that odors remain within 10 dilutions to threshold (D/T), or within treatment plant boundaries.	Implement odor control projects at Plant No. 1 (trickling filters) and Plant No. 20 (solids loading facilities) by 2018.
<b>Air Emissions Control</b>	Apply sufficient resources to meet regulatory requirements related to air emissions.	Catalytic converters are being installed on power generation engines which will significantly lower emissions	Cengen Emissions Control, a \$24 million project that will be completed in FY 2016-17, addresses the new air toxic emission standards.
<b>Groundwater Replenishment System (GWRS)</b>	Continue partnership with the Orange County Water District (OCWD) in support of the GWRS.	Maximize the use of treated effluent for water recycling to defer the need for second ocean outfall	The District will evaluate the feasibility of providing additional effluent to the GWRS from effluent currently being discharged to the ocean from Plant No. 2.

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# 2016-17 & 2017-18 Budget

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## ***Background Information and Description of Services:***

The Orange County Sanitation District (the "District") is a public agency that operates one of the largest wastewater facilities in the United States of America. Originally formed in 1954 pursuant to the joint powers provision under the County Sanitation District Act of the California Health and Safety Code, the District then consisted of independent special districts responsible for wastewater collection within their own geographical boundaries. These districts were co-participants in a Joint Agreement to provide for the joint construction, ownership, and operation of the District's Joint Facilities for the treatment and recycling of wastewater.

On July 1, 1998, the nine individual existing districts requested to be consolidated into one district by resolution of the Board of Supervisors of the County of Orange and special legislation.

The District is governed by a Board of Directors made up of mayors or members of city councils, directors of independent special districts, and one member from the County Board of Supervisors. A variety of board committees, made up of members of the Board of Directors, consider topics for action by the Board and make recommendations to the Board.

The District is responsible for collecting, treating, and safely disposing of approximately 185 million gallons of wastewater each day for an area covering 479 square miles in metropolitan (central and northwestern) Orange County. The District's service area includes approximately 2.6 million residents and businesses, or approximately 81 percent of the County's total population.

Professional staff of 627 full-time equivalent employees supports the District's around-the-clock operation. Staff is organized into six departments, including the General Manager's Office, Human Resources, Administration, Environmental Services, Engineering, and Operations and Maintenance.

As working environmentalists, the District's staff is regulated by many agencies, including the United States Environmental Protection Agency (USEPA), the California Regional Water Quality Control Board (CRWQCB), the California Integrated Waste Management Board, the California Environmental

Protection Agency and the South Coast Air Quality Management District (SCAQMD).

The District operates under an ocean discharge permit issued by the USEPA and the Santa Ana Regional Water Quality Control Board. This permit was last issued in July 2012 and is noticed for re-adoption on December 15, 2017. To maintain the District's National Pollutant Discharge Elimination System (NPDES) operating permit, the District's plants must meet strict conditions set jointly by the USEPA and the CRWQCB.

The District maintains and operates a large system of trunk sewers and pumping stations in addition to the two modern treatment plants. The plants use chemical, physical and biological processes to produce a high-quality effluent. Chemicals used are either environmentally neutral or biodegradable.

The treated effluent from the Huntington Beach plant is pumped through a five-mile, 10-foot diameter ocean outfall pipe. The outfall has a one-mile long diffuser section that discharges treated water through more than 500 portholes four miles off shore.

In January 2008, the Orange County Water District (OCWD) and the District completed Phase I of the Groundwater Replenishment System, a joint project by the two agencies to provide reclaimed water for percolation into the groundwater basin from most of the secondary effluent pumped from the Fountain Valley plant, or approximately 92,300 acre-feet per year.

In January 2012, the OCWD completed Phase II of the Groundwater Replenishment System (GWRS) that provided an additional 33,000 acre-feet per year of reclaimed water; resulting in the purification of 100 percent of the treated wastewater produced at the Fountain Valley plant.



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# Orange County at a Glance

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## **Community Profile of the County of Orange**

The County of Orange is bordered on the north by Los Angeles and San Bernardino counties, on the east by Riverside County, on the southeast by San Diego County, and on the west and southwest by the Pacific Ocean. Approximately 42 miles of ocean shoreline provide many beaches, marinas and other recreational areas for use by residents and visitors.

The climate in the County is mild, with an average rainfall of 13 inches. The mean temperature ranges from a minimum of 48 degrees to a maximum of 76 degrees.

The County has become a tourist center in Southern California by offering a broad spectrum of recreational opportunities that is enhanced by the mild climate. Along the shoreline are five state beaches and parks, five municipal beaches and five county beaches. There are two small-craft docking facilities in Newport Harbor, one located in Sunset Beach and another in Dana Point.

Other major recreational and tourist facilities include Disneyland, California Adventure, Knott's Berry Farm and Soak City, Mission San Juan Capistrano, the Anaheim Convention Center, and the Art Colony at Laguna Beach with its annual art festival. Also located within the County is Anaheim Stadium, home of the Los Angeles Angels of Anaheim of Major League Baseball, and the Honda Center, home of the Anaheim Ducks of the National Hockey League.

## **Economic Outlook**

According to the California Employment Development Department (EDD), Orange County generated an increase of approximately 3.1 percent in payroll jobs from April 2015 to April 2016. During this same time period, unemployment in Orange County decreased to 3.9 percent from 4.3 percent while the unemployment in California as a whole decreased to 5.3 percent from 6.5 percent.

According to Chapman University's December 2016 Economic Forecast, the Great Recession that started in December 2007 and officially ended in June 2009, reduced California's real gross domestic product (GDP) from \$1.99 billion in 2008 to \$1.92 billion in 2009, a decline of 3.9 percent. Real GDP recovered in 2011, reaching \$2.03 billion, thus surpassing its previous peak and showed steady growth over the 2012-14 period. So

in terms of output, the recession lasted only two years.

However, the same cannot be said for employment as the Great Recession had a devastating impact on payroll jobs in California. In Orange County, employment decreased by 173,000 on a seasonally adjusted basis as employment declined to 1,356,000 in March 2010 from a peak level of 1,529,000, or a decline of 11.3 percent. It wasn't until the statistics released by EDD in September 2015 that showed payroll employment in California as being only 20,000 above the employment peak before the beginning of the recession.

With a pickup in job growth, unemployment rates gradually declined in California and across the state over the 2011-15 period. In September 2015, Orange County had the third lowest rate among the ten largest metropolitan areas of the state at 4.0 percent.

Job creation is obviously the primary factor in lowering unemployment rates but the rates have also declined because of the decreasing labor force participation rate, at a high of 66.1 percent in September 2008 to only 62.4 percent in September 2015.

Overall, Chapman forecasts a job growth gain of 2.5 percent in Orange County for 2016.

According to Chapman, the devaluation of the Chinese yuan and weakness in the currencies of Mexico, Canada, and Japan are making California's merchandise more expensive. In aggregate, Chapman projects total merchandise exports in California to gain 1.5 percent in 2016 following their estimate of a decline of about 2.0 percent in 2015.

Based on the current levels of permit activity, Chapman's forecast shows a leveling off of total building permit valuations. Following the Great Recession, these valuations increased annually from 16.3 percent in 2011, to 11.4 percent in 2012, 47.7 percent in 2013, 11.0 in 2014, and 9.1 percent in 2015 to a projected decline of 1.1 percent in 2016.

On a more positive outlook, Chapman forecasts personnel income in Orange County to grow 5.2 percent in 2016 while the consumer price index to remain relatively low in comparison at 2.0 percent.

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**POLICIES & PRACTICES**  
**SECTION 3**

BACK OF SECTION 3 DIVIDER

# Fiscal Policy

<i>Fiscal Policy Statement</i>	<i>Completed</i>	<i>In Progress</i>	<i>Comments</i>
<b>General Financial Goals</b>			
To maintain a financially viable Sanitation District that can maintain an appropriate level of wastewater treatment services.	✓		
To maintain financial flexibility by adapting to local and regional economic changes.	✓		
To maintain and enhance the sound fiscal condition of the District.	✓		
To ensure that the value added by every program and activity within the District is proportional to its cost; and to eliminate those programs and activities that do not contribute to the District's mission.	✓		
To provide training opportunities to the greatest extent possible for available jobs within the organization for those employees working in programs or activities that have been reduced or eliminated.	✓		
To provide employees with cross-training opportunities in order to achieve multi-tasking capabilities.	✓		
<b>Operating Budget Policies</b>			
The District will adopt a balanced budget by June 30 of each year.	✓		
The budget will be used as a fiscal control device as well as a financial plan.	✓		
Budget preparation and monitoring will be performed by each division within the District, the organizational level of accountability and control.	✓		
The Director of Finance & Administrative Service will prepare a budget calendar no later than January of each year.	✓		
An annual operating budget will be developed by conservatively projecting revenues and expenditures for the current and forthcoming fiscal years.	✓		
During the annual budget development process, the existing programs will be thoroughly examined to assure removal or reduction of any services or programs that could be eliminated or reduced in cost.	✓		
Current operating revenues will be sufficient to support current operating expenditures.	✓		

# 2016-17 & 2017-18 Budget

<i>Fiscal Policy Statement</i>	<i>Completed</i>	<i>In Progress</i>	<i>Comments</i>
Annual budgets including reserves will provide for adequate design, construction, maintenance and replacement of District capital facilities and equipment.	✓		
The District will maintain all physical assets at a level adequate to protect the District's capital investment and to minimize future maintenance and replacement costs.	✓		
The District will project equipment replacement and maintenance needs for the next five years and will update this projection each year. From this projection a maintenance and replacement schedule will be developed and followed.	✓		
The District will avoid budgetary and accounting procedures that balance the current budget at the expense of future budgets.	✓		
The District will forecast its expenditures and revenues for each of the next five years and will update this forecast at least annually.	✓		
<b>Revenue Policies</b>			
Because revenues are sensitive to both local and regional economic conditions, revenue estimates adopted by the Board of Directors must be conservative.	✓		
Staff will estimate annual revenues by an objective, analytical process that utilizes trend, judgmental, and statistical analysis as appropriate.	✓		
Ad valorem property tax revenues of the District will be dedicated to debt service.	✓		
Sewer Service User Fees will be projected for each of the next ten years and this projection will be updated annually.	✓		
<b>Expenditure Policies</b>			
The District will maintain a level of expenditures that provides for the health, safety and welfare of the residents of the community.	✓		
The District will set fees and user charges at a level that fully supports the total direct and indirect costs of operations, capital improvements, and debt service requirements not covered by reserves.	✓		



# Fiscal Policy

<i>Fiscal Policy Statement</i>	<i>Completed</i>	<i>In Progress</i>	<i>Comments</i>
<b>Capital Improvement Budget Policies</b>			
The District will make all capital improvements in accordance with an adopted and funded capital improvement program. The adopted capital improvement program will be based on need.	✓		
The District will develop an annual five-year plan for capital improvements, including design, development, implementation, and operating and maintenance costs.	✓		Master Plan projects needs through 2050.
All capital improvement projects approved in the annual operating budget are approved at the budgeted amounts through the completion of the project. The Board of Directors approves both the individual project total budget and the projected cash outlays for all capital improvement projects for the current fiscal year.	✓		
Staff will identify the estimated costs, potential funding sources and project schedule for each capital project proposal before it is submitted to the Board of Directors for approval.	✓		
Staff will identify the estimated on-going future Operating and Maintenance costs, as well as staffing requirements upon completion for each capital project proposal before it is submitted to the Board of Directors for approval.	✓		Included in Asset Management.
The District will use intergovernmental assistance and other outside resources whenever possible to fund capital improvements providing that these improvements are consistent with the Capital Improvement Plan and the District's priorities, and that the future operating and maintenance costs of these improvements have been included in the budget.	✓		
Staff will coordinate development of the capital improvement budget with the development of the operating budget. All operations and maintenance resources required to implement the CIP have been considered and appropriately reflected in the operating budget for the year the CIP is to be implemented.	✓		
Cost tracking for components of the capital improvement program will be updated quarterly to ensure project completion against budget and established time lines.	✓		

# 2016-17 & 2017-18 Budget

<i>Fiscal Policy Statement</i>	<i>Completed</i>	<i>In Progress</i>	<i>Comments</i>
<b>Asset Management Policy</b>			
In order to provide for the systematic planning, acquisition, deployment, utilization control, and decommissioning of capital assets, the following policies have been established:			
<ul style="list-style-type: none"> <li>The condition, performance, utilization, and cost of assets will be recorded down to the maintenance managed item component level.</li> </ul>	✓		
<ul style="list-style-type: none"> <li>A detailed, planned maintenance program is in place to ensure that the assets, facilities and systems perform to their design criteria and meet their design lives.</li> </ul>	✓		
<ul style="list-style-type: none"> <li>A system is in place to blend planned and unplanned activity to optimize the cost against the asset performance requirements.</li> </ul>	✓		
<ul style="list-style-type: none"> <li>Reliability Centered Maintenance techniques will be used to optimize the maintenance plans and to identify any design alterations that are economically justified.</li> </ul>	✓		
<ul style="list-style-type: none"> <li>Current levels of asset management service in terms of quantity and quality of service including condition, function/size/type, regulatory requirements, reliability, and repair response times have been determined and documented.</li> </ul>	✓		Completed for critical and high value assets.
<ul style="list-style-type: none"> <li>The full economic cost is charged on all asset management activities.</li> </ul>	✓		
<ul style="list-style-type: none"> <li>Asset Management maintains appropriate pricing and funding strategies that match the needs of the business to ensure sustainability.</li> </ul>	✓		
<ul style="list-style-type: none"> <li>Asset Management considers the real growth of the District's service area and the way in which demands for service will change in the future, including population, unit demand, demographics, changing customer expectations, and changing regulatory requirements.</li> </ul>	✓		
<ul style="list-style-type: none"> <li>Monitoring and reporting is performed on the condition, performance and functionality of the District's assets against prescribed service levels and regulatory requirements.</li> </ul>	✓		Service levels are reported quarterly through the Strategic Plan reporting.
<ul style="list-style-type: none"> <li>A condition/function index is linked with customer expectations at a cost that customers are willing to pay.</li> </ul>	✓		Completed through the budget process.
<ul style="list-style-type: none"> <li>Future level of service options available and their associated costs are constantly analyzed.</li> </ul>	✓		

# Fiscal Policy

<i>Fiscal Policy Statement</i>	<i>Completed</i>	<i>In Progress</i>	<i>Comments</i>
<ul style="list-style-type: none"> <li>• An assessment of the relative risks, costs and benefits is derived for all investments in capital works, maintenance, and operations.</li> </ul>	✓		
<ul style="list-style-type: none"> <li>• Individual asset management decisions are made only when the cost of all programs has been analyzed and the funding needs of the whole organization is known together with the knowledge of its impact on rates.</li> </ul>	✓		
<ul style="list-style-type: none"> <li>• Necessary renewal programs to sustain the existing levels of service and condition of assets, as identified through the best appropriate process, is approved ahead of new capital works and services.</li> </ul>	✓		
<ul style="list-style-type: none"> <li>• New capital assets for new works and services are approved only with the commitment of the recurrent (operations and maintenance) funding necessary to sustain the new works and services.</li> </ul>	✓		
<ul style="list-style-type: none"> <li>• The financial, social, and environmental aspects of asset management will be reported on bi-annually.</li> </ul>	✓		

## Vehicle Replacement Policy

In order to provide safe, reliable transportation appropriate to the work to be performed, the following policies have been established:

<ul style="list-style-type: none"> <li>• The newest vehicles will be used for those purposes requiring the highest annual mileage.</li> </ul>	✓		
<ul style="list-style-type: none"> <li>• Vehicles may be replaced when they are 12 years old or have accumulated 120,000 miles.</li> </ul>	✓		
<ul style="list-style-type: none"> <li>• A vehicle may be replaced in advance of the above criteria if it can be reallocated to a low mileage use between the plants.</li> </ul>	✓		
<ul style="list-style-type: none"> <li>• Electric carts are to be utilized for in-plant use only.</li> </ul>	✓		
<ul style="list-style-type: none"> <li>• When available, CNG vehicles or bi-fuel vehicles are to be utilized within the County (pump station runs, source control inspections, etc).</li> </ul>	✓		
<ul style="list-style-type: none"> <li>• When available, CNG vehicles or bi-fuel vehicles are to be utilized to travel outside of Orange County (e.g., Environmental Compliance Monitoring of biosolids application sites, etc).</li> </ul>	✓		

# 2016-17 & 2017-18 Budget

<i>Fiscal Policy Statement</i>	<i>Completed</i>	<i>In Progress</i>	<i>Comments</i>
<b>Short-Term Debt Policies</b>			
The District may use short-term debt to cover temporary or emergency cash flow shortages. All short-term borrowing will be subject to Board approval by resolution.	✓		
The District may utilize Board approved intra-agency loans rather than outside debt instruments to meet short-term cash needs. Intra-agency loans will be permitted only if an analysis of the affected Revenue Areas indicates funds are available and the use of these funds will not impact current operations. The principal, along with interest at the prevailing rate as established by the District's Treasurer, will be paid to the lending Revenue Area.	✓		
<b>Long-Term Debt Policies</b>			
Proceeds from long-term debt will <u>not</u> be used for current on-going operations.	✓		
Before any new debt is issued, the impact of debt service payments on total annual fixed costs will be analyzed.	✓		
Develop and maintain a board adopted debt policy.	✓		
<b>Accumulated Funds &amp; Reserve Policies</b>			
A cash flow reserve will be established to fund operations, maintenance, and certificates of participation expenses for the first half of the fiscal year, prior to the receipt of the first installment of the property tax allocation and the sewer service user fees which are collected as a separate line item on the property tax bill. The level of this reserve will be established as the sum of an amount equal to six months operations and maintenance expenses and the total of the annual debt (COP) service payments due in August each year.	✓		
An operating contingency reserve will be established to provide for non-recurring expenditures that were not anticipated when the annual budget and sewer service fees were considered and adopted. The level of this reserve will be established at an amount equal to ten percent of the annual operating budget.	✓		

# Fiscal Policy

<i>Fiscal Policy Statement</i>	<i>Completed</i>	<i>In Progress</i>	<i>Comments</i>
A capital improvement reserve will be maintained to fund annual increments of the capital improvement program. The long-term target is for one half of the capital improvement program to be funded from borrowing and for one half to be funded from current revenues and reserves. With this program in mind, the target level of this reserve has been established at one half of the average annual capital improvement program through the year 2020. Levels higher and lower than the target can be expected while the long-term financing and capital improvement programs are being finalized.	✓		
A renewal/replacement reserve will be maintained to fund the District's renewal, rehabilitation and replacement requirement costs associated with the District's existing capital plant and collection system over the next twenty years. The reserve was initially set at \$50 million in 1998-99 and is annually augmented by interest earnings and a small portion of the annual sewer user fees in order to meet projected needs through the year 2030.	✓		
Catastrophic loss, or self-insurance, reserves will be maintained for property damage including fire, flood, and earthquake; for general liability; and for workers' compensation. These reserves are intended to work with purchased insurance policies, FEMA disaster reimbursements, and State disaster reimbursements. Based on the current infrastructure value of \$1.3 billion, the reserve level has been set to fund the District's non-reimbursed costs, estimated to be \$57 million.	✓		
<b>Investment Policies</b>			
The District's Treasurer will annually submit an investment policy to the Board of Directors for review and adoption.	✓		
The investment policy will emphasize safety and liquidity before yield.	✓		
<b>Accounting, Auditing, and Financial Reporting</b>			
The District's accounting and financial reporting systems will be maintained in conformance with generally accepted accounting principles and standards promulgated by the Governmental Accounting Standards Board.	✓		
A capital asset system will be maintained to identify all District assets, their condition, historical cost, replacement value, and useful life.	✓		

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## 2016-17 & 2017-18 Budget

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<i>Fiscal Policy Statement</i>	<i>Completed</i>	<i>In Progress</i>	<i>Comments</i>
Quarterly financial reports will be submitted to the Board of Directors and will be made available to the public.	✓		
Full disclosure will be provided in the general financial statements and bond representations.	✓		
The District will maintain a good credit rating in the financial community.	✓		The District's AAA rating was reaffirmed with the \$146 million 2016A Revenue Refunding debt issuance.
An annual audit will be performed by an independent public accounting firm with the subsequent issue of an official Comprehensive Annual Financial Report, including an audit opinion and a management letter.	✓		



# GFOA Best Practices and Advisories

<i>GFOA Recommended Practice</i>	<i>Compliance Met</i>	<i>Not Applicable</i>	<i>In Progress</i>	<i>Comments</i>
<b><u>Accounting, Auditing, and Financial Reporting Recommended Practices</u></b>				
Governmental Accounting, Auditing, and Financial Reporting Practice	✓			
Prepare Popular Reports		✓		Not being considered at this time due to other communication efforts.
Appropriate Levels of Working Capital in Enterprise Funds	✓			Working Capital of the District shall be greater than 45 days worth of annual operating expenses
Audit Procurement	✓			
Use the Comprehensive Annual Financial Report to Meet SEC Requirements for Periodic Disclosure	✓			
Establish Appropriate Capitalization Thresholds for Tangible Capital Assets	✓			
Internal Audit Function Established	✓			Administrative Committee directs Internal Audits
Audit Committees	✓			Administrative Committee serves as an audit committee.
The Need for Periodic Inventories of Capitalized Tangible Assets			✓	
Application of Full-Cost Accounting to Municipal Solid Waste Management Activities		✓		OCSD does not provide solid waste services.
Present Securities Lending Transactions in Financial Statements		✓		OCSD does not have Securities Lending Activities
Technology Disaster Recovery Planning			✓	Managed by Information Technology Division
Present Budget to Actual Comparisons Within the Basic Financial Statements		✓		Not required for audited financial statement reports of Enterprise Funds. Budget/actual comparisons are included within unaudited quarterly financial reports.
Use Websites to Improve Access to Budget Documents and Financial Reports	✓			
Use of Trend Data and Comparative Data for Financial Analysis	✓			

# 2016-17 & 2017-18 Budget

<i>GFOA Recommended Practice</i>	<i>Compliance Met</i>	<i>Not Applicable</i>	<i>In Progress</i>	<i>Comments</i>
Appropriate Level of Unrestricted Fund Balance in the General Fund	✓			OCSD only has Proprietary Fund Types - established a formal policy on the level of unrestricted net assets
Document Accounting Policies and Procedures	✓			
Establish the Estimated Useful Lives of Capital Assets	✓			
Improve the Effectiveness of Fund Accounting	✓			
Enhance Management Involvement with Internal Control	✓			
Including Management's Discussion and Analysis in Departmental Reports	✓			
Auditor Association with Financial Statements Included in Offering Statements or Posted on Websites	✓			
Ensuring Control over Noncapitalized Items	✓			
Considerations on Using the Modified Approach to Account for Infrastructure Assets		✓		OCSD depreciates all capital assets; OCSD has no governmental fund types
Mitigating the negative effects of Statement on Auditing Standards No.112	✓			
Encouraging and facilitating the reporting of fraud and questionable accounting and auditing practices	✓			
Ensuring adequate documentation of costs to support claims for disaster recovery assistance			✓	
Improving the timeliness of financial reports	✓			
Web Site Presentation of Official Financial Documents	✓			Managed by Information Technology Division
<b><u>Treasury and Investment Management Recommended Practices</u></b>				
Collateralization of Public Deposits	✓			
Government Relationships with Securities Dealers	✓			
Using Mutual Funds for Cash Management Purposes	✓			

# GFOA Best Practices and Advisories

<i>GFOA Recommended Practice</i>	<i>Compliance Met</i>	<i>Not Applicable</i>	<i>In Progress</i>	<i>Comments</i>
Debt Service Payment Settlement Procedures	✓			
Adopt a comprehensive written Investment Policy and review and update policies, if necessary on an annual basis	✓			
Use of Derivatives and Structured Investment by State and Local Governments for Non-Pension Fund Investment Portfolios		✓		Investment Policy does not allow Derivative Investments
Use of Derivatives and Structured Investment by State and Local Governments for Cash Operating and Reverse Portfolios		✓		Investment Policy does not allow Derivative Investments
Security Lending Programs for Non-Pension Fund Portfolios	✓			
Diversification of Investments in a Portfolio	✓			
Managing Market Risk in Investment Portfolios	✓			Managed by Chandler Asset Management
Electronic Payment Systems	✓			
Procurement of Banking Services	✓			
Purchasing Card Programs	✓			
Acceptance of Payment Cards and Selection of Payment Card Service Providers	✓			
Frequency of Purchased Securities Valuation in Repurchase Agreements	✓			
Selection of Investment Advisors for Non-Pension Fund Investment Portfolios	✓			
Utilize independent Third-Party Custodians to safeguard District investments and protect against safekeeping/custodial risks.	✓			
Mark-to-Market Reporting Practices	✓			
Establish Policy for Repurchase Agreements and Reverse Repurchase Agreements	✓			

# 2016-17 & 2017-18 Budget

<i>GFOA Recommended Practice</i>	<i>Compliance Met</i>	<i>Not Applicable</i>	<i>In Progress</i>	<i>Comments</i>
Use of Lockbox Services		✓		OCSD does not have sufficient cash related transactions to use Lockbox services. The majority of revenues are collected on the property tax roll.
Commercial Paper	✓			
Use of Cash Flow Forecasts in Operations	✓			
Bank Account Fraud Prevention	✓			
Use of Local Government Investment Pools	✓			
Revenue Control and Management Policy	✓			
Payment Consolidation Services		✓		
Using Electronic Signatures			✓	
Using Remote Deposit Capture	✓			
<b><i>Budgeting and Fiscal Policy Recommended Practices</i></b>				
Economic Development Incentives	✓			
Use of Performance Measurement for Decision Making	✓			
Providing a Concise Summary of the Budget	✓			
Establishing of Government Charges and Fees	✓			
Recommended Budget Practices of the National Advisory Council on State and Local Budgeting (NACSLB)	✓			
Financial Forecasting in the Budget Preparation Process	✓			
Relationships Between Budgetary and Financial Statement Information	✓			
Use of Financial Status in the Budgeting Process	✓			
Adoption of Financial Policies	✓			
Appropriate Level of Unreserved Fund Balance in the General Fund	✓			OCSD only has Proprietary Fund Types - established a formal policy on the level of unrestricted net assets

# GFOA Best Practices and Advisories

<i><b>GFOA Recommended Practice</b></i>	<i><b>Compliance Met</b></i>	<i><b>Not Applicable</b></i>	<i><b>In Progress</b></i>	<i><b>Comments</b></i>
Include Sustainability in Public Finance Practices	✓			
Establish Strategic Plans	✓			
Measuring the Cost of Government Services	✓			
Using Websites to Improve Access to Budget Documents and Financial Reports	✓			
Business Preparedness and Continuity Guidelines	✓			
Statistical/Supplemental Section of the Budget Document	✓			
Budgeting for Results and Outcomes	✓			
Present Capital Budget in Operating Budget Document	✓			
Present Departmental Section in the Operating Budget Document	✓			
Alternative Service Delivery: Shared Services	✓			
Long-Term Financial Planning	✓			
Comprehensive Risk Management Program	✓			
Public Participation in Planning, Budgeting, and Performance Management	✓			
Inflationary Indices in Budgeting	✓			
Key Issues in Succession Planning			✓	Expand and align ongoing succession planning as part of OCSD's workforce planning and development efforts to ensure continuity and consistency of service delivery.
Managing the Salary and Wage Budgeting Process	✓			
Managed Competition as a Service Delivery Option			✓	
<b><u>Debt Management Recommended Practices</u></b>				
Select and Manage the Method of Sale of State and Local Government Bonds	✓			

# 2016-17 & 2017-18 Budget

<i>GFOA Recommended Practice</i>	<i>Compliance Met</i>	<i>Not Applicable</i>	<i>In Progress</i>	<i>Comments</i>
Analyzing and Issuing Refunding Bonds	✓			At the outset of evaluating the issuance of bonds, solicit the advice of bond counsel and financial advisor in order to outline key legal and financial issues.
Debt Management Policy	✓			Board approved Debt Policy completed in 2001-02.
Investment of Bond Proceeds	✓			Included in Trustee Documents
Use of Debt-Related Derivatives Products and Development of Derivatives Policy			✓	No Derivative Products
Maintain an Investor Relations Program	✓			
Payment of the Expense Component of Underwriters' Discount	✓			Establish at the beginning of the bond negotiation process what expenses will be directly paid by the issuer or as part of the underwriter spread.
Issuer's role in Secondary Market Securitization of Tax-Exempt Obligations	✓			Meet qualifications of arbitrage
Evaluate the Use of Pension Obligation Bonds			✓	OCSD does not manage pension fund
Evaluating the Sale and Securitization of Property Tax Liens			✓	
Use Variable Rate Debt Instruments	✓			
Issuer's Role in Selection of Underwriter's Counsel			✓	
Issuing Taxable Debt by U.S. State and Local Governments	✓			OCSD does not plan to issue taxable debt outside of the Build America Bonds program
Select Bond Counsel	✓			
Price Bonds in a Negotiated Sale	✓			
Underwriter Disclaimers in Official Statements	✓			
Use a Web Site for Disclosure	✓			
Tax Increment Financing as a Fiscal Tool			✓	

# GFOA Best Practices and Advisories

<i><b>GFOA Recommended Practice</b></i>	<i><b>Compliance Met</b></i>	<i><b>Not Applicable</b></i>	<i><b>In Progress</b></i>	<i><b>Comments</b></i>
Caution in Regard to OPEB Bonds		✓		Pay-As-You-Go funding, no plan on issuing bond
Public-Private Partnerships for Economic Development		✓		
Role of the Finance Officer in Privatization		✓		
Selecting Financial Advisors	✓			
Selecting Underwriters for Negotiated Bond Sales	✓			
Understanding Your Continuing Disclosure Responsibilities	✓			
Managing Build America and Other Subsidy Bonds	✓			Develop procedures for managing post-sale considerations and responsibilities while the bonds remain outstanding.
<b><u>Retirement and Benefits Administration Recommended Practices</u></b>				
Public Employee Retirement System Investments		✓		Managed by OCERS
Preparing an Effective Summary Plan Description		✓		Managed by OCERS
Retirement and Financial Planning Services		✓		Managed by OCERS
Directed Brokerage Programs		✓		OCERS manages all "soft dollar" transactions
A Policy for Retirement Plan Design Option	✓			
Asset Allocation – Guidance for Defined Benefit Plans		✓		Managed by OCERS
Asset Allocation - Guidance for Defined Contribution Plans		✓		OCERS is a defined benefit plan.
Alternative Investment Policy for Public Employee Retirement Systems (PERS)		✓		Managed by OCERS
Pension Investment Policy		✓		Managed by OCERS
Selection of Investment Advisors for Pension Fund Assets		✓		Managed by OCERS

# 2016-17 & 2017-18 Budget

<i>GFOA Recommended Practice</i>	<i>Compliance Met</i>	<i>Not Applicable</i>	<i>In Progress</i>	<i>Comments</i>
Brokerage Window Options for Defined Contribution Retirement Plans		✓		Managed by OCERS
Framework for Understanding Pension Fund Risk		✓		Managed by OCERS
Investment Policies Governing Assets in a Deferred Compensation Plan			✓	Managed by the plan sponsors
Health Care Cost Containment	✓			
Evaluating Use of Early Retirement Incentives	✓			
Deferred Retirement Option Plans (DROPs)		✓		
A Policy to Participate in Securities Litigation Class Actions		✓		Managed by OCERS
Ensuring the Sustainability of Other Postemployment Benefits	✓			Pay-As-You-Go funding
Design Elements of Defined Benefit Retirement Plans		✓		Managed by OCERS
Design Elements of Defined Contribution Plans as the Primary Retirement Plan		✓		
Design Elements of Hybrid Retirement Plans		✓		
Monitoring and Disclosure of Fees for Defined Contribution Plans		✓		
Prefunding OPEB Obligation		✓		Pay-As-You-Go funding
Establishing and Administering an OPEB trust		✓		Pay-As-You-Go funding
Commission Recapture Program		✓		
Communicating Health-Care Benefits to Employees and Retirees	✓			
Participant Education-Guidance for Defined Contribution Plans		✓		
Strategic Health-Care Plan Design			✓	
Governance of Public Employee Retirement System		✓		Managed by OCERS
Sustainable Funding Practices of Defined Benefit Pension Plans	✓			

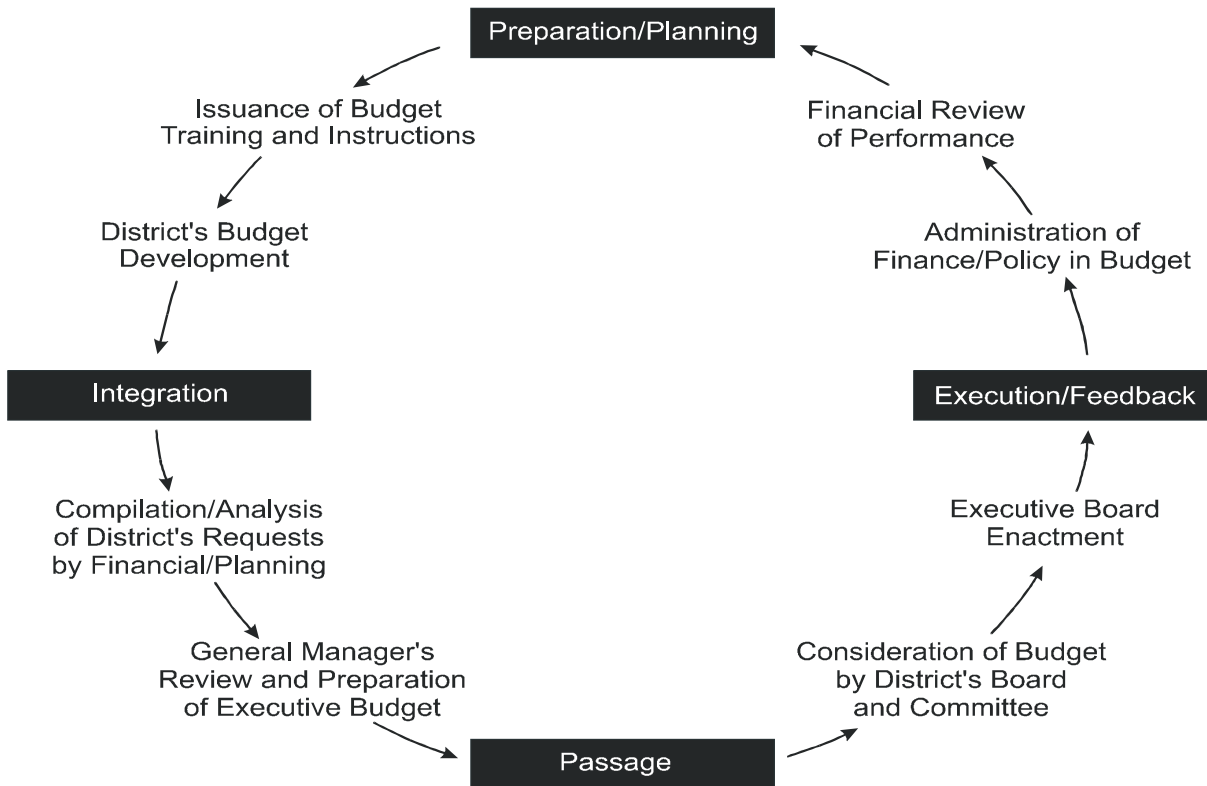


# GFOA Best Practices and Advisories

<i><b>GFOA Recommended Practice</b></i>	<i><b>Compliance Met</b></i>	<i><b>Not Applicable</b></i>	<i><b>In Progress</b></i>	<i><b>Comments</b></i>
Responsible Management and Design Practices for Defined Benefit Pension Plans	✓			
Design and Implement Sustainable Pension Benefit Tiers			✓	
Develop a Review Process for Implementing National Health-Care Reform (COBRA)	✓			
<b><u>Economic Development and Capital Planning</u></b>				
Multi-Year Capital Planning	✓			
The Role of the Finance Officer in Economic Development	✓			
Capital Project Monitoring and Reporting	✓			
Capital Asset Assessment, Maintenance, and Replacement Policy	✓			Establish a system for assessing District assets and plan and budget for any capital maintenance and replacement needs.
The Role of Master Plans in Capital Improvement Planning	✓			
Analyzing the Cost of Economic Development Projects		✓		
Building Resiliency into Capital Planning	✓			Establish resiliency into the capital planning process to produce a sustainable community and mitigate the effects of disasters.
Incorporating a Capital Project Budget in the Budget Process	✓			
Developing an Economic Development Incentive Policy		✓		No Incentive Policy established
Monitoring Economic Development Performance		✓		
Balancing the Costs and Benefits of Economic Development Projects	✓			
Incorporating Environmentally Responsible Practices in the Capital Improvement Program	✓			

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# Overview of the Budget Process



## Budget Process:

Ten years ago, the District prepared its first complete budget document covering two years instead of one. The next year a smaller budget update document was prepared to summarize revisions to the second year of the previously adopted two-year budget period. This two-year cycle approach to budget preparation is expected to continue for the indefinite future.

This change has not caused any modification to the previously established stages of the annual budget process except with regard to the level of detail which is provided. The timing of all stages of the budget process remains consistent from year to year. In the second year of a two-year cycle, however, the focus is on any changes that need to be made to the upcoming year's budget relative to what was previously submitted, reviewed, and approved for that budget during the prior year.

The District's annual budget preparation process begins in January of each year and concludes in June upon its adoption. However, the entire budget process extends beyond one year and overlaps with the preceding budget and the subsequent budget. As shown in the chart above, the budget process consists of four major parts. These parts occur at various stages throughout the year as follows:

- Preparation/Planning - takes place from January through March.
- Integration - runs from March through May.
- Passage - adoption of the budget usually occurs in June of each year.
- Execution - starts from the first day of the budget year, July 1, through the entire budget year and beyond into November with the presentation of the annual audit report.

Key dates in this 2016 budget cycle are:

Budget Kick-off Meeting	- January 20
Department Budget Submissions	- February 18
Preliminary Budget Review	- March 7-16
General Manager Budget Review	- March 17-22
Presentation to Board Committees	- June 1 & 8
Public Hearing & Board Adoption	- June 22

## Team Approach

As identified by one of the fiscal policies, the budget preparation process originates at the division level, the organizational level of accountability and control. Budget coordinators are established to represent each operating division. A comprehensive budget manual is prepared and used as the training manual during a training session with the budget coordinators.

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# 2016-17 & 2017-18 Budget

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After the initial divisional budgets are prepared, budget review sessions are scheduled for each division with the General Manager. It is during these sessions that all proposed staffing levels, programs, and line item expenses are justified. Next senior management representatives from each department analyze opportunities for consolidating programs and eliminating unnecessary requests. Guidance is also sought and utilized from District's committees on various issues that affect budget development.

## ***The Process***

The budget preparation process begins in January with the distribution of the budget manual, budget preparation training, and issuance of personnel budget and justification forms, and equipment budget forms to all of the Divisions.

In March, the Administrative Services Department develops divisional level budgets based on the request forms received from the various divisions. These divisional budgets are then reviewed in mid-March by the General Manager along with the Department and Divisional managers for each program request and for new, additional, or reduced services, positions, and capital outlay.

The Capital Improvement Program requests are prepared from October through March and are reviewed by Engineering and Department and Divisional managers prior to being submitted to the General Manager for review and evaluation as part of the budget process.

In determining recommended allocation levels, the General Manager takes into consideration the projected amount of available resources, direction provided by the Directors, the District's fiscal policies, and how to best provide the most cost-effective and efficient service levels to the public. After a final review of the operating budgets by the General Manager, the proposed annual budgets are finalized in late May and then distributed to the Directors for consideration.

The General Manager presents the proposed budget to the various Directors' Committees for deliberations throughout the month of June. The proposed budget is scheduled for adoption, along with any revisions by the Board, at the Board of Directors meeting in June.

## ***Level of Control and Amendments to the Budget***

Budgetary control, the level at which expenses cannot legally exceed the appropriated amount, is exercised at the individual Department level.

Administrative policies provide guidelines on budget transfers and the authorization necessary to implement transfers. Generally, there are two types of budget transfers:

### **1. Budget Adjustment**

This is a transfer which does not change the total appropriated amount and does not require Board action. Depending on the budget category affected by the transfer, approval may be granted at the General Manager or Department Head level as follows:

Department Heads have discretion to reapportion funds between certain line items within a division but may not exceed total appropriated amounts for each department. They also may transfer staff across divisional lines within their department. The General Manager and Board of Directors must approve additional capital outlay items. Funds appropriated for salaries and benefits may not be expended for any other purpose unless approved by the Board. The General Manager may transfer operating funds within and between divisions and departments. The General Manager may also transfer staff positions between departments.

### **2. Budget Amendment:**

This is an adjustment to the total appropriated amount, which was not included in the original budget. These supplemental appropriations require formal action by the Board of Directors. Types of modifications can be categorized as follows:

Prior year reserves or fund balances may be appropriated to fund items not previously included in the adopted budget.

Reserves/fund balances exceeding minimum amounts required by fiscal policy may be appropriated if it is determined to be in the best interest of the District. Directors may also appropriate reserves in case of emergencies or unusual circumstances.

Transfers between Revenue Areas require formal action by the Board of Directors.

Unexpended appropriations automatically lapse at the end of the fiscal year and are included in the ending fund balances.

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# Budget Assumptions

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## 2016-18 Proposed Budget Assumptions

### *Economic Assumptions*

- Inflation for Orange County in FY 2016-17 is projected to be 2.0 percent based on the 2016 projected percentage change in consumer price index obtained from the December 2015 Economic and Business Review report prepared by Chapman University. A 2.0 percent inflation factor will also be used for FY 2017-18.

### *Revenue Assumptions*

- Based upon the revised Sewer Service Fee Rate Schedule approved by the Board in May 2015, the single-family residence (SFR) rate will increase by 1.6 percent to \$327 in FY 2016-17.
- Note that each \$1 increase in the SFR rate generates approximately \$900,000 per year.
- The capital facilities capacity charge (CFCC) fee captures only those infrastructure costs that relate to additional capacity. The CFCC fee will increase for FY 2016-17 by the increase in the Engineering-News Record construction cost index. Other infrastructure costs such as improved treatment, rehabilitation, refurbishment, and replacement, will be supported through user fees.
- Given the Facilities Master Plan adopted in December 2009, a rate study was completed in January 2013 to ensure that the CFCC fee methodology remains equitable and to confirm that an appropriate share of system costs would be recovered from new development.
- Revenues will be budgeted to reflect little growth in Equivalent Dwelling Unit (EDU) connections that have remained flat over the past five years.
- Permit user rates for flow, Biochemical Oxygen Demand (BOD) and Total Suspended Solids (TSS) will follow the most recent Rate Study.
- Annexation fees capture both the net current assets and the equivalent property tax allocations totaling \$4,235 per acre.
- Annexable property in the District's service area sphere is minimal; consequently, no

FY 2016-17 income from annexation fees is anticipated.

- Property tax revenues are preliminarily estimated to increase by approximately five percent from FY 2015-16 to \$92,953,000.
- A two percent annual increase in Assessed Value is authorized by the state constitution and is included in the increases noted above. The additional increase in assessed value is from authorized increases to market value when property is sold at a higher value.
- Earnings on the investment of the District's operating cash and reserves will be budgeted at 1.0 percent of the average cash and investment balance projected for the fiscal year.
- No additional debt issuance is scheduled for FY 2016-17.

### *Operating Assumptions*

- Operating expenses are expected to approximate the adopted FY 2015-16 budget of \$149 million.
- Average daily flows are projected at 185 mgd for FY 2016-17 and FY 2017-18. This projection reflects an expectation that increased economic activity and urban runoff will be more than offset by effects of conservation and minimal rainfall, resulting in an overall decrease in the average daily flow. The FY 2016-17 flow projection of 185 mgd reflects no change from the actual for the first five months of the current year and is 2 mgd below the final actual flow for FY 2014-15.

### *Employee/Staffing Assumptions*

- Staffing level is expected to remain flat. No additional positions are anticipated. The total FY 2015-16 authorized staffing level is 624.00 FTEs, excluding Management Discretion positions.
- Vacant positions as of 12/31/15 are budgeted at 50 percent of step 1 for the remainder of FY 2015-16 and at 100 percent of step 2 for FY 2016-17.

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## 2016-17 & 2017-18 Budget

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- New positions will be projected at 100 percent of step 1 for FY 2016-17.
- A 5.0 percent vacancy factor on authorized positions has been budgeted for FY 2016-17. The actual vacancy factor for 2014-15 was 6.3 percent. This vacancy factor accounts for time spent for recruitment and turnover.
- The Memorandums of Understanding (MOUs) for the OCEA, the Local 501, and the Supervisor and Professional (SPMT) groups expire on June 30, 2016. Pending the completion of the negotiation process, no salary adjustments will be included in the budget for COLA for periods beyond the expiration of the current MOUs.
- Retirement costs for employees enrolled in OCERS Plans G and H are estimated at a rate of 16.59 percent of the employee's base salary for FY 2016-17 and FY 2017-18, down from 24.25 percent in FY 2015-16. The rates for Plans G and H include the District's pickup of 3.5 percent of employees' required contributions. Employees enrolled in OCERS Plan B are estimated at a rate of 10.99 percent of the employee's base salary for FY2016-17 and FY 2017-18, down from 18.39 percent in FY 2015-16. All employees hired on or after January 1, 2013 are enrolled in OCERS Plan U and are estimated at a rate of 9.69 percent for FY 2016-17 and FY 2017-18, down from 17.52 percent in FY 2015-16. Interns are not enrolled in OCERS so their retirement benefits are calculated at 6.2 percent (FICA rate).
- Other employee benefits and insurances will be budgeted to increase in FY 2016-17 and FY 2017-18 by moderate but yet to be determined amounts.

### *Materials, Supplies, & Services Assumptions*

- The proposed operating budget will continue to reflect an emphasis on safety, security, and maintenance of plant assets and infrastructure.
- An amount equal to half of one percent of the Operating materials and services budget will be a contingency for prior year re-appropriations. Since the current year's budget lapses on June 30, a contingency is needed in the succeeding budget year for goods or services ordered at the end of one budget year but not delivered until the following year.

- An amount equal to 0.85 percent of the Operating materials and services budget will be the General Manager's contingency budget. These funds will be allocated to appropriate line items during the year after requests and justifications for unanticipated needs are approved by the General Manager.
- Resource needs for strategic initiatives will be included in the budget.

### *Capital Improvement Program Assumptions*

- The FY 2016-17 and FY 2017-18 cash flow budget, based on the most current Validated Capital Improvement Program (CIP), is the target.
- The baseline CIP cash flow is \$128 million for FY 2016-17 and \$115 million for FY 2017-18.
- Continual evaluation of the CIP by the Asset Management Team may result in deferral or reduction of some projects and a resultant increase in O&M repair costs for materials and services, if the net cash flow impact is a decrease.
- The FY 2016-17 and 2017-18 CIP budget will only increase for critical projects which were not previously identified in the Strategic Plan Update.
- For the first five months of FY2015-16, \$56.9 million of the \$175.0 million CIP budget, approximately 32.5 percent, was expended.

### *Debt Financing*

- The District will issue new debt in the form of Certificates of Participation (COP) as needed to fund the CIP and to maintain reserves.
- No additional debt issuance is scheduled for FY2016-17 and FY 2017-18.
- Debt will only be used for CIP and capital expenses, not for operating expenses.
- Capital financing plans no longer include future borrowings over the next ten years as the approved user fee schedule is considered sufficient.

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# Budget Assumptions

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- Borrowing is proposed only for facilities which do not add capacity and that are funded by all users for replacement, rehabilitation, and improved treatment.

## *Reserve Assumptions*

The existing reserve policy is summarized as follows:

- ▶ A cash flow reserve will be established to fund operations, maintenance and certificates of participation expenses for the first half of the fiscal year, prior to receipt of the first installment of the property tax allocation and sewer service user fees which are collected as a separate line item on the property tax bill. The level of this reserve will be established as the sum of an amount equal to six months operations and maintenance expenses and the total of the annual debt (COP) service payments due in August each year.
- ▶ An operating contingency reserve will be established to provide for non-recurring expenditures that were not anticipated when the annual budget and sewer service fees were considered and adopted. The level of this reserve will be established at an amount equal to ten percent of the annual operating budget.
- ▶ A capital improvement reserve will be maintained to fund annual increments of the capital improvement program. The long-term target is for one half of the capital improvement program to be funded from borrowing and for one half to be funded from current revenues and reserves. With this program in mind, the target level of this reserve has been established at one-half of the average annual capital improvement program over the next ten years.
- ▶ Catastrophic loss, or self-insurance, reserves will be maintained for property damage including fire, flood and earthquake, for general liability and for workers' compensation. These reserves are intended to work with purchased insurance policies, FEMA disaster reimbursements and State disaster reimbursements. The potential infrastructure loss from a major earthquake, of which the District currently has limited outside insurance coverage of \$25 million,

has been estimated to be as high as \$1.3 billion. The level of this reserve has been set at \$57 million should such a catastrophic event occur. This reserve amount will assist the District with any short-term funding needs until Federal and State assistance becomes available.

- ▶ Accumulated capital funds will be set aside for certain specific, short-term capital improvements as the need and availability arise.
- ▶ A capital replacement/renewal reserve policy has been established to provide thirty percent of the funding to replace or refurbish the current collection, treatment and disposal facilities at the end of their useful economic lives.

Based on the FY 2011-12 Asset Management Plan, the current replacement value of these facilities is estimated to be \$3.14 billion for the collection facilities and \$3.12 billion for the treatment and disposal facilities. The initial reserve level has been established at \$50 million, which will be augmented by interest earnings and a small portion of the annual sewer user fee, in order to meet projected needs through the year 2030.

- ▶ Provisions of the various certificates of participation (COP) issues require debt service reserves to be under the control of the Trustee for that issue. These reserve funds are not available for the general needs of the District and must be maintained at specified levels. The current level of required COP service reserves is projected to be \$209.9 million.
- ▶ Accumulated funds exceeding the levels specified by District policy will be maintained in a rate stabilization fund. These funds will be applied to future years' needs in order to maintain rates or to moderate annual fluctuations. There is no established target for this reserve.

## *Miscellaneous*

- The budget document will be in a bi-annual format with two, one-year budgets presented for FY 2016-17 and FY 2017-18.

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## 2016-17 & 2017-18 Budget

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- The budget worksheets for operating costs will contain one column for FY 2016-17 and one column for 2017-18. The column will represent all collection, treatment, and disposal/reuse costs.



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# Accounting System & Budgetary Control

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## **Accounting System and Budgetary Control**

### **Fund Accounting & Proprietary Funds**

The accounts of the District are organized within one Enterprise Fund, a Proprietary Fund Type. The District's Enterprise Fund is comprised of two Revenue Areas which are identified as Revenue Area 14 and the Consolidated Revenue Area (Revenue Area 15). Each Revenue Area includes a share of capital outlay activities, self-insurance activities, debt service activities, and operating activities. These activities are allocated to each Revenue Area based on sewage flows, location, or level of participation in specific programs.

Enterprise Funds are used to account for operations that are financed and operated in a manner similar to a private business enterprise, where the costs (expenses, including depreciation) of providing goods or services to the general public on a continuing basis are financed or recovered through user charges.

### **Basis of Accounting**

Basis of accounting refers to the point at which revenues and expenses are recognized in the accounts and reported in the financial statements. Enterprise funds are accounted for on the flow of economic resources measurement focus and use the accrual basis of accounting. In an enterprise fund, revenues are recognized when earned and expenses are recognized when incurred, regardless of the timing of related cash flows.

### **Budgetary Basis of Accounting**

The operating budget for the Enterprise Fund is adopted on a basis consistent with generally accepted accounting principles. Except as noted in the following paragraph, the basis of accounting and the budgetary basis of accounting are the same. Budgeted amounts are as originally adopted and as further amended by Board action of the District.

Although the District does budget for capital improvement projects, the related capital outlays are recorded as increases in Property, Plant, and Equipment on the balance sheet of the Enterprise Fund. Similarly, the District budgets for the retirement of debt. However, the principal payments on debt are recorded as reductions in the current portion of long-term debt on the balance sheet of the Enterprise Fund.

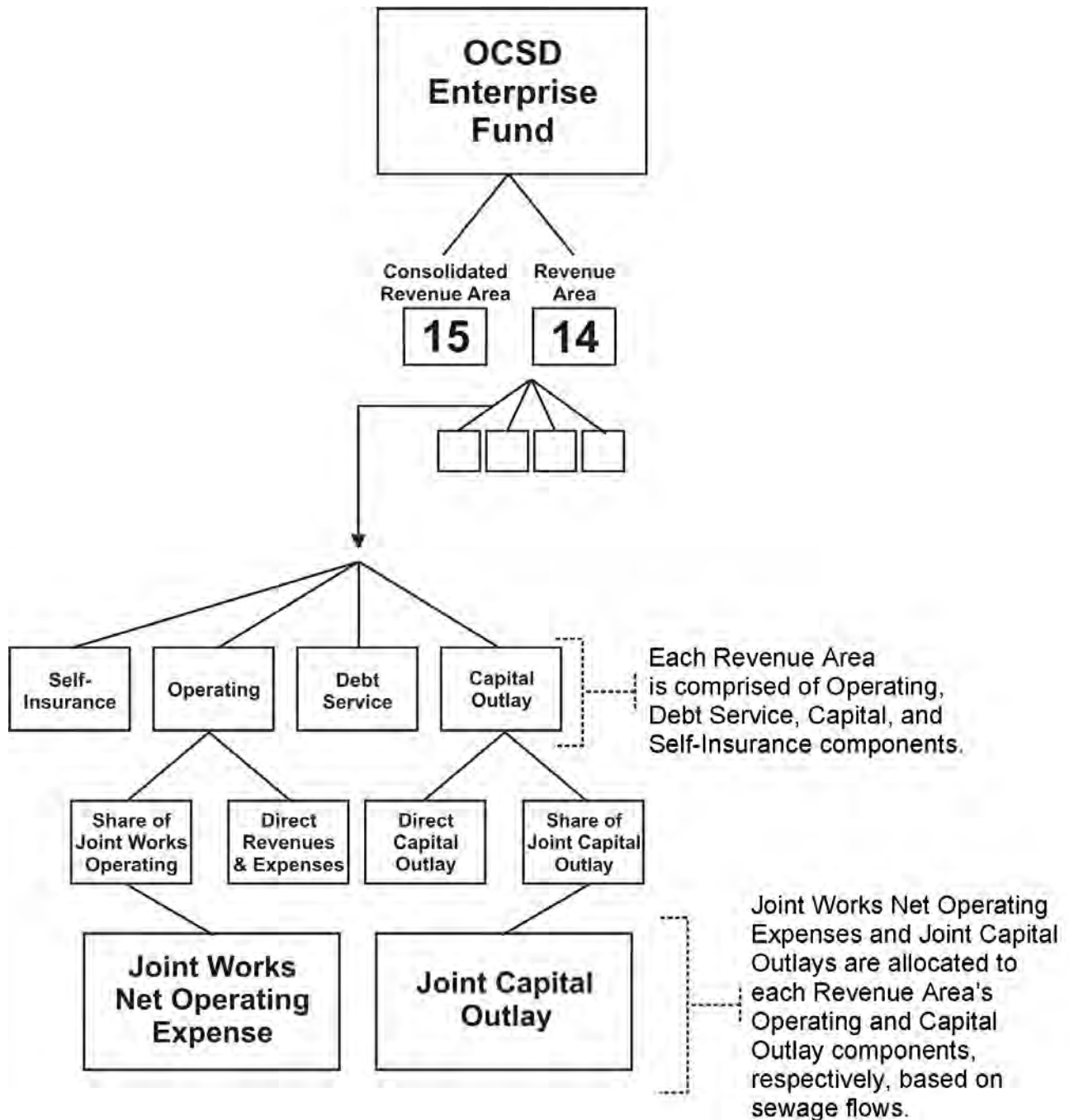
### **Internal Controls**

The District is responsible for establishing and maintaining an internal control structure designed to ensure that the assets of the government are protected from loss, theft, or misuse and to ensure that adequate accounting data are compiled to allow for the preparation of financial statements in conformity with generally accepted accounting principles. The internal control structure is designed to provide reasonable, but not absolute, assurance that these objectives are met. The concept of reasonable assurance recognizes that the cost of a control should not exceed the benefits likely to be derived and that the valuation of costs and benefits requires estimates and judgments by management.

### **Budgetary Control**

Budgetary controls are maintained to ensure compliance with legal provisions embodied in the annual appropriated budget approved by the Board of Directors. The budgetary level of control, the level at which operating expenses cannot legally exceed the appropriated amount, is exercised at the department level.

# 2016-17 & 2017-18 Budget



# Revenue Sources

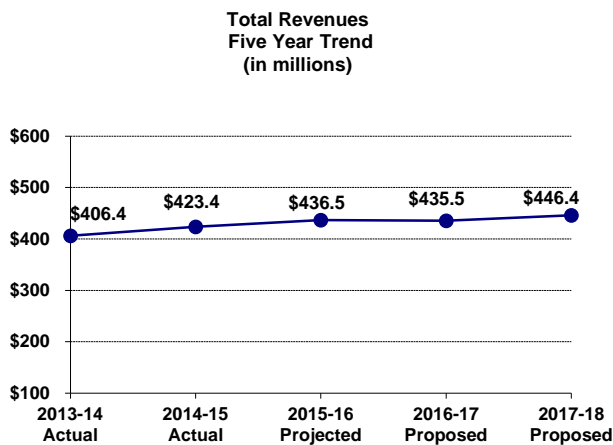
## Revenue Sources

The District has a variety of revenue sources available for operating and capital expenses. The major revenue sources are as follows:

- Property Taxes
- User Fees
- Industrial Waste Permit User Fees
- Interest Earnings
- Debt Proceeds

These sources have generally accounted for 90 percent or more of the total revenue to the District.

The following graph summarizes revenues from all sources for the District as a whole over the past two fiscal years, the current year, and through the following two proposed budget years:



Total revenues increased from \$406.4 million in FY 2013-14 to \$423.4 million in FY 2014-15, or \$17.0 million. This increase was due mostly to: (1) the \$7.8 million increase in capital facility capacity charges due to the rebound from the recent economic recession and the increased activity in construction as total nonresidential permit valuations in Orange County increased 26.5 percent in calendar year 2014 over the prior year; (2) an increase of \$7.2 million in IRWD assessments; and (3) a \$4.8 million, or 6.4 percent increase in property tax revenues as total assessed property valuations increased the same 6.4 percent over the prior year.

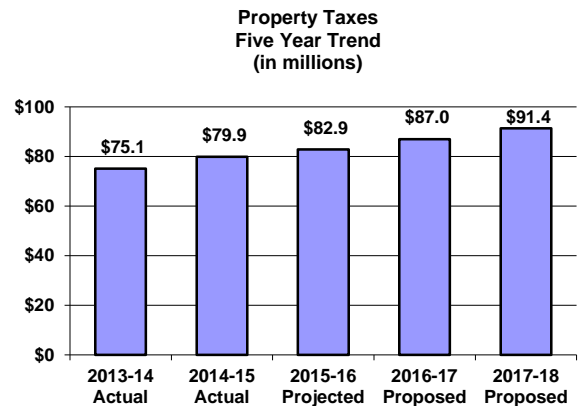
In FY 2016-17, revenues are being proposed at \$435.5 million, a decrease of \$1.0 million, or 0.2 percent over the prior year. This decrease is primarily attributable to the \$5.1 million decrease in intra-district equity sale/purchase between the Consolidated Revenue Areas and Revenue Area 14.

This decrease is mostly offset by the expected increase of \$4.1 million in property tax revenue as property tax revenues are estimated to increase 5.0 percent over the prior year as property assessed valuations continue to rebound from the previous market downturn.

In FY 2017-18, revenues are being proposed at \$446.4 million, an increase of \$10.9 million, or 2.5 percent over the prior year. This increase is primarily attributable to the 1.2 percent increase in user fees that is expected to generate an additional \$4.6 million. Property tax revenue is expected to generate an additional increase of \$4.4 million, or another projected increase of 5.0 percent over the prior year.

## Property Taxes

The County is permitted by State law (Proposition 13) to levy taxes at one percent of full market value (at time of purchase) and can increase the assessed value no more than two percent per year. The District receives a share of this basic levy proportionate to the amount that was received in the 1976 to 1978 period less \$3.5 million, the amount that represents the State's permanent annual diversion from special districts to school districts that began in 1992-93.



The District's annual share of the one percent ad valorem property tax levy is first dedicated for the payment of COP debt service. The apportionment of the ad valorem tax is pursuant to the Revenue Program adopted in April 1979 to comply with regulations of the Environmental Protection Agency, the State Water Resources Control Board, and in accordance with COP documents and Board policy.

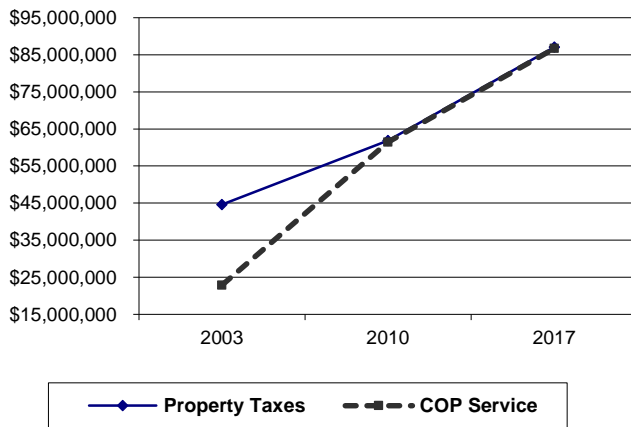
As shown in the graph above, property tax revenues increased from a low in FY 2013-14 of \$75.1 million to a projected \$91.4 million in FY 2017-18, primarily due to the rebound from the economic decline and the collapse in the housing and commercial property

# 2016-17 & 2017-18 Budget

markets beginning in 2008. Property tax revenues are now being projected to increase 5.0 percent a year through FY 2017-18.

Historically the District's property tax revenues were at a higher level than necessary to support the District's debt service obligations. However, capital improvement requirements averaging \$200.0 million a year over the last ten years have required new COP debt issuances that have increased future debt service payments that more closely matches property tax revenues.

**COP Funding Requirements vs. Property Tax Funding Source**



## User Fees

User fees are ongoing fees for service paid by customers connected to the sewer system. A property owner, or user, does not pay user fees until connected to the sewer system and receiving services. Once connected, a user is responsible for their share of the system's costs, both fixed and variable, in proportion to the user's demand on the system.

In addition, the Consolidated Revenue Area charges industrial and commercial user fees to customers discharging high-strength or high-volume wastes into the sewer systems. Revenue Area No. 14 need's are funded by IRWD. Previously the District had been able to avoid or minimize user fee increases by reducing operational costs through reorganizing and streamlining District operations. As a result of the capital improvement program expansion and the rehabilitation and refurbishment of existing facilities, annual increases in user fees are required.

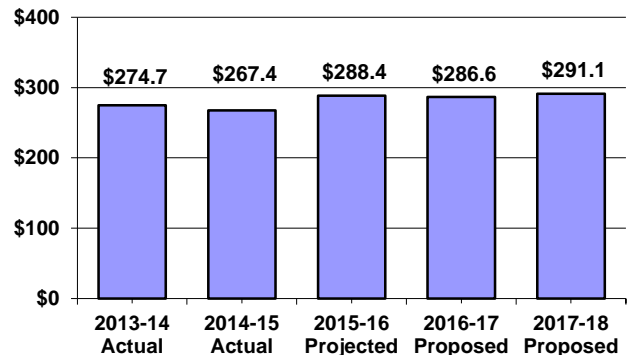
In 2007, District staff first conducted strategic planning workshops with the Board of Directors to

layout a capital program to deliver the levels of service desired by the Board of Directors. These levels of service and resulting capital projects are included in the District's 5-year Strategic Plan that were most recently updated in December 2015. The original effort was reinforced through the adoption of a new Master Plan in December 2009, a planning effort to define the District's goals, responsibilities, and requirements over the next 20 years, and includes projections through the assumed "build-out" of the District's service area to the year 2050. Incorporating the 2009 Master Plan into the CIP validation update for FY 2015-16, the current CIP includes 81 projects totaling outlays of \$2.4 billion over the next ten years.

In March of 2013, the Board approved rate increases for each year over the next five years. These increases are necessary for compliance with the District's debt fiscal policy of balancing the funding of new capital improvements with current revenues and existing debt, and to minimize the increase in rates over an extended period of time.

The impact of this five-year sewer fee schedule increased the single family residence user fee rate, the underlying rate for all sewer service user fees, an average of 2.9 percent a year from \$294 in FY 2012-13 to \$339 in FY 2017-18. Following the first two years of this rate plan, the Board of Directors approved a reduction of the rate increase for the last three years of the plan, lowering the average of these increases from 2.4 percent to 1.6 percent, or to \$327 in FY 2016-17 and \$331 in FY 2017-18. These rate increases by the District are still well below the average annual sewer rate of \$475 being charged throughout the State according to the 2015 California Wastewater Charge Survey conducted by the State Water Resources Control Board.

**Net User Fees (in millions)**



# Revenue Sources

Although there was a rate increase of 2.6 percent in FY 2014-15 over the prior year, user fees declined \$7.3 million as shown in the Net User Fees chart above. This decrease was due to rebates provided to commercial property users of \$9.4 million, a 35 percent increase over the prior year. Rebates jumped as a result of lower commercial sewer flows due to the past economic recession and increased water conservation efforts.

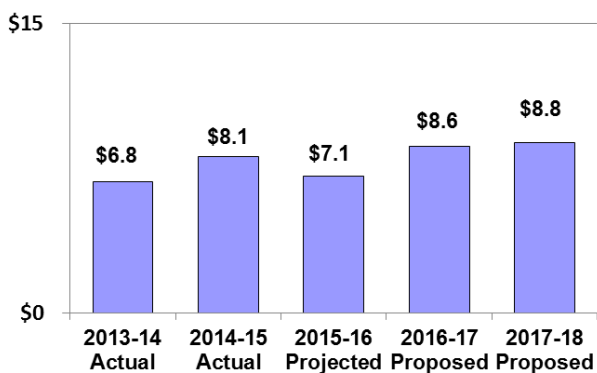
Likewise, there is a rate increase scheduled for the proposed FY 2016-17 budget of 1.6 percent over the prior year, however, user fees are projected to decline \$1.8 million. This decline is due to the Orange County Local Agency Formation Committee's approval to transfer OCSD owned local sewer lines located in the City of Tustin, along with the associated OCSD current annual user fees of approximately \$7 million and capital sewer replacement reserves of approximately \$40 million, to the East Orange County Water District. This transfer takes OCSD out of the local sewer maintenance, repair, and replacement business as it's the mission of OCSD to maintain only regional sewer trunk line collection systems.

### Interest Earnings

Interest earnings are generated from the investment of accumulated reserves consisting of a cash flow/contingency, a capital improvement, a capital replacement/refurbishment, and a self-insurance reserve, all projected to total \$597.9 million at July 1, 2016.

The District's reserves are invested in accordance with the District's investment policy and the State Government Code through an outside money manager, and an independent custodian bank.

**Interest Earnings  
(in millions)**



Interest earnings fluctuate from year to year based on the timing of CIP outlays and debt issuances, which impact the available balance in reserves for investing, and in the rise and fall of fixed-income investment market yields.

The District's investment policy is structured conservatively towards liquidity to avoid having to sell investments at a loss and having unrealized losses become realized losses. Total return on investments were 1.1 percent in FY 2013-14 and 0.8 percent in FY 2014-15. However, interest earnings were higher in FY 2014-15 due to larger investment balances.

The District is proposing an interest earnings rate of 1.5 percent in both FY 2016-17 and FY 2017-18 to generate earnings of \$8.6 million and \$8.8 million, on annual average investment portfolio projections, with fiscal year end balances of \$558.1 million and \$629.3 million in FY 2016-17 and FY 2017-18, respectively.

### Debt Proceeds

Over the next ten years, the District is projecting an additional \$2.4 billion in future treatment plant and collection system capital refurbishments. In order to minimize annual sewer rate increases in the long-term, all of these refurbishments are being proposed to be funded from user fees with no issuances of new money debt issuances.

### Teeter Plan

In June 1993, the County of Orange adopted the Teeter Plan pursuant to Sections 4701 through 4717 of the California Revenue and Taxation Code. The Teeter Plan is an alternative method of distribution of revenues from the secured property tax roll to local participating agencies.

The District participates in the Teeter Plan program and receives its full share of property tax and user fees from the secured roll, whether or not these taxes and user fees have been collected. The Teeter Plan provides the District with stable and timely cash flow without the collection risk. The County, in exchange for assuming the collection risk, receives the delinquent taxes and user fees, penalties and interest for the defaulted properties when paid.

For the fiscal year ended June 30, 2015, the District received \$362,927,000 in tax and user fees from the County, or 99.99 percent of the total tax and user fee levy.

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## **2016-17 & 2017-18 Budget**

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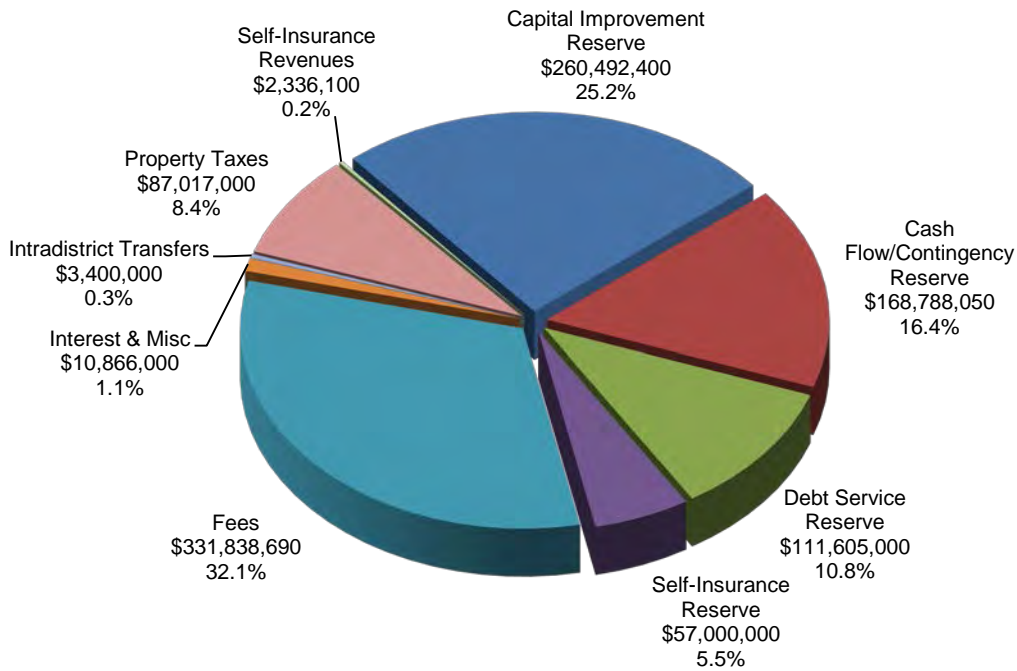
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**DISTRICT SUMMARY**  
**SECTION 4**

BACK OF SECTION 4 DIVIDER

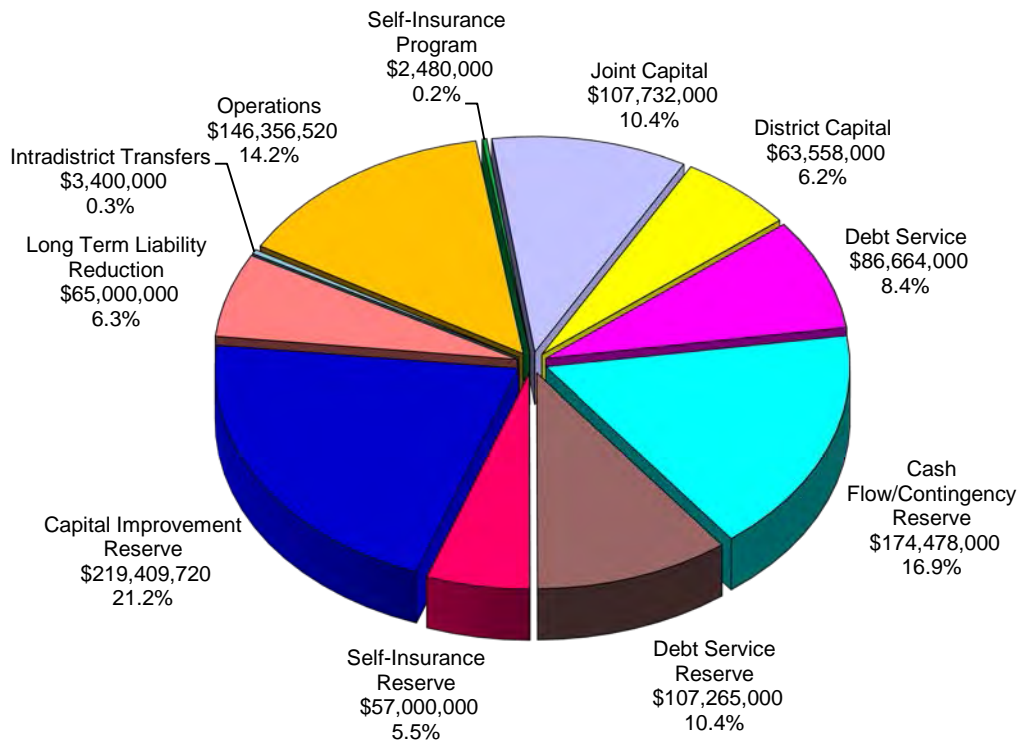


## Where the Money Comes From – FY 2016-17



**FY 2016-17 Total Funding Sources - \$1,033,343,240**

## Where the Money Goes – FY 2016-17



**FY 2016-17 Total Funding Uses - \$1,033,343,240**

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## 2016-17 & 2017-18 Budget

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### Funding Sources by Category FY 2016-17

	Consolidated Revenue Area	Revenue Area 14	Total Sources
Beginning Reserves	\$ 607,060,110	\$ (9,174,660)	\$ 597,885,450
Services Fees	14,475,870	17,308,820	31,784,690
User Fees	286,554,000	-	286,554,000
Capital Facilities Capacity Charge	13,500,000	-	13,500,000
Capacity Rights	-	-	-
Debt Proceeds	-	-	-
Property Taxes	84,436,000	2,581,000	87,017,000
Intradistrict Transfers	3,400,000	-	3,400,000
Insurance In-Lieu Premiums	2,279,100	57,000	2,336,100
Interest and Other Revenue	<u>10,763,000</u>	<u>103,000</u>	<u>10,866,000</u>
Total Sources	<u>\$ 1,022,468,080</u>	<u>\$ 10,875,160</u>	<u>\$ 1,033,343,240</u>

# Funding Uses by Category

## Funding Uses by Category FY 2016-17

	Consolidated Revenue Area	Revenue Area 14	Total Uses
Directors' Fees	\$ 146,500	\$ 6,100	\$ 152,600
Salaries & Benefits	81,324,600	7,812,600	89,137,200
Administrative Expenses	1,599,040	153,610	1,752,650
Printing & Publications	259,420	24,920	284,340
Training & Meetings	1,056,570	101,500	1,158,070
Operating Materials and Supplies	15,234,700	1,463,550	16,698,250
Contractual Expenses	22,655,020	2,176,400	24,831,420
Professional Expenses	3,796,150	364,680	4,160,830
Research & Monitoring	729,880	70,120	800,000
Repairs & Maintenance	13,015,570	1,250,360	14,265,930
Utilities	8,131,110	781,130	8,912,240
Self-Insurance Requirements	2,419,480	60,520	2,480,000
Other Materials, Supplies, & Services	3,088,330	296,690	3,385,020
Cost Allocation	(17,508,060)	(1,673,970)	(19,182,030)
Joint Works Capital Improvement Program	104,963,000	2,769,000	107,732,000
Collection System Capital Improvement Prog.	63,558,000	-	63,558,000
Debt Service	86,664,000	-	86,664,000
Long Term Debt Reduction	62,809,000	2,191,000	65,000,000
Intradistrict Transfers	-	3,400,000	3,400,000
Joint Equity Sale to IRWD	-	-	-
Subtotal	453,942,310	21,248,210	475,190,520
Ending Reserves	568,525,770	(10,373,050)	558,152,720
Total Uses	<u>\$ 1,022,468,080</u>	<u>\$ 10,875,160</u>	<u>\$ 1,033,343,240</u>

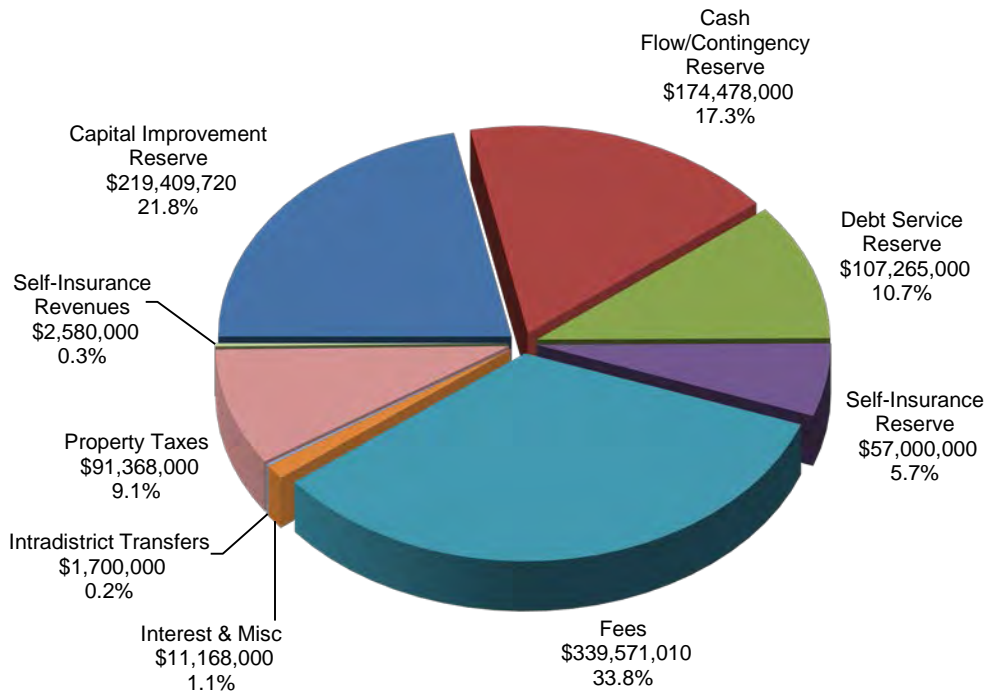
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## **2016-17 & 2017-18 Budget**

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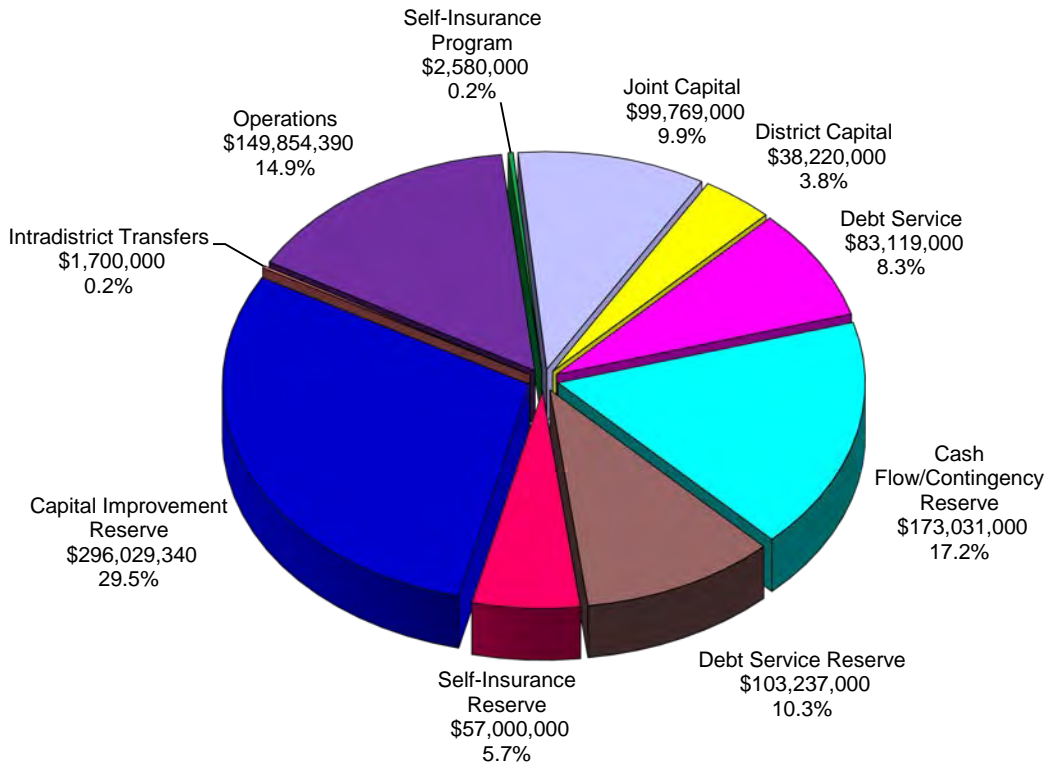
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## Where the Money Comes From – FY 2017-18



**FY 2017-18 Total Funding Sources - \$1,004,539,730**

## Where the Money Goes – FY 2017-18



**FY 2017-18 Total Funding Uses - \$1,004,539,730**

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## 2016-17 & 2017-18 Budget

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### Funding Sources by Category FY 2017-18

	Consolidated Revenue Area	Revenue Area 14	Total Sources
Beginning Reserves	\$ 568,525,770	\$ (10,373,050)	\$ 558,152,720
Services Fees	14,742,700	15,580,310	30,323,010
User Fees	291,158,000	-	291,158,000
Capital Facilities Capacity Charge	18,090,000	-	18,090,000
Capacity Rights	-	-	-
Debt Proceeds	-	-	-
Property Taxes	88,910,000	2,458,000	91,368,000
Intradistrict Transfers	1,700,000	-	1,700,000
Insurance In-Lieu Premiums	2,517,050	62,950	2,580,000
Interest and Other Revenue	<u>11,082,000</u>	<u>86,000</u>	<u>11,168,000</u>
Total Sources	<u>\$ 996,725,520</u>	<u>\$ 7,814,210</u>	<u>\$ 1,004,539,730</u>

# Funding Uses by Category

## Funding Uses by Category FY 2017-18

	Consolidated Revenue Area	Revenue Area 14	Total Uses
Directors' Fees	\$ 146,500	\$ 6,100	\$ 152,600
Salaries & Benefits	83,250,160	7,214,640	90,464,800
Administrative Expenses	1,716,710	148,770	1,865,480
Printing & Publications	339,540	29,420	368,960
Training & Meetings	1,087,930	94,280	1,182,210
Operating Materials and Supplies	15,984,360	1,385,240	17,369,600
Contractual Expenses	20,842,290	1,806,240	22,648,530
Professional Expenses	3,830,080	331,920	4,162,000
Research & Monitoring	802,830	69,570	872,400
Repairs & Maintenance	14,871,370	1,288,790	16,160,160
Utilities	9,417,530	816,140	10,233,670
Self-Insurance Requirements	2,517,050	62,950	2,580,000
Other Materials, Supplies, & Services	3,468,000	300,540	3,768,540
Cost Allocation	(17,853,920)	(1,540,640)	(19,394,560)
Joint Works Capital Improvement Program	97,205,000	2,564,000	99,769,000
Collection System Capital Improvement Prog.	38,220,000	-	38,220,000
Debt Service	83,119,000	-	83,119,000
Long Term Debt Reduction	-	-	-
Intradistrict Transfers	-	1,700,000	1,700,000
Joint Equity Sale to IRWD	-	-	-
Subtotal	358,964,430	16,277,960	375,242,390
Ending Reserves	637,761,090	(8,463,750)	629,297,340
Total Uses	<u>\$ 996,725,520</u>	<u>\$ 7,814,210</u>	<u>\$ 1,004,539,730</u>

# 2016-17 & 2017-18 Budget

DESCRIPTION OR ACCOUNT TITLE	ACTUAL 2014-15	APPROVED 2015-16	PROJECTED 2015-16	PROPOSED 2016-17	PROPOSED 2017-18
BEGINNING ACCUMULATED FUNDS	\$ 713,695,240	\$ 626,917,530	\$ 587,971,180	\$ 597,885,450	\$ 558,152,720
<u>OPERATING REVENUES</u>					
General Sewer Service User Fees	267,421,492	294,182,000	288,440,000	286,554,000	291,158,000
Permitted User Fees	14,587,191	13,555,000	11,100,000	11,272,000	11,410,000
IRWD Assessments	17,682,964	11,450,570	14,346,000	12,827,690	11,951,010
SAWPA Assessments	2,760,099	2,690,000	3,359,000	3,283,000	3,415,000
Interest	8,110,687	6,064,000	7,125,000	8,606,000	8,840,000
Miscellaneous Receipts	2,812,547	2,059,000	2,933,000	2,260,000	2,328,000
Operating Revenue Subtotal	313,374,980	330,000,570	327,303,000	324,802,690	329,102,010
<u>NON-OPERATING REVENUES</u>					
Property Tax Allocation	71,463,088	78,827,000	73,131,000	76,788,000	80,627,550
Redevelopment Agency Pass Thru	8,456,401	9,700,000	9,742,000	10,229,000	10,740,450
Subtotal-Taxes	79,919,489	88,527,000	82,873,000	87,017,000	91,368,000
Capital Facilities Capacity Charge	20,242,080	11,000,000	13,259,000	13,500,000	18,090,000
Sale of Capacity Rights, SAWPA & SSBSD	-	-	-	-	-
Capital Assessment (IRWD)	3,202,027	2,293,000	2,552,000	4,402,000	3,547,000
Non-Operating Revenue Subtotal	103,363,596	101,820,000	98,684,000	104,919,000	113,005,000
<u>INTRADISTRICT REVENUES</u>					
Annual Intradistrict Joint Equity Purchase/Sale	5,386,575	1,000,000	8,500,000	3,400,000	1,700,000
<u>FINANCING REVENUES</u>					
Sale of Certificates of Participation	-	-	-	-	-
Financing Revenues Subtotal	-	-	-	-	-
<u>SELF INSURANCE REVENUES</u>					
Workers' Comp SFI	764,117	1,483,700	1,488,980	1,206,300	1,130,000
General Liability SFI	505,770	516,000	515,800	1,129,800	1,450,000
Subtotal-Self Insurance	1,269,887	1,999,700	2,004,780	2,336,100	2,580,000
Total Revenues	423,395,038	434,820,270	436,491,780	435,457,790	446,387,010
TOTAL AVAILABLE FUNDING	\$ 1,137,090,278	\$ 1,061,737,800	\$ 1,024,462,960	\$ 1,033,343,240	\$ 1,004,539,730



# Budget Resources

DESCRIPTION OR ACCOUNT TITLE	ACTUAL 2014-15	APPROVED 2015-16	PROJECTED 2015-16	PROPOSED 2016-17	PROPOSED 2017-18
<b><u>OPERATING REQUIREMENTS</u></b>					
Directors' Fees	\$ 161,259	\$ 142,700	\$ 152,600	\$ 152,600	\$ 152,600
Salaries & Benefits	94,044,757	94,659,700	89,780,880	89,137,200	90,464,800
Administrative Expense	1,409,104	1,624,570	1,511,070	1,752,650	1,865,480
Printing & Publications	267,347	412,020	251,600	284,340	368,960
Training & Meetings	835,764	1,050,500	850,870	1,158,070	1,182,210
Operating Materials & Supplies	15,364,441	17,191,000	16,424,170	16,698,250	17,369,600
Contractual Expense	22,183,465	23,938,480	23,461,780	24,831,420	22,648,530
Professional Expense	3,168,796	3,476,580	3,034,080	4,160,830	4,162,000
Research & Monitoring	810,854	831,000	720,000	800,000	872,400
Repairs & Maintenance	11,649,253	12,362,440	13,427,200	14,265,930	16,160,160
Utilities	7,157,617	7,787,080	8,468,730	8,912,240	10,233,670
Other Materials, Supplies, & Services	1,701,945	2,708,370	1,620,250	3,385,020	3,768,540
Cost Allocation	(17,276,525)	(16,877,500)	(18,307,870)	(19,182,030)	(19,394,560)
Subtotal- Operating	141,478,077	149,306,940	141,395,360	146,356,520	149,854,390
<b><u>CAPITAL IMPROVEMENTS</u></b>					
Joint Works Capital Improvements	130,465,143	132,851,000	112,650,900	107,732,000	99,769,000
Collection System Capital Improvements	49,594,857	42,170,000	27,571,600	63,558,000	38,220,000
Annual Intradistrict Joint Equity Purchase/Sale	5,386,575	1,000,000	8,500,000	3,400,000	1,700,000
Subtotal- Capital Improvements	185,446,575	176,021,000	148,722,500	174,690,000	139,689,000
<b><u>FINANCING REQUIREMENTS</u></b>					
Certificate of Participation Service	94,999,290	91,777,000	83,950,050	86,664,000	83,119,000
Long Term Debt Reduction	125,000,000	50,000,000	50,000,000	65,000,000	-
Subtotal-Financing Req	219,999,290	141,777,000	133,950,050	151,664,000	83,119,000
<b><u>SELF INSURANCE REQUIREMENTS</u></b>					
Workers' Comp SFI	1,012,673	955,000	1,128,500	1,090,000	1,130,000
General Liability SFI	1,182,483	1,657,700	1,381,100	1,390,000	1,450,000
Subtotal-Self Insurance	2,195,156	2,612,700	2,509,600	2,480,000	2,580,000
TOTAL REQUIREMENTS	549,119,098	469,717,640	426,577,510	475,190,520	375,242,390
REVENUES EXCEEDING REQUIREMENTS	(125,724,060)	(37,165,890)	9,914,270	(39,732,730)	71,144,620
ENDING ACCUM FUNDS & RESERVES	\$ 587,971,180	\$ 592,020,160	\$ 597,885,450	\$ 558,152,720	\$ 629,297,340

# 2016-17 & 2017-18 Budget

## BUDGET RESOURCES BY REVENUE AREA - FY 16-17

DESCRIPTION OR ACCOUNT TITLE	Consolidated Revenue Area Proposed	Rev Area 14 Proposed	Total Proposed
BEGINNING ACCUMULATED FUNDS	\$ 607,060,110	\$ (9,174,660)	\$ 597,885,450
<u>OPERATING REVENUES</u>			
General Sewer Service User Fees	286,554,000	-	286,554,000
Permitted User Fees	11,272,000	-	11,272,000
O & M Joint Operating Assessment Service Fees (IRWD)	-	2,440,180	2,440,180
O & M Collection System Assessment Service Fees (IRWD)	-	1,297,510	1,297,510
O & M Sludge Disposal Assessment Service Fees (IRWD)	-	9,090,000	9,090,000
SAWPA Assessments	3,203,870	79,130	3,283,000
Interest	8,694,000	(88,000)	8,606,000
Miscellaneous Receipts	2,069,000	191,000	2,260,000
Operating Revenue Subtotal	311,792,870	13,009,820	324,802,690
<u>NON-OPERATING REVENUES</u>			
Property Tax Allocation	74,510,000	2,278,000	76,788,000
Redevelopment Agency Pass Thru	9,926,000	303,000	10,229,000
Subtotal-Taxes	84,436,000	2,581,000	87,017,000
Capital Facilities Capacity Charge	13,500,000	-	13,500,000
Sale of Capacity Rights, SAWPA & SSBSD	-	-	-
Capital Assessment (IRWD)	-	4,402,000	4,402,000
Non-Operating Revenue Subtotal	97,936,000	6,983,000	104,919,000
<u>INTRADISTRICT REVENUES</u>			
Annual Intradistrict Joint Equity Purchase/Sale	3,400,000	-	3,400,000
<u>FINANCING REVENUES</u>			
Sale of Certificates of Participation	-	-	-
Intradistrict Loans, Advances & Repayments	-	-	-
Financing Revenues Subtotal	-	-	-
<u>SELF INSURANCE REVENUES</u>			
Workers' Comp SFI	1,176,870	29,430	1,206,300
General Liability SFI	1,102,230	27,570	1,129,800
Subtotal-Self Insurance	2,279,100	57,000	2,336,100
Total Revenues	415,407,970	20,049,820	435,457,790
TOTAL AVAILABLE FUNDING	\$ 1,022,468,080	\$ 10,875,160	\$ 1,033,343,240

# Budget Resources

DESCRIPTION OR ACCOUNT TITLE	Consolidated Revenue Area Proposed	Rev Area 14 Proposed	Total Proposed
<u>OPERATING REQUIREMENTS</u>			
Directors' Fees	\$ 146,500	\$ 6,100	\$ 152,600
Salaries & Benefits	81,324,600	7,812,600	89,137,200
Administrative Expense	1,599,040	153,610	1,752,650
Printing & Publications	259,420	24,920	284,340
Training & Meetings	1,056,570	101,500	1,158,070
Operating Materials and Supplies	15,234,700	1,463,550	16,698,250
Contractual Expense	22,655,020	2,176,400	24,831,420
Professional Expense	3,796,150	364,680	4,160,830
Research & Monitoring	729,880	70,120	800,000
Repairs & Maintenance	13,015,570	1,250,360	14,265,930
Utilities	8,131,110	781,130	8,912,240
Other Materials, Supplies, & Services	3,088,330	296,690	3,385,020
Cost Allocation	(17,508,060)	(1,673,970)	(19,182,030)
Subtotal- Operating	133,528,830	12,827,690	146,356,520
<u>CAPITAL IMPROVEMENTS</u>			
Joint Works Capital Improvements	104,963,000	2,769,000	107,732,000
Collection System Capital Improvements	63,558,000	-	63,558,000
Annual Intradistrict Joint Equity Purchase/Sale	-	3,400,000	3,400,000
Subtotal- Capital Improvements	168,521,000	6,169,000	174,690,000
<u>FINANCING REQUIREMENTS</u>			
Certificate of Participation Service	86,664,000	-	86,664,000
Long Term Debt Reduction	62,809,000	2,191,000	65,000,000
Subtotal- Financing Requirements	149,473,000	2,191,000	151,664,000
<u>SELF INSURANCE REQUIREMENTS</u>			
Workers' Comp SFI	1,063,400	26,600	1,090,000
General Liability SFI	1,356,080	33,920	1,390,000
Subtotal- Self Insurance	2,419,480	60,520	2,480,000
<u>OTHER CASH OUTLAYS</u>			
Joint Equity Sale to IRWD	-	-	-
Subtotal- Other Cash Outlays	-	-	-
TOTAL REQUIREMENTS	453,942,310	21,248,210	475,190,520
REVENUES EXCEEDING REQUIREMENTS	(38,534,340)	(1,198,390)	(39,732,730)
ENDING ACCUMULATED FUNDS & RESERVES	\$ 568,525,770	\$ (10,373,050)	\$ 558,152,720

# 2016-17 & 2017-18 Budget

## BUDGET RESOURCES BY REVENUE AREA - FY 17-18

DESCRIPTION OR ACCOUNT TITLE	Consolidated Revenue Area Proposed	Rev Area 14 Proposed	Total Proposed
BEGINNING ACCUMULATED FUNDS	\$ 568,525,770	\$ (10,373,050)	\$ 558,152,720
<u>OPERATING REVENUES</u>			
General Sewer Service User Fees	291,158,000	-	291,158,000
Permitted User Fees	11,410,000	-	11,410,000
O & M Joint Operating Assessment Service Fees (IRWD)	-	2,513,150	2,513,150
O & M Collection System Assessment Service Fees (IRWD)	-	1,357,860	1,357,860
O & M Sludge Disposal Assessment Service Fees (IRWD)	-	8,080,000	8,080,000
SAWPA Assessments	3,332,700	82,300	3,415,000
Interest	8,956,000	(116,000)	8,840,000
Miscellaneous Receipts	2,126,000	202,000	2,328,000
Operating Revenue Subtotal	316,982,700	12,119,310	329,102,010
<u>NON-OPERATING REVENUES</u>			
Property Tax Allocation	78,458,550	2,169,000	80,627,550
Redevelopment Agency Pass Thru	10,451,450	289,000	10,740,450
Subtotal-Taxes	88,910,000	2,458,000	91,368,000
Capital Facilities Capacity Charge	18,090,000	-	18,090,000
Sale of Capacity Rights, SAWPA & SSBSD	-	-	-
Capital Assessment (IRWD)	-	3,547,000	3,547,000
Non-Operating Revenue Subtotal	107,000,000	6,005,000	113,005,000
<u>INTRADISTRICT REVENUES</u>			
Annual Intradistrict Joint Equity Purchase/Sale	1,700,000	-	1,700,000
<u>FINANCING REVENUES</u>			
Sale of Certificates of Participation	-	-	-
Intradistrict Loans, Advances & Repayments	-	-	-
Financing Revenues Subtotal	-	-	-
<u>SELF INSURANCE REVENUES</u>			
Workers' Comp SFI	1,102,430	27,570	1,130,000
General Liability SFI	1,414,620	35,380	1,450,000
Subtotal-Self Insurance	2,517,050	62,950	2,580,000
Total Revenues	428,199,750	18,187,260	446,387,010
TOTAL AVAILABLE FUNDING	\$ 996,725,520	\$ 7,814,210	\$ 1,004,539,730

# Budget Resources

DESCRIPTION OR ACCOUNT TITLE	Consolidated Revenue Area Proposed	Rev Area 14 Proposed	Total Proposed
<u>OPERATING REQUIREMENTS</u>			
Directors' Fees	\$ 146,500	\$ 6,100	\$ 152,600
Salaries & Benefits	83,250,160	7,214,640	90,464,800
Administrative Expense	1,716,710	148,770	1,865,480
Printing & Publications	339,540	29,420	368,960
Training & Meetings	1,087,930	94,280	1,182,210
Operating Materials and Supplies	15,984,360	1,385,240	17,369,600
Contractual Expense	20,842,290	1,806,240	22,648,530
Professional Expense	3,830,080	331,920	4,162,000
Research & Monitoring	802,830	69,570	872,400
Repairs & Maintenance	14,871,370	1,288,790	16,160,160
Utilities	9,417,530	816,140	10,233,670
Other Materials, Supplies, & Services	3,468,000	300,540	3,768,540
Cost Allocation	(17,853,920)	(1,540,640)	(19,394,560)
Subtotal- Operating	137,903,380	11,951,010	149,854,390
<u>CAPITAL IMPROVEMENTS</u>			
Joint Works Capital Improvements	97,205,000	2,564,000	99,769,000
Collection System Capital Improvements	38,220,000	-	38,220,000
Annual Intradistrict Joint Equity Purchase/Sale	-	1,700,000	1,700,000
Subtotal- Capital Improvements	135,425,000	4,264,000	139,689,000
<u>FINANCING REQUIREMENTS</u>			
Certificate of Participation Service	83,119,000	-	83,119,000
Subtotal-Financing Req	83,119,000	-	83,119,000
<u>SELF INSURANCE REQUIREMENTS</u>			
Workers' Comp SFI	1,102,430	27,570	1,130,000
General Liability SFI	1,414,620	35,380	1,450,000
Subtotal-Self Insurance	2,517,050	62,950	2,580,000
<u>OTHER CASH OUTLAYS</u>			
Joint Equity Sale to IRWD	-	-	-
Subtotal- Other Cash Outlays	-	-	-
TOTAL REQUIREMENTS	358,964,430	16,277,960	375,242,390
REVENUES EXCEEDING REQUIREMENTS	69,235,320	1,909,300	71,144,620
ENDING ACCUMULATED FUNDS & RESERVES	\$ 637,761,090	\$ (8,463,750)	\$ 629,297,340

# 2016-17 & 2017-18 Budget

## Projected Reserves at June 30, 2016, 2017 and 2018

	Projected 6/30/2016	Proposed 6/30/2017	Proposed 6/30/2018
Cash Flow Requirements			
Operating Expenses	\$ 70,698,000	\$ 73,178,000	\$ 74,927,000
COP Payments	83,950,050	86,664,000	83,119,000
Operating Contingencies	14,140,000	14,636,000	14,985,000
Capital Improvement Program	197,081,400	154,730,720	230,056,340
Catastrophe & Self Insurance	57,000,000	57,000,000	57,000,000
Subtotal	422,869,450	386,208,720	460,087,340
Capital Replacement & Refurbishment	63,411,000	64,679,000	65,973,000
COP Service Required Reserves	111,605,000	107,265,000	103,237,000
Total	\$ 597,885,450	\$ 558,152,720	\$ 629,297,340

### Accumulated Funds and Reserves Policy

A cash flow reserve will be established to fund operations, maintenance and certificate of participations expenses for the first half of the fiscal year, prior to the receipt of the first installment of the property tax allocation and the sewer service user fees which are collected as a separate line item on the property tax bill. The level of this reserve will be established as the sum of an amount equal to six months operations and maintenance expenses and the total of the annual debt (COP) service payments due in August each year.

An operating contingency reserve will be established to provide for non-recurring expenditures that were not anticipated when the annual budget and sewer service fees were evaluated and adopted. The level of this reserve will be established at an amount equal to ten percent of the annual operating budget.

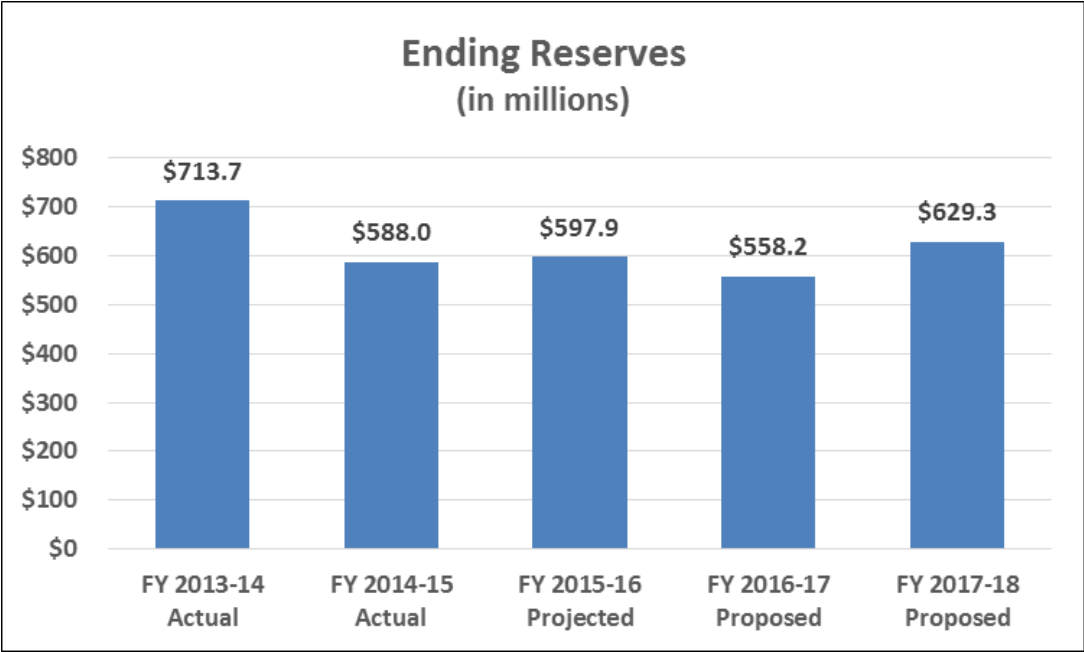
A capital improvement reserve will be maintained to fund annual increments of the capital improvement program. The long-term target is for one half of the capital improvement program to be funded from borrowing and for one half to be funded from current revenues and reserves. With this program in mind, the target level of this reserve has been established at one half of the average annual capital improvement program over the next ten years.

Levels higher and lower than the target can be expected while the long term financing and capital improvement programs are being finalized.

A catastrophic loss or self-insurance reserve has been established to fund potential losses from property damage, including fire, flood and earthquake; general liability; and for workers' compensation. These reserves are intended to supplement purchased insurance policies, FEMA disaster reimbursements and State disaster reimbursements. The potential infrastructure loss from a major earthquake has been estimated at \$495 million. The level of this reserve has been set to fund the District's non-reimbursed costs, estimated to be \$57 million.

A capital replacement/renewal reserve policy has been established to provide thirty percent of the funding to replace or refurbish the current collection, treatment and disposal facilities at the end of their useful economic lives. The current replacement value of these facilities is estimated to be \$6.2 billion. The initial reserve level was established at \$50 million, which will be augmented by interest earnings and a small portion of the annual sewer user fee, in order to meet projected needs over the next 20 years.

# Projected Reserves



Provisions of the various Certificate of Participation (COP) issues require debt service reserves to be under the control of the Trustee for that issue. These reserve funds are not available for the general needs of the District and must be maintained at specified levels.

Accumulated funds exceeding the levels specified by District policy will be maintained in a rate stabilization fund. These funds will be applied to future years' needs in order to maintain rates or to moderate annual fluctuations. There is no established target for this group.

# 2016-17 & 2017-18 Budget

## Orange County Sanitation District Consolidated Cash Flow Projections

Ref	Description	Preliminary 16-17	Preliminary 17-18	Preliminary 18-19	Preliminary 19-20	Preliminary 20-21	Preliminary 21-22
<b>Revenues:</b>							
1	General User Fees	\$ 286,554,000	\$ 291,158,000	\$ 297,643,000	\$ 305,095,000	\$ 312,588,000	\$ 320,124,000
2	Permitted User Fees	11,272,000	11,410,000	11,617,000	11,859,000	12,100,000	12,341,000
3	IRWD Assessments	17,229,690	15,498,010	11,689,500	10,261,490	11,296,590	10,939,300
4	SAWPA Assessments	3,283,000	3,415,000	3,552,000	3,694,000	3,842,000	3,996,000
5	Property Taxes (Flat in short term)	87,017,000	91,368,000	95,936,000	100,733,000	105,770,000	111,059,000
6	New COP Issues	-	-	-	-	-	-
7	Interest Revenues	8,606,000	8,840,000	12,904,000	16,682,000	16,454,000	16,358,000
8	Capital Facilities Capacity Charges	13,500,000	18,090,000	9,513,000	9,981,000	10,474,000	10,986,000
9	Other Revenues	7,996,100	6,608,000	4,967,000	5,028,000	5,090,000	5,153,000
<b>10</b>	<b>Revenues</b>	<b>435,457,790</b>	<b>446,387,010</b>	<b>447,821,500</b>	<b>463,333,490</b>	<b>477,614,590</b>	<b>490,956,300</b>
<b>Requirements:</b>							
11	Oper & Mtce Exp (5.0% yr)	146,356,520	149,854,390	155,849,000	162,083,000	168,566,000	175,309,000
12	Capital Improvement Program (CIP)	190,322,000	153,037,000	175,511,000	222,002,000	244,127,000	212,661,000
13	Less: CIP Savings & Deferrals	(19,032,000)	(15,304,000)	(17,551,000)	(17,760,000)	(14,648,000)	(6,380,000)
14	Repl, Rehab & Refurb	-	256,000	5,181,000	10,108,000	17,743,000	19,395,000
15	COP Service (5.0%, 30 yrs)	86,664,000	83,119,000	81,550,000	81,041,000	81,042,000	73,351,000
16	Reduction of Long-Term Liabilities	65,000,000	-	-	-	-	-
17	Other Requirements	5,880,000	4,280,000	2,580,000	2,580,000	2,580,000	2,580,000
<b>18</b>	<b>Requirements</b>	<b>475,190,520</b>	<b>375,242,390</b>	<b>403,120,000</b>	<b>460,054,000</b>	<b>499,410,000</b>	<b>476,916,000</b>
<b>19</b>	<b>Revenues-Requirements</b>	<b>(39,732,730)</b>	<b>71,144,620</b>	<b>44,701,500</b>	<b>3,279,490</b>	<b>(21,795,410)</b>	<b>14,040,300</b>
<b>Accumulated Funds:</b>							
20	Beginning of Year	597,885,450	558,152,720	629,297,340	673,998,840	677,278,330	655,482,920
21	End of Year	\$ 558,152,720	\$ 629,297,340	\$ 673,998,840	\$ 677,278,330	\$ 655,482,920	\$ 669,523,220
22	Consolidated Reserve Policy	\$ 522,181,000	\$ 518,000,000	\$ 517,365,000	\$ 517,847,000	\$ 518,848,000	\$ 512,937,000
<b>23</b>	<b>Over (Under) Reserve Policy*</b>	<b>\$ 35,971,720</b>	<b>\$ 111,297,340</b>	<b>\$ 156,633,840</b>	<b>\$ 159,431,330</b>	<b>\$ 136,634,920</b>	<b>\$ 156,586,220</b>
<b>Sewer Service User Fees:</b>							
24	Avg SFR Annual User Fee	\$327.00	\$331.00	\$337.00	\$344.00	\$351.00	\$358.00
25	Percentage Change	1.55%	1.22%	1.81%	2.08%	2.03%	1.99%
26	Equivalent Dwelling Units	922,183	924,950	927,725	930,508	933,300	936,100
27	SFR Connection Fee	\$3,926	\$4,107	\$4,296	\$4,494	\$4,701	\$4,917
28	Outstanding COPs	\$1,072,648,000	\$1,032,373,000	\$992,541,000	\$951,592,000	\$908,960,000	\$872,295,000
<b>Reserve Policy</b>							
29	50% Next Year Operating	\$ 73,178,000	\$ 74,927,000	\$ 77,925,000	\$ 81,042,000	\$ 84,283,000	\$ 87,655,000
30	10% Next Year Operating	14,636,000	14,985,000	15,585,000	16,208,000	16,857,000	17,531,000
31	100% Next Year AUG COP Svc.	86,664,000	83,119,000	81,550,000	81,041,000	81,042,000	73,351,000
32	50% average ten-year CIP Bal.	118,759,000	118,759,000	118,759,000	118,759,000	118,759,000	118,759,000
33	DSR @ 10% Outstanding COPs	107,265,000	103,237,000	99,254,000	95,159,000	90,896,000	87,230,000
34	SFI @ \$57mm INPUT	57,000,000	57,000,000	57,000,000	57,000,000	57,000,000	57,000,000
35	Repl & Refurb @ 2%/yr	64,679,000	65,973,000	67,292,000	68,638,000	70,011,000	71,411,000
36	*Reserve Reduction (in accordance with Board action allowing a \$40M reduction to total reserves)	-	-	-	-	-	-
37	Total	\$ 522,181,000	\$ 518,000,000	\$ 517,365,000	\$ 517,847,000	\$ 518,848,000	\$ 512,937,000
<b>COP Ratios</b>							
38	Sr Lien Coverage, Min 1.25	3.18	3.35	3.46	3.59	3.68	4.15



# Cash Flow Projection

## Orange County Sanitation District Consolidated Cash Flow Projections

Ref	Description	Preliminary 22-23	Preliminary 23-24	Preliminary 24-25	Preliminary 25-26	10-Year Total
<b>Revenues:</b>						
1	General User Fees	\$ 327,701,000	\$ 336,263,000	\$ 343,929,000	\$ 352,585,000	\$ 3,173,640,000
2	Permitted User Fees	12,583,000	12,859,000	13,101,000	13,377,000	122,519,000
3	IRWD Assessments	12,664,910	14,421,750	14,187,150	13,510,430	131,698,820
4	SAWPA Assessments	4,156,000	4,322,000	4,495,000	4,675,000	39,430,000
5	Property Taxes (Flat in short term)	116,612,000	122,443,000	128,565,000	134,993,000	1,094,496,000
6	New COP Issues	-	-	-	-	-
7	Interest Revenues	16,081,000	14,542,000	12,605,000	11,834,000	134,906,000
8	Capital Facilities Capacity Charges	11,524,000	12,093,000	9,220,000	9,675,000	115,056,000
9	Other Revenues	5,217,000	5,283,000	5,352,000	5,421,000	56,115,100
<b>10</b>	<b>Revenues</b>	<b>506,538,910</b>	<b>522,226,750</b>	<b>531,454,150</b>	<b>546,070,430</b>	<b>4,867,860,920</b>
<b>Requirements:</b>						
11	Oper & Mtce Exp (5.0% yr)	182,321,000	189,614,000	197,199,000	205,087,000	1,732,238,910
12	Capital Improvement Program (CIP)	233,257,000	244,876,000	243,803,000	197,278,000	2,116,874,000
13	Less: CIP Savings & Deferrals	(6,998,000)	(4,898,000)	(4,876,000)	(4,876,000)	(112,323,000)
14	Repl, Rehab & Refurb	58,518,000	104,857,000	88,146,000	66,429,000	370,633,000
15	COP Service (5.0%, 30 yrs)	73,344,000	73,347,000	73,340,000	73,350,000	780,148,000
16	Reduction of Long-Term Liabilites	-	-	-	-	65,000,000
17	Other Requirements	2,580,000	2,580,000	2,580,000	2,580,000	30,800,000
<b>18</b>	<b>Requirements</b>	<b>543,022,000</b>	<b>610,376,000</b>	<b>600,192,000</b>	<b>539,848,000</b>	<b>4,983,370,910</b>
<b>19</b>	<b>Revenues-Requirements</b>	<b>(36,483,090)</b>	<b>(88,149,250)</b>	<b>(68,737,850)</b>	<b>6,222,430</b>	<b>(115,509,990)</b>
<b>Accumulated Funds:</b>						
20	Beginning of Year	669,523,220	633,040,130	544,890,880	476,153,030	597,885,450
21	End of Year	\$ 633,040,130	\$ 544,890,880	\$ 476,153,030	\$ 482,375,460	\$ 482,375,460
22	Consolidated Reserve Policy	\$ 514,754,000	\$ 516,640,000	\$ 478,566,000	\$ 480,583,000	\$ 480,583,000
<b>23</b>	<b>Over (Under) Reserve Policy*</b>	<b>\$ 118,286,130</b>	<b>\$ 28,250,880</b>	<b>\$ (2,412,970)</b>	<b>\$ 1,792,460</b>	<b>\$ 1,792,460</b>
<b>Sewer Service User Fees:</b>						
24	Avg SFR Annual User Fee	\$365.00	\$373.00	\$380.00	\$388.00	
25	Percentage Change	1.96%	2.19%	1.88%	2.11%	
26	Equivalent Dwelling Units	938,908	941,725	944,550	947,384	
27	SFR Connection Fee	\$5,143	\$5,380	\$5,627	\$5,886	
28	<u>Outstanding COPs</u>	\$834,188,000	\$794,702,000	\$753,654,000	\$711,227,000	
<b>Reserve Policy</b>						
29	50% Next Year Operating	\$ 91,161,000	\$ 94,807,000	\$ 98,600,000	\$ 102,544,000	
30	10% Next Year Operating	18,232,000	18,961,000	19,720,000	20,509,000	
31	100% Next Year AUG COP Svc.	73,344,000	73,347,000	73,340,000	73,350,000	
32	50% average ten-year CIP Bal.	118,759,000	118,759,000	118,759,000	118,759,000	
33	DSR @ 10% Outstanding COPs	83,419,000	79,470,000	75,365,000	71,123,000	
34	SFI @ \$57mm INPUT	57,000,000	57,000,000	57,000,000	57,000,000	
35	Repl & Refurb @ 2%/yr	72,839,000	74,296,000	75,782,000	77,298,000	
36	*Reserve Reduction	-	-	(40,000,000)	(40,000,000)	
37	Total	\$ 514,754,000	\$ 516,640,000	\$ 478,566,000	\$ 480,583,000	
<b>COP Ratios</b>						
38	Sr Lien Coverge, Min 1.25	4.26	4.37	4.43	4.52	

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**OPERATIONS OVERVIEW**  
**SECTION 5**

BACK OF SECTION 5 DIVIDER

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# Operations Budget Overview

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## **OPERATING REQUIREMENTS**

The net operating requirements budget finances the administrative, operations and maintenance, and program costs for collecting, treating, and recycling of wastewater. The departmental budgets are all completely funded by the operating fund. The net operating budget for FY 2016-17 is \$146.4 million and for FY 2017-18 is \$149.9 million.

Following are descriptions of the major factors that comprise the operating budget:

**Regulatory Requirements:** Many of the District's activities are either required or regulated by environmental permits issued by federal, state, and local regulatory authorities. These authorities regulate effluent quality, air emissions, greenhouse gases, stormwater quality, biosolids and hazardous waste management, as well as extensive monitoring of all media. New and developing regulations also drive future capital and operating expenses.

**Urban Runoff Program:** The Urban Runoff program was established to protect and improve the regional water quality of Orange County's coastal watershed by accepting dry weather urban runoff into the District's sewerage system. This program addresses the public health and environmental impacts associated with the urban runoff discharge that cannot be economically or practically controlled by alternative means. The Environmental Compliance Division administers the program through a permitting and monitoring program to regulate the quantity and quality of urban runoff that is discharged into the District's sewerage system.

**Fats, Oils, and Grease (FOG) Control Program:** The FOG Control Program was established to respond to the CRWQCB, Santa Ana Region's *General Waste Discharge Requirements* (Order No. R8-2002-0014), to control sanitary sewer overflows (SSOs). This order was subsequently superseded by the SWRCB's *Statewide General Waste Discharge Requirements for Sanitary Sewer Systems* (Order No. 2006-0003-DWQ) adopted May 2, 2006, which added a statewide SSO monitoring and reporting component to the original requirements. The District's Environmental Compliance Division facilitated the regional efforts to develop FOG Control Programs and has a program for the District to regulate the quantity and quality of FOG-laden wastewater that is discharged into the District's sewerage system.

**Operating Chemicals:** Chemicals are used for disinfection, coagulation, and odor control programs.

- **Coagulants:** Coagulant chemicals are used to enhance primary treatment solids removal, solids dewatering, waste solids thickening, and to control hydrogen sulfide in the digesters.
  - Ferric chloride is an iron salt which is used with anionic polymer to increase the solids removal efficiencies in the primary treatment process and to control hydrogen sulfide levels in the digester gas as required by AQMD Rule 431.1.
  - Cationic polymer is added to digested sludge prior to dewatering to improve the sludge and water separation process. Cationic polymer is also added to the waste activated sludge dissolved air flotation thickeners to thicken the solids before digestion.
- **Odor Control:** Under septic or anaerobic conditions, sulfate-reducing bacteria can flourish resulting in the accumulation of sulfides in the liquid phase. One of the sulfide forms present is hydrogen sulfide (H<sub>2</sub>S). When released to the vapor phase, this creates the potential for both odor and corrosion problems in the collection system.
  - Sodium hydroxide is added in "shock doses" to the sewers trunkline for sulfide control. Sodium hydroxide is added over a period of 30 to 45 minutes at sufficient dosages to elevate the pH level between 12.0 to 14.0. The high pH slug temporarily inactivates sulfate reducing bacteria and greatly reduces hydrogen sulfide generation.
  - The largest costs for collection system odor control are for ferrous chloride, magnesium hydroxide and calcium nitrate. These costs cover continuous treatment for odor control within four trunk lines. The contractor(s) provide(s) leased equipment and on-going labor for services such as maintenance, remote monitoring of the chemical feed rates, optimization, and field sampling.

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## 2016-17 & 2017-18 Budget

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**Residuals Management:** These costs are for hauling and beneficial reuse or landfill disposal of wastewater solids recovered during the treatment process. Solids treated through the digesters, called biosolids or treated sewage sludge, can be recycled offsite via composting (about 50 percent) or land application on farm fields (about 40 percent) or sent to a landfill. Approximately 10 percent of the District's biosolids are disposed in an Orange County landfill with methane recovery (energy production). Most of the District's residuals management costs are for hauling 30-40 truckloads of biosolids offsite every day. A smaller component of residuals management cost is grit and screenings waste that must be disposed of at a landfill.

**Repairs and Maintenance:** Preventive maintenance and repair activities throughout the District's expanded and upgraded treatment facilities and collection system continue to keep this budgetary category at a significant amount. This category includes contracted services, materials and supplies, and outsourced service agreements.

**Utilities:** The cost for utilities is a significant component of the operating budget. The largest utility cost incurred by the District is the electricity that is purchased to supplement generated power to operate the plant processes. The central generation facilities produce approximately 70 percent of the electricity used for running the plants. In FY 2005-06, the central generation production was reduced in order to meet new air emission limits. Following the completion of the installation of emission control systems on the engines, the central generation facilities production can be increased.

# Operations Summary

## Proposed Budget Comparisons by Department

Department and Division	2015-16 Revised Budget	2015-16 Projected	2016-17 Proposed	Budget Percent Change	2017-18 Proposed	Budget Percent Change
<b>General Manager's Office</b>						
General Management Admin	\$ 2,947,170	\$ 1,920,090	\$ 2,964,220	0.58%	\$ 2,943,720	-0.69%
Board Services	488,410	476,650	633,540	29.71%	649,640	2.54%
Public Affairs	1,155,850	1,042,360	1,010,100	-12.61%	1,037,500	2.71%
Department subtotal	4,591,430	3,439,100	4,607,860	0.36%	4,630,860	0.50%
<b>Human Resources Department</b>						
Human Resources	4,730,090	3,830,420	3,918,890	-17.15%	3,945,130	0.67%
Risk Management	3,578,550	3,042,320	4,079,050	13.99%	4,473,650	9.67%
Department subtotal	8,308,640	6,872,740	7,997,940	-3.74%	8,418,780	5.26%
<b>Administrative Services Department</b>						
Administrative Services Admin	610,710	585,510	590,830	-3.26%	599,230	1.42%
Financial Management	3,629,380	3,689,610	3,410,810	-6.02%	4,101,990	20.26%
Contracts, Purch, & Materials Mgmt	4,386,540	4,232,730	4,169,220	-4.95%	4,250,520	1.95%
Information Technology	10,189,160	10,170,720	10,267,510	0.77%	10,435,640	1.64%
Department subtotal	18,815,790	18,678,570	18,438,370	-2.01%	19,387,380	5.15%
<b>Facilities Support Services Department</b>						
Facilities Support Services Admin	822,330	911,240	-	-100.00%	-	0.00%
Fleet Services	2,083,620	2,167,200	-	-100.00%	-	0.00%
Facilities Engineering & Repair Services	2,842,880	2,784,900	-	-100.00%	-	0.00%
NPDES Source Inspection	2,404,160	2,304,200	-	-100.00%	-	0.00%
Odor & Corrosion Control	8,096,320	7,031,630	-	-100.00%	-	0.00%
Collection Facilities O&M	4,095,100	3,747,930	-	-100.00%	-	0.00%
Department subtotal	20,344,410	18,947,100	-	-100.00%	-	0.00%
<b>Environmental Services Department</b>						
Environmental Services Admin	-	-	838,250	100.00%	864,100	3.08%
Environmental Compliance	-	-	8,563,220	100.00%	8,691,900	1.50%
Laboratory & Ocean Monitoring	-	-	7,768,150	100.00%	8,019,270	3.23%
Department subtotal	-	-	17,169,620	0.00%	17,575,270	2.36%
<b>Engineering Department</b>						
Engineering Admin	406,860	471,160	399,390	-1.84%	400,590	0.30%
Planning	3,200,230	3,236,200	3,252,440	1.63%	3,178,770	-2.27%
Project Management Office	3,493,120	2,551,040	2,693,360	-22.90%	2,745,120	1.92%
Civil & Mechanical Engineering	9,576,040	9,495,310	8,407,280	-12.21%	8,538,340	1.56%
Electrical & Control Systems Engineering	-	-	4,610,980	100.00%	4,639,220	0.61%
Environmental Compliance	6,222,510	6,420,330	-	-100.00%	-	0.00%
Department subtotal	22,898,760	22,174,040	19,363,450	-15.44%	19,502,040	0.72%
<b>Operations &amp; Maintenance Dept.</b>						
O & M Administration	884,100	858,800	685,600	-22.45%	698,450	1.87%
Collection Facilities O&M	-	-	12,900,210	100.00%	13,643,740	5.76%
Fleet Services	-	-	2,051,320	100.00%	2,076,050	1.21%
Plant No. 1 Operations	29,091,695	31,895,020	29,104,240	0.04%	27,890,810	-4.17%
Plant No. 2 Operations	23,277,850	21,687,060	21,366,450	-8.21%	20,524,050	-3.94%
Plant No. 1 Maintenance	19,291,815	16,549,260	20,499,680	6.26%	20,244,060	-1.25%
Plant No. 2 Maintenance	10,624,840	10,648,440	11,353,810	6.86%	14,657,460	29.10%
Environmental Lab / Ocean Monitoring	8,055,110	7,953,100	-	-100.00%	-	0.00%
Department subtotal	91,225,410	89,591,680	97,961,310	7.38%	99,734,620	1.81%
<b>Less: Cost Allocation</b>	<b>(16,877,500)</b>	<b>(18,307,870)</b>	<b>(19,182,030)</b>	<b>13.65%</b>	<b>(19,394,560)</b>	<b>1.11%</b>
<b>Net Operating Requirements</b>	<b>\$ 149,306,940</b>	<b>\$ 141,395,360</b>	<b>\$ 146,356,520</b>	<b>-1.98%</b>	<b>\$ 149,854,390</b>	<b>2.39%</b>

# 2016-17 & 2017-18 Budget

## Proposed Budget Expense by Category

Description	2014-15 Actual	2015-16 Revised Budget	2015-16 Projected	2016-17 Proposed	2017-18 Proposed
Salaries, Wages & Benefits	\$ 94,206,016	\$ 94,802,400	\$ 89,933,480	\$ 89,289,800	\$ 90,617,400
Administrative Expenses	1,409,104	1,624,570	1,511,070	1,752,650	1,865,480
Printing & Publication	267,347	412,020	251,600	284,340	368,960
Training & Meetings	835,764	1,050,500	850,870	1,158,070	1,182,210
Operating Materials & Supplies	15,364,441	17,191,000	16,424,170	16,698,250	17,369,600
Contractual Services	22,183,465	23,938,480	23,461,780	24,831,420	22,648,530
Professional Services	3,168,796	3,476,580	3,034,080	4,160,830	4,162,000
Research & Monitoring	810,854	831,000	720,000	800,000	872,400
Repairs & Maintenance	11,649,253	12,362,440	13,427,200	14,265,930	16,160,160
Utilities	7,157,617	7,787,080	8,468,730	8,912,240	10,233,670
Other Materials, Supplies, and Svc.	1,701,945	2,708,370	1,620,250	3,385,020	3,768,540
Cost Allocation	(17,276,525)	(16,877,500)	(18,307,870)	(19,182,030)	(19,394,560)
Net Operating Requirements	<u>\$ 141,478,077</u>	<u>\$ 149,306,940</u>	<u>\$ 141,395,360</u>	<u>\$ 146,356,520</u>	<u>\$ 149,854,390</u>
Cost to Collect/Treat 1 Million Gallons	<u>\$ 2,070.97</u>	<u>\$ 2,045.30</u>	<u>\$ 2,099.42</u>	<u>\$ 2,167.44</u>	<u>\$ 2,219.24</u>
Flow, Million Gallons	<u>68,315</u>	<u>73,000</u>	<u>67,350</u>	<u>67,525</u>	<u>67,525</u>
Flow Per Day, MGD	<u>187.17</u>	<u>200.00</u>	<u>184.52</u>	<u>185.00</u>	<u>185.00</u>



# Operations Summary

## Proposed Budget Allocation to Individual Revenue Areas

Revenue Area No.	Total Gallonage Flows, Million Gallons per Year (MG)					
	2015-16 Projected Flow (MG)	Projected Increase (MG)	2016-17 Budgeted Flow (MG)	Percent of Total	2017-18 Budgeted Flow (MG)	Percent of Total
Consolidated	65,707	188	65,895	97.59%	65,915	97.62%
14	1,643	(13)	1,630	2.41%	1,610	2.38%
<b>TOTALS</b>	<b>67,350</b>	<b>175</b>	<b>67,525</b>	<b>100.00%</b>	<b>67,525</b>	<b>100.00%</b>

Revenue Area No.	Average Daily Gallonage Flows, Million Gallons per Day (MGD)					
	2015-16 Projected Flow (MGD)	Projected Increase (MGD)	2016-17 Budgeted Flow (MGD)	Percent of Total	2017-18 Budgeted Flow (MGD)	Percent of Total
Consolidated	180	1	181	97.84%	181	97.84%
14	5	(1)	4	2.16%	4	2.16%
<b>TOTALS</b>	<b>185</b>	<b>0</b>	<b>185</b>	<b>100.00%</b>	<b>185</b>	<b>100.00%</b>

### FY 2016-17 Estimated Allocation of Total Costs to Revenue Areas

Revenue Area No.	Collection Costs	Treatment & Disposal Costs	Total Costs	Total Cost/MG
Consolidated	\$22,997,590	\$ 110,531,240	\$ 133,528,830	\$ 2,026.39
14 - O&M	1,297,510	2,440,180	3,737,690	2,293.06
14 - Sludge	-	9,090,000	9,090,000	5,576.69
<b>TOTALS</b>	<b>\$24,295,100</b>	<b>\$ 122,061,420</b>	<b>\$ 146,356,520</b>	<b>\$ 2,167.44</b>

### FY 2017-18 Estimated Allocation of Total Costs to Revenue Areas

Revenue Area No.	Collection Costs	Treatment & Disposal Costs	Total Costs	Total Cost/MG
Consolidated	\$24,067,140	\$ 113,836,240	\$ 137,903,380	\$ 2,092.14
14 - O&M	1,357,860	2,513,150	3,871,010	2,404.35
14 - Sludge	-	8,080,000	8,080,000	5,018.63
<b>TOTALS</b>	<b>\$25,425,000</b>	<b>\$ 124,429,390</b>	<b>\$ 149,854,390</b>	<b>\$ 2,219.24</b>

# 2016-17 & 2017-18 Budget

## Proposed Budget Net Operating Expense by Line Item

Description	2014-15 Actual	Adjusted Budget 2015-16	2015-16 Projected	2016-17 Proposed	% Budget Change to 15-16	2017-18 Proposed	% Budget Change to 16-17
<b>Salaries, Wages, &amp; Benefits</b>							
<u>Salaries &amp; Wages</u>							
Salaries & Wages	\$ 62,415,718	\$ 66,276,100	\$ 63,091,000	\$ 66,833,000	0.84%	\$ 67,651,700	1.22%
<u>Employee Benefits</u>							
Retirement	21,635,953	16,726,300	15,544,300	10,950,600	-34.53%	11,034,900	0.77%
Group Insurances	8,816,678	9,766,200	9,243,600	9,725,700	-0.41%	10,223,100	5.11%
Tuition & Certificate Reimb	172,185	154,500	172,200	175,600	13.66%	179,100	1.99%
Edu. degrees, Cert. & Lic.	307,821	303,300	308,800	314,600	3.73%	314,600	0.00%
Uniform Rental	51,949	47,400	53,200	53,200	12.24%	53,200	0.00%
Workers' Compensation	755,000	1,478,700	1,479,580	1,196,300	-19.10%	1,120,000	-6.38%
Unemployment Insurance	11,204	9,200	2,900	2,900	-68.48%	2,900	0.00%
EMT Supplemental Benefits	39,508	40,700	37,900	37,900	-6.88%	37,900	0.00%
Salaries, Wages, & Benefits	94,206,016	94,802,400	89,933,480	89,289,800	-5.81%	90,617,400	1.49%
<b>Materials, Supplies, &amp; Services</b>							
<u>Administrative Expenses</u>							
Memberships	512,145	597,840	506,290	586,050	-1.97%	588,320	0.39%
Office Exp - Supplies	51,095	68,600	60,330	62,870	-8.35%	59,420	-5.49%
Postage	39,986	39,970	40,550	41,040	2.68%	310,520	656.63%
Books & Publications	27,648	38,400	35,430	50,970	32.73%	42,020	-17.56%
Forms	2,013	910	910	1,300	42.86%	550	-57.69%
Small Computer Items	627,332	734,000	734,000	750,000	2.18%	750,000	0.00%
Minor Furniture & Fixtures	148,885	144,850	133,560	260,420	79.79%	114,650	-55.97%
<u>Printing &amp; Publication</u>							
Repro-In-House	224,553	369,680	212,150	243,690	-34.08%	244,460	0.32%
Printing-Outside	21,510	22,450	20,110	20,750	-7.57%	103,060	396.67%
Notices & Ads	21,179	19,620	19,290	19,850	1.17%	21,390	7.76%
Photo Processing	105	270	50	50	-81.48%	50	0.00%
<u>Meetings &amp; Training</u>							
Meetings	128,715	212,620	156,250	208,310	-2.03%	219,610	5.42%
Training	707,049	837,880	694,620	949,760	13.35%	962,600	1.35%
<u>Operating Materials &amp; Supplies</u>							
Chem. Coagulants	5,902,654	6,012,000	6,005,960	5,126,550	-14.73%	5,397,000	5.28%
Odor Control	7,042,603	8,043,200	7,461,000	8,157,300	1.42%	8,722,300	6.93%
Disinfection	278,015	154,000	180,560	170,500	10.71%	181,300	6.33%
Chemicals - Cogen Op.	26,926	502,000	437,000	472,000	-5.98%	477,000	1.06%
Miscellaneous Chemicals	5,515	45,000	2,300	-	n/a	-	n/a
Gas, Diesel, & Oil	525,853	705,970	592,100	632,790	-10.37%	647,690	2.35%
Tools	318,565	351,400	385,500	691,950	96.91%	561,350	-18.87%
Safety Equipment/tools	455,769	469,350	513,140	587,560	25.19%	505,690	-13.93%
Solv, Paint, Janitor Supplies	83,209	88,320	86,260	82,390	-6.71%	84,950	3.11%
Lab Chemicals & Supplies	579,226	647,160	579,620	601,360	-7.08%	612,160	1.80%
Misc. Operating Supplies	146,002	155,800	177,430	171,850	10.30%	176,160	2.51%
Property Tax Fees	104	16,800	3,300	4,000	-76.19%	4,000	0.00%
<u>Contractual Services</u>							
Solids Removal	17,210,567	17,607,000	17,866,680	17,206,000	-2.28%	13,950,300	-18.92%
Other Waste Disp.	1,071,673	943,220	787,890	886,400	-6.02%	934,220	5.39%
Groundskeeping	149,377	174,000	174,000	129,720	-25.45%	129,720	0.00%
Janitorial	491,152	478,340	478,340	345,700	-27.73%	345,700	0.00%
Outside Lab Services	167,271	280,500	240,000	275,000	-1.96%	320,000	16.36%
Oxygen Plant Oper	493,780	274,200	358,000	406,000	48.07%	426,000	4.93%
County Service Fee	602,923	706,950	676,430	671,700	-4.99%	717,600	6.83%
Temporary Services	358,949	462,380	470,060	814,400	76.13%	1,062,400	30.45%
Security Services	390,549	582,000	410,000	660,000	13.40%	720,000	9.09%
Other	1,247,224	2,429,890	2,000,380	3,436,500	41.43%	4,042,590	17.64%

# Operations Summary

## Proposed Budget Net Operating Expense by Line Item (Continued)

Description	2014-15 Actual	Budget 2015-16	2015-16 Projected	2016-17 Proposed	% Budget Change to 15-16	2017-18 Proposed	% Budget Change to 16-17
<u>Professional Services</u>							
Legal	1,791,715	948,200	1,369,890	1,363,500	43.80%	1,064,000	-21.97%
Audit & Accounting	207,673	211,250	217,990	270,700	28.14%	359,300	32.73%
Engineering	112,224	720,000	244,100	743,000	3.19%	1,018,000	37.01%
Enviro Scientific Consult	169,830	105,000	101,000	125,000	19.05%	125,800	0.64%
Software Prgm Consult	252,834	308,000	254,000	410,000	33.12%	380,000	-7.32%
Advocacy Efforts	177,878	247,000	247,000	176,000	-28.74%	176,000	0.00%
Industrial Hygiene Svcs	120,394	100,000	100,000	50,000	-50.00%	50,000	0.00%
Labor Negotiation Svc	34,455	60,000	20,000	80,000	33.33%	20,000	-75.00%
Other	301,793	777,130	480,100	942,630	21.30%	968,900	2.79%
<u>Research &amp; Monitoring</u>							
Environ. Monitoring	315,922	345,000	235,000	305,000	-11.59%	352,200	15.48%
Air Quality Monitoring	94,932	85,000	85,000	95,000	11.76%	95,200	0.21%
Research	400,000	401,000	400,000	400,000	-0.25%	425,000	6.25%
<u>Repairs &amp; Maintenance</u>							
Materials & Services	9,923,988	10,364,180	10,928,640	11,453,670	10.51%	12,584,400	9.87%
Service Maint. Agreements	1,725,265	1,998,260	2,498,560	2,812,260	40.74%	3,575,760	27.15%
<u>Utilities</u>							
Telephone	315,172	385,000	350,000	400,000	3.90%	400,000	0.00%
Diesel For Generators	17,477	24,160	16,040	18,240	-24.50%	18,370	0.71%
Natural Gas	566,699	500,000	493,000	519,000	3.80%	628,000	21.00%
Power	5,721,449	6,319,500	6,977,700	7,324,000	15.90%	8,526,500	16.42%
Water	536,820	558,420	631,990	651,000	16.58%	660,800	1.51%
<u>Other Operating Costs</u>							
Outside Equip Rental	133,724	105,970	43,100	139,600	31.74%	151,600	8.60%
Insurance Premiums	31,884	32,000	32,000	32,000	0.00%	32,000	0.00%
Prop & Gen Liab Insurance	500,000	496,000	496,000	1,111,100	124.01%	1,431,300	28.82%
Freight	69,230	69,070	79,990	70,030	1.39%	69,560	-0.67%
Misc. Operating Expense	176,603	289,820	192,280	162,310	-44.00%	168,160	3.60%
Regulatory Operating Fees	725,461	708,000	708,000	715,900	1.12%	730,080	1.98%
Contingency	-	552,000	-	639,500	15.85%	659,500	3.13%
Prior year reappropriation	-	352,200	-	376,200	6.81%	387,900	3.11%
Loss on obsolete inventory	433	3,380	2,000	2,300	-31.95%	2,300	0.00%
Other Non-Oper Expense	64,610	99,930	66,880	136,080	36.18%	136,140	0.04%
Materials, Supplies, & Services	64,548,586	71,382,040	69,769,750	76,248,750	6.82%	78,631,550	3.13%
<b>Total Operating Requirements</b>	<b>158,754,602</b>	<b>166,184,440</b>	<b>159,703,230</b>	<b>165,538,550</b>	<b>-0.39%</b>	<b>169,248,950</b>	<b>2.24%</b>
<b>Less: Cost Allocation</b>	<b>(17,276,525)</b>	<b>(16,877,500)</b>	<b>(18,307,870)</b>	<b>(19,182,030)</b>	<b>13.65%</b>	<b>(19,394,560)</b>	<b>1.11%</b>
<b>Net Operating Requirements</b>	<b>\$ 141,478,077</b>	<b>\$ 149,306,940</b>	<b>\$ 141,395,360</b>	<b>\$ 146,356,520</b>	<b>-1.98%</b>	<b>\$ 149,854,390</b>	<b>2.39%</b>
<b>Cost to Collect, Treat, &amp; Dispose of 1 Million Gallons</b>	<b>\$ 2,070.97</b>	<b>\$ 2,045.30</b>	<b>\$ 2,099.42</b>	<b>\$ 2,167.44</b>		<b>\$ 2,219.24</b>	
<b>Flow, Million Gallons</b>	<b>68,315</b>	<b>73,000</b>	<b>67,350</b>	<b>67,525</b>		<b>67,525</b>	
<b>Flow Per Day, MGD</b>	<b>187.17</b>	<b>200.00</b>	<b>184.52</b>	<b>185.00</b>		<b>185.00</b>	

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# 2016-17 & 2017-18 Budget

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## **NOTES TO THE FISCAL YEAR 2016-17 and 2017-18 OPERATIONS BUDGET**

### **Salaries, Wages & Benefits**

**Salaries & Wages** - The proposed budget is set at 627.0 Full Time Equivalent (FTE) positions for FY 2016-17 and 2017-18. Provision has been made in the proposed salaries for FY 2016-17 in order to comply with the terms of those current MOU's which extend through that fiscal year. Pending completion of the negotiation process, no salary adjustments have been included for periods beyond the expiration of current MOU's.

**Retirement** - The District's employees are members of the Orange County Employees' Retirement System. Employees participate in one of three plans depending on hire date: Plan G/H (older), Plan B, or Plan U (newer, with a lower retirement benefit). The employer's required contribution rate for Plan G/H has been decreased from 20.75 percent to 13.09 percent, Plan B has been decreased from 18.39 percent to 10.99 percent, and Plan U has been decreased from 17.52 percent to 9.69 percent in FY 2016-17. In addition, for Plan G/H the District pays 3.5 percent on behalf of each employee.

**Group Insurance** - This includes the District's share of employees' medical and dental insurance plans, and life and disability insurance premiums. It also includes the other post-employment benefits that the District is obligated to pay for retirees. The FY 2016-17 budget includes an estimated 5.0 percent increase for medical insurance, followed by a 6.0 percent increase in FY 2017-18. The FY 2016-17 and 2017-18 budgets include estimated annual increases for vision, life, and disability insurance of 3.0 percent, 10.0 percent, and 6.0 percent, respectively. There is no change for dental insurance in the FY 2016-17 and 2017-18 budgets.

**Tuition & Certification Reimbursements** - To encourage the self-development and training of employees, the District has a tuition and certification reimbursement program. This appropriation is set at \$175,600 for FY 2016-17 and \$179,100 for FY 2017-18.

**Development Pay** - To further promote employee efforts that increase job knowledge, skills, and abilities, the District has established this new benefit for employees obtaining educational degrees and job-related certificates/ licenses. The

budget of \$314,600 for FY 2016-17 and 2017-18 is based on estimated employee participation.

**Uniforms** - This budget projection is for uniforms provided to field and lab employees in accordance with employee MOU's.

**Workers' Compensation** - This item is used to maintain the level of accumulated reserves for workers' compensation self-insurance. The amount recommended is \$1,196,300 for FY 2016-17 and \$1,120,000 for FY 2017-18. The total estimated expenditures for the workers' compensation program are set forth in detail in the Self-Insurance section.

**Unemployment Insurance** - The District is on an actual claims paid basis, which has historically resulted in an overall lower cost because of favorable claims history. This appropriation is proposed at a level consistent with the prior year's actual costs.

**Memberships** - The District has memberships in agencies such as the National Association of Clean Water Agencies (NACWA), the National Water Research Institute (NWRI), the Water Emergency Response Organization of Orange County (WEROC), the Water Environment Research Foundation (WERF), the Information Technology Approval Group (ITAG), the California Association of Sanitation Agencies (CASA), the Southern California Alliance of Publicly Owned Treatment Works (SCAP), and the Center for Demographic Research

**Administrative Expenses** - These accounts include supplies, postage, technical journals and publications, forms, small office equipment, and small computer items. The small equipment and computer items cost less than \$5,000 per item and exclude items that are capitalized.

**Printing and Publication** - The budget provides for in-house and outside reproduction costs and reflects an expanded management information system and administrative requirements as well as a continuing demand by the public and regulatory agencies for information. This group of accounts also includes costs for photo processing, advertisements, and notices.

**Training & Meetings** - Board member and staff travel has been significantly reduced in recent years. This category includes meetings of professional societies; ongoing technical training and materials for staff; training for computerized plant monitoring and control systems and other "high tech" equipment, processes

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## Notes to Operations Summary

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and systems; and training to allow for an adaptive and flexible work force. The District continues to place an emphasis on safety, technical, leadership and management training. The training budget has held constant between 1.6 percent and 1.8 percent of budgeted, regular salaries.

### **Operating Materials & Supplies**

**Chemical Coagulants** - Chemical coagulants are used to enhance the primary treatment process by increasing the solids removal efficiencies and are used to control hydrogen sulfide levels in the digester gas.

The anionic polymer budget for FY 2016-17 is \$387,000 with FY 2017-18 increasing to \$398,000 because of a 3 percent anticipated inflation rate increase. The cationic polymer budgets are \$2,010,000 for FY 2016-17 and \$2,160,000 in FY 2017-18. The projected ferric chloride budget for FY 2016-17 is \$2,730,000 and \$2,839,000 in FY2017-18, a 4 percent increase due to anticipated changes in unit rates.

**Odor Control Chemicals** - The District uses hydrogen peroxide, sodium hydroxide (caustic soda), and bleach as the primary odor control chemicals within the treatment plants; muriatic acid is an odor control chemical used for cleaning the scrubbers. The treatment plant odor control chemicals budgets reflect a \$477,000 increase from FY 2015-16 due to increased odor complaints, CIP projects, and unit rate increases, with a decrease of \$20,000 in FY 2017-18.

Ferrous chloride, magnesium hydroxide, calcium nitrate, and caustic soda are the primary odor control chemicals used within the collection system. The FY 2016-17 budgets for these chemicals reflect a \$363,000 decrease from FY 2015-16 primarily due to discontinuing ferrous chloride use at IRWD dosing site, with an increase of \$585,000 in FY 2017-18 because of estimated unit rate increases and the planned addition of a new dosing site on the Euclid trunk sewer.

**Disinfection Chemicals** - Sodium Hypochlorite (Bleach) – With the cessation of the disinfection of water discharged to the ocean, the remaining treatment plant bleach usage is for the disinfection of plant water and odor control. It is anticipated that the District treatment plant bleach budgets will be \$167,000 in FY 2016-17 and \$177,000 in FY 2017-18.

Sodium Bisulfite – Sodium bisulfite is used for dechlorination of outfall effluent at Plant No. 2, if

required, to ensure that no residual chlorine is discharged into the ocean. Sodium bisulfite usage decreased with the decrease in effluent disinfection bleach during FY 2015-16. That is anticipated to remain the same during fiscal years 2016-17 and 2017-18.

**Gasoline, Oil and Fuel** - This group of accounts includes gasoline, oil, and diesel fuel required to operate stationary treatment plant equipment as well as approximately 300 pieces of major mobile equipment such as cars, trucks, cranes, and generators. Also included in this group of accounts is the cost of fuel for the compressed natural gas station. The cost of the natural gas is recovered by selling the compressed natural gas as vehicle fuel to outside users. The budgets for this group of items are expected to remain relatively the same for the next two fiscal years.

**Other Operating Supplies** - This group of accounts is for miscellaneous items such as scrubber acids, activated carbon, solvents, cleaners, hardware, janitorial supplies, tools, safety equipment, laboratory supplies, etc., that are required to operate and maintain existing and expanding facilities. This group of accounts is expected to remain relatively the same during fiscal years 2016-17 and 2017-18.

**Contractual Services** - The major component of this category is biosolids removal and transportation costs. Contracts have been executed with firms for agricultural reuse of residual solids, composting, and a landfill site for biosolids disposal. A total of \$17,206,000 has been budgeted for solids and other waste removal and transportation in FY 2016-17 and \$13,950,000 in FY 2017-18.

This category also includes appropriations for groundskeeping services, janitorial services, security services, county service fees, temporary help to level out periodic increases in staff workload, long-term leaves, and position vacancies, outside laboratory services, manhole rehabilitation, CCTV services, industrial and line cleaning services.

**Professional Services** - Includes General Counsel, special labor counsel, engineering, advocacy efforts, audit and accounting services, software program consulting, and other technical consulting services.

**Research and Monitoring** - Overall this category of costs is expected to decrease approximately \$31,000 in FY 2016-17 and then increase by \$72,000 the following fiscal year. The costs in this category consist of contract services to carry out the extensive

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## 2016-17 & 2017-18 Budget

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ocean monitoring program required by EPA Region IX under the provisions of the District's NPDES permit; air quality monitoring costs; the District's contribution to the Southern California Coastal Water Research Project (SCCWRP) being conducted under a joint powers agreement with other Southern California municipal dischargers; and also provides for operational and ocean research and evaluation to develop optimum operating parameters in the treatment plants.

**Repairs and Maintenance** - Approximately 85 percent of these budgets support the maintenance of the collection system and the treatment plants. These line items also reflect base budgets for equipment maintenance. Out-sourced annual service contracts and maintenance agreements are also included. The FY 2016-17 and FY 2017-18 budgets include maintenance costs totaling \$14.3 million and \$16.2 million, respectively. Further, Information Technology has a repairs and maintenance budget of \$2.0 million and \$2.1 million for each of the next two fiscal years, respectively, that will provide services for the computer systems located throughout the collection facilities, treatment plants, and administration areas.

O&M contracted materials and services for FY 2016-17 include: Central Generation engine overhaul, digester cleaning, carbon media replacement, electrical protective relay maintenance, belt press overhaul, interplant line inspection and maintenance, emergency generator maintenance, and other maintenance services and operating materials, including street overlays/ manhole cover raisings and replacements, and warehouse stock.

**Utilities** - The cost for utilities is a significant component of the operating budget. In FY2016-17, the overall cost for utilities is anticipated to increase by \$1.1 million from the FY 2015-16 budget, with another increase of \$1.3 million in FY 2017-18.

**Natural Gas** - Natural gas is purchased to supplement the digester gas that is used to run the central generation facilities. The total FY 2016-17 natural gas budget is \$519,000, an increase of \$19,000 from last fiscal year. A natural gas budget increase of \$109,000 in FY 2017-18 reflects an anticipated higher unit cost for gas.

**Electricity** - Electricity is the largest utility cost incurred by the District. Approximately 85 percent of purchased electricity is used to run the plant processes; the remaining power is used for the support building and pump stations. The treatment

plants and support buildings estimated consumption and resulting costs for electrical energy purchased from Southern California Edison for the 2016-17 fiscal year are \$6,113,000 and the pump stations budget for the same period is \$610,000. Other support buildings power costs are \$601,000, completing the total estimated power costs for FY 2016-17. An increase of \$1.2 million in FY 2017-18 is primarily due to increase power usage associated with the sludge dewatering and odor control facilities anticipated to be operational in March 2017.

### **Other Materials, Supplies, and Services**

**Insurance Premiums** - Other than approximately \$32,000 budgeted each year in the operating section to insure the District's ocean vessel, the cost for general liability and property insurance premiums is budgeted entirely within the Self-Insurance section.

### **Property & General Liability In-Lieu Insurance**

**Premium** - This item is used to maintain the level of accumulated reserves for property and general liability self-insurance. The amount recommended is \$1,111,100 for FY 2016-17 and \$1,431,300 for FY 2017-18. The total estimated expenditures for the insurance program are set forth in detail in the Self-Insurance section.

### **Other Operating & Non-Operating Expenses**

- Expenses not chargeable elsewhere, such as annual regulatory fees assessed by the SCAQMD and CRWQCB, freight and other miscellaneous items are recorded within these groups of accounts.

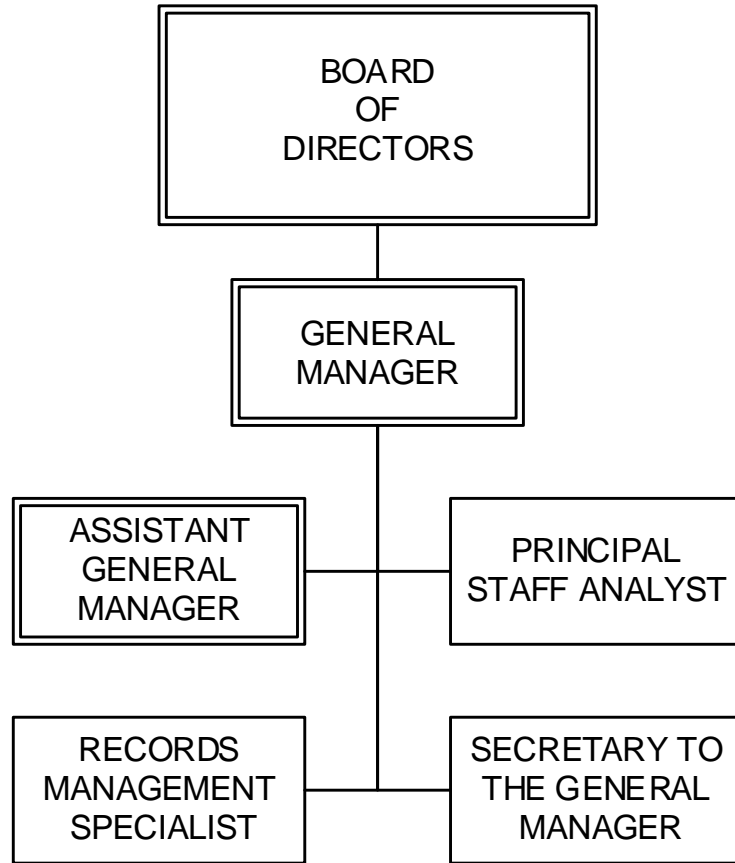
**Cost Allocation** - This represents direct labor and benefit charge outs and materials, supplies and services cost allocation to the capital project where the related work was performed.

**Net Operating Requirements** - This line item represents the net salary, wages, benefits, materials, supplies, and services related to operating costs for collection, treatment, and disposal activities, after charge backs to CIP.

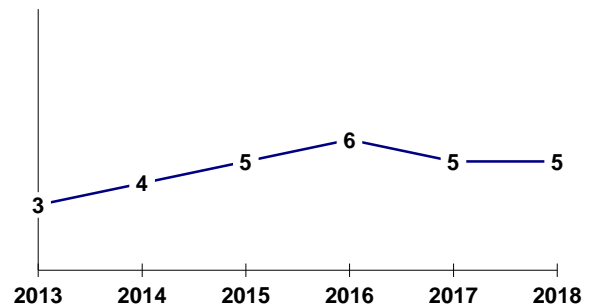
**OPERATING DIVISIONS**  
**SECTION 6**

BACK OF SECTION 6 DIVIDER





**Staffing Trends**



**2016-17 & 2017-18 Authorized FTE Positions**

Executive Managers	2.0
Supervisors / Professionals	3.0

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**Total** 5.0

# 2016-17 & 2017-18 Budget

## Service Description

The mission of the General Management Administration Division is to work with the Board to establish standards, policies and procedures, and the overall goals and Strategic Plan of the agency. The Division reports the District's progress in meeting the established goals to support the District's mission, and provides general oversight of the District's operations. The General Manager reports directly to the Board of Directors and provides general oversight to all District operations, interagency relations, legislative activities, communications, and the Strategic Plan. The Assistant General Manager directly oversees the Public Affairs Division and Board Services Division.

### 2015-16 Performance Objectives

- ◆ Ensure that the Board approved Strategic Plan is implemented.
- ◆ Ensure the District does not exceed 624 FTEs by the end of Fiscal Year 2015-16.
- ◆ Deliver a minimum of 90% of each fiscal year's CIP budget.
- ◆ Manage operating expenditures to within 96% to 100% of the approved budget.
- ◆ Ensure OCSD's total recordable injury rate is below industry average of 4.6.

### 2015-16 Performance Results

- ◆ The Update to the Strategic Plan was adopted by the Board of Directors in December 2015.
- ◆ Actual FTE count of 573.25 as of December 2015.
- ◆ 80% of Fiscal Year 2015-16 CIP budget estimated for delivery.
- ◆ At mid-year 55% of the approved budget's operating expenditures were expended.
- ◆ OCSD's total recordable injury rate was 2.6 and below industry average as of December 2015.

### 2016-17 & 2017-18 Performance Objectives

- ◆ Ensure that the Board approved Strategic Plan is implemented.
- ◆ Respond to 90% of public records requests within 7 business days.
- ◆ Conduct an annual destruction day with District wide participation.
- ◆ Contribute to employee development through the BLAST program by providing quality leadership development training, materials, classes and presentations by reaching at least 70% of OCSD staff.

### Performance Measures

Summary	2014-15 Actual	2015-16 Projected	2016-17 Proposed	2017-18 Proposed	Justification
◆ Strategic Plan Implementation	100%	100%	100%	100%	In-house standard
◆ Public Records Responses	N/A	90%	90%	90%	In-house standard
◆ Annual Destruction Day	N/A	100%	100%	100%	In-house standard
◆ BLAST Program reach	86%	76%	70%	70%	In-house standard

# General Management Administration

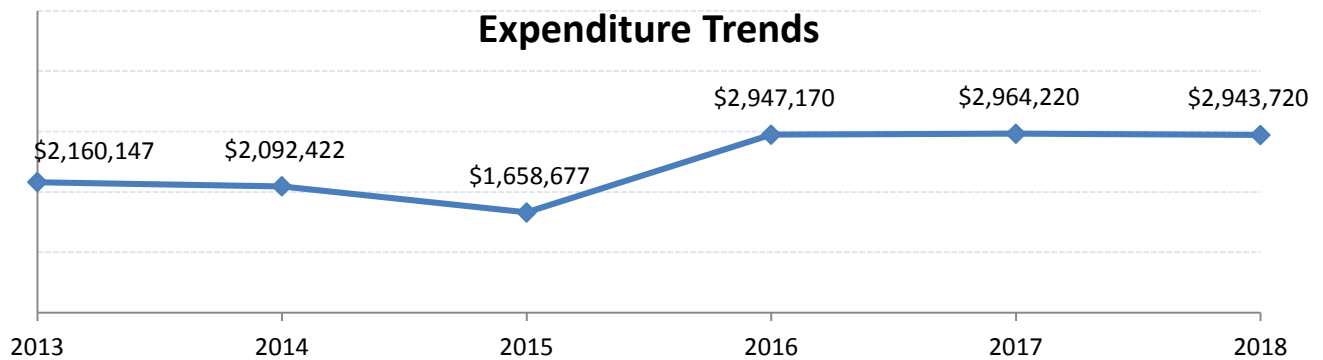
## Budget Overview

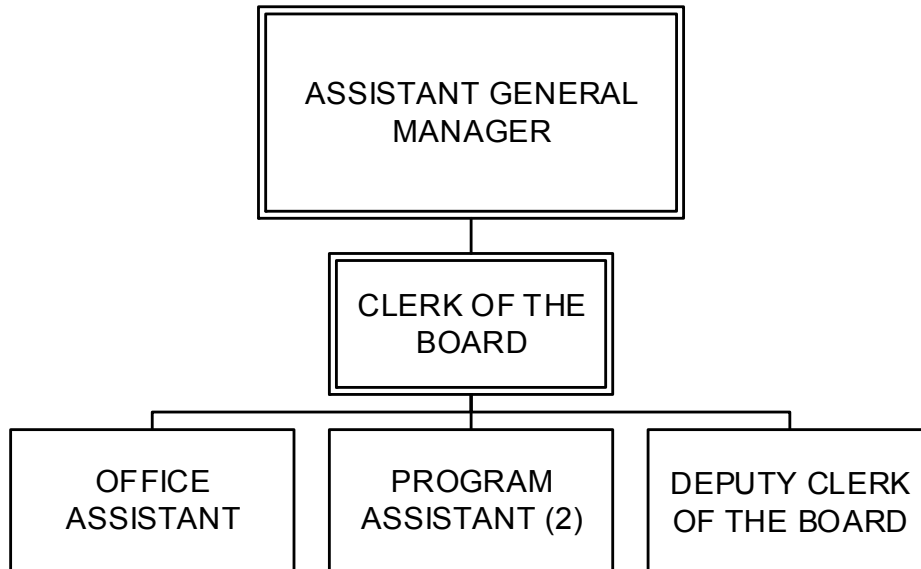
The FY 2016-17 & 2017-18 budgets for the General Management Administration Division reflect increase of 1% and a decrease of 1% over the prior year, respectively. The increase is primarily due to an increase in legal services and an increase in the General Manager's contingency and the contingency for reappropriations, which are set at 0.85% and 0.5% of the District's overall non-salary related operating budget, respectively.

<b>2015-16 Adjusted Budget - Total Operating Requirements</b>	<b>\$ 2,947,170</b>
<b>Salaries for Position Changes:</b>	
Transfer of Positions from/(to) Other Divisions	(113,500)
New or (decreased) FTE	-
<b>Changes in Personnel Expenses:</b>	
Other net salary adjustments	(61,600)
Change in OCERS retirement costs	(82,700)
Change in group insurance costs	(31,200)
Other benefit cost adjustments	(5,100)
<b>Other Cost Adjustments:</b>	
Increase in memberships	59,110
Increase in temporary services	31,500
Increase in legal services	100,000
Increase in software program consulting	40,000
Decrease in other professional services	(15,000)
Decrease in electricity costs	(14,000)
Increase in General Manager's contingency / reappropriations	111,500
<b>Aggregate change in Other Categories:</b>	
Aggregate change in other materials, supplies, and services	(1,960)
<b>2016-17 Proposed Budget - Total Operating Requirements</b>	<b>\$ 2,964,220</b>
<b>Changes in Personnel Expenses:</b>	
Net salary adjustments (MOU-related, leave payoffs, vacancy, etc.)	10,100
Change in OCERS retirement costs	1,100
Change in group insurance costs	3,200
Other benefit cost adjustments	(600)
<b>Other Cost Adjustments:</b>	
Increase in meetings	10,000
Increase in other professional services	9,000
Decrease in legal services	(100,000)
Increase in electricity costs	15,000
Increase in General Manager's contingency / reappropriations	31,700
<b>Aggregate change in Other Categories:</b>	
Aggregate change in other materials, supplies, and services	-
<b>2017-18 Proposed Budget - Total Operating Requirements</b>	<b>\$ 2,943,720</b>

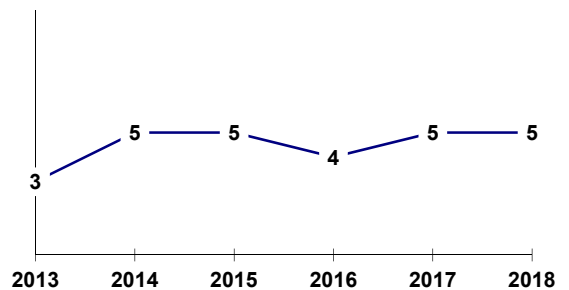
## 2016-17 & 2017-18 Budget

Operating Expenses By Category	2014-15 Actual	2015-16 Revised Budget	2015-16 Projected	2016-17 Proposed	Budget % Change	2017-18 Proposed	Budget % Change
Personnel	\$ 1,232,613	\$ 1,425,400	\$ 1,211,900	\$ 1,131,300	(20.63%)	\$ 1,145,100	1.22%
Supplies	187,403	223,430	193,380	273,550	22.43%	283,550	3.66%
Professional & Contractual Services	117,103	254,500	391,000	413,900	62.63%	322,900	(21.99%)
Research & Monitoring	-	-	-	-	-	-	-
Repairs & Maintenance	-	-	-	-	-	-	-
Utilities	110,824	136,000	116,000	122,000	(10.29%)	137,000	12.30%
Other	10,734	907,840	7,810	1,023,470	12.74%	1,055,170	3.10%
<b>Total</b>	<b>\$ 1,658,677</b>	<b>\$ 2,947,170</b>	<b>\$ 1,920,090</b>	<b>\$ 2,964,220</b>	<b>0.58%</b>	<b>\$ 2,943,720</b>	<b>(0.69%)</b>





Staffing Trends



2016-17 & 2017-18 Authorized FTE Positions

Supervisors / Professionals	2.00
Administrative / Clerical	3.00

**Total** 5.00

# 2016-17 & 2017-18 Budget

## Service Description

The mission of the Board Services Division is to provide exceptional customer service and support to the Board of Directors, district staff and the general public through the Clerk of the Board's Office. The Clerk of the Board's office promotes public trust and ensures transparency by: accurately recording and preserving the legislative actions of the District; safeguarding the vital, historic and permanent records of the District as their official custodian; preparing and publishing agendas and notices in accordance with legal requirements; acting as filing officer for Statement of Economic Interest filings; receiving and processing summons and complaints filed against the District; and maintaining rosters of the Board of Directors, appointed committees and historical events.

### 2015-16 Performance Objectives

- ◆ Mail Board agenda packages six calendar days prior to Board meeting, 100% of the time, unless otherwise authorized by the General Manager.
- ◆ Maintain accurate records of official actions taken by the Board of Directors.
- ◆ Post annotated agendas on website by 5:00 p.m. the following day.

### 2015-16 Performance Results

- ◆ Achieved 100% success rate.
- ◆ Achieved 100% success rate.
- ◆ Achieved 100% success rate.

### 2016-17 & 2017-18 Performance Objectives

- ◆ Mail Board Agenda packages six calendar days prior to Board meeting, 100% of the time, unless otherwise authorized by the General Manager.
- ◆ Maintain accurate records of official actions taken by the Board of Directors and post those actions on website by 5:00 p.m. the day following a meeting.
- ◆ Respond to all Board of Directors, staff and public inquiries in a satisfactory time frame providing excellent internal and external customer service.
- ◆ Maintain Legal compliance with various federal, state and local laws (Brown Act, Political Reform Act, etc.)
- ◆ Maintain District Transparency Certificate of Excellence (SDLF)

### Performance Measures

Summary	2014-15 Actual	2015-16 Projected	2016-17 Proposed	2017-18 Proposed	Justification
◆ Board Agenda Packages	100%	100%	100%	100%	In-house standard
◆ Maintain & post accurate Records of Board Actions	100%	100%	100%	100%	In-house standard
◆ Respond to all Inquiries in satisfactory time frame	100%	100%	100%	100%	In-house standard
◆ Maintain Legal Compliance	100%	100%	100%	100%	In-house standard
◆ Maintain District Transparency Certificate	100%	100%	100%	100%	In-house standard

# Board Services

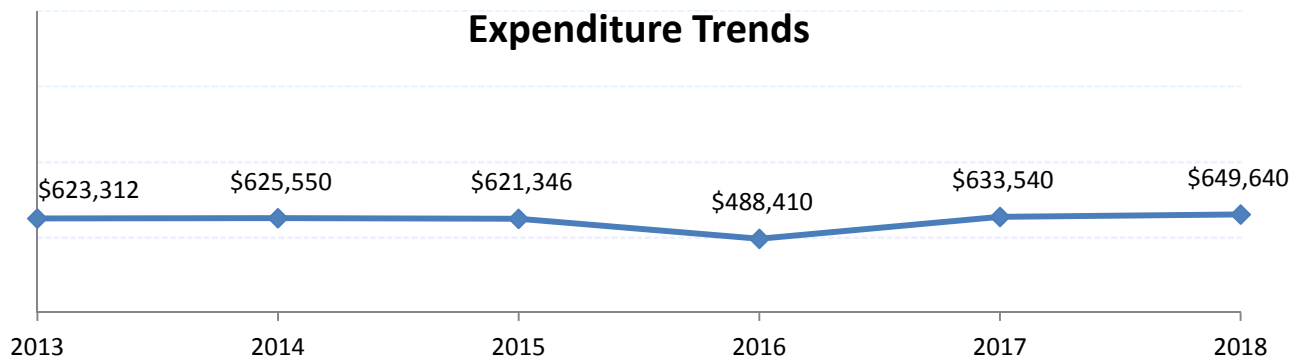
## Budget Overview

The FY 2016-17 & 2017-18 budgets for the Board Services Division reflect an increase of 30% and an increase of 3% over the prior year, respectively. The increase is primarily due to the transfer of one FTE position and adjustments to salaries and benefits.

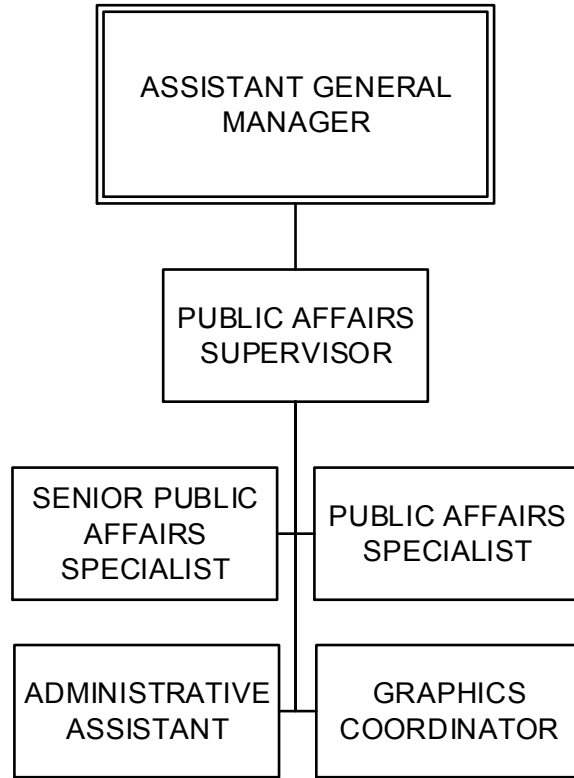
<b>2015-16 Adjusted Budget - Total Operating Requirements</b>	<b>\$ 488,410</b>
<b>Salaries for Position Changes:</b>	
Transfer of Positions from/(to) Other Divisions	46,200
New or (decreased) FTE	-
<b>Changes in Personnel Expenses:</b>	
Other net salary adjustments (MOU-related, leave payoffs, vacancy, etc.)	86,900
Change in OCERS retirement costs	(3,970)
Change in group insurance costs	15,400
Other benefit cost adjustments	(2,000)
<b>Other Cost Adjustments:</b>	
Decrease in meetings	(11,350)
Increase in legal services	10,000
<b>Aggregate change in Other Categories:</b>	
Aggregate change in other materials, supplies, and services	3,950
<b>2016-17 Proposed Budget - Total Operating Requirements</b>	<b>\$ 633,540</b>
<b>Changes in Personnel Expenses:</b>	
Net salary adjustments (MOU-related, leave payoffs, vacancy, etc.)	11,600
Change in OCERS retirement costs	1,000
Change in group insurance costs	4,100
Other benefit cost adjustments	(600)
<b>Other Cost Adjustments:</b>	
Decrease in training	(2,300)
<b>Aggregate change in Other Categories:</b>	
Aggregate change in other materials, supplies, and services	2,300
<b>2017-18 Proposed Budget - Total Operating Requirements</b>	<b>\$ 649,640</b>

## 2016-17 & 2017-18 Budget

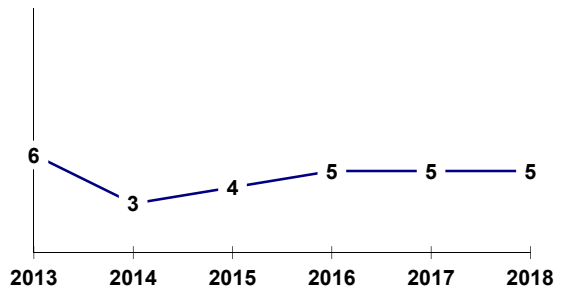
Operating Expenses By Category	2014-15 Actual	2015-16 Revised Budget	2015-16 Projected	2016-17 Proposed	Budget % Change	2017-18 Proposed	Budget % Change
Personnel	\$ 396,982	\$ 368,370	\$ 368,000	\$ 510,900	38.69%	\$ 527,000	3.15%
Supplies	8,913	38,460	17,590	32,540	(15.39%)	32,540	0.00%
Professional & Contractual Services	214,656	80,000	90,980	90,000	12.50%	90,000	0.00%
Research & Monitoring	-	-	-	-	-	-	-
Repairs & Maintenance	795	1,500	-	-	(100.00%)	-	-
Utilities	-	-	-	-	-	-	-
Other	-	80	80	100	25.00%	100	0.00%
<b>Total</b>	<b>\$ 621,346</b>	<b>\$ 488,410</b>	<b>\$ 476,650</b>	<b>\$ 633,540</b>	<b>29.71%</b>	<b>\$ 649,640</b>	<b>2.54%</b>







Staffing Trends



2016-17 & 2017-18 Authorized FTE Positions

Supervisors / Professionals	3.0
Administrative & Clerical	2.0

**Total** 5.0

# 2016-17 & 2017-18 Budget

## Service Description

The Public Affairs Division provides services and implements programs to meet the communications and legislative needs of both internal and external audiences for the Orange County Sanitation District. The division plans and implements media relations, website content, community relations, community education and outreach, employee newsletter, intranet development, corporate identity program, collateral material and graphics development, presentation development, crisis communications and legislative affairs. The goal is to create a total communications program that promotes clear and transparent communications with all designated audiences and to promote the understanding of OCSD's mission to protect the environment.

### 2015-16 Performance Objectives

- ◆ Provide services and implement programs that meet the communications needs of OCSD's internal audiences.
- ◆ Provide services and implement programs that meet the communications needs of OCSD's external audiences.
- ◆ Support General Manager activities and provide information on current issues to Board of Directors.

### 2015-16 Performance Results

- ◆ Produced and circulated daily articles on MyOCSD, weekly blurbs on 3 Things to Know email, monthly news in Digester, and bi-monthly stories in Pipeline.
- ◆ Coordinated employee events including holiday luncheons, Take Your Kid to Work Day, and Honor Walk event.
- ◆ Hosted 3,000 people that toured Plant No. 1, staff participated in 20 speaking engagements, staffed a booth at 16 community events and 6 career fairs.
- ◆ Collaborated with OCWD to expand tour program and offer joint GWRS tours.
- ◆ Daily participation on social media sites
- ◆ Created protocol to handle odor complaints from the community.
- ◆ Prepared key messages and talking points for Board Chair and General Manager.
- ◆ Prepared/presented reports on division efforts to OCSD Legislative and Public Affairs Committee.

### 2016-17 & 2017-18 Performance Objectives

- ◆ Provide services and implement programs that meet the communications needs of OCSD's internal audiences by producing a minimum of 70 internal communication pieces.
- ◆ Provide services and implement programs that meet communications needs of OCSD's external audiences by reaching a minimum of 3,000 people.
- ◆ Support General Manager activities and provide information to Board of Directors through the General Manager's monthly report and the new Board member orientation.

### Performance Measures

Summary	2014-15 Actual	2015-16 Projected	2016-17 Proposed	2017-18 Proposed	Justification
◆ Internal Services & Programs	Completed	On Target	Per Plan	Per Plan	In-house standard
◆ External Services & Programs	Completed	On Target	Per Plan	Per Plan	In-house standard
◆ Board of Directors & GM Support	Completed	On Target	Per Plan	Per Plan	In-house standard

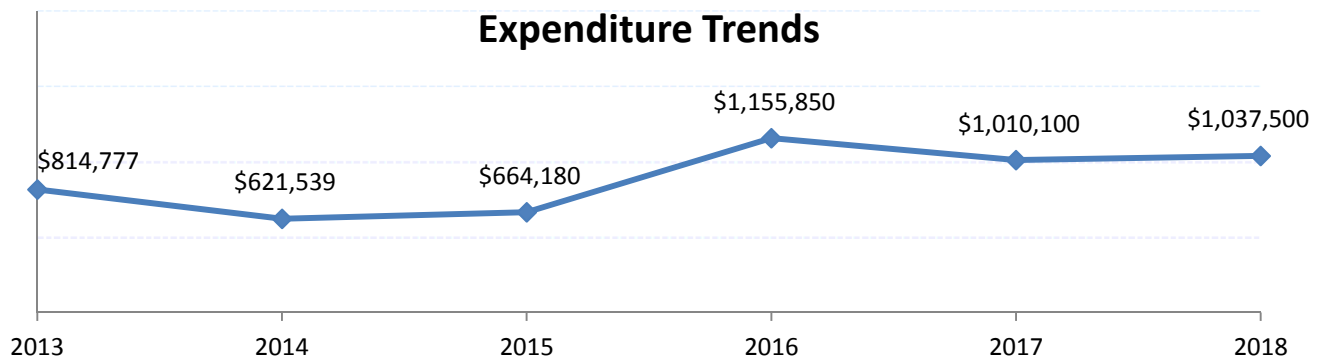
## Budget Overview

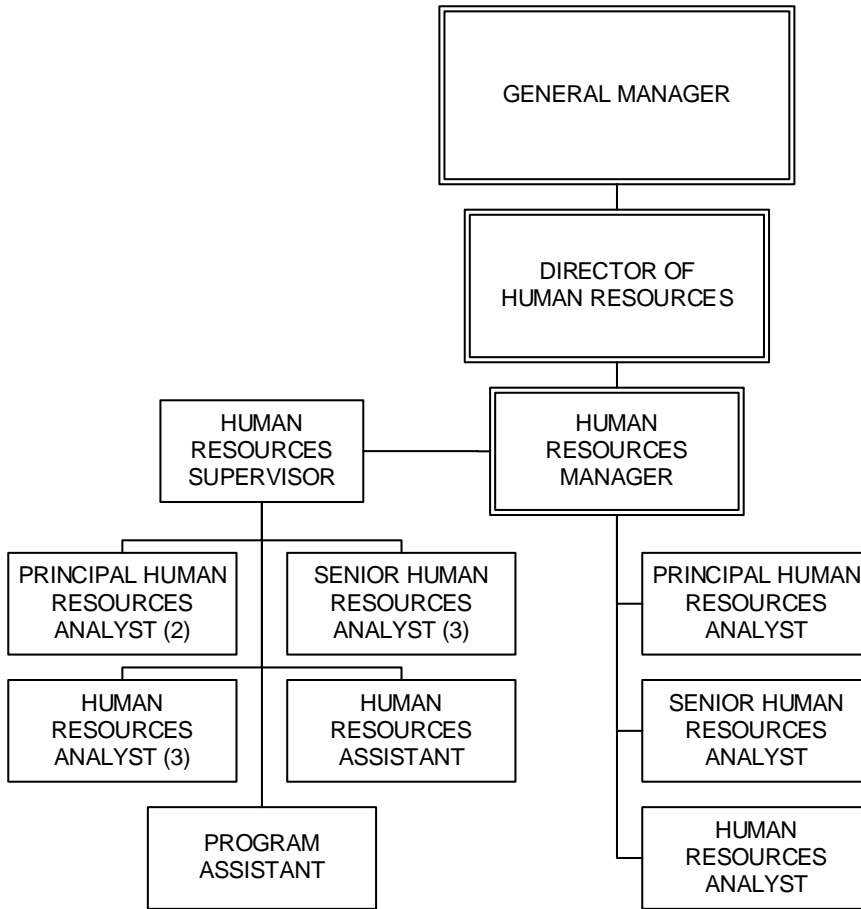
The FY 2016-17 & 2017-18 budgets for the Public Affairs Division reflect a decrease of 13% and an increase of 3% from the prior year, respectively. The decrease is primarily due to a decrease in advocacy efforts.

<b>2015-16 Adjusted Budget - Total Operating Requirements</b>	<b>\$ 1,155,850</b>
<b>Salaries for Position Changes:</b>	
Transfer of Positions from/(to) Other Divisions	-
New or (decreased) FTE	-
<b>Changes in Personnel Expenses:</b>	
Other net salary adjustments (MOU-related, leave payoffs, vacancy, etc.)	5,900
Change in OCERS retirement costs	(30,100)
Change in group insurance costs	(600)
Other benefit cost adjustments	-
<b>Other Cost Adjustments:</b>	
Decrease in training	(9,830)
Decrease in advocacy efforts	(66,000)
Decrease in other professional services	(5,000)
Decrease in miscellaneous operating supplies expense	(33,800)
<b>Aggregate change in Other Categories:</b>	
Aggregate change in other materials, supplies, and services	(6,320)
<b>2016-17 Proposed Budget - Total Operating Requirements</b>	<b>\$ 1,010,100</b>
<b>Changes in Personnel Expenses:</b>	
Net salary adjustments (MOU-related, leave payoffs, vacancy, etc.)	14,900
Change in OCERS retirement costs	1,900
Change in group insurance costs	4,100
Other benefit cost adjustments	(600)
<b>Other Cost Adjustments:</b>	
Increase in other professional services	5,000
Increase in miscellaneous operating supplies expense	5,000
<b>Aggregate change in Other Categories:</b>	
Aggregate change in other materials, supplies, and services	(2,900)
<b>2017-18 Proposed Budget - Total Operating Requirements</b>	<b>\$ 1,037,500</b>

## 2016-17 & 2017-18 Budget

Operating Expenses By Category	2014-15 Actual	2015-16 Revised Budget	2015-16 Projected	2016-17 Proposed	Budget % Change	2017-18 Proposed	Budget % Change
Personnel	\$ 532,211	\$ 668,700	\$ 619,600	\$ 643,900	(3.71%)	\$ 664,200	3.15%
Supplies	47,627	65,650	56,760	49,500	(24.60%)	46,600	(5.86%)
Professional & Contractual Services	3,326	296,000	296,000	225,000	(23.99%)	230,000	2.22%
Research & Monitoring	-	-	-	-	-	-	-
Repairs & Maintenance	52	-	-	-	-	-	-
Utilities	-	-	-	-	-	-	-
Other	80,964	125,500	70,000	91,700	(26.93%)	96,700	5.45%
<b>Total</b>	<b>\$ 664,180</b>	<b>\$ 1,155,850</b>	<b>\$ 1,042,360</b>	<b>\$ 1,010,100</b>	<b>(12.61%)</b>	<b>\$ 1,037,500</b>	<b>2.71%</b>



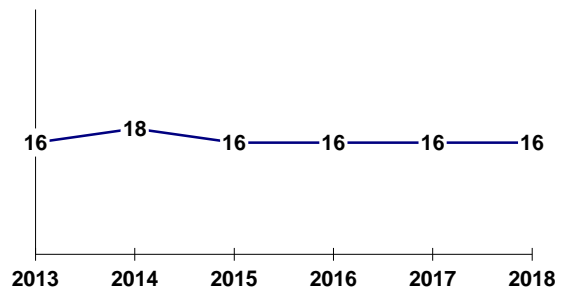


### 2016-17 & 2017-18 Authorized FTE Positions

Executive Manager	1.0
Manager	1.0
Supervisors / Professionals	12.0
Administrative/Clerical	2.0

**Total** 16.0

Staffing Trends



# 2016-17 & 2017-18 Budget

## Service Description

The mission of the Human Resources Administration Division is to work with employees and management to ensure an effective and productive employment relationship.

### 2015-16 Performance Objectives

- ◆ Support departments in the development of multi-year Workforce planning requirements.
- ◆ Support departments in the development of a multi-year Workforce development plan.
- ◆ Continuous Leadership Development through June 2015.
- ◆ Meet the training level of service of 45 hours per employee.
- ◆ Manage the department's budget to within 96% to 100% of the approved budget.
- ◆ Implement a comprehensive employee relations and labor relations training program by the end of fiscal year 2015-16.

### 2015-16 Performance Results

- ◆ Implemented.
- ◆ Implemented.
- ◆ Implemented.
- ◆ Estimated at 45 hours per employee.
- ◆ Estimated to stay within budget.
- ◆ Implemented.

### 2014-15 & 2015-16 Performance Objectives

- ◆ Continue with development and implementation of effective workforce planning/development and succession planning strategies.
- ◆ Update and implement recruitment plan to reduce vacancies by 6/30/17.
- ◆ Continuous leadership development.
- ◆ Review all training requirements and meet the training level of service of 45 hours per employee.
- ◆ Manage the department's budget to within 96% to 100% of the approved budget.
- ◆ Complete labor negotiations with all bargaining units by 12/31/16.
- ◆ Report Classification & Compensation study results by July 2016.

### Performance Measures

Summary	2014-15 Actual	2015-16 Projected	2016-17 Proposed	2017-18 Proposed	Justification
◆ Workforce Planning / Workforce Development	Sustain	Sustain	Sustain	Sustain	OCSD Strategic Plan
◆ Reduce Vacancies	Sustain	Sustain	Sustain	Sustain	OCSD Strategic Plan
◆ Continuous Leadership Development	Sustain	Sustain	Sustain	Sustain	OCSD Strategic Plan
◆ Training Level of Service	Sustain	In Progress	Sustain	Sustain	Level of Service
◆ Manage Budget	97%	90%	96-100%	96-100%	In-house standard
◆ Approved Labor Contracts	N/A	N/A	Implement	Sustain	HR Work Plan
◆ Approved Classifications & Compensation Plan	N/A	N/A	Implement	Sustain	HR Work Plan

# Human Resources Administration

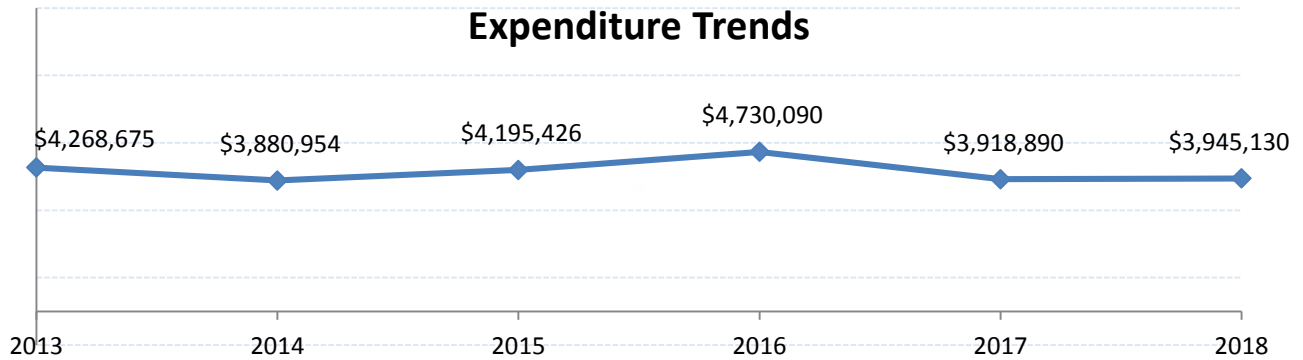
## Budget Overview

The FY 2016-17 & 2017-18 budgets for the Human Resources Administration Division reflect a decrease of 17% and an increase of 1% over the prior year, respectively. The decrease is primarily due to reductions in budgeted retirement costs.

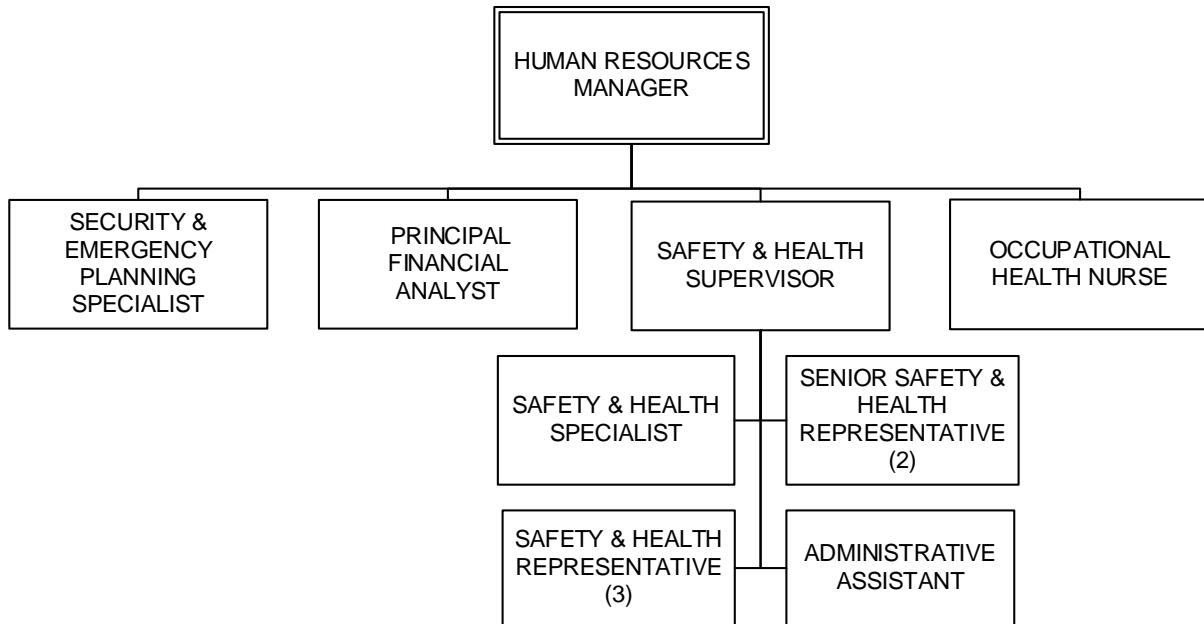
<b>2015-16 Adjusted Budget - Total Operating Requirements</b>	<b>\$ 4,730,090</b>
<i><b>Salaries for Position Changes:</b></i>	
Transfer of Positions from/(to) Other Divisions	121,200
New or (decreased) FTE	-
<i><b>Changes in Personnel Expenses:</b></i>	
Other net salary adjustments (MOU-related, leave payoffs, vacancy, etc.)	(26,600)
Change in retirement costs	(934,300)
Change in group insurance costs	13,200
Other benefit cost adjustments	16,500
<i><b>Other Cost Adjustments:</b></i>	
increase in training	8,400
Decrease in temporary services	(10,400)
Decrease in other contractual services	(17,000)
Decrease in legal services	(8,800)
Increase in labor negotiation services	20,000
Decrease in other professional services	(20,100)
Increase in service maintenance agreements	25,000
 <i><b>Aggregate change in Other Categories:</b></i>	
Aggregate change in other materials, supplies, and services	1,700
<b>2016-17 Proposed Budget - Total Operating Requirements</b>	<b>\$ 3,918,890</b>
<i><b>Changes in Personnel Expenses:</b></i>	
Net salary adjustments (MOU-related, leave payoffs, vacancy, etc.)	27,100
Change in retirement costs	3,800
Change in group insurance costs	12,800
Other benefit cost adjustments	1,600
<i><b>Other Cost Adjustments:</b></i>	
Increase in training	30,000
Increase in temporary services	10,400
Decrease in labor negotiation services	(60,000)
 <i><b>Aggregate change in Other Categories:</b></i>	
Aggregate change in other materials, supplies, and services	540
<b>2017-18 Proposed Budget - Total Operating Requirements</b>	<b>\$ 3,945,130</b>

## 2016-17 & 2017-18 Budget

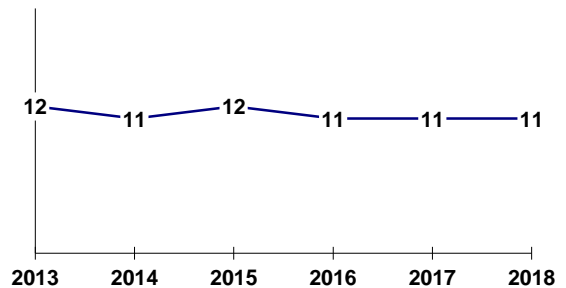
Operating Expenses By Category	2014-15 Actual	2015-16 Revised Budget	2015-16 Projected	2016-17 Proposed	Budget % Change	2017-18 Proposed	Budget % Change
Personnel	\$ 3,345,017	\$ 3,796,100	\$ 2,992,510	\$ 2,986,100	(21.34%)	\$ 3,031,400	1.52%
Supplies	104,626	125,850	90,010	135,270	7.49%	165,810	22.58%
Professional & Contractual Services	718,293	737,300	706,900	701,000	(4.92%)	651,400	(7.08%)
Research & Monitoring	-	-	-	-	-	-	-
Repairs & Maintenance	-	-	-	25,000	-	25,000	0.00%
Utilities	-	-	-	-	-	-	-
Other	27,490	70,840	41,000	71,520	0.96%	71,520	0.00%
<b>Total</b>	<b>\$ 4,195,426</b>	<b>\$ 4,730,090</b>	<b>\$ 3,830,420</b>	<b>\$ 3,918,890</b>	<b>(17.15%)</b>	<b>\$ 3,945,130</b>	<b>0.67%</b>







**Staffing Trends**



**2016-17 & 2017-18 Authorized FTE Positions**

Supervisors / Professionals	10.0
Administrative & Clerical	1.0

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**Total** **11.0**

# 2016-17 & 2017-18 Budget

## Service Description

The mission of the Risk Management/Safety/Security Division is to identify potential risk to the organization and provide solutions for mitigation or reduce the risk to acceptable levels. Through this process the Risk Management Division will create a safe, healthy, and secure environment for District staff, contractors, and visitors. It will partner with management and employees to take ownership of identifying risk and controlling the risk within their sphere of control.

### 2015-16 Performance Objectives

- ◆ Safety Compliance Training
- ◆ Develop JSA's Planned
- ◆ Contractor Safety Analysis
- ◆ Third Party Safety Audit
- ◆ Revise Claim Procedure

### 2015-16 Performance Results

- ◆ Completed.
- ◆ Ongoing.
- ◆ Ongoing.
- ◆ Completed.
- ◆ Ongoing.

### 2016-17 & 2017-18 Performance Objectives

- ◆ Ensure 100% of Safety Compliance Training is completed.
- ◆ Develop JSA's for high risk work activities.
- ◆ Contractor Safety Analysis to reduce injuries and accidents.
- ◆ Third Party Safety Audit of Safety Program to ensure compliance
- ◆ Implement Security Recommendations from security consultant.
- ◆ Implement Leading Safety Indicators to reduce injuries to employees.
- ◆ Revise Risk Register with newly identified risks.

### Performance Measures

Summary	2014-15 Actual	2015-16 Projected	2016-17 Proposed	2017-18 Proposed	Justification
◆ Safety Compliance Training	96%	95%	100%	100%	OCSD Strategic Plan
◆ Develop JSA's	Ongoing	Ongoing	Planned	Planned	OSHA Requirement
◆ Contractor Safety Initiative	N/A	N/A	Planned	Planned	Uniform Bid Evaluation
◆ Third Party VPP Feasibility Audit	100%	Complete	N/A	Planned	GM Strategic Plan
◆ Security Recommendations	Ongoing	Ongoing	Planned	Planned	DHS Recommendations
◆ Implement Leading Safety Indicator	N/A	N/A	Planned	Planned	Continuous Safety Improvement
◆ Revise Risk Register	Complete	Complete	Planned	Planned	GM Strategic Plan

# Risk Management/Safety/Security

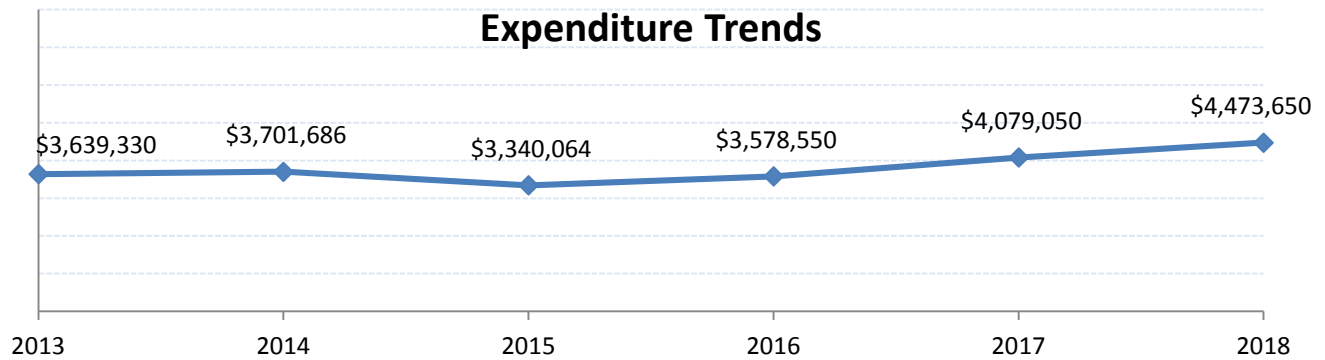
## Budget Overview

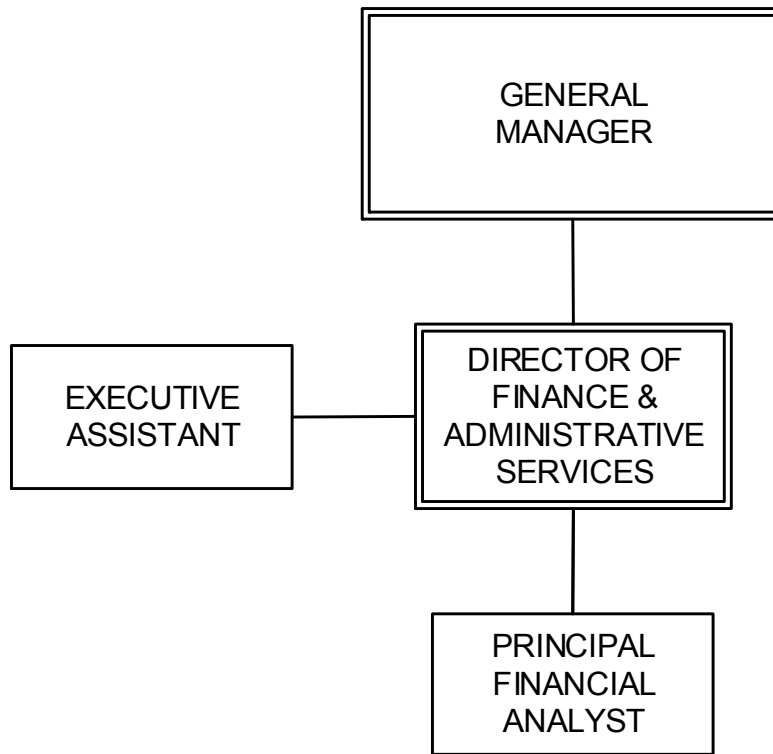
The FY 2016-17 & 2017-18 budgets for the Risk Management/Safety/Security Division reflect an increase of 14% and 10% from the prior year, respectively. These changes are primarily due to adjustments to the property and general liability insurance in-lieu premiums.

<b>2015-16 Adjusted Budget - Total Operating Requirements</b>	<b>\$ 3,578,550</b>
<i><b>Salaries for Position Changes:</b></i>	
Transfer of Positions from/(to) Other Divisions	(121,200)
New or (decreased) FTE	-
<i><b>Changes in Personnel Expenses:</b></i>	
Other net salary adjustments (MOU-related, leave payoffs, vacancy, etc.)	(10,900)
Change in OCERS retirement costs	(107,400)
Change in group insurance costs	(17,400)
Other benefit cost adjustments	2,900
<i><b>Other Cost Adjustments:</b></i>	
Increase in minor furniture & fixtures	20,000
Increase in training	52,810
Increase in safety equipment and tools	45,000
Increase in security services	78,000
Decrease in audit & accounting	(7,000)
Decrease in industrial hygiene services	(50,000)
Increase in property/general liability insurance in-lieu premium	615,100
<i><b>Aggregate change in Other Categories:</b></i>	
Aggregate change in other materials, supplies, and services	590
<b>2016-17 Proposed Budget - Total Operating Requirements</b>	<b>\$ 4,079,050</b>
<i><b>Changes in Personnel Expenses:</b></i>	
Net salary adjustments (MOU-related, leave payoffs, vacancy, etc.)	20,100
Change in OCERS retirement costs	1,900
Change in group insurance costs	8,800
Other benefit cost adjustments	(1,400)
<i><b>Other Cost Adjustments:</b></i>	
Increase in training	20,000
Decrease in safety equipment and tools	(45,000)
Increase in security services	60,000
Increase in audit & accounting	10,000
Increase in property/general liability insurance in-lieu premium	320,200
<i><b>Aggregate change in Other Categories:</b></i>	
Aggregate change in other materials, supplies, and services	-
<b>2017-18 Proposed Budget - Total Operating Requirements</b>	<b>\$ 4,473,650</b>

## 2016-17 & 2017-18 Budget

Operating Expenses By Category	2014-15 Actual	2015-16 Revised Budget	2015-16 Projected	2016-17 Proposed	Budget % Change	2017-18 Proposed	Budget % Change
Personnel	\$ 1,507,784	\$ 1,677,500	\$ 1,309,270	\$ 1,423,500	(15.14%)	\$ 1,452,900	2.07%
Supplies	434,650	420,260	431,210	547,100	30.18%	522,100	(4.57%)
Professional & Contractual Services	813,431	918,500	731,490	921,000	0.27%	991,000	7.60%
Research & Monitoring	-	-	-	-	-	-	-
Repairs & Maintenance	1,155	3,550	3,050	3,050	(14.08%)	3,050	0.00%
Utilities	-	-	-	-	-	-	-
Other	583,044	558,740	567,300	1,184,400	111.98%	1,504,600	27.03%
<b>Total</b>	<b>\$ 3,340,064</b>	<b>\$ 3,578,550</b>	<b>\$ 3,042,320</b>	<b>\$ 4,079,050</b>	<b>13.99%</b>	<b>\$ 4,473,650</b>	<b>9.67%</b>





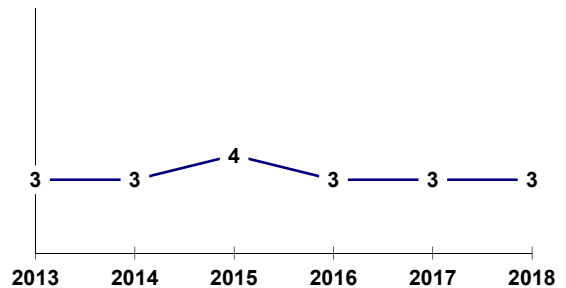
Staffing Trends

**2016-17 & 2017-18 Authorized FTE Positions**

Executive Manager	1.0
Supervisors / Professionals	1.0
Administrative / Clerical	1.0

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**Total** 3.0



# 2016-17 & 2017-18 Budget

## Service Description

The mission of the Administrative Services Administration Division is to oversee the functions of the Financial Management, Contracts, Purchasing, & Materials Management, Information Technology, and Risk Management Divisions. This oversight includes both day-to-day operations and strategic planning. The division is the departmental liaison with Executive Management, the Administration Committee, the Board of Directors, and other departments of the District.

### 2015-16 Performance Measures

- ◆ Submittal of annual sewer service fees (SSF) within property parcel database to the County by August 10<sup>th</sup>.
- ◆ All Treasury investments will be in compliance with the State Government Code 100% of the time.
- ◆ Sustain succession management and leadership academy programs.
- ◆ Coordinate and uphold solicitation schedules in support of planned projects and emergency procurements.

### 2015-16 Performance Results

- ◆ Submittal completed in time for placement on secured property tax bills.
- ◆ All Treasury investments in compliance 100% of the time.
- ◆ All identified staff have been trained through the leadership academy; proposed succession management programs for Professional and Administrative Employees drafted and presented.
- ◆ Solicitation schedules upheld at 100% completion.

### 2016-17 & 2017-18 Performance Objectives

- ◆ Submit annual sewer service fees (SSF) within property parcel database to the County by August 10<sup>th</sup>.
- ◆ Comply with the California State Government Code 100% of the time with all treasury investments.
- ◆ Coordinate and uphold solicitation schedules in support of planned projects and emergency procurements.

### Performance Measures

Summary	2014-15 Actual	2015-16 Projected	2016-17 Proposed	2017-18 Proposed	Justification
◆ Submit SSF to the County by August 10 <sup>th</sup>	Yes	Expected	Expected	Expected	In-house standard
◆ Investment Compliance	Yes	Yes	Expected	Expected	In-house standard
◆ Uphold Solicitation Schedules	100%	100%	100%	100%	In-house standard

# Administrative Services Administration

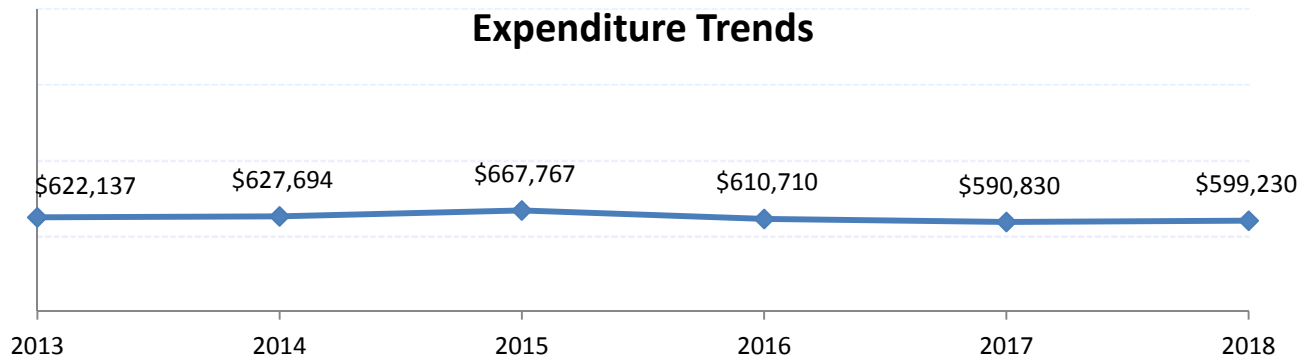
## Budget Overview

The FY 2016-17 & 2017-18 budgets for the Administrative Services Administration Division reflect a decrease of 3% and an increase of 1% over the prior year, respectively. The decrease is primarily due to the reduction in retirement costs.

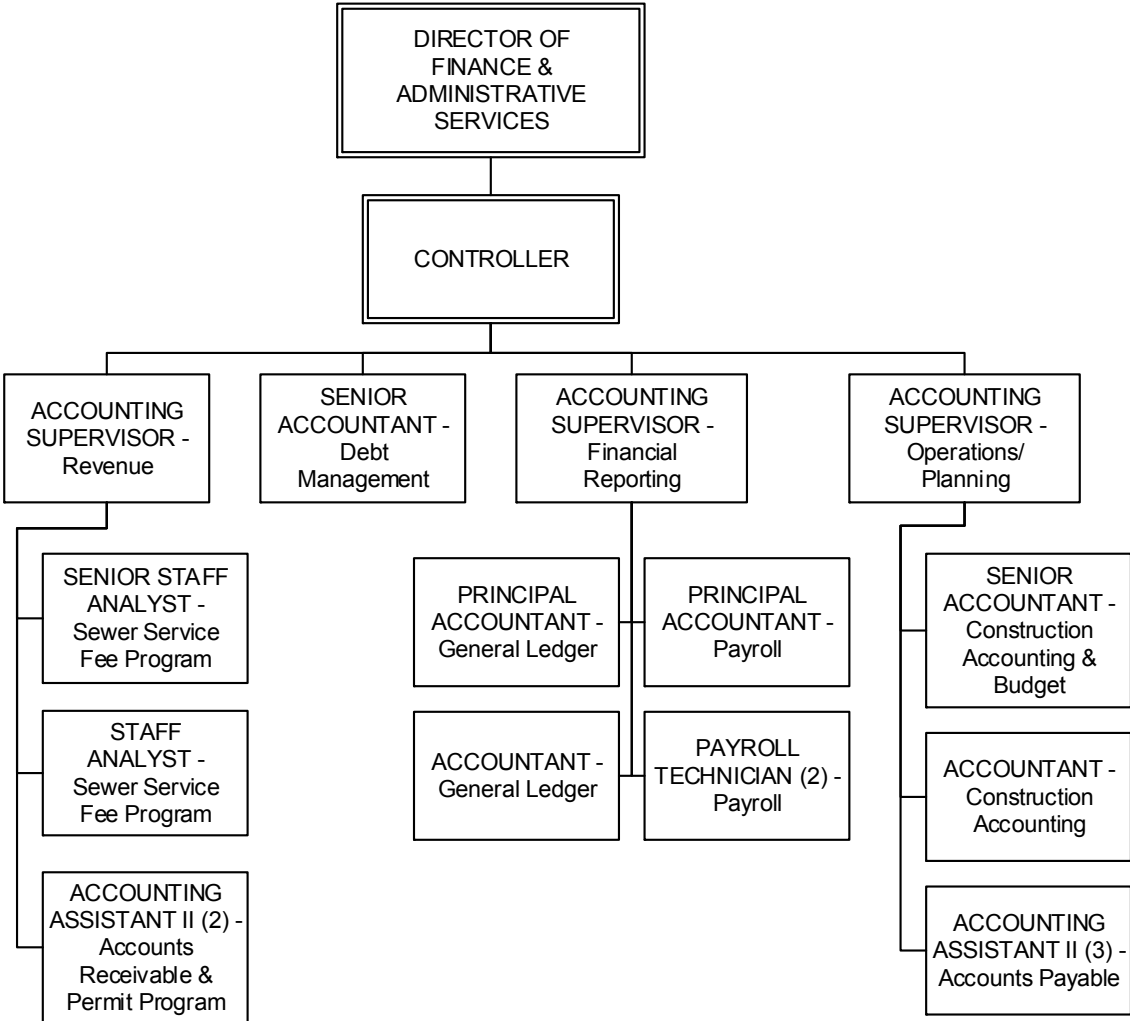
<b>2015-16 Adjusted Budget - Total Operating Requirements</b>	<b>\$ 610,710</b>
<b>Salaries for Position Changes:</b>	
Transfer of Positions from/(to) Other Divisions	-
New or (decreased) FTE	-
<b>Changes in Personnel Expenses:</b>	
Other net salary adjustments (MOU-related, leave payoffs, vacancy, etc.)	26,300
Change in OCERS retirement costs	(39,600)
Change in group insurance costs	-
Other benefit cost adjustments	(15,800)
<b>Other Cost Adjustments:</b>	
Increase in legal services	9,300
<b>Aggregate change in Other Categories:</b>	
Aggregate change in other materials, supplies, and services	(80)
<b>2016-17 Proposed Budget - Total Operating Requirements</b>	<b>\$ 590,830</b>
<b>Changes in Personnel Expenses:</b>	
Net salary adjustments (MOU-related, leave payoffs, vacancy, etc.)	5,800
Change in OCERS retirement costs	500
Change in group insurance costs	2,400
Other benefit cost adjustments	(300)
<b>Other Cost Adjustments:</b>	
No other cost changes	
<b>Aggregate change in Other Categories:</b>	
Aggregate change in other materials, supplies, and services	-
<b>2017-18 Proposed Budget - Total Operating Requirements</b>	<b>\$ 599,230</b>

# 2016-17 & 2017-18 Budget

Operating Expenses By Category	2014-15 Actual	2015-16 Revised Budget	2015-16 Projected	2016-17 Proposed	Budget % Change	2017-18 Proposed	Budget % Change
Personnel	\$ 657,354	\$ 604,100	\$ 567,600	\$ 575,000	(4.82%)	\$ 583,400	1.46%
Supplies	758	850	850	770	(9.41%)	770	0.00%
Professional & Contractual Services	9,263	5,700	17,000	15,000	163.16%	15,000	0.00%
Research & Monitoring	-	-	-	-	-	-	-
Repairs & Maintenance	-	-	-	-	-	-	-
Utilities	-	-	-	-	-	-	-
Other	392	60	60	60	0.00%	60	0.00%
<b>Total</b>	<b>\$ 667,767</b>	<b>\$ 610,710</b>	<b>\$ 585,510</b>	<b>\$ 590,830</b>	<b>(3.26%)</b>	<b>\$ 599,230</b>	<b>1.42%</b>





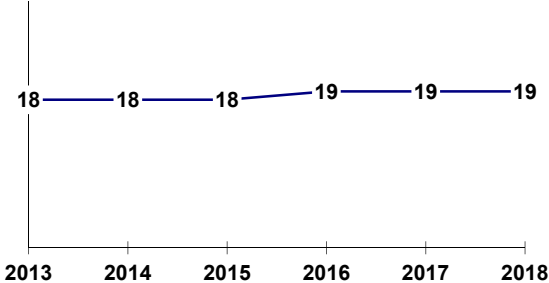


Staffing Trends

2016-17 & 2017-18 Authorized FTE Positions

Manager	1.0
Supervisors / Professionals	11.0
Administrative & Clerical	7.0

**Total** 19.0



# 2016-17 & 2017-18 Budget

## Service Description

The mission of the Financial Management Division is to maintain financial oversight and administration of all District funds and accounts. The Financial Management Division is responsible for administering the treasury management and debt financing programs, the processing of cash receipts, accounts payable, accounts receivable, user fees, and payroll, accounting for fixed assets, and coordinating the capital and operating budget process throughout the District. The annual audit required by law and all financial reporting required of special districts by the State of California is coordinated and administered through this division.

2015-16 Performance Objectives	2015-16 Performance Results
<ul style="list-style-type: none"> <li>◆ Issue monthly financial reports within 10 working days of the following month for 83% of the year.</li> <li>◆ No more than 30 invoices for payment shall be outstanding longer than 30 days during the completion of any one accounts payable cycle 90% of the time.</li> <li>◆ All sewer service fee rebate requests will be processed within 90 days 90% of the time.</li> <li>◆ Payroll processing will be completed on time 100% of the time and error free &gt;99.5% of the time.</li> <li>◆ All debt service payments will be paid electronically, on the actual due dates, and error free 100% of the time.</li> <li>◆ All treasury investments will be in compliance with the California State Government Code 100% of the time.</li> </ul>	<ul style="list-style-type: none"> <li>◆ Goal was achieved.</li> <li>◆ No more than 30 invoices for payment were outstanding longer than 30 days during the completion of any one accounts payable cycle 100% of the time.</li> <li>◆ The economic downturn has resulted in more than a doubling of claims submitted since FY 2010-11. As a result, claims were not processed within 90 days.</li> <li>◆ Payroll was processed with an error-free rate of 99.9% on a bi-weekly and interim basis.</li> <li>◆ All debt service payments were paid electronically, on the actual due dates, and error free 100% of the time.</li> <li>◆ All treasury investments were in compliance with the California State Government Code 100% of the time.</li> </ul>

## 2016-17 & 2017-18 Performance Objectives

- ◆ Issue monthly financial reports within 10 working days of the following month for 83% of the year.
- ◆ No more than 30 invoices for payment shall be outstanding longer than 30 days during the completion of any one accounts payable cycle 90% of the time.
- ◆ The current backlog of rebate claims will be processed resulting in all claims being processed within 90 days of receipt.
- ◆ Payroll processing will be completed on time 100% of the time and error free >99.5% of the time.
- ◆ All debt service payments will be paid electronically, on the actual due dates, and error free 100% of the time.
- ◆ All treasury investments will be in compliance with the California State Government Code 100% of the time.

Summary	Performance Measures				Justification
	2014-15 Actual	2015-16 Projected	2016-17 Proposed	2017-18 Proposed	
◆ Financial Reports Issuance Standard	83%	83%	83%	83%	In-house standard
◆ Accounts Payable Standard	100%	100%	90%	90%	In-house standard
◆ Sewer Service Refund 90 Day Standard	0%	0%	90%	90%	In-house standard
◆ Payroll Error Free Standard	99.7%	99.8%	99.5%	99.5%	In-house standard
◆ Debt Service Payment Standard	100%	100%	100%	100%	In-house standard
◆ Investment Compliance	100%	100%	100%	100%	In-house standard

# Financial Management

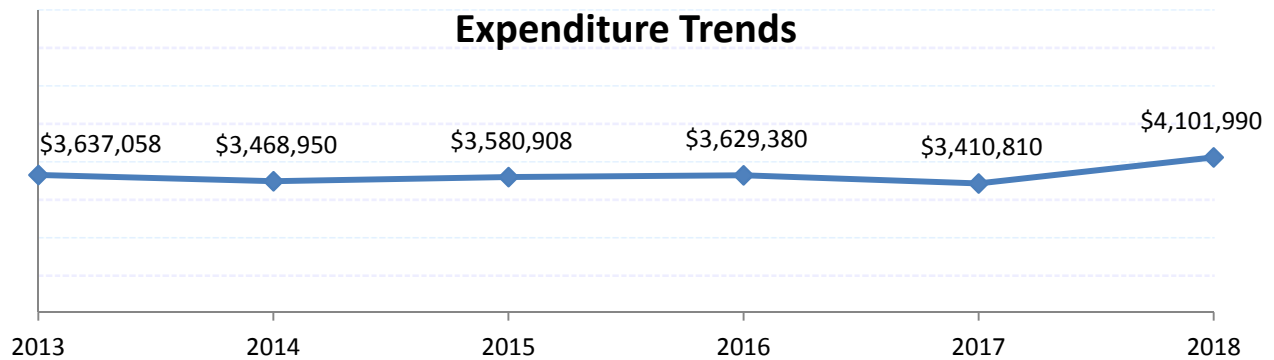
## Budget Overview

The FY 2016-17 & 2017-18 budgets for the Financial Management Division reflects a decrease of 6% and an increase of 20% over the prior year, respectively. The decrease in 2016-17 is primarily due to the reduction in retirement costs. The 2017-18 increase is primarily due to postage, printing, and county service fees for Proposition 218 notices, and other professional services for a sewer service fee rate study.

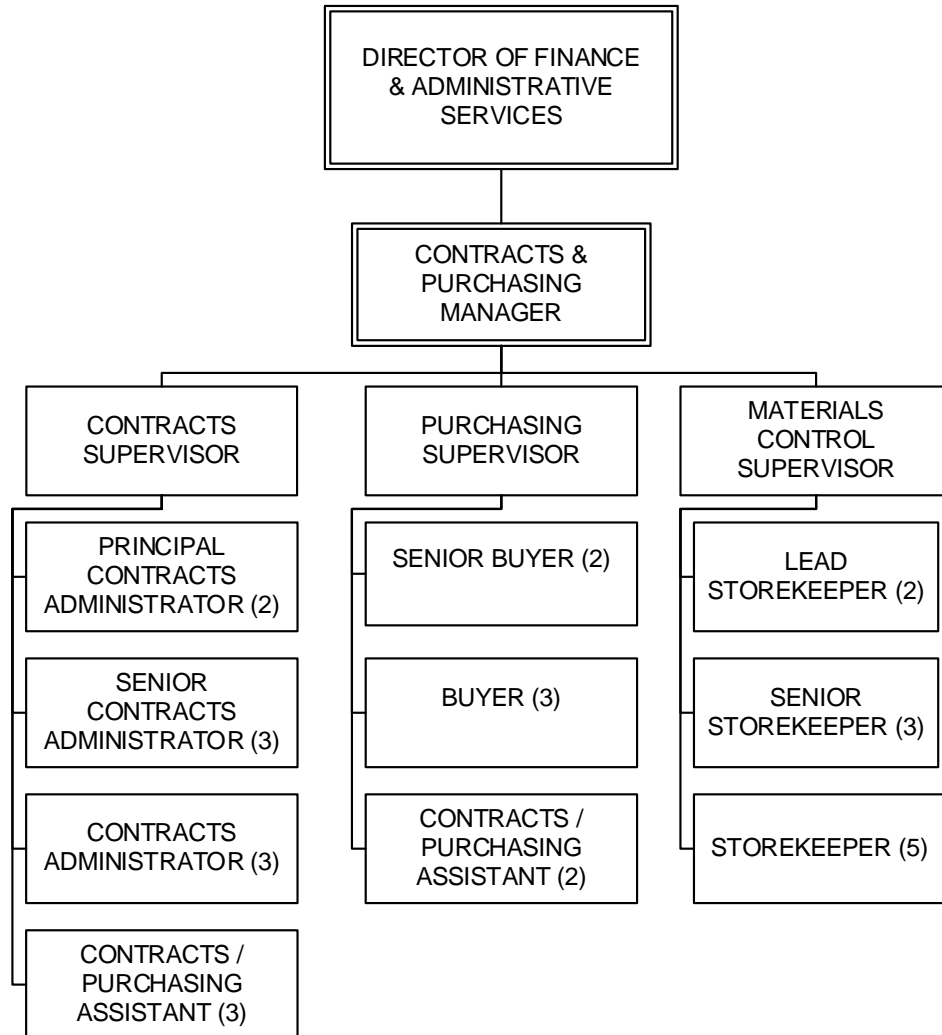
<b>2015-16 Adjusted Budget - Total Operating Requirements</b>	<b>\$ 3,629,380</b>
<b>Salaries for Position Changes:</b>	
Transfer of Positions from/(to) Other Divisions	-
New or (decreased) FTE	-
<b>Changes in Personnel Expenses:</b>	
Other net salary adjustments (MOU-related, leave payoffs, vacancy, etc.)	5,000
Change in OCERS retirement costs	(138,100)
Change in group insurance costs	(2,800)
Other benefit cost adjustments	(8,700)
<b>Other Cost Adjustments:</b>	
Decrease in county service fee	(35,250)
Decrease in audit and accounting services	(16,550)
Decrease in other professional services	(17,100)
<b>Aggregate change in Other Categories:</b>	
Aggregate change in other materials, supplies, and services	(5,070)
<b>2016-17 Proposed Budget - Total Operating Requirements</b>	<b>\$ 3,410,810</b>
<b>Changes in Personnel Expenses:</b>	
Net salary adjustments (MOU-related, leave payoffs, vacancy, etc.)	22,200
Change in OCERS retirement costs	3,000
Change in group insurance costs	15,100
Other benefit cost adjustments	(2,400)
<b>Other Cost Adjustments:</b>	
Increase in postage	268,930
Increase in outside printing services	82,300
Increase in county service fee	45,900
Increase in audit and accounting services	18,600
Increase in other professional services	217,900
<b>Aggregate change in Other Categories:</b>	
Aggregate change in other materials, supplies, and services	19,650
<b>2017-18 Proposed Budget - Total Operating Requirements</b>	<b>\$ 4,101,990</b>

# 2016-17 & 2017-18 Budget

Operating Expenses By Category	2014-15 Actual	2015-16 Revised Budget	2015-16 Projected	2016-17 Proposed	Budget % Change	2017-18 Proposed	Budget % Change
Personnel	\$ 2,730,185	\$ 2,649,700	\$ 2,717,000	\$ 2,505,100	(5.46%)	\$ 2,543,000	1.51%
Supplies	23,917	38,430	41,110	40,930	6.51%	394,710	864.35%
Professional & Contractual Services	825,426	940,870	930,840	864,400	(8.13%)	1,163,900	34.65%
Research & Monitoring	-	-	-	-	-	-	-
Repairs & Maintenance	105	-	60	-	-	-	-
Utilities	-	-	-	-	-	-	-
Other	1,275	380	600	380	0.00%	380	0.00%
<b>Total</b>	<b>\$ 3,580,908</b>	<b>\$ 3,629,380</b>	<b>\$ 3,689,610</b>	<b>\$ 3,410,810</b>	<b>(6.02%)</b>	<b>\$ 4,101,990</b>	<b>20.26%</b>



# Contracts, Purchasing, & Materials Management

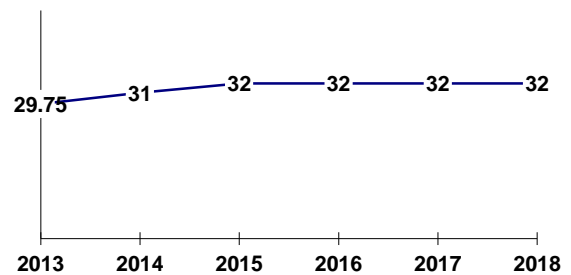


Staffing Trends

**2016-17 & 2017-18 Authorized FTE Positions**

Manager	1.00
Supervisors / Professionals	16.00
Administrative & Clerical	15.00

**Total 32.00**



# 2016-17 & 2017-18 Budget

## Service Description

The Contracts, Purchasing and Materials Management Division's goal is to provide equipment, services and information with the commitment to achieving the highest ethical, economic and progressive contracts and purchasing standards possible. The division is responsible for contract administration and procurement for all District departments. The District's warehouses receive, inventory and distribute supplies, materials and equipment to all departments in addition to inventory control analysis and surplus disposition.

### 2015-16 Performance Objectives

- ◆ Continue the cycle count program and maintain a 97% accuracy rate or better.
- ◆ Obtain the 2015 "Achievement of Excellence in Procurement" (AEP) award by meeting all National requirements.
- ◆ Successfully reorganize Plant 1 and Plant 2 warehouse inventories to accommodate staffing relocation.
- ◆ Successfully complete the new Purchasing Ordinance and General Manager's Policies & Procedures and have Ordinance approved by Committees and Board.
- ◆ Successfully implement two high-level service-based contracts to substantially increase cost savings through economies of scale.

### 2015-16 Performance Results

- ◆ Cycle count program temporarily suspended due to ERP change
- ◆ AEP award received.
- ◆ Completed
- ◆ Completed
- ◆ Completed.

### 2016-17 & 2017-18 Performance Objectives

- ◆ Re-implement the warehouse inventory cycle count program and maintain a 97% accuracy rate or better.
- ◆ Obtain the 2016 "Achievement of Excellence in Procurement" (AEP) award by meeting all National requirements.
- ◆ Successfully implement a bin reorganization for Materials staff to ensure continuity and efficiency.
- ◆ Successfully implement a new surplus ordinance.
- ◆ Successfully implement two high-volume inventory commodity contracts to maximize savings and performance.

### Performance Measures

Summary	2014-15 Actual	2015-16 Projected	2016-17 Proposed	2017-18 Proposed	Justification
◆ Cycle Count	97%	97%	97%	97%	APICS standard
◆ AEP Award	Obtained	Obtain	Obtain	Obtain	NPI, NAPM, NIGP, & CAPPO standards
◆ Materials Reorganization	N/A	In Progress	In Progress	In Progress	Best Practices
◆ Surplus Ordinance	N/A	N/A	In Progress	In Progress	Legal Requirement
◆ Commodity Contracts	N/A	N/A	1	1	Chemical Shortages

# Contracts, Purchasing, & Materials Management

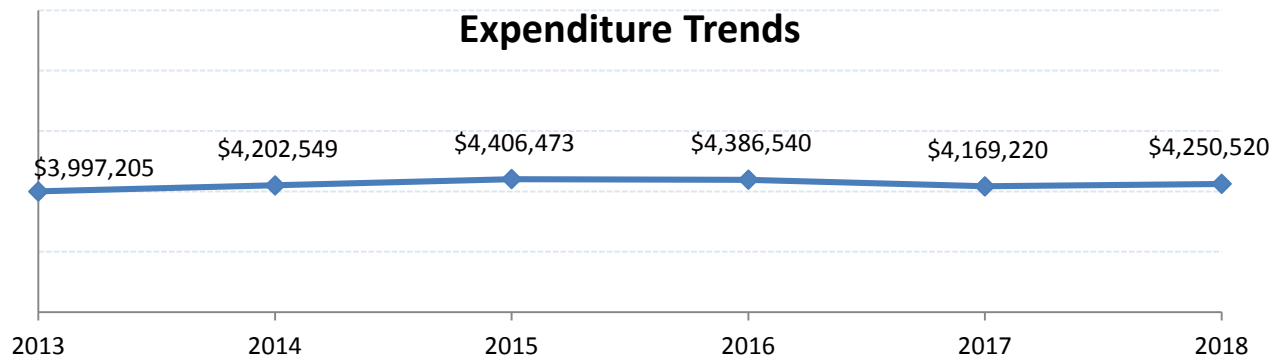
## Budget Overview

The FY 2016-17 & 2017-18 budgets for the Contracts, Purchasing, & Materials Management Division reflect a decrease of 5% and an increase of 2% over the prior year, respectively. These changes are primarily due to the reduction in retirement costs.

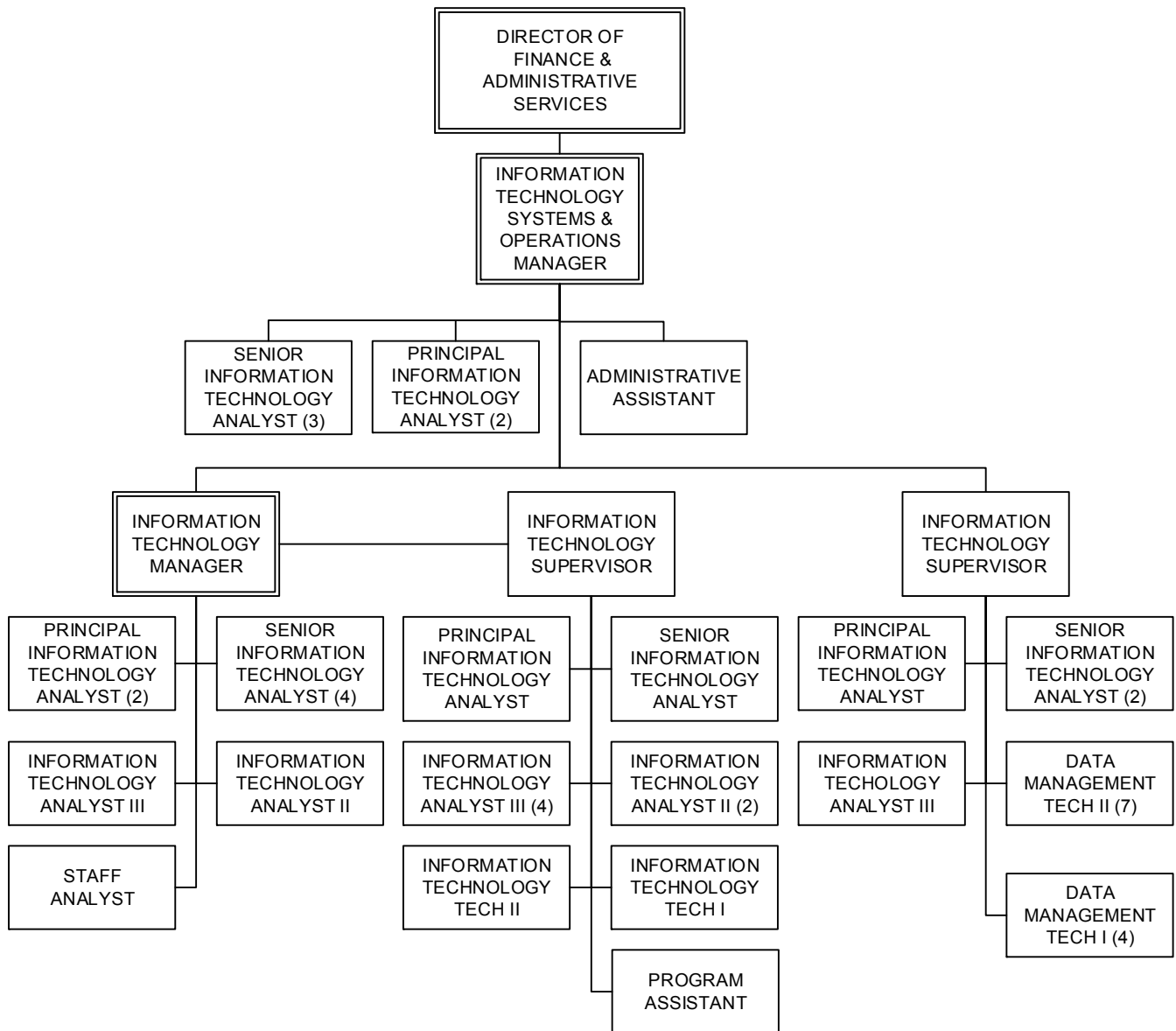
<b>2015-16 Adjusted Budget - Total Operating Requirements</b>	<b>\$ 4,386,540</b>
<b>Salaries for Position Changes:</b>	
Transfer of Positions from/(to) Other Divisions	-
New or (decreased) FTE	-
<b>Changes in Personnel Expenses:</b>	
Other net salary adjustments (MOU-related, leave payoffs, vacancy, etc.)	5,100
Change in OCERS retirement costs	(225,200)
Change in group insurance costs	(4,700)
Other benefit cost adjustments	(15,300)
<b>Other Cost Adjustments:</b>	
Increase in training and meetings	6,300
Decrease in temporary services	(20,000)
Increase in audit and accounting services	25,000
Increase in repairs & maintenance	8,600
<b>Aggregate change in Other Categories:</b>	
Aggregate change in other materials, supplies, and services	2,880
<b>2016-17 Proposed Budget - Total Operating Requirements</b>	<b>\$ 4,169,220</b>
<b>Changes in Personnel Expenses:</b>	
Net salary adjustments (MOU-related, leave payoffs, vacancy, etc.)	41,800
Change in OCERS retirement costs	4,900
Change in group insurance costs	25,500
Other benefit cost adjustments	(3,900)
<b>Other Cost Adjustments:</b>	
Decrease in administrative expense	(7,000)
Increase in temporary services	20,000
<b>Aggregate change in Other Categories:</b>	
Aggregate change in other materials, supplies, and services	-
<b>2017-18 Proposed Budget - Total Operating Requirements</b>	<b>\$ 4,250,520</b>

## 2016-17 & 2017-18 Budget

Operating Expenses By Category	2014-15 Actual	2015-16 Revised Budget	2015-16 Projected	2016-17 Proposed	Budget % Change	2017-18 Proposed	Budget % Change
Personnel	\$ 4,204,953	\$ 4,154,700	\$ 4,027,000	\$ 3,914,600	(5.78%)	\$ 3,982,900	1.74%
Supplies	43,563	48,800	42,530	55,980	14.71%	48,980	(12.50%)
Professional & Contractual Services	106,491	120,000	85,000	120,000	0.00%	140,000	16.67%
Research & Monitoring	-	-	-	-	-	-	-
Repairs & Maintenance	(16,985)	1,400	200	10,000	614.29%	10,000	0.00%
Utilities	-	-	-	-	-	-	-
Other	68,451	61,640	78,000	68,640	11.36%	68,640	0.00%
<b>Total</b>	<b>\$ 4,406,473</b>	<b>\$ 4,386,540</b>	<b>\$ 4,232,730</b>	<b>\$ 4,169,220</b>	<b>(4.95%)</b>	<b>\$ 4,250,520</b>	<b>1.95%</b>





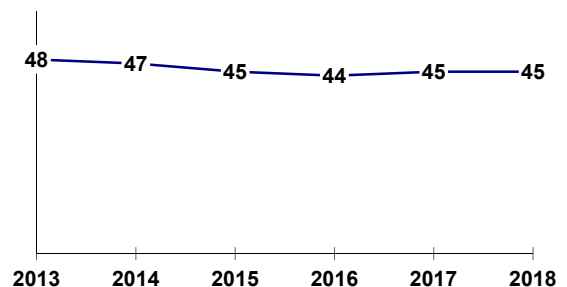


### 2016-17 & 2017-18 Authorized FTE Positions

Manager	2.0
Supervisors / Professionals	28.0
Technical Staff	13.0
Administrative/Clerical	2.0

**Total** 45.0

### Staffing Trends



# 2016-17 & 2017-18 Budget

## Service Description

The Information Technology Division provides support to the users of District's information technology related assets and services, as well as developing and implementing technology solutions that best meet the needs of the District. The Division procures and manages computer hardware/software and provides end user support with a Service Desk that performs computer and telecommunications installations, moves, and changes. The Division is also responsible for the design, installation, maintenance, troubleshooting, and upgrades of all networking infrastructure components and back-end computer system, wireless connectivity, plant ratio/public address, fire/security, reprographics, and mailroom services. Additionally, this Division works closely with every department and division in developing an understanding of the organization's software application and information requirements and providing systems analysis and design, customer computer programming, system implementation and integration, and database/data warehousing availability and support.

### 2015-16 Performance Objectives

- ◆ Implement IT Disaster Recovery objectives (P2 and 3rd site).
- ◆ Implement additional Pump Station Multiprotocol Label Switching (MPLS) solutions.
- ◆ Upgrade the District's OCERS programs and data interfaces to meet OCERS new Vitech Systems Group's V3 system requirements.
- ◆ Implement commercial off the shelf software for Source Control's Pretreatment Program needs.

### 2015-16 Performance Results

- ◆ 55% complete. Acquired equipment and configuration underway. Need to design a redundant Internet connection with separate ISPs at P1 and P2.
- ◆ Complete. All 14 Pump Stations now are connected with MPLS solutions.
- ◆ Complete. Developed the internal programs to extract and format the data. OCERS V3 PASS live.
- ◆ 95% complete. System went live on 1/18/2016. Addressing final system acceptance issues.

### 2016-17 & 2017-18 Performance Objectives

- ◆ Replace obsolete computing equipment.
- ◆ Critical system availability.
- ◆ Replace CIP Management System.
- ◆ Maintain a Safety Scorecard above 90% for overall.

### Performance Measures

Summary	2014-15 Actual	2015-16 Projected	2016-17 Proposed	2017-18 Proposed	Justification
◆ Replace Obsolete Computers	30% of total computers	38% of total computers	25% of total computers	25% of total computers	Rotate Every 4 Years
◆ Critical Systems Availability	90%	95%	>90%	>90%	Minimum Business Impact
◆ Replace CIP Management System	5%	10%	100%	100%	Improve Business Processes
◆ Safety Scorecard	95%	100%	>90%	>90%	District Goal

# Information Technology

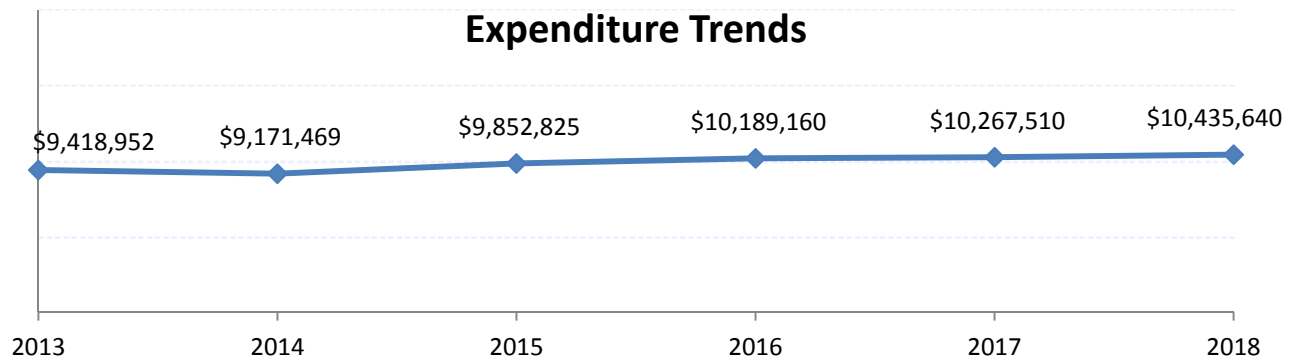
## Budget Overview

The FY 2016-17 & 2017-18 budgets for the Information Technology Division reflect an increase of 1% and an increase of 2% over the prior year, respectively. The increase is primarily due to increases in repairs & maintenance and service maintenance agreements. The increase is partially offset by the reduction in retirement costs and decreases in in-house reproduction services and other professional services.

<b>2015-16 Adjusted Budget - Total Operating Requirements</b>	<b>\$ 10,189,160</b>
<b>Salaries for Position Changes:</b>	
Transfer of Positions from/(to) Other Divisions	-
New or (decreased) FTE	-
<b>Changes in Personnel Expenses:</b>	
Other net salary adjustments (MOU-related, leave payoffs, vacancy, etc.)	30,300
Change in OCERS retirement costs	(372,400)
Change in group insurance costs	(6,000)
Other benefit cost adjustments	(63,600)
<b>Other Cost Adjustments:</b>	
Increase in small computer items	16,000
Decrease in in-house reproduction services	(122,000)
Decrease in training	(24,790)
Decrease in temporary services	(10,000)
Increase in software program consulting	48,000
Decrease in other professional services	(150,000)
Increase in repairs & maintenance services and materials	127,260
Increase in service maintenance agreements	552,000
Increase in telephone	15,000
Increase in outside equipment rental	38,070
<b>Aggregate change in Other Categories:</b>	
Aggregate change in other materials, supplies, and services	510
<b>2016-17 Proposed Budget - Total Operating Requirements</b>	<b>\$ 10,267,510</b>
<b>Changes in Personnel Expenses:</b>	
Net salary adjustments (MOU-related, leave payoffs, vacancy, etc.)	50,700
Change in OCERS retirement costs	4,800
Change in group insurance costs	34,900
Other benefit cost adjustments	(5,400)
<b>Other Cost Adjustments:</b>	
Decrease in software program consulting	(30,000)
Increase in service maintenance agreements	100,000
Increase in outside equipment rental	12,000
<b>Aggregate change in Other Categories:</b>	
Aggregate change in other materials, supplies, and services	1,130
<b>2017-18 Proposed Budget - Total Operating Requirements</b>	<b>\$ 10,435,640</b>

## 2016-17 & 2017-18 Budget

Operating Expenses By Category	2014-15 Actual	2015-16 Revised Budget	2015-16 Projected	2016-17 Proposed	Budget % Change	2017-18 Proposed	Budget % Change
Personnel	\$ 6,971,512	\$ 6,780,400	\$ 6,512,400	\$ 6,368,700	(6.07%)	\$ 6,453,700	1.33%
Supplies	928,881	1,266,280	1,056,630	1,136,280	(10.27%)	1,137,410	0.10%
Professional & Contractual Services	277,661	402,000	244,070	290,000	(27.86%)	260,000	(10.34%)
Research & Monitoring	-	-	-	-	-	-	-
Repairs & Maintenance	1,357,930	1,352,740	2,006,000	2,032,000	50.21%	2,132,000	4.92%
Utilities	315,172	385,000	350,000	400,000	3.90%	400,000	0.00%
Other	1,669	2,740	1,620	40,530	1379.20%	52,530	29.61%
<b>Total</b>	<b>\$ 9,852,825</b>	<b>\$ 10,189,160</b>	<b>\$ 10,170,720</b>	<b>\$ 10,267,510</b>	<b>0.77%</b>	<b>\$ 10,435,640</b>	<b>1.64%</b>

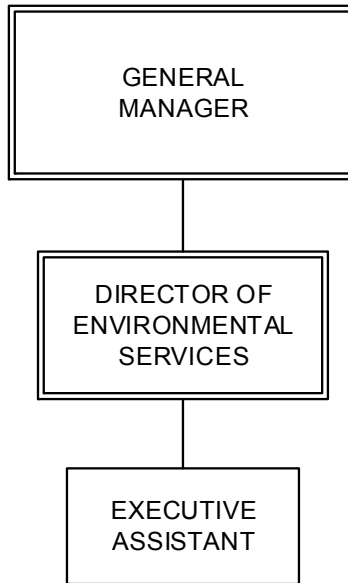


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# Environmental Services Administration

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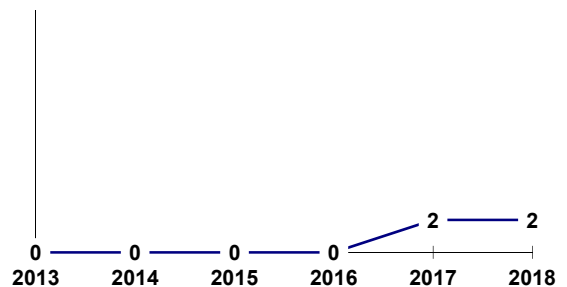
## Staffing Trends

### 2016-17 & 2017-18 Authorized FTE Positions

Executive Manager	1.00
Administrative / Clerical	1.00

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**Total** 2.00



# 2016-17 & 2017-18 Budget

## Service Description

The Environmental Services Administration Division provides leadership, support and oversight of the Environmental Services Department staff who are responsible for managing all of OCSD's environmental monitoring, regulatory, compliance and reporting elements. The Division's key role is to ensure the sanitation district meets the requirements of federal, state and local regulations for treated sewage discharge into the ocean, water recycling, air emissions, industrial waste, sewer system operations, land use controls and biosolids and stormwater management.

### 2015-16 Performance Objectives

- ◆ N/A – New division effective FY 2016-17

### 2015-16 Performance Results

- ◆ N/A

### 2016-17 & 2017-18 Performance Objectives

- ◆ Manage operating expenditures to within 96% to 100% of the approved budget.
- ◆ Ensure that reporting divisions achieve 90% of individual performance objectives.
- ◆ Ensure all environmental compliance reporting requirements are met on or before required submission date 100% of the time.
- ◆ Conduct audits of all major environmental permits at least once every 3 years.

### Performance Measures

Summary	2014-15 Actual	2015-16 Projected	2016-17 Proposed	2017-18 Proposed	Justification
◆ Manage Budget	N/A	N/A	96-100%	96-100%	In-house standard
◆ Department Performance Objectives	N/A	N/A	≥ 90%	≥ 90%	In-house standard
◆ Compliance Reporting Requirements	N/A	N/A	100%	100%	In-house standard
◆ Audit Environmental Permits Every 3 Years	N/A	N/A	100%	100%	In-house standard

# Environmental Services Administration

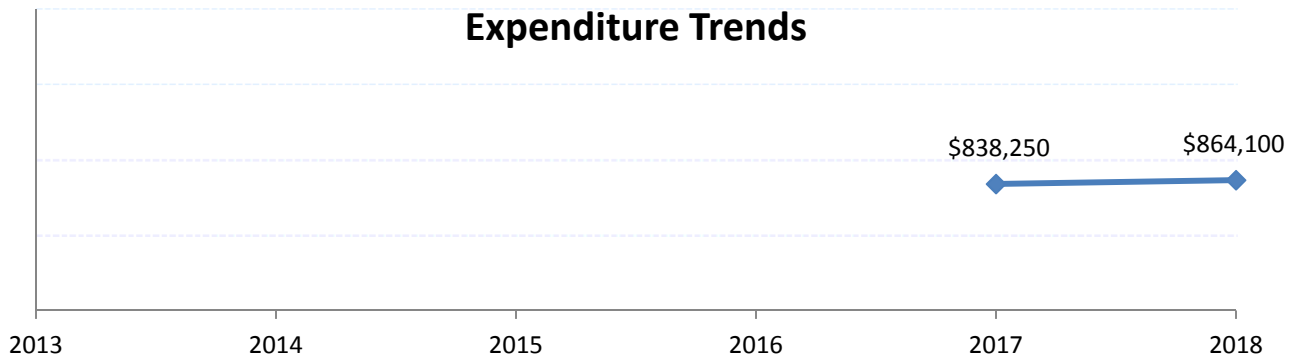
## Budget Overview

The FY 2016-17 budget for the newly created Environmental Services Administration Division is \$838,250. The major cost items included in this budget are two FTE positions reallocated from other divisions, as well as costs for research and monitoring. The FY 2017-18 budget reflects an increase of 3% primarily due to an increase in research and monitoring costs.

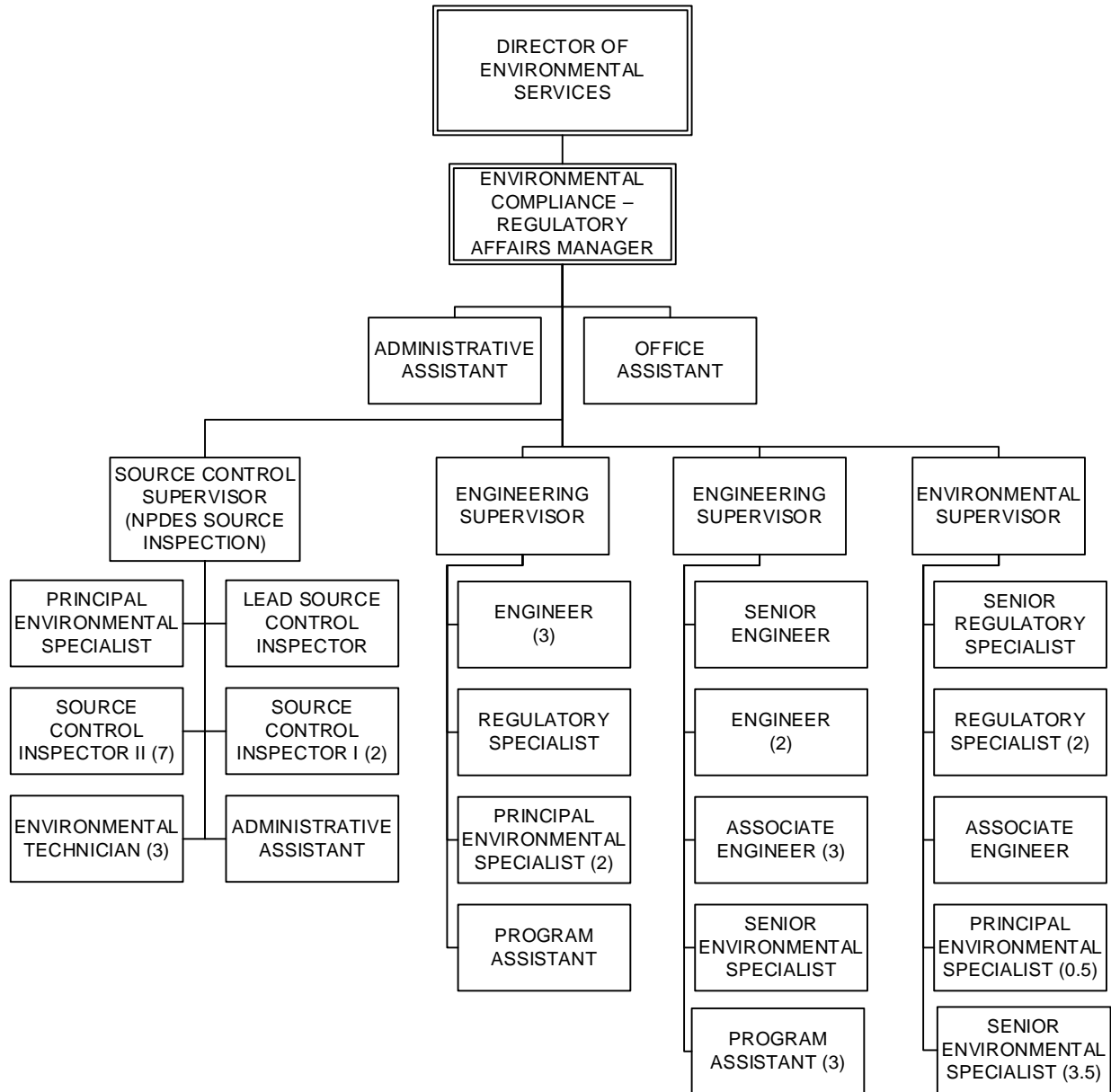
<b>2015-16 Adjusted Budget - Total Operating Requirements</b>	<b>\$ -</b>
<b>Salaries for Position Changes:</b>	
Transfer of Positions from/(to) Other Divisions	269,000
New or (decreased) FTE	-
<b>Changes in Personnel Expenses:</b>	
Other net salary adjustments (MOU-related, leave payoffs, vacancy, etc.)	53,900
Change in OCERS retirement costs	44,900
Change in group insurance costs	32,800
Other benefit cost adjustments	23,900
<b>Other Cost Adjustments:</b>	
Increase in training & meetings	7,350
Increase in research & monitoring	400,000
<b>Aggregate change in Other Categories:</b>	
Aggregate change in other materials, supplies, and services	6,400
<hr/>	
<b>2016-17 Proposed Budget - Total Operating Requirements</b>	<b>\$ 838,250</b>
<b>Changes in Personnel Expenses:</b>	
Net salary adjustments (MOU-related, leave payoffs, vacancy, etc.)	-
Change in OCERS retirement costs	(100)
Change in group insurance costs	1,500
Other benefit cost adjustments	(200)
<b>Other Cost Adjustments:</b>	
Increase in research & monitoring	25,000
<b>Aggregate change in Other Categories:</b>	
Aggregate change in other materials, supplies, and services	(350)
<hr/>	
<b>2017-18 Proposed Budget - Total Operating Requirements</b>	<b>\$ 864,100</b>

# 2016-17 & 2017-18 Budget

Operating Expenses By Category	2014-15 Actual	2015-16 Revised Budget	2015-16 Projected	2016-17 Proposed	Budget % Change	2017-18 Proposed	Budget % Change
Personnel	\$ -	\$ -	\$ -	\$ 424,500	-	\$ 425,700	0.28%
Supplies	-	-	-	10,750	-	10,400	(3.26%)
Professional & Contractual Services	-	-	-	2,000	-	2,000	0.00%
Research & Monitoring	-	-	-	400,000	-	425,000	6.25%
Repairs & Maintenance	-	-	-	-	-	-	-
Utilities	-	-	-	-	-	-	-
Other	-	-	-	1,000	-	1,000	0.00%
<b>Total</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 838,250</b>	<b>-</b>	<b>\$ 864,100</b>	<b>3.08%</b>



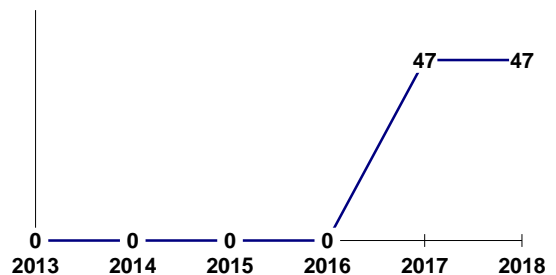




### 2016-17 & 2017-18 Authorized FTE Positions

Manager	1.0
Supervisors / Professionals	26.0
Technical Staff	13.0
Administrative / Clerical	7.0
<b>Total</b>	<b>47.0</b>

### Staffing Trends



# 2016-17 & 2017-18 Budget

## Service Description

The Environmental Compliance Division fulfills regulatory requirements with proper biosolids management, air quality controls, federal pretreatment regulations, stormwater guidelines, non-industrial source control, and water reclamation and reuse. This is done in the most cost effective, practical, and beneficial manner that meets regulatory requirements, protects the Sanitation District's assets, employees, and ocean discharge.

### 2015-16 Performance Objectives

- ◆ Meet 100% of regulatory deadlines for required compliance reports and permit applications.
- ◆ Maintain Environmental Compliance Awareness Program (ECAP) for all existing program areas.
- ◆ Develop and maintain regulatory tracking mechanism covering all media.
- ◆ Maintain Certified Environmental Management System for Biosolids.
- ◆ Issue and renew 100% of the industrial wastewater permits prior to the expiration date.
- ◆ Continue to implement the fats, oil & grease (FOG) control program and strategies on a regional basis in conformance with the Wastewater Discharge Requirements Order.

### 2015-16 Performance Results

- ◆ To date 100% compliance.
- ◆ Completed.
- ◆ Completed.
- ◆ Successfully completed recertification via a 10-year audit of the program.
- ◆ Staff issued and renewed 100% of the industrial wastewater permits prior to the expiration dates.
- ◆ Staff implements the fats, oil & grease (FOG) control program in conformance with the Wastewater Discharged Requirements Order for local sewers only (Tustin, North Tustin).

### 2016-17 & 2017-18 Performance Objectives

- ◆ Meet 100% of regulatory deadlines for required compliance reports and permit applications.
- ◆ Maintain ECAP for all existing program areas. Report 100% past deadlines to Director monthly.
- ◆ Implement new Local Limits and Prohibitions into all permits by June 2018.
- ◆ Issue and renew 100% of the industrial wastewater permits prior to the expiration date.
- ◆ Complete all assigned inspections and monitoring of Class I industrial permit holders.
- ◆ Continue to implement the fats, oil & grease (FOG) control program and strategies on a regional basis in conformance with the Wastewater Discharge Requirements Order.
- ◆ Complete 100% of Safety Scorecard requirements each quarter.

### Performance Measures

Summary	2014-15 Actual	2015-16 Projected	2016-17 Proposed	2017-18 Proposed	Justification
◆ Meet 100% of Regulatory Deadlines (Permits)	N/A	100%	100%	100%	Permit Requirement
◆ ECAP Implementation	N/A	100%	100%	100%	Regulatory Requirement
◆ Implement New Local Limits and Ordinance Update	N/A	N/A	Local Limits	Ordinance	Federal Pretreatment Requirement
◆ Industrial Permit Issuance/Renewal	100%	100%	100%	100%	Federal Rule and Permit Requirement
◆ Inspections/Monitoring	N/A	N/A	100%	100%	Federal Rule and Permit Requirement
◆ Fats, Oil & Grease Program	100%	100%	100%	100%	Permit Requirement
◆ Safety Scorecard	N/A	N/A	100%	100%	In-house Standard

# Environmental Compliance

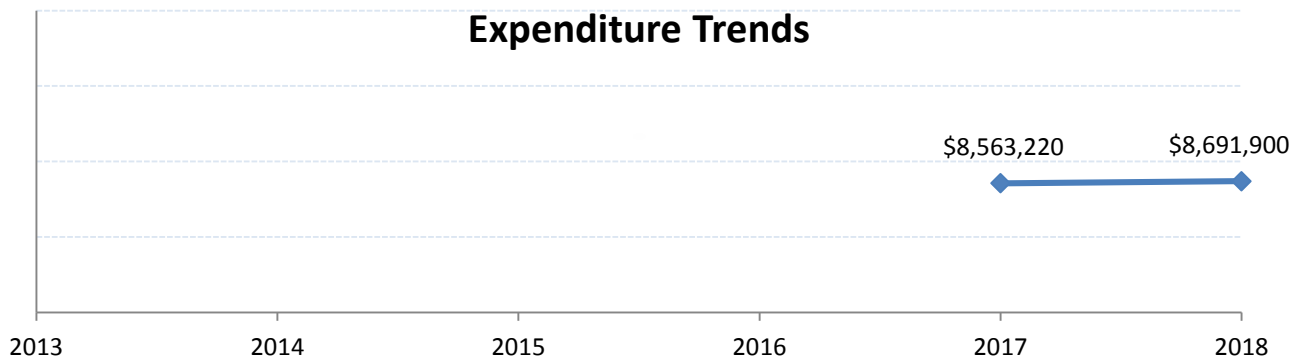
## Budget Overview

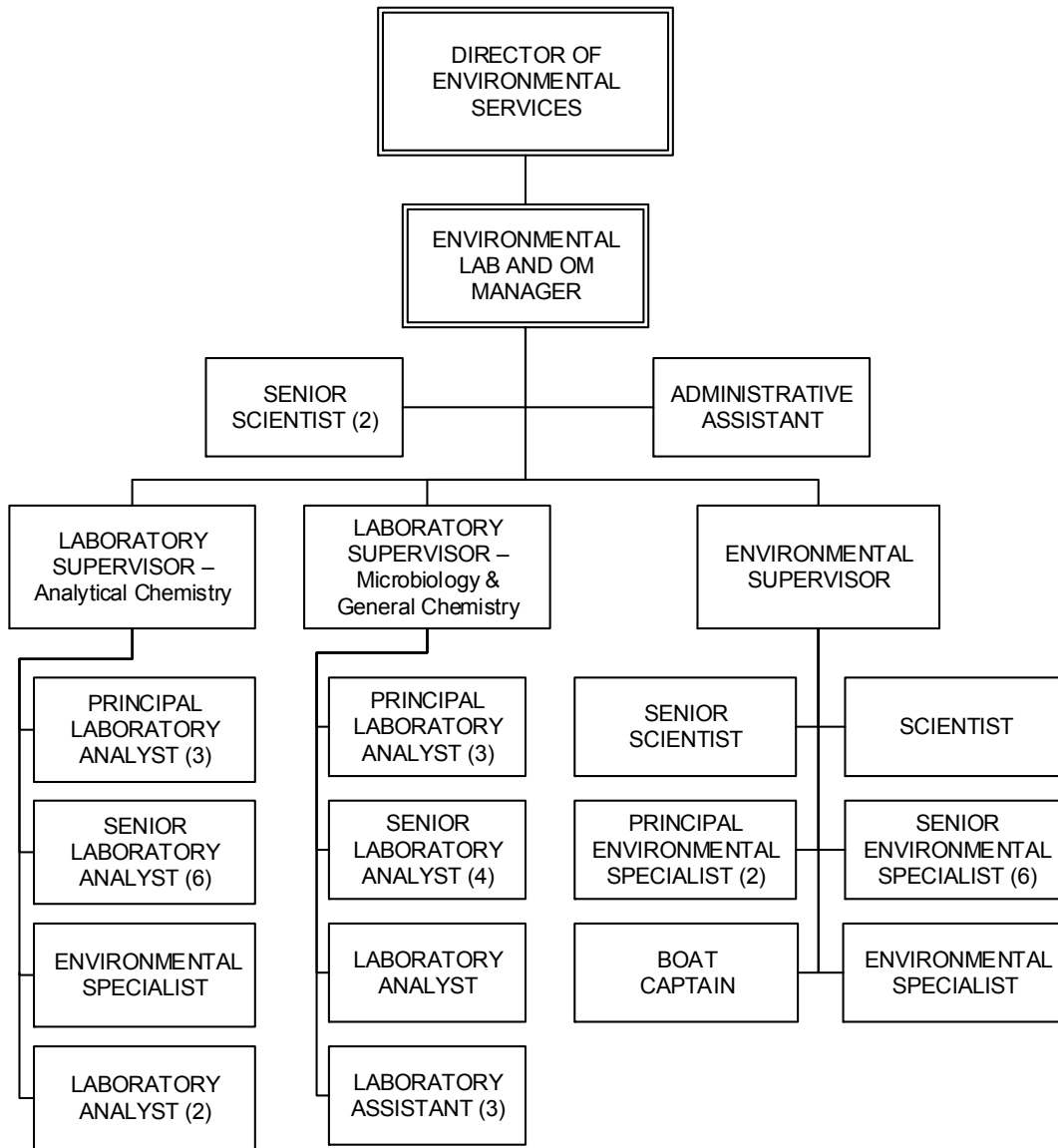
The FY 2016-17 budget for the newly created Environmental Compliance Division is \$8,563,220. This new division is a consolidation of the previous NPDES Source Inspection and Environmental Compliance divisions. The major cost items included in this budget are 47 FTE positions reallocated from other divisions, as well as costs for regulatory operating fees, legal services and other professional services. The FY 2017-18 budget reflects an increase of 2% over the prior year. The increase is primarily due to increases in salaries and benefits, auditing and accounting services, and other professional services, partially offset by a decrease in legal services.

<b>2015-16 Adjusted Budget - Total Operating Requirements</b>	<b>\$ -</b>
<b>Salaries for Position Changes:</b>	
Transfer of Positions from/(to) Other Divisions	4,774,200
New or (decreased) FTE	-
<b>Changes in Personnel Expenses:</b>	
Other net salary adjustments (MOU-related, leave payoffs, vacancy, etc.)	399,500
Change in OCERS retirement costs	744,500
Change in group insurance costs	731,500
Other benefit cost adjustments	296,700
<b>Other Cost Adjustments:</b>	
Increase in administrative expense	13,830
Increase in training & meetings	52,220
Increase in tools	25,200
Increase in lab chemicals & supplies	27,500
Increase in outside lab services	18,000
Increase in temporary services	30,000
Increase in legal services	300,000
Increase in auditing and accounting services	65,000
Increase in enviro scientific consulting services	85,000
Increase in advocacy efforts	26,000
Increase in other professional services	170,000
Increase in air quality monitoring	85,000
Increase in regulatory operating fees	708,900
<b>Aggregate change in Other Categories:</b>	
Aggregate change in other materials, supplies, and services	10,170
<hr/>	
<b>2016-17 Proposed Budget - Total Operating Requirements</b>	<b>\$ 8,563,220</b>
<b>Changes in Personnel Expenses:</b>	
Net salary adjustments (MOU-related, leave payoffs, vacancy, etc.)	38,300
Change in OCERS retirement costs	4,000
Change in group insurance costs	36,900
Other benefit cost adjustments	(5,700)
<b>Other Cost Adjustments:</b>	
Decrease in legal services	(150,000)
Increase in auditing and accounting services	100,000
increase in other professional services	90,000
Increase in regulatory operating fees	14,180
<b>Aggregate change in Other Categories:</b>	
Aggregate change in other materials, supplies, and services	1,000
<hr/>	
<b>2017-18 Proposed Budget - Total Operating Requirements</b>	<b>\$ 8,691,900</b>

# 2016-17 & 2017-18 Budget

Operating Expenses By Category	2014-15 Actual	2015-16 Revised Budget	2015-16 Projected	2016-17 Proposed	Budget % Change	2017-18 Proposed	Budget % Change
Personnel	\$ -	\$ -	\$ -	\$ 6,946,400	-	\$ 7,019,900	1.06%
Supplies	-	-	-	126,950	-	127,950	0.79%
Professional & Contractual Services	-	-	-	694,000	-	734,000	5.76%
Research & Monitoring	-	-	-	85,000	-	85,000	0.00%
Repairs & Maintenance	-	-	-	-	-	-	-
Utilities	-	-	-	-	-	-	-
Other	-	-	-	710,870	-	725,050	1.99%
<b>Total</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 8,563,220</b>	<b>-</b>	<b>\$ 8,691,900</b>	<b>1.50%</b>



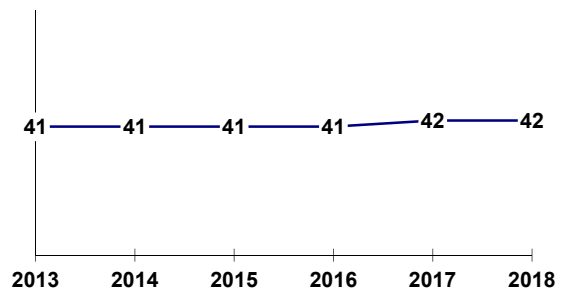


Staffing Trends

**2016-17 & 2017-18 Authorized FTE Positions**

Manager	1.0
Supervisors / Professionals	37.0
Technical Staff	3.0
Administrative / Clerical	1.0

**Total 42.0**



# 2016-17 & 2017-18 Budget

## Service Description

The mission of the Laboratory and Ocean Monitoring Division is to perform sampling, monitoring, analysis, evaluation and recommendations for collection system, treatment processes, air samples, coastal water quality, marine sediments and the fish populations within the influence of OCSD's wastewater discharge and comparison sites to evaluate and address related issues of concern to the District in order to protect and preserve the environment and public health.

### 2015-16 Performance Objectives

- ◆ Meet or surpass efficiency improvement as measured by internal standards and industry benchmarking with other laboratories.
- ◆ Successful performance on proficiency test standards 100% correctly on first attempt.
- ◆ Manage division controllable costs to 98% to 102% of projection.
- ◆ Support of GWRS, special projects and routine monitoring requirements.
- ◆ Meet all NPDES Permit compliance standards, Strategic Initiatives and Strategic Process Studies to advance OCSD's Mission.

### 2015-16 Performance Results

- ◆ Surpassed all established comparison laboratory benchmarks and internal standards.
- ◆ Met all proficiency test standards 100% on first attempt. Internal audits provided positive feedback for each section.
- ◆ Division budget was 100.55% of projection.
- ◆ All requests for OCSD assistance to support GWRS and special projects were met and performance feedback was excellent.
- ◆ No permit deficiencies were found this year and all proposed Strategic Project Studies were completed on schedule.

### 2016-17 & 2017-18 Performance Objectives

- ◆ Continued efficiency improvement as measured by internal standards and industry benchmarking with other laboratories.
- ◆ Successful performance on proficiency test standards 100% correctly in no more than two attempts and achieve no less than 95% correct results on the first attempt.
- ◆ Manage division controllable costs to within 5% of projection.
- ◆ Support of GWRS, special projects and routine monitoring requirements.
- ◆ Meet all NPDES Permit compliance standards, Strategic Initiatives and Strategic Process Studies to advance OCSD's Mission.
- ◆ Complete 100% of Safety Scorecard requirements each quarter.

Summary	Performance Measures				Justification
	2014-15 Actual	2015-16 Projected	2016-17 Proposed	2017-18 Proposed	
◆ Laboratory Productivity	100%	100%	100%	100%	Internal and external benchmark comparison.
◆ Laboratory Standards	100%	100%	100%	100%	Blind check standards.
◆ Budget	95.66%	≤100%	≤100%	≤100%	Percent of budget spent
◆ Support GWRS	100%	100%	100%	100%	Percent of requested work completed
◆ Permit Compliance	100%	100%	100%	100%	Compliance measure
◆ Safety Scorecard	98.5%	100%	100%	100%	In-house standard

# Laboratory and Ocean Monitoring

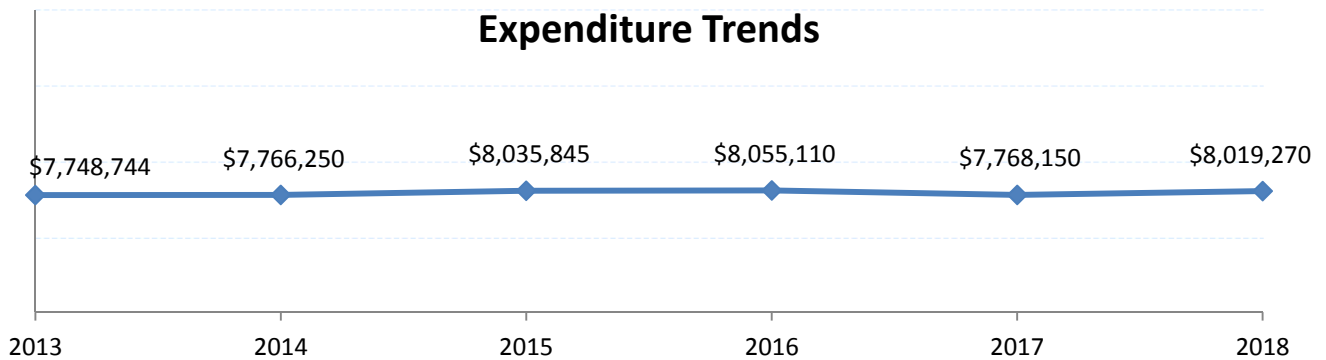
## Budget Overview

The FY 2016-17 budget for the Laboratory and Ocean Monitoring Division is \$7,768,150. Prior to FY 2016-17, this division was a part of the Operations and Maintenance Department. The major cost items included in this budget are salaries and benefits for 42 FTE positions, as well as costs for lab chemicals and supplies, electricity, research and monitoring, repairs and maintenance, and outside lab services. The FY 2017-18 budget reflects an increase of 3% over the prior year primarily due to increases in salaries and benefits, electricity costs, research and monitoring, and outside lab services.

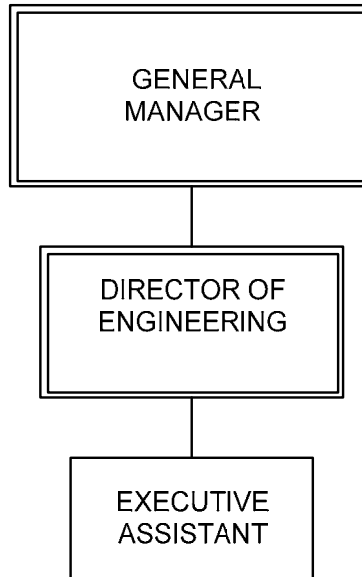
<b>2015-16 Adjusted Budget - Total Operating Requirements</b>	<b>\$ -</b>
<b>Salaries for Position Changes:</b>	
Transfer of Positions from/(to) Other Divisions	4,207,100
New or (decreased) FTE	-
<b>Changes in Personnel Expenses:</b>	
Other net salary adjustments (MOU-related, leave payoffs, vacancy, etc.)	185,000
Change in OCERS retirement costs	644,300
Change in group insurance costs	650,400
Other benefit cost adjustments	181,400
<b>Other Cost Adjustments:</b>	
Increase in administrative expense	16,300
Increase in training & meetings	37,650
Increase in diesel fuel	25,000
Increase in safety equipment/tools	17,500
Increase in lab chemicals and supplies	525,000
Increase in outside lab services	145,000
Increase in enviro scientific consulting services	40,000
Increase in research & monitoring	315,000
Increase in repairs and maintenance	255,000
Increase in electricity costs	448,000
Increase in insurance premiums	32,000
Increase in miscellaneous operating expenses	30,000
<b>Aggregate change in Other Categories:</b>	
Aggregate change in other materials, supplies, and services	13,500
<hr/>	
<b>2016-17 Proposed Budget - Total Operating Requirements</b>	<b>\$ 7,768,150</b>
<b>Changes in Personnel Expenses:</b>	
Net salary adjustments (MOU-related, leave payoffs, vacancy, etc.)	41,200
Change in OCERS retirement costs	4,200
Change in group insurance costs	33,200
Other benefit cost adjustments	(5,100)
<b>Other Cost Adjustments:</b>	
Increase in lab chemicals and supplies	10,500
Increase in outside lab services	45,000
Increase in research & monitoring	47,400
Increase in repairs and maintenance	15,000
Increase in electricity costs	56,000
<b>Aggregate change in Other Categories:</b>	
Aggregate change in other materials, supplies, and services	3,720
<hr/>	
<b>2017-18 Proposed Budget - Total Operating Requirements</b>	<b>\$ 8,019,270</b>

# 2016-17 & 2017-18 Budget

Operating Expenses By Category	2014-15 Actual	2015-16 Revised Budget	2015-16 Projected	2016-17 Proposed	Budget % Change	2017-18 Proposed	Budget % Change
Personnel	\$ 6,326,007	\$ 6,085,000	\$ 6,221,700	\$ 5,868,200	(3.56%)	\$ 5,941,700	1.25%
Supplies	610,189	706,360	619,150	630,450	(10.75%)	643,180	2.02%
Professional & Contractual Services	125,083	230,000	186,000	185,000	(19.57%)	230,800	24.76%
Research & Monitoring	315,633	345,000	235,000	315,000	(8.70%)	362,400	15.05%
Repairs & Maintenance	213,965	210,000	205,000	255,000	21.43%	270,000	5.88%
Utilities	393,685	406,000	425,000	448,000	10.34%	504,000	12.50%
Other	51,283	72,750	61,250	66,500	(8.59%)	67,190	1.04%
<b>Total</b>	<b>\$ 8,035,845</b>	<b>\$ 8,055,110</b>	<b>\$ 7,953,100</b>	<b>\$ 7,768,150</b>	<b>(3.56%)</b>	<b>\$ 8,019,270</b>	<b>3.23%</b>







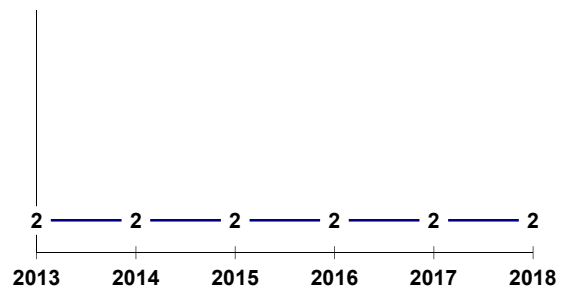
### Staffing Trends

#### 2016-17 & 2017-18 Authorized FTE Positions

Executive Manager	1.0
Administrative / Clerical	1.0

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**Total** 2.0



# 2016-17 & 2017-18 Budget

## Service Description

The mission of the Engineering Administration Division is to deliver world class engineered projects through skilled staff, technical excellence, proactive project planning, effective project delivery, effective communication, and critical thinking.

### 2015-16 Performance Objectives

- ◆ Expend 90 to 100% of project annual CIP cash flow.
- ◆ Manage operating expenditures to within 96 to 100% of approved budget.
- ◆ Ensure that reporting divisions achieve 90% of individual performance objectives.

### 2015-16 Performance Results

- ◆ Projected at 78.3%.
- ◆ Projected to be < 100%.
- ◆ Reporting divisions estimate achieving 90% of performance measures.

### 2016-17 & 2017-18 Performance Objectives

- ◆ Expend 90 to 100% of project annual CIP cash flow.
- ◆ Manage operating expenditures to within 96% to 100% of the approved budget.
- ◆ Ensure that reporting divisions achieve 90% of individual performance objectives.
- ◆ Prepare and maintain a 20-year District-wide capital plan coordinating research, condition assessment, regulatory requirements, changing levels of service, and projected capacity requirements.

### Performance Measures

Summary	2014-15 Actual	2015-16 Projected	2016-17 Proposed	2017-18 Proposed	Justification
◆ Manage Project Annual Cash Flows (CIP), Min 90-100%	105%	78%	90%	90%	In-house standard
◆ Manage Budget 96-100%	28%	90%	96-100%	96-100%	In-house standard
◆ Ensure Reporting Divisions Achieve Performance Measures, Min 90%	83%	90% min	90% min	90% min	In-house standard
◆ Prepare & Maintain 20-Year District-Wide Capital Plan	Yes	Yes	Yes	Yes	In-house standard

# Engineering Administration

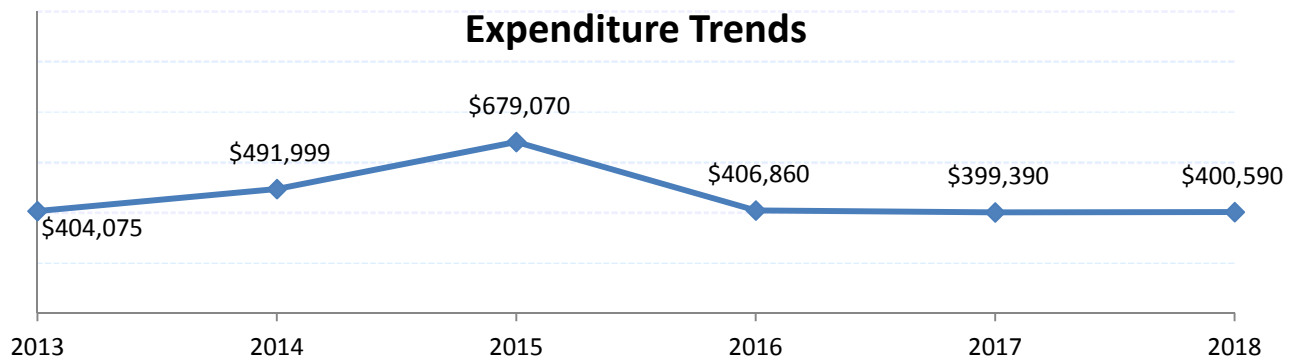
## Budget Overview

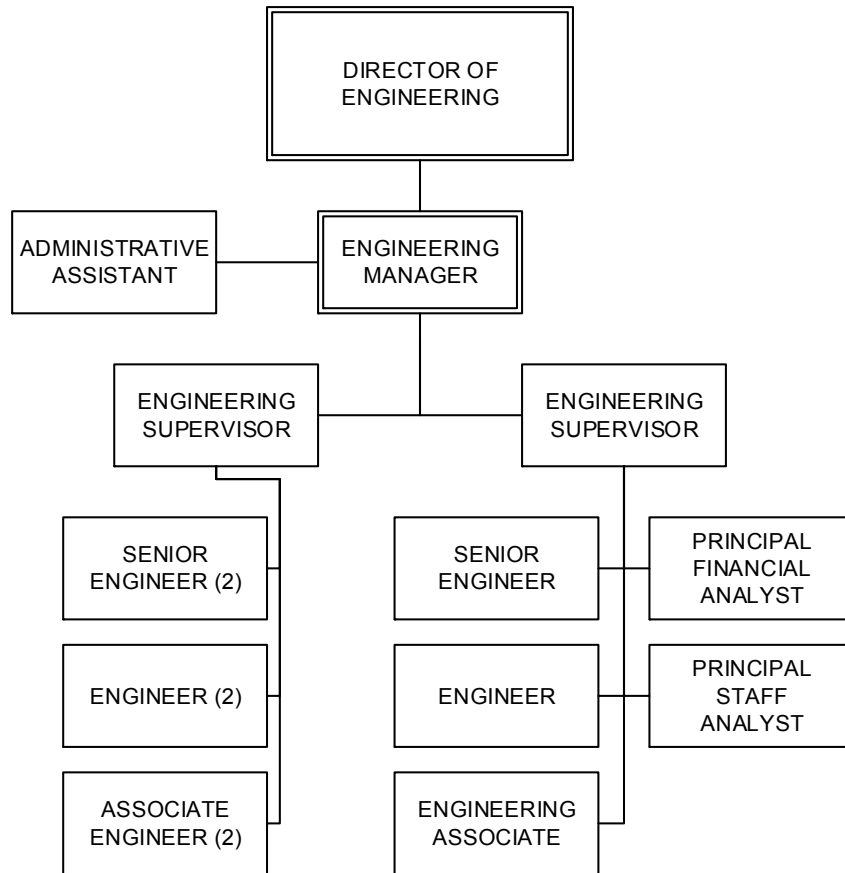
The FY 2016-17 & 2017-18 budgets for the Engineering Administration Division reflect a decrease of 2% and an increase of 0.3% over the prior year, respectively. There are no significant changes affecting the budget for this division.

<b>2015-16 Adjusted Budget - Total Operating Requirements</b>	<b>\$ 406,860</b>
<i>Salaries for Position Changes:</i>	
Transfer of Positions from/(to) Other Divisions	-
New or (decreased) FTE	-
<i>Changes in Personnel Expenses:</i>	
Other net salary adjustments (MOU-related, leave payoffs, vacancy, etc.)	2,400
Change in OCERS retirement costs	(18,400)
Change in group insurance costs	(200)
Other benefit cost adjustments	(1,500)
<i>Other Cost Adjustments:</i>	
Increase in legal services	10,000
<i>Aggregate change in Other Categories:</i>	
Aggregate change in other materials, supplies, and services	230
<b>2016-17 Proposed Budget - Total Operating Requirements</b>	<b>\$ 399,390</b>
<i>Changes in Personnel Expenses:</i>	
Net salary adjustments (MOU-related, leave payoffs, vacancy, etc.)	-
Change in OCERS retirement costs	(100)
Change in group insurance costs	1,500
Other benefit cost adjustments	(200)
<i>Other Cost Adjustments:</i>	
No other significant cost changes	
<i>Aggregate change in Other Categories:</i>	
Aggregate change in other materials, supplies, and services	-
<b>2017-18 Proposed Budget - Total Operating Requirements</b>	<b>\$ 400,590</b>

## 2016-17 & 2017-18 Budget

Operating Expenses By Category	2014-15 Actual	2015-16 Revised Budget	2015-16 Projected	2016-17 Proposed	Budget % Change	2017-18 Proposed	Budget % Change
Personnel	\$ 675,558	\$ 399,700	\$ 464,000	\$ 382,000	(4.43%)	\$ 383,200	0.31%
Supplies	3,512	7,120	7,120	7,350	3.23%	7,350	0.00%
Professional & Contractual Services	-	-	-	10,000	-	10,000	0.00%
Research & Monitoring	-	-	-	-	-	-	-
Repairs & Maintenance	-	-	-	-	-	-	-
Utilities	-	-	-	-	-	-	-
Other	-	40	40	40	0.00%	40	0.00%
<b>Total</b>	<b>\$ 679,070</b>	<b>\$ 406,860</b>	<b>\$ 471,160</b>	<b>\$ 399,390</b>	<b>(1.84%)</b>	<b>\$ 400,590</b>	<b>0.30%</b>

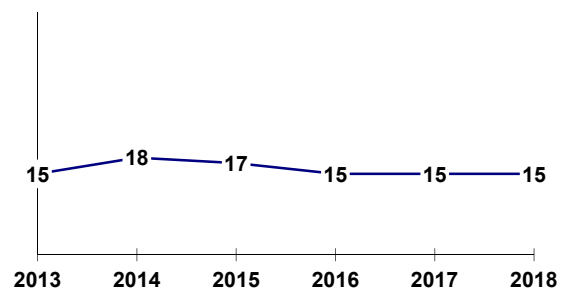




**2016-17 & 2017-18 Authorized FTE Positions**

Manager	1.0
Supervisors / Professionals	12.0
Administrative / Clerical	2.0
<b>Total</b>	<b>15.0</b>

**Staffing Trends**



# 2016-17 & 2017-18 Budget

## Service Description

The mission of the Planning Division is to provide a comprehensive Capital Improvement Program for the District considering projected capacity requirements, condition of current asset, projected regulatory and level of service changes, and research or business opportunities. The Division is also responsible for water resources management, California Environmental Quality Act preparation and review, annexations, connection permitting, easements, and interagency agreements.

### 2015-16 Performance Objectives

- ◆ Ensure that expenditures are managed to within 96 to 100% of approved budget.
- ◆ Process 95% of connection permit applications within one day of complete application submittal.
- ◆ Facilitate the District-wide project clearinghouse.
- ◆ Prepare and maintain a 20-year District-wide capital plan coordinating research, condition assessment, regulatory requirements, changing levels of service, and projected capacity requirements.
- ◆ Response to 100% of environmental correspondence within 45 days.

### 2015-16 Performance Results

- ◆ Projected to be 90-100%.
- ◆ Greater than 95% of connection permits were issued within one day.
- ◆ Clearinghouse meets biweekly to disposition all necessary capital & maintenance repair work.
- ◆ The research program & condition assessment is refocused to support future major projects. The CIP program has been filled in for eight years, building to 20 years.
- ◆ 100% of environmental correspondence was responded to within 45 days.

### 2016-17 & 2017-18 Performance Objectives

- ◆ Manage operating expenditures to within 96% to 100% of the approved budget.
- ◆ Process 95% of connection permit applications within one day of complete application submittal.
- ◆ Facilitate the District-wide project clearinghouse to properly disposition maintenance, repair, replacement and capital expansion work into projects. Meet regularly and clearly assign tasks.
- ◆ Prepare and maintain a 20-year District-wide capital plan coordinating research, condition assessment, regulatory requirements, changing levels of service, and projected capacity requirements.
- ◆ Response to 100% of environmental correspondence within 45 days.
- ◆ Complete comprehensive Facilities Master Plan.

Summary	Performance Measures				Justification
	2014-15 Actual	2015-16 Projected	2016-17 Proposed	2017-18 Proposed	
◆ Manage Budget	67%	75%	96-100%	96-100%	In-house standard
◆ Process Connection Permits Within One Day	100%	100%	100%	100%	In-house standard
◆ Facilitate Project Clearinghouse	Yes	Yes	Yes	Yes	In-house standard
◆ Prepare and Maintain a 20-Year District-Wide Capital Plan	Yes	Yes	Yes	Yes	In-house standard
◆ CEQA Correspondence	100%	100%	100%	100%	CEQA requirement
◆ Master Plan	N/A	N/A	Yes	Yes	In-house standard

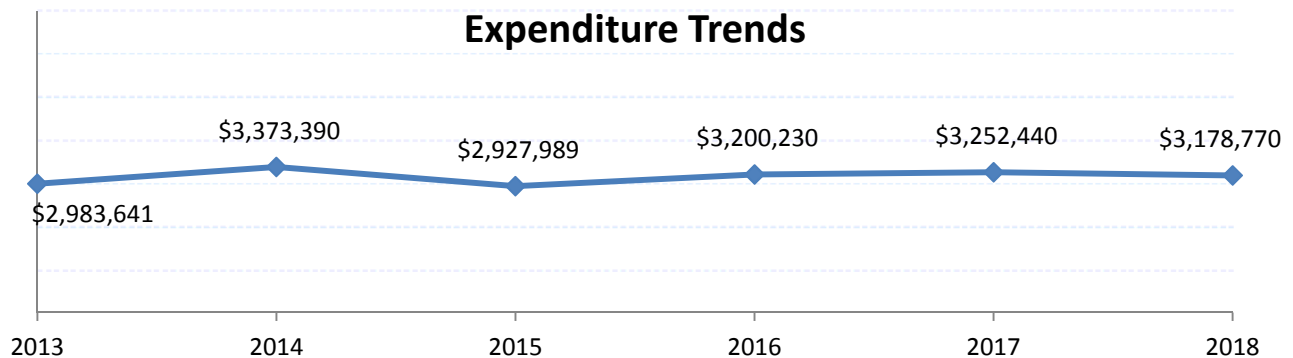
## Budget Overview

The FY 2016-17 & 2017-18 budgets for the Planning Division reflect an increase of 2% and a decrease of 2% over the prior year, respectively. The increase is primarily due to salary and benefits adjustments and an increase in legal services.

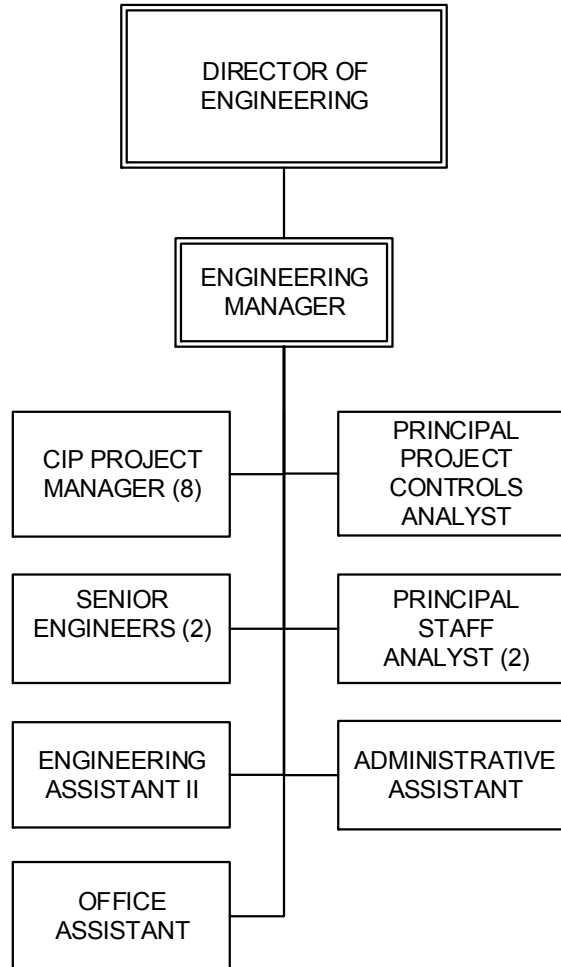
<b>2015-16 Adjusted Budget - Total Operating Requirements</b>	<b>\$ 3,200,230</b>
<b>Salaries for Position Changes:</b>	
Transfer of Positions from/(to) Other Divisions	131,400
New or (decreased) FTE	-
<b>Changes in Personnel Expenses:</b>	
Other net salary adjustments (MOU-related, leave payoffs, vacancy, etc.)	59,500
Change in OCERS retirement costs	(119,200)
Change in group insurance costs	14,700
Other benefit cost adjustments	(7,100)
<b>Other Cost Adjustments:</b>	
Decrease in memberships	(90,650)
Decrease in meetings	(7,000)
Increase in temporary services	30,000
Increase in other contractual services	25,000
Increase in legal services	50,000
Decrease in engineering services	(35,000)
<b>Aggregate change in Other Categories:</b>	
Aggregate change in other materials, supplies, and services	560
<b>2016-17 Proposed Budget - Total Operating Requirements</b>	<b>\$ 3,252,440</b>
<b>Changes in Personnel Expenses:</b>	
Net salary adjustments (MOU-related, leave payoffs, vacancy, etc.)	11,400
Change in OCERS retirement costs	1,000
Change in group insurance costs	12,500
Other benefit cost adjustments	(1,900)
<b>Other Cost Adjustments:</b>	
Decrease in training	(1,680)
Decrease in temporary services	(30,000)
Decrease in other contractual services	(25,000)
Decrease in legal services	(50,000)
Increase in engineering services	10,000
<b>Aggregate change in Other Categories:</b>	
Aggregate change in other materials, supplies, and services	10
<b>2017-18 Proposed Budget - Total Operating Requirements</b>	<b>\$ 3,178,770</b>

## 2016-17 & 2017-18 Budget

Operating Expenses By Category	2014-15 Actual	2015-16 Revised Budget	2015-16 Projected	2016-17 Proposed	Budget % Change	2017-18 Proposed	Budget % Change
Personnel	\$ 2,567,040	\$ 2,646,600	\$ 2,823,100	\$ 2,725,900	3.00%	\$ 2,748,900	0.84%
Supplies	293,568	351,310	261,410	255,740	(27.20%)	254,070	(0.65%)
Professional & Contractual Services	66,305	200,000	151,100	270,000	35.00%	175,000	(35.19%)
Research & Monitoring	-	-	-	-	-	-	-
Repairs & Maintenance	52	-	-	-	-	-	-
Utilities	-	-	-	-	-	-	-
Other	1,024	2,320	590	800	(65.52%)	800	0.00%
<b>Total</b>	<b>\$ 2,927,989</b>	<b>\$ 3,200,230</b>	<b>\$ 3,236,200</b>	<b>\$ 3,252,440</b>	<b>1.63%</b>	<b>\$ 3,178,770</b>	<b>(2.27%)</b>







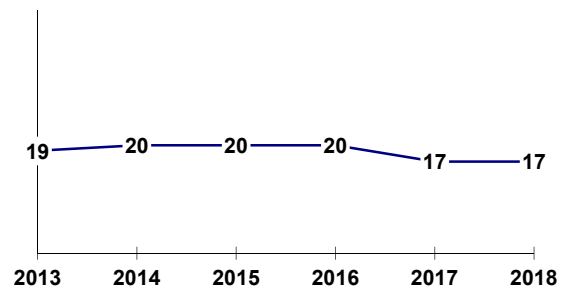
**Staffing Trends**

**2016-17 & 2017-18 Authorized FTE Positions**

Manager	1.00
Supervisors / Professionals	13.00
Administrative / Clerical	3.00

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**Total 17.00**



# 2016-17 & 2017-18 Budget

## Service Description

The mission of the Project Management Office (PMO) Division is to be responsible for managing the design and construction of new collection and treatment and disposal facilities plus the rehabilitation of older facilities to ensure the safe, cost effective transport, and treatment of influent/effluent. This division is responsible for the delivery of capital projects from the preliminary design stages through closeout of construction. The PMO provides standards, processes, and methodologies to improve project quality, cost and timeliness.

### 2015-16 Performance Objectives

- ◆ Ensure that the division's expenditures are managed to 90-100% of the proposed budget.
- ◆ Expend 90 to 100% of project annual CIP cash flow.
- ◆ Maintain or improve non-construction costs at 35% or less.
- ◆ Develop Program Risk Register to improve risk tracking, consistency, and transparency.
- ◆ Review CIP performance and reporting metrics to align with program needs and goals.
- ◆ Develop plan for Admin Facility implementation.

### 2015-16 Performance Results

- ◆ Projected to be 90-100%
- ◆ Projected at 78.3%
- ◆ 35.1% for all closed, active and future projects
- ◆ Not developed
- ◆ New metrics developed – Combined Advertising Variance and Combined Completion Variances characterize the dollar weighted schedule impact for design and construction projects respectively.
- ◆ Project P1-128 was approved by the Board in October. The RFP for design was advertised in December 2015

### 2016-17 & 2017-18 Performance Objectives

- ◆ Manage operating expenditures to within 96 to 100% of approved budget.
- ◆ Expend 85%-105% of budgeted CIP expenditures for projects managed by Divisions 740 and 750.
- ◆ Manage non-construction costs for active projects to less than 37.5% of construction costs.
- ◆ Maintain a Combined Advertising Variance of less than 30 days.
- ◆ Maintain a Combined Completion Variance of less than 120 days.

### Performance Measures

Summary	2014-15 Actual	2015-16 Projected	2016-17 Proposed	2017-18 Proposed	Justification
◆ Manage Division Budget	79%	41%	96-100%	96-100%	In-house standard
◆ Expend 85-105% of Project Expenditures	105%	78.3%	85-105%	85-105%	In-house standard
◆ Manage Non-Construction Costs	N/A	37.0%	<37.5%	< 37.5%	In-house standard
◆ Combined Advertising Variance of < 30 days	N/A	13	<30	<30	In-house standard
◆ Combined Completion Variance of < 120 days	N/A	137	<120	<120	In-house standard

# Project Management Office

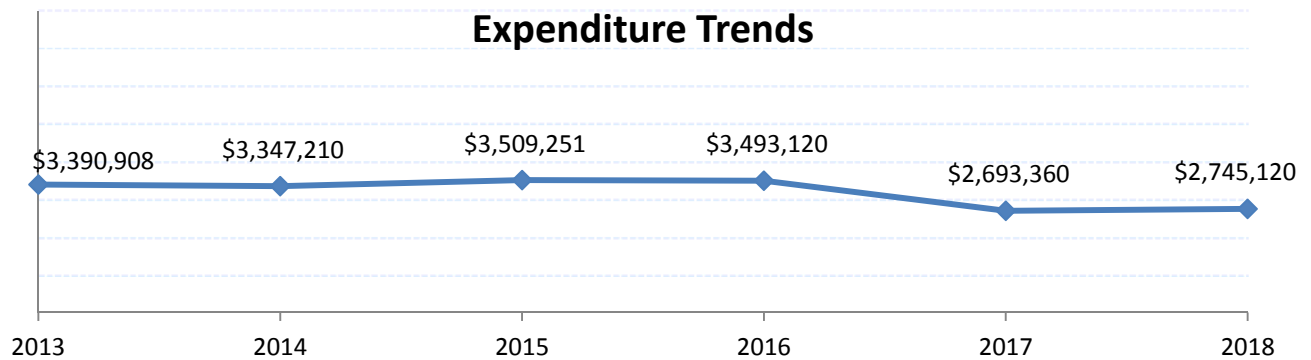
## Budget Overview

The FY 2016-17 & 2017-18 budgets for the Project Management Office Division reflect a decrease of 23% and an increase of 2% over the prior year, respectively. The decrease is primarily due to the transfer of three FTE positions to other divisions and the reduction in retirement costs.

<b>2015-16 Adjusted Budget - Total Operating Requirements</b>	<b>\$ 3,493,120</b>
<i><b>Salaries for Position Changes:</b></i>	
Transfer of Positions from/(to) Other Divisions	(472,000)
New or (decreased) FTE	108,100
<i><b>Changes in Personnel Expenses:</b></i>	
Other net salary adjustments (MOU-related, leave payoffs, vacancy, etc.)	(100,100)
Change in OCERS retirement costs	(273,430)
Change in group insurance costs	(51,400)
Other benefit cost adjustments	(16,400)
<i><b>Other Cost Adjustments:</b></i>	
Increase in memberships	3,280
Increase in training & meeting	2,160
<i><b>Aggregate change in Other Categories:</b></i>	
Aggregate change in other materials, supplies, and services	30
<b>2016-17 Proposed Budget - Total Operating Requirements</b>	<b>\$ 2,693,360</b>
<i><b>Changes in Personnel Expenses:</b></i>	
Net salary adjustments (MOU-related, leave payoffs, vacancy, etc.)	35,900
Change in OCERS retirement costs	3,800
Change in group insurance costs	13,800
Other benefit cost adjustments	(2,000)
<i><b>Other Cost Adjustments:</b></i>	
No other significant cost changes	
<i><b>Aggregate change in Other Categories:</b></i>	
Aggregate change in other materials, supplies, and services	260
<b>2017-18 Proposed Budget - Total Operating Requirements</b>	<b>\$ 2,745,120</b>

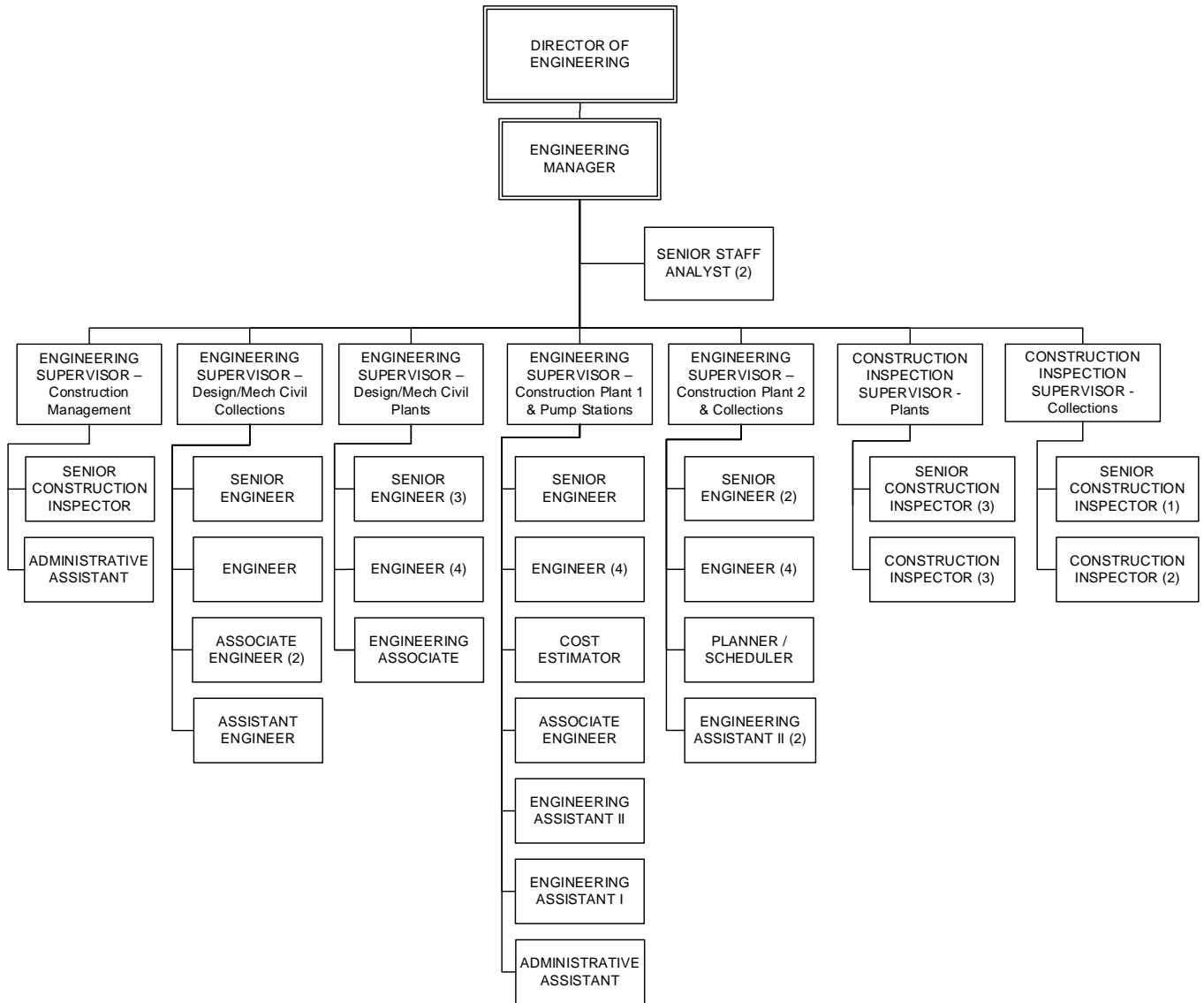
## 2016-17 & 2017-18 Budget

Operating Expenses By Category	2014-15 Actual	2015-16 Revised Budget	2015-16 Projected	2016-17 Proposed	Budget % Change	2017-18 Proposed	Budget % Change
Personnel	\$ 3,478,921	\$ 3,454,030	\$ 2,535,200	\$ 2,648,800	(23.31%)	\$ 2,700,300	1.94%
Supplies	20,780	38,520	15,300	44,020	14.28%	44,280	0.59%
Professional & Contractual Services	9,055	-	-	-	-	-	-
Research & Monitoring	-	-	-	-	-	-	-
Repairs & Maintenance	-	-	-	-	-	-	-
Utilities	-	-	-	-	-	-	-
Other	495	570	540	540	(5.26%)	540	0.00%
<b>Total</b>	<b>\$ 3,509,251</b>	<b>\$ 3,493,120</b>	<b>\$ 2,551,040</b>	<b>\$ 2,693,360</b>	<b>(22.90%)</b>	<b>\$ 2,745,120</b>	<b>1.92%</b>



# Civil & Mechanical Engineering

760

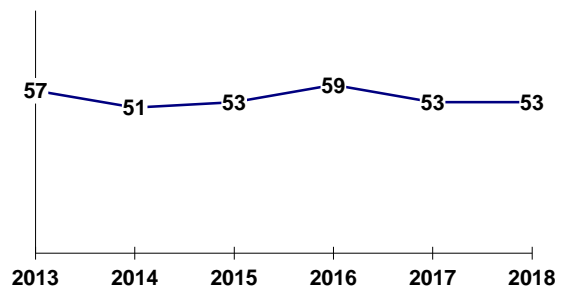


Staffing Trends

## 2016-17 & 2017-18 Authorized FTE Positions

Manager	1.0
Supervisors / Professionals	35.0
Administrative / Clerical	17.0

**Total** 53.0



# 2016-17 & 2017-18 Budget

## Service Description

The mission of the division is to provide civil/mechanical engineering and construction management services for OCSD divisions and for project support to ensure OCSD projects are designed to meet stakeholder needs, comply with applicable codes and standards, are safely constructed and are fully inspected while minimizing impacts to operations, maintenance, local agencies and the public.

### 2015-16 Performance Objectives

- ◆ Ensure the division's expenditures are managed to 98-100% of proposed budget.
- ◆ Reduce program change order performance towards Change Order Management Plan goal of 5%.
- ◆ Significant updates to maintain Engineering Standards and policies & procedures.
- ◆ No sewer spills on CIP collections projects.
- ◆ Division Injury Incident Rate < 2.9 to support OCSD goal of < 4.6.
- ◆ Implement CIP with no CalOSHA Reportable Contractor incidents.

### 2015-16 Performance Results

- ◆ Expected to be 98-100%
- ◆ 3.7% as of Dec. 31 data
- ◆ Over 20 policies & procedures updated
- ◆ No spills
- ◆ 0, no injuries
- ◆ 4 reportable incidents

### 2016-17 & 2017-18 Performance Objectives

- ◆ Manage operating expenditures to within 96 to 100% of approved budget.
- ◆ Reduce program change order performance towards Change Order Management Plan goal of 5%.
- ◆ Respond to public complaints or inquiries regarding construction projects within 1 day.
- ◆ No sewer spills on CIP collections projects.
- ◆ Division Injury Incident Rate < 2.9 to support OCSD goal of < 4.4.
- ◆ Develop and implement a plan of continuous improvement incorporating lessons learned from executed projects.

### Performance Measures

Summary	2014-15 Actual	2015-16 Projected	2016-17 Proposed	2017-18 Proposed	Justification
◆ Manage Division Budget	98.55%	90-100%	96-100%	96-100%	In-house standard
◆ Change Order Rate	3.62%	3.7%	< 5%	< 5%	In-house standard
◆ Respond to Public	1 day	1 day	1 day	1 day	In-house standard
◆ No Sewer Spills	2	0	0	0	In-house standard
◆ Injury Incident Rate < 2.8	0	0	< 2.9	< 2.9	In-house standard
◆ Continuous Improvement Plan	N/A	N/A	Develop	Implement	In-house standard

# Civil & Mechanical Engineering

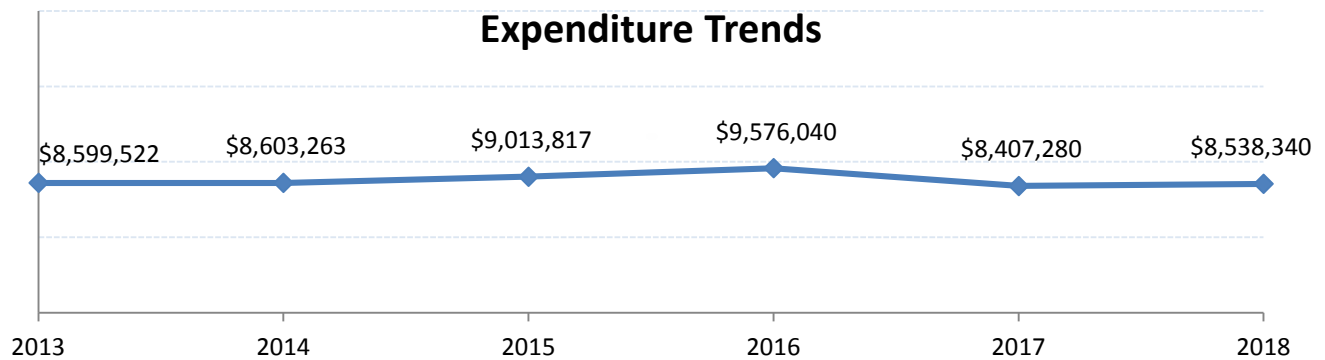
## Budget Overview

The FY 2016-17 & 2017-18 budgets for the Civil & Mechanical Engineering Division reflect a decrease of 12% and an increase of 2% over the prior year, respectively. The decrease is primarily due to the transfer of six FTE positions to other divisions and the reduction in retirement costs.

<b>2015-16 Adjusted Budget - Total Operating Requirements</b>	<b>\$ 9,576,040</b>
<b>Salaries for Position Changes:</b>	
Transfer of Positions from/(to) Other Divisions	(687,200)
New or (decreased) FTE	152,400
<b>Changes in Personnel Expenses:</b>	
Other net salary adjustments (MOU-related, leave payoffs, vacancy, etc.)	50,800
Change in OCERS retirement costs	(571,800)
Change in group insurance costs	(71,400)
Other benefit cost adjustments	(58,900)
<b>Other Cost Adjustments:</b>	
Increase in training & meetings	8,540
Increase in legal services	10,000
<b>Aggregate change in Other Categories:</b>	
Aggregate change in other materials, supplies, and services	(1,200)
<b>2016-17 Proposed Budget - Total Operating Requirements</b>	<b>\$ 8,407,280</b>
<b>Changes in Personnel Expenses:</b>	
Net salary adjustments (MOU-related, leave payoffs, vacancy, etc.)	85,100
Change in OCERS retirement costs	8,600
Change in group insurance costs	43,200
Other benefit cost adjustments	(6,500)
<b>Other Cost Adjustments:</b>	
No other significant cost changes	
<b>Aggregate change in Other Categories:</b>	
Aggregate change in other materials, supplies, and services	660
<b>2017-18 Proposed Budget - Total Operating Requirements</b>	<b>\$ 8,538,340</b>

## 2016-17 & 2017-18 Budget

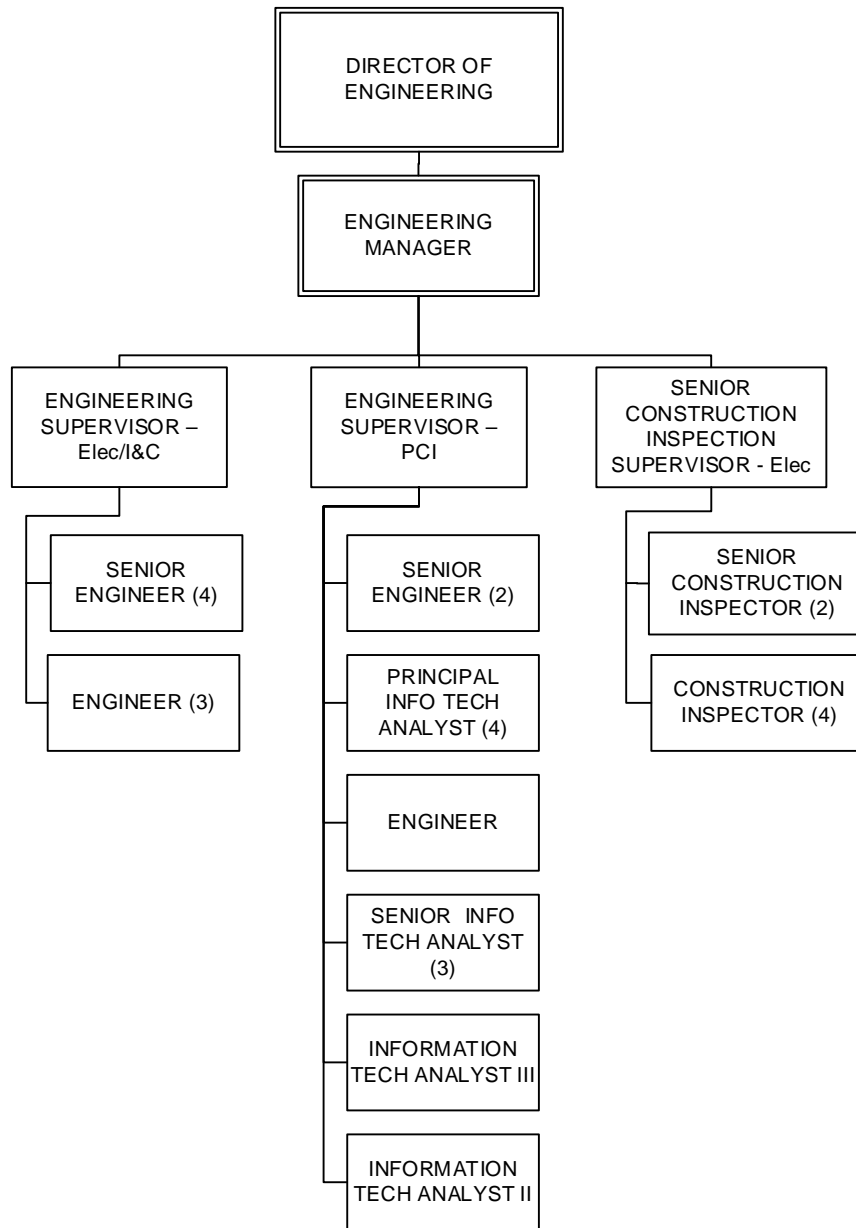
Operating Expenses By Category	2014-15 Actual	2015-16 Revised Budget	2015-16 Projected	2016-17 Proposed	Budget % Change	2017-18 Proposed	Budget % Change
Personnel	\$ 8,926,893	\$ 9,511,100	\$ 9,430,600	\$ 8,325,000	(12.47%)	\$ 8,455,400	1.57%
Supplies	55,370	61,920	51,740	67,800	9.50%	68,410	0.90%
Professional & Contractual Services	29,031	-	8,500	10,000	-	10,000	0.00%
Research & Monitoring	-	-	-	-	-	-	-
Repairs & Maintenance	1,044	-	2,000	2,000	-	2,000	0.00%
Utilities	-	-	-	-	-	-	-
Other	1,479	3,020	2,470	2,480	(17.88%)	2,530	2.02%
<b>Total</b>	<b>\$ 9,013,817</b>	<b>\$ 9,576,040</b>	<b>\$ 9,495,310</b>	<b>\$ 8,407,280</b>	<b>(12.21%)</b>	<b>\$ 8,538,340</b>	<b>1.56%</b>





# Electrical & Control Systems Engineering

770

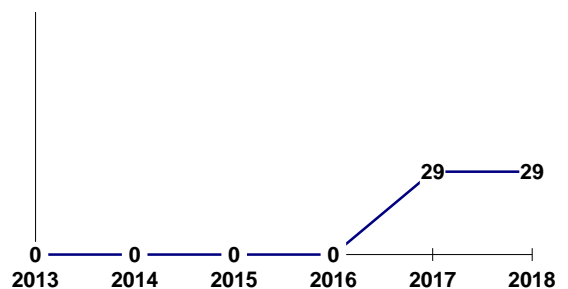


## Staffing Trends

### 2016-17 & 2017-18 Authorized FTE Positions

Manager	1.0
Supervisors / Professionals	22.0
Administrative / Clerical	6.0

**Total** 29.0



# 2016-17 & 2017-18 Budget

## Service Description

The mission of the Electrical and Instrumentation Engineering Division is to provide electrical and control system designs which are reliable, maintainable, and operable at optimum lifecycle costs in accordance with Engineering Standards and codes. The Division ensures that projects are properly and safely constructed and executed in accordance with the contract documents with minimal impact to operations, maintenance, local agencies, and the public. The Division also provides process control SCADA system hardware, software and data network support for collections and treatment plant processes that are highly reliable, safe, secure, online, and available to monitor, record, control, and operate our facilities.

### 2015-16 Performance Objectives

- ◆ N/A – New division effective FY 2016-17

### 2015-16 Performance Results

- ◆ N/A

### 2016-17 & 2017-18 Performance Objectives

- ◆ Manage operating expenditures to within 96 to 100% of approved budget.
- ◆ Reduce program change order performance towards Change Order Management Plan goal of 5%.
- ◆ Assure all mission critical real-time SCADA systems are online and available greater than 99.9% (8hr/year of unplanned downtime).
- ◆ SCADA system programming is complete and bench tested prior to functional acceptance testing.
- ◆ New electrical equipment is properly modeled in the power systems software and equipment is properly configured and tested prior to energization.
- ◆ No sewer spills on CIP collections projects.
- ◆ Division Injury Incident Rate < 2.9 to support OCSD goal of < 4.4.
- ◆ Develop and implement a plan of continuous improvement incorporating lessons learned from executed projects.

### Performance Measures

Summary	2014-15 Actual	2015-16 Projected	2016-17 Proposed	2017-18 Proposed	Justification
◆ Manage Division Budget	N/A	N/A	96-100%	96-100%	In-house standard
◆ Change Order Rate	N/A	3.7%	< 5%	< 5%	In-house standard
◆ SCADA system availability (less planned downtime)	N/A	99.9%	99.9%	99.9%	In-house standard
◆ SCADA system programming complete	N/A	100%	> 98%	> 98%	In-house standard
◆ New Electrical Equipment Configured and Tested	N/A	N/A	> 98%	> 98%	In-house standard
◆ No Sewer Spills	N/A	0	0	0	In-house standard
◆ Injury Incident Rate < 2.8	N/A	N/A	< 2.9	< 2.9	In-house standard
◆ Continuous Improvement Plan	N/A	N/A	Develop	Implement	In-house standard

# Electrical & Control Systems Engineering

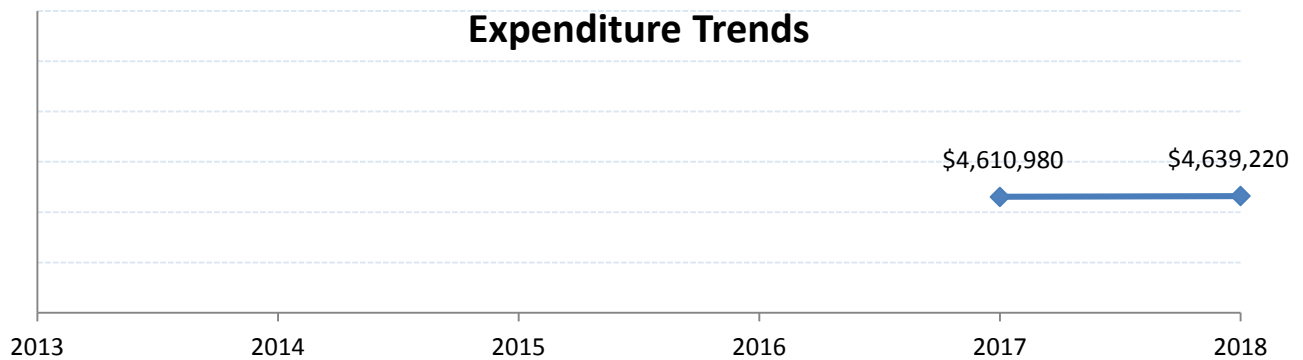
## Budget Overview

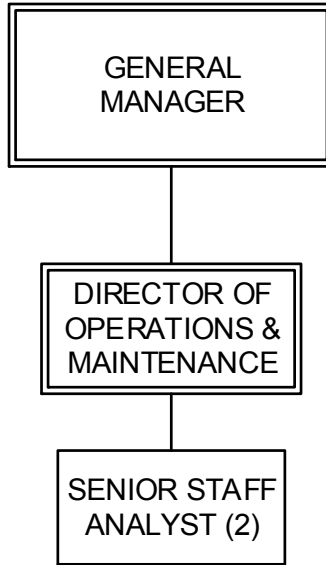
The FY 2016-17 budget for the newly created Electrical & Control Systems Engineering Division is \$4,610,980. The major cost items included in this budget are 29 FTE positions transferred from other divisions, as well as costs for software program consulting. The FY 2017-18 budget reflects an increase of 1% over the prior year.

<b>2015-16 Adjusted Budget - Total Operating Requirements</b>	<b>\$ -</b>
<b>Salaries for Position Changes:</b>	
Transfer of Positions from/(to) Other Divisions	3,036,800
New or (decreased) FTE	105,500
<b>Changes in Personnel Expenses:</b>	
Other net salary adjustments (MOU-related, leave payoffs, vacancy, etc.)	172,700
Change in OCERS retirement costs	472,800
Change in group insurance costs	411,200
Other benefit cost adjustments	60,300
<b>Other Cost Adjustments:</b>	
Increase in training & meetings	93,130
Increase in tools expense	37,500
Increase in engineering services	50,000
Increase in software program consulting	160,000
<b>Aggregate change in Other Categories:</b>	
Aggregate change in other materials, supplies, and services	11,050
<b>2016-17 Proposed Budget - Total Operating Requirements</b>	<b>\$ 4,610,980</b>
<b>Changes in Personnel Expenses:</b>	
Net salary adjustments (MOU-related, leave payoffs, vacancy, etc.)	27,300
Change in OCERS retirement costs	2,400
Change in group insurance costs	20,600
Other benefit cost adjustments	(3,200)
<b>Other Cost Adjustments:</b>	
Decrease in training & meetings	(7,810)
Decrease in tools expense	(36,000)
Increase in engineering services	25,000
<b>Aggregate change in Other Categories:</b>	
Aggregate change in other materials, supplies, and services	(50)
<b>2017-18 Proposed Budget - Total Operating Requirements</b>	<b>\$ 4,639,220</b>

# 2016-17 & 2017-18 Budget

Operating Expenses By Category	2014-15 Actual	2015-16 Revised Budget	2015-16 Projected	2016-17 Proposed	Budget % Change	2017-18 Proposed	Budget % Change
Personnel	\$ -	\$ -	\$ -	\$ 4,259,300	-	\$ 4,306,400	1.11%
Supplies	-	-	-	141,180	-	97,320	(31.07%)
Professional & Contractual Services	-	-	-	210,000	-	235,000	11.90%
Research & Monitoring	-	-	-	-	-	-	-
Repairs & Maintenance	-	-	-	-	-	-	-
Utilities	-	-	-	-	-	-	-
Other	-	-	-	500	-	500	0.00%
<b>Total</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 4,610,980</b>	<b>-</b>	<b>\$ 4,639,220</b>	<b>0.61%</b>





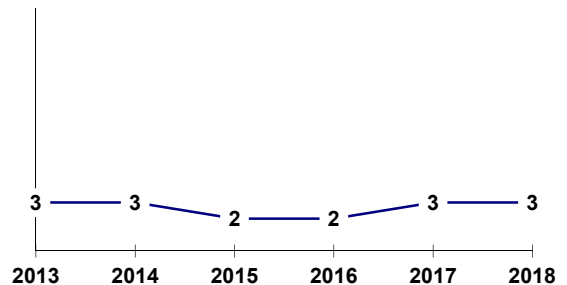
Staffing Trends

**2016-17 & 2017-18 Authorized FTE Positions**

Executive Manager	1.00
Supervisors / Professionals	2.00

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**Total** 3.00



# 2016-17 & 2017-18 Budget

## Service Description

The mission of the Operations and Maintenance Administration Division is to provide leadership and support, as well as management oversight and development of the department. Ratepayer owned facilities and assets managed by the O&M Divisions have a replacement value that exceeds \$6.5 billion. The Director, as a member of the Executive Management Team, provides counsel and expertise in developing the necessary strategies to maintain alignment with the District's Strategic Plan, levels of service, and annual divisional work plans. The Director and staff also proactively network with the OCSD member cities, sewerage agencies and regional regulators on operational issues.

### 2015-16 Performance Objectives

- ◆ Achieve 100% compliance with water, solids, air, and energy permits.
- ◆ Manage operating expenditures to within 96 to 100% of approved budget.
- ◆ Achieve a compliance level of 90 to 100% of the levels of service targets.
- ◆ Complete an implementation plan with a recommendation to the Board of Directors by the end of Fiscal Year 2014-15 regarding ceasing the ocean outfall disinfection program

### 2015-16 Performance Results

- ◆ Achieved 100% compliance through March 2016.
- ◆ Project to expend 96-100% of approved budget by June 2016.
- ◆ Achieved all levels of service above 90% through March 2016 with the exception of odor complaints.
- ◆ Completed; ocean outfall disinfection has ceased.

### 2016-17 & 2017-18 Performance Objectives

- ◆ Achieve 100% compliance with water, solids, air, and energy permits.
- ◆ Manage operating expenditures to within 96 to 100% of approved budget.
- ◆ Achieve a compliance level of 90 to 100% of the levels of service targets.

### Performance Measures

Summary	2014-15 Actual	2015-16 Projected	2016-17 Proposed	2017-18 Proposed	Justification
◆ Compliance with Permits	100%	100%	100%	100%	In-house standard
◆ Manage Budget	99%	96-100%	96-100%	96-100%	In-house standard
◆ Levels of Service Compliance	> 90%	> 90%	> 90%	> 90%	In-house standard

# Operations and Maintenance Administration

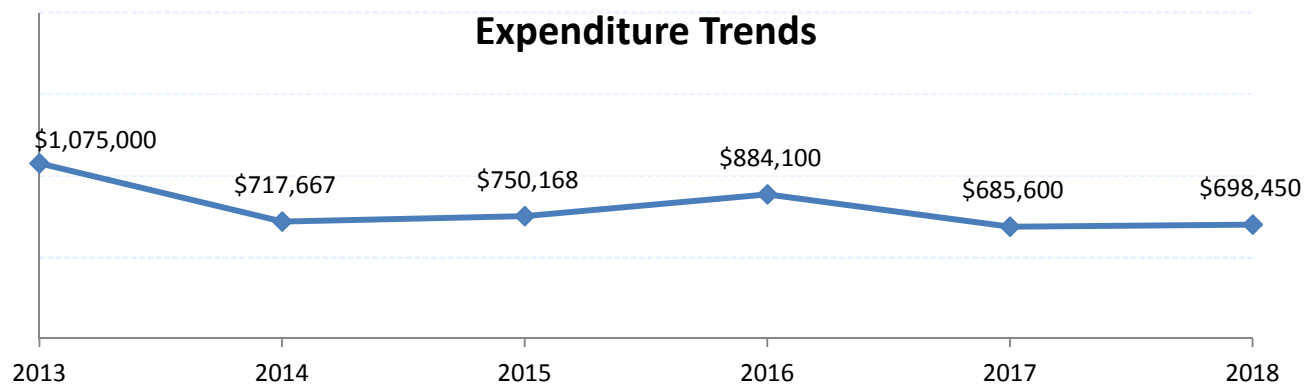
## Budget Overview

The FY 2016-17 & 2017-18 budgets for the Operations & Maintenance Administration Division reflect a decrease of 22% and an increase of 2% over the prior year, respectively. The decrease is primarily due to the transfer of costs for research services to the new created Environmental Services Administration Division.

<b>2015-16 Adjusted Budget - Total Operating Requirements</b>	<b>\$ 884,100</b>
<b>Salaries for Position Changes:</b>	
Transfer of Positions from/(to) Other Divisions	84,400
New or (decreased) FTE	-
<b>Changes in Personnel Expenses:</b>	
Other net salary adjustments (MOU-related, leave payoffs, vacancy, etc.)	90,200
Change in OCERS retirement costs	(10,200)
Change in group insurance costs	19,700
Other benefit cost adjustments	-
<b>Other Cost Adjustments:</b>	
Increase in other professional services	17,340
Decrease in research services	(400,000)
<b>Aggregate change in Other Categories:</b>	
Aggregate change in other materials, supplies, and services	60
<b>2016-17 Proposed Budget - Total Operating Requirements</b>	<b>\$ 685,600</b>
<b>Changes in Personnel Expenses:</b>	
Net salary adjustments (MOU-related, leave payoffs, vacancy, etc.)	9,500
Change in OCERS retirement costs	800
Change in group insurance costs	2,400
Other benefit cost adjustments	(300)
<b>Other Cost Adjustments:</b>	
No other significant cost changes	
<b>Aggregate change in Other Categories:</b>	
Aggregate change in other materials, supplies, and services	450
<b>2017-18 Proposed Budget - Total Operating Requirements</b>	<b>\$ 698,450</b>

## 2016-17 & 2017-18 Budget

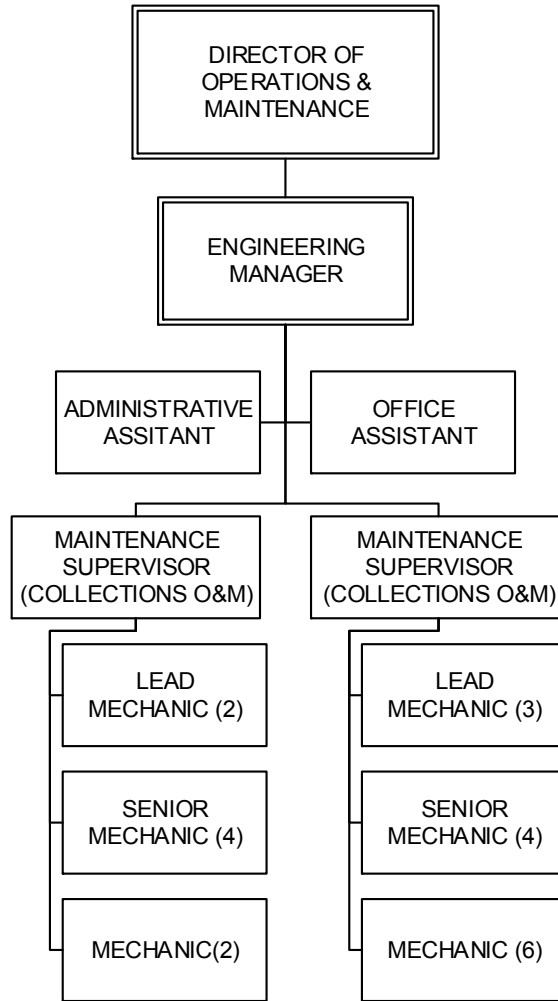
Operating Expenses By Category	2014-15 Actual	2015-16 Revised Budget	2015-16 Projected	2016-17 Proposed	Budget % Change	2017-18 Proposed	Budget % Change
Personnel	\$ 341,496	\$ 472,400	\$ 449,500	\$ 656,500	38.97%	\$ 668,900	1.89%
Supplies	7,502	10,610	8,230	10,640	0.28%	10,740	0.94%
Professional & Contractual Services	-	500	500	17,840	3468.00%	18,180	1.91%
Research & Monitoring	400,000	400,000	400,000	-	(100.00%)	-	-
Repairs & Maintenance	-	-	20	-	-	-	-
Utilities	-	-	-	-	-	-	-
Other	1,170	590	550	620	5.08%	630	1.61%
<b>Total</b>	<b>\$ 750,168</b>	<b>\$ 884,100</b>	<b>\$ 858,800</b>	<b>\$ 685,600</b>	<b>(22.45%)</b>	<b>\$ 698,450</b>	<b>1.87%</b>





# Collections Facilities Operations and Maintenance

820

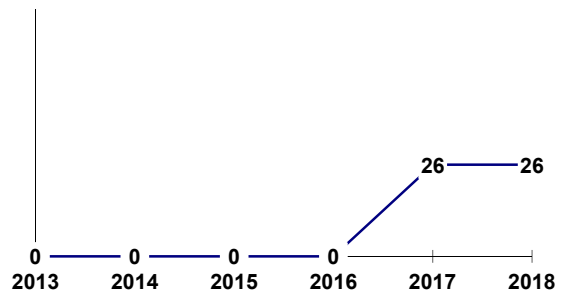


## 2016-17 & 2017-18 Authorized FTE Positions

Manager	1.0
Supervisors / Professionals	2.0
Operations & Maintenance	21.0
Administrative / Clerical	2.0

**Total** 26.0

## Staffing Trends



# 2016-17 & 2017-18 Budget

## Service Description

The mission of the Collections Facilities Operations & Maintenance Division is to provide support and services which preserve the integrity and reliability of the District's infrastructure. The Pipeline and Pump Station teams operate and maintain the sewer systems and auxiliary facilities to protect public health and the environment and to achieve regulatory compliance.

### 2015-16 Performance Objectives

- ◆ Keep sewer spills to fewer than 13 per year.
- ◆ Achieve levels of service for response to sewer system spills within one hour and full containment within five hours.
- ◆ Manage expenditures to within 98 to 100% of the approved budget.
- ◆ Achieve 100% compliance with the safety scorecard.

### 2015-16 Performance Results

- ◆ 3 spills.
- ◆ 100%.
- ◆ 93% projected.
- ◆ 100%.

### 2016-17 & 2017-18 Performance Objectives

- ◆ Achieve levels of service for keeping the number of sewer spills less than 13 per year based on the industry average of 2.1 per 100 miles of sewer.
- ◆ Achieve levels of service response to sewer spills within one hour and full containment within five hours.
- ◆ Manage operating expenditures to within 96 to 100% of approved budget.
- ◆ Achieve 100% compliance with the safety scorecard.

### Performance Measures

Summary	2014-15 Actual	2015-16 Projected	2016-17 Proposed	2017-18 Proposed	Justification
◆ Spill Compliance	100%	100%	100%	100%	Levels of Service
◆ Response and Containment Compliance	100%	100%	100%	100%	Levels of Service
◆ Manage Budget	99.74%	96-100%	96-100%	96-100%	In house standard
◆ Compliance with the Safety Scorecard	93%	93%	96-100%	96-100%	In house standard

# Collections Facilities Operations and Maintenance

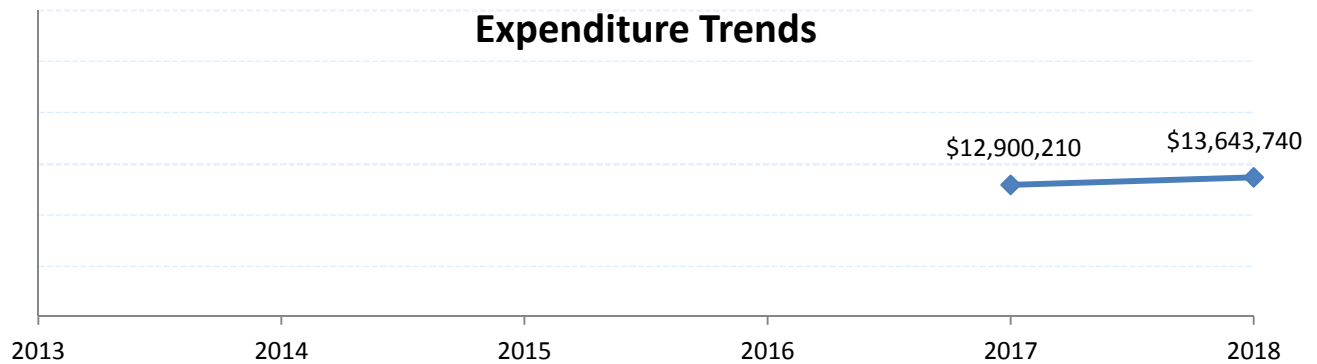
## Budget Overview

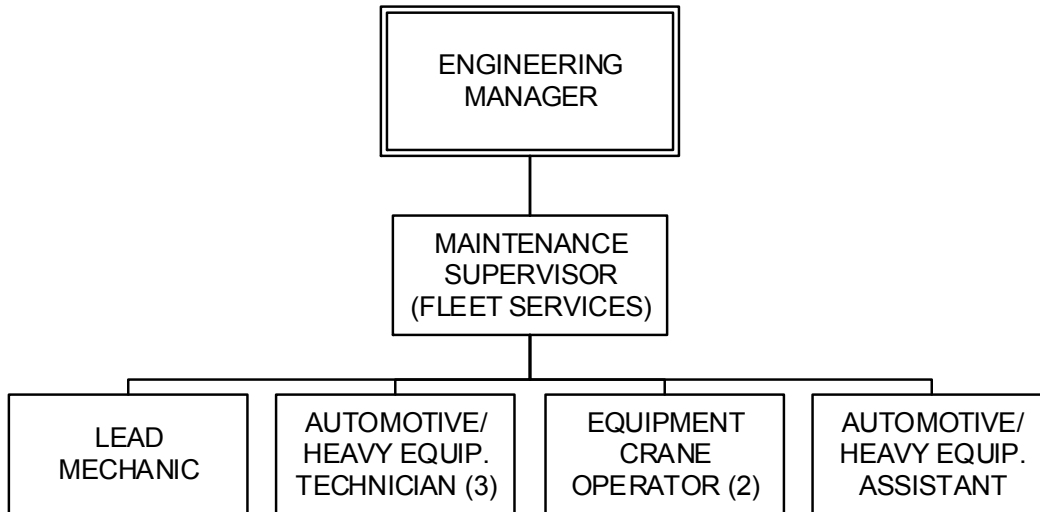
The FY 2016-17 budget for the newly created Collections Facilities Operations and Maintenance Division is \$12,900,210. The major cost items included in this budget are 26 FTE positions reallocated from other divisions, as well as costs for odor control, repairs and maintenance, electricity, and other contractual services to support inspection and maintenance of the collection system. The FY 2017-18 budget reflects an increase of 5% over the prior year. The increase is primarily due to increases in odor control costs.

<b>2015-16 Adjusted Budget - Total Operating Requirements</b>	<b>\$ -</b>
<b>Salaries for Position Changes:</b>	
Transfer of Positions from/(to) Other Divisions	2,156,900
New or (decreased) FTE	-
<b>Changes in Personnel Expenses:</b>	
Other net salary adjustments (MOU-related, leave payoffs, vacancy, etc.)	157,500
Change in OCERS retirement costs	336,200
Change in group insurance costs	396,700
Other benefit cost adjustments	113,200
<b>Other Cost Adjustments:</b>	
Increase in administrative expense	13,700
Increase in training & meetings	28,010
Increase in odor control costs	6,375,300
Increase in tools	33,000
Increase in safety equipment and tools	53,000
Increase in solvents, paint & janitorial supplies	14,000
Increase in miscellaneous operating supplies	14,000
Increase in other contractual services	1,854,600
Increase in audit & accounting services	40,000
Increase in other professional services	22,400
Increase in repairs and maintenance	655,000
Increase in electricity costs	610,000
Increase in water costs	15,000
<b>Aggregate change in Other Categories:</b>	
Aggregate change in other materials, supplies, and services	11,700
<b>2016-17 Proposed Budget - Total Operating Requirements</b>	<b>\$ 12,900,210</b>
<b>Changes in Personnel Expenses:</b>	
Net salary adjustments (MOU-related, leave payoffs, vacancy, etc.)	17,900
Change in OCERS retirement costs	1,600
Change in group insurance costs	20,500
Other benefit cost adjustments	(3,200)
<b>Other Cost Adjustments:</b>	
Increase in training & meetings	20,760
Increase in odor control costs	585,000
Increase in other contractual services	125,090
Decrease in audit & accounting services	(40,000)
<b>Aggregate change in Other Categories:</b>	
Aggregate change in other materials, supplies, and services	15,880
<b>2017-18 Proposed Budget - Total Operating Requirements</b>	<b>\$ 13,643,740</b>

# 2016-17 & 2017-18 Budget

Operating Expenses By Category	2014-15 Actual	2015-16 Revised Budget	2015-16 Projected	2016-17 Proposed	Budget % Change	2017-18 Proposed	Budget % Change
Personnel	\$ -	\$ -	\$ -	\$ 3,160,500	-	\$ 3,197,300	1.16%
Supplies	-	-	-	6,541,290	-	7,150,630	9.32%
Professional & Contractual Services	-	-	-	1,917,000	-	2,002,590	4.46%
Research & Monitoring	-	-	-	-	-	-	-
Repairs & Maintenance	-	-	-	655,000	-	661,000	0.92%
Utilities	-	-	-	625,000	-	630,800	0.93%
Other	-	-	-	1,420	-	1,420	0.00%
<b>Total</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 12,900,210</b>	<b>-</b>	<b>\$ 13,643,740</b>	<b>5.76%</b>



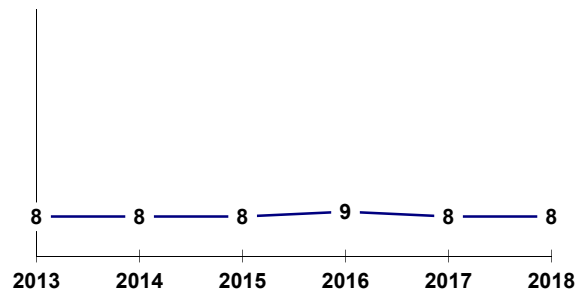


Staffing Trends

2016-17 & 2017-18 Authorized FTE Positions

Supervisors / Professionals 1.0  
 Operations & Maintenance 7.0

**Total 8.0**



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# 2016-17 & 2017-18 Budget

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## Service Description

The mission of the Fleet Services Division is to provide our customers with high quality, dependable, cost effective and efficient services.

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### 2015-16 Performance Objectives

- ◆ Manage operating expenditures to within 96-100% of the approved budget
- ◆ Achieve 100% compliance with state emissions regulations on all mobile vehicle and equipment.
- ◆ Fleet Services in-house survey published with results achieving 80% or above satisfaction ratings.
- ◆ Achieve 100% compliance with the safety scorecard.

### 2015-16 Performance Results

- ◆ 99.6% projected
  - ◆ In compliance
  - ◆ Fleet achieved 97% satisfactory rating
  - ◆ In compliance
- 

### 2016-17 & 2017-18 Performance Objectives

- ◆ Manage operating expenditures to within 96 to 100% of the approved budget.
  - ◆ Achieve 100% compliance with state emissions regulations on all mobile vehicle and equipment.
  - ◆ Fleet Services in-house survey published with results achieving 80% at or above satisfaction ratings.
  - ◆ Achieve 100% compliance with the safety scorecard.
- 

### Performance Measures

Summary	2014-15 Actual	2015-16 Projected	2016-17 Proposed	2017-18 Proposed	Justification
◆ Manage Budget	104%	96-100%	96-100%	96-100%	In-house standard
◆ Vehicle & Equipment Compliance	100%	100%	100%	100%	In-house standard
◆ In-house Survey	> 80%	> 97%	> 80%	> 80%	In-house standard
◆ Safety Scorecard Compliance	100%	100%	100%	100%	In-house standard

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# Fleet Services

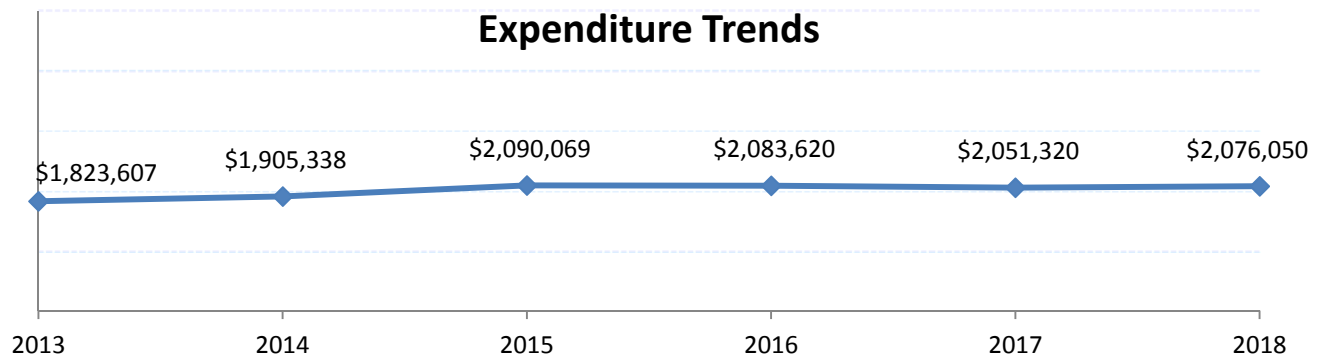
## Budget Overview

The FY 2016-17 budget for the Fleet Services Division is \$2,051,320. Prior to FY 2016-17, this division was a part of the Facilities Support Services Department. The major cost items included in this budget are salaries and benefits for eight FTE positions, as well as costs for repairs and maintenance, vehicle fuel & lubricants, compressed natural gas, and outside equipment rental. The FY 2017-18 budget reflects an increase of 1% over the prior year.

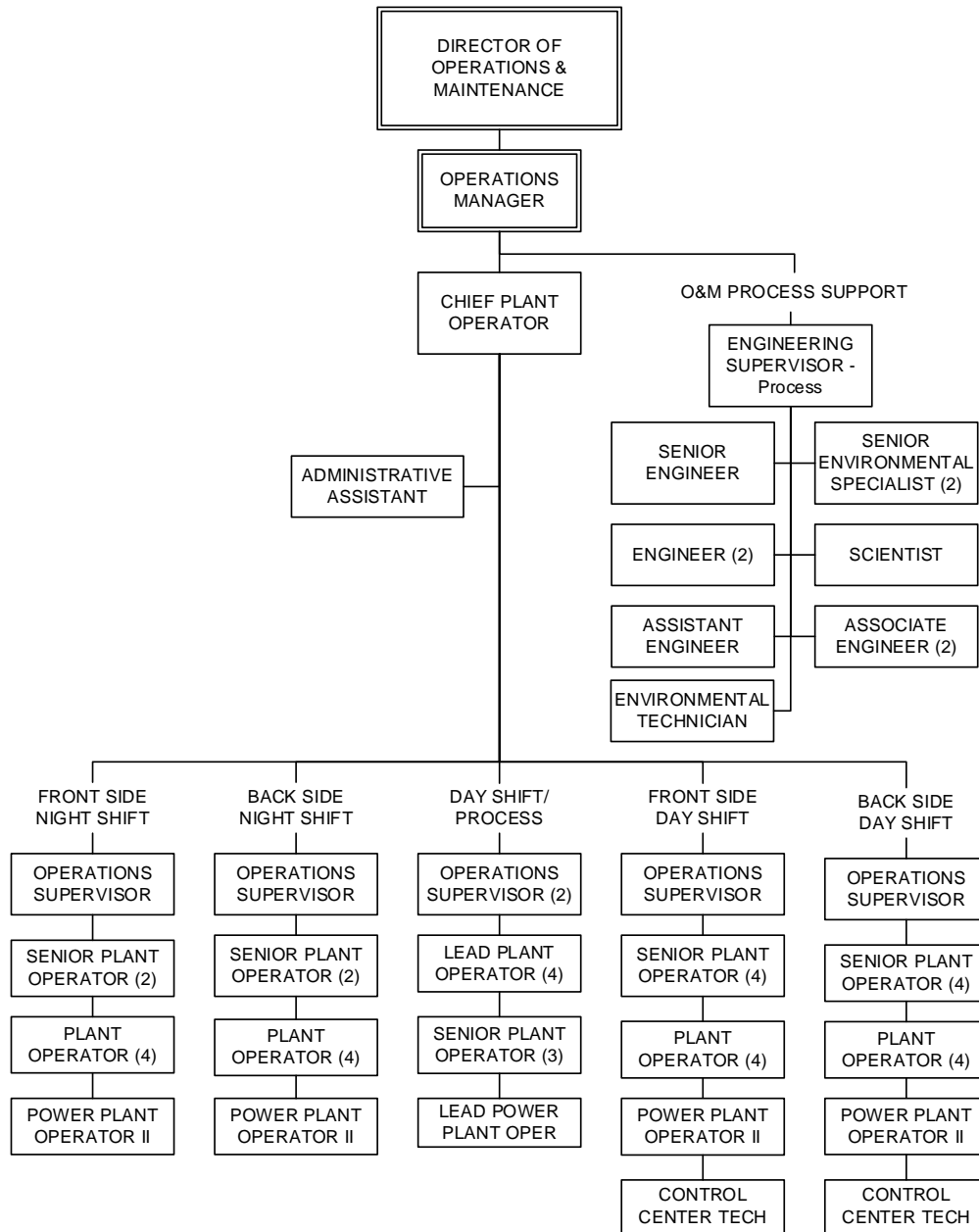
<b>2015-16 Adjusted Budget - Total Operating Requirements</b>	<b>\$ -</b>
<b>Salaries for Position Changes:</b>	
Transfer of Positions from/(to) Other Divisions	677,800
New or (decreased) FTE	-
<b>Changes in Personnel Expenses:</b>	
Other net salary adjustments (MOU-related, leave payoffs, vacancy, etc.)	72,100
Change in OCERS retirement costs	113,000
Change in group insurance costs	122,500
Other benefit cost adjustments	64,200
<b>Other Cost Adjustments:</b>	
Increase in training & meetings	11,400
Increase in vehicle fuel & lubricants	275,000
Increase in diesel fuel	8,000
Increase in oil & grease	10,000
Increase in compressed natural gas	125,000
Increase in tools	42,000
Increase in safety equipment/tools	6,000
Increase in repairs and maintenance	410,000
Increase in outside equipment rental	100,000
<b>Aggregate change in Other Categories:</b>	
Aggregate change in other materials, supplies, and services	14,320
<b>2016-17 Proposed Budget - Total Operating Requirements</b>	<b>\$ 2,051,320</b>
<b>Changes in Personnel Expenses:</b>	
Net salary adjustments (MOU-related, leave payoffs, vacancy, etc.)	-
Change in OCERS retirement costs	(100)
Change in group insurance costs	6,200
Other benefit cost adjustments	(1,000)
<b>Other Cost Adjustments:</b>	
Increase in vehicle fuel and lubricants	5,500
Increase in compressed natural gas	5,000
Increase in repairs and maintenance	8,500
<b>Aggregate change in Other Categories:</b>	
Aggregate change in other materials, supplies, and services	630
<b>2017-18 Proposed Budget - Total Operating Requirements</b>	<b>\$ 2,076,050</b>

## 2016-17 & 2017-18 Budget

Operating Expenses By Category	2014-15 Actual	2015-16 Revised Budget	2015-16 Projected	2016-17 Proposed	Budget % Change	2017-18 Proposed	Budget % Change
Personnel	\$ 1,171,772	\$ 1,146,500	\$ 1,152,600	\$ 1,049,600	(8.45%)	\$ 1,054,700	0.49%
Supplies	396,473	546,330	471,600	489,660	(10.37%)	500,690	2.25%
Professional & Contractual Services	-	1,000	-	-	(100.00%)	-	-
Research & Monitoring	-	-	-	-	-	-	-
Repairs & Maintenance	389,154	383,210	500,000	410,000	6.99%	418,500	2.07%
Utilities	-	-	-	-	-	-	-
Other	132,670	6,580	43,000	102,060	1451.06%	102,160	0.10%
<b>Total</b>	<b>\$ 2,090,069</b>	<b>\$ 2,083,620</b>	<b>\$ 2,167,200</b>	<b>\$ 2,051,320</b>	<b>(1.55%)</b>	<b>\$ 2,076,050</b>	<b>1.21%</b>







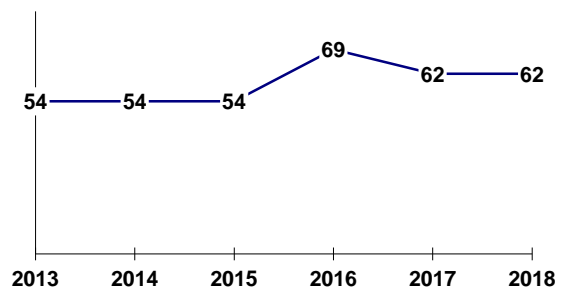
### 2016-17 & 2017-18 Authorized FTE Positions

Manager	1.00
Supervisors / Professionals	17.00
Operations & Maintenance	42.00
Technical Staff	1.00
Administrative / Clerical	1.00

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**Total** **62.00**

### Staffing Trends



# 2016-17 & 2017-18 Budget

## Service Description

The mission of the Plant No. 1 Operations Division is to safely, reliably, and cost effectively operate the plant to meet all regulatory requirements for the land, air, and water environments of Orange County and the 2.6 million residents we serve.

### 2015-16 Performance Objectives

- ◆ Achieve 100% permit compliance.
- ◆ Maintain 30-day geometric mean for fecal coliform at the final sampler at or below 50,000 MPN.
- ◆ Maintain overtime as less than 5% of the total hours worked.
- ◆ Maintain a safety scorecard above 90% overall.
- ◆ Manage expenditures to within 96% to 100% of approved budget.

### 2015-16 Performance Results

- ◆ 100% NPDES compliance.
- ◆ Bleach discontinued as of March 18, 2015. Fecal coliform limits are no longer an operational goal.
- ◆ Overtime has consistently been held below 5% of total hours worked.
- ◆ The average scorecard value through December 2015 is 100%.
- ◆ Projected 96% to 100% of budget will be expended.

### 2016-17 & 2017-18 Performance Objectives

- ◆ Achieve 100% permit compliance.
- ◆ Maintain overtime at less than 6% of the total hours worked.
- ◆ Maintain a safety scorecard above 90% overall.
- ◆ Manage expenditures to within 96% to 100% of approved budget.

### Performance Measures

Summary	2014-15 Actual	2015-16 Projected	2016-17 Proposed	2017-18 Proposed	Justification
◆ Permit Compliance	100%	100%	100%	100%	Permit Requirement
◆ Overtime	4%	≤ 5%	≤ 5%	≤ 5%	In-house standard
◆ Safety Scorecard	99%	≥ 90%	≥ 90%	≥ 90%	In-house standard
◆ Manage Budget	104%	≥ 96%	96-100%	96-100%	In-house standard

# Operations – Plant No. 1

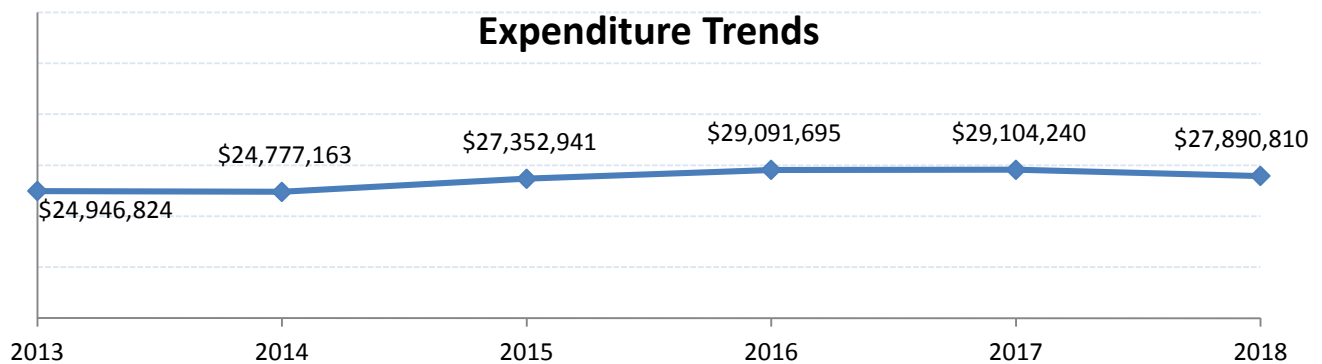
## Budget Overview

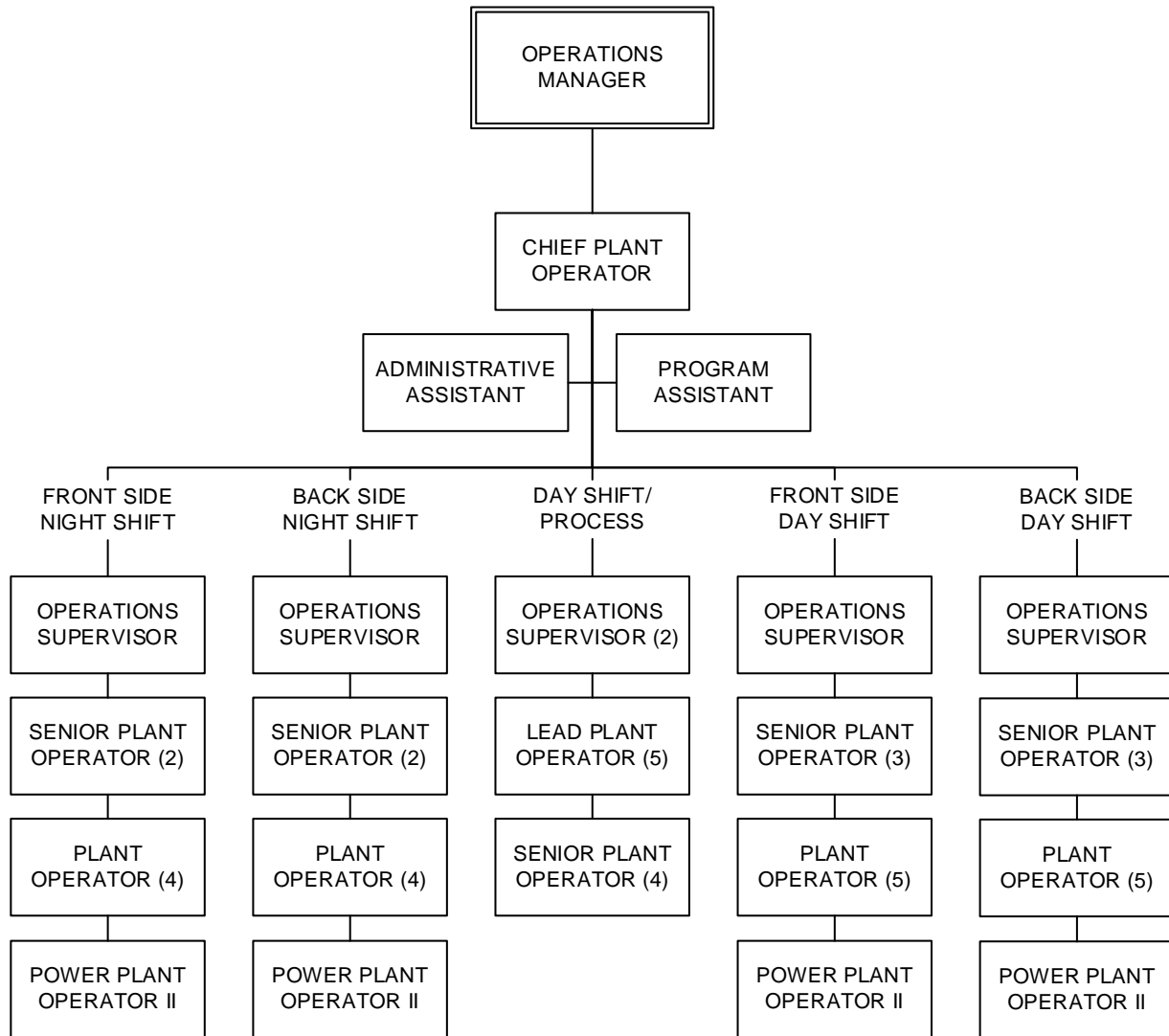
The FY 2016-17 & 2017-18 budgets for the Plant No. 1 Operations Division reflect an increase of 0.04% and a decrease of 4% over the prior year, respectively. Significant changes for 2016-17 include cost increases for electricity, odor control, and solids removal, offset by the transfer of costs for seven FTE positions to other divisions. The 2017-18 budget reflects a significant decrease primarily due to the anticipated pricing decrease for solids removal services.

<b>2015-16 Adjusted Budget - Total Operating Requirements</b>	<b>\$ 29,091,695</b>
<b>Salaries for Position Changes:</b>	
Transfer of Positions from/(to) Other Divisions	(948,100)
New or (decreased) FTE	-
<b>Changes in Personnel Expenses:</b>	
Other net salary adjustments (MOU-related, leave payoffs, vacancy, etc.)	(24,400)
Change in OCERS retirement costs	(736,000)
Change in group insurance costs	(94,000)
Other benefit cost adjustments	5,100
<b>Other Cost Adjustments:</b>	
Decrease in training & meetings	(72,595)
Decrease in chemical coagulants	(310,090)
Increase in odor control chemicals	372,300
Increase in disinfection chemicals	29,500
Increase in safety equipment/tools	22,600
Increase in solids removal costs	317,000
Decrease in other waste disposal costs	(64,000)
Increase in outside laboratory services	40,000
Increase in other contractual services	25,000
Decrease in professional services	(41,050)
Increase in service maintenance agreements	48,800
Increase in electricity costs	1,362,000
Increase in water costs	77,000
<b>Aggregate change in Other Categories:</b>	
Aggregate change in other materials, supplies, and services	3,480
<b>2016-17 Proposed Budget - Total Operating Requirements</b>	<b>\$ 29,104,240</b>
<b>Changes in Personnel Expenses:</b>	
Net salary adjustments (MOU-related, leave payoffs, vacancy, etc.)	114,000
Change in OCERS retirement costs	12,200
Change in group insurance costs	51,300
Other benefit cost adjustments	(7,800)
<b>Other Cost Adjustments:</b>	
Decrease in administrative expense	(49,080)
Increase in chemical coagulants	229,090
Decrease in solids removal costs	(2,368,200)
Increase in other waste disposal costs	32,000
Decrease in professional services	(60,000)
Increase in natural gas costs	77,000
Increase in electricity costs	739,500
Increase in water costs	9,000
<b>Aggregate change in Other Categories:</b>	
Aggregate change in other materials, supplies, and services	7,560
<b>2017-18 Proposed Budget - Total Operating Requirements</b>	<b>\$ 27,890,810</b>

## 2016-17 & 2017-18 Budget

Operating Expenses By Category	2014-15 Actual	2015-16 Revised Budget	2015-16 Projected	2016-17 Proposed	Budget % Change	2017-18 Proposed	Budget % Change
Personnel	\$ 8,382,997	\$ 10,590,000	\$ 10,619,200	\$ 8,792,600	(16.97%)	\$ 8,962,300	1.93%
Supplies	4,902,523	5,445,105	5,897,380	5,508,910	1.17%	5,696,980	3.41%
Professional & Contractual Services	10,466,197	9,188,000	10,366,790	9,464,950	3.01%	7,068,750	(25.32%)
Research & Monitoring	-	-	-	-	-	-	-
Repairs & Maintenance	20,041	99,470	94,470	135,000	35.72%	135,000	0.00%
Utilities	3,577,248	3,764,000	4,913,600	5,201,000	38.18%	6,026,500	15.87%
Other	3,935	5,120	3,580	1,780	(65.23%)	1,280	(28.09%)
<b>Total</b>	<b>\$ 27,352,941</b>	<b>\$ 29,091,695</b>	<b>\$ 31,895,020</b>	<b>\$ 29,104,240</b>	<b>0.04%</b>	<b>\$ 27,890,810</b>	<b>(4.17%)</b>





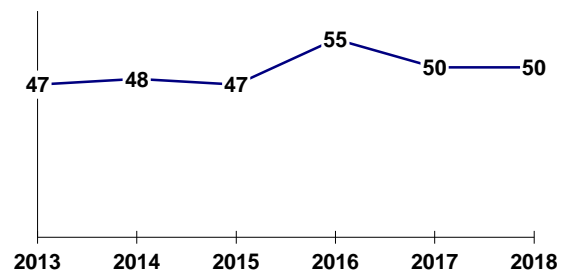
### 2016-17 & 2017-18 Authorized FTE Positions

Supervisors / Professionals	7.0
Operations & Maintenance	41.0
Administrative / Clerical	2.0

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**Total** 50.0

Staffing Trends



# 2016-17 & 2017-18 Budget

## Service Description

The mission of the Plant No. 2 Operations Division is to safely, reliably, and cost effectively operate the plant to meet all regulatory requirements for the land, air, and water environments of Orange County and the 2.6 million residents we serve.

### 2015-16 Performance Objectives

- ◆ Achieve 100% permit compliance.
- ◆ Maintain 30-day geometric mean for fecal coliform at the final sampler at or below 50,000 MPN.
- ◆ Maintain overtime as less than 5% of the total hours worked.
- ◆ Maintain a safety scorecard above 90% overall.
- ◆ Manage expenditures to within 96% to 100% of approved budget.

### 2015-16 Performance Results

- ◆ 100% NPDES compliance.
- ◆ Bleach discontinued as of March 18, 2015. Fecal coliform limits are no longer an operational goal.
- ◆ Overtime has consistently been held below 6% of total hours worked.
- ◆ The average scorecard value through December 2015 is 99.9%.
- ◆ Projected 96% to 100% of budget will be expended.

### 2016-17 & 2017-18 Performance Objectives

- ◆ Achieve 100% permit compliance.
- ◆ Maintain overtime at less than 6% of the total hours worked.
- ◆ Maintain a safety scorecard above 90% overall.
- ◆ Manage operating expenditures to within 96 to 100% of approved budget.

### Performance Measures

Summary	2014-15 Actual	2015-16 Projected	2016-17 Proposed	2017-18 Proposed	Justification
◆ Permit Compliance	100%	100%	100%	100%	Permit Requirement
◆ Overtime	6%	< 6%	< 6%	< 6%	In-house standard
◆ Safety Scorecard	100%	≥ 90%	≥ 90%	≥ 90%	In-house standard
◆ Manage Budget	83%	≥ 96%	96-100%	96-100%	In-house standard

# Operations – Plant No. 2

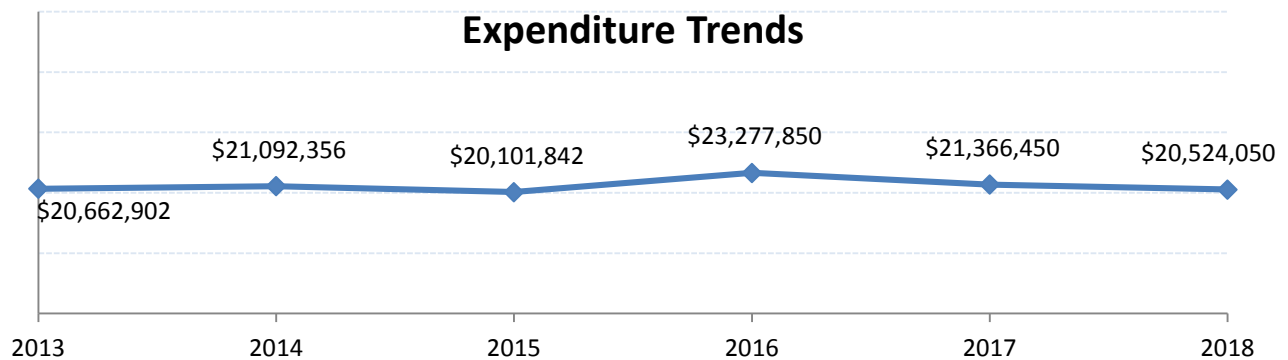
## Budget Overview

The FY 2016-17 & 2017-18 budgets for the Plant No. 2 Operations Division reflect a decrease of 8% and a decrease of 4% over the prior year, respectively. The decrease is primarily due to the transfer of five FTE positions to other divisions and decreases in the costs for chemical coagulants, solids removal, and electricity. The budget for 2017-18 reflects a significant decrease primarily due to the anticipated pricing decrease for solids removal services.

<b>2015-16 Adjusted Budget - Total Operating Requirements</b>	<b>\$ 23,277,850</b>
<b>Salaries for Position Changes:</b>	
Transfer of Positions from/(to) Other Divisions	(392,600)
New or (decreased) FTE	-
<b>Changes in Personnel Expenses:</b>	
Other net salary adjustments (MOU-related, leave payoffs, vacancy, etc.)	(48,900)
Change in OCERS retirement costs	(446,500)
Change in group insurance costs	(97,900)
Other benefit cost adjustments	(54,100)
<b>Other Cost Adjustments:</b>	
Increase in administrative expense	27,320
Decrease in chemical coagulants	(575,360)
Increase in odor control chemicals	104,500
Decrease in chemicals for cogen operations	(16,200)
Decrease in miscellaneous chemicals	(45,000)
Decrease in solids removal costs	(518,000)
Increase in other waste disposal	27,000
Increase in oxygen plant operations	131,800
Increase in professional services	85,750
Increase in repairs and maintenance	119,710
Increase in natural gas costs	21,000
Decrease in electricity costs	(250,000)
Increase in water costs	20,000
<b>Aggregate change in Other Categories:</b>	
Aggregate change in other materials, supplies, and services	(3,920)
<b>2016-17 Proposed Budget - Total Operating Requirements</b>	<b>\$ 21,366,450</b>
<b>Changes in Personnel Expenses:</b>	
Net salary adjustments (MOU-related, leave payoffs, vacancy, etc.)	18,100
Change in OCERS retirement costs	1,900
Change in group insurance costs	38,200
Other benefit cost adjustments	(6,000)
<b>Other Cost Adjustments:</b>	
Decrease in administrative expense	(25,560)
Increase in chemical coagulants	41,360
Decrease in odor control chemicals	(20,000)
Decrease in solids removal costs	(887,500)
Increase in other waste disposal	15,000
Increase in oxygen plant operations	20,000
Decrease in professional services	(60,000)
Decrease in repairs and maintenance services	(399,800)
Increase in natural gas costs	32,000
Increase in electricity costs	387,000
<b>Aggregate change in Other Categories:</b>	
Aggregate change in other materials, supplies, and services	2,900
<b>2017-18 Proposed Budget - Total Operating Requirements</b>	<b>\$ 20,524,050</b>

## 2016-17 & 2017-18 Budget

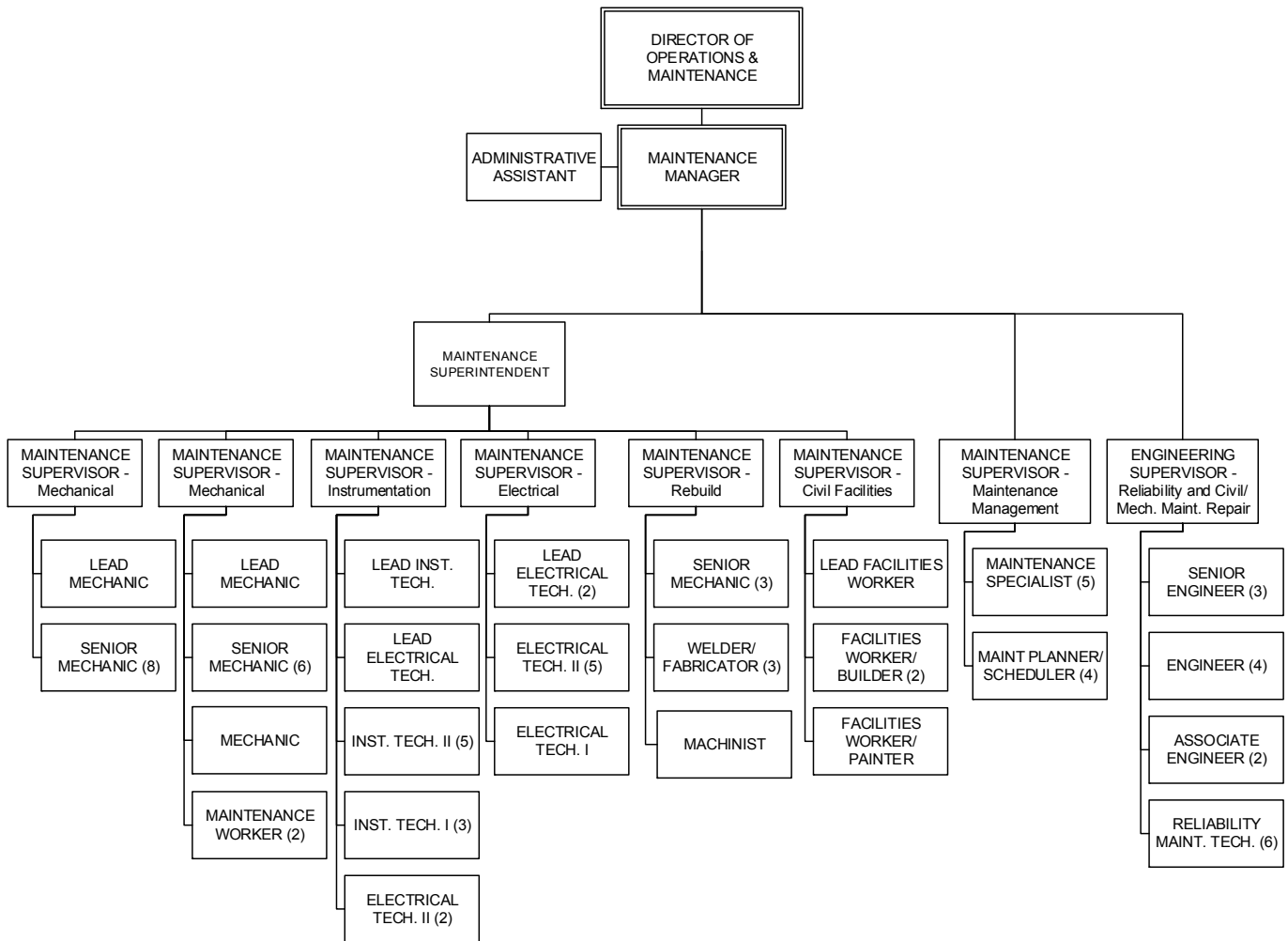
Operating Expenses By Category	2014-15 Actual	2015-16 Revised Budget	2015-16 Projected	2016-17 Proposed	Budget % Change	2017-18 Proposed	Budget % Change
Personnel	\$ 7,016,968	\$ 7,954,800	\$ 7,640,000	\$ 6,914,800	(13.07%)	\$ 6,967,000	0.75%
Supplies	2,768,897	2,946,320	2,791,600	2,438,620	(17.23%)	2,437,300	(0.05%)
Professional & Contractual Services	8,094,134	9,446,200	8,604,420	9,172,750	(2.89%)	8,260,250	(9.95%)
Research & Monitoring	-	-	-	-	-	-	-
Repairs & Maintenance	469,995	620,290	619,000	740,000	19.30%	340,200	(54.03%)
Utilities	1,749,653	2,307,000	2,029,740	2,098,000	(9.06%)	2,517,000	19.97%
Other	2,195	3,240	2,300	2,280	(29.63%)	2,300	0.88%
<b>Total</b>	<b>\$20,101,842</b>	<b>\$23,277,850</b>	<b>\$21,687,060</b>	<b>\$21,366,450</b>	<b>(8.21%)</b>	<b>\$20,524,050</b>	<b>(3.94%)</b>





# Maintenance – Plant No. 1

870

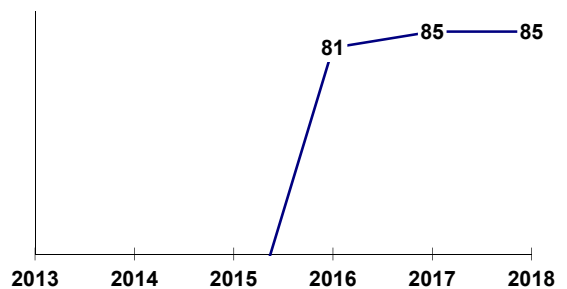


## 2016-17 & 2017-18 Authorized FTE Positions

Manager	1.0
Supervisors / Professionals	23.0
Operations & Maintenance	60.0
Administrative / Clerical	1.0

**Total 85.0**

## Staffing Trends



# 2016-17 & 2017-18 Budget

## Service Description

The mission of the Plant No. 1 Maintenance Division is to protect public health and the environment by providing reliable power distribution, electrical and instrument maintenance, civil facilities and grounds maintenance, and mechanical maintenance to the treatment plant. The division's professional, highly skilled staff use best practices and technology to provide Plant Operations and District staff with electrical power, control systems, environmental controls that are safe and on-line, mechanical and facilities support to ensure and restore reliability, and administer the Civil Assets Maintenance Program (CAMP).

### 2015-16 Performance Objectives

- ◆ Maintain overtime at less than 5% of the total hours worked.
- ◆ Maintain a calendar yearly safety scorecard rating above 90%.
- ◆ Maintain 100% records compliance for Volatile Organic Compounds (VOC's).
- ◆ Manage operating expenditures to within 96 to 100% of approved budget.
- ◆ Maintain electrical power availability at the distribution level greater than 99.9% (8 hr/yr of unplanned outage).
- ◆ Maintain all three supervisory control and data acquisition system servers above 99.9% (8 hr/yr of unplanned downtime).
- ◆ Restrict the wasting of digester gas by flaring to less than 2%.

### 2015-16 Performance Results

- ◆ Maintain overtime at less than 5.5% of the total hours worked.
- ◆ Maintained a calendar yearly safety scorecard rating of 97%.
- ◆ Maintain 100% records compliance for Volatile Organic Compounds (VOCs).
- ◆ Manage operating expenditures to within 97% of approved budget.
- ◆ Maintain electrical power availability at the distribution level greater than 99.9%
- ◆ Maintain all three supervisory control and data acquisition system servers above 99.9
- ◆ Restrict the wasting of digester gas by flaring to less than 2%.

### 2016-17 & 2017-18 Performance Objectives

- ◆ Maintain overtime at less than 5% of the total hours worked.
- ◆ Maintain a total work order backlog of no greater than 6 weeks.
- ◆ Maintain a calendar yearly safety scorecard rating above 90%.
- ◆ Maintain 100% records compliance for Volatile Organic Compounds (VOC's)
- ◆ Manage operating expenditures to within 96 to 100% of the approved budget.
- ◆ Maintain electrical power availability at the distribution level greater than 99.9% (8hr/yr of unplanned outage).

Summary	Performance Measures				Justification
	2014-15 Actual	2015-16 Projected	2016-17 Proposed	2017-18 Proposed	
◆ Overtime	< 5%	3.5%	< 5%	< 5%	In-house standard based on industry standards
◆ Work Order Backlog	N/A	N/A	< 6 weeks	< 6 weeks	In-house standard
◆ Safety Scorecard	97%	95%	> 90%	> 90%	In-house standard
◆ VOC Record Compliance	100%	100%	100%	100%	In-house standard
◆ Manage Budget	99%	100%	96-100%	96-100%	In-house standard
◆ Power Availability	100%	100%	100%	100%	In-house standard

# Maintenance – Plant No. 1

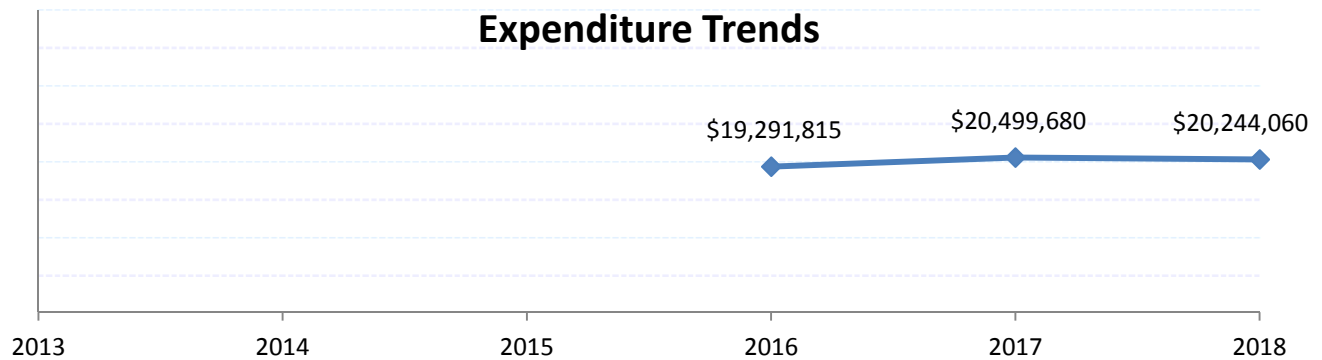
## Budget Overview

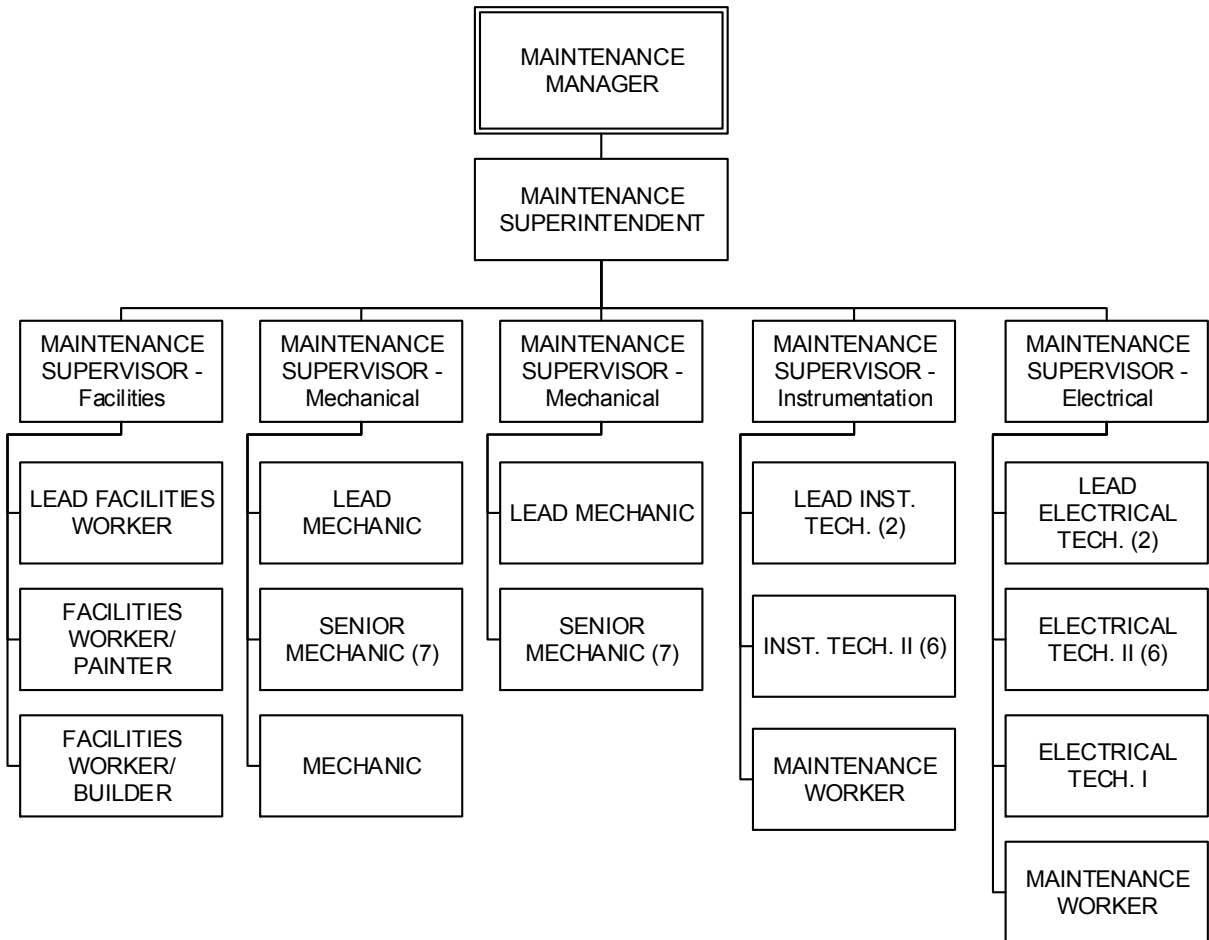
The FY 2016-17 & 2017-18 budgets for the Plant No. 1 Maintenance Division reflect an increase of 6% and a decrease of 1% from the prior year, respectively. The increase is primarily due to the transfer of four FTE positions from other divisions and increases in the costs for tools, temporary services, other contractual services, and professional services.

<b>2015-16 Adjusted Budget - Total Operating Requirements</b>	<b>\$ 19,291,815</b>
<b>Salaries for Position Changes:</b>	
Transfer of Positions from/(to) Other Divisions	295,900
New or (decreased) FTE	-
<b>Changes in Personnel Expenses:</b>	
Other net salary adjustments (MOU-related, leave payoffs, vacancy, etc.)	53,800
Change in OCERS retirement costs	(536,400)
Change in group insurance costs	38,400
Other benefit cost adjustments	(115,300)
<b>Other Cost Adjustments:</b>	
Increase in minor furniture & fixtures	68,000
Increase in training & meetings	67,355
Increase in tools	178,550
Increase in safety equipment and tools	33,000
Decrease in solids removal costs	(200,000)
Decrease in groundskeeping	(43,680)
Decrease in janitorial services	(104,350)
Increase in temporary services	537,400
Increase in other contractual services	575,880
Increase in professional services	293,910
Increase in repairs and maintenance	170,090
Decrease in outside equipment rental	(100,520)
<b>Aggregate change in Other Categories:</b>	
Aggregate change in other materials, supplies, and services	(4,170)
<b>2016-17 Proposed Budget - Total Operating Requirements</b>	<b>\$ 20,499,680</b>
<b>Changes in Personnel Expenses:</b>	
Net salary adjustments (MOU-related, leave payoffs, vacancy, etc.)	129,900
Change in OCERS retirement costs	12,400
Change in group insurance costs	67,100
Other benefit cost adjustments	(10,400)
<b>Other Cost Adjustments:</b>	
Decrease in minor furniture & fixtures	(65,000)
Decrease in training & meetings	(42,950)
Decrease in tools	(65,020)
Decrease in safety equipment and tools	(29,740)
Increase in temporary services	238,000
Increase in other contractual services	490,000
Increase in professional services	93,210
Decrease in repairs and maintenance	(1,317,500)
Increase in service maintenance agreements	250,000
<b>Aggregate change in Other Categories:</b>	
Aggregate change in other materials, supplies, and services	(5,620)
<b>2017-18 Proposed Budget - Total Operating Requirements</b>	<b>\$ 20,244,060</b>

# 2016-17 & 2017-18 Budget

Operating Expenses By Category	2014-15 Actual	2015-16 Revised Budget	2015-16 Projected	2016-17 Proposed	Budget % Change	2017-18 Proposed	Budget % Change
Personnel	\$ -	\$ 11,395,000	\$ 10,387,400	\$ 11,131,400	(2.31%)	\$ 11,330,400	1.79%
Supplies	-	465,035	446,180	829,860	78.45%	621,460	(25.11%)
Professional & Contractual Services	-	2,038,170	983,050	3,077,710	51.00%	3,898,920	26.68%
Research & Monitoring	-	-	-	-	-	-	-
Repairs & Maintenance	-	5,272,890	4,714,310	5,440,690	3.18%	4,373,190	(19.62%)
Utilities	-	12,080	10,000	12,080	0.00%	12,080	0.00%
Other	-	108,640	8,320	7,940	(92.69%)	8,010	0.88%
<b>Total</b>	<b>\$ -</b>	<b>\$ 19,291,815</b>	<b>\$ 16,549,260</b>	<b>\$ 20,499,680</b>	<b>6.26%</b>	<b>\$ 20,244,060</b>	<b>(1.25%)</b>





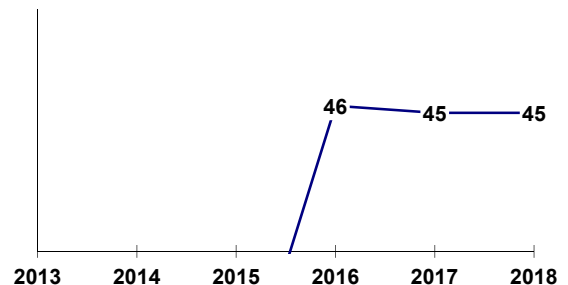
**Staffing Trends**

**2016-17 & 2017-18 Authorized FTE Positions**

Supervisors / Professionals 6.0  
 Operations & Maintenance 39.0

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**Total 45.0**



# 2016-17 & 2017-18 Budget

## Service Description

The mission of the Plant No. 2 Maintenance Division is to protect public health and the environment by providing reliable power distribution, electrical and instrument maintenance, civil facilities and grounds maintenance, and mechanical maintenance to the treatment plant and associated pump stations in outer lying service areas. The division's professional, highly skilled staff use best practices and technology to provide Collections, Plant Operations, and District staff with electrical power, control systems, environmental controls that are safe and on-line, and mechanical and facilities support to ensure and restore reliability.

### 2015-16 Performance Objectives

- ◆ Maintain overtime at less than 5% of the total hours worked.
- ◆ Maintain a calendar yearly safety scorecard rating above 90%.
- ◆ Maintain 100% records compliance for Volatile Organic Compounds (VOC's).
- ◆ Manage operating expenditures to within 96 to 100% of approved budget.
- ◆ Maintain electrical power availability at the distribution level greater than 99.9% (8 hr/yr of unplanned outage).
- ◆ Maintain all three supervisory control and data acquisition system servers above 99.9% (8 hr/yr of unplanned downtime).
- ◆ Restrict the wasting of digester gas by flaring to less than 2%.

### 2015-16 Performance Results

- ◆ Maintain overtime at less than 5.5% of the total hours worked.
- ◆ Maintained a calendar yearly safety scorecard rating of 97%.
- ◆ Maintain 100% records compliance for Volatile Organic Compounds (VOCs).
- ◆ Manage operating expenditures to within 97% of approved budget.
- ◆ Maintain electrical power availability at the distribution level greater than 99.9%
- ◆ Maintain all three supervisory control and data acquisition system servers above 99.9
- ◆ Restrict the wasting of digester gas by flaring to less than 2%.

### 2016-17 & 2017-18 Performance Objectives

- ◆ Maintain overtime at less than 5% of the total hours worked.
- ◆ Maintain a total work order backlog of no greater than 6 weeks.
- ◆ Maintain a calendar year safety scorecard above 90%.
- ◆ Maintain 100% records compliance for Volatile Organic Compounds (VOC's).
- ◆ Manage operating expenditures to within 96 to 100% of the approved budget.
- ◆ Maintain electrical power availability at the distribution level greater than 99.9% (8 hr/yr of unplanned outage).

### Performance Measures

Summary	2014-15 Actual	2015-16 Projected	2016-17 Proposed	2017-18 Proposed	Justification
◆ Overtime	< 5%	5.5%	< 5%	< 5%	In-house standard based on industry standards
◆ Work Order Backlog	N/A	N/A	< 6 weeks	< 6 weeks	In-house standard
◆ Safety Scorecard	97%	98%	> 90%	> 90%	In-house standard
◆ VOC Record Compliance	100%	100%	100%	100%	In-house standard
◆ Manage Budget	99%	100%	96-100%	96-100%	In-house standard
◆ Power Availability	100%	100%	100%	100%	In-house standard

# Maintenance – Plant No. 2

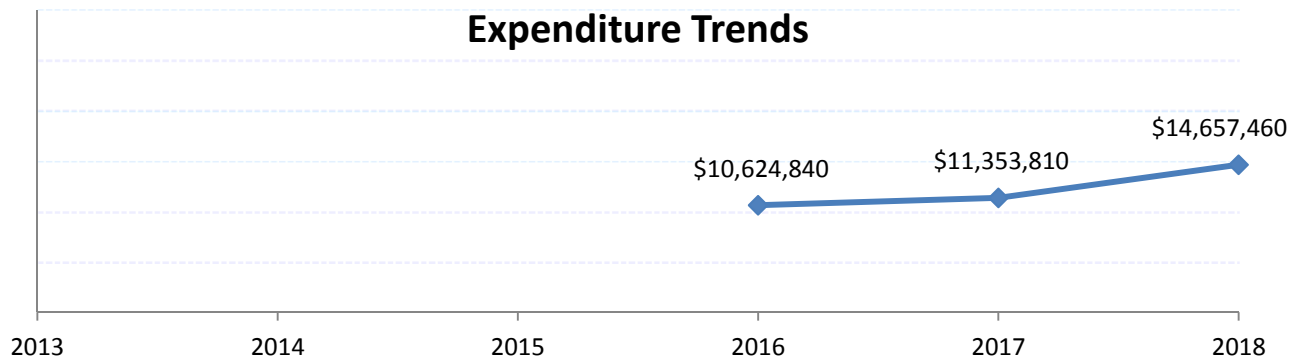
## Budget Overview

The FY 2016-17 & 2017-18 budgets for the Plant No. 2 Maintenance Division reflect an increase of 7% and an increase of 29% from the prior year, respectively. The 2016-17 increase is primarily due to increases in the costs for tools, repairs and maintenance, and service maintenance agreements. The 2017-18 increase is primarily due to increases in repairs and maintenance for the scheduled overhaul of two CenGen engines.

<b>2015-16 Adjusted Budget - Total Operating Requirements</b>	<b>\$ 10,624,840</b>
<b>Salaries for Position Changes:</b>	
Transfer of Positions from/(to) Other Divisions	-
New or (decreased) FTE	-
<b>Changes in Personnel Expenses:</b>	
Other net salary adjustments (MOU-related, leave payoffs, vacancy, etc.)	34,800
Change in OCERS retirement costs	(286,500)
Change in group insurance costs	7,700
Other benefit cost adjustments	52,300
<b>Other Cost Adjustments:</b>	
Decrease in training & meetings	(17,190)
Increase in tools	120,250
Decrease in janitorial costs	(28,290)
Increase in professional services	19,280
Increase in repairs and maintenance	665,810
Increase in service maintenance agreements	156,990
<b>Aggregate change in Other Categories:</b>	
Aggregate change in other materials, supplies, and services	3,820
<b>2016-17 Proposed Budget - Total Operating Requirements</b>	<b>\$ 11,353,810</b>
<b>Changes in Personnel Expenses:</b>	
Net salary adjustments (MOU-related, leave payoffs, vacancy, etc.)	85,800
Change in OCERS retirement costs	8,800
Change in group insurance costs	37,600
Other benefit cost adjustments	(5,700)
<b>Other Cost Adjustments:</b>	
Decrease in tools	(33,000)
Decrease in professional services	(20,680)
Increase in repairs and maintenance	2,832,030
Increase in service maintenance agreements	400,000
<b>Aggregate change in Other Categories:</b>	
Aggregate change in other materials, supplies, and services	(1,200)
<b>2017-18 Proposed Budget - Total Operating Requirements</b>	<b>\$ 14,657,460</b>

# 2016-17 & 2017-18 Budget

Operating Expenses By Category	2014-15 Actual	2015-16 Revised Budget	2015-16 Projected	2016-17 Proposed	Budget % Change	2017-18 Proposed	Budget % Change
Personnel	\$ -	\$ 6,136,900	\$ 5,365,400	\$ 5,945,200	(3.12%)	\$ 6,071,700	2.13%
Supplies	-	404,570	397,980	518,170	28.08%	483,020	(6.78%)
Professional & Contractual Services	-	329,510	264,600	320,700	(2.67%)	300,840	(6.19%)
Research & Monitoring	-	-	-	-	-	-	-
Repairs & Maintenance	-	3,735,390	4,609,050	4,558,190	22.03%	7,790,220	70.91%
Utilities	-	12,080	6,040	6,160	(49.01%)	6,290	2.11%
Other	-	6,390	5,370	5,390	(15.65%)	5,390	0.00%
<b>Total</b>	<b>\$ -</b>	<b>\$ 10,624,840</b>	<b>\$ 10,648,440</b>	<b>\$ 11,353,810</b>	<b>6.86%</b>	<b>\$ 14,657,460</b>	<b>29.10%</b>





**SELF-INSURANCE PROGRAM**  
**SECTION 7**

BACK OF SECTION 7 DIVIDER

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# Self-Insurance Program Overview

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## **SELF-FUNDED INSURANCE PLANS**

The District is partially self-insured for general liability and workers' compensation. The General Liability and Property program and the Workers' Compensation program have been in existence since 1979. The annual in-lieu premiums and charges to the Revenue Areas or Operating Divisions are the revenue sources within these programs. Expenses primarily consist of claim settlements, legal fees and excess loss insurance premiums. Ending Reserve Balances are projected at \$57,000,000 in FY 2016-17 and in FY 2017-18.

### **General Liability and Property**

- The District's current outside excess general liability insurance coverage is \$40 million per occurrence with an annual aggregate limit and with a self-insured retention of \$500,000.
- The District's current property insurance coverage is \$1 billion for perils of fire and \$300 million for perils of flood, subject to a self-insured retention of \$250,000. The District is partially self-insured for earthquake, but does carry \$25 million in coverage on seven key structures with a \$5 million deductible. The District also has a \$50 million sublimit for builder's risk under the property insurance program to ensure upcoming construction projects are adequately covered.
- In order to maintain a reserve balance of \$55 million for FY 2016-17 and FY 2017-18 for the Property and General Liability program, appropriations for in-lieu premiums charged to the Revenue Areas are recommended at \$1,111,100 and \$1,431,300 for FY 2016-17 and FY 2017-18, respectively.

### **Workers' Compensation**

- The District's current excess workers' compensation coverage has unlimited statutory coverage per occurrence and \$4 million employer's liability per employee with a self-insured retention of \$1 million per person per occurrence.

- In order to maintain the reserve balance of \$2 million for the Workers' Compensation program, appropriations for in-lieu premiums charged to operating divisions are recommended at \$1,196,300 and \$1,120,000 for FY 2016-17 and FY 2017-18, respectively.

# 2016-17 & 2017-18 Budget

## Total of the Self-Insurance Programs

DESCRIPTION OR ACCOUNT TITLE	2014-15 Actuals	2015-16 Budget	2015-16 Projected	2016-17 Proposed	2017-18 Proposed
<b>Beginning Reserves</b>	\$ 58,574,044	\$ 57,613,000	\$ 57,648,775	\$ 57,143,900	\$ 57,000,000
<b><u>Revenues</u></b>					
In-Lieu Premiums	1,255,000	1,974,700	1,974,700	2,307,400	2,551,300
Miscellaneous Other Revenue	9,391	5,000	24,580	10,000	10,000
Service Department Allocation	5,496	20,000	5,500	18,700	18,700
<b>Total Revenues</b>	1,269,887	1,999,700	2,004,780	2,336,100	2,580,000
<b><u>Expenses</u></b>					
Benefits/Claims	631,661	600,000	700,000	700,000	720,000
Contractual Services	-	200	-	-	-
Legal Services	178,671	180,000	397,800	300,000	310,000
Professional Services	60,425	77,500	57,000	60,000	60,000
<b>Subtotal</b>	870,757	857,700	1,154,800	1,060,000	1,090,000
Policy Premium Expense	1,324,399	1,755,000	1,354,800	1,420,000	1,490,000
<b>Total Expenses</b>	2,195,156	2,612,700	2,509,600	2,480,000	2,580,000
<b>Excess Revenue (Expenses)</b>	(925,269)	(613,000)	(504,820)	(143,900)	-
<b>Ending Reserves</b>	\$ 57,648,775	\$ 57,000,000	\$ 57,143,955	\$ 57,000,000	\$ 57,000,000

# Self-Insurance Program

## General Liability and Property Self-Insurance Program

DESCRIPTION OR ACCOUNT TITLE	2014-15 Actuals	2015-16 Budget	2015-16 Projected	2016-17 Proposed	2017-18 Proposed
<b>Beginning Reserves</b>	\$ 56,802,224	\$ 56,141,700	\$ 56,125,511	\$ 55,260,200	\$ 55,000,000
<b><u>Revenues</u></b>					
In-Lieu Premiums	500,000	496,000	496,000	1,111,100	1,431,300
Miscellaneous Other Revenue	274	-	14,300	-	-
Service Department Allocation	5,496	20,000	5,500	18,700	18,700
<b>Total Revenues</b>	505,770	516,000	515,800	1,129,800	1,450,000
<b><u>Expenses</u></b>					
Benefits/Claims	28,272	75,000	24,200	40,000	40,000
Contractual Services		200	-	-	-
Legal Services	52,339	50,000	196,400	130,000	130,000
Professional Services	-	2,500	-	-	-
<b>Subtotal</b>	80,611	127,700	220,600	170,000	170,000
Policy Premium Expense	1,101,872	1,530,000	1,160,500	1,220,000	1,280,000
<b>Total Expenses</b>	1,182,483	1,657,700	1,381,100	1,390,000	1,450,000
<b>Excess Revenue (Expenses)</b>	(676,713)	(1,141,700)	(865,300)	(260,200)	-
<b>Ending Reserves</b>	\$ 56,125,511	\$ 55,000,000	\$ 55,260,211	\$ 55,000,000	\$ 55,000,000

# 2016-17 & 2017-18 Budget

## Workers' Compensation Self-Insurance Program

DESCRIPTION OR ACCOUNT TITLE	2014-15 Actuals	2015-16 Budget	2015-16 Projected	2016-17 Proposed	2017-18 Proposed
<b>Beginning Reserves</b>	\$ 1,771,820	\$ 1,471,300	\$ 1,523,264	\$ 1,883,700	\$ 2,000,000
<b><u>Revenues</u></b>					
In-Lieu Premiums	755,000	1,478,700	1,478,700	1,196,300	1,120,000
Miscellaneous Other Revenue	9,117	5,000	10,280	10,000	10,000
Transfer In	-	-	-	-	-
Service Department Allocation	-	-	-	-	-
<b>Total Revenues</b>	764,117	1,483,700	1,488,980	1,206,300	1,130,000
<b><u>Expenses</u></b>					
Benefits/Claims	603,389	525,000	675,800	660,000	680,000
Contractual Services	-	-	-	-	-
Legal Services	126,332	130,000	201,400	170,000	180,000
Professional Services	60,425	75,000	57,000	60,000	60,000
<b>Subtotal</b>	790,146	730,000	934,200	890,000	920,000
Policy Premium Expense	222,527	225,000	194,300	200,000	210,000
<b>Total Expenses</b>	1,012,673	955,000	1,128,500	1,090,000	1,130,000
<b>Excess Revenue (Expenses)</b>	(248,556)	528,700	360,480	116,300	-
<b>Ending Reserves</b>	\$ 1,523,264	\$ 2,000,000	\$ 1,883,744	\$ 2,000,000	\$ 2,000,000

**CAPITAL IMPROVEMENTS**  
**SECTION 8**

BACK OF SECTION 8 DIVIDER



# Capital Improvement Program Overview

## CIP BUDGET REQUEST SUMMARY

Each year, the Board of Directors, through their committee process, reviews and approves the Capital Improvement Program (CIP) prepared by staff for both sewage collection system projects (collections) and the joint works treatment and disposal system projects.

Many of the District's projects take several years to complete the planning, design and construction cycle. The budget for a construction project covers the life of the project. This budget is reevaluated each year for the purpose of managing annual cash flows. Thus, many of the projects in the CIP Budget for 2016-18 are continuing projects that were approved in prior years.

The Asset Management Program within the Planning Division continues assessing the condition of the District's existing assets and systems to ensure that these assets and systems can provide the necessary level of service. The Planning Division will continue to review and update the ongoing and future CIP to appropriately manage the risks associated with asset or system failure. This year several projects were delayed, consolidated and rescope to help ensure that the CIP is delivered in the most efficient way possible. The Asset Management Program will continue these efforts and will continue to define the future CIP project requirements not currently included on the CIP list but are anticipated within the long-term financial plan to ensure effective and efficient operations in the future.

Four new projects are proposed for addition to the 2016-2018 budget to rehabilitate the Gisler-Red Hill Interceptor, relocate the Banning Gate at Plant No. 2, reduce odor at various Newport Beach pump stations, and evaluate the steps necessary to replace District's process SCADA system. These CIP projects increase the amount of the CIP by \$15.9 million. However, these projects will be funded from OCSD's existing budget and will not impact OCSD user rates.

In conjunction with preparation of the 2016-18 Budget, District staff have developed and reviewed, with the Board of Directors, a capital program to deliver the levels of service included in the District's Five-year Strategic Plan.

District staff has also validated all active and future CIP projects to ensure that the project scopes of work and cost estimates were accurate. Through the validation process, each project's schedule, staff resources, total project cost, cash flow and risks are

assessed to confirm the budgetary requirements. The validated CIP includes 81 active and future capital projects with a 10-year expenditure of \$2.4 billion.

The proposed 2016-17 CIP budget is organized by treatment process. The funds requested for the current CIP budget total \$190.3 million, which is part of an overall total CIP budget of \$3.3 billion for active and future projects.

Following is a table of the FY 2016-17 proposed CIP budget, by project phase, in millions:

<u>Project Status</u>	<u>2016-17 CIP Budget</u>
Planning	\$ 11.0
Design	52.3
Construction	<u>127.0</u>
Total Gross CIP Budget	<b>190.3</b>
Less: Savings and Deferrals	(19.0)
CIP Net of Savings/Deferrals	<b><u>\$ 171.3</u></b>

There are currently 11 projects in the Planning Phase with proposed capital outlay spending in 2016-17. Two of the larger 2016-17 cash flow projects in the Planning Phase are the Process SCADA Replacement Study and the Biosolids Master Plan, which is one of the planning studies within the Master Studies Program. The current year projected expenditures for these two projects are \$1.3 million and \$2.9 million, respectively.

There are currently 39 projects in the Design Phase with proposed capital outlay spending in 2016-17. The two largest projects in the Design Phase are the Rehabilitation of Western Regional Sewers and the Headworks Rehabilitation and Expansion at Plant No. 1 with projected current year expenditures of \$16.0 million and \$6.7 million, respectively.

There are currently 31 projects in the Construction Phase with proposed capital outlay spending in 2016-17. The two most significant projects in the construction phase are the Sludge Dewatering and Odor Control at Plant No. 2 and the Newhope-Placentia Trunk Replacement with projected FY 2016-17 expenditures of \$23.5 million and \$20.9 million, respectively.

Standard contingency factors have been applied to improve cost estimates. The rates of 30, 20, and 10 percent have been applied respectively to the estimates made during the project development,

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## 2016-17 & 2017-18 Budget

design, and construction project phases. This reflects standard practice for estimating construction project costs.

Following within this section are individual capital improvement project detail sheets that have been provided as a brief overview of each project, the budget for the next five years, and the budget for the total project.

Each project went through an extensive validation and prioritization process. Projects have been prioritized based on risk exposure. Projects that would present a higher risk or disproportionately higher future cost if they were delayed are given a higher priority.

### **The Treatment Process:**

The Treatment Process Diagram on the following page illustrates the stages of wastewater treatment in relation to the flow of wastewater through the treatment process. The icons in the legend are shown as graphics in the individual CIP Detail Sheets to give the reader insight about where a project correlates to the treatment process.

OCSD's system includes approximately 570 miles of sewers that convey wastewater generated within the Sanitation District's boundaries to the Sanitation District's two wastewater treatment plants, Reclamation Plant No. 1 located in the City of Fountain Valley, and Treatment Plant No. 2 located in the City of Huntington Beach.

Influent wastewater undergoes Preliminary Treatment upon entry to the treatment plants where it is filtered through bar screens, and grit and debris are removed. It then flows to Primary Treatment, which consists of large settling basins where solids are settled out, enhanced by the addition of chemicals, and sent to Solids Processing. The wastewater then flows to Secondary Treatment, which is a biological process using either the trickling filter or activated sludge process. Solids removed in Secondary Treatment are also sent to digestion.

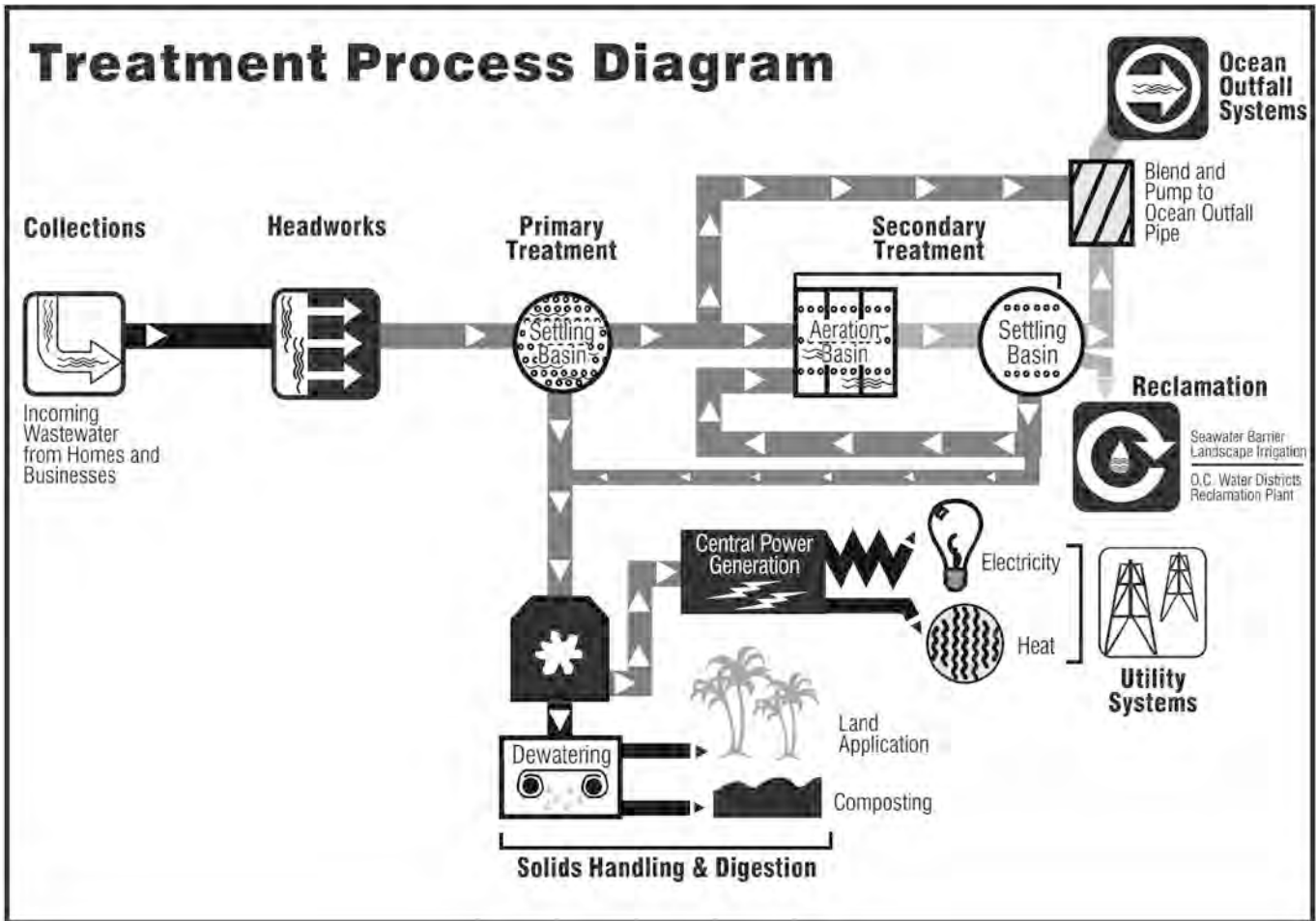
Methane gas generated during the natural decomposition of the solids in the digesters fuels the Central Power Generation System producing enough electricity to meet two-thirds of the power needed to run both treatment plants.

Solids are then dewatered to a 20 percent solids consistency, called biosolids, and recycled via direct land application or composting.

Approximately 130 MGD of secondary effluent from Reclamation Plant No. 1 is sent to the Orange County Water District (OCWD) for recycling in its two treatment processes.

The first is OCWD's Groundwater Replenishment System (GWRS). The GWRS is the largest water purification project of its kind in the world and its construction was funded jointly by OCWD and OCSD. At 100 million gallons per day, the GWRS generates enough pure water to meet the needs of 850,000 people.

The second is OCWD's Green Acres Project (GAP) which is a water recycling effort that provides reclaimed water for landscape irrigation at parks, schools and golf courses as well as for industrial uses, such as carpet dyeing. The total annual demand for GAP water is about four million gallons per day.

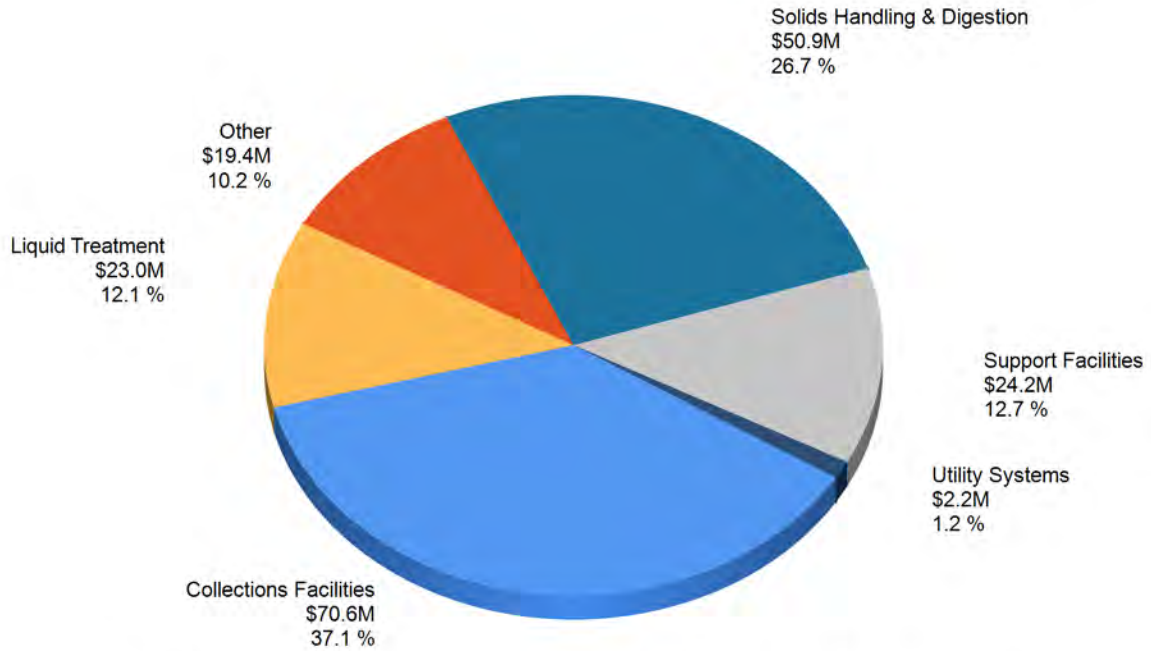


# 2016-17 & 2017-18 Budget

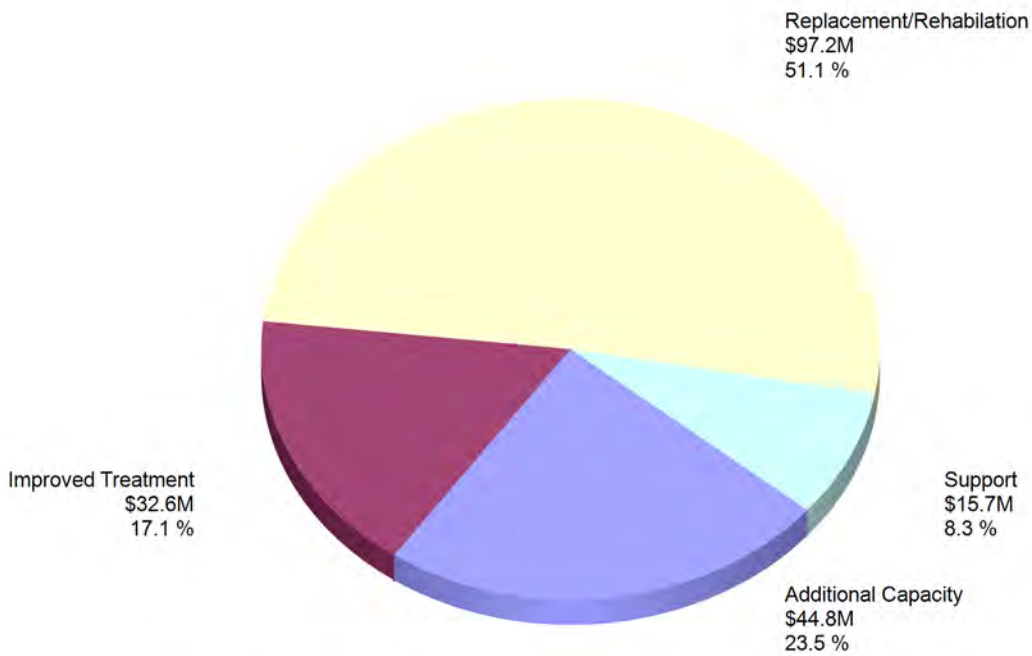
## Project Summary FY 2016-17

Item	Replacement/ Rehabilitation	Improved Treatment	Additional Capacity	Support	Total Budget
Collections Facilities	\$ 39,478,050	\$ 2,526,349	\$ 28,401,641	\$ 214,440	\$ 70,620,480
Solids Handling & Digestion	17,004,761	20,272,827	13,608,533	-	50,886,121
Support Facilities	10,626,100	1,910,375	-	11,690,725	24,227,200
Utility Systems	1,482,836	692,372	22,531	-	2,197,739
Liquid Treatment:					
Ocean Outfall Systems	10,251,220	-	-	-	10,251,220
Headworks	7,981,622	1,968,387	-	-	9,950,009
Primary Treatment	1,857,441	216,293	-	-	2,073,734
Secondary Treatment	723,670	-	-	-	723,670
Liquid Treatment Total	20,813,953	2,184,680	-	-	22,998,633
Other:					
Strategic & Master Planning	2,444,528	1,527,831	611,132	1,527,831	6,111,322
Information Management Systems	3,780,245	-	636,054	1,285,649	5,701,948
Equipment	920,695	920,695	920,695	920,695	3,682,780
Research	-	846,653	574,540	42,659	1,463,852
Process Related Special Projects	704,960	585,791	-	-	1,290,751
Water Management Projects	-	1,104,241	-	-	1,104,241
Others	6,080	6,082	6,082	6,082	24,326
Other Total	7,856,508	4,991,293	2,748,503	3,782,916	19,379,220
<b>Grand Total</b>	<b>\$ 97,262,208</b>	<b>\$ 32,577,896</b>	<b>\$ 44,781,208</b>	<b>\$ 15,688,081</b>	<b>\$ 190,309,393</b>

# Summary of Capital Requirements - FY 2016-17



**Total FY 2016-17 Capital Improvement Outlays by Process - \$190.3 Million**



**Total FY 2016-17 Capital Improvement Outlays by Type - \$190.3 Million**

# 2016-17 & 2017-18 Budget

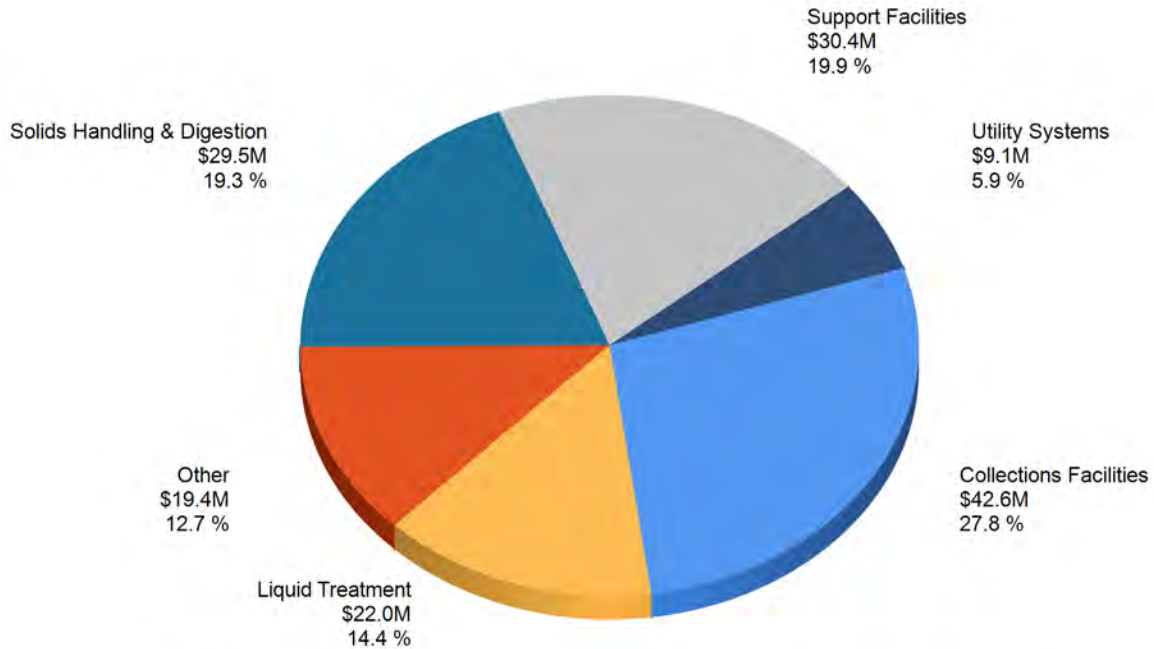
## Project Summary FY 2017-18

Item	Replacement/ Rehabilitation	Improved Treatment	Additional Capacity	Support	Total Budget
Collections Facilities	\$ 21,689,502	\$ 1,484,271	\$ 18,728,912	\$ 564,146	\$ 42,466,831
Solids Handling & Digestion	9,957,099	10,610,149	8,972,165	-	29,539,413
Support Facilities	13,496,988	2,212,479	-	14,739,270	30,448,737
Utility Systems	9,103,264	-	-	-	9,103,264
Liquid Treatment:					
Headworks	6,819,623	761,582	-	-	7,581,205
Primary Treatment	5,674,086	750,624	-	-	6,424,710
Ocean Outfall Systems	6,124,276	-	-	-	6,124,276
Secondary Treatment	1,916,293	-	-	-	1,916,293
Liquid Treatment Total	<u>20,534,278</u>	<u>1,512,206</u>	<u>-</u>	<u>-</u>	<u>22,046,484</u>
Other:					
Strategic & Master Planning	3,393,525	2,120,954	848,382	2,120,954	8,483,815
Information Management Systems	4,618,013	-	672,946	2,102,664	7,393,623
Research	-	856,729	847,546	15,526	1,719,801
Equipment	251,075	251,075	251,075	251,075	1,004,300
Process Related Special Projects	710,073	27,982	-	-	738,055
Others	6,889	6,889	6,889	61,945	82,612
Water Management Projects	-	-	-	-	-
Other Total	<u>8,979,575</u>	<u>3,263,629</u>	<u>2,626,838</u>	<u>4,552,164</u>	<u>19,422,206</u>
<b>Grand Total</b>	<b><u>\$ 83,760,706</u></b>	<b><u>\$ 19,082,734</u></b>	<b><u>\$ 30,327,915</u></b>	<b><u>\$ 19,855,580</u></b>	<b><u>\$ 153,026,935</u></b>

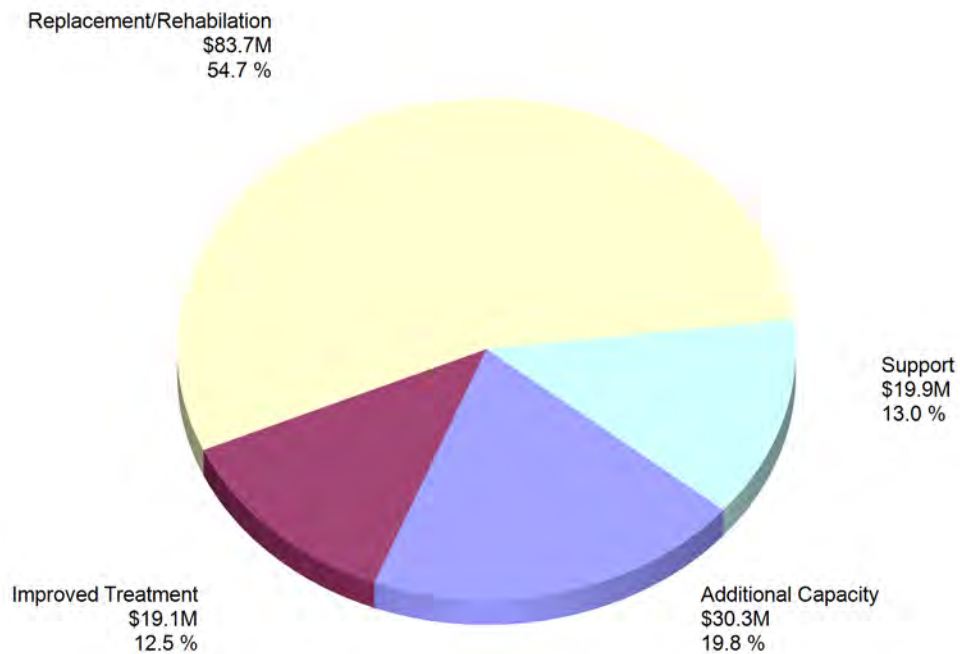
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## Summary of Capital Requirements - FY 2017-18

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**Total FY 2017-18 Capital Improvement Outlays by Process - \$153.0 Million**



**Total FY 2017-18 Capital Improvement Outlays by Type - \$153.0 Million**

# 2016-17 & 2017-18 Budget

## Summary of Capital Requirement - Collection System Improvement Projects

	Project Number	Project Phase 7/1/16	Total Project Budget	Est. Cost to Date 6/30/16	2016-17 Cashflow Budget	2017-18 Cashflow Budget	Future Budget	Budget Status
<b>Collections Facilities</b>								
Raitt & Bristol Street Sewer Rehab & Extension	1-101	Planning	\$ 13,622,000	\$ 259,066	\$ 204,379	\$ 184,407	\$ 12,974,148	Revised
Santa Ana Trunk Sewer Rehab	1-17	Const./Impl.	6,974,000	6,899,881	74,119			Revised
Edinger Bolsa Chica Trunk Impr.	11-25	Planning	5,159,000				5,159,000	Future
Edinger Pump Station Rehab	11-33	Planning	8,880,000				8,880,000	Future
Slater Avenue Pump Station Rehab	11-34	Planning	9,729,000				9,729,000	Future
SARI Re-Alignment	2-41	Const./Impl.	11,404,000	10,841,729	562,271			Continuing
SARI Rock Stabilizers Removal	2-41-8	Design	3,743,000	413,055	312,927	881,137	2,135,881	Revised
Taft Branch Sewer Relief	2-49	Planning	1,928,000	12,092			1,915,908	Future
Newhope - Placentia Trunk Grade Separation Repl.	2-65	Const./Impl.	5,739,000	4,073,526	934,520	719,339	11,615	Revised
Newhope-Placentia Trunk Repl.	2-72	Const./Impl.	99,475,000	7,233,074	20,943,945	14,157,441	57,140,540	Revised
Yorba Linda Pump Station Abandonment	2-73	Planning	7,053,000			120,583	6,932,417	Future
Lakeview Grade Separation Project	2-75	Const./Impl.	330,000	126,260	154,706	49,034		Continuing
Tustin Rose OCTA Grade Separation	2-76	Const./Impl.	586,000	514,683	71,317			Continuing
Beach Trunk/Knott Interceptor Sewer Relief	3-60	Planning	118,678,000				118,678,000	Future
Seal Beach Pump Station Rehab	3-62	Design	60,840,000	2,229,757	5,964,626	2,463,453	50,182,164	Revised
Rehab of Western Regional Sewers	3-64	Design	217,069,000	1,934,740	16,018,059	6,380,601	192,735,600	Revised
Newport Force Main Rehab	5-60	Const./Impl.	64,000,000	57,965,431	6,034,569			Continuing
Crystal Cove Pump Station Rehab	5-66	Planning	10,882,000				10,882,000	Future
Bay Bridge Pump Station Repl.	5-67	Planning	54,000,000			4,291,175	49,708,825	Future
Newport Beach Pump Stations Odor Control Impr.	5-68	Planning	4,066,000			67,533	3,998,467	New
District 6 Trunk Sewer Relief	6-17	Design	7,965,000	1,351,790	4,623,818	1,975,316	14,076	Revised
Southwest Costa Mesa Trunk Sewer	6-19	Design	29,650,000	1,953,184	876,199	666,960	26,153,657	Revised
Gisler - Red Hill System Impr. - Reach B	7-37	Const./Impl.	25,213,000	6,249,013	11,951,892	6,902,874	109,221	Revised
Browning Subtrunk Sewer Relief	7-60	Planning	16,952,000				16,952,000	Future
MacArthur Pump Station Rehab	7-63	Planning	8,762,000			145,682	8,616,318	Future
Main Street Pump Station Rehab	7-64	Planning	39,219,000				39,219,000	Future
Gisler Red-Hill Interceptor Rehab	7-65	Planning	5,486,000		102,511	138,529	5,244,960	New
Facilities Engineering Program - Collections	M-FE-COLLECT	Const./Impl.	12,192,000	107,153	1,429,603	3,310,756	7,344,488	New
Bay Bridge Pump Station & Force Main Repl. Study	SP-178	Planning	725,000	351,970	361,019	12,011		Continuing
<b>Collections Facilities Total Budget</b>			<b>850,321,000</b>	<b>102,516,404</b>	<b>70,620,480</b>	<b>42,466,831</b>	<b>634,717,285</b>	



# Summary of Capital Requirements

## Summary of Capital Requirement - Treatment System Improvement Projects

	Project Number	Project Phase 7/1/16	Total Project Budget	Est. Cost to Date 6/30/16	2016-17 Cashflow Budget	2017-18 Cashflow Budget	Future Budget	Budget Status
<b>Headworks</b>								
Headworks Rehab & Expansion at P1	P1-105	Design	274,841,000	2,746,223	6,705,388	7,569,666	257,819,723	Revised
Trunk Line Odor Control Impr.	P1-123	Const./Impl.	9,299,000	6,042,840	3,244,621	11,539		Revised
<b>Headworks Total</b>			<b>284,140,000</b>	<b>8,789,063</b>	<b>9,950,009</b>	<b>7,581,205</b>	<b>257,819,723</b>	
<b>Primary Treatment</b>								
Primary Clarifier & Trickling Filter Odor Control at P1	P1-114	Planning	94,228,000		95,767	389,521	93,742,712	Continuing
P1 Primary Treatment Upgrades	P1-124	Const./Impl.	9,146,000	8,852,129	293,871			Revised
Primary Clarifiers Repl.s & Impr. at P1	P1-126	Planning	158,332,000			476,555	157,855,445	Future
A-Side Primary Clarifiers Repl. at P2	P2-98	Design	428,264,000	1,150,178	1,684,096	5,558,634	419,871,092	Revised
<b>Primary Treatment Total</b>			<b>689,970,000</b>	<b>10,002,307</b>	<b>2,073,734</b>	<b>6,424,710</b>	<b>671,469,249</b>	
<b>Secondary Treatment</b>								
Activated Sludge Aeration Basin Deck Repair at P2	P2-118	Design	2,331,000	65,149	295,085	1,871,166	99,600	Revised
Oxygen Plant Demolition at P2	SP-129	Const./Impl.	3,444,000	2,970,288	428,585	45,127		Revised
<b>Secondary Treatment Total</b>			<b>5,775,000</b>	<b>3,035,437</b>	<b>723,670</b>	<b>1,916,293</b>	<b>99,600</b>	
<b>Solids Handling &amp; Digestion</b>								
Digester Rehab at P1	P1-100	Const./Impl.	66,650,000	58,486,818	4,754,023	2,567,779	841,380	Revised
Sludge Dewatering & Odor Control at P1	P1-101	Const./Impl.	188,328,000	148,088,414	18,460,389	9,725,351	12,053,846	Revised
Solids Thickening & Processing Upgrades	P2-89	Const./Impl.	51,150,000	46,636,451	4,208,003	305,546		Continuing
Digester Facilities Rehab at P2	P2-91-1	Planning	49,220,000	152,363		151,386	48,916,251	Future
Sludge Dewatering & Odor Control at P2	P2-92	Const./Impl.	90,477,000	27,990,292	23,463,706	16,789,351	22,233,651	Revised
<b>Solids Handling &amp; Digestion Total</b>			<b>445,825,000</b>	<b>281,354,338</b>	<b>50,886,121</b>	<b>29,539,413</b>	<b>84,045,128</b>	
<b>Ocean Outfall Systems</b>								
Final Effluent Sampler & Building Area Upgrades	J-110	Const./Impl.	16,411,000	10,133,199	5,602,416	675,385		Revised
Ocean Outfall System Rehab	J-117	Design	87,683,000	4,438,000	4,648,804	5,448,891	73,147,305	Revised
<b>Ocean Outfall Systems Total</b>			<b>104,094,000</b>	<b>14,571,199</b>	<b>10,251,220</b>	<b>6,124,276</b>	<b>73,147,305</b>	
<b>Utility Systems</b>								
Cengen Cooling Water System Repl. Project	J-109	Const./Impl.	11,477,000	11,477,000				Continuing
Cengen Emissions Control Project	J-111	Const./Impl.	23,820,000	23,127,628	692,372			Revised
UPS System Upgrades	J-121	Planning	8,087,000				8,087,000	Future
Digester Gas Facilities Rehab	J-124	Planning	87,897,000		332,017	361,387	87,203,596	Revised
Natural Gas Pipelines Repl. at P1 & P2	J-127	Planning	1,310,000		33,573	53,872	1,222,555	Continuing
Electrical Power Distribution System Impr.	J-98	Planning	34,608,000				34,608,000	Future
Plant Water System Rehab at P1	P1-112	Const./Impl.	6,157,000	6,145,355	11,645			Revised
Central Generation Rehab at P1	P1-127	Planning	73,151,000				73,151,000	Future

# 2016-17 & 2017-18 Budget

## Summary of Capital Requirement - Treatment System Improvement Projects

	Project Number	Project Phase 7/1/16	Total Project Budget	Est. Cost to Date 6/30/16	2016-17 Cashflow Budget	2017-18 Cashflow Budget	Future Budget	Budget Status
<b>Utility Systems</b>								
Plant Water System Rehab at P2	P2-101	Const./Impl.	3,704,000	3,702,116	1,884			Revised
Consolidated Demolition & Utility Impr. at P2	P2-110	Design	38,460,000	2,688,994	1,081,187	8,688,005	26,001,814	Revised
Central Generation Rehab at P2	P2-119	Planning	95,906,000				95,906,000	Future
Plant Air System Master Plan	SP-148	Planning	225,000	179,939	45,061			Revised
<b>Utility Systems Total</b>			<b>384,802,000</b>	<b>47,321,032</b>	<b>2,197,739</b>	<b>9,103,264</b>	<b>326,179,965</b>	
<b>Process Related Special Projects</b>								
Safety Impr. Program	J-126	Design	9,702,000	183,089	704,960	710,073	8,103,878	Revised
Odor Control Master Plan	SP-166	Planning	1,950,000	1,336,227	585,791	27,982		Revised
<b>Process Related Special Projects Total</b>			<b>11,652,000</b>	<b>1,519,316</b>	<b>1,290,751</b>	<b>738,055</b>	<b>8,103,878</b>	
<b>Information Management Systems</b>								
Process Control Systems Upgrades	J-120	Planning	102,399,000				102,399,000	Future
Programmable Control Panel Upgrades	J-125	Const./Impl.	2,283,000	2,208,355	74,645			Revised
Information Technology Capital Program	M-MC-IT	Const./Impl.	10,000,000		502,307	1,297,930	8,199,763	New
Power Monitoring & Control Systems at P2	P2-107	Design	34,123,000	1,217,451	2,590,934	2,580,842	27,733,773	Revised
EAM Software & Process Implementation	SP-100	Const./Impl.	7,500,000	4,861,098	471,467	627,109	1,540,326	Revised
PDS2D Software Repl.	SP-103	Const./Impl.	525,000	359,190	98,061	67,749		Continuing
Geographic Information System	SP-15	Const./Impl.	4,568,000	2,250,165	616,445	614,082	1,087,308	Revised
Process Control Systems Upgrades Study	SP-196	Planning	3,554,000		1,348,089	2,205,911		New
<b>Information Management Systems Total</b>			<b>164,952,000</b>	<b>10,896,259</b>	<b>5,701,948</b>	<b>7,393,623</b>	<b>140,960,170</b>	
<b>Strategic &amp; Master Planning</b>								
Planning Studies Program	M-STUDIES	Planning	23,652,000	1,212,480	6,111,322	8,483,815	7,844,383	New
Climate Change Impact Study	SP-152	Planning	590,000				590,000	Future
<b>Strategic &amp; Master Planning Total</b>			<b>24,242,000</b>	<b>1,212,480</b>	<b>6,111,322</b>	<b>8,483,815</b>	<b>8,434,383</b>	
<b>Water Management Projects</b>								
Effluent Reuse Study	SP-173	Planning	3,250,000	2,145,759	1,104,241			Continuing
<b>Water Management Projects Total</b>			<b>3,250,000</b>	<b>2,145,759</b>	<b>1,104,241</b>			
<b>Research</b>								
Research Program	M-RESEARCH	Planning	8,500,000		1,149,080	1,695,092	5,655,828	New
Fuel Cell Demo	SP-125-04	Planning	135,000	109,173	16,644	9,183		Revised
SCCWRP Nutrient Cycling Sampling	SP-125-15	Planning	95,000	36,815	42,659	15,526		Continuing
AquaCritox Evaluation/Design	SP-125-17	Planning	588,000	332,531	255,469			Revised
<b>Research Total</b>			<b>9,318,000</b>	<b>478,519</b>	<b>1,463,852</b>	<b>1,719,801</b>	<b>5,655,828</b>	
<b>Support Facilities</b>								
Facilities Engineering Program - Plant	M-FE-PLANT	Const./Impl.	43,325,000	5,796,203	12,735,831	14,749,859	10,043,107	New

# Summary of Capital Requirements

## Summary of Capital Requirement - Treatment System Improvement Projects

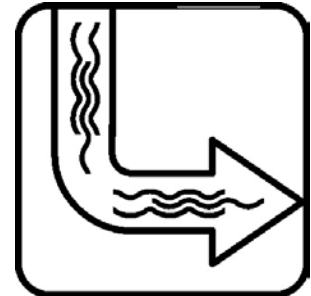
	Project Number	Project Phase 7/1/16	Total Project Budget	Est. Cost to Date 6/30/16	2016-17 Cashflow Budget	2017-18 Cashflow Budget	Future Budget	Budget Status
<b>Support Facilities</b>								
Operations & Maintenance Capital Program	M-SM-CAP	Const./Impl.	15,622,000	40,359	1,711,019	3,172,087	10,698,535	New
Title 24 Access Compliance & Building Rehab Project	P1-115	Const./Impl.	17,509,000	11,783,642	3,816,143	1,564,022	345,193	Revised
Headquarters Complex, Site & Security, & Entrance Realignment Program	P1-128	Design	179,067,000	536,761	5,951,410	10,955,474	161,623,355	Revised
Site & Security Impr. at P2	P2-96	Const./Impl.	252,000	231,908	12,797	7,295		Continuing
<b>Support Facilities Total</b>			<b>255,775,000</b>	<b>18,388,873</b>	<b>24,227,200</b>	<b>30,448,737</b>	<b>182,710,190</b>	
<b>Others</b>								
Banning Gate Relocation & Grading at P2	P2-120	Planning	2,812,000			55,056	2,756,944	New
Capital Improvement Program Mgmt. Services	SP-195	Design	300,000	7,808	24,326	27,556	240,310	Continuing
<b>Others Total</b>			<b>3,112,000</b>	<b>7,808</b>	<b>24,326</b>	<b>82,612</b>	<b>2,997,254</b>	
<b>Total Treatment and Disposal Projects</b>			<b>2,386,907,000</b>	<b>399,722,390</b>	<b>116,006,133</b>	<b>109,555,804</b>	<b>1,761,622,673</b>	
<b>Total Collections Facilities</b>			<b>850,321,000</b>	<b>102,516,404</b>	<b>70,620,480</b>	<b>42,466,831</b>	<b>634,717,285</b>	
<b>Capital Equipment Purchases</b>			<b>16,000,000</b>	<b>3,275,000</b>	<b>3,682,780</b>	<b>1,004,300</b>	<b>8,037,920</b>	
<b>Total Capital Improvement Program Budget</b>			<b>\$ 3,253,228,000</b>	<b>\$505,513,794</b>	<b>\$190,309,393</b>	<b>\$153,026,935</b>	<b>\$2,404,377,878</b>	

# 2016-17 & 2017-18 Budget

<b>Project Name &amp; Number</b>	<b>Raitt &amp; Bristol Street Sewer Rehab &amp; Extension - 1-101</b>		
<b>Project Category</b>	<b>Collections Facilities</b>	<b>Project Status:</b>	<b>Revised</b>

**Description**

This project will replace 2,360 linear feet of 21-inch City of Santa Ana sewer with a 24-inch Sanitation District's sewer line and a parallel 8-inch City of Santa Ana sewer line to allow for redirecting all house lateral connections. The sewer line is located along Myrtle Street, between Raitt and Bristol Streets in the City of Santa Ana. The project also includes rehabilitating 910 feet of 18-inch VCP, 7,075 feet of 21-inch VCP, and 2,570 feet of 24-inch VCP pipe and associated manholes in Bristol Street and Raitt Street.



**Collections  
Facilities**

**Justification**

This project was identified in the 2006 Strategic Plan Update and is needed to eliminate bottlenecks and avoid a potential spill. This project will also rehabilitate aging infrastructure.

The project budget has been increased from \$5,319,000 to \$13,622,000. The project's construction cost is \$7,791,961. This project will not have an impact on operational budgets.

**Budget Projections**

Budget Phase	Cost To-Date	2016-2017	2017-18	2018-19	2019-20	2020-21	Thereafter	Total Project Budget
Proj Dev	255,153	155,839						410,992
Prelim Design		40,682	120,320	72,757				233,759
Design	3,610			304,871	675,104	422,583		1,406,168
Construction	303					1,651,793	7,386,881	9,038,977
Commissioning							155,843	155,843
Close-out							38,960	38,960
Contingency		7,858	64,087	159,616	243,827	340,570	1,521,343	2,337,301
<b>Total</b>	<b>259,066</b>	<b>204,379</b>	<b>184,407</b>	<b>537,244</b>	<b>918,931</b>	<b>2,414,946</b>	<b>9,103,027</b>	<b>13,622,000</b>

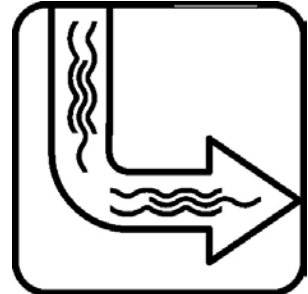
Reimbursable Costs: N/A

# CIP Project Detail Sheets

<b>Project Name &amp; Number</b>	<b>Santa Ana Trunk Sewer Rehab - 1-17</b>		
<b>Project Category</b>	<b>Collections Facilities</b>	<b>Project Status:</b>	<b>Revised</b>

**Description**

This project will rehabilitate the existing Santa Ana Trunk sewer from the Sanitation District's Reclamation Plant 1 to Bristol Street in the Cities of Fountain Valley, Costa Mesa and Santa Ana. The project reviewed the condition of 17,500 feet of 42 inch and 48 inch unlined concrete pipe and manholes. The condition assessment concluded only the most severely corroded manholes, 22 in total, need to be rehabilitated with a protective liner or replaced. Similar to the manholes, only the most corroded pipe reach, approximately 1,000 feet, will be relined at this time.



**Collections  
Facilities**

**Justification**

The sewer was originally constructed in 1955, and the estimated life of this type of pipe is 40 to 50 years. During routine cleaning of the sewer, it has been noted that the manholes are deteriorating due to corrosive sewer gases. These manholes were not originally constructed with protective linings. The project will repair the most severely corroded manholes to minimize the risks from potential failures. During pipeline inspection, pipeline coring confirmed the rehabilitation of the pipeline can be deferred at least 10 years. Deferring the lining of the pipeline until it is needed will minimize the life cycle cost of maintaining the sewer.

The project budget has been decreased from \$7,676,000 to \$6,974,000. The project's construction cost is \$2,865,024. This project will not have an impact on operational budgets.

**Budget Projections**

Budget Phase	Cost To-Date	2016-2017	2017-18	2018-19	2019-20	2020-21	Thereafter	Total Project Budget
Proj Dev	180,066							180,066
Prelim Design	2,045,229							2,045,229
Design	784,507							784,507
Construction	3,620,481							3,620,481
Commissioning	274							274
Close-out	72,921	37,500						110,421
Contingency	196,405	36,619						233,024
<b>Total</b>	<b>6,899,881</b>	<b>74,119</b>						<b>6,974,000</b>

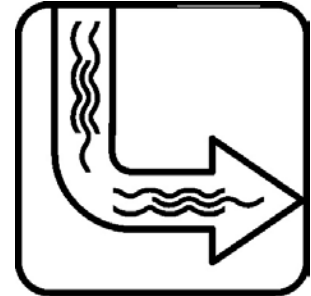
Reimbursable Costs: N/A

# 2016-17 & 2017-18 Budget

<b>Project Name &amp; Number</b>	Edinger Bolsa Chica Trunk Impr. - 11-25		
<b>Project Category</b>	Collections Facilities	<b>Project Status:</b>	Future

**Description**

The scope of this project includes increasing the size of approx. 4,000 linear feet of Edinger Bolsa Chica Trunk from 12-inch to 15-inches. The project is located in Bolsa Chica Street from Robinwood Drive, north to Bolsa Avenue in the City of Huntington Beach.



**Collections  
Facilities**

**Justification**

The need for this project was identified in the 2006 Strategic Plan Update. These improvements will accommodate changing flow patterns due to planned development strategies, economic influences, and potential wet weather surcharges.

The project's construction cost is \$3,008,349. This project will not have an impact on operational budgets.

**Budget Projections**

Budget Phase	Cost To-Date	2016-2017	2017-18	2018-19	2019-20	2020-21	Thereafter	Total Project Budget
Proj Dev							60,200	60,200
Prelim Design							90,303	90,303
Design							541,474	541,474
Construction							3,489,657	3,489,657
Commissioning							60,108	60,108
Close-out							15,004	15,004
Contingency							902,254	902,254
<b>Total</b>							<b>5,159,000</b>	<b>5,159,000</b>

Reimbursable Costs: N/A

# CIP Project Detail Sheets

<b>Project Name &amp; Number</b>	<b>Edinger Pump Station Rehab - 11-33</b>		
<b>Project Category</b>	<b>Collections Facilities</b>	<b>Project Status:</b>	<b>Future</b>

## Description

The purpose of the Edinger Pump Station Rehabilitation Project is to execute the conceptual design plan that is currently being developed as a result of the study by the same name. This project will rehabilitate the Edinger Pump Station to improve the condition of the structures and the mechanical piping and support systems. The electrical and controls system will also be updated.



**Collections  
Facilities**

## Justification

Edinger Pump Station was originally constructed in 1968. Although the pumps have recently been replaced, the control systems are rapidly becoming obsolete and the facility is relatively dangerous to access. The electrical system does not comply with current codes.

The project's construction cost is \$4,800,244. This project will not have an impact on operational budgets.

## Budget Projections

Budget Phase	Cost To-Date	2016-2017	2017-18	2018-19	2019-20	2020-21	Thereafter	Total Project Budget
Proj Dev						96,000		96,000
Prelim Design						38,966	105,028	143,994
Design							1,103,997	1,103,997
Construction							5,904,239	5,904,239
Commissioning							95,987	95,987
Close-out							96,000	96,000
Contingency						18,321	1,421,462	1,439,783
<b>Total</b>						<b>153,287</b>	<b>8,726,713</b>	<b>8,880,000</b>

Reimbursable Costs: N/A

# 2016-17 & 2017-18 Budget

<b>Project Name &amp; Number</b>	<b>Slater Avenue Pump Station Rehab - 11-34</b>		
<b>Project Category</b>	<b>Collections Facilities</b>	<b>Project Status:</b>	<b>Future</b>

## Description

The purpose of the Slater Avenue Pump Station Rehabilitation Project is to execute the conceptual design plan that was developed as a result of the study by the same name. This project will rehabilitate the existing Slater Avenue Pump Station to meet current building, electrical and safety codes, and OCS design standards. The pump station will also need to be seismically retrofitted and have a roof replacement. In addition to the improvements to the pump station, both force mains currently serving this pump station and the gravity system in close proximity of the pump station will be rehabilitated.



**Collections  
Facilities**

## Justification

Slater Avenue Pump Station was constructed in the late 1990s and needs rehabilitation to maintain the pump station's reliability in the coming decades. The electrical system does not meet current building code requirements. The ductile iron force mains, one of which was constructed with the original Slater Avenue Pump Station, are aging and need to be rehabilitated.

The project's construction cost is \$5,258,997. This project will not have an impact on operational budgets.

## Budget Projections

Budget Phase	Cost To-Date	2016-2017	2017-18	2018-19	2019-20	2020-21	Thereafter	Total Project Budget
Proj Dev						105,200		105,200
Prelim Design						19,336	138,360	157,696
Design							1,209,399	1,209,399
Construction							6,468,494	6,468,494
Commissioning							105,103	105,103
Close-out							105,101	105,101
Contingency						5,963	1,572,044	1,578,007
<b>Total</b>						<b>130,499</b>	<b>9,598,501</b>	<b>9,729,000</b>

Reimbursable Costs: N/A

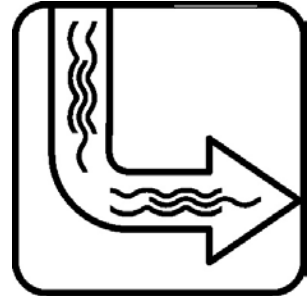


# CIP Project Detail Sheets

<b>Project Name &amp; Number</b>	<b>SARI Re-Alignment - 2-41</b>		
<b>Project Category</b>	<b>Collections Facilities</b>	<b>Project Status:</b>	<b>Continuing</b>

**Description**

This project provides for the protection and relocation of the Santa Ana River Interceptor (SARI), currently located within the floodplain of the Santa Ana River between Weir Canyon Road and the County line. This project is intended to protect approximately 4 miles of pipeline and manholes from failure due to high storm water releases from Prado Dam in major flood events. The most recent United States Army Corps of Engineers (USACE) study of the project was completed in October 2005. The current budget only reflects funds necessary for OCSD support of the project.



**Collections  
Facilities**

**Justification**

The existing pipeline has been subjected to continued scour of overlying soil and sediments since it was constructed in the mid 1970's. Hydraulic analyses of the river after the Prado Dam improvements are completed indicated that the pipeline could be washed away during dam releases above 5,000 cubic feet per second. The Prado Dam improvements will allow for releases of up to 30,000 cubic feet per second. If this pipeline reach from Weir Canyon Road to the Orange/San Bernardino County line is not relocated or protected prior to the completion of the Prado Dam improvements, then the line could fail during a flood event.

The construction of this project has been completed.

This project will not have an impact on operational budgets.

**Budget Projections**

Budget Phase	Cost To-Date	2016-2017	2017-18	2018-19	2019-20	2020-21	Thereafter	Total Project Budget
Proj Dev	183,657							183,657
Prelim Design	2,326,837							2,326,837
Design	6,257,957							6,257,957
Construction	1,449,510							1,449,510
Commissioning	278,106							278,106
Close-out	79,975	31,233						111,208
Contingency	265,687	531,038						796,725
<b>Total</b>	<b>10,841,729</b>	<b>562,271</b>						<b>11,404,000</b>

Reimbursable Costs: 4,943,876

# 2016-17 & 2017-18 Budget

<b>Project Name &amp; Number</b>	<b>SARI Rock Stabilizers Removal - 2-41-8</b>		
<b>Project Category</b>	<b>Collections Facilities</b>	<b>Project Status:</b>	<b>Revised</b>

## Description

This project will remove and dispose of all rip rap rocks protecting the abandoned segment of the Santa Ana River Interceptor (SARI) line within the Santa Ana River between SAVI Ranch and the Green River Golf Course in Yorba Linda. The rock to be removed was installed under emergency authorization to temporarily protect the SARI line since 2005.



**Collections  
Facilities**

## Justification

This is a condition of the emergency permits issued by the US Army Corps of Engineers over the years for temporarily protecting the SARI line.

The project budget has been increased from \$3,092,000 to \$3,743,000. The project's construction cost is \$1,800,000. This project will not have an impact on operational budgets.

## Budget Projections

Budget Phase	Cost To-Date	2016-2017	2017-18	2018-19	2019-20	2020-21	Thereafter	Total Project Budget
Proj Dev	130,793							130,793
Prelim Design	238,151	51,490						289,641
Design	10,190	186,317	130,677					327,184
Construction	3,801		651,762	1,747,354				2,402,917
Commissioning								
Close-out				52,399				52,399
Contingency	30,119	75,120	98,698	270,222	65,906			540,065
<b>Total</b>	<b>413,055</b>	<b>312,927</b>	<b>881,137</b>	<b>2,069,975</b>	<b>65,906</b>			<b>3,743,000</b>

Reimbursable Costs: 45,696

# CIP Project Detail Sheets

<b>Project Name &amp; Number</b>	<b>Taft Branch Sewer Relief - 2-49</b>		
<b>Project Category</b>	<b>Collections Facilities</b>	<b>Project Status:</b>	<b>Future</b>

## Description

The purpose of this project is to increase the capacity of a portion of the Taft Branch regional sewer. The project includes replacing approximately 9,500 feet of 12-inch to 18-inch pipe with 15-inch to 24-inch diameter pipe along both Taft and Meats Avenues in the City of Orange.



**Collections  
Facilities**

## Justification

This project was identified in the 2006 Strategic Plan Update. These improvements will accommodate changing flow patterns due to planned development strategies, economic influences, and potential wet weather surcharges.

The project's construction cost is \$1,115,711. This project will not have an impact on operational budgets.

## Budget Projections

Budget Phase	Cost To-Date	2016-2017	2017-18	2018-19	2019-20	2020-21	Thereafter	Total Project Budget
Proj Dev	9,395						22,300	31,695
Prelim Design							33,499	33,499
Design	2,697						202,705	205,402
Construction							1,294,205	1,294,205
Commissioning							22,398	22,398
Close-out							5,600	5,600
Contingency							335,201	335,201
<b>Total</b>	<b>12,092</b>						<b>1,915,908</b>	<b>1,928,000</b>

Reimbursable Costs: N/A

# 2016-17 & 2017-18 Budget

<b>Project Name &amp; Number</b>	<b>Newhope - Placentia Trunk Grade Separation Repl. - 2-65</b>		
<b>Project Category</b>	<b>Collections Facilities</b>	<b>Project Status:</b>	<b>Revised</b>

## Description

This project will replace a section of the OCSD's Newhope-Placentia Trunk and Wastewater Disposal Company Sewers in State College Boulevard between Orangethorpe and Commonwealth. The project is being done with the City of Fullerton as part of a railroad grade separation project.



**Collections  
Facilities**

## Justification

The existing sewers need to be relocated to accommodate the undergrounding of State College Boulevard below the railroad tracks at the intersection of Valencia Drive and State College Boulevard. These improvements will also accommodate the projected increases in flow for this section of sewer from planned developments and growth and be designed to convey potential wet weather surcharges. The project is anticipated to be constructed by the City of Fullerton's contractor performing the roadwork under the railroad. The original project and budget were to upsize a large stretch of sewer that will be hydraulically deficient. The remaining portion of the sewer upsizing was re-budgeted under a new CIP project.

The project budget has been decreased from \$5,966,000 to \$5,739,000. The project's construction cost is \$3,458,514. This project will not have an impact on operational budgets.

## Budget Projections

Budget Phase	Cost To-Date	2016-2017	2017-18	2018-19	2019-20	2020-21	Thereafter	Total Project Budget
Proj Dev	103,062							103,062
Prelim Design	64,933							64,933
Design	311,952							311,952
Construction	3,424,261	387,111	59,124					3,870,496
Commissioning								
Close-out			9,726	5,924				15,650
Contingency	169,318	547,409	650,489	5,691				1,372,907
<b>Total</b>	<b>4,073,526</b>	<b>934,520</b>	<b>719,339</b>	<b>11,615</b>				<b>5,739,000</b>

Reimbursable Costs: N/A

# CIP Project Detail Sheets

<b>Project Name &amp; Number</b>	<b>Newhope-Placentia Trunk Repl. - 2-72</b>		
<b>Project Category</b>	<b>Collections Facilities</b>	<b>Project Status:</b>	<b>Revised</b>

## Description

This project will increase the size of approx. 35,000 feet of the Newhope-Placentia Trunk sewer from Yorba Linda Boulevard to Orangewood Avenue. The upsized sewer will accommodate flows from the newly abandoned Yorba Linda Pump Station and the newly interconnected Atwood Sub-trunk. The scope also includes upsizing approximately 3,500 feet of the Rolling Hill Subtrunk, and abandoning any remaining portion of the wastewater disposal company sewer alignment not used for the new pipeline.



**Collections  
Facilities**

## Justification

This section of the Newhope-Placentia Trunk Sewer was originally constructed in 1961. These improvements will accommodate the projected flow increases due to the abandonment of the aging Yorba Linda Pump Station, increase capacity in a short portion of the Rolling Hills Sub-trunk that is undersized when burdened by 2030 wet weather flows, and increase operational flexibility of the collection system.

The project budget has been decreased from \$104,890,000 to \$99,475,000. The project's construction cost is \$66,726,000. This project will not have an impact on operational budgets.

## Budget Projections

Budget Phase	Cost To-Date	2016-2017	2017-18	2018-19	2019-20	2020-21	Thereafter	Total Project Budget
Proj Dev	132,601							132,601
Prelim Design	4,089,814	1,050,186						5,140,000
Design	2,658,356	1,997,723	643,367					5,299,446
Construction	122,816	16,461,592	11,092,046	15,592,566	15,911,139	15,280,336	2,116,869	76,577,364
Commissioning								
Close-out			54,011	77,582	65,729	61,343	26,016	284,681
Contingency	229,486	1,434,444	2,368,017	1,270,568	2,208,383	3,172,189	1,357,820	12,040,907
<b>Total</b>	<b>7,233,074</b>	<b>20,943,945</b>	<b>14,157,441</b>	<b>16,940,716</b>	<b>18,185,251</b>	<b>18,513,868</b>	<b>3,500,705</b>	<b>99,475,000</b>

Reimbursable Costs: N/A

# 2016-17 & 2017-18 Budget

<b>Project Name &amp; Number</b>	<b>Yorba Linda Pump Station Abandonment - 2-73</b>		
<b>Project Category</b>	<b>Collections Facilities</b>	<b>Project Status:</b>	<b>Future</b>

## Description

This project will abandon the Yorba Linda Pump Station and downstream force main. Gravity sewers located in Yorba Linda Boulevard will also be reconfigured to improve access to the facilities for maintenance. Flows which are currently being pumped by the Yorba Linda Pump Station east will be conveyed by gravity through the newly upsized Newhope-Placentia Trunk located in State College Boulevard to the west.



**Collections  
Facilities**

## Justification

The Yorba Linda Pump Station was built, in part, to convey flow away from undersized gravity sewers located in State College Boulevard. Land development in the vicinity necessitates the upsizing of the same gravity sewers and the project to do so is currently in design. When complete the pump station will no longer be needed. Also, the pump station is rapidly aging and does not meet current electrical and safety codes. Costly rehabilitation would be necessary for the pump station to remain in service.

The project budget has been increased from \$4,158,000 to \$7,053,000. The project's construction cost is \$3,812,369. The impacts to operational budgets have not yet been determined.

## Budget Projections

Budget Phase	Cost To-Date	2016-2017	2017-18	2018-19	2019-20	2020-21	Thereafter	Total Project Budget
Proj Dev			76,246					76,246
Prelim Design			31,680	82,700				114,380
Design				182,270	650,589	43,982		876,841
Construction						2,551,867	2,137,345	4,689,212
Commissioning						11,011	65,240	76,251
Close-out							76,250	76,250
Contingency			12,657	66,757	143,555	230,425	690,426	1,143,820
<b>Total</b>			<b>120,583</b>	<b>331,727</b>	<b>794,144</b>	<b>2,837,285</b>	<b>2,969,261</b>	<b>7,053,000</b>

Reimbursable Costs: N/A

# CIP Project Detail Sheets

<b>Project Name &amp; Number</b>	<b>Lakeview Grade Separation Project - 2-75</b>		
<b>Project Category</b>	<b>Collections Facilities</b>	<b>Project Status:</b>	<b>Continuing</b>

## Description

This project will provide construction costs and staff support costs for the realignment of an OCSD trunkline as part of Orange County Transit Authority's (OCTA) Grade Separation Project near the intersection of Lakeview and Orangethorpe Avenues.



**Collections  
Facilities**

## Justification

The Orange County Transportation Authority (OCTA) will construct a vehicle overpass at the intersection of Lakeview and Orangethorpe Avenues, along the Burlington Northern Santa Fe railroad track. An OCSD trunkline will need to be relocated as part of the project. The design of relocating OCSD's trunkline is complete and was paid for by OCTA.

The project's construction cost is \$71,733. This project will not have an impact on operational budgets.

## Budget Projections

Budget Phase	Cost To-Date	2016-2017	2017-18	2018-19	2019-20	2020-21	Thereafter	Total Project Budget
Proj Dev								
Prelim Design								
Design								
Construction	70,331	76,538						146,869
Commissioning	26,568							26,568
Close-out		173	8,797					8,970
Contingency	29,361	77,995	40,237					147,593
<b>Total</b>	<b>126,260</b>	<b>154,706</b>	<b>49,034</b>					<b>330,000</b>

Reimbursable Costs: N/A

# 2016-17 & 2017-18 Budget

<b>Project Name &amp; Number</b>	<b>Tustin Rose OCTA Grade Separation - 2-76</b>		
<b>Project Category</b>	<b>Collections Facilities</b>	<b>Project Status:</b>	<b>Continuing</b>

**Description**

This project will provide construction costs and staff support costs for the realignment of an OCSD trunkline as part of Orange County Transit Authority's (OCTA) Grade Separation Project at the intersection of Tustin Avenue/Rose Drive and Orangethorpe Avenue.



**Collections  
Facilities**

**Justification**

The Orange County Transportation Authority (OCTA) will construct a vehicle overpass at the intersection of Tustin Avenue/Rose Drive and Orangethorpe Avenue, along the Burlington Northern Santa Fe railroad track. An OCSD trunkline will need to be relocated as part of the project. The design of relocating OCSD's trunkline is complete and was paid for by OCTA.

The project's construction cost is \$300,000. This project will not have an impact on operational budgets.

**Budget Projections**

Budget Phase	Cost To-Date	2016-2017	2017-18	2018-19	2019-20	2020-21	Thereafter	Total Project Budget
Proj Dev								
Prelim Design								
Design								
Construction	415,729							415,729
Commissioning	25,060							25,060
Close-out	2,377	6,594						8,971
Contingency	71,517	64,723						136,240
<b>Total</b>	<b>514,683</b>	<b>71,317</b>						<b>586,000</b>

Reimbursable Costs: N/A



# CIP Project Detail Sheets

<b>Project Name &amp; Number</b>	<b>Beach Trunk/Knott Interceptor Sewer Relief - 3-60</b>		
<b>Project Category</b>	<b>Collections Facilities</b>	<b>Project Status:</b>	<b>Future</b>

## Description

The purpose of this project is to increase the capacity of numerous OCSD regional sewers located in the City of Buena Park. The project consists of the following potential capacity improvements projects: 1) upsize 11,100 feet of 39 to 45-inch pipe along Knott Avenue from Orangethorpe Avenue to Artesia Boulevard, East to Kingman, and North to Dobbs Avenue, and 2) upsize 9,800 feet of 24 to 36-inch along Knott Avenue from 8th Street north to Artesia Boulevard and then east to Dale Street.



**Collections  
Facilities**

## Justification

The need for this project was identified in the 2006 Strategic Plan Update. These improvements will accommodate changing flow patterns due to planned development strategies, economic influences, and potential wet weather surcharges.

The project's construction cost is \$73,169,950. This project will not have an impact on operational budgets.

## Budget Projections

Budget Phase	Cost To-Date	2016-2017	2017-18	2018-19	2019-20	2020-21	Thereafter	Total Project Budget
Proj Dev							321,900	321,900
Prelim Design							1,097,498	1,097,498
Design							10,243,904	10,243,904
Construction							84,145,352	84,145,352
Commissioning							731,698	731,698
Close-out							186,600	186,600
Contingency							21,951,048	21,951,048
<b>Total</b>							<b>118,678,000</b>	<b>118,678,000</b>

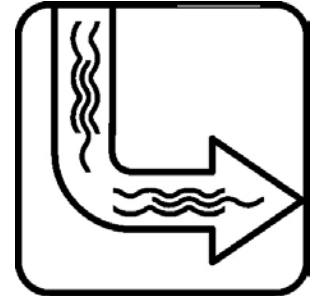
Reimbursable Costs: N/A

# 2016-17 & 2017-18 Budget

<b>Project Name &amp; Number</b>	<b>Seal Beach Pump Station Rehab - 3-62</b>		
<b>Project Category</b>	<b>Collections Facilities</b>	<b>Project Status:</b>	<b>Revised</b>

**Description**

This project will rehabilitate the existing Seal Beach Pump Station and Force Main system to meet current building, electrical and safety codes, and OCSD design standards. The existing facilities will either be restored or reconstructed and additional facilities will be constructed to contain on-site emergency power generation and odor control facilities.



**Collections  
Facilities**

**Justification**

The Seal Beach Pump Station was originally constructed in 1972. The pumping systems are aging, regularly clog, and have control systems that are rapidly becoming obsolete, all require additional attention from maintenance staff. The existing pumping station does not comply with current electrical and safety codes. One of the force mains is in danger of failing and cannot be placed into operation, thus leaving no redundancy.

The project budget has been decreased from \$62,041,000 to \$60,840,000. The project's construction cost is \$35,002,000. The impacts to operational budgets have not yet been determined.

**Budget Projections**

Budget Phase	Cost To-Date	2016-2017	2017-18	2018-19	2019-20	2020-21	Thereafter	Total Project Budget
Proj Dev	199,668							199,668
Prelim Design	1,839,677	2,274,964						4,114,641
Design	5,320	3,073,378	1,367,910					4,446,608
Construction	77		152,031	13,467,935	17,627,241	11,060,463		42,307,747
Commissioning				236,555	432,626	162,818		831,999
Close-out						144,785		144,785
Contingency	185,015	616,284	943,512	1,285,587	2,404,066	2,795,332	564,756	8,794,552
<b>Total</b>	<b>2,229,757</b>	<b>5,964,626</b>	<b>2,463,453</b>	<b>14,990,077</b>	<b>20,463,933</b>	<b>14,163,398</b>	<b>564,756</b>	<b>60,840,000</b>

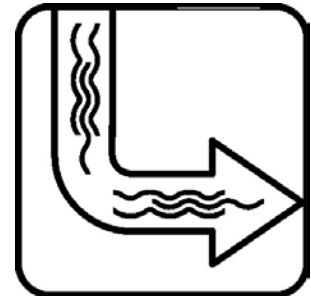
Reimbursable Costs: N/A

# CIP Project Detail Sheets

<b>Project Name &amp; Number</b>	<b>Rehab of Western Regional Sewers - 3-64</b>		
<b>Project Category</b>	<b>Collections Facilities</b>	<b>Project Status:</b>	<b>Revised</b>

## Description

The project will replace or rehabilitate a significant portion of the sewers and manholes located in Revenue Area 3. The extent of the rehabilitation effort includes Orange Western Sub-Trunk; 3-6 (13,940 feet), the Los Alamitos Sub-Trunk; 3-8 (34,620 feet), and the Westside Relief Interceptor pipeline; 3-21-1 (32,100 feet) and the Seal Beach Boulevard Interceptor; 3-11 (5,530 feet). Two of the sewers are located in the cities of Los Alamitos and Cypress in the public rights of way of Seal Beal Boulevard, Katella Avenue, Cerritos Avenue, Oak Street, Bloomfield Street, and Denni Street. The third sewer is located in the cities of Cypress, Anaheim, and Buena Park in the public rights of way of Orange and Western Avenues. The final segment is located in the City of Seal Beach. The portion of the project to be replaced with larger pipes include 14,540 feet of Los Alamitos Sub-Trunk and 15,160 feet of the West Side Relief Interceptor. Additional components of the project also include the replacement of the wet well, rehabilitation of the force main and the replacement of the odor control equipment at the West Side Pump Station.



**Collections  
Facilities**

## Justification

Most of the sewers were originally constructed in late 1950's and early 1960's. The estimated life of this type of pipe is 40 to 50 years. During routine cleaning of the sewer, it has been noted that the sewer liner had significant defects and the joints are allowing significant amounts of groundwater into the sewers. The area has a high groundwater level that can contribute to the formation of sink holes if sediments are allowed to continue to be washed into the sewer through the failed joints and cracks. Upsizing the Westside Relief Interceptor will provide capacity for future flows projected from redevelopment and infill in the City of Cypress.

The project budget has been increased from \$125,000,000 to \$217,069,000. The project's construction cost is \$139,000,000. This project will not have an impact on operational budgets.

## Budget Projections

Budget Phase	Cost To-Date	2016-2017	2017-18	2018-19	2019-20	2020-21	Thereafter	Total Project Budget
Proj Dev	441,003							441,003
Prelim Design	1,207,486	12,744,024	86,265					14,037,775
Design	9,152	2,079,449	4,325,921	1,023,460				7,437,982
Construction				10,702,358	27,632,655	28,235,029	93,228,284	159,798,326
Commissioning							49,998	49,998
Close-out							553,360	553,360
Contingency	277,099	1,194,586	1,968,415	2,523,727	2,445,239	3,463,398	22,878,092	34,750,556
<b>Total</b>	<b>1,934,740</b>	<b>16,018,059</b>	<b>6,380,601</b>	<b>14,249,545</b>	<b>30,077,894</b>	<b>31,698,427</b>	<b>116,709,734</b>	<b>217,069,000</b>

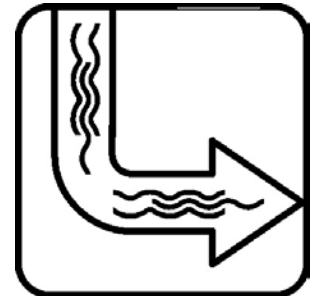
Reimbursable Costs: N/A

# 2016-17 & 2017-18 Budget

<b>Project Name &amp; Number</b>	<b>Newport Force Main Rehab - 5-60</b>		
<b>Project Category</b>	<b>Collections Facilities</b>	<b>Project Status:</b>	<b>Continuing</b>

**Description**

This project will rehabilitate approximately 28,000 feet of the Newport Force Main system located on Pacific Coast Highway in Newport Beach between the Bitter Point Pump Station and Dover Drive. The force main system consists of two parallel, interconnected pipelines, varying in size from 22 to 36 inches. More than half of the force main system will be rehabilitated rather than replaced to minimize impacts to the community, businesses, tourism and the environment.



**Collections  
Facilities**

**Justification**

The force main system has reached the end of its useful life. Rehabilitation and replacement is necessary because the force main system is more than 50 years old and has experienced multiple structural failures due to corrosion since 1984.

The project's construction cost is \$42,786,580. This project will not have an impact on operational budgets.

**Budget Projections**

Budget Phase	Cost To-Date	2016-2017	2017-18	2018-19	2019-20	2020-21	Thereafter	Total Project Budget
Proj Dev	1,224,529							1,224,529
Prelim Design	2,364,482							2,364,482
Design	1,625,645							1,625,645
Construction	48,649,999	1,166,866						49,816,865
Commissioning	428,286	12,558						440,844
Close-out	308,557	134,260						442,817
Contingency	3,363,932	4,720,885						8,084,817
<b>Total</b>	<b>57,965,431</b>	<b>6,034,569</b>						<b>64,000,000</b>

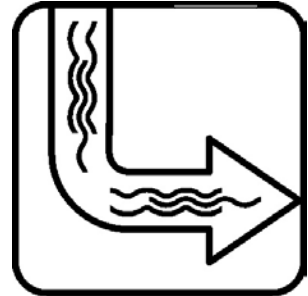
Reimbursable Costs: N/A

# CIP Project Detail Sheets

<b>Project Name &amp; Number</b>	<b>Crystal Cove Pump Station Rehab - 5-66</b>		
<b>Project Category</b>	<b>Collections Facilities</b>	<b>Project Status:</b>	<b>Future</b>

**Description**

The purpose of the Crystal Cove Pump Station Rehabilitation Project is to execute the conceptual design plan that was developed as a result of the study by the same name. This project will rehabilitate the existing Crystal Cove Pump Station to maintain compliance with electrical and safety codes, and to restore the condition of the aging facility. The project also consists of rehabilitating the two 8-inch ductile iron force mains and constructing access manholes to facilitate future condition assessments. The existing gravity system in the vicinity of the pump station, located in Pacific Coast Highway, will also be rehabilitated.



**Collections  
Facilities**

**Justification**

The Pump Station was originally constructed in 1995 and needs rehabilitation to maintain the pump station's reliability in the coming decades. The electrical system does not meet current code requirements. The control system is out of date and does not meet OCSD standards. The force mains are not currently protected from corrosion.

The project budget has been increased from \$10,514,000 to \$10,882,000. The project's construction cost is \$5,882,431. This project will not have an impact on operational budgets.

**Budget Projections**

Budget Phase	Cost To-Date	2016-2017	2017-18	2018-19	2019-20	2020-21	Thereafter	Total Project Budget
Proj Dev							117,648	117,648
Prelim Design							176,452	176,452
Design							1,352,973	1,352,973
Construction							7,235,395	7,235,395
Commissioning							117,654	117,654
Close-out							117,645	117,645
Contingency							1,764,233	1,764,233
<b>Total</b>							<b>10,882,000</b>	<b>10,882,000</b>

Reimbursable Costs: N/A

# 2016-17 & 2017-18 Budget

<b>Project Name &amp; Number</b>	<b>Bay Bridge Pump Station Repl. - 5-67</b>		
<b>Project Category</b>	<b>Collections Facilities</b>	<b>Project Status:</b>	<b>Future</b>

## Description

This project will reconstruct the existing Bay Bridge Pump Station to meet current building, electrical, and safety codes and OCSD design standards. The pump station capacity will increase from a 16 MGD station to a 18.5 MGD station. The Bay Bridge Pump Station associated force mains will also be replaced and the size of the force mains will increase. The force mains to be replaced extend from Bay Bridge Pump Station to a valve box on the west side of Upper Newport Bay.



**Collections  
Facilities**

## Justification

The Bay Bridge Pump Station was originally constructed in 1966. The pumping systems are aging, and have control systems that are rapidly becoming obsolete, all require additional attention from maintenance staff. Also, the existing pumping station does not comply with current electrical and safety codes. The Bay Bridge Pump Station associated force mains will increase in size as part of this project. This will allow OCSD to operate fully on one force main (and keep one as backup). Current operation requires both force mains be in operation.

The project budget has been increased from \$51,010,000 to \$54,000,000. The project's construction cost is \$26,511,465. This project will not have an impact on operational budgets.

## Budget Projections

Budget Phase	Cost To-Date	2016-2017	2017-18	2018-19	2019-20	2020-21	Thereafter	Total Project Budget
Proj Dev			388,341	141,894				530,235
Prelim Design				221,487	573,851			795,338
Design			3,800,000		310,877	2,476,585	3,310,166	9,897,628
Construction							32,609,108	32,609,108
Commissioning							530,232	530,232
Close-out							530,230	530,230
Contingency			102,834	218,462	473,961	680,568	7,631,404	9,107,229
<b>Total</b>			<b>4,291,175</b>	<b>581,843</b>	<b>1,358,689</b>	<b>3,157,153</b>	<b>44,611,140</b>	<b>54,000,000</b>

Reimbursable Costs: N/A

# CIP Project Detail Sheets

<b>Project Name &amp; Number</b>	<b>Newport Beach Pump Stations Odor Control Impr. - 5-68</b>		
<b>Project Category</b>	<b>Collections Facilities</b>	<b>Project Status:</b>	<b>New</b>

**Description**

This project will address the ventilation issues that causes odorants to migrate to unwanted areas at the Newport Beach collections system pump stations. It will also provide odor control at selected pump stations and gravity lines in the Newport Beach collections system.



**Collections  
Facilities**

**Justification**

The migration of corrosive hydrogen sulfide from pump stations' wet wells into electrical rooms not only can cause additional public odor complaints, but can cause pump failures that can lead to sewage spills and compliance violations.

The project's construction cost is \$2,197,909. This project will not have an impact on operational budgets.

**Budget Projections**

Budget Phase	Cost To-Date	2016-2017	2017-18	2018-19	2019-20	2020-21	Thereafter	Total Project Budget
Proj Dev			43,957					43,957
Prelim Design			14,428	50,822	686			65,936
Design				38,926	213,634	224,391	28,571	505,522
Construction						14,595	2,688,839	2,703,434
Commissioning							43,957	43,957
Close-out							43,958	43,958
Contingency			9,148	28,662	55,723	82,661	483,042	659,236
<b>Total</b>			<b>67,533</b>	<b>118,410</b>	<b>270,043</b>	<b>321,647</b>	<b>3,288,367</b>	<b>4,066,000</b>

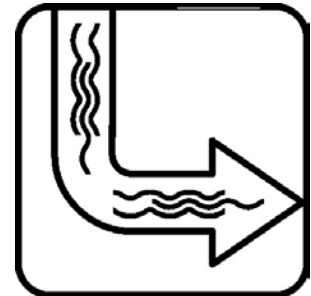
Reimbursable Costs: N/A

# 2016-17 & 2017-18 Budget

<b>Project Name &amp; Number</b>	<b>District 6 Trunk Sewer Relief - 6-17</b>		
<b>Project Category</b>	<b>Collections Facilities</b>	<b>Project Status:</b>	<b>Revised</b>

## Description

This project is to increase the capacity, rehabilitate and perform access improvements for the District 6 Trunk sewer. The existing 3,700 feet of 12-inch through 18-inch pipeline runs west of Pomona, southerly to 16th Street, to Newport Boulevard, and southerly along Newport Boulevard towards Coast Highway in the Cities of Costa Mesa and Newport Beach. Portions of the sewer that are not being increased in size are being rehabilitated so the life of this sewer will be extended by 30 years. Combined into this work are Maintenance access improvements for OCSD personnel.



**Collections  
Facilities**

## Justification

The need for this project was identified in the January 2006 Draft Strategic Plan Update. Based on current flow projections and hydraulic modeling, this project is needed to reduce the potential for surcharging and sewer spills due to projected increase in flow from planned developments and growth. Investigations during preliminary design also revealed the that segments not being up-sized, required rehabilitation and maintenance access improvements.

The project budget has been increased from \$7,795,000 to \$7,965,000. The project's construction cost is \$4,327,000. This project will not have an impact on operational budgets.

## Budget Projections

Budget Phase	Cost To-Date	2016-2017	2017-18	2018-19	2019-20	2020-21	Thereafter	Total Project Budget
Proj Dev	70,429							70,429
Prelim Design	442,229							442,229
Design	798,006	19,153						817,159
Construction	329	4,317,886	1,536,996					5,855,211
Commissioning	7,234	42,938						50,172
Close-out			63,463					63,463
Contingency	33,563	243,841	374,857	14,076				666,337
<b>Total</b>	<b>1,351,790</b>	<b>4,623,818</b>	<b>1,975,316</b>	<b>14,076</b>				<b>7,965,000</b>

Reimbursable Costs: N/A



# CIP Project Detail Sheets

<b>Project Name &amp; Number</b>	<b>Southwest Costa Mesa Trunk Sewer - 6-19</b>		
<b>Project Category</b>	<b>Collections Facilities</b>	<b>Project Status:</b>	<b>Revised</b>

## Description

This project will design and construct a new gravity sewer system for the southwest portion of Costa Mesa and a portion of Newport Beach along the 19th Street Alignment across the Santa Ana River to Plant No. 2. The project will allow the Costa Mesa Sanitary District to abandon up to six pump stations, the one pump station for the City of Newport Beach and one private pump station.



**Collections  
Facilities**

## Justification

Pump stations in the project area operated by the Costa Mesa Sanitary District and by the City of Newport are outdated and in need of major rehabilitation and/or replacement. The project will allow all but one of these pump station to be abandoned, which will benefit the region by providing more efficient and reliable wastewater conveyance in the area, and will reducing the potential for spills and odors associated with wastewater pumping.

The project budget has been increased from \$14,993,000 to \$29,650,000. The project's construction cost is \$16,610,766. This project will increase operational budgets by \$90,000 annually. The new sewer will require annual cleaning and inspection.

## Budget Projections

Budget Phase	Cost To-Date	2016-2017	2017-18	2018-19	2019-20	2020-21	Thereafter	Total Project Budget
Proj Dev	1,577,527	50,533						1,628,060
Prelim Design	268,728	624,031	468,204	264,643	93,386			1,718,992
Design	39,827				598,780	1,111,446	701,145	2,451,198
Construction							19,573,839	19,573,839
Commissioning	169						193,784	193,953
Close-out							325,691	325,691
Contingency	66,933	201,635	198,756	215,812	273,699	306,561	2,494,871	3,758,267
<b>Total</b>	<b>1,953,184</b>	<b>876,199</b>	<b>666,960</b>	<b>480,455</b>	<b>965,865</b>	<b>1,418,007</b>	<b>23,289,330</b>	<b>29,650,000</b>

Reimbursable Costs: N/A

# 2016-17 & 2017-18 Budget

<b>Project Name &amp; Number</b>	<b>Gisler - Red Hill System Impr. - Reach B - 7-37</b>		
<b>Project Category</b>	<b>Collections Facilities</b>	<b>Project Status:</b>	<b>Revised</b>

## Description

This project will replace a section of the existing sewer and rehabilitate other reaches in the Gisler-Redhill System. This will include installing larger diameter pipelines, providing interties, new diversion settings, sliplining and relining manholes. The project includes repairs of up to 13,200 feet along Redhill Avenue in the Cities of Santa Ana, Tustin and Irvine.



**Collections  
Facilities**

## Justification

This section of the Gisler-Redhill System was originally built in the 1960's. Based on hydraulic analysis and condition assessments of the pipes, a new replacement section of pipeline and rehabilitation of other sections are needed. To accommodate near-term future flows the project will also reset several diversions to accommodate new flows.

The project budget has been decreased from \$28,143,000 to \$25,213,000. The project's construction cost is \$16,157,966. This project will not have an impact on operational budgets.

## Budget Projections

Budget Phase	Cost To-Date	2016-2017	2017-18	2018-19	2019-20	2020-21	Thereafter	Total Project Budget
Proj Dev	15,006							15,006
Prelim Design	293,306							293,306
Design	3,056,850							3,056,850
Construction	2,725,802	10,987,429	5,517,443					19,230,674
Commissioning	207							207
Close-out			134,739	20,553				155,292
Contingency	157,842	964,463	1,250,692	88,668				2,461,665
<b>Total</b>	<b>6,249,013</b>	<b>11,951,892</b>	<b>6,902,874</b>	<b>109,221</b>				<b>25,213,000</b>

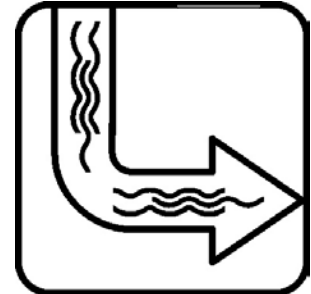
Reimbursable Costs: N/A

# CIP Project Detail Sheets

<b>Project Name &amp; Number</b>	<b>Browning Subtrunk Sewer Relief - 7-60</b>		
<b>Project Category</b>	<b>Collections Facilities</b>	<b>Project Status:</b>	<b>Future</b>

**Description**

The purpose of the Browning Sub-trunk Sewer Relief Project is to increase the capacity of the Browning Sub-trunk. The project consists of upsizing approximately 7,800 feet of existing pipeline to a 10 to 18-inch pipeline located along Browning Avenue from Mitchell Avenue to Rainbow Drive, in the City of Tustin and unincorporated county.



**Collections  
Facilities**

**Justification**

The need for this project was identified in the 2006 Strategic Plan Update. These improvements will accommodate changing flow patterns due to planned development strategies, economic influences, and potential wet weather surcharges.

The project's construction cost is \$9,884,569. This project will not have an impact on operational budgets.

**Budget Projections**

Budget Phase	Cost To-Date	2016-2017	2017-18	2018-19	2019-20	2020-21	Thereafter	Total Project Budget
Proj Dev							197,700	197,700
Prelim Design							296,494	296,494
Design							1,779,098	1,779,098
Construction							11,466,080	11,466,080
Commissioning							197,598	197,598
Close-out							49,400	49,400
Contingency							2,965,630	2,965,630
<b>Total</b>							<b>16,952,000</b>	<b>16,952,000</b>

Reimbursable Costs: N/A

# 2016-17 & 2017-18 Budget

<b>Project Name &amp; Number</b>	<b>MacArthur Pump Station Rehab - 7-63</b>		
<b>Project Category</b>	<b>Collections Facilities</b>	<b>Project Status:</b>	<b>Future</b>

**Description**

This project will rehabilitate the existing MacArthur Pump Station, force main and upstream gravity system pipeline and manholes (approximately 2,000 linear feet of 8-inch pipe and eight manholes). The existing station is located in the vicinity of John Wayne Airport in the City of Newport Beach. The work includes bringing the pump station into compliance with the latest applicable electrical and safety codes and replacing maintenance-intensive pumps. 700 feet of the nearby Von Karman Trunk Sewer (located in Campus Drive north of the pump station) will also be upsized as part of this project. The sewer, which is a 12-inch vitrified clay pipe (VCP), will be upsized to 15-inch in diameter.



**Collections  
Facilities**

**Justification**

The MacArthur Pump Station was originally built in 1960. The pump station is aging and requires increased effort to adequately maintain, does not comply with current electrical and safety codes, and needs to be upgraded to reliably serve the cities of Irvine and Newport Beach. The age and condition of the force main indicates that it needs to be replaced and the condition of the upstream sewers indicates that rehabilitation is necessary in the near future. The capacity project for the Von Karman Trunk Sewer was identified in 2006 Strategic Plan Update.

The project's construction cost is \$4,736,194. This project will not have an impact on operational budgets.

**Budget Projections**

Budget Phase	Cost To-Date	2016-2017	2017-18	2018-19	2019-20	2020-21	Thereafter	Total Project Budget
Proj Dev			94,700					94,700
Prelim Design			31,924	87,573	22,610			142,107
Design					533,599	551,734	3,851	1,089,184
Construction							5,825,592	5,825,592
Commissioning							94,709	94,709
Close-out							94,703	94,703
Contingency			19,058	58,303	114,131	165,821	1,063,692	1,421,005
<b>Total</b>			<b>145,682</b>	<b>145,876</b>	<b>670,340</b>	<b>717,555</b>	<b>7,082,547</b>	<b>8,762,000</b>

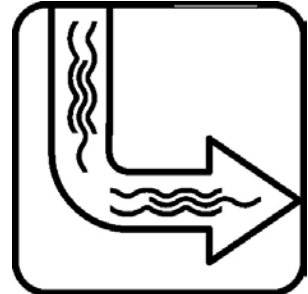
Reimbursable Costs: N/A

# CIP Project Detail Sheets

<b>Project Name &amp; Number</b>	<b>Main Street Pump Station Rehab - 7-64</b>		
<b>Project Category</b>	<b>Collections Facilities</b>	<b>Project Status:</b>	<b>Future</b>

**Description**

The purpose of the Main Street Pump Station Rehabilitation Project is to execute the conceptual design plan that was developed as a result of the study by the same name. This project will rehabilitate the existing Main Street Pump Station to meet current building, electrical and safety codes. The pump station will need to be seismically retrofitted and have a roof replacement. In addition to the pump station, two of three force mains will be rehabilitated and access manholes constructed for future condition assessments and the third force main will be completely reconstructed as part of this project. The condition of gravity system components in close proximity to the pump station such as a reinforced concrete pipe and access manholes will be assessed and the facilities rehabilitated as needed.



**Collections  
Facilities**

**Justification**

Main Street pump station was constructed in 1987 and needs rehabilitation to maintain the pump station's reliability in the coming decades. Two of the force mains that serve this facility are ductile iron pipe and have been operating without corrosion protection.

The project budget has been increased from \$37,952,000 to \$39,219,000. The project's construction cost is \$21,199,322. This project will not have an impact on operational budgets.

**Budget Projections**

Budget Phase	Cost To-Date	2016-2017	2017-18	2018-19	2019-20	2020-21	Thereafter	Total Project Budget
Proj Dev							423,983	423,983
Prelim Design							635,978	635,978
Design							4,875,842	4,875,842
Construction							26,075,172	26,075,172
Commissioning							423,990	423,990
Close-out							423,987	423,987
Contingency							6,360,048	6,360,048
<b>Total</b>							<b>39,219,000</b>	<b>39,219,000</b>

Reimbursable Costs: N/A

# 2016-17 & 2017-18 Budget

<b>Project Name &amp; Number</b>	<b>Gisler Red-Hill Interceptor Rehab - 7-65</b>		
<b>Project Category</b>	<b>Collections Facilities</b>	<b>Project Status:</b>	<b>New</b>

**Description**

The purpose of this project is to determine the condition of and rehabilitate the Gisler Redhill Interceptor. The facilities consists of approx. 38 manholes, 12,500 feet of 33-inch VCP, and 2,175 feet of 30-inch VCP.



**Collections  
Facilities**

**Justification**

The condition of Gisler Redhill Interceptor upstream of College Avenue pump station is of concern. Condition assessments completed in 2007 and again in 2015 indicate that the condition of the piping is worsening. Camera video of the manholes indicate liner failures and corrosion from the cover to the base in the majority of the structures.

The project's construction cost is \$3,198,548. This project will not have an impact on operational budgets.

**Budget Projections**

Budget Phase	Cost To-Date	2016-2017	2017-18	2018-19	2019-20	2020-21	Thereafter	Total Project Budget
Proj Dev		63,968						63,968
Prelim Design		25,079	69,637	1,241				95,957
Design			24,871	316,085	234,783			575,739
Construction					340,071	1,476,195	1,894,047	3,710,313
Commissioning						26,069	37,906	63,975
Close-out							15,990	15,990
Contingency		13,464	44,021	83,946	122,212	178,241	518,174	960,058
<b>Total</b>		<b>102,511</b>	<b>138,529</b>	<b>401,272</b>	<b>697,066</b>	<b>1,680,505</b>	<b>2,466,117</b>	<b>5,486,000</b>

Reimbursable Costs: N/A

# CIP Project Detail Sheets

<b>Project Name &amp; Number</b>	<b>Facilities Engineering Program - Collections - M-FE-COLLECT</b>		
<b>Project Category</b>	<b>Collections Facilities</b>	<b>Project Status:</b>	<b>New</b>

**Description**

This budget provides funds for miscellaneous collection facilities small capital projects. A small capital project is defined as a miscellaneous capital improvement related to plant safety, reliability, or improvements where the professional design consulting services are less than \$200,000. This project is an annual budget for numerous small collection facilities projects. This system results in a stream-lined process for the procurement and execution of engineering and contractor services for smaller, but vital projects.



**Collections  
Facilities**

**Justification**

The Collection Facilities Engineering project allows smaller capital projects to extend the life of the existing treatment works and extend the time between major rehabilitations. These smaller, high priority projects are individually tracked within the larger budget for procurement of engineering and contractor services as needed to maintain reliable operations.

The project's construction cost is \$1,759,164. This project will not have an impact on operational budgets.

**Budget Projections**

Budget Phase	Cost To-Date	2016-2017	2017-18	2018-19	2019-20	2020-21	Thereafter	Total Project Budget
Proj Dev								
Prelim Design								
Design	69,093	525,250	735,092					1,329,435
Construction	29,294	477,134	1,434,418	727,158	74,904			2,742,908
Commissioning								
Close-out								
Contingency	8,766	427,219	1,141,246	1,657,846	2,224,064	2,660,516		8,119,657
<b>Total</b>	<b>107,153</b>	<b>1,429,603</b>	<b>3,310,756</b>	<b>2,385,004</b>	<b>2,298,968</b>	<b>2,660,516</b>		<b>12,192,000</b>

Reimbursable Costs: N/A

# 2016-17 & 2017-18 Budget

<b>Project Name &amp; Number</b>	<b>Bay Bridge Pump Station &amp; Force Main Repl. Study - SP-178</b>		
<b>Project Category</b>	<b>Collections Facilities</b>	<b>Project Status:</b>	<b>Continuing</b>

**Description**

This project will investigate opportunities to replace and relocate the Bay Bridge Pump Station and replace the forcemains under the Newport Bay Channel. The pump station and forcemains are aging and undersized. This project will also investigate operation, maintenance, and code compliance issues associated with the Bay Bridge Pump Station and the force mains leaving the station. This includes CEQA requirements, odor control needs, equipment inspection, hydraulic capacities, National Fire Protection Association (NFPA) compliance, and Occupational Safety & Health Administration (OSHA) requirements.



**Collections  
Facilities**

**Justification**

This project will provide needed recommendations and direction for future Project No. 5-67, Bay Bridge Pumping Station Upgrade and Rehabilitation.

This project will not have an impact on operational budgets.

**Budget Projections**

Budget Phase	Cost To-Date	2016-2017	2017-18	2018-19	2019-20	2020-21	Thereafter	Total Project Budget
Proj Dev	278,888	184,404	12,011					475,303
Prelim Design								
Design	11,748	39,318						51,066
Construction								
Commissioning								
Close-out								
Contingency	61,334	137,297						198,631
<b>Total</b>	<b>351,970</b>	<b>361,019</b>	<b>12,011</b>					<b>725,000</b>

Reimbursable Costs: N/A

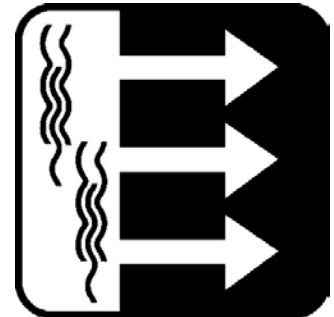


# CIP Project Detail Sheets

<b>Project Name &amp; Number</b>	<b>Headworks Rehab &amp; Expansion at P1 - P1-105</b>		
<b>Project Category</b>	<b>Headworks</b>	<b>Project Status:</b>	<b>Revised</b>

## Description

This project will rehabilitate and upgrade facilities at the Plant 1 Headworks. Facilities to be rehabilitated include the Metering and Diversion Structure, the Bar Screen Building, the Bin Loading Building, the Main Sewage Pump Station, the Grit Basins, the Primary Influent channels, the Headworks Odor Control Scrubbers, and electrical power distribution and control systems. The project will also include demolition of the original Headworks No. 1 facilities and the unused Chlorine Building pumps.



**Headworks**

## Justification

The purpose of the work is to rehabilitate the Plant 1 headworks area in order to increase the life of critical assets, improve services of other areas in the plant, and meet level of service goals.

The project budget has been increased from \$235,273,000 to \$274,841,000. The project's construction cost is \$166,000,000. The impacts to operational budgets have not yet been determined.

## Budget Projections

Budget Phase	Cost To-Date	2016-2017	2017-18	2018-19	2019-20	2020-21	Thereafter	Total Project Budget
Proj Dev	152,473							152,473
Prelim Design	2,358,366	4,542,111	302,642					7,203,119
Design	27	1,455,915	5,985,235	7,158,511	579,524			15,179,212
Construction					16,752,206	24,217,564	164,828,140	205,797,910
Commissioning						444,482	3,818,051	4,262,533
Close-out	36						744,881	744,917
Contingency	235,321	707,362	1,281,789	1,567,638	1,705,385	1,810,812	34,192,529	41,500,836
<b>Total</b>	<b>2,746,223</b>	<b>6,705,388</b>	<b>7,569,666</b>	<b>8,726,149</b>	<b>19,037,115</b>	<b>26,472,858</b>	<b>203,583,601</b>	<b>274,841,000</b>

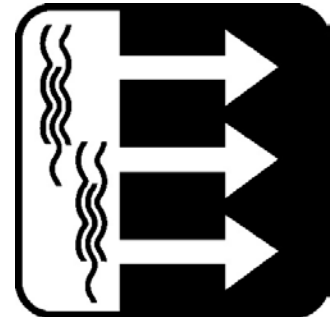
Reimbursable Costs: N/A

# 2016-17 & 2017-18 Budget

<b>Project Name &amp; Number</b>	<b>Trunk Line Odor Control Impr. - P1-123</b>		
<b>Project Category</b>	<b>Headworks</b>	<b>Project Status:</b>	<b>Revised</b>

## Description

Scrubbers 9 and 10, which are part of Plant No. 1 Headworks odor control system, will be replaced with new biological scrubbers. The new scrubbers will treat air from Steve Anderson Lift Station (SALS), Waste Hauler Station, Sunflower Pump Station and M&D Structure. The treated air will then continue to existing Chemical Scrubbers 1 through 4 for further treatment. The second part of the scope of work is to eliminate odors upstream of the three siphons along the Baker-Gisler Interceptor and Santa Ana Trunk sewers by implementing air jumper improvements.



**Headworks**

## Justification

The concept evaluation study for Project J-71-8 indicated an imbalance of airflow between existing Scrubbers 9 and 10 causing poor performance of the scrubbers. The carbon units of the SALS odor control system and the packaged biofilter at the Waste Hauler Station have both been operating inefficiently. Replacing the existing Scrubbers 9 and 10 will improve the overall efficiency of the Headworks facilities' odor control system.

The project budget has been decreased from \$11,170,000 to \$9,299,000. The project's construction cost is \$5,372,609. This project will not have an impact on operational budgets.

## Budget Projections

Budget Phase	Cost To-Date	2016-2017	2017-18	2018-19	2019-20	2020-21	Thereafter	Total Project Budget
Proj Dev								
Prelim Design	568,151							568,151
Design	929,312							929,312
Construction	4,304,612	2,578,407						6,883,019
Commissioning	32,644	138,031						170,675
Close-out		156,914	4,042					160,956
Contingency	208,121	371,269	7,497					586,887
<b>Total</b>	<b>6,042,840</b>	<b>3,244,621</b>	<b>11,539</b>					<b>9,299,000</b>

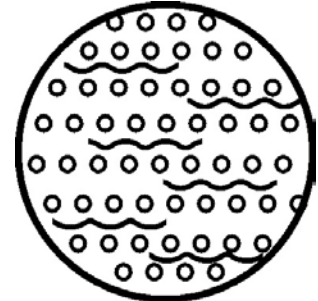
Reimbursable Costs: N/A

# CIP Project Detail Sheets

<b>Project Name &amp; Number</b>	<b>Primary Clarifier &amp; Trickling Filter Odor Control at P1 - P1-114</b>		
<b>Project Category</b>	<b>Primary Treatment</b>	<b>Project Status:</b>	<b>Continuing</b>

**Description**

This project will provide odor control modifications necessary to meet the Board required level of service, as determined by the 2016 Odor Control Master Plan (SP-166 outcomes), for the Plant No. 1 Primary Basins and the Trickling Filters. This includes replacement of the air scrubbing system and related equipment.



**Primary  
Treatment**

**Justification**

The current odor control facilities are at the end of their useful life and cannot meet the Board approved level of service for odors. Also, the cable trays were installed prior to 1987 and do not comply with the current National Electrical Code.

The project's construction cost is \$56,576,524. The impacts to operational budgets have not yet been determined.

**Budget Projections**

Budget Phase	Cost To-Date	2016-2017	2017-18	2018-19	2019-20	2020-21	Thereafter	Total Project Budget
Proj Dev		58,674	76,727					135,401
Prelim Design			40,257	116,604	54,137			210,998
Design					2,445,076	4,126,277	637,357	7,208,710
Construction							64,927,921	64,927,921
Commissioning							4,040,997	4,040,997
Close-out							731,501	731,501
Contingency		37,093	272,537	504,203	884,529	1,199,171	14,074,939	16,972,472
<b>Total</b>		<b>95,767</b>	<b>389,521</b>	<b>620,807</b>	<b>3,383,742</b>	<b>5,325,448</b>	<b>84,412,715</b>	<b>94,228,000</b>

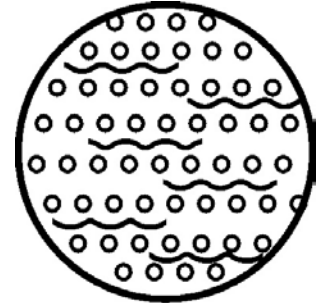
Reimbursable Costs: N/A

# 2016-17 & 2017-18 Budget

<b>Project Name &amp; Number</b>	<b>P1 Primary Treatment Upgrades - P1-124</b>		
<b>Project Category</b>	<b>Primary Treatment</b>	<b>Project Status:</b>	<b>Revised</b>

## Description

This project will upgrade the sludge pumping system for Primary Clarifiers (PC) 16-31 at Reclamation Plant No. 1, and will resolve various operation, maintenance, corrosion, and safety issues throughout this facility.



**Primary Treatment**

## Justification

This project will allow the rectangular primary clarifiers to handle increase in solids loading to Plant No. 1, and future flows through the plant to support the future expansion of GWRs. Also, recent investigations uncovered corrosion, safety, operational, and maintenance issues which need to be addressed at the rectangular primary clarifiers.

The project budget has been decreased from \$10,317,000 to \$9,146,000. The project's construction cost is \$5,594,695. This project will not have an impact on operational budgets.

## Budget Projections

Budget Phase	Cost To-Date	2016-2017	2017-18	2018-19	2019-20	2020-21	Thereafter	Total Project Budget
Proj Dev	16,506							16,506
Prelim Design	270,241							270,241
Design	682,544							682,544
Construction	7,280,434							7,280,434
Commissioning	140,397							140,397
Close-out	62,196	77,615						139,811
Contingency	399,810	216,256						616,066
<b>Total</b>	<b>8,852,129</b>	<b>293,871</b>						<b>9,146,000</b>

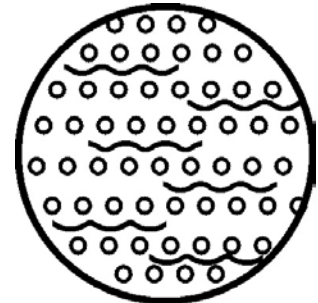
Reimbursable Costs: N/A

# CIP Project Detail Sheets

<b>Project Name &amp; Number</b>	<b>Primary Clarifiers Repl.s &amp; Impr. at P1 - P1-126</b>		
<b>Project Category</b>	<b>Primary Treatment</b>	<b>Project Status:</b>	<b>Future</b>

**Description**

This project will rehabilitate or replace the Plant No. 1 Primary Clarifiers 3, 4, & 5 System which includes all primary influent and effluent lines, distribution boxes, junction boxes, the Primary Effluent Pump Station, structural, mechanical, and electrical systems affiliated with Primary Clarifiers 3, 4, & 5. This project will demolish Primary Clarifiers 1&2.



**Primary  
Treatment**

**Justification**

The project is needed due to the age and condition of the Primary Clarifiers (PCs) 3, 4, & 5 System. PCs 3&4 were constructed in 1956 and are the oldest primary clarifiers at Plant No. 1. They share a common sludge and scum pumping facility located between them. PC 5 was constructed in 1963. Many of the PC 3-5 System components are showing significant deterioration. To continue to operate the PC 3-5 system for the next 50 years will require the entire system be rehabilitated or replaced. PCs 1-2 were constructed in 1986 to replace the two original clarifiers. These primary clarifiers are currently used only during extreme flow events. They share a common sludge and scum pumping facility at the southwest end of PCs 1-2 that also serves PC 5. PCs 1-2 shall be demolished to make space for other future processes.

The project budget has been increased from \$122,649,000 to \$158,332,000. The project's construction cost is \$95,065,590. This project will not have an impact on operational budgets.

**Budget Projections**

Budget Phase	Cost To-Date	2016-2017	2017-18	2018-19	2019-20	2020-21	Thereafter	Total Project Budget
Proj Dev			227,587					227,587
Prelim Design			62,342	169,184	123,060			354,586
Design			25,478		1,150,575	6,348,622	4,588,224	12,112,899
Construction							109,098,414	109,098,414
Commissioning							6,790,049	6,790,049
Close-out							1,229,007	1,229,007
Contingency			161,148	417,215	778,965	1,262,897	25,899,233	28,519,458
<b>Total</b>			<b>476,555</b>	<b>586,399</b>	<b>2,052,600</b>	<b>7,611,519</b>	<b>147,604,927</b>	<b>158,332,000</b>

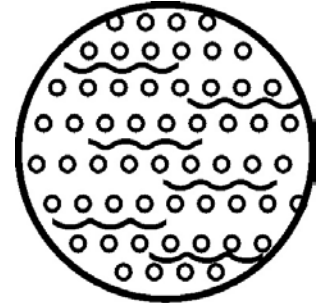
Reimbursable Costs: N/A

# 2016-17 & 2017-18 Budget

<b>Project Name &amp; Number</b>	<b>A-Side Primary Clarifiers Repl. at P2 - P2-98</b>		
<b>Project Category</b>	<b>Primary Treatment</b>	<b>Project Status:</b>	<b>Revised</b>

## Description

The primary treatment facilities at Plant No. 2 consist of fourteen circular clarifiers which are supported by influent piping, influent distribution structures, effluent piping and sludge pumping units. The clarifiers are covered with geodesic domes which collect foul air from the clarifiers for conveyance and treatment at two foul air scrubbing complexes. The first phase of the project will replace the four clarifiers on side "A", provide a new Power Building to serve the entire primary system and install an electrical distribution system to Side "A". The project will also construct a new central odor scrubbing system for the primary treatment system and will provide air foul ducting to Side "A". The second phase of the project will rehabilitate the ten remaining clarifiers on sides "B" and "C", along with associated facilities.



**Primary Treatment**

## Justification

The primary treatment facilities were built between 1960 and 1985. The facilities are subject to varying deterioration due to corrosion and are in need of rehabilitation or replacement based on physical condition, level of performance and age. The four clarifiers on Side "A" were built between 1960 and 1965 on a foundation which is subject to liquefaction in a seismic event. The existing Power Building "A" was constructed in the late 1950s, is located in a low drainage area which is subject to flooding and the electrical equipment does not meet current codes requirements. The existing odor treatment equipment has exceeded its expected service life, is subject to frequent failures, and is the subject of District study to upgrade the Odor Scrubbing Systems at Plant 2.

The project budget has been increased from \$156,029,000 to \$221,500,000. The project's construction cost is \$269,188,182. The impacts to operational budgets have not yet been determined.

## Budget Projections

Budget Phase	Cost To-Date	2016-2017	2017-18	2018-19	2019-20	2020-21	Thereafter	Total Project Budget
Proj Dev	706,748						125,612	832,360
Prelim Design	270,472	1,140,544	3,851,499	144,784			293,553	5,700,852
Design			548,909	4,354,727	4,165,828	970,317	16,101,338	26,141,119
Construction						6,882,187	303,360,668	310,242,855
Commissioning							15,235,564	15,235,564
Close-out							2,785,910	2,785,910
Contingency	172,958	543,552	1,158,226	1,427,821	1,808,641	2,229,480	59,984,662	67,325,340
<b>Total</b>	<b>1,150,178</b>	<b>1,684,096</b>	<b>5,558,634</b>	<b>5,927,332</b>	<b>5,974,469</b>	<b>10,081,984</b>	<b>397,887,307</b>	<b>428,264,000</b>

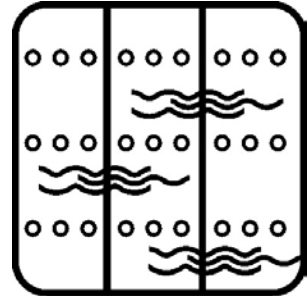
Reimbursable Costs: N/A

# CIP Project Detail Sheets

<b>Project Name &amp; Number</b>	<b>Activated Sludge Aeration Basin Deck Repair at P2 - P2-118</b>		
<b>Project Category</b>	<b>Secondary Treatment</b>	<b>Project Status:</b>	<b>Revised</b>

**Description**

The purpose of the project is to rehabilitate the concrete deck at the oxygen activated sludge basins at Plant No. 2 in order to increase the life of its critical assets and to address safety issues associated with oxygen seepage from cracks in the deck. This project will focus on repair of full penetration cracks and surface spalling on the top deck of the basins.



**Secondary Treatment**

**Justification**

The deck of the aeration basins has incurred cracking over time, many of which go through the entire slab potentially exposing the rebar to corrosion and causing leakage of oxygen. The leaking oxygen imposes a safety concern because of the potential for it to accumulate in confined areas potentially creating an oxygen-enriched environment. Additionally, there are large areas of surface spalling where the top layer of reinforcement is exposed, causing corrosion of the metal. This project will rehabilitate or restore the reinforcement as needed and replace the spalled concrete with an epoxy-based mortar to cover and protect the reinforcement from being compromised further.

The project budget has been decreased from \$6,659,000 to \$2,331,000. The project's construction cost is \$900,000. This project will not have an impact on operational budgets.

**Budget Projections**

Budget Phase	Cost To-Date	2016-2017	2017-18	2018-19	2019-20	2020-21	Thereafter	Total Project Budget
Proj Dev	22,842							22,842
Prelim Design	38,848	62,999						101,847
Design		184,394	188,596					372,990
Construction			1,278,822					1,278,822
Commissioning			53,303					53,303
Close-out			46,172	4,817				50,989
Contingency	3,459	47,692	304,273	94,783				450,207
<b>Total</b>	<b>65,149</b>	<b>295,085</b>	<b>1,871,166</b>	<b>99,600</b>				<b>2,331,000</b>

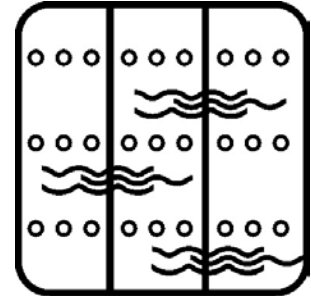
Reimbursable Costs: N/A

# 2016-17 & 2017-18 Budget

<b>Project Name &amp; Number</b>	Oxygen Plant Demolition at P2 - SP-129		
<b>Project Category</b>	Secondary Treatment	<b>Project Status:</b>	Revised

**Description**

This project removes the existing abandoned cryogenic facility, compressors and associated equipment which, prior to decommissioning in October 2012 was operated and maintained by Air Products and Chemicals. The assets are owned by OCSD.



**Secondary Treatment**

**Justification**

As a cost savings measure, Operations now purchases liquid oxygen rather than using the aging cryogenic facility to generate high purity oxygen.

The project budget has been decreased from \$4,051,000 to \$3,444,000. The project's construction cost is \$1,543,205. This project will not have an impact on operational budgets.

**Budget Projections**

Budget Phase	Cost To-Date	2016-2017	2017-18	2018-19	2019-20	2020-21	Thereafter	Total Project Budget
Proj Dev	16,776							16,776
Prelim Design	128,380							128,380
Design	461,037							461,037
Construction	2,190,379							2,190,379
Commissioning	3,513							3,513
Close-out	30,457	249,405	29,748					309,610
Contingency	139,746	179,180	15,379					334,305
<b>Total</b>	<b>2,970,288</b>	<b>428,585</b>	<b>45,127</b>					<b>3,444,000</b>

Reimbursable Costs: N/A

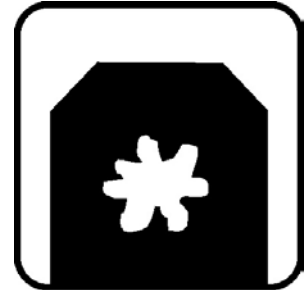


# CIP Project Detail Sheets

<b>Project Name &amp; Number</b>	<b>Digester Rehab at P1 - P1-100</b>		
<b>Project Category</b>	<b>Solids Handling &amp; Digestion</b>	<b>Project Status:</b>	<b>Revised</b>

## Description

The project rehabilitates Digesters No. 5 through No. 16 at Plant No. 1 to replace aging equipment and improve solids handling capacity. The equipment rehabilitation includes sludge pumping, heating, structural systems, mechanical systems, electrical and control systems.



**Solids Handling  
& Digestion**

## Justification

This project is being built in conjunction with Project P1-101 to treat increased solids due to secondary expansion at Plant No. 1, efficiently use existing digesters' capacity, increase reliability, and improve quality of sludge production. Scope of work includes removal of sludge accumulated in digesters, replacing aging mechanical/electrical equipment, and structural rehabilitation of digesters 5-16 that were built during the years of 1959-1993.

The project budget has been increased from \$64,902,000 to \$66,650,000. The project's construction cost is \$38,555,003. This project will not have an impact on operational budgets.

## Budget Projections

Budget Phase	Cost To-Date	2016-2017	2017-18	2018-19	2019-20	2020-21	Thereafter	Total Project Budget
Proj Dev	217,569							217,569
Prelim Design	3,082,231							3,082,231
Design	3,603,031							3,603,031
Construction	48,498,902	2,254,323	523,615					51,276,840
Commissioning	2,325,099	441,721	44,002					2,810,822
Close-out	52,706		161,555	6,399				220,660
Contingency	707,281	2,057,979	1,838,607	834,981				5,438,848
<b>Total</b>	<b>58,486,818</b>	<b>4,754,023</b>	<b>2,567,779</b>	<b>841,380</b>				<b>66,650,000</b>

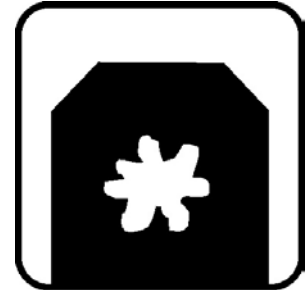
Reimbursable Costs: N/A

# 2016-17 & 2017-18 Budget

<b>Project Name &amp; Number</b>	<b>Sludge Dewatering &amp; Odor Control at P1 - P1-101</b>		
<b>Project Category</b>	<b>Solids Handling &amp; Digestion</b>	<b>Project Status:</b>	<b>Revised</b>

## Description

This project constructs primary sludge thickening facilities to improve solids handling capacity, replace sludge dewatering facilities with aging equipment and reduce biosolids handling and disposal, rehabilitate solids handling odor control equipment for aging equipment, and temporarily expand sludge dewatering facilities to accommodate temporary construction needs.



**Solids Handling  
& Digestion**

## Justification

This project is necessary to support the need for more capacity to thicken and dewater sludge due to conversion of Plant No. 1 to full secondary treatment and increased flows to support expansion of the GWR System. The existing sludge dewatering facilities that were built in the late 1970's have reached the end of useful life and are in need of replacement. This project will increase cake dryness which will reduce biosolids management costs; improve sludge thickening to optimize use of existing digesters while eliminating construction of new digesters and improve site constraints at Plant No. 1 by building compact solids treatment facilities and facilitate future expansion.

The project budget has been increased from \$171,978,000 to \$188,328,000. The project's construction cost is \$127,668,668. This project will decrease operational budgets by \$3,600,000 annually. Sludge hauling and disposal costs will drop because there will be less moisture in the sludge. This operational savings factors in the additional energy and chemical costs associated with operating centrifuges.

## Budget Projections

Budget Phase	Cost To-Date	2016-2017	2017-18	2018-19	2019-20	2020-21	Thereafter	Total Project Budget
Proj Dev	329,977							329,977
Prelim Design	6,894,055							6,894,055
Design	11,393,374							11,393,374
Construction	128,460,747	14,639,634	6,184,656	354,583				149,639,620
Commissioning	370,146	1,998,940	1,314,208					3,683,294
Close-out	22,658	47,931	28,988	598,214	622			698,413
Contingency	617,457	1,773,884	2,197,499	9,928,703	1,171,724			15,689,267
<b>Total</b>	<b>148,088,414</b>	<b>18,460,389</b>	<b>9,725,351</b>	<b>10,881,500</b>	<b>1,172,346</b>			<b>188,328,000</b>

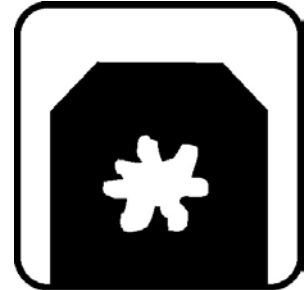
Reimbursable Costs: N/A

# CIP Project Detail Sheets

<b>Project Name &amp; Number</b>	<b>Solids Thickening &amp; Processing Upgrades - P2-89</b>		
<b>Project Category</b>	<b>Solids Handling &amp; Digestion</b>	<b>Project Status:</b>	<b>Continuing</b>

**Description**

This project will rehabilitate and upgrade the four existing Dissolved Air Flotation Thickeners (DAFTs) to treat the Activated Sludge Plant solids and the solids from the Trickling Filter/Solids Contactor (TF/SC) process. This project will also convert two holding digesters into working digesters to accommodate the increased production of sludge coming from the new secondary TF/SC process.



**Solids Handling  
& Digestion**

**Justification**

This project is required to rehabilitate aging sludge thickening equipment, and to improve thickening capacity reliability related to the solids generated by the Trickling Filter/Solids Contact facility.

The project's construction cost is \$29,312,724. This project will not have an impact on operational budgets.

**Budget Projections**

Budget Phase	Cost To-Date	2016-2017	2017-18	2018-19	2019-20	2020-21	Thereafter	Total Project Budget
Proj Dev	181,772							181,772
Prelim Design	3,460,820							3,460,820
Design	5,749,912							5,749,912
Construction	35,737,855	2,416,448						38,154,303
Commissioning	691,132	118,453						809,585
Close-out	254,807	315,451	19,179					589,437
Contingency	560,153	1,357,651	286,367					2,204,171
<b>Total</b>	<b>46,636,451</b>	<b>4,208,003</b>	<b>305,546</b>					<b>51,150,000</b>

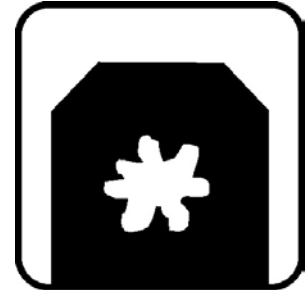
Reimbursable Costs: N/A

# 2016-17 & 2017-18 Budget

<b>Project Name &amp; Number</b>	<b>Digester Facilities Rehab at P2 - P2-91-1</b>		
<b>Project Category</b>	<b>Solids Handling &amp; Digestion</b>	<b>Project Status:</b>	<b>Future</b>

## Description

This project will rehabilitate Plant 2 Digester P through T. The extend of rehabilitation will include mechanical equipment and piping including sludge mixing system, sludge recirculation and heating system, hot water system, and axillary equipment; digester cleaning and fixing concrete structure damages found, miscellaneous safety item, and related electrical and instrumentation works.



**Solids Handling  
& Digestion**

## Justification

Based on Planning study SP-186 findings, the decision was made that all Plant 2 digesters will be replaced with new digesters due to condition of the digesters, and liquefaction and seismic risks. The Biosolids Master Plan (with FY 15/16 start date) will evaluate the replacement options. It will take about 10-15 years to finish the design and construction of the new digesters in a phased manner. In order to keep all the existing digesters online until they are replaced, this project will rehabilitate some of the digesters to extend their useful lives.

The project budget has been increased from \$47,600,000 to \$49,220,000. The project's construction cost is \$29,460,998. This project will not have an impact on operational budgets.

## Budget Projections

Budget Phase	Cost To-Date	2016-2017	2017-18	2018-19	2019-20	2020-21	Thereafter	Total Project Budget
Proj Dev	149,732		70,529					220,261
Prelim Design			13,061	61,899	34,930			109,890
Design	2,358				1,106,106	1,897,750	749,941	3,756,155
Construction	273						33,809,791	33,810,064
Commissioning							2,104,248	2,104,248
Close-out							380,870	380,870
Contingency			67,796	190,773	448,435	631,548	7,499,960	8,838,512
<b>Total</b>	<b>152,363</b>		<b>151,386</b>	<b>252,672</b>	<b>1,589,471</b>	<b>2,529,298</b>	<b>44,544,810</b>	<b>49,220,000</b>

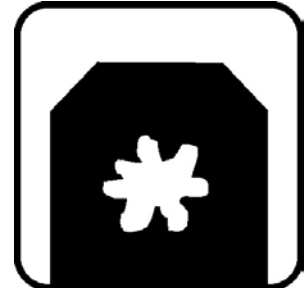
Reimbursable Costs: N/A

# CIP Project Detail Sheets

<b>Project Name &amp; Number</b>	<b>Sludge Dewatering &amp; Odor Control at P2 - P2-92</b>		
<b>Project Category</b>	<b>Solids Handling &amp; Digestion</b>	<b>Project Status:</b>	<b>Revised</b>

## Description

This project constructs facilities to reduce biosolids handling and disposal costs, replace aging sludge dewatering facilities, and provides associated odor control facilities. The project will also demolish the existing Belt Press Dewatering Building, and two unused sludge cake storage silos. This budget also includes the P2-92A Truck Loading Bay Odor Control project, the construction of which will be separately from P2-92.



**Solids Handling  
& Digestion**

## Justification

This project will replace the dewatering facilities that have reached the end of their service life. Based on the Long Range Biosolids Master Plan, a newer dewatering technology, centrifuges, will be utilized to reduce the amount of water in the biosolids hauled offsite to reduce biosolids management disposal costs.

The project budget has been increased from \$86,500,000 to \$90,477,000. The project's construction cost is \$53,835,000. This project will decrease operational budgets by \$1,300,000 annually. Sludge hauling and disposal costs will drop because there will be less moisture in the sludge. This operational savings factors in the additional energy and chemical costs associated with operating centrifuges.

## Budget Projections

Budget Phase	Cost To-Date	2016-2017	2017-18	2018-19	2019-20	2020-21	Thereafter	Total Project Budget
Proj Dev	587,514							587,514
Prelim Design	2,788,301							2,788,301
Design	7,002,817							7,002,817
Construction	17,205,861	22,504,880	15,548,028	10,865,723	4,835,107	140,040		71,099,639
Commissioning			58,313	568,298	762,527	20,373		1,409,511
Close-out						592,942		592,942
Contingency	405,798	958,826	1,183,010	1,414,601	1,712,947	1,280,910	40,183	6,996,275
<b>Total</b>	<b>27,990,292</b>	<b>23,463,706</b>	<b>16,789,351</b>	<b>12,848,622</b>	<b>7,310,581</b>	<b>2,034,265</b>	<b>40,183</b>	<b>90,477,000</b>

Reimbursable Costs: N/A

# 2016-17 & 2017-18 Budget

<b>Project Name &amp; Number</b>	<b>Final Effluent Sampler &amp; Building Area Upgrades - J-110</b>		
<b>Project Category</b>	<b>Ocean Outfall Systems</b>	<b>Project Status:</b>	<b>Revised</b>

## Description

This project will renovate, replace, or demolish facilities surrounding the final effluent sampler trailer. This includes replacement of the final effluent sampler pumping and sampling systems and sampling trailer with a new building, the removal of the adjacent unused buildings, removal and replacement of gas lines, rehabilitation of the short ocean outfall system, drainage and storm drain improvements, and landscaping and irrigation along the east plant perimeter.



**Ocean Outfall  
Systems**

## Justification

These facilities need significant renovations due to age and exposure to ocean air. Several repairs and upgrades have been attempted to correct deficient sampling equipment. Similarly, a number of repairs have been made to existing structures. Those past projects have extended the life of the equipment and structures, however, those past repairs are also at the end of their useful lives. Thus, the buildings, gas lines, and equipment need large-scale renovations and replacement. Project No. P2-96 was bid with J-110. The management and construction costs are included in the J-110 budget for ease of OCSD project management since it was a small percentage of the overall construction cost for the two projects.

The project budget has been increased from \$15,973,000 to \$16,411,000. The project's construction cost is \$9,716,000. This project will not have an impact on operational budgets.

## Budget Projections

Budget Phase	Cost To-Date	2016-2017	2017-18	2018-19	2019-20	2020-21	Thereafter	Total Project Budget
Proj Dev	101,240							101,240
Prelim Design	1,420,752							1,420,752
Design	1,396,388							1,396,388
Construction	7,057,401	4,798,322	274,102					12,129,825
Commissioning		147,278						147,278
Close-out	6	128,274	114,867					243,147
Contingency	157,411	528,542	286,416					972,369
<b>Total</b>	<b>10,133,199</b>	<b>5,602,416</b>	<b>675,385</b>					<b>16,411,000</b>

Reimbursable Costs: N/A

# CIP Project Detail Sheets

<b>Project Name &amp; Number</b>	<b>Ocean Outfall System Rehab - J-117</b>		
<b>Project Category</b>	<b>Ocean Outfall Systems</b>	<b>Project Status:</b>	<b>Revised</b>

## Description

This project will rehabilitate the mechanical, electrical, and civil systems at the Ocean Outfall Booster Station at Plant 2 which is the primary pumping station for the discharge of secondary effluent to the ocean outfall system. This project also includes replacement of portions of the Ocean Outfall Booster Station pumping systems with a low flow pump station to more efficiently pump dry weather flow. Related facilities between Plant 1 and Plant 2 are also included in this project including rehabilitation of the 120" and 84" pipelines and replacement of the fiber optic cable.



**Ocean Outfall  
Systems**

## Justification

The existing Ocean Outfall Booster Station facility is over 20 years old. A consultant was hired to perform an extensive evaluation of the existing mechanical and electrical equipment at the Ocean Outfall Booster Station as well as a hydraulic analysis of the projected dry weather daily flows. The conclusions were that the mechanical and electrical equipment are nearing the end of their useful lives and in need of replacement or rehabilitation and modifications to the pumping system were required to more efficiently pump dry weather flows. In addition, the pipelines between Plant 1 and Plant 2 were evaluated by the Engineering Department's corrosion staff and were determined to be in need of rehabilitation.

The project budget has been increased from \$76,000,000 to \$87,683,000. The project's construction cost is \$51,825,778. This project will decrease operational budgets by \$1,000,000 annually. resulting from energy savings by using more appropriately sized pumps during non-storm periods.

## Budget Projections

Budget Phase	Cost To-Date	2016-2017	2017-18	2018-19	2019-20	2020-21	Thereafter	Total Project Budget
Proj Dev	224,788							224,788
Prelim Design	2,900,979	919,510						3,820,489
Design	325,253	3,000,543	2,881,319	137,602				6,344,717
Construction	739,095		1,566,332	7,353,859	20,587,749	21,597,888	10,571,738	62,416,661
Commissioning							1,711,161	1,711,161
Close-out				19,344	57,593	53,634	77,892	208,463
Contingency	247,886	728,751	1,001,240	1,784,149	1,455,307	1,874,012	5,865,377	12,956,722
<b>Total</b>	<b>4,438,000</b>	<b>4,648,804</b>	<b>5,448,891</b>	<b>9,294,954</b>	<b>22,100,649</b>	<b>23,525,534</b>	<b>18,226,168</b>	<b>87,683,000</b>

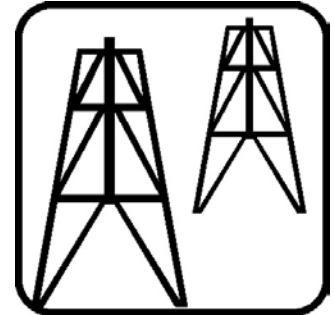
Reimbursable Costs: N/A

# 2016-17 & 2017-18 Budget

<b>Project Name &amp; Number</b>	<b>Cengen Cooling Water System Repl. Project - J-109</b>		
<b>Project Category</b>	<b>Utility Systems</b>	<b>Project Status:</b>	<b>Continuing</b>

**Description**

This project will improve the efficiency of existing cooling system equipment at both plants. It will improve heat recovery from the Central Generation Engines and reduce water consumption by replacing the existing once-through cooling systems with a more efficient system



**Utility Systems**

**Justification**

This project will substantially reduce the amount of water consumed by process equipment/systems, resulting in an estimated savings of \$500,000 annually. The District currently buys OCWD reclaimed water to cool mechanical equipment. This water is expensive and contains chemicals that damage equipment. The contract is set to expire in 2012. This project will eliminate the need to purchase reclaimed water due to use of a closed loop system with cooling towers.

The project's construction cost is \$6,115,457. This project will not have an impact on operational budgets.

**Budget Projections**

Budget Phase	Cost To-Date	2016-2017	2017-18	2018-19	2019-20	2020-21	Thereafter	Total Project Budget
Proj Dev	119,348							119,348
Prelim Design	1,130,934							1,130,934
Design	1,377,122							1,377,122
Construction	8,305,206							8,305,206
Commissioning	167,472							167,472
Close-out	289,695							289,695
Contingency	87,223							87,223
<b>Total</b>	<b>11,477,000</b>							<b>11,477,000</b>

Reimbursable Costs: N/A

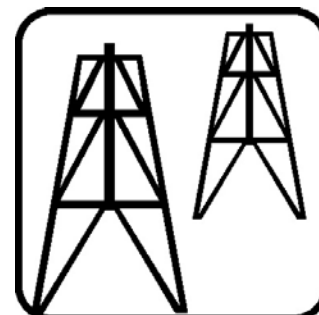


# CIP Project Detail Sheets

<b>Project Name &amp; Number</b>	<b>Cengen Emissions Control Project - J-111</b>		
<b>Project Category</b>	<b>Utility Systems</b>	<b>Project Status:</b>	<b>Revised</b>

**Description**

This project will install equipment at each plant to control the Central Generation emissions and comply with existing and proposed regulatory limits. The Central Generation System (CGS) engines provide both electricity and heat to our treatment plants and are permitted to operate by the South Coast Air Quality Management District (SCAQMD). The project will also automate the operation of two steam absorption chillers and provide a steam converter at Plant 2 to reduce natural gas consumption required for digester heating.



**Utility Systems**

**Justification**

The SCAQMD has amended an existing Rule 1110.2 which requires significant reductions in common pollutants that have national ambient air quality standards. Also, OCSD is subject to an existing SCAQMD air toxic rule (Rule 1402) that requires significant reductions in emissions associated with health risks. This project will bring OCSD in compliance with the proposed and existing Rules for air emissions based on the results of the pilot testing conducted under Project No. J-79. The project will also allow OCSD to operate engines using natural gas, which will be used during peak power rate periods to reduce electrical costs.

The project budget has been decreased from \$24,950,000 to \$23,820,000. The project's construction cost is \$15,483,739. This project will increase operational budgets by \$300,000 annually. However, this can be offset by reduced peak demand costs by the ability to generate power using natural gas during peak electric rate periods.

**Budget Projections**

Budget Phase	Cost To-Date	2016-2017	2017-18	2018-19	2019-20	2020-21	Thereafter	Total Project Budget
Proj Dev	221,077							221,077
Prelim Design	1,002,075							1,002,075
Design	1,827,488							1,827,488
Construction	19,086,806							19,086,806
Commissioning	508,356							508,356
Close-out	10,372	163,036						173,408
Contingency	471,454	529,336						1,000,790
<b>Total</b>	<b>23,127,628</b>	<b>692,372</b>						<b>23,820,000</b>

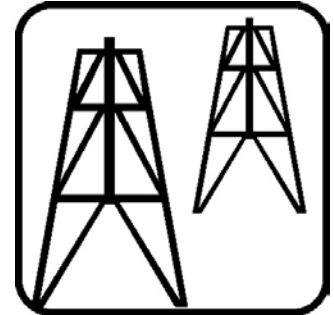
Reimbursable Costs: N/A

# 2016-17 & 2017-18 Budget

<b>Project Name &amp; Number</b>	<b>UPS System Upgrades - J-121</b>		
<b>Project Category</b>	<b>Utility Systems</b>	<b>Project Status:</b>	<b>Future</b>

## Description

This project will provide a regional uninterruptible power system (UPS) at Plant No. 1 in Power Building 8, a regional UPS in the northern portion of Plant No. 2, and provide UPS power distribution and power distribution units (PDUs) to feed UPS loads from the regional UPS's installed by this project and regional UPS's installed by P1-101, P2-89 and P2-110. The regional UPS's will be industrial grade with lead acid batteries and will replace the smaller UPS units. This is described in detail as Option 5, from TM-9 (Plant UPS Rehabilitation and Master Planning) of the Energy Master Plan which proposes replacing all existing UPS units with a limited number of larger units.



**Utility Systems**

## Justification

The existing UPS system includes units of various sizes, configurations, and capabilities. This system does not provide an ideal level of reliability or cost effective operation. Issues with the existing UPS system include failures without warning, use of maintenance free battery that last less than 5 years compared to 20 years for lead acid batteries, locations that are difficult to maintain, increased maintenance due to UPS quantity, and lack of standby diesel generator back up power to maintain UPS operation during an extended power outage.

The project budget has been decreased from \$8,393,000 to \$8,087,000. The project's construction cost is \$3,985,255. The impacts to operational budgets have not yet been determined.

## Budget Projections

Budget Phase	Cost To-Date	2016-2017	2017-18	2018-19	2019-20	2020-21	Thereafter	Total Project Budget
Proj Dev							98,493	98,493
Prelim Design							219,426	219,426
Design							1,026,199	1,026,199
Construction							5,317,382	5,317,382
Commissioning							150,312	150,312
Close-out							80,100	80,100
Contingency							1,195,088	1,195,088
<b>Total</b>							<b>8,087,000</b>	<b>8,087,000</b>

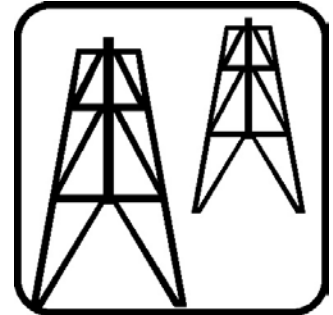
Reimbursable Costs: N/A

# CIP Project Detail Sheets

<b>Project Name &amp; Number</b>	<b>Digester Gas Facilities Rehab - J-124</b>		
<b>Project Category</b>	<b>Utility Systems</b>	<b>Project Status:</b>	<b>Revised</b>

## Description

Plant 1 and Plant 2 have similar facilities to collect and pressurize digester gas for fueling the Central Generation Power Facilities. The facilities consist of low pressure gas collector piping and storage, gas compressors, gas dryers and a high pressure gas distribution piping. The project will modify the low pressure gas vent on the digesters, install new gas compressors and gas dryers and replace the high pressure flare system with a low pressure system. Sections of the gas piping need modification to control condensation and corrosion. The existing gas compressor buildings will be demolished and replaced at new locations at both plants.



**Utility Systems**

## Justification

The gas compressor system was installed in 1982 and the mechanical equipment has reached the end of its service life. The gas facilities are in need of upgrading to improve safety and to meet current and future requirements of the Air Quality Management District (AQMD) and the National fire Protection Association (NFPA).

The project budget has been increased from \$85,870,000 to \$87,897,000. The project's construction cost is \$53,362,643. This project will not have an impact on operational budgets.

## Budget Projections

Budget Phase	Cost To-Date	2016-2017	2017-18	2018-19	2019-20	2020-21	Thereafter	Total Project Budget
Proj Dev		155,406						155,406
Prelim Design		23,796	68,789	69,080	28,043			189,708
Design		13,800			2,344,367	3,763,222	406,380	6,527,769
Construction							60,741,867	60,741,867
Commissioning							3,679,678	3,679,678
Close-out							593,531	593,531
Contingency		139,015	292,598	603,247	830,304	1,076,867	13,067,010	16,009,041
<b>Total</b>		<b>332,017</b>	<b>361,387</b>	<b>672,327</b>	<b>3,202,714</b>	<b>4,840,089</b>	<b>78,488,466</b>	<b>87,897,000</b>

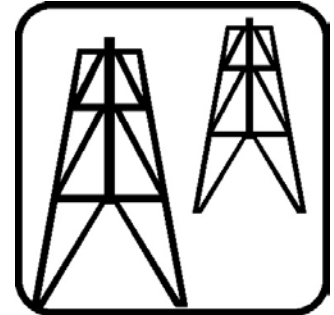
Reimbursable Costs: N/A

# 2016-17 & 2017-18 Budget

<b>Project Name &amp; Number</b>	Natural Gas Pipelines Repl. at P1 & P2 - J-127		
<b>Project Category</b>	Utility Systems	<b>Project Status:</b>	Continuing

**Description**

This project will rehabilitate the natural gas pipelines at Plants No 1 and 2. This includes the replacement of aging metallic pipelines and risers and upgrades to the cathodic protection systems.



**Utility Systems**

**Justification**

Recent condition assessments of the natural gas piping have revealed that some of the metallic piping and risers have reached the end of their useful life and require replacement. The cathodic protection systems will also be upgraded to provide corrosion control of the buried metallic piping. This project will ensure safe, reliable operations of the natural gas systems.

The project's construction cost is \$640,918. This project will not have an impact on operational budgets.

**Budget Projections**

Budget Phase	Cost To-Date	2016-2017	2017-18	2018-19	2019-20	2020-21	Thereafter	Total Project Budget
Proj Dev		1,470						1,470
Prelim Design		31,419	44,928					76,347
Design			6,447	120,397	109,363	1,596		237,803
Construction						285,328	556,960	842,288
Commissioning						4,545	15,050	19,595
Close-out							25,947	25,947
Contingency		684	2,497	6,287	10,102	15,772	71,208	106,550
<b>Total</b>		<b>33,573</b>	<b>53,872</b>	<b>126,684</b>	<b>119,465</b>	<b>307,241</b>	<b>669,165</b>	<b>1,310,000</b>

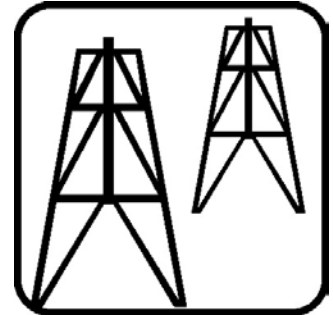
Reimbursable Costs: N/A

# CIP Project Detail Sheets

<b>Project Name &amp; Number</b>	<b>Electrical Power Distribution System Impr. - J-98</b>		
<b>Project Category</b>	<b>Utility Systems</b>	<b>Project Status:</b>	<b>Future</b>

## Description

This project provides various electrical distribution system improvements at Plant Nos. 1 and 2, as recommended by the J-25-4 project study, which are needed based on equipment condition and age, insufficient equipment ratings, grounding safety, non-compliance with the National Electrical Code (NEC) requirements, and electrical configuration reliability. This includes replacing delta-delta transformers with delta-wye transformer, adding high resistance grounding to maintain plant operations and reduce the arc flash levels, replacing electrical that is at the end of its useful life, modifying the electrical system configurations to improve reliability and support maintenance, replacing electrical cables and equipment that are not properly sized, and adding surge protection to protect equipment.



**Utility Systems**

## Justification

These improvements are required to improve electrical safety, reliability and protective device coordination and for compliance with NEC requirements. As the electrical systems at Plant 1 and 2 has aged and reliability and safety philosophy has improved, the existing electrical systems, which are not scheduled for rehabilitation in the near future, require improvements and replacement to maintain electrical system reliability and improved safety.

The project budget has been decreased from \$35,081,000 to \$34,608,000. The project's construction cost is \$18,608,097. This project will not have an impact on operational budgets.

## Budget Projections

Budget Phase	Cost To-Date	2016-2017	2017-18	2018-19	2019-20	2020-21	Thereafter	Total Project Budget
Proj Dev							377,799	377,799
Prelim Design							1,425,399	1,425,399
Design							2,574,924	2,574,924
Construction							24,096,259	24,096,259
Commissioning							397,120	397,120
Close-out							154,150	154,150
Contingency							5,582,349	5,582,349
<b>Total</b>							<b>34,608,000</b>	<b>34,608,000</b>

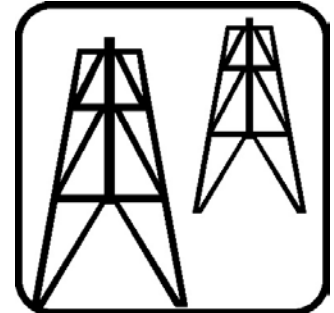
Reimbursable Costs: N/A

# 2016-17 & 2017-18 Budget

<b>Project Name &amp; Number</b>	Plant Water System Rehab at P1 - P1-112		
<b>Project Category</b>	Utility Systems	<b>Project Status:</b>	Revised

## Description

This project will rehabilitate or replace deteriorating plant water pipe that is in need of replacement due to corrosion. This includes the valves that have become unserviceable or have exceeded their useful lives. The project will need to install temporary measures to ensure that the treatment plant maintains continuous operations during the repairs.



**Utility Systems**

## Justification

O&M recently prepared an evaluation of the plant water systems for each plant in response to an increasing number of emergency repairs to the plant water systems. The resulting report identified the scope and magnitude of the needed repairs. These repairs were packaged into the projects for each plant.

The project budget has been decreased from \$8,000,000 to \$6,157,000. The project's construction cost is \$3,800,116. This project will not have an impact on operational budgets.

## Budget Projections

Budget Phase	Cost To-Date	2016-2017	2017-18	2018-19	2019-20	2020-21	Thereafter	Total Project Budget
Proj Dev	135,760							135,760
Prelim Design	415,400							415,400
Design	900,660							900,660
Construction	4,590,077							4,590,077
Commissioning								
Close-out	89,205	1,241						90,446
Contingency	14,253	10,404						24,657
<b>Total</b>	<b>6,145,355</b>	<b>11,645</b>						<b>6,157,000</b>

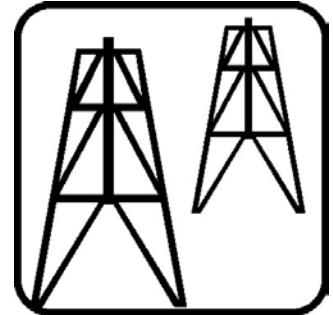
Reimbursable Costs: N/A

# CIP Project Detail Sheets

<b>Project Name &amp; Number</b>	<b>Central Generation Rehab at P1 - P1-127</b>		
<b>Project Category</b>	<b>Utility Systems</b>	<b>Project Status:</b>	<b>Future</b>

## Description

This project will rehabilitate the Cen Gen facility equipment including the lube oil system, the engine jacket water loop, steam loop, hot water loop, waste/supplement heat system, chilled water loop, cooling water loop, HVAC system, starting air and instrumentation air systems, exhaust gas monitoring system, miscellaneous building improvements, and electrical equipment including the 12 KV feeders and switch gears.



**Utility Systems**

## Justification

Cen Gen equipment had been rebuilt through regular maintenance program, or by CIP projects working in the area. There has not been a project just focusing on the condition assessment and rehabilitation of overall Cen Gen facility equipment, particularly the equipment that are too large to be rebuilt through regular maintenance.

The project budget has been increased from \$35,647,000 to \$73,151,000. The project's construction cost is \$43,921,253. This project will not have an impact on operational budgets.

## Budget Projections

Budget Phase	Cost To-Date	2016-2017	2017-18	2018-19	2019-20	2020-21	Thereafter	Total Project Budget
Proj Dev						105,148		105,148
Prelim Design						72,253	91,574	163,827
Design							5,596,253	5,596,253
Construction							50,404,559	50,404,559
Commissioning							3,137,087	3,137,087
Close-out							567,814	567,814
Contingency						140,466	13,035,846	13,176,312
<b>Total</b>						<b>317,867</b>	<b>72,833,133</b>	<b>73,151,000</b>

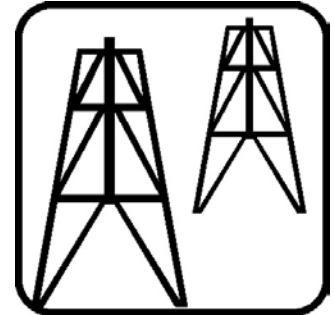
Reimbursable Costs: N/A

# 2016-17 & 2017-18 Budget

<b>Project Name &amp; Number</b>	<b>Plant Water System Rehab at P2 - P2-101</b>		
<b>Project Category</b>	<b>Utility Systems</b>	<b>Project Status:</b>	<b>Revised</b>

## Description

This project will rehabilitate or replace deteriorating plant water pipe that is in need of replacement due to corrosion. This includes the valves that have become unserviceable or have exceeded their useful lives. The project will need to install temporary measures to ensure that the treatment plant maintains continuous operations during the repairs.



**Utility Systems**

## Justification

O&M recently prepared an evaluation of the plant water systems for each plant in response to an increasing number of emergency repairs to the plant water systems. The resulting report identified the scope and magnitude of the needed repairs. These repairs were packaged into the projects for each plant

The project budget has been decreased from \$5,070,000 to \$3,704,000. The project's construction cost is \$2,333,590. This project will not have an impact on operational budgets.

## Budget Projections

Budget Phase	Cost To-Date	2016-2017	2017-18	2018-19	2019-20	2020-21	Thereafter	Total Project Budget
Proj Dev	121,403							121,403
Prelim Design	374,535							374,535
Design	420,871							420,871
Construction	2,691,822							2,691,822
Commissioning								
Close-out	84,492							84,492
Contingency	8,992	1,884						10,876
<b>Total</b>	<b>3,702,116</b>	<b>1,884</b>						<b>3,704,000</b>

Reimbursable Costs: N/A

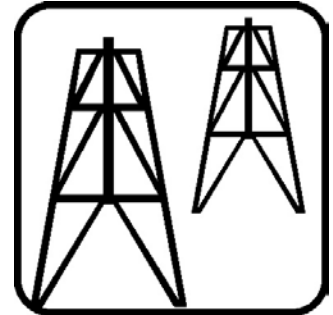


# CIP Project Detail Sheets

<b>Project Name &amp; Number</b>	<b>Consolidated Demolition &amp; Utility Impr. at P2 - P2-110</b>		
<b>Project Category</b>	<b>Utility Systems</b>	<b>Project Status:</b>	<b>Revised</b>

## Description

This project will demolish Digesters A and B; Primary Clarifiers A, B and C; Air Compressor Building; Emergency Power Building, and several other facilities at the end of useful life. Several existing tunnels will be demolished and/or rehabilitated including new pipe supports, drainage improvements, structural repair, lighting improvements etc. The demolition site will receive extensive grading, drainage and paving improvements.



**Utility Systems**

## Justification

Most facilities are at the end of useful life or is not in use any longer.

The project budget has been decreased from \$43,984,000 to \$38,460,000. The project's construction cost is \$26,343,000. This project will not have an impact on operational budgets.

## Budget Projections

Budget Phase	Cost To-Date	2016-2017	2017-18	2018-19	2019-20	2020-21	Thereafter	Total Project Budget
Proj Dev	221,226							221,226
Prelim Design	1,473,583							1,473,583
Design	907,646	728,167						1,635,813
Construction		79,298	8,225,372	20,047,951	2,416,113			30,768,734
Commissioning								
Close-out					367,597	41,358		408,955
Contingency	86,538	273,722	462,633	1,143,255	1,742,796	242,744		3,951,688
<b>Total</b>	<b>2,688,994</b>	<b>1,081,187</b>	<b>8,688,005</b>	<b>21,191,206</b>	<b>4,526,506</b>	<b>284,102</b>		<b>38,460,000</b>

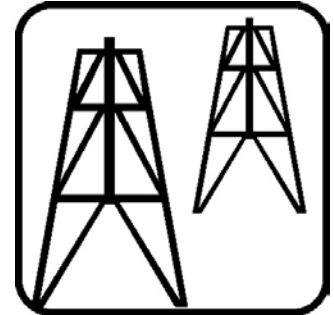
Reimbursable Costs: N/A

# 2016-17 & 2017-18 Budget

<b>Project Name &amp; Number</b>	<b>Central Generation Rehab at P2 - P2-119</b>		
<b>Project Category</b>	<b>Utility Systems</b>	<b>Project Status:</b>	<b>Future</b>

## Description

This project will rehabilitate the Plant 2 Cen Gen facility equipment including the lube oil system, the engine jacket water loop, steam loop, hot water loop, cooling water loop, HVAC system, starting air and instrumentation air systems, exhaust gas monitoring system, miscellaneous building improvements, and electrical equipment including 12 KV feeders and switchgears.



**Utility Systems**

## Justification

Cen Gen equipment had been rebuilt through regular maintenance program, or by CIP projects working in the area. There has not been a project just focusing on the condition assessment and rehabilitation of overall Cen Gen facility equipment, particularly the equipment that are too large to be rebuilt through regular maintenance.

The project budget has been increased from \$41,909,000 to \$95,906,000. The project's construction cost is \$57,583,506. This project will not have an impact on operational budgets.

## Budget Projections

Budget Phase	Cost To-Date	2016-2017	2017-18	2018-19	2019-20	2020-21	Thereafter	Total Project Budget
Proj Dev						137,854		137,854
Prelim Design						94,727	120,059	214,786
Design							7,337,061	7,337,061
Construction							66,083,518	66,083,518
Commissioning							4,112,892	4,112,892
Close-out							744,450	744,450
Contingency						184,167	17,091,272	17,275,439
<b>Total</b>						<b>416,748</b>	<b>95,489,252</b>	<b>95,906,000</b>

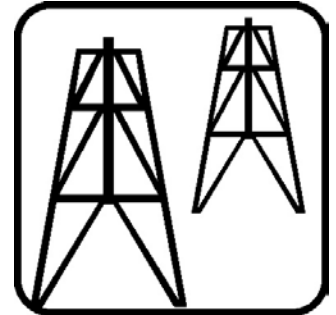
Reimbursable Costs: N/A

# CIP Project Detail Sheets

<b>Project Name &amp; Number</b>	<b>Plant Air System Master Plan - SP-148</b>		
<b>Project Category</b>	<b>Utility Systems</b>	<b>Project Status:</b>	<b>Revised</b>

## Description

This project will evaluate the Plant No. 1 and 2 Plant Air Systems for ultimate demands and capacity and include whether it is more reliable to operate as various islands or as a plant wide system served by a single location.



**Utility Systems**

## Justification

Many changes have occurred due to the declining condition of the existing systems and new demands from recent projects. Low air pressures and condensate have been noted at both plants.

The project budget has been decreased from \$340,000 to \$225,000. This project will not have an impact on operational budgets.

## Budget Projections

Budget Phase	Cost To-Date	2016-2017	2017-18	2018-19	2019-20	2020-21	Thereafter	Total Project Budget
Proj Dev	149,190	37,910						187,100
Prelim Design								
Design								
Construction								
Commissioning								
Close-out								
Contingency	30,749	7,151						37,900
<b>Total</b>	<b>179,939</b>	<b>45,061</b>						<b>225,000</b>

Reimbursable Costs: N/A

# 2016-17 & 2017-18 Budget

<b>Project Name &amp; Number</b>	<b>Safety Impr. Program - J-126</b>		
<b>Project Category</b>	<b>Process Related Special Projects</b>	<b>Project Status:</b>	<b>Revised</b>

## Description

Planning study SP-145-1 provided a facility-wide assessment of the significant structural safety issues (ladders, handrail, hatches, etc.) and identified over 1600 deficient safety items. About half of the safety items will be addressed by OCSD's Maintenance department while some lower priority items have been assigned to future CIP projects. This project will address the remaining items that are either high priority or cannot be assigned to a future CIP project.



**Process Related  
Special Projects**

## Justification

OCSD facilities have been constructed with varying compliance with safety codes. While the safety issues created by the configurations may have a low probability of causing injury, the consequence could be high in terms of injury and OCSD liability. The cost to mitigate these structural issues after construction is high. Dealing with these issues on a case-by-case basis is not cost effective. OCSD would benefit greatly by having consistent facilities-wide structural safety standards.

The project budget has been increased from \$1,708,000 to \$9,702,000. The project's construction cost is \$5,400,000. This project will not have an impact on operational budgets.

## Budget Projections

Budget Phase	Cost To-Date	2016-2017	2017-18	2018-19	2019-20	2020-21	Thereafter	Total Project Budget
Proj Dev	123,810							123,810
Prelim Design	51,823	401,833						453,656
Design	900	226,213	411,159	30,636				668,908
Construction			89,362	4,111,152	2,503,249			6,703,763
Commissioning								
Close-out					131,572			131,572
Contingency	6,556	76,914	209,552	457,107	688,927	181,235		1,620,291
<b>Total</b>	<b>183,089</b>	<b>704,960</b>	<b>710,073</b>	<b>4,598,895</b>	<b>3,323,748</b>	<b>181,235</b>		<b>9,702,000</b>

Reimbursable Costs: N/A

# CIP Project Detail Sheets

**Project Name & Number** | Odor Control Master Plan - SP-166

**Project Category** | Process Related Special Projects **Project Status:** Revised

**Description**

This project is a strategic initiative on odor impacts at both plants. Phase I will repetitively collect the odor data from the different treatment processes and analyze them by chemical and sensory methods to determine the target odorants. Phase II will model the target odorants, determine the maximum allowed concentrations, and recommend foul air treatment systems and associated costs to meet a certain level of service. The Board will use the Odor Control Master Plan to decide on a particular level of service for odors.



**Process Related  
Special Projects**

**Justification**

The 2005 odor model was based on sensory analyses which provides insufficient information to achieve effective foul air treatment at the sources. This study aims at providing sufficient information about the chemical compounds (odorants) causing odors at the different treatment processes in order to design treatment systems that meet an achievable level of service target for odors.

The project budget has been increased from \$1,900,000 to \$1,950,000. This project will not have an impact on operational budgets.

**Budget Projections**

Budget Phase	Cost To-Date	2016-2017	2017-18	2018-19	2019-20	2020-21	Thereafter	Total Project Budget
Proj Dev	1,312,627	473,117						1,785,744
Prelim Design								
Design	976							976
Construction								
Commissioning								
Close-out								
Contingency	22,624	112,674	27,982					163,280
<b>Total</b>	<b>1,336,227</b>	<b>585,791</b>	<b>27,982</b>					<b>1,950,000</b>

Reimbursable Costs: N/A

# 2016-17 & 2017-18 Budget

<b>Project Name &amp; Number</b>	<b>Process Control Systems Upgrades - J-120</b>		
<b>Project Category</b>	<b>Information Management Systems</b>	<b>Project Status:</b>	<b>Future</b>

## Description

This project will upgrade the existing Supervisory Control and Data Acquisition (SCADA) Systems for the treatment plants and pump stations which includes Human Machine Interface (HMI) hardware and HMI software, Programmable Logic Controllers (PLCs), historian, import-export tools to align HMI servers, and security administrative requirements. These improvements will provide greater reliability and system continuity by replacing the existing obsolete HMI systems, databases and software programs, to provide trending, diagnostic data, monitoring, control, automation and management information such as logistic information, detailed linked Standard Operating Procedures (SOPs), and expert-system troubleshooting guides. This project will consist of a pilot phase and an implementation phase. The pilot phase will test two HMI manufacturers under simulated conditions to evaluate ease of programming, configuration, performance, and features and will include the development of draft standards, database development and tools such as the Software Administrative Tool (SAT). The implementation phase will develop HMI and PLC programming standards, templates, programming methodologies, tools, and databases and will develop standards for SCADA networking and PLC control panels. The implementation phase will provide a phased conversion of the SCADA system replacement for the treatment plants and pump stations to maintain process automation and regulatory compliance. Project also includes the replacement of the existing fiber optic system at Plant 1.



**Information Management Systems**

## Justification

The existing HMI system consisting of the CRISP software and associated SCADA subsystems are obsolete. The CRISP software has a limited customer installed base and technical expertise for support and source code modifications will become scarce in the future. The CRISP HMI software in conjunction with the SCADA subsystems provides important data communications for treatment process and plant monitoring, control, automation, visualization, alarm handling and notification. The existing Quantum PLCs that are currently being used throughout the treatment plants and pump stations are no longer being manufactured. The manufacturer has developed a family of replacement PLC processors and ancillary equipment with enhanced capabilities and security features. A replacement PLC processor system will be evaluated and selected to provide a long-term, 20-year life. Reliability and maintainability of the SCADA systems is critical to maintaining regulatory compliance for both the collections system and the treatment plants. Many of the fiber optic cables at Plant 1 have reached the end of their useful life. Since the existing 62.5 micron fiber cables are no long manufactured, the entire fiber optic system needs to be replaced with 50 micron fibers to provide overall system compatibility.

The project budget has been increased from \$24,680,000 to \$102,399,000. The project's construction cost is \$40,631,874. The impacts to operational budgets have not yet been determined.

## Budget Projections

Budget Phase	Cost To-Date	2016-2017	2017-18	2018-19	2019-20	2020-21	Thereafter	Total Project Budget
Proj Dev					97,273			97,273
Prelim Design					357,020	854,647	1,638,530	2,850,197
Design							4,652,815	4,652,815
Construction							79,376,465	79,376,465
Commissioning							2,839,960	2,839,960
Close-out							392,789	392,789
Contingency					93,653	192,274	11,903,574	12,189,501
<b>Total</b>					<b>547,946</b>	<b>1,046,921</b>	<b>100,804,133</b>	<b>102,399,000</b>

Reimbursable Costs: N/A

# CIP Project Detail Sheets

<b>Project Name &amp; Number</b>	<b>Programmable Control Panel Upgrades - J-125</b>		
<b>Project Category</b>	<b>Information Management Systems</b>	<b>Project Status:</b>	<b>Revised</b>

**Description**

The project will upgrade programmable logic control (PLC) panels at both plants to be functional with new Industrial Control System (ICS) Network being installed by the Information Technology Department. The project will install ten (10) new PLC panels (5 at Plant No.1 and 5 Plant No. 2), add equipment to existing panels at both Plants No. 1 &2, and installation of miscellaneous network components.



**Justification**

ICS Network Installation and Supervisory Control and Data Acquisition System (SCADA) Security Upgrade Project (IT Project) is being completed by IT and requires these PLC upgrades for the PLCs to communicate through the ICS Network. This project will eliminate the dependency on the old Modbus Plus Network, and will increase level of security and reliability in SCADA communications.

The project budget has been decreased from \$3,177,000 to \$2,283,000. The project's construction cost is \$1,411,664. This project will not have an impact on operational budgets.

**Budget Projections**

Budget Phase	Cost To-Date	2016-2017	2017-18	2018-19	2019-20	2020-21	Thereafter	Total Project Budget
Proj Dev								
Prelim Design								
Design	5,611							5,611
Construction	2,036,917							2,036,917
Commissioning								
Close-out	72,721	26,354						99,075
Contingency	93,106	48,291						141,397
<b>Total</b>	<b>2,208,355</b>	<b>74,645</b>						<b>2,283,000</b>

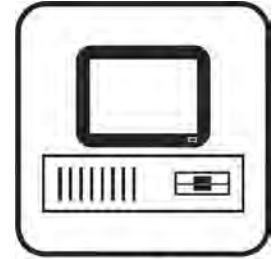
Reimbursable Costs: N/A

# 2016-17 & 2017-18 Budget

<b>Project Name &amp; Number</b>	Information Technology Capital Program - M-MC-IT		
<b>Project Category</b>	Information Management Systems	<b>Project Status:</b>	<b>New</b>

**Description**

This project will provide for the replacement, rehabilitation and/or upgrade of various Information technology assets that meet the criteria and justification for capital expenditure.



**Information Management Systems**

**Justification**

These funds are needed in order to replace/rehabilitate/upgrade Information technology assets that are not included or identified in a capital improvement project.

The project's construction cost is \$5,000,000. This project will not have an impact on operational budgets.

**Budget Projections**

Budget Phase	Cost To-Date	2016-2017	2017-18	2018-19	2019-20	2020-21	Thereafter	Total Project Budget
Proj Dev								
Prelim Design								
Design		125,694	324,657	499,232	679,993	870,425		2,500,001
Construction		251,382	649,308	998,463	1,359,985	1,740,860		4,999,998
Commissioning								
Close-out								
Contingency		125,231	323,965	497,855	677,416	875,534		2,500,001
<b>Total</b>		<b>502,307</b>	<b>1,297,930</b>	<b>1,995,550</b>	<b>2,717,394</b>	<b>3,486,819</b>		<b>10,000,000</b>

Reimbursable Costs: N/A



# CIP Project Detail Sheets

<b>Project Name &amp; Number</b>	<b>Power Monitoring &amp; Control Systems at P2 - P2-107</b>		
<b>Project Category</b>	<b>Information Management Systems</b>	<b>Project Status:</b>	<b>Revised</b>

## Description

This project will implement a power monitoring and control system at Plant No. 2, similar to the system installed under Project No. J-33-3 at Plant No. 1. Remote actuators and monitors will be provided for 12kV and 480V distribution switches to allow for operation from remote control panels which maintains a safe operating distance from live electrical panels to avoid arc flash risks.

The project will also provide a new industrial control system configured as three looped fiber optic networks.



## Justification

With the improvements made under this project, staff will be able to respond quickly via remote control panels to perform normal power switching or switching as a result of a fault condition, allowing operators to maintain a safe operating distance from live electrical panels to avoid arc flash risks.

Improvements to the industrial control system will improve reliability by eliminating a potential single point of failure with the fiber optic network

The project budget has been increased from \$27,839,000 to \$34,123,000. The project's construction cost is \$17,554,000. This project will not have an impact on operational budgets.

## Budget Projections

Budget Phase	Cost To-Date	2016-2017	2017-18	2018-19	2019-20	2020-21	Thereafter	Total Project Budget
Proj Dev	100,241							100,241
Prelim Design	952,405	264,658						1,217,063
Design	12	1,976,229	858,357					2,834,598
Construction			1,147,495	7,676,620	7,517,681	6,548,174		22,889,970
Commissioning	96,907			192,663	439,598	431,308		1,160,476
Close-out						42,718	164,018	206,736
Contingency	67,885	350,047	574,990	722,981	1,124,439	1,553,733	1,319,840	5,713,915
<b>Total</b>	<b>1,217,451</b>	<b>2,590,934</b>	<b>2,580,842</b>	<b>8,592,264</b>	<b>9,081,718</b>	<b>8,575,933</b>	<b>1,483,858</b>	<b>34,123,000</b>

Reimbursable Costs: N/A

# 2016-17 & 2017-18 Budget

<b>Project Name &amp; Number</b>	<b>EAM Software &amp; Process Implementation - SP-100</b>		
<b>Project Category</b>	<b>Information Management Systems</b>	<b>Project Status:</b>	<b>Revised</b>

## Description

This project will implement the IBM Maximo System in support of the Enterprise Asset Management program. The system will replace the current Computerized Maintenance Management System. The system will manage asset data and asset activities throughout the asset lifecycle.



## Justification

The IBM Maximo System will provide the means to manage asset to achieve the highest return at low risk by improving asset usage and reducing cost. The system will also manage asset lifecycle, provide visibility into asset performance, streamline process by eliminating paper work order, and reduce maintenance cost. The system will be integrated with other District system (i.e. FIS, GIS, and Timecard).

The project's construction cost is \$210,000. This project will not have an impact on operational budgets.

## Budget Projections

Budget Phase	Cost To-Date	2016-2017	2017-18	2018-19	2019-20	2020-21	Thereafter	Total Project Budget
Proj Dev	1,306,829							1,306,829
Prelim Design	424,675	28,345	28,238	28,237	28,346			537,841
Design	2,045,157	134,428	225,304	318,688	415,809			3,139,386
Construction	767,249	143,350	208,858	182,180	126,275			1,427,912
Commissioning	235,966	56,688	56,471	56,472	56,688			462,285
Close-out	35,846							35,846
Contingency	45,377	108,656	108,238	108,239	109,072	108,655	1,665	589,902
<b>Total</b>	<b>4,861,098</b>	<b>471,467</b>	<b>627,109</b>	<b>693,816</b>	<b>736,190</b>	<b>108,655</b>	<b>1,665</b>	<b>7,500,000</b>

Reimbursable Costs: N/A

# CIP Project Detail Sheets

<b>Project Name &amp; Number</b>	PDS2D Software Repl. - SP-103		
<b>Project Category</b>	Information Management Systems	<b>Project Status:</b>	Continuing

**Description**

This project provides a replacement to the Process and Instrumentation Diagram (P&ID) software used at the Sanitation District, which will not be supported by the vendor, and will eventually become inoperable. The software provides for the electronic storage and updating of diagrams which document the configuration of critical processes and equipment at the Sanitation District. The scope includes finding the replacement software, implementing the new software, and converting data to the new software.



**Justification**

This software maintains the drawings which document the configuration of critical treatment processes and equipment. These drawings are needed for plant expansion, and are required by the EPA for plant maintenance. An electronic system of this nature is the only feasible system for this purpose. The software will eventually become obsolete and inoperable. A replacement is needed because no update to this software will be provided. The data must be converted to the new software format before the software becomes inoperable.

This project will not have an impact on operational budgets.

**Budget Projections**

Budget Phase	Cost To-Date	2016-2017	2017-18	2018-19	2019-20	2020-21	Thereafter	Total Project Budget
Proj Dev								
Prelim Design								
Design	356,642	86,814	56,545					500,001
Construction								
Commissioning								
Close-out								
Contingency	2,548	11,247	11,204					24,999
<b>Total</b>	<b>359,190</b>	<b>98,061</b>	<b>67,749</b>					<b>525,000</b>

Reimbursable Costs: N/A

# 2016-17 & 2017-18 Budget

<b>Project Name &amp; Number</b>	<b>Geographic Information System - SP-15</b>		
<b>Project Category</b>	<b>Information Management Systems</b>	<b>Project Status:</b>	<b>Revised</b>

## Description

Geographic Information Systems (GIS) can be utilized at the District for any works project such as collections, ocean monitoring, flow studies, rate structure studies, and construction. The GIS can be a planning tool for Asset Management, and a reporting tool for Permits and Sewer Shed Modeling. Other regional programs that would utilize the GIS are Bacteria Investigations, Air Quality, Special Purpose Discharge Permits, Connection Permits, and Source Control Permits. A goal of the project is to enable Internet access to the District's GIS and Electronic Data Management System (EDMS) by consultants to collect data for projects and to check out and check in drawings. The public would also benefit through Internet access to reports and news about District's projects.



## Justification

There is a need and an opportunity for cost savings, spatial data control, and a reporting tool that can graphically display the District's data on maps via the Internet to reporting agencies, the public, and across the organization.

The project budget has been increased from \$4,460,000 to \$4,568,000. The project's construction cost is \$25,000. This project will not have an impact on operational budgets.

## Budget Projections

Budget Phase	Cost To-Date	2016-2017	2017-18	2018-19	2019-20	2020-21	Thereafter	Total Project Budget
Proj Dev	801,895							801,895
Prelim Design	121,040							121,040
Design	180,047	15,017	14,958	14,959	15,016			239,997
Construction	941,598	227,628	226,756	226,756	227,628			1,850,366
Commissioning	25,000							25,000
Close-out	24,476							24,476
Contingency	156,108	373,800	372,368	372,368	230,581			1,505,225
<b>Total</b>	<b>2,250,165</b>	<b>616,445</b>	<b>614,082</b>	<b>614,083</b>	<b>473,225</b>			<b>4,568,000</b>

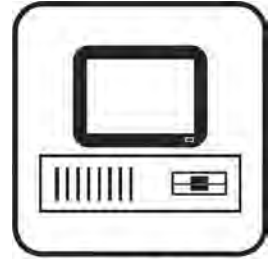
Reimbursable Costs: N/A

# CIP Project Detail Sheets

<b>Project Name &amp; Number</b>	<b>Process Control Systems Upgrades Study - SP-196</b>		
<b>Project Category</b>	<b>Information Management Systems</b>	<b>Project Status:</b>	<b>New</b>

**Description**

This study will evaluate and identify suitable replacements for the existing Supervisory Control and Data Acquisition (SCADA) Systems for the treatment plants and pump stations, which includes Human Machine Interface (HMI) hardware and HMI software, Programmable Logic Controllers (PLCs), Historian, import-export tools to align HMI servers, and security and administrative requirements for the Industrial Control System (ICS) network. These improvements will provide greater reliability and system continuity by replacing the existing obsolete HMI systems, databases and software programs, to provide trending, diagnostic data, monitoring, control, automation and management information such as logistic information, detailed linked Standard Operating Procedures (SOPs), and expert-system troubleshooting guides. This study will review the latest technology offerings, evaluate the existing process networks and hardwired network configuration and recommend changes, define system reliability, redundancy, performance and scan time requirements, identify software programming tools that need replacement, evaluate enterprise wide process data integration needs, evaluate and define requirements for current and future SCADA and ICS security requirements, define requirements for upgrading HMI and PLC hardware and software standards.



**Information  
Management  
Systems**

**Justification**

The existing HMI system consisting of the CRISP software and associated SCADA sub systems is obsolete. The CRISP software has a limited customer installed base and technical expertise for support and source code modifications will become scarce in the future. The CRISP HMI software in conjunction with the SCADA sub systems provides important data communications for treatment process and plant monitoring, control, automation, visualization, alarm handling and notification. The existing Quantum PLCs that are currently being used throughout the treatment plants and pump stations are no longer being manufactured.. The manufacturer has developed a family of replacement PLC processors and ancillary equipment with enhanced capabilities and security features. A new processor system will also be evaluated and selected to provide a long-term, 20-year plus life. Reliability and maintainability of the SCADA systems is critical to maintaining regulatory compliance for both the collections system and the treatment plants.

This project will not have an impact on operational budgets.

**Budget Projections**

Budget Phase	Cost To-Date	2016-2017	2017-18	2018-19	2019-20	2020-21	Thereafter	Total Project Budget
Proj Dev		986,292	1,746,789					2,733,081
Prelim Design								
Design								
Construction								
Commissioning								
Close-out								
Contingency		361,797	459,122					820,919
<b>Total</b>		<b>1,348,089</b>	<b>2,205,911</b>					<b>3,554,000</b>

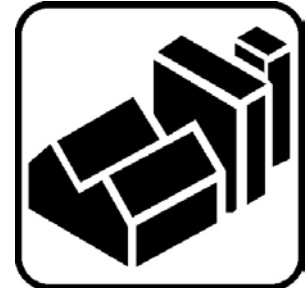
Reimbursable Costs: N/A

# 2016-17 & 2017-18 Budget

<b>Project Name &amp; Number</b>	<b>Planning Studies Program - M-STUDIES</b>		
<b>Project Category</b>	<b>Strategic &amp; Master Planning</b>	<b>Project Status:</b>	<b>New</b>

## Description

This budget provides funds for planning phase studies. This project acts as an annual budget placeholder for planning studies that have been identified by the Asset Management Program as necessary in order to assess the condition and capacity of the District's existing assets and systems.



**Strategic & Master Planning**

## Justification

Planning studies provide comprehensive CIP planning for the District to meet anticipated capacity needs, manage risks associated with asset or system failure, take advantage of technology advancements, comply with regulatory changes, and meet strategic goals.

The impacts to operational budgets have not yet been determined.

## Budget Projections

Budget Phase	Cost To-Date	2016-2017	2017-18	2018-19	2019-20	2020-21	Thereafter	Total Project Budget
Proj Dev	913,705	5,394,316	7,035,047	4,687,127	504,650	71,580	34,343	18,640,768
Prelim Design								
Design	7							7
Construction	1,178							1,178
Commissioning								
Close-out								
Contingency	297,591	717,006	1,448,768	1,662,256	560,888	315,363	8,176	5,010,048
<b>Total</b>	<b>1,212,480</b>	<b>6,111,322</b>	<b>8,483,815</b>	<b>6,349,383</b>	<b>1,065,538</b>	<b>386,943</b>	<b>42,519</b>	<b>23,652,000</b>

Reimbursable Costs: N/A

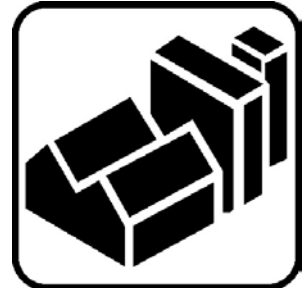
# CIP Project Detail Sheets

<b>Project Name &amp; Number</b>	<b>Climate Change Impact Study - SP-152</b>		
<b>Project Category</b>	<b>Strategic &amp; Master Planning</b>	<b>Project Status:</b>	<b>Future</b>

## Description

This study provides a site specific vulnerability analysis of potential impacts to OCSD facilities from global climate change in response to the Governor's Executive Order (EO) S-13-08.

Environmental Services is actively pursuing a climate change strategy through its Environmental Footprint Strategic Initiative efforts and has completed a detailed carbon footprint study. The next step and the subject of this study includes a site specific vulnerability analysis of potential climate change impacts to OCSD.



**Strategic &  
Master Planning**

## Justification

Global warming is predicted to lead to thermal expansion of sea water, along with partial melting of land-based glaciers and sea-ice, resulting in a rise of sea level. On November 14, 2008, Governor Arnold Schwarzenegger issued an executive order directing state agencies to plan for sea level rise and climate impacts.

The project budget has been increased from \$400,000 to \$590,000. This project will not have an impact on operational budgets.

## Budget Projections

Budget Phase	Cost To-Date	2016-2017	2017-18	2018-19	2019-20	2020-21	Thereafter	Total Project Budget
Proj Dev				56,768	197,883	195,347		449,998
Prelim Design								
Design								
Construction								
Commissioning								
Close-out								
Contingency				11,095	58,426	70,481		140,002
<b>Total</b>				<b>67,863</b>	<b>256,309</b>	<b>265,828</b>		<b>590,000</b>

Reimbursable Costs: N/A

# 2016-17 & 2017-18 Budget

<b>Project Name &amp; Number</b>	Effluent Reuse Study - SP-173		
<b>Project Category</b>	Water Management Projects	<b>Project Status:</b>	Continuing

**Description**

This joint study with OCWD will identify opportunities for beneficial use of Plant No. 2 effluent currently being discharged to the ocean.



**Water Management  
Projects**

**Justification**

The OCSD Strategic Plan identifies increases in reclamation as a strategic goal. This primarily includes diversions from Plant No. 2 to Plant No. 1 where the effluent is already being reused currently. This project will investigate additional options for reclamation of remaining flows at Plant No. 2. The results of this study will be presented to the Board of Directors for consideration and potential incorporation into future strategic planning goals.

This project will not have an impact on operational budgets.

**Budget Projections**

Budget Phase	Cost To-Date	2016-2017	2017-18	2018-19	2019-20	2020-21	Thereafter	Total Project Budget
Proj Dev	2,047,695	908,978						2,956,673
Prelim Design								
Design	1,184							1,184
Construction	1,008							1,008
Commissioning								
Close-out								
Contingency	95,872	195,263						291,135
<b>Total</b>	<b>2,145,759</b>	<b>1,104,241</b>						<b>3,250,000</b>

Reimbursable Costs: N/A

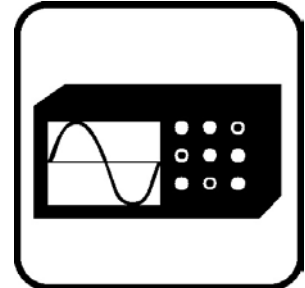


# CIP Project Detail Sheets

<b>Project Name &amp; Number</b>	<b>Research Program - M-RESEARCH</b>		
<b>Project Category</b>	<b>Research</b>	<b>Project Status:</b>	<b>New</b>

## Description

This is a fund for operational research projects that have not yet been identified. As directed by OCSD management, an annual allocation will be made to fund research projects. The Research Strategic Plan identified projects and topics for research. Specific projects will be identified and developed to be funded from this budget.



## Research & Development

## Justification

These funds will be used for various research projects designed to improve operational efficiency, reduce costs, improve safety, or fill important information gaps. The results will support O&M and provide information needed by Engineering for future planning and design work. The projects will be individually budgeted and tracked within the overall line item allocation.

This project will not have an impact on operational budgets.

## Budget Projections

Budget Phase	Cost To-Date	2016-2017	2017-18	2018-19	2019-20	2020-21	Thereafter	Total Project Budget
Proj Dev		296,702	399,079	399,079	401,381	400,230	103,524	1,999,995
Prelim Design								
Design								
Construction								
Commissioning								
Close-out								
Contingency		852,378	1,296,013	1,296,012	1,305,983	1,300,998	448,621	6,500,005
<b>Total</b>		<b>1,149,080</b>	<b>1,695,092</b>	<b>1,695,091</b>	<b>1,707,364</b>	<b>1,701,228</b>	<b>552,145</b>	<b>8,500,000</b>

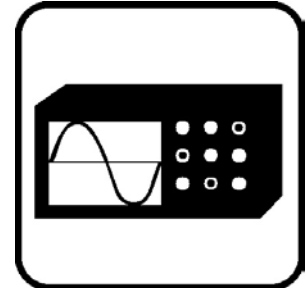
Reimbursable Costs: N/A

# 2016-17 & 2017-18 Budget

<b>Project Name &amp; Number</b>	Fuel Cell Demo - SP-125-04		
<b>Project Category</b>	Research	<b>Project Status:</b>	Revised

## Description

OCSD is the host site for a public / private collaborative demonstration with the University of California, Irvine, U.S. Department of Energy, California Air Resources Board, South Coast Air Quality Management District, Air Products and Chemicals, and FuelCell Energy. A 300 kW fuel cell is installed at Plant No. 1 to use a portion of the treatment plant's digester gas to generate electricity for on-site use. In addition, hydrogen gas is produced and compressed for fueling vehicles at a publicly accessible fueling station as part of the California "Hydrogen Highway."



**Research & Development**

## Justification

This project is designed to demonstrate the tri-generation concept of fuel cell operation using a renewable fuel (digester gas). The elements of this project that are included under the general goal of "demonstrating the fuel cell power plant operation" include determining the amount of digester gas cleaning that is needed to make it a suitable fuel, documenting the operating efficiency of the power plant and its component processes, determining the maintenance requirements for the system, and verifying the expected lack of air pollutant emissions.

The project budget has been increased from \$105,923 to \$135,000. This project will decrease operational budgets by \$12,000 annually. The demolition of this facility will reduce staff time associated with the station, such as interface with other organizations and oversight of the agreements.

## Budget Projections

Budget Phase	Cost To-Date	2016-2017	2017-18	2018-19	2019-20	2020-21	Thereafter	Total Project Budget
Proj Dev	613							613
Prelim Design								
Design	489							489
Construction	105,378	14,295	7,887					127,560
Commissioning	1,377							1,377
Close-out	335							335
Contingency	981	2,349	1,296					4,626
<b>Total</b>	<b>109,173</b>	<b>16,644</b>	<b>9,183</b>					<b>135,000</b>

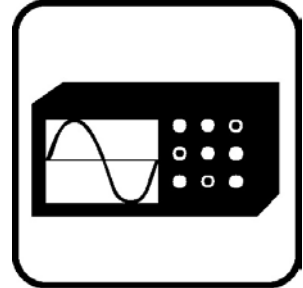
Reimbursable Costs: N/A

# CIP Project Detail Sheets

<b>Project Name &amp; Number</b>	<b>SCCWRP Nutrient Cycling Sampling - SP-125-15</b>		
<b>Project Category</b>	<b>Research</b>	<b>Project Status:</b>	<b>Continuing</b>

## Description

The goal of this project is to understand the influence of effluent nitrogen on coastal waters and how the nature of this nitrogen affects the response of the biological community. The study objectives are: (1) Identify the relative contribution of different nitrogen sources that are being utilized by phytoplankton and bacteria in effluent impacted area (Orange County) as well as a minimally-impacted area in Oceanside (i.e. mostly natural nutrient sources; anthropogenic inputs minor); (2) Conduct process studies to determine key rates of primary production, respiration, nitrogen uptake and nitrification in effluent impacted (Orange County) and minimally-impacted (Oceanside) regions.



**Research & Development**

## Justification

Eutrophication of coastal waters is a global environmental issue, with demonstrated links between anthropogenic nutrient inputs and the global increase in frequency and occurrence of algal blooms. However, untangling the relative influence of natural versus anthropogenic nutrient sources on coastal waters has proved to be complex. Studies have indicated that anthropogenic nitrogen may be having a significant impact on the ecology of the ocean, but it has also demonstrated that we have an incomplete understanding of the fate and dynamics of nitrogen in urban coastal settings and a poor understanding of the seasonal and interannual variability in these dynamics.

This project will not have an impact on operational budgets.

## Budget Projections

Budget Phase	Cost To-Date	2016-2017	2017-18	2018-19	2019-20	2020-21	Thereafter	Total Project Budget
Proj Dev								
Prelim Design								
Design	36,815	42,659	15,526					95,000
Construction								
Commissioning								
Close-out								
Contingency								
<b>Total</b>	<b>36,815</b>	<b>42,659</b>	<b>15,526</b>					<b>95,000</b>

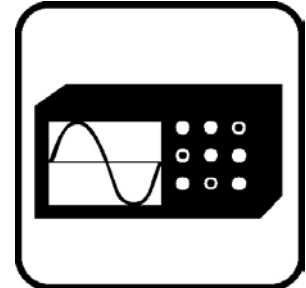
Reimbursable Costs: N/A

# 2016-17 & 2017-18 Budget

<b>Project Name &amp; Number</b>	AquaCritox Evaluation/Design - SP-125-17		
<b>Project Category</b>	Research	<b>Project Status:</b>	Revised

## Description

This project will conduct an engineering evaluation and produce a preliminary design package for a Supercritical Water Oxidation (SCWO) installation. SCWO (process trademark name: AquaCritox) accomplishes essentially complete oxidation of wastewater solids and other organic material, producing carbon dioxide, nitrogen, and process heat. This can be applied to primary or secondary solids and to other organic materials (e.g., pharmaceuticals and other Compounds of Emerging Concern). This project will include technical and economic evaluations of the feasible alternatives for an SCWO installation at OCSD, concluding with a preliminary design package for the recommended alternative that can be used to secure approval for a corresponding CIP design, construction, and testing project.



**Research & Development**

## Justification

SCWO could be used instead of anaerobic digestion, biogas cleaning/compression/storage, residual solids dewatering, and biosolids management activities. The early projections are an overall cost benefit if the system were to replace these processes. The goal of the study is to quantify the cost to construct operate the facility and determine any cost savings over existing processes.

The project budget has been increased from \$423,000 to \$588,000. This project will not have an impact on operational budgets.

## Budget Projections

Budget Phase	Cost To-Date	2016-2017	2017-18	2018-19	2019-20	2020-21	Thereafter	Total Project Budget
Proj Dev	296,665	201,767						498,432
Prelim Design								
Design	60							60
Construction								
Commissioning								
Close-out								
Contingency	35,806	53,702						89,508
<b>Total</b>	<b>332,531</b>	<b>255,469</b>						<b>588,000</b>

Reimbursable Costs: N/A

# CIP Project Detail Sheets

<b>Project Name &amp; Number</b>	<b>Facilities Engineering Program - Plant - M-FE-PLANT</b>		
<b>Project Category</b>	<b>Support Facilities</b>	<b>Project Status:</b>	<b>New</b>

**Description**

This budget provides funds for miscellaneous Reclamation Plant No. 1 facilities small capital projects, Treatment Plant No. 2 facilities small capital projects and joint small capital projects. A small capital project is defined as a miscellaneous capital improvement related to plant safety, reliability, or improvements where the professional design consulting services are less than \$200,000. This project acts as an annual budget placeholder for numerous small joint facilities projects. This system results in a fast-track process for the procurement and execution of engineering and contractor services for smaller, but vital projects.



**Justification**

The Plant Facilities Engineering project allows smaller capital projects to extend the life of the existing treatment works and the time between major rehabilitations. These smaller, high priority projects are individually tracked within the larger budget for procurement of engineering and contractor services as needed to maintain reliable operations.

The project's construction cost is \$14,069,063. This project will not have an impact on operational budgets.

**Budget Projections**

Budget Phase	Cost To-Date	2016-2017	2017-18	2018-19	2019-20	2020-21	Thereafter	Total Project Budget
Proj Dev								
Prelim Design								
Design	2,157,889	959,860	730,667					3,848,416
Construction	2,745,943	7,550,664	6,737,170					17,033,777
Commissioning								
Close-out								
Contingency	892,371	4,225,307	7,282,022	4,437,964	2,451,460	3,153,683		22,442,807
<b>Total</b>	<b>5,796,203</b>	<b>12,735,831</b>	<b>14,749,859</b>	<b>4,437,964</b>	<b>2,451,460</b>	<b>3,153,683</b>		<b>43,325,000</b>

Reimbursable Costs: N/A

# 2016-17 & 2017-18 Budget

<b>Project Name &amp; Number</b>	<b>Operations &amp; Maintenance Capital Program - M-SM-CAP</b>		
<b>Project Category</b>	<b>Support Facilities</b>	<b>Project Status:</b>	<b>New</b>

## Description

This project will provide for the replacement and rehabilitation of various plant processes and collection facilities as well as the replacement and or rehabilitation of facilities that meet the criteria for capital replacement.



**Support Facilities**

## Justification

These funds are needed in order to replace/rehabilitate equipment that is beyond economical repair or is at the end of its useful life or repair of facilities that are not included in a capital improvement project. It is also used to replace equipment when parts or services are no longer economically feasible.

The project's construction cost is \$8,000,000. This project will not have an impact on operational budgets.

## Budget Projections

Budget Phase	Cost To-Date	2016-2017	2017-18	2018-19	2019-20	2020-21	Thereafter	Total Project Budget
Proj Dev								
Prelim Design								
Design	9,305	333,775	616,571	919,495	1,130,160			3,009,305
Construction	31,054	1,176,487	2,080,982	3,050,342	3,751,892	28,180		10,118,937
Commissioning								
Close-out								
Contingency		200,757	474,534	773,185	1,045,282			2,493,758
<b>Total</b>	<b>40,359</b>	<b>1,711,019</b>	<b>3,172,087</b>	<b>4,743,022</b>	<b>5,927,334</b>	<b>28,180</b>		<b>15,622,000</b>

Reimbursable Costs: N/A

# CIP Project Detail Sheets

<b>Project Name &amp; Number</b>	<b>Title 24 Access Compliance &amp; Building Rehab Project - P1-115</b>		
<b>Project Category</b>	<b>Support Facilities</b>	<b>Project Status:</b>	<b>Revised</b>

## Description

The project evaluated Title 24 (Americans with Disabilities Act) upgrades and retrofits, code compliance and asset condition at the existing office facilities and grounds at Plant No. 1. The buildings studied in the Preliminary Design Report include: Administration, Human Resources, Laboratory, Maintenance Facilities, Fleet Services, Purchasing, Warehouses, Purchasing Conference Room and office trailers and Demolition of Building H. The grounds modifications include changes to the parking areas, asphalt repair, drainage improvements, and accessibility improvements.

The project costs developed for the Preliminary Design Report for the Laboratory, Administration Building, Purchasing, Human Resources Building, Fleet Services and supporting trailers were used for comparison to other options for housing the staff and laboratory including the construction of new facilities and/or repurposing the Laboratory. The options were considered in the Administrative Facilities Master Plan under this project budget.

This project scope is revised to only include the rehabilitation of the Warehouse and Maintenance Facilities, demolition of Building H and area improvements adjacent to these buildings under P1-115A and rehabilitation of the Fleet Services compound under P1-115B.

## Justification

State and federal law requires that OCSD ensure that these facilities can be accessible to individuals with disabilities. Roofing, lighting, some ventilation equipment, and other building features are at the end of their useful life and require replacement. Building H does not meet current building codes and needs to be demolished.

An implementation plan for the construction of new facilities for the Administration Building, Laboratory, Fleet Services, Purchasing, Human Resources and office trailers was conducted under Project No. SP-194.

The project budget has been increased from \$17,161,000 to \$17,509,000. The project's construction cost is \$9,227,674. This project will not have an impact on operational budgets.



## Budget Projections

Budget Phase	Cost To-Date	2016-2017	2017-18	2018-19	2019-20	2020-21	Thereafter	Total Project Budget
Proj Dev	86,853							86,853
Prelim Design	1,595,698							1,595,698
Design	2,008,621	482,918	145,864					2,637,403
Construction	7,600,815	2,865,003	1,228,467	193,165				11,887,450
Commissioning								
Close-out	44,990	107,728	90,296	69,366				312,380
Contingency	446,665	360,494	99,395	57,162	25,500			989,216
<b>Total</b>	<b>11,783,642</b>	<b>3,816,143</b>	<b>1,564,022</b>	<b>319,693</b>	<b>25,500</b>			<b>17,509,000</b>

Reimbursable Costs: N/A

# 2016-17 & 2017-18 Budget

<b>Project Name &amp; Number</b>	<b>Headquarters Complex, Site &amp; Security, &amp; Entrance Realignment Program - P1-128</b>		
<b>Project Category</b>	<b>Support Facilities</b>	<b>Project Status:</b>	<b>Revised</b>

## Description

This project is for the new Headquarters Complex to house administrative, engineering and laboratory staff along with associated site and utilities improvements, security improvements and entrance modifications at the south area of Plant 1. The work also includes demolition of Trailers A, B, E and F, the associated utilities and asphalt replacement in the south area, and the existing structure demolition and associated utilities and site demolition and improvements at the north area of Plant 1. An estimated total of 155,000 square feet of new facilities will be constructed. Over 550,000 square feet of site development will be required including security walls, security improvements, utility rerouting, ocean monitoring garage, parking and roadway improvements, storm-water drainage and grading, and landscaping.



**Support Facilities**

## Justification

The administrative, engineering and laboratory functions are located primarily at Reclamation Plant No. 1 in Fountain Valley. The Administration, Laboratory, Human Resources, and Purchasing buildings are aging, were not permitted when constructed and are in need of replacement. Also, approximately 130 staff are located in aging office trailers throughout Plant No. 1. OCSD has decided that the most cost effective solution is replacement of the aging buildings and trailers with new buildings that serve administrative, engineering, and laboratory functions.

The project budget has been increased from \$168,000,000 to \$179,067,000. The project's construction cost is \$112,000,000. This project will not have an impact on operational budgets.

## Budget Projections

Budget Phase	Cost To-Date	2016-2017	2017-18	2018-19	2019-20	2020-21	Thereafter	Total Project Budget
Proj Dev	82,376							82,376
Prelim Design	156,510	4,645,219	2,082,743					6,884,472
Design	2,006	3,175	6,611,470	4,142,391				10,759,042
Construction				7,474,178	39,701,529	52,038,511	26,325,885	125,540,103
Commissioning					1,192,239	2,228,979	852,396	4,273,614
Close-out							3,526,998	3,526,998
Contingency	295,869	1,303,016	2,261,261	3,207,439	4,283,995	6,048,863	10,599,952	28,000,395
<b>Total</b>	<b>536,761</b>	<b>5,951,410</b>	<b>10,955,474</b>	<b>14,824,008</b>	<b>45,177,763</b>	<b>60,316,353</b>	<b>41,305,231</b>	<b>179,067,000</b>

Reimbursable Costs: N/A



# CIP Project Detail Sheets

<b>Project Name &amp; Number</b>	<b>Site &amp; Security Impr. at P2 - P2-96</b>		
<b>Project Category</b>	<b>Support Facilities</b>	<b>Project Status:</b>	<b>Continuing</b>

## Description

This project will improve the beautification and visual screening of Plant No. 2 from areas east of the Santa Ana River in Newport Beach and Costa Mesa (includes new vegetation, irrigation, and fencing ). This project will not include vegetation along the Santa Ana River levee due to Army Corp. of Engineer restrictions.



**Support Facilities**

## Justification

The visual screening provided by this project is needed in order to mitigate the visual impacts of existing and future expansion at Plant No. 2.

This project will increase operational budgets by \$1,000 annually. A slight increase in landscape maintenance and irrigation water may be necessary.

## Budget Projections

Budget Phase	Cost To-Date	2016-2017	2017-18	2018-19	2019-20	2020-21	Thereafter	Total Project Budget
Proj Dev	155,164							155,164
Prelim Design	46,486							46,486
Design	23,460							23,460
Construction	3,211	3,975	122					7,308
Commissioning								
Close-out								
Contingency	3,586	8,822	7,173					19,581
<b>Total</b>	<b>231,908</b>	<b>12,797</b>	<b>7,295</b>					<b>252,000</b>

Reimbursable Costs: N/A

# 2016-17 & 2017-18 Budget

<b>Project Name &amp; Number</b>	<b>Banning Gate Relocation &amp; Grading at P2 - P2-120</b>		
<b>Project Category</b>	<b>Others</b>	<b>Project Status:</b>	<b>New</b>

### Description

This project relocates the Plant No. 2 vehicular gate near Banning Avenue to align with Banning Avenue. This includes moving the gate and supporting infrastructure such as the wall, curb, gutter, and sidewalk. It will also re-grade the pavement in Plant No. 2 in this area to improve drainage and storm water flow.



**Others**

### Justification

This project is needed to improve traffic flow so that vehicles, in particular trucks, may exit left from the Banning Avenue gate. Currently, if vehicles need to drive to the south, they must exit to the north and perform a u-turn. Aligning the gate with the intersection should reduce unnecessary travel. The grading will reduce ponding that occurs during storm events.

The project's construction cost is \$1,385,492. This project will not have an impact on operational budgets.

### Budget Projections

Budget Phase	Cost To-Date	2016-2017	2017-18	2018-19	2019-20	2020-21	Thereafter	Total Project Budget
Proj Dev			34,244					34,244
Prelim Design			15,704	59,970	611			76,285
Design				25,075	180,920	147,713	3,064	356,772
Construction						13,993	1,834,624	1,848,617
Commissioning							52,252	52,252
Close-out							27,839	27,839
Contingency			5,108	15,829	30,132	44,374	320,548	415,991
<b>Total</b>			<b>55,056</b>	<b>100,874</b>	<b>211,663</b>	<b>206,080</b>	<b>2,238,327</b>	<b>2,812,000</b>

Reimbursable Costs: N/A

# CIP Project Detail Sheets

<b>Project Name &amp; Number</b>	<b>Capital Improvement Program Mgmt. Services - SP-195</b>		
<b>Project Category</b>	<b>Others</b>	<b>Project Status:</b>	<b>Continuing</b>

## Description

Program management consulting services for the Capital Improvement Program not related on any one specific project, but on the management of the projects as a whole. Includes consulting services related to best practices in project and program management including risk analysis, benchmarking, analysis of key performance indicators (KPI), program metrics, and data analysis. May also include review of project controls including project budgeting, cash flow analysis and project scheduling.



**Others**

## Justification

Project facilitates continuous improvements to program management practices to maintain effectiveness in managing the Capital Improvement Program as business practices and the project makeup of the CIP evolves.

This project will not have an impact on operational budgets.

## Budget Projections

Budget Phase	Cost To-Date	2016-2017	2017-18	2018-19	2019-20	2020-21	Thereafter	Total Project Budget
Proj Dev								
Prelim Design								
Design	4,014	10,010	9,970	9,971	14,338	18,591	37,111	104,005
Construction								
Commissioning								
Close-out								
Contingency	3,794	14,316	17,586	22,641	27,920	31,360	78,378	195,995
<b>Total</b>	<b>7,808</b>	<b>24,326</b>	<b>27,556</b>	<b>32,612</b>	<b>42,258</b>	<b>49,951</b>	<b>115,489</b>	<b>300,000</b>

Reimbursable Costs: N/A

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## Summary by Project Status

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# Summary of Revenue Program Category

## Collection System Improvement Projects

Project Name	Total Project Budget	Percentage Allocation				Total Project Cost Budget			
		Repl/Rehab	Imp. Treatment	Additional Capacity	Support	Rehab./Replacement	Imp. Treatment	Additional Capacity	Support
<b>Collections Facilities</b>									
Raitt & Bristol Street Sewer Rehab & Extension	\$ 13,622,000	50%		50%		\$ 6,811,000	-	\$ 6,811,000	-
Santa Ana Trunk Sewer Rehab	6,974,000	100%				6,974,000	-	-	-
Edinger Bolsa Chica Trunk Impr.	5,159,000			100%		-	-	5,159,000	-
Edinger Pump Station Rehab	8,880,000	100%				8,880,000	-	-	-
Slater Avenue Pump Station Rehab	9,729,000	100%				9,729,000	-	-	-
SARI Re-Alignment	11,404,000	100%				11,404,000	-	-	-
SARI Rock Stabilizers Removal	3,743,000	100%				3,743,000	-	-	-
Taft Branch Sewer Relief	1,928,000			100%		-	-	1,928,000	-
Newhope - Placentia Trunk Grade Separation Repl.	5,739,000	50%		50%		2,869,500	-	2,869,500	-
Newhope-Placentia Trunk Repl.	99,475,000			100%		-	-	99,475,000	-
Yorba Linda Pump Station Abandonment	7,053,000	100%				7,053,000	-	-	-
Lakeview Grade Separation Project	330,000	100%				330,000	-	-	-
Tustin Rose OCTA Grade Separation	586,000	100%				586,000	-	-	-
Beach Trunk/Knott Interceptor Sewer Relief	118,678,000			100%		-	-	118,678,000	-
Seal Beach Pump Station Rehab	60,840,000	100%				60,840,000	-	-	-
Rehab of Western Regional Sewers	217,069,000	100%				217,069,000	-	-	-
Newport Force Main Rehab	64,000,000	100%				64,000,000	-	-	-
Crystal Cove Pump Station Rehab	10,882,000	100%				10,882,000	-	-	-
Bay Bridge Pump Station Repl.	54,000,000	100%				54,000,000	-	-	-
Newport Beach Pump Stations Odor Control Impr.	4,066,000				100%	-	-	-	4,066,000
District 6 Trunk Sewer Relief	7,965,000	50%	50%			3,982,500	3,982,500	-	-
Southwest Costa Mesa Trunk Sewer	29,650,000			100%		-	-	29,650,000	-
Gisler - Red Hill System Impr. - Reach B	25,213,000	50%		50%		12,606,500	-	12,606,500	-
Browning Subtrunk Sewer Relief	16,952,000			100%		-	-	16,952,000	-
MacArthur Pump Station Rehab	8,762,000	100%				8,762,000	-	-	-
Main Street Pump Station Rehab	39,219,000	100%				39,219,000	-	-	-
Gisler Red-Hill Interceptor Rehab	5,486,000	100%				5,486,000	-	-	-
Facilities Engineering Program - Collections	12,192,000	70%	15%		15%	8,534,400	1,828,800	-	1,828,800
Bay Bridge Pump Station & Force Main Repl. Study	725,000	90%		10%		652,500	-	72,500	-
<b>Collections Facilities Projects Total</b>	<b>850,321,000</b>					<b>544,413,400</b>	<b>5,811,300</b>	<b>294,201,500</b>	<b>5,894,800</b>

# 2016-17 & 2017-18 Budget

## Treatment & Disposal Improvement Projects

Project Name	Total Project Budget	Percentage Allocation				Total Project Cost Budget			
		Repl./Rehab	Imp. Treatment	Additional Capacity	Support	Rehab./Replacement	Imp. Treatment	Additional Capacity	Support
Headworks Rehab & Expansion at P1	274,841,000	90%	10%			247,356,900	27,484,100	-	-
Trunk Line Odor Control Impr.	9,299,000	60%	40%			5,579,400	3,719,600	-	-
<b>Headworks Projects Total</b>	<b>284,140,000</b>					<b>252,936,300</b>	<b>31,203,700</b>	<b>-</b>	<b>-</b>
Programmable Control Panel Upgrades	2,283,000	100%				2,283,000	-	-	-
Process Control Systems Upgrades	102,399,000	50%			50%	51,199,500	-	-	51,199,500
Information Technology Capital Program	10,000,000				100%	-	-	-	10,000,000
Process Control Systems Upgrades Study	3,554,000	100%				3,554,000	-	-	-
Geographic Information System	4,568,000				100%	-	-	-	4,568,000
EAM Software & Process Implementation	7,500,000	50%		25%	25%	3,750,000	-	1,875,000	1,875,000
PDS2D Software Repl.	525,000	50%			50%	262,500	-	-	262,500
Power Monitoring & Control Systems at P2	34,123,000	80%		20%		27,298,400	-	6,824,600	-
<b>Information Management Systems Projects Total</b>	<b>164,952,000</b>					<b>88,347,400</b>	<b>-</b>	<b>8,699,600</b>	<b>67,905,000</b>
Final Effluent Sampler & Building Area Upgrades	16,411,000	100%				16,411,000	-	-	-
Ocean Outfall System Rehab	87,683,000	100%				87,683,000	-	-	-
<b>Ocean Outfall Systems Projects Total</b>	<b>104,094,000</b>					<b>104,094,000</b>	<b>-</b>	<b>-</b>	<b>-</b>
Banning Gate Relocation & Grading at P2	2,812,000				100%	-	-	-	2,812,000
Capital Improvement Program Mgmt. Services	300,000	25%	25%	25%	25%	75,000	75,000	75,000	75,000
<b>Others Projects Total</b>	<b>3,112,000</b>					<b>75,000</b>	<b>75,000</b>	<b>75,000</b>	<b>2,887,000</b>
P1 Primary Treatment Upgrades	9,146,000	100%				9,146,000	-	-	-
Primary Clarifiers Repl.s & Impr. at P1	158,332,000	100%				158,332,000	-	-	-
Primary Clarifier & Trickling Filter Odor Control at P1	94,228,000	50%	50%			47,114,000	47,114,000	-	-
A-Side Primary Clarifiers Repl. at P2	428,264,000	90%	10%			385,437,600	42,826,400	-	-
<b>Primary Treatment Projects Total</b>	<b>689,970,000</b>					<b>600,029,600</b>	<b>89,940,400</b>	<b>-</b>	<b>-</b>
Odor Control Master Plan	1,950,000		100%			-	1,950,000	-	-
Safety Impr. Program	9,702,000	100%				9,702,000	-	-	-
<b>Process Related Special Projects Projects Total</b>	<b>11,652,000</b>					<b>9,702,000</b>	<b>1,950,000</b>	<b>-</b>	<b>-</b>
Fuel Cell Demo	135,000		100%			-	135,000	-	-
SCCWRP Nutrient Cycling Sampling	95,000				100%	-	-	-	95,000
AquaCritox Evaluation/Design	588,000		100%			-	588,000	-	-

# Summary of Revenue Program Category

## Treatment & Disposal Improvement Projects

Project Name	Total Project Budget	Percentage Allocation				Total Project Cost Budget			
		Repl/Rehab	Imp. Treatment	Additional Capacity	Support	Rehab./Replacement	Imp. Treatment	Additional Capacity	Support
Research Program	8,500,000		50%	50%		-	4,250,000	4,250,000	-
<b>Research Projects Total</b>	<b>9,318,000</b>					<b>-</b>	<b>4,973,000</b>	<b>4,250,000</b>	<b>95,000</b>
Oxygen Plant Demolition at P2	3,444,000	100%				3,444,000	-	-	-
Activated Sludge Aeration Basin Deck Repair at P2	2,331,000	100%				2,331,000	-	-	-
<b>Secondary Treatment Projects Total</b>	<b>5,775,000</b>					<b>5,775,000</b>	<b>-</b>	<b>-</b>	<b>-</b>
Solids Thickening & Processing Upgrades	51,150,000	50%	50%			25,575,000	25,575,000	-	-
Digester Facilities Rehab at P2	49,220,000	100%				49,220,000	-	-	-
Sludge Dewatering & Odor Control at P2	90,477,000	40%	20%	40%		36,190,800	18,095,400	36,190,800	-
Digester Rehab at P1	66,650,000	50%		50%		33,325,000	-	33,325,000	-
Sludge Dewatering & Odor Control at P1	188,328,000	17%	73%	10%		32,015,760	137,479,440	18,832,800	-
<b>Solids Handling &amp; Digestion Projects Total</b>	<b>445,825,000</b>					<b>176,326,560</b>	<b>181,149,840</b>	<b>88,348,600</b>	<b>-</b>
Planning Studies Program	23,652,000	40%	25%	10%	25%	9,460,800	5,913,000	2,365,200	5,913,000
Climate Change Impact Study	590,000		100%			-	590,000	-	-
<b>Strategic &amp; Master Planning Projects Total</b>	<b>24,242,000</b>					<b>9,460,800</b>	<b>6,503,000</b>	<b>2,365,200</b>	<b>5,913,000</b>
Operations & Maintenance Capital Program	15,622,000	100%				15,622,000	-	-	-
Facilities Engineering Program - Plant	43,325,000	70%	15%		15%	30,327,500	6,498,750	-	6,498,750
Site & Security Impr. at P2	252,000				100%	-	-	-	252,000
Headquarters Complex, Site & Security, & Entrance Realignment Program	179,067,000				100%	-	-	-	179,067,000
Title 24 Access Compliance & Building Rehab Project	17,509,000				100%	-	-	-	17,509,000
<b>Support Facilities Projects Total</b>	<b>255,775,000</b>					<b>45,949,500</b>	<b>6,498,750</b>	<b>-</b>	<b>203,326,750</b>
Cengen Emissions Control Project	23,820,000		100%			-	23,820,000	-	-
UPS System Upgrades	8,087,000	80%		20%		6,469,600	-	1,617,400	-
Digester Gas Facilities Rehab	87,897,000	100%				87,897,000	-	-	-
Cengen Cooling Water System Repl. Project	11,477,000	100%				11,477,000	-	-	-
Natural Gas Pipelines Repl. at P1 & P2	1,310,000	100%				1,310,000	-	-	-
Electrical Power Distribution System Impr.	34,608,000	100%				34,608,000	-	-	-
Plant Water System Rehab at P2	3,704,000	100%				3,704,000	-	-	-
Consolidated Demolition & Utility Impr. at P2	38,460,000	100%				38,460,000	-	-	-
Plant Water System Rehab at P1	6,157,000	100%				6,157,000	-	-	-

# 2016-17 & 2017-18 Budget

## Treatment & Disposal Improvement Projects

Project Name	Total Project Budget	Percentage Allocation				Total Project Cost Budget			
		Repl/ Rehab	Imp. Treatment	Additional Capacity	Support	Rehab./ Replacement	Imp. Treatment	Additional Capacity	Support
Central Generation Rehab at P1	73,151,000	100%				73,151,000	-	-	-
Central Generation Rehab at P2	95,906,000	100%				95,906,000	-	-	-
Plant Air System Master Plan	225,000	50%		50%		112,500	-	112,500	-
<b>Utility Systems Projects Total</b>	<b>384,802,000</b>					<b>359,252,100</b>	<b>23,820,000</b>	<b>1,729,900</b>	<b>-</b>
Effluent Reuse Study	3,250,000		100%			-	3,250,000	-	-
<b>Water Management Projects Projects Total</b>	<b>3,250,000</b>					<b>-</b>	<b>3,250,000</b>	<b>-</b>	<b>-</b>
<b>Total Treatment and Disposal Projects</b>	<b>2,386,907,000</b>					<b>1,651,948,260</b>	<b>349,363,690</b>	<b>105,468,300</b>	<b>280,126,750</b>
<b>Total Collections Facilities</b>	<b>850,321,000</b>					<b>544,413,400</b>	<b>5,811,300</b>	<b>294,201,500</b>	<b>5,894,800</b>
<b>Capital Equipment Purchases</b>	<b>16,000,000</b>					<b>4,000,000</b>	<b>4,000,000</b>	<b>4,000,000</b>	<b>4,000,000</b>
<b>Total Capital Improvement Program</b>	<b>\$3,253,228,000</b>					<b>\$2,200,361,660</b>	<b>\$359,174,990</b>	<b>\$403,669,800</b>	<b>\$290,021,550</b>



# Summary by Project Status

## Collection System Improvement Projects - Budget by Project Status

Project Number	Title	Total Budget	New Project	Continuing Project	Revised Project	Future Project
<b>Collections Facilities</b>						
1-101	Raitt & Bristol Street Sewer Rehab & Extension	\$ 13,622,000			\$ 13,622,000	
1-17	Santa Ana Trunk Sewer Rehab	6,974,000			6,974,000	
11-25	Edinger Bolsa Chica Trunk Impr.	5,159,000				5,159,000
11-33	Edinger Pump Station Rehab	8,880,000				8,880,000
11-34	Slater Avenue Pump Station Rehab	9,729,000				9,729,000
2-41	SARI Re-Alignment	11,404,000		11,404,000		
2-41-8	SARI Rock Stabilizers Removal	3,743,000			3,743,000	
2-49	Taft Branch Sewer Relief	1,928,000				1,928,000
2-65	Newhope - Placentia Trunk Grade Separation Repl.	5,739,000			5,739,000	
2-72	Newhope-Placentia Trunk Repl.	99,475,000			99,475,000	
2-73	Yorba Linda Pump Station Abandonment	7,053,000				7,053,000
2-75	Lakeview Grade Separation Project	330,000		330,000		
2-76	Tustin Rose OCTA Grade Separation	586,000		586,000		
3-60	Beach Trunk/Knott Interceptor Sewer Relief	118,678,000				118,678,000
3-62	Seal Beach Pump Station Rehab	60,840,000			60,840,000	
3-64	Rehab of Western Regional Sewers	217,069,000			217,069,000	
5-60	Newport Force Main Rehab	64,000,000		64,000,000		
5-66	Crystal Cove Pump Station Rehab	10,882,000				10,882,000
5-67	Bay Bridge Pump Station Repl.	54,000,000				54,000,000
5-68	Newport Beach Pump Stations Odor Control Impr.	4,066,000	4,066,000			
6-17	District 6 Trunk Sewer Relief	7,965,000			7,965,000	
6-19	Southwest Costa Mesa Trunk Sewer	29,650,000			29,650,000	
7-37	Gisler - Red Hill System Impr. - Reach B	25,213,000			25,213,000	
7-60	Browning Subtrunk Sewer Relief	16,952,000				16,952,000
7-63	MacArthur Pump Station Rehab	8,762,000				8,762,000
7-64	Main Street Pump Station Rehab	39,219,000				39,219,000
7-65	Gisler Red-Hill Interceptor Rehab	5,486,000	5,486,000			
M-FE-COLLECT	Facilities Engineering Program - Collections	12,192,000	12,192,000			
SP-178	Bay Bridge Pump Station & Force Main Repl. Study	725,000		725,000		
<b>Collections Facilities Total Budget</b>		<b>850,321,000</b>	<b>21,744,000</b>	<b>77,045,000</b>	<b>470,290,000</b>	<b>281,242,000</b>

# 2016-17 & 2017-18 Budget

## Treatment & Disposal Projects - Budget by Project Status

Project Number	Title	Total Budget	New Project	Continuing Project	Revised Project	Future Project
<b>Headworks</b>						
P1-105	Headworks Rehab & Expansion at P1	274,841,000			274,841,000	
P1-123	Trunk Line Odor Control Impr.	9,299,000			9,299,000	
<b>Headworks Total Budget</b>		<b>284,140,000</b>			<b>284,140,000</b>	
<b>Primary Treatment</b>						
P1-124	P1 Primary Treatment Upgrades	9,146,000			9,146,000	
P1-126	Primary Clarifiers Repl.s & Impr. at P1	158,332,000				158,332,000
P1-114	Primary Clarifier & Trickling Filter Odor Control at P1	94,228,000		94,228,000		
P2-98	A-Side Primary Clarifiers Repl. at P2	428,264,000			428,264,000	
<b>Primary Treatment Total Budget</b>		<b>689,970,000</b>		<b>94,228,000</b>	<b>437,410,000</b>	<b>158,332,000</b>
<b>Secondary Treatment</b>						
SP-129	Oxygen Plant Demolition at P2	3,444,000			3,444,000	
P2-118	Activated Sludge Aeration Basin Deck Repair at P2	2,331,000			2,331,000	
<b>Secondary Treatment Total Budget</b>		<b>5,775,000</b>			<b>5,775,000</b>	
<b>Solids Handling &amp; Digestion</b>						
P2-89	Solids Thickening & Processing Upgrades	51,150,000		51,150,000		
P2-91-1	Digester Facilities Rehab at P2	49,220,000				49,220,000
P2-92	Sludge Dewatering & Odor Control at P2	90,477,000			90,477,000	
P1-100	Digester Rehab at P1	66,650,000			66,650,000	
P1-101	Sludge Dewatering & Odor Control at P1	188,328,000			188,328,000	
<b>Solids Handling &amp; Digestion Total Budget</b>		<b>445,825,000</b>		<b>51,150,000</b>	<b>345,455,000</b>	<b>49,220,000</b>
<b>Ocean Outfall Systems</b>						
J-110	Final Effluent Sampler & Building Area Upgrades	16,411,000			16,411,000	
J-117	Ocean Outfall System Rehab	87,683,000			87,683,000	
<b>Ocean Outfall Systems Total Budget</b>		<b>104,094,000</b>			<b>104,094,000</b>	
<b>Utility Systems</b>						
J-111	Cengen Emissions Control Project	23,820,000			23,820,000	
J-121	UPS System Upgrades	8,087,000				8,087,000
J-124	Digester Gas Facilities Rehab	87,897,000			87,897,000	
J-109	Cengen Cooling Water System Repl. Project	11,477,000		11,477,000		
P1-112	Plant Water System Rehab at P1	6,157,000			6,157,000	
J-127	Natural Gas Pipelines Repl. at P1 & P2	1,310,000		1,310,000		
J-98	Electrical Power Distribution System Impr.	34,608,000				34,608,000

# Summary by Project Status

## Treatment & Disposal Projects - Budget by Project Status

Project Number	Title	Total Budget	New Project	Continuing Project	Revised Project	Future Project
<b>Utility Systems</b>						
P2-119	Central Generation Rehab at P2	95,906,000				95,906,000
P2-110	Consolidated Demolition & Utility Impr. at P2	38,460,000			38,460,000	
P2-101	Plant Water System Rehab at P2	3,704,000			3,704,000	
P1-127	Central Generation Rehab at P1	73,151,000				73,151,000
SP-148	Plant Air System Master Plan	225,000			225,000	
<b>Utility Systems Total Budget</b>		<b>384,802,000</b>		<b>12,787,000</b>	<b>160,263,000</b>	<b>211,752,000</b>
<b>Process Related Special Projects</b>						
SP-166	Odor Control Master Plan	1,950,000			1,950,000	
J-126	Safety Impr. Program	9,702,000			9,702,000	
<b>Process Related Special Projects Total Budget</b>		<b>11,652,000</b>			<b>11,652,000</b>	
<b>Information Management Systems</b>						
J-125	Programmable Control Panel Upgrades	2,283,000			2,283,000	
J-120	Process Control Systems Upgrades	102,399,000				102,399,000
M-MC-IT	Information Technology Capital Program	10,000,000	10,000,000			
P2-107	Power Monitoring & Control Systems at P2	34,123,000			34,123,000	
SP-196	Process Control Systems Upgrades Study	3,554,000	3,554,000			
SP-15	Geographic Information System	4,568,000			4,568,000	
SP-100	EAM Software & Process Implementation	7,500,000			7,500,000	
SP-103	PDS2D Software Repl.	525,000		525,000		
<b>Information Management Systems Total Budget</b>		<b>164,952,000</b>	<b>13,554,000</b>	<b>525,000</b>	<b>48,474,000</b>	<b>102,399,000</b>
<b>Strategic &amp; Master Planning</b>						
SP-152	Climate Change Impact Study	590,000				590,000
M-STUDIES	Planning Studies Program	23,652,000	23,652,000			
<b>Strategic &amp; Master Planning Total Budget</b>		<b>24,242,000</b>	<b>23,652,000</b>			<b>590,000</b>
<b>Water Management Projects</b>						
SP-173	Effluent Reuse Study	3,250,000		3,250,000		
<b>Water Management Projects Total Budget</b>		<b>3,250,000</b>		<b>3,250,000</b>		
<b>Research</b>						
SP-125-04	Fuel Cell Demo	135,000			135,000	
SP-125-15	SCCWRP Nutrient Cycling Sampling	95,000		95,000		
SP-125-17	AquaCritox Evaluation/Design	588,000			588,000	
M-RESEARCH	Research Program	8,500,000	8,500,000			
<b>Research Total Budget</b>		<b>9,318,000</b>	<b>8,500,000</b>	<b>95,000</b>	<b>723,000</b>	

# 2016-17 & 2017-18 Budget

## Treatment & Disposal Projects - Budget by Project Status

Project Number	Title	Total Budget	New Project	Continuing Project	Revised Project	Future Project
<b>Support Facilities</b>						
M-SM-CAP	Operations & Maintenance Capital Program	15,622,000	15,622,000			
M-FE-PLANT	Facilities Engineering Program - Plant	43,325,000	43,325,000			
P2-96	Site & Security Impr. at P2	252,000		252,000		
P1-115	Title 24 Access Compliance & Building Rehab Project	17,509,000			17,509,000	
P1-128	Headquarters Complex, Site & Security, & Entrance Realignment Program	179,067,000			179,067,000	
<b>Support Facilities Total Budget</b>		<b>255,775,000</b>	<b>58,947,000</b>	<b>252,000</b>	<b>196,576,000</b>	
<b>Others</b>						
P2-120	Banning Gate Relocation & Grading at P2	2,812,000	2,812,000			
SP-195	Capital Improvement Program Mgmt. Services	300,000		300,000		
<b>Others Total Budget</b>		<b>3,112,000</b>	<b>2,812,000</b>	<b>300,000</b>		
<b>Total Treatment and Disposal Projects</b>		<b>2,386,907,000</b>	<b>107,465,000</b>	<b>162,587,000</b>	<b>1,594,562,000</b>	<b>522,293,000</b>
<b>Total Collections Facilities</b>		<b>850,321,000</b>	<b>21,744,000</b>	<b>77,045,000</b>	<b>470,290,000</b>	<b>281,242,000</b>
<b>Capital Equipment Purchases</b>		<b>16,000,000</b>		<b>16,000,000</b>		
<b>Total Capital Improvement Program Budget</b>		<b>\$3,253,228,000</b>	<b>\$129,209,000</b>	<b>\$255,632,000</b>	<b>\$2,064,852,000</b>	<b>\$803,535,000</b>

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## 2016-17 & 2017-18 Budget

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### Proposed Capital Equipment Budget 2016-17

Department	Trucks & Vehicles 09410000	Other Mobile Eq 09410001	Machine Eq & Tools 09410002	Comm Equipment 09410003
Information Technology	\$ -	\$ -	\$ -	\$ -
Laboratory and Ocean Monitoring	-	-	-	-
Fleet Services	1,778,500	349,700	-	-
Plant No. 1 Maintenance	-	-	43,800	-
Plant No. 2 Maintenance	-	-	5,100	-
Total Proposed Capital Equipment	<u>\$ 1,778,500</u>	<u>\$ 349,700</u>	<u>\$ 48,900</u>	<u>\$ -</u>

# Proposed Capital Equipment Budget Summary

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## Proposed Capital Equipment Budget 2016-17

Department	Instr / Test Equipment 09410004	Safety & Traffic Eq 09410005	Office Fix & Eq 09410006	Computer Equipment 09410007	2016-17 Proposed Budget
Information Technology	\$ -	\$ -	\$ -	\$ 474,600	\$ 474,600
Laboratory and Ocean Monitoring	751,100	-	-	-	751,100
Fleet Services	-	-	-	-	2,128,200
Plant No. 1 Maintenance	15,500	-	-	-	59,300
Plant No. 2 Maintenance	18,900	-	-	-	24,000
<b>Total Proposed Capital Equipment</b>	<b>\$ 785,500</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 474,600</b>	<b>\$ 3,437,200</b>

# 2016-17 & 2017-18 Budget

## Proposed Capital Equipment Budget Detail

Division	Equipment Type	Proposed Capital Equip. Budget
<u>250 - Information Technology</u>		
	Employee Development E-Learning Content for Div. 110	\$ 20,000
	FUJITSU Document Scanners for Div. 110	27,000
	The Web QA-GovQA Public Records Management System for Div. 110	13,000
	Video Upgrades in Conference Rooms	40,500
	Disaster Recovery (DR) Infrastructure Hardware/Software	350,000
	Chromatography Software for Div. 630	12,000
	AMS Suite: Machinery Health Manager Software for Div. 870	6,000
	Desktop Label Printer Kit for Div. 880	6,100
	Total	<u>474,600</u>
<u>630 - Laboratory &amp; Ocean Monitoring</u>		
	Gel Permeation Chromatography (GPC) Clean-up System	80,000
	ICP-OES/ICP-MS	550,000
	Benchtop Balance Enclosure	12,000
	Automated Refrigerated Sampler	23,000
	Skalar Segmented Flow Upgrade	35,000
	Laboratory Glassware Washer	14,000
	Acoustic Releases	16,500
	Environmental Chambers	20,600
	Total	<u>751,100</u>
<u>822 - Fleet Services</u>		
	Two (2) 12-Passenger Vans - Replace V0535 & V0583	82,100
	Two (2) NEW 12-Passenger Vans	82,100
	Two (2) NEW Pick-up Trucks - for reclassified positions in Div. 760	42,000
	Five (5) Electric Carts - Replace C0977, C1009, C1011, C1016, C1020	60,500
	Six (6) Cargo Carts - Replace C0806, C0915, C0974, C0979, C0980, C0982 for Div. 870	85,800
	Seven (7) Electric Carts - Replace C0910, C0914, C0916, C0918, C0929, C0931, C1060 for Div. 880	73,200
	Seven (7) Light Duty Service Trucks - Replace V0517, V0522, V0523 for Div. 760, and V0515, V0516, V0518, & V0519 for Div. 322, 342, 870 & 880.	297,700
	NEW Electric Cart for Div. 870	11,300
	NEW Combo Truck/Recycler for Div. 820	700,000
	NEW Pick-up Truck - for Div. 820	28,500
	Two (2) Utility Bed Boxes for V0521 & V0549 for Div. 870	9,800
	Weld Truck - Replace V0373 for Div. 870	58,300
	Light Duty Service Truck - Replace V0381 for Div. 870	37,300
	Light Duty Service Truck - Replace V0389	49,700
	Light Duty Service Truck - Replace V0403 for Div. 870	29,700
	Two (2) Electric Sedans - Replace V0412 & V0413 for Div. 870	64,800
	Light Duty Service Truck - Replace V0423 for Div. 250	41,600
	Light Duty Service Truck - Replace V0425 for Div. 830	29,700
	Light Duty Service Truck - Replace V0434 for Div. 840	29,700
	Light Duty Service Truck - Replace V0439 for Div. 870	41,600



# Proposed Capital Equipment Budget Detail

## Proposed Capital Equipment Budget Detail

Division	Equipment Type	Proposed Capital Equip. Budget
<u>822 - Fleet Services - continued</u>		
	Light Duty Service Truck - Replace V0448	\$ 41,600
	Light Duty Service Truck - Replace V0452	41,600
	Light Duty Service Truck - Replace V0466 for Div. 620	35,100
	Light Duty Service Truck - Replace V0598	35,600
	Heavy Duty Trailer - Replace E0903 for Div. 820	31,500
	Flatbed Trailer - Replace E0576	16,900
	NEW Cargo Wagon Trailer - for Div. 880	9,000
	NEW Electric Scissor Lift for Plant No. 1	20,800
	One (1) NEW Trailer - for Div. 870	19,500
	Towable Air Compressor - Replace E0854	21,200
	Total	2,128,200
<u>870 - Plant No. 1 Maintenance</u>		
	Industrial Oven	9,700
	Press Brake Control System	17,600
	Table Saw	5,100
	Transformer Turns Ratio Tester	15,500
	TU5 Beveling Tool	11,400
	Total	59,300
<u>880 - Plant No. 2 Maintenance</u>		
	Motor Operated Limitorque Actuator Training Aid	9,600
	Table Saw	5,100
	Ultrasound Detection System	9,300
	Total	24,000
<b>Total Proposed 2016-17 Capital Equipment Budget</b>		<b>\$ 3,437,200</b>

# 2016-17 & 2017-18 Budget

## Proposed Capital Equipment Budget 2017-18

Department	Trucks & Vehicles 09410000	Other Mobile Eq 09410001	Machine Eq & Tools 09410002	Comm Equipment 09410003
Information Technology	\$ -	\$ -	\$ -	\$ -
Laboratory and Ocean Monitoring	-	-	-	-
Electrical & Control Systems Engineering				
Fleet Services	41,600	125,200		
Plant No. 1 Maintenance	-	-	76,000	-
Plant No. 2 Maintenance	-	-	-	-
<b>Total Proposed Capital Equipment</b>	<b>\$ 41,600</b>	<b>\$ 125,200</b>	<b>\$ 76,000</b>	<b>\$ -</b>

# Proposed Capital Equipment Budget Summary

## Proposed Capital Equipment Budget 2017-18

Department	Instr / Test Equipment 09410004	Safety & Traffic Eq 09410005	Office Fix & Eq 09410006	Computer Equipment 09410007	2017-18 Proposed Budget
Information Technology	\$ -	\$ -	\$ -	\$ 100,000	\$ 100,000
Laboratory and Ocean Monitoring	575,100	-	-	-	575,100
Electrical & Control Systems Engineering	85,400				85,400
Fleet Services					166,800
Plant No. 1 Maintenance	-	-	-	-	76,000
Plant No. 2 Maintenance	5,800	-	-	-	5,800
<b>Total Proposed Capital Equipment</b>	<b>\$ 666,300</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 100,000</b>	<b>\$ 1,009,100</b>

# 2016-17 & 2017-18 Budget

## Proposed Capital Equipment Budget Detail

<u>Division</u>	<u>Equipment Type</u>	<u>Proposed Capital Equip. Budget</u>
<u>250 - Information Technology</u>		
	Disaster Recovery (DR) Infrastructure Support	\$ 100,000
	Total	<u>100,000</u>
<u>630 - Laboratory &amp; Ocean Monitoring</u>		
	Automated Sample Extraction System	120,000
	Digital Droplet PCR System	84,000
	Automated Refrigerated Sampler	24,000
	Acoustic Releases	16,500
	Three (3) Acoustic Doppler Current Profilers (ADCP)	62,000
	Telemetry Oceanographic Mooring	130,000
	Seakeeper Vessel Stabilizing System	138,600
	Total	<u>575,100</u>
<u>770 - Electrical &amp; Control Systems Engineering</u>		
	Three (3) PLC Test Units	85,400
	Total	<u>85,400</u>
<u>822 - Fleet Services</u>		
	Four (4) Electric Carts - Replace C0942, C1119, C1120, C1121	48,400
	Light Duty Service Truck - Replace V0427	41,600
	Heavy Duty Trailer - Replace E0904 for Div. 820	31,500
	NEW Electric Scissor Lift for Plant No. 2	20,800
	Two (2) NEW Mobile Fueler Trailers	24,500
	Total	<u>166,800</u>
<u>870 - Plant No. 1 Maintenance</u>		
	Dake Band Saw	35,400
	Press Brake Power Back Gauge	32,500
	TU3 Beveling Tool	8,100
	Total	<u>76,000</u>
<u>880 - Plant No. 2 Maintenance</u>		
	HART Field Communicator	5,800
	Total	<u>5,800</u>
<b>Total Proposed 2017-18 Capital Equipment Budget</b>		<b><u>\$ 1,009,100</u></b>

**DEBT PROGRAM**  
**SECTION 9**

BACK OF SECTION 9 DIVIDER

# Debt Financing Program

## CERTIFICATES OF PARTICIPATION DEBT FINANCING PROGRAM

A Ten-Year Financial Plan is maintained to establish financing parameters regarding the issuance of debt, the levying of user charges and the funding level for required reserves in accordance with the District's reserve policy. The Financial Plan is revised annually to reflect the most current cost and revenue figures resulting from capital program revisions and operating changes.

In December 2009, the District adopted a new Facilities Master Plan to define the District's engineering goals, responsibilities, and requirements over the next twenty years. It includes projections

through the assumed "build-out" of the District's service area to the year 2050. Critical factors such as population growth, new construction, the volume of wastewater delivered to the plants and viable water conservation and reclamation programs have been reevaluated.

The incorporation of the 2009 Master Plan into the CIP includes the addition of 65 new CIP projects totaling \$615.7 million through the year 2030. Also, 23 planned projects were revised resulting in an additional \$169.3 million through the year 2030.

*Figure 1*

<b>Summary of Certificates of Participation / Revenue Obligations and Notes</b>					
<b>Series</b>	2007A Series	2007B Series	2008B Series	2009A Series	2010A Series
<b>Issue Name</b>	Refunding COPs	COPs	Refunding COPs	COPs	Taxable BABs
<b>Issue Date</b>	05-22-2007	12-20-2007	09-04-2008	04-23-2009	05-18-10
<b>Original Par</b>	\$95,180,000	\$300,000,000	\$27,800,000	\$200,000,000	\$80,000,000
<b>Outstanding Par</b>	\$91,885,000	\$7,110,000	\$8,815,000	\$13,405,000	\$80,000,000
<b>Payment Date</b>	February 1	February 1	August 1	February 1	February 1
<b>Use of Proceeds</b>	Advance Refund	Current/Future CIP	Advance Refund	Current/Future CIP	Current/Future CIP
<b>Lien or Tier</b>	Open Senior	Open Senior	Open Senior	Open Senior	Open Senior
<b>Interest Rate Mode</b>	Fixed	Fixed	Fixed	Fixed	Fixed
<b>Final Maturity Date</b>	02-01-2030	02-01-2017	08-01-2016	02-01-2019	02-01-2040
<b>Series</b>	2010C Series	2011A Series	2012A Series	2012B Series	2014A Series
<b>Issue Name</b>	Taxable BABs	Refund Rev Oblig	Refund Rev Oblig	Refund Rev Oblig	Refund Rev Oblig
<b>Issue Date</b>	11-29-10	10-03-11	03-22-12	08-16-12	08-07-14
<b>Original Par</b>	\$157,000,000	\$147,595,000	\$100,645,000	\$66,395,000	\$85,090,000
<b>Outstanding Par</b>	\$157,000,000	\$111,465,000	\$100,645,000	\$66,395,000	\$85,090,000
<b>Payment Date</b>	February 1	February & August 1	February 1	February 1	February 1
<b>Use of Proceeds</b>	Current/Future CIP	Advance Refund	Advance Refund	Advance Refund	Advance Refund
<b>Lien or Tier</b>	Open Senior	Open Senior	Open Senior	Open Senior	Open Senior
<b>Interest Rate Mode</b>	Fixed	Fixed	Fixed	Fixed	Fixed
<b>Final Maturity Date</b>	02-01-2044	02-01-2026	02-01-2033	02-01-2026	02-01-2027
<b>Series</b>	2014B Series	2015A Series	2016A Series		
<b>Issue Name</b>	Refunding CANs	Refund Rev Oblig	Refund Rev Oblig		
<b>Issue Date</b>	10-08-14	02-12-15	03-30-16		
<b>Original Par</b>	\$120,850,000	\$127,510,000	\$145,880,000		
<b>Outstanding Par</b>	\$120,850,000	\$127,510,000	\$145,880,000		
<b>Payment Date</b>	November 15	February 1	February 1		
<b>Use of Proceeds</b>	Current Refund	Advance Refund	Advance Refund		
<b>Lien or Tier</b>	Open Senior	Open Senior	Open Senior		
<b>Interest Rate Mode</b>	Fixed	Fixed	Fixed		
<b>Final Maturity Date</b>	11-15-2016	02-01-2037	02-01-2039		

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# 2016-17 & 2017-18 Budget

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In conjunction with preparation for the 2016-18 Budget, District staff has developed and reviewed with the Board of Directors a capital program to deliver the levels of service included in the District's 5-year Strategic Plan.

District staff has also validated the active CIP projects currently being executed to ensure that the active project scopes of work and cost estimates were accurate. The validated CIP includes 81 active and future capital projects with a 10-year expenditure of \$2.4 billion.

The District embarked upon its Debt Financing and Management Program, and specifically its Variable and Fixed Rate Debt Program (the "Program"), in 1990 with the issuance of \$100 million in Certificates of Participation ("COP"), Capital Improvement Program, 1990 Series "A." The Program was established to:

- Finance assets with long useful lives with long-term debt;
- Achieve the lowest possible interest costs and highest investment returns, commensurate with the appropriate risk;
- Recoup reserve moneys that had previously been spent.

COPs are repayment obligations based on a lease or installment sale agreement. The COP structure was selected over other structures because COPs are not viewed as debt by the State of California, as the purchaser does not actually receive a "bond," but rather a share in an installment sale arrangement where the District serves as the purchaser. Accordingly, the District is not subject to the usual State restrictions surrounding the issuance of debt. COPs can be issued with fixed or variable interest rates.

As of July 1, 2016, the total outstanding COP indebtedness is \$1.1 billion.

## **Dedicated Funding Source**

In 1992 and 2004 the Board of Directors formalized the dedication of certain funding sources. To assure the continuation of favorable credit ratings, revenues were dedicated to debt service in the following order:

1. Ad valorem property taxes
2. Sanitary sewer service charges
3. Other revenues

This apportionment of the ad valorem tax was consistent with and pursuant to the Revenue Program adopted in April 1979 to comply with regulations of the Environmental Protection Agency and the State Water Resources Control Board and in accordance with COP documents and Board policy.

Historically the District's property tax revenues were at a higher level than necessary to support the District's debt service obligations. However, capital improvement requirements averaging \$200.0 million a year over the last ten years have required new COP debt issuances that have increased future debt service payments that more closely matches property tax revenues.

## **Establishment of Debt Policy**

In 2001, the District developed a written debt policy for the following underlying reasons:

- committing to long-term financial planning;
- promoting credit quality to rating agencies;
- rationalizing the decision making process;
- enhancing the quality of decisions; and
- promoting consistency and continuity.

This Board adopted policy serves as the agency's guide in the management of existing debt and in the issuance of future debt.

## **Debt Coverage Ratios**

The only legal debt limits pertaining to the District are those that are provided within the existing COP indenture agreements requiring minimum coverage ratios of 1.25. The minimum coverage ratio is the ratio of net annual revenues available for debt service requirements to total annual debt service requirements for all senior lien COP debt. The coverage ratio for senior lien COP debt is proposed at 3.18 and 3.35 for FY 2016-17 and FY 2017-18, respectively.



# Debt Financing Program

## Build America Bonds Financings

The District issued the \$80.0 million Wastewater Revenue Obligation, Series 2010A in May 2010 and the \$157.0 million Wastewater Revenue Obligations, Series 2010C in November 2010 as "Build America Bonds" (BABs) fixed rate debt.

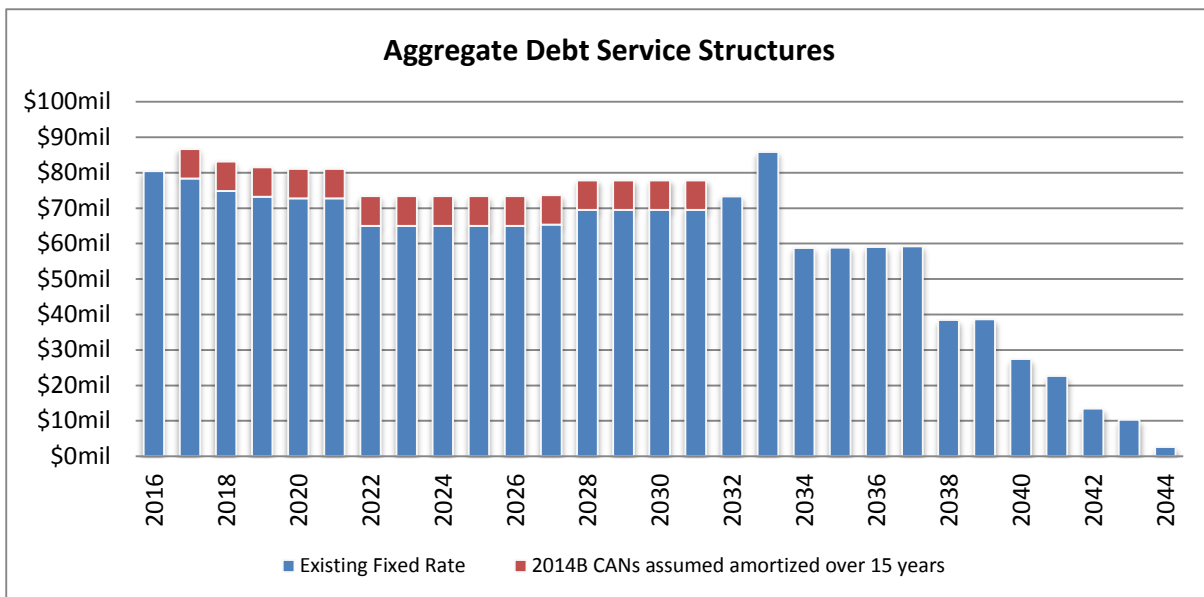
The American Recovery and Reinvestment Act of 2009 created a new financing product, BABs, for the municipal issuer. BABs are issued as higher interest taxable bonds; however, the U.S. Treasury provides a 35 percent subsidy on interest payments. The net cost, after accounting for the 35 percent subsidy payment, frequently results in lower net costs to the issuer, specifically in the maturity years beyond ten years.

On March 1, 2013, the federal government implemented certain automatic spending cuts known as the sequester. As a result of the sequester, federal subsidy payments on BABs have been reduced annually from a high of 8.7 percent for the federal fiscal year ended September 30, 2013 to a low of 6.8 percent for the federal fiscal year ended September 30, 2016.

## Future Financings

As a result of having a prudent reserve policy, experienced management, and prudent planning, the District has been able to secure "AAA" credit ratings from both Fitch Ratings and Standard and Poors. The District's long-range financing plan is designed to maintain these high ratings. Over the next 10 years, the District is projecting an additional \$2.4 billion in future treatment plant and collection system capital replacement, refurbishment, and rehabilitation improvements. In accordance with the District's long-term debt fiscal policy, the District will confine long-term borrowing to capital improvements that cannot be financed from current revenue. Before any new debt is issued, the impact of debt service payments on total annual fixed costs will be analyzed.

The District's cash flow forecast does not require any new money debt issuances over the next ten years as all capital improvements planned over this time period primarily consist of replacement, refurbishment, and rehabilitation of existing projects which are to be funded through existing reserves and current sewer charges.



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# 2016-17 & 2017-18 Budget

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*Figure 2*

<u>Schedule of Future Certificates of Participation Issues and CIP Cash Flows</u>										
(in millions)										
	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26
New COP Issues	\$ 0.0	\$ 0.0	\$ 0.0	\$0.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0
CIP Outlays	\$171.3	\$138.0	\$163.1	\$214.4	\$247.2	\$225.7	\$284.8	\$344.8	\$327.1	\$258.8

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# 2016-17 & 2017-18 Budget

## Total Certificates of Participation / Revenue Obligations and Notes Debt Service Requirements

### Principal and Interest Combined

<b>Fiscal Year Of Payments</b>	<b>2007A Refunding (Partial 2003)</b>	<b>2007B Acquisition/ Construction</b>	<b>2008B Refunding (1993)</b>	<b>2009A Acquisition/ Construction</b>	<b>2010A Build America Bonds Acq./Const.</b>	<b>2010C Build America Bonds Acq./Const.</b>	<b>2011A Refunding (Partial 2000 &amp; 2003)</b>
2016-17	\$ 4,373,278	\$ 7,465,500	\$ 8,947,225	\$ 4,835,250	\$ 2,897,639	\$ 6,523,780	\$ 19,909,725
2017-18	4,372,678	-	-	4,922,750	2,897,639	6,523,780	24,832,350
2018-19	4,371,678	-	-	4,924,500	2,897,639	6,523,780	3,348,350
2019-20	4,370,278	-	-	-	2,897,639	6,523,780	3,348,350
2020-21	8,863,478	-	-	-	2,897,639	6,523,780	3,348,350
2021-22	4,135,478	-	-	-	2,897,639	6,523,780	17,143,350
2022-23	4,134,138	-	-	-	2,897,639	6,523,780	17,093,600
2023-24	4,132,238	-	-	-	2,897,639	6,523,780	17,136,200
2024-25	4,134,768	-	-	-	2,897,639	6,523,780	17,088,450
2025-26	4,136,500	-	-	-	2,897,639	6,523,780	17,141,250
2026-27	23,397,500	-	-	-	2,897,639	6,523,780	-
2027-28	23,355,725	-	-	-	2,897,639	6,523,780	-
2028-29	23,316,150	-	-	-	2,897,639	6,523,780	-
2029-30	24,196,975	-	-	-	2,897,639	6,523,780	-
2030-31	-	-	-	-	2,897,639	12,258,780	-
2031-32	-	-	-	-	2,897,639	23,382,068	-
2032-33	-	-	-	-	2,897,639	23,476,472	-
2033-34	-	-	-	-	12,487,639	13,967,040	-
2034-35	-	-	-	-	12,696,056	13,897,232	-
2035-36	-	-	-	-	12,919,416	13,834,528	-
2036-37	-	-	-	-	13,151,453	13,758,096	-
2037-38	-	-	-	-	13,399,607	13,667,936	-
2038-39	-	-	-	-	13,658,823	13,574,048	-
2039-40	-	-	-	-	13,937,832	13,481,016	-
2040-41	-	-	-	-	-	22,698,216	-
2041-42	-	-	-	-	-	13,457,728	-
2042-43	-	-	-	-	-	10,305,640	-
2043-44	-	-	-	-	-	2,583,168	-
<b>Totals</b>	<b>\$141,290,858</b>	<b>\$7,465,500</b>	<b>\$8,947,225</b>	<b>\$14,682,500</b>	<b>\$141,510,688</b>	<b>\$295,674,891</b>	<b>\$140,389,975</b>

# Debt Financing Program

## Total Certificates of Participation / Revenue Obligations and Notes Debt Service Requirements

### Principal and Interest Combined

Fiscal Year Of Payments	2012A Refunding (Remain 2003)	2012B Refunding (2000-A & 2000-B)	2014A Refunding (Partial 2007B)	2014B Refunding Notes (2013A)	2015A Refunding (Partial 2007B)	2016A Refunding (Partial 2009A)	Total Payment Per Fiscal Year
2016-17	\$ 3,735,900	\$ 3,187,400	\$ 4,254,500	\$ 123,267,000	\$ 6,375,500	\$ 5,833,798	\$ 201,606,495
2017-18	3,735,900	3,187,400	10,969,500	-	6,375,500	6,977,300	74,794,797
2018-19	3,735,900	23,107,400	10,963,750	-	6,375,500	6,977,300	73,225,797
2019-20	3,735,900	23,106,400	10,966,500	-	6,375,500	11,392,300	72,716,647
2020-21	3,735,900	18,535,650	11,046,500	-	6,375,500	11,391,550	72,718,347
2021-22	3,735,900	1,776,150	11,049,000	-	6,375,500	11,389,800	65,026,597
2022-23	3,735,900	1,821,150	11,046,750	-	6,375,500	11,391,550	65,020,007
2023-24	3,735,900	1,781,950	11,044,000	-	6,375,500	11,396,050	65,023,257
2024-25	3,735,900	1,818,050	11,049,750	-	6,375,500	11,392,550	65,016,387
2025-26	3,735,900	1,771,600	11,052,500	-	6,375,500	11,390,800	65,025,469
2026-27	3,735,900	-	11,051,250	-	6,375,500	11,390,050	65,371,619
2027-28	3,735,900	-	-	-	21,615,500	11,394,550	69,523,094
2028-29	3,735,900	-	-	-	21,658,500	11,388,300	69,520,269
2029-30	3,735,900	-	-	-	20,776,250	11,391,050	69,521,594
2030-31	32,725,900	-	-	-	10,228,000	11,411,550	69,521,869
2031-32	31,921,200	-	-	-	3,702,250	11,413,050	73,316,207
2032-33	44,304,000	-	-	-	3,702,250	11,415,550	85,795,911
2033-34	-	-	-	-	20,882,250	11,408,050	58,744,979
2034-35	-	-	-	-	20,883,250	11,415,050	58,891,588
2035-36	-	-	-	-	20,881,250	11,409,800	59,044,994
2036-37	-	-	-	-	20,879,250	11,411,800	59,200,599
2037-38	-	-	-	-	-	11,411,000	38,478,543
2038-39	-	-	-	-	-	11,414,000	38,646,871
2039-40	-	-	-	-	-	-	27,418,848
2040-41	-	-	-	-	-	-	22,698,216
2041-42	-	-	-	-	-	-	13,457,728
2042-43	-	-	-	-	-	-	10,305,640
2043-44	-	-	-	-	-	-	2,583,168
<b>Totals</b>	<b>\$161,253,700</b>	<b>\$80,093,150</b>	<b>\$114,494,000</b>	<b>\$123,267,000</b>	<b>\$235,339,250</b>	<b>\$247,806,798</b>	<b>\$1,712,215,534</b>

# 2016-17 & 2017-18 Budget

## Certificates of Participation/ Revenue Obligations and Notes Debt Service Requirements

### Annual Interest Payments

<b>Fiscal Year Of Payments</b>	<b>2007A Refunding (Partial 2003)</b>	<b>2007B Acquisition/ Construction</b>	<b>2008B Refunding (1993)</b>	<b>2009A Acquisition/ Construction</b>	<b>2010A Build America Bonds Acq./Const.</b>	<b>2010C Build America Bonds Acq./Const.</b>	<b>2011A Refunding (Partial 2000 &amp; 2003)</b>
2016-17	\$ 4,108,278	\$ 355,500	\$ 132,225	\$ 585,250	\$ 2,897,639	\$ 6,523,780	\$ 4,774,725
2017-18	4,097,678	-	-	457,750	2,897,639	6,523,780	3,872,350
2018-19	4,086,678	-	-	234,500	2,897,639	6,523,780	3,348,350
2019-20	4,075,278	-	-	-	2,897,639	6,523,780	3,348,350
2020-21	4,063,478	-	-	-	2,897,639	6,523,780	3,348,350
2021-22	3,865,478	-	-	-	2,897,639	6,523,780	3,348,350
2022-23	3,854,138	-	-	-	2,897,639	6,523,780	2,658,600
2023-24	3,842,238	-	-	-	2,897,639	6,523,780	2,081,200
2024-25	3,829,768	-	-	-	2,897,639	6,523,780	1,328,450
2025-26	3,816,500	-	-	-	2,897,639	6,523,780	816,250
2026-27	3,802,500	-	-	-	2,897,639	6,523,780	-
2027-28	2,920,725	-	-	-	2,897,639	6,523,780	-
2028-29	2,001,150	-	-	-	2,897,639	6,523,780	-
2029-30	1,041,975	-	-	-	2,897,639	6,523,780	-
2030-31	-	-	-	-	2,897,639	6,523,780	-
2031-32	-	-	-	-	2,897,639	6,287,068	-
2032-33	-	-	-	-	2,897,639	5,581,472	-
2033-34	-	-	-	-	2,897,639	4,837,040	-
2034-35	-	-	-	-	2,551,056	4,457,232	-
2035-36	-	-	-	-	2,184,416	4,064,528	-
2036-37	-	-	-	-	1,796,453	3,658,096	-
2037-38	-	-	-	-	1,384,607	3,237,936	-
2038-39	-	-	-	-	948,823	2,804,048	-
2039-40	-	-	-	-	487,832	2,356,016	-
2040-41	-	-	-	-	-	1,893,216	-
2041-42	-	-	-	-	-	1,027,728	-
2042-43	-	-	-	-	-	510,640	-
2043-44	-	-	-	-	-	103,168	-
<b>Totals</b>	<b>\$49,405,858</b>	<b>\$ 355,500</b>	<b>\$ 132,225</b>	<b>\$1,277,500</b>	<b>\$ 61,510,688</b>	<b>\$138,674,891</b>	<b>\$28,924,975</b>

# Debt Financing Program

## Certificates of Participation/ Revenue Obligations and Notes Debt Service Requirements

### Annual Interest Payments

Fiscal Year Of Payments	2012A Refunding (Remain 2003)	2012B Refunding (2000-A & 2000-B)	2014A Refunding (Partial 2007B)	2014B Refunding Notes (2013A)	2015A Refunding (Partial 2007B)	2016A Refunding (Partial 2009A)	Total Interest Per Fiscal Year
2016-17	\$ 3,735,900	\$ 3,187,400	\$ 4,254,500	\$ 2,417,000	\$ 6,375,500	\$ 5,833,798	\$ 45,181,495
2017-18	3,735,900	3,187,400	4,254,500	-	6,375,500	6,977,300	42,379,797
2018-19	3,735,900	3,187,400	3,918,750	-	6,375,500	6,977,300	41,285,797
2019-20	3,735,900	2,191,400	3,566,500	-	6,375,500	6,977,300	39,691,647
2020-21	3,735,900	1,145,650	3,196,500	-	6,375,500	6,756,550	38,043,347
2021-22	3,735,900	276,150	2,804,000	-	6,375,500	6,524,800	36,351,597
2022-23	3,735,900	216,150	2,391,750	-	6,375,500	6,281,550	34,935,007
2023-24	3,735,900	151,950	1,959,000	-	6,375,500	6,026,050	33,593,257
2024-25	3,735,900	103,050	1,504,750	-	6,375,500	5,757,550	32,056,387
2025-26	3,735,900	51,600	1,027,500	-	6,375,500	5,475,800	30,720,469
2026-27	3,735,900	-	526,250	-	6,375,500	5,180,050	29,041,619
2027-28	3,735,900	-	-	-	6,375,500	4,869,550	27,323,094
2028-29	3,735,900	-	-	-	5,613,500	4,543,300	25,315,269
2029-30	3,735,900	-	-	-	4,811,250	4,201,050	23,211,594
2030-31	3,735,900	-	-	-	4,013,000	3,841,550	21,011,869
2031-32	2,866,200	-	-	-	3,702,250	3,463,050	19,216,207
2032-33	1,704,000	-	-	-	3,702,250	3,065,550	16,950,911
2033-34	-	-	-	-	3,702,250	2,648,050	14,084,979
2034-35	-	-	-	-	2,843,250	2,210,050	12,061,588
2035-36	-	-	-	-	1,941,250	1,749,800	9,939,994
2036-37	-	-	-	-	994,250	1,266,800	7,715,599
2037-38	-	-	-	-	-	861,000	5,483,543
2038-39	-	-	-	-	-	439,000	4,191,871
2039-40	-	-	-	-	-	-	2,843,848
2040-41	-	-	-	-	-	-	1,893,216
2041-42	-	-	-	-	-	-	1,027,728
2042-43	-	-	-	-	-	-	510,640
2043-44	-	-	-	-	-	-	103,168
Totals	<u>\$ 60,608,700</u>	<u>\$ 13,698,150</u>	<u>\$ 29,404,000</u>	<u>\$ 2,417,000</u>	<u>\$ 107,829,250</u>	<u>\$ 101,926,798</u>	<u>\$ 596,165,534</u>

# 2016-17 & 2017-18 Budget

## Certificates of Participation/ Revenue Obligations and Notes Debt Service Requirements

### Annual Principal Payments

<b>Fiscal Year Of Payments</b>	<b>2007A Refunding (Partial 2003)</b>	<b>2007B Acquisition/ Construction</b>	<b>2008B Refunding (1993)</b>	<b>2009A Acquisition/ Construction</b>	<b>2010A Build America Bonds Acq./Const.</b>	<b>2010C Build America Bonds Acq./Const.</b>	<b>2011A Refunding (Partial 2000 &amp; 2003)</b>
2016-17	\$ 265,000	\$ 7,110,000	\$ 8,815,000	\$ 4,250,000	\$ -	\$ -	\$ 15,135,000
2017-18	275,000	-	-	4,465,000	-	-	20,960,000
2018-19	285,000	-	-	4,690,000	-	-	-
2019-20	295,000	-	-	-	-	-	-
2020-21	4,800,000	-	-	-	-	-	-
2021-22	270,000	-	-	-	-	-	13,795,000
2022-23	280,000	-	-	-	-	-	14,435,000
2023-24	290,000	-	-	-	-	-	15,055,000
2024-25	305,000	-	-	-	-	-	15,760,000
2025-26	320,000	-	-	-	-	-	16,325,000
2026-27	19,595,000	-	-	-	-	-	-
2027-28	20,435,000	-	-	-	-	-	-
2028-29	21,315,000	-	-	-	-	-	-
2029-30	23,155,000	-	-	-	-	-	-
2030-31	-	-	-	-	-	5,735,000	-
2031-32	-	-	-	-	-	17,095,000	-
2032-33	-	-	-	-	-	17,895,000	-
2033-34	-	-	-	-	9,590,000	9,130,000	-
2034-35	-	-	-	-	10,145,000	9,440,000	-
2035-36	-	-	-	-	10,735,000	9,770,000	-
2036-37	-	-	-	-	11,355,000	10,100,000	-
2037-38	-	-	-	-	12,015,000	10,430,000	-
2038-39	-	-	-	-	12,710,000	10,770,000	-
2039-40	-	-	-	-	13,450,000	11,125,000	-
2040-41	-	-	-	-	-	20,805,000	-
2041-42	-	-	-	-	-	12,430,000	-
2042-43	-	-	-	-	-	9,795,000	-
2043-44	-	-	-	-	-	2,480,000	-
<b>Totals</b>	<b>\$91,885,000</b>	<b>\$7,110,000</b>	<b>\$8,815,000</b>	<b>\$13,405,000</b>	<b>\$80,000,000</b>	<b>\$157,000,000</b>	<b>\$111,465,000</b>



# Debt Financing Program

## Certificates of Participation/ Revenue Obligations and Notes Debt Service Requirements

### Annual Principal Payments

Fiscal Year Of Payments	2012A Refunding (Remain 2003)	2012B Refunding (2000-A & 2000-B)	2014A Refunding (Partial 2007B)	2014B Refunding Notes (2013A)	2015A Refunding (Partial 2007B)	2016A Refunding (Partial 2009A)	Total Principal Per Fiscal Year
2016-17	\$ -	\$ -	\$ -	\$ 120,850,000	\$ -	\$ -	\$ 156,425,000
2017-18	-	-	6,715,000	-	-	-	32,415,000
2018-19	-	19,920,000	7,045,000	-	-	-	31,940,000
2019-20	-	20,915,000	7,400,000	-	-	4,415,000	33,025,000
2020-21	-	17,390,000	7,850,000	-	-	4,635,000	34,675,000
2021-22	-	1,500,000	8,245,000	-	-	4,865,000	28,675,000
2022-23	-	1,605,000	8,655,000	-	-	5,110,000	30,085,000
2023-24	-	1,630,000	9,085,000	-	-	5,370,000	31,430,000
2024-25	-	1,715,000	9,545,000	-	-	5,635,000	32,960,000
2025-26	-	1,720,000	10,025,000	-	-	5,915,000	34,305,000
2026-27	-	-	10,525,000	-	-	6,210,000	36,330,000
2027-28	-	-	-	-	15,240,000	6,525,000	42,200,000
2028-29	-	-	-	-	16,045,000	6,845,000	44,205,000
2029-30	-	-	-	-	15,965,000	7,190,000	46,310,000
2030-31	28,990,000	-	-	-	6,215,000	7,570,000	48,510,000
2031-32	29,055,000	-	-	-	-	7,950,000	54,100,000
2032-33	42,600,000	-	-	-	-	8,350,000	68,845,000
2033-34	-	-	-	-	17,180,000	8,760,000	44,660,000
2034-35	-	-	-	-	18,040,000	9,205,000	46,830,000
2035-36	-	-	-	-	18,940,000	9,660,000	49,105,000
2036-37	-	-	-	-	19,885,000	10,145,000	51,485,000
2037-38	-	-	-	-	-	10,550,000	32,995,000
2038-39	-	-	-	-	-	10,975,000	34,455,000
2039-40	-	-	-	-	-	-	24,575,000
2040-41	-	-	-	-	-	-	20,805,000
2041-42	-	-	-	-	-	-	12,430,000
2042-43	-	-	-	-	-	-	9,795,000
2043-44	-	-	-	-	-	-	2,480,000
<b>Totals</b>	<b>\$100,645,000</b>	<b>\$66,395,000</b>	<b>\$85,090,000</b>	<b>\$120,850,000</b>	<b>\$127,510,000</b>	<b>\$145,880,000</b>	<b>\$1,116,050,000</b>

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**APPENDIX**  
**SECTION 10**

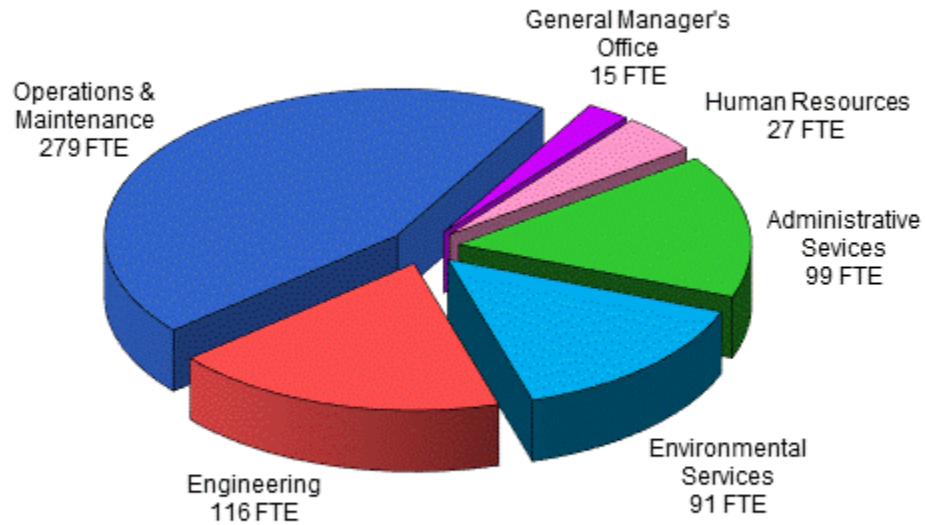
BACK OF SECTION 10 DIVIDER

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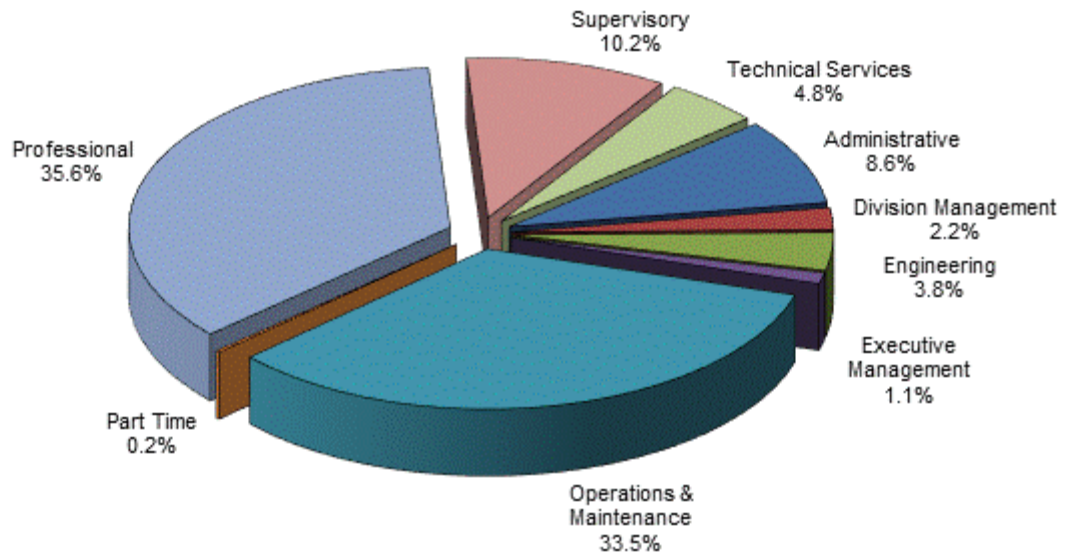
# Staffing Allocation

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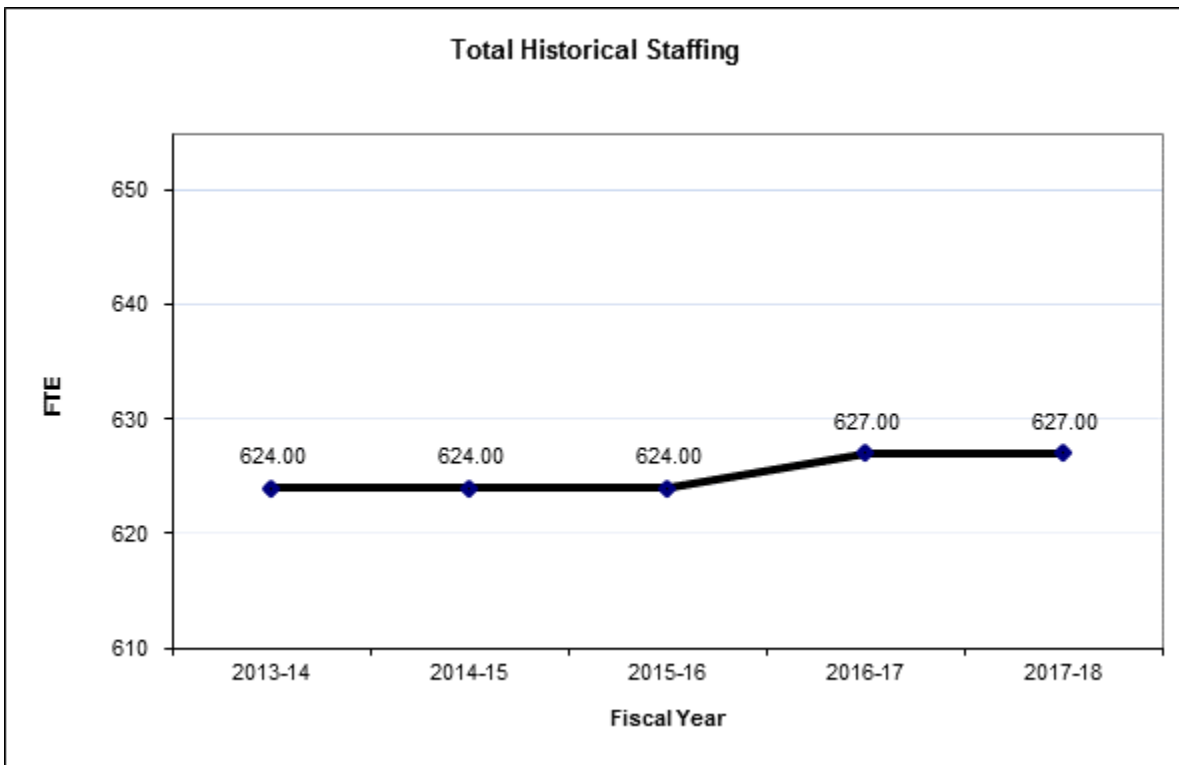
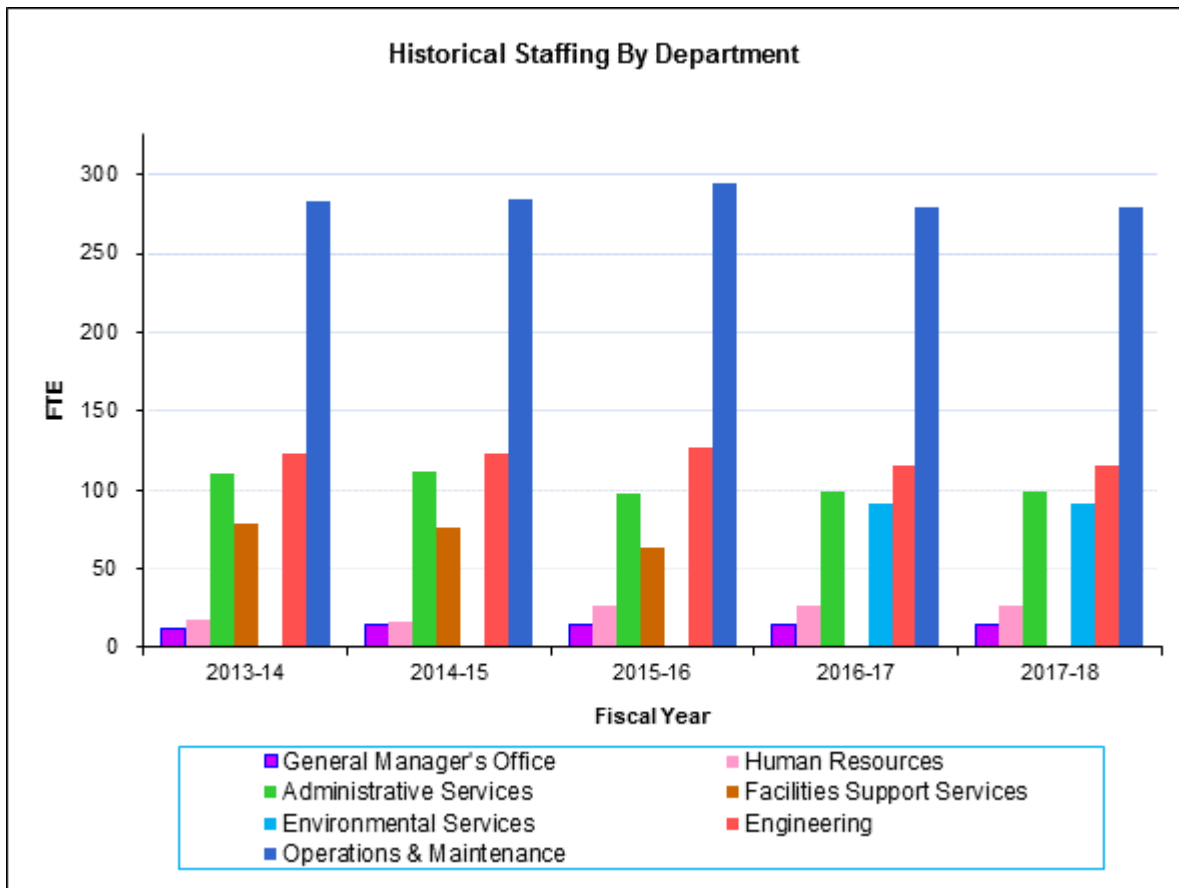
**Staffing by Department**  
Total 627 FTE



**Staffing by Category**



# 2016-17 & 2017-18 Budget



# Staffing Allocation

Department and Division Name	Authorized FTEs 2013-14	Authorized FTEs 2014-15	Proposed FTEs 2015-16	Authorized FTEs 2016-17	Proposed FTEs 2017-18
<b>General Manager's Office</b>					
General Management Administration	4.00	5.00	6.00	5.00	5.00
Board Services	5.00	5.00	4.00	5.00	5.00
Public Affairs	3.00	4.00	5.00	5.00	5.00
<b>Department Subtotal*</b>	<b>12.00</b>	<b>14.00</b>	<b>15.00</b>	<b>15.00</b>	<b>15.00</b>
<b>Human Resources Department</b>					
Human Resources	18.00	16.00	16.00	16.00	16.00
Risk Management	-	-	11.00	11.00	11.00
<b>Department Subtotal</b>	<b>18.00</b>	<b>16.00</b>	<b>27.00</b>	<b>27.00</b>	<b>27.00</b>
<b>Administrative Services Department</b>					
Administrative Services	3.00	4.00	3.00	3.00	3.00
Financial Management	18.00	18.00	19.00	19.00	19.00
Contracts, Purchasing & Materials Management	31.00	32.00	32.00	32.00	32.00
Information Technology	47.00	45.00	44.00	45.00	45.00
Risk Management	11.00	12.00	-	-	-
<b>Department Subtotal</b>	<b>110.00</b>	<b>111.00</b>	<b>98.00</b>	<b>99.00</b>	<b>99.00</b>
<b>Facilities Support Services Department</b>					
Facilities Support Services Administration	3.00	3.00	4.00	-	-
Facilities Support	3.00	3.00	-	-	-
Equipment Rebuild	8.00	8.00	-	-	-
Fleet Services	8.00	8.00	9.00	-	-
Facilities Engineering & Repair Services	11.00	9.00	5.00	-	-
NPDES Source Inspection	16.00	16.00	16.00	-	-
Odor and Corrosion Control	6.00	6.00	6.00	-	-
Collection Facilities Operations & Maintenance	23.00	23.00	23.00	-	-
<b>Department Subtotal</b>	<b>78.00</b>	<b>76.00</b>	<b>63.00</b>	<b>-</b>	<b>-</b>
<b>Environmental Services Department</b>					
Environmental Services Administration	-	-	-	2.00	2.00
Environmental Compliance	-	-	-	47.00	47.00
Laboratory & Ocean Monitoring	-	-	-	42.00	42.00
<b>Department Subtotal</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>91.00</b>	<b>91.00</b>
<b>Engineering Department</b>					
Engineering Administration	2.00	2.00	2.00	2.00	2.00
Planning	18.00	17.00	15.00	15.00	15.00
Project Management Office	20.00	20.00	20.00	17.00	17.00
Civil & Mechanical Engineering	51.00	53.00	59.00	53.00	53.00
Electrical & Control Systems Engineering	-	-	-	29.00	29.00
Environmental Compliance	32.00	31.00	31.00	-	-
<b>Department Subtotal</b>	<b>123.00</b>	<b>123.00</b>	<b>127.00</b>	<b>116.00</b>	<b>116.00</b>
<b>Operations &amp; Maintenance Department</b>					
Operations & Maintenance Administration	3.00	2.00	2.00	3.00	3.00
Collection Facilities Operations & Maintenance	-	-	-	26.00	26.00
Fleet Services	-	-	-	8.00	8.00
Plant No. 1 Operations	54.00	54.00	69.00	62.00	62.00
Plant No. 2 Operations	48.00	47.00	54.00	50.00	50.00
Building, Grounds, and Mechanical Maintenance	62.00	65.00	-	-	-
Instrumentation & Electrical Maintenance	75.00	75.00	-	-	-
Plant No. 1 Maintenance	-	-	82.00	85.00	85.00
Plant No. 2 Maintenance	-	-	46.00	45.00	45.00
Environmental Laboratory & Ocean Monitoring	41.00	41.00	41.00	-	-
<b>Department Subtotal</b>	<b>283.00</b>	<b>284.00</b>	<b>294.00</b>	<b>279.00</b>	<b>279.00</b>
<b>Grand Total - All Departments*</b>	<b>624.00</b>	<b>624.00</b>	<b>624.00</b>	<b>627.00</b>	<b>627.00</b>

# 2016-17 & 2017-18 Budget

Division & Position	Authorized FTEs 2013-14	Authorized FTEs 2014-15	Proposed FTEs 2015-16	Authorized FTEs 2016-17	Proposed FTEs 2017-18
<b>General Manager's Office</b>					
<b>110 General Management Administration</b>					
General Manager	1.00	1.00	1.00	1.00	1.00
Assistant General Manager	1.00	1.00	1.00	1.00	1.00
Public Affairs Manager	-	1.00	1.00	-	-
Principal Staff Analyst	1.00	1.00	-	1.00	1.00
Records Management Specialist	-	-	1.00	1.00	1.00
Senior Staff Analyst	-	-	1.00	-	-
Secretary to the General Manager	1.00	1.00	1.00	1.00	1.00
Total General Management Administration*	4.00	5.00	6.00	5.00	5.00
<b>120 Board Services</b>					
Clerk of the Board	1.00	1.00	1.00	1.00	1.00
Records Management Specialist	1.00	1.00	-	-	-
Deputy Clerk of the Board	-	-	1.00	1.00	1.00
Administrative Assistant	1.00	1.00	-	-	-
Program Assistant	2.00	2.00	2.00	2.00	2.00
Office Assistant	-	-	-	1.00	1.00
Total Board Services	5.00	5.00	4.00	5.00	5.00
<b>140 Public Affairs</b>					
Public Affairs Supervisor	-	-	-	1.00	1.00
Principal Public Affairs Specialist	-	1.00	1.00	-	-
Senior Public Affairs Specialist	1.00	-	1.00	1.00	1.00
Public Affairs Specialist	-	1.00	1.00	1.00	1.00
Administrative Assistant	1.00	1.00	1.00	1.00	1.00
Graphics Coordinator	1.00	1.00	1.00	1.00	1.00
Total Public Affairs	3.00	4.00	5.00	5.00	5.00
<b>Total Office of the General Manager</b>	<b>12.00</b>	<b>14.00</b>	<b>15.00</b>	<b>15.00</b>	<b>15.00</b>
<b>Human Resources Department</b>					
<b>160 Human Resources</b>					
Director of Human Resources	1.00	1.00	1.00	1.00	1.00
Human Resources Manager	1.00	1.00	1.00	1.00	1.00
Human Resources Supervisor	-	-	1.00	1.00	1.00
Principal Human Resources Analyst	2.00	2.00	3.00	3.00	3.00
Senior Human Resources Analyst	4.00	5.00	4.00	4.00	4.00
Human Resources Analyst	5.00	4.00	4.00	4.00	4.00
Executive Assistant	1.00	-	-	-	-
Human Resources Assistant	2.00	1.00	1.00	1.00	1.00
Program Assistant	2.00	2.00	1.00	1.00	1.00
Total Human Resources	18.00	16.00	16.00	16.00	16.00
<b>161 Risk Management</b>					
Safety & Health Supervisor	-	-	1.00	1.00	1.00
Principal Financial Analyst	-	-	1.00	1.00	1.00
Safety & Health Specialist	-	-	1.00	1.00	1.00
Security & Emergency Planning Specialist	-	-	1.00	1.00	1.00
Occupational Health Nurse	-	-	1.00	1.00	1.00
Senior Safety & Health Representative	-	-	2.00	2.00	2.00
Safety & Health Representative	-	-	3.00	3.00	3.00
Administrative Assistant	-	-	1.00	1.00	1.00
Total Risk Management	-	-	11.00	11.00	11.00
<b>Total Human Resources Department</b>	<b>18.00</b>	<b>16.00</b>	<b>27.00</b>	<b>27.00</b>	<b>27.00</b>



# Historical Staffing Detail

Division & Position	Authorized FTEs 2013-14	Authorized FTEs 2014-15	Proposed FTEs 2015-16	Authorized FTEs 2016-17	Proposed FTEs 2017-18
<b>Administrative Services Department</b>					
<b>210 Administrative Services</b>					
Director of Finance & Administrative Services / Treasurer	1.00	1.00	1.00	1.00	1.00
Principal Financial Analyst	1.00	1.00	1.00	1.00	1.00
Executive Assistant	1.00	1.00	1.00	1.00	1.00
Accounting Assistant II	-	1.00	-	-	-
Total Finance Administration	3.00	4.00	3.00	3.00	3.00
<b>220 Financial Management</b>					
Controller	1.00	1.00	1.00	1.00	1.00
Accounting Supervisor	3.00	3.00	3.00	3.00	3.00
Principal Accountant	3.00	3.00	3.00	2.00	2.00
Senior Accountant	1.00	1.00	1.00	2.00	2.00
Senior Staff Analyst	-	-	1.00	1.00	1.00
Accountant/Staff Analyst	4.00	4.00	3.00	3.00	3.00
Payroll Technician	2.00	2.00	2.00	2.00	2.00
Accounting Assistant II	4.00	4.00	5.00	5.00	5.00
Total Financial Management	18.00	18.00	19.00	19.00	19.00
<b>230 Contracts, Purchasing &amp; Materials Management</b>					
Contracts & Purchasing Manager	1.00	1.00	1.00	1.00	1.00
Contracts Supervisor	1.00	1.00	1.00	1.00	1.00
Principal Contracts Administrator	2.00	2.00	2.00	2.00	2.00
Purchasing Supervisor	1.00	1.00	1.00	1.00	1.00
Materials Control Supervisor	1.00	1.00	1.00	1.00	1.00
Senior Contracts Administrator	3.00	3.00	3.00	3.00	3.00
Principal Buyer	1.00	1.00	1.00	1.00	1.00
Contracts Administrator	3.00	3.00	3.00	3.00	3.00
Senior Buyer	1.00	1.00	1.00	1.00	1.00
Buyer	2.00	3.00	3.00	3.00	3.00
Contracts/Purchasing Assistant	5.00	5.00	5.00	5.00	5.00
Lead Storekeeper	2.00	2.00	2.00	2.00	2.00
Senior Storekeeper	3.00	3.00	3.00	3.00	3.00
Storekeeper	5.00	5.00	5.00	5.00	5.00
Total Contracts, Purchasing & Materials Management	31.00	32.00	32.00	32.00	32.00
<b>250 Information Technology</b>					
Information Technology Systems & Operations Manager	1.00	1.00	1.00	1.00	1.00
Information Technology Manager	2.00	1.00	1.00	1.00	1.00
Information Technology Supervisor	1.00	2.00	2.00	2.00	2.00
Principal Information Technology Analyst	6.00	6.00	6.00	6.00	6.00
Principal Public Affairs Specialist	1.00	-	-	-	-
Senior Information Technology Analyst	9.00	9.00	9.00	10.00	10.00
Information Technology Analyst III	3.00	4.00	6.00	6.00	6.00
Engineering Associate	1.00	-	-	-	-
Senior Staff Analyst	-	1.00	-	-	-
Data Management Technician II	7.00	7.00	7.00	7.00	7.00
Information Technology Analyst II	6.00	5.00	3.00	3.00	3.00
Data Management Technician I	5.00	4.00	4.00	4.00	4.00
Staff Analyst	1.00	1.00	1.00	1.00	1.00
Administrative Assistant	1.00	1.00	1.00	1.00	1.00
Information Technology Technician II	1.00	1.00	1.00	1.00	1.00
Information Technology Technician I	1.00	1.00	1.00	1.00	1.00
Program Assistant	1.00	1.00	1.00	1.00	1.00
Total Information Technology	47.00	45.00	44.00	45.00	45.00

# 2016-17 & 2017-18 Budget

Division & Position	Authorized FTEs 2013-14	Authorized FTEs 2014-15	Proposed FTEs 2015-16	Authorized FTEs 2016-17	Proposed FTEs 2017-18
<b>260 Risk Management</b>					
Risk Manager	-	1.00	-	-	-
Safety & Health Supervisor	1.00	1.00	-	-	-
Principal Financial Analyst	1.00	1.00	-	-	-
Safety & Health Specialist	2.00	1.00	-	-	-
Security & Emergency Planning Specialist	1.00	1.00	-	-	-
Occupational Health Nurse	1.00	1.00	-	-	-
Senior Safety & Health Representative	1.00	2.00	-	-	-
Safety & Health Representative	3.00	3.00	-	-	-
Administrative Assistant	1.00	1.00	-	-	-
Total Risk Management	11.00	12.00	-	-	-
<b>Total Administrative Services Department</b>	<b>110.00</b>	<b>111.00</b>	<b>98.00</b>	<b>99.00</b>	<b>99.00</b>
<b>Facilities Support Services Department</b>					
<b>310 Facilities Support Services Administration</b>					
Director of Facilities Support	1.00	1.00	1.00	-	-
Principal Financial Analyst	1.00	1.00	1.00	-	-
Senior Staff Analyst	-	-	1.00	-	-
Executive Assistant	1.00	1.00	1.00	-	-
Total Facilities Support Services Administration	3.00	3.00	4.00	-	-
<b>320 Facilities Support</b>					
Facilities Manager	1.00	1.00	-	-	-
Senior Staff Analyst	1.00	1.00	-	-	-
Office Assistant	1.00	1.00	-	-	-
Total Equipment / Rebuild	3.00	3.00	-	-	-
<b>321 Equipment Rebuild (formerly part of division 320)</b>					
Maintenance Supervisor	1.00	1.00	-	-	-
Machinist	1.00	1.00	-	-	-
Senior Mechanic	3.00	3.00	-	-	-
Welder/Fabricator	3.00	3.00	-	-	-
Total Equipment / Rebuild	8.00	8.00	-	-	-
<b>322 Fleet Services (formerly part of division 320)</b>					
Maintenance Supervisor	1.00	1.00	1.00	-	-
Lead Mechanic	1.00	1.00	1.00	-	-
Automotive/ Heavy Equipment Technician	3.00	3.00	3.00	-	-
Mobile Crane Operator	2.00	2.00	2.00	-	-
Automotive/ Heavy Equipment Assistant	1.00	1.00	1.00	-	-
Office Assistant	-	-	1.00	-	-
Total Fleet Services	8.00	8.00	9.00	-	-
<b>330 Facilities Engineering &amp; Repair Services</b>					
Engineering Manager	1.00	1.00	1.00	-	-
Senior Engineer	1.00	1.00	1.00	-	-
Engineer	2.00	2.00	-	-	-
Associate Engineer	3.00	3.00	2.00	-	-
Maintenance Specialist	2.00	-	-	-	-
Engineering Associate	1.00	1.00	-	-	-
Administrative Assistant	1.00	1.00	1.00	-	-
Total Facilities Engineering	11.00	9.00	5.00	-	-

# Historical Staffing Detail

Division & Position	Authorized FTEs 2013-14	Authorized FTEs 2014-15	Proposed FTEs 2015-16	Authorized FTEs 2016-17	Proposed FTEs 2017-18
<b>341 NPDES Source Inspection</b>					
Source Control Supervisor	1.00	1.00	1.00	-	-
Principal Environmental Specialist	1.00	1.00	1.00	-	-
Senior Environmental Specialist	1.00	1.00	-	-	-
Lead Source Control Inspector	-	-	1.00	-	-
Source Control Inspector II	9.00	8.00	7.00	-	-
Source Control Inspector I	-	1.00	2.00	-	-
Administrative Assistant	1.00	1.00	1.00	-	-
Environmental Technician	3.00	3.00	3.00	-	-
Total NPDES Source Inspection	<b>16.00</b>	<b>16.00</b>	<b>16.00</b>	-	-
<b>342 Odor and Corrosion Control</b>					
Engineering Supervisor	1.00	1.00	1.00	-	-
Associate Engineer	1.00	1.00	1.00	-	-
Senior Environmental Specialist	2.00	2.00	2.00	-	-
Engineering Assistant I	1.00	1.00	1.00	-	-
Environmental Technician	1.00	1.00	1.00	-	-
Total Odor & Corrosion Control	<b>6.00</b>	<b>6.00</b>	<b>6.00</b>	-	-
<b>343 Collection Facilities Operations &amp; Maintenance</b>					
Maintenance Supervisor	2.00	2.00	2.00	-	-
Lead Mechanic	5.00	5.00	5.00	-	-
Senior Mechanic	8.00	8.00	8.00	-	-
Mechanic	8.00	8.00	8.00	-	-
Total Collection Facilities O&M	<b>23.00</b>	<b>23.00</b>	<b>23.00</b>	-	-
<b>Total Facilities Support Services Department</b>	<b>78.00</b>	<b>76.00</b>	<b>63.00</b>	-	-
<b>Environmental Services Department</b>					
<b>610 Facilities Support Services Administration</b>					
Director of Environmental Services	-	-	-	1.00	1.00
Executive Assistant	-	-	-	1.00	1.00
Total Environmental Services Administration	-	-	-	<b>2.00</b>	<b>2.00</b>
<b>620 Environmental Compliance</b>					
Environmental Compl & Reg Affairs Manager	-	-	-	1.00	1.00
Engineering Supervisor	-	-	-	2.00	2.00
Environmental Supervisor	-	-	-	1.00	1.00
Senior Engineer	-	-	-	1.00	1.00
Senior Regulatory Specialist	-	-	-	1.00	1.00
Engineer	-	-	-	5.00	5.00
Source Control Supervisor	-	-	-	1.00	1.00
Regulatory Specialist	-	-	-	3.00	3.00
Associate Engineer	-	-	-	4.00	4.00
Principal Environmental Specialist	-	-	-	3.50	3.50
Lead Source Control Inspector	-	-	-	1.00	1.00
Senior Environmental Specialist	-	-	-	4.50	4.50
Source Control Inspector II	-	-	-	7.00	7.00
Source Control Inspector I	-	-	-	2.00	2.00
Administrative Assistant	-	-	-	2.00	2.00
Environmental Technician	-	-	-	3.00	3.00
Program Assistant	-	-	-	4.00	4.00
Office Assistant	-	-	-	1.00	1.00
Total Environmental Compliance	-	-	-	<b>47.00</b>	<b>47.00</b>

# 2016-17 & 2017-18 Budget

Division & Position	Authorized FTEs 2013-14	Authorized FTEs 2014-15	Proposed FTEs 2015-16	Authorized FTEs 2016-17	Proposed FTEs 2017-18
<b>630 Laboratory and Ocean Monitoring</b>					
Environmental Lab & Ocean Monitoring Manager	-	-	-	1.00	1.00
Environmental Supervisor	-	-	-	1.00	1.00
Laboratory Supervisor	-	-	-	2.00	2.00
Senior Scientist	-	-	-	3.00	3.00
Scientist	-	-	-	1.00	1.00
Principal Environmental Specialist	-	-	-	2.00	2.00
Principal Laboratory Analyst	-	-	-	6.00	6.00
Senior Environmental Specialist	-	-	-	6.00	6.00
Boat Captain	-	-	-	1.00	1.00
Senior Laboratory Analyst	-	-	-	10.00	10.00
Environmental Specialist	-	-	-	2.00	2.00
Laboratory Analyst	-	-	-	3.00	3.00
Administrative Assistant	-	-	-	1.00	1.00
Laboratory Assistant	-	-	-	3.00	3.00
Total Laboratory and Ocean Monitoring	-	-	-	42.00	42.00
<b>Total Environmental Services Department</b>	-	-	-	<b>91.00</b>	<b>91.00</b>
<b>Engineering Department</b>					
<b>710 Engineering Administration</b>					
Director of Engineering	1.00	1.00	1.00	1.00	1.00
Executive Assistant	1.00	1.00	1.00	1.00	1.00
Total Engineering Administration	2.00	2.00	2.00	2.00	2.00
<b>740 Planning</b>					
Engineering Manager	1.00	1.00	1.00	1.00	1.00
Engineering Supervisor	1.00	1.00	1.00	2.00	2.00
Senior Engineer	4.00	4.00	3.00	3.00	3.00
Engineer	5.00	4.00	4.00	3.00	3.00
Principal Financial Analyst	-	-	-	1.00	1.00
Principal Staff Analyst	1.00	1.00	1.00	1.00	1.00
Associate Engineer	2.00	3.00	2.00	2.00	2.00
Principal Environmental Specialist	1.00	-	-	-	-
Assistant Engineer	1.00	-	-	-	-
Engineering Associate	-	1.00	1.00	1.00	1.00
Senior Staff Analyst	1.00	1.00	1.00	-	-
Administrative Assistant	1.00	1.00	1.00	1.00	1.00
Total Planning	18.00	17.00	15.00	15.00	15.00

# Historical Staffing Detail

Division & Position	Authorized FTEs 2013-14	Authorized FTEs 2014-15	Proposed FTEs 2015-16	Authorized FTEs 2016-17	Proposed FTEs 2017-18
<b>750 Project Management Office</b>					
Engineering Manager	1.00	1.00	1.00	1.00	1.00
Engineering Supervisor	1.00	1.00	1.00	-	-
Project Controls Supervisor	1.00	-	-	-	-
Capital Improvement Program Project Manager	8.00	8.00	7.00	8.00	8.00
Senior Engineer	-	-	1.00	2.00	2.00
Principal Project Controls Analyst	1.00	1.00	1.00	1.00	1.00
Engineer	1.00	1.00	1.00	-	-
Principal Staff Analyst	1.00	2.00	2.00	2.00	2.00
Cost Estimator	1.00	1.00	1.00	-	-
Planner/Scheduler	1.00	1.00	1.00	-	-
Senior Staff Analyst	2.00	1.00	1.00	-	-
Engineering Assistant II	-	1.00	1.00	1.00	1.00
Administrative Assistant	1.00	1.00	1.00	1.00	1.00
Office Assistant	1.00	1.00	1.00	1.00	1.00
Total Project Management Office	20.00	20.00	20.00	17.00	17.00
<b>760 Civil &amp; Mechanical Engineering</b>					
Engineering Manager	1.00	1.00	1.00	1.00	1.00
Engineering Supervisor	3.00	4.00	4.00	5.00	5.00
Senior Construction Inspection Supervisor	1.00	1.00	1.00	-	-
Senior Engineer	8.00	8.00	9.00	7.00	7.00
Construction Inspection Supervisor	1.00	1.00	1.00	2.00	2.00
Engineer	10.00	10.00	13.00	13.00	13.00
Associate Engineer	2.00	1.00	3.00	3.00	3.00
Cost Estimator	-	-	-	1.00	1.00
Planner/Scheduler	-	-	-	1.00	1.00
Senior Construction Inspector	7.00	7.00	7.00	5.00	5.00
Assistant Engineer	1.00	2.00	2.00	1.00	1.00
Associate Engineer II	-	-	-	-	-
Senior Staff Analyst	-	1.00	1.00	2.00	2.00
Engineering Associate	-	-	1.00	1.00	1.00
Construction Inspector	9.00	9.00	9.00	5.00	5.00
Associate Engineer I	-	-	-	-	-
Engineering Assistant II	3.00	3.00	3.00	3.00	3.00
Public Affairs Specialist	-	-	-	-	-
Staff Analyst	1.00	1.00	1.00	-	-
Administrative Assistant	2.00	2.00	2.00	2.00	2.00
Engineering Assistant I	1.00	1.00	1.00	1.00	1.00
Program Assistant	1.00	1.00	-	-	-
Total Civil & Mechanical Engineering	51.00	53.00	59.00	53.00	53.00
<b>770 Electrical &amp; Control Systems Engineering</b>					
Engineering Manager	-	-	-	1.00	1.00
Engineering Supervisor	-	-	-	2.00	2.00
Senior Construction Insp Supv	-	-	-	1.00	1.00
Senior Engineer	-	-	-	5.00	5.00
Principal Info Tech Analyst	-	-	-	4.00	4.00
Engineer	-	-	-	4.00	4.00
Senior Info Tech Analyst	-	-	-	3.00	3.00
Information Tech Analyst III	-	-	-	1.00	1.00
Senior Construction Inspector	-	-	-	2.00	2.00
Information Tech Analyst II	-	-	-	1.00	1.00
Construction Inspector	-	-	-	4.00	4.00
Senior Engineer	-	-	-	1.00	1.00
Total Electrical & Control Systems Engineering	-	-	-	29.00	29.00

# 2016-17 & 2017-18 Budget

Division & Position	Authorized FTEs 2013-14	Authorized FTEs 2014-15	Proposed FTEs 2015-16	Authorized FTEs 2016-17	Proposed FTEs 2017-18
<b>790 Environmental Compliance</b>					
Environmental Compl & Reg Affairs Manager	1.00	1.00	1.00	-	-
Engineering Supervisor	2.00	2.00	2.00	-	-
Environmental Supervisor	1.00	1.00	1.00	-	-
Public Affairs Manager	1.00	-	-	-	-
Senior Scientist	1.00	1.00	1.00	-	-
Engineer	6.00	6.00	6.00	-	-
Regulatory Specialist	3.00	3.00	3.00	-	-
Associate Engineer	4.00	4.00	4.00	-	-
Associate Engineer III	-	-	-	-	-
Principal Environmental Specialist	2.50	2.50	2.50	-	-
Principal Laboratory Analyst	-	-	-	-	-
Senior Environmental Specialist	4.50	4.50	4.50	-	-
Administrative Assistant	1.00	1.00	1.00	-	-
Program Assistant	4.00	4.00	4.00	-	-
Office Assistant	1.00	1.00	1.00	-	-
Intern	-	-	-	-	-
Total Environmental Compliance	32.00	31.00	31.00	-	-
<b>Total Engineering Department</b>	<b>123.00</b>	<b>123.00</b>	<b>127.00</b>	<b>116.00</b>	<b>116.00</b>
<b>Operations &amp; Maintenance Department</b>					
<b>810 Operations &amp; Maintenance Administration</b>					
Director of Operations & Maintenance	1.00	1.00	1.00	1.00	1.00
Operations Manager	1.00	-	-	-	-
Senior Staff Analyst	1.00	1.00	1.00	2.00	2.00
Total Operations & Maintenance Administration	3.00	2.00	2.00	3.00	3.00
<b>820 Collection Facilities Operations &amp; Maintenance</b>					
Engineering Manager	-	-	-	1.00	1.00
Maintenance Supervisor	-	-	-	2.00	2.00
Lead Mechanic	-	-	-	5.00	5.00
Administrative Assistant	-	-	-	1.00	1.00
Senior Mechanic	-	-	-	8.00	8.00
Mechanic	-	-	-	8.00	8.00
Office Assistant	-	-	-	1.00	1.00
Total Collection Facilities O&M	-	-	-	26.00	26.00
<b>822 Fleet Services</b>					
Maintenance Supervisor	-	-	-	1.00	1.00
Lead Mechanic	-	-	-	1.00	1.00
Automotive/ Heavy Equipment Technician	-	-	-	3.00	3.00
Mobile Crane Operator	-	-	-	2.00	2.00
Automotive/ Heavy Equipment Assistant	-	-	-	1.00	1.00
Total Fleet Services	-	-	-	8.00	8.00

# Historical Staffing Detail

Division & Position	Authorized FTEs 2013-14	Authorized FTEs 2014-15	Proposed FTEs 2015-16	Authorized FTEs 2016-17	Proposed FTEs 2017-18
<b>830 Plant No. 1 Operations</b>					
Engineering Manager	1.00	-	-	-	-
Operations Manager	-	1.00	1.00	1.00	1.00
Engineering Supervisor	1.00	1.00	2.00	1.00	1.00
Chief Plant Operator	1.00	1.00	1.00	1.00	1.00
Senior Engineer	2.00	2.00	4.00	1.00	1.00
Principal Information Technology Analyst Engineer	-	-	3.00	-	-
Engineer	2.00	2.00	3.00	2.00	2.00
Operations Supervisor	6.00	6.00	6.00	6.00	6.00
Senior Information Technology Analyst	-	-	3.00	-	-
Maintenance Supervisor	-	-	1.00	-	-
Scientist	1.00	1.00	1.00	1.00	1.00
Associate Engineer	-	-	1.00	2.00	2.00
Information Technology Analyst III	-	-	1.00	-	-
Assistant Engineer	2.00	2.00	1.00	1.00	1.00
Senior Environmental Specialist	1.00	1.00	1.00	2.00	2.00
Information Technology Analyst II	-	-	1.00	-	-
Lead Plant Operator	5.00	5.00	3.00	4.00	4.00
Lead Power Plant Operator	-	-	1.00	1.00	1.00
Power Plant Operator II	-	-	4.00	4.00	4.00
Senior Plant Operator	15.00	14.00	14.00	15.00	15.00
Administrative Assistant	1.00	1.00	1.00	1.00	1.00
Plant Operator	14.00	15.00	14.00	16.00	16.00
Environmental Technician	-	-	-	1.00	1.00
Control Center Technician	2.00	2.00	2.00	2.00	2.00
<b>Total Plant No. 1 Operations</b>	<b>54.00</b>	<b>54.00</b>	<b>69.00</b>	<b>62.00</b>	<b>62.00</b>
<b>840 Plant No. 2 Operations</b>					
Chief Plant Operator	1.00	1.00	1.00	1.00	1.00
Operations Supervisor	6.00	6.00	6.00	6.00	6.00
Lead Plant Operator	5.00	5.00	6.00	5.00	5.00
Power Plant Operator II	-	-	4.00	4.00	4.00
Senior Plant Operator	14.00	14.00	15.00	14.00	14.00
Administrative Assistant	1.00	1.00	1.00	1.00	1.00
Plant Operator	20.00	19.00	20.00	18.00	18.00
Control Center Technician	1.00	1.00	-	-	-
Program Assistant	-	-	1.00	1.00	1.00
<b>Total Plant No. 2 Operations</b>	<b>48.00</b>	<b>47.00</b>	<b>54.00</b>	<b>50.00</b>	<b>50.00</b>
<b>850 Building, Grounds, and Mechanical Maintenance</b>					
Maintenance Manager	1.00	1.00	-	-	-
Senior Engineer	-	1.00	-	-	-
Engineer	1.00	-	-	-	-
Maintenance Supervisor	6.00	6.00	-	-	-
Associate Engineer	1.00	1.00	-	-	-
Maintenance Specialist	5.00	8.00	-	-	-
Reliability Maintenance Technician	4.00	4.00	-	-	-
Lead Mechanic	4.00	4.00	-	-	-
Administrative Assistant	1.00	1.00	-	-	-
Senior Mechanic	29.00	29.00	-	-	-
Lead Facilities Worker	1.00	1.00	-	-	-
Facilities Worker/Builder	3.00	3.00	-	-	-
Facilities Worker/Painter	2.00	2.00	-	-	-
Mechanic	2.00	2.00	-	-	-
Maintenance Worker	2.00	2.00	-	-	-
<b>Total Building, Grounds, and Mechanical Maintenance</b>	<b>62.00</b>	<b>65.00</b>	<b>-</b>	<b>-</b>	<b>-</b>

# 2016-17 & 2017-18 Budget

Division & Position	Authorized FTEs 2013-14	Authorized FTEs 2014-15	Proposed FTEs 2015-16	Authorized FTEs 2016-17	Proposed FTEs 2017-18
<b>860 Instrumentation &amp; Electrical Maintenance</b>					
Engineering Manager	1.00	1.00	-	-	-
Engineering Supervisor	1.00	1.00	-	-	-
Senior Engineer	3.00	3.00	-	-	-
Principal Information Technology Analyst	1.00	2.00	-	-	-
Engineer	4.00	3.00	-	-	-
Senior Information Technology Analyst	4.00	4.00	-	-	-
Maintenance Supervisor	5.00	5.00	-	-	-
Information Technology Analyst III	2.00	1.00	-	-	-
Information Technology Analyst II	-	1.00	-	-	-
Lead Electrical Technician	5.00	5.00	-	-	-
Lead Instrumentation Technician	3.00	3.00	-	-	-
Lead Power Plant Operator	1.00	1.00	-	-	-
Electrical Technician II	13.00	14.00	-	-	-
Instrumentation Technician II	15.00	14.00	-	-	-
Power Plant Operator II	8.00	8.00	-	-	-
Administrative Assistant	1.00	1.00	-	-	-
Power Plant Operator I	1.00	1.00	-	-	-
Electrical Technician I	2.00	2.00	-	-	-
Instrumentation Technician I	1.00	2.00	-	-	-
Maintenance Worker	4.00	3.00	-	-	-
Total Instrumentation & Electrical Maintenance	75.00	75.00	-	-	-
<b>870 Plant No. 1 Maintenance</b>					
Engineering Manager	-	-	1.00	-	-
Maintenance Manager	-	-	-	1.00	1.00
Engineering Supervisor	-	-	1.00	1.00	1.00
Maintenance Superintendent	-	-	1.00	1.00	1.00
Senior Engineer	-	-	2.00	3.00	3.00
Engineer	-	-	3.00	4.00	4.00
Maintenance Supervisor	-	-	6.00	7.00	7.00
Associate Engineer	-	-	1.00	2.00	2.00
Maintenance Specialist	-	-	5.00	5.00	5.00
Lead Electrical Technician	-	-	3.00	3.00	3.00
Lead Instrumentation Technician	-	-	1.00	1.00	1.00
Maintenance Planner/Scheduler	-	-	3.00	4.00	4.00
Reliability Maintenance Technician	-	-	4.00	6.00	6.00
Electrical Technician II	-	-	7.00	7.00	7.00
Instrumentation Technician II	-	-	6.00	5.00	5.00
Lead Mechanic	-	-	2.00	2.00	2.00
Machinist	-	-	1.00	1.00	1.00
Administrative Assistant	-	-	1.00	1.00	1.00
Senior Mechanic	-	-	17.00	17.00	17.00
Welder/Fabricator	-	-	3.00	3.00	3.00
Lead Facilities Worker	-	-	1.00	1.00	1.00
Electrical Technician I	-	-	1.00	1.00	1.00
Instrumentation Technician I	-	-	3.00	3.00	3.00
Facilities Worker/Builder	-	-	3.00	2.00	2.00
Facilities Worker/Painter	-	-	2.00	1.00	1.00
Mechanic	-	-	1.00	1.00	1.00
Maintenance Worker	-	-	3.00	2.00	2.00
Total Plant No. 1 Maintenance	-	-	82.00	85.00	85.00



# Historical Staffing Detail

Division & Position	Authorized FTEs 2013-14	Authorized FTEs 2014-15	Proposed FTEs 2015-16	Authorized FTEs 2016-17	Proposed FTEs 2017-18
<b>880 Plant No. 2 Maintenance</b>					
Maintenance Superintendent	-	-	1.00	1.00	1.00
Maintenance Supervisor	-	-	5.00	5.00	5.00
Lead Electrical Technician	-	-	2.00	2.00	2.00
Lead Instrumentation Technician	-	-	2.00	2.00	2.00
Electrical Technician II	-	-	6.00	6.00	6.00
Instrumentation Technician II	-	-	7.00	6.00	6.00
Lead Mechanic	-	-	2.00	2.00	2.00
Administrative Assistant	-	-	1.00	-	-
Senior Mechanic	-	-	15.00	14.00	14.00
Lead Facilities Worker	-	-	-	1.00	1.00
Electrical Technician I	-	-	1.00	1.00	1.00
Instrumentation Technician I	-	-	1.00	-	-
Facilities Worker/Builder	-	-	-	1.00	1.00
Facilities Worker/Painter	-	-	-	1.00	1.00
Mechanic	-	-	1.00	1.00	1.00
Maintenance Worker	-	-	2.00	2.00	2.00
<b>Total Plant No. 2 Maintenance</b>	-	-	46.00	45.00	45.00
<b>890 Environmental Laboratory and Ocean Monitoring</b>					
Environmental Lab & Ocean Monitoring Manager	1.00	1.00	1.00	-	-
Environmental Supervisor	1.00	1.00	1.00	-	-
Laboratory Supervisor	2.00	2.00	2.00	-	-
Senior Scientist	3.00	3.00	3.00	-	-
Scientist	1.00	1.00	1.00	-	-
Principal Environmental Specialist	2.00	2.00	2.00	-	-
Principal Laboratory Analyst	6.00	6.00	6.00	-	-
Senior Environmental Specialist	6.00	6.00	6.00	-	-
Boat Captain	1.00	1.00	1.00	-	-
Senior Laboratory Analyst	10.00	10.00	10.00	-	-
Environmental Specialist	1.00	1.00	1.00	-	-
Laboratory Analyst	3.00	3.00	3.00	-	-
Administrative Assistant	1.00	1.00	1.00	-	-
Laboratory Assistant	3.00	3.00	3.00	-	-
<b>Total Environmental Laboratory and Ocean Monitoring</b>	41.00	41.00	41.00	-	-
<b>Total Operations &amp; Maintenance Department</b>	<b>283.00</b>	<b>284.00</b>	<b>294.00</b>	<b>279.00</b>	<b>279.00</b>
<b>Grand Total, All Departments*</b>	<b>624.00</b>	<b>624.00</b>	<b>624.00</b>	<b>627.00</b>	<b>627.00</b>

*\*FTE totals exclude Management Discretion positions that are authorized but used only on a temporary basis to facilitate the replacement of key positions. There are a total of three (3) Management Discretion positions proposed for FY 2016-17 and 2017-18; however, total filled positions will not exceed 627 FTEs at any point in time.*

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## **2016-17 & 2017-18 Budget**

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# Appropriations Limit

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## **Appropriations Limit**

Article XIII B of the California State Constitution, more commonly referred to as the Gann Initiative or Gann Limit, was adopted by California voters in 1980. The Gann Limit placed limits on the amount of proceeds of taxes that state and local governmental agencies can receive and appropriate (authorize to spend) each year.

The limit is different for each agency and the limit changes each year. The annual limit is based on the amount of tax proceeds that were authorized to be spent in fiscal year 1978-79 in each agency, modified for changes in inflation and population in each subsequent year.

Proposition 111 was passed by the State's voters in June 1990. This legislation made changes to the manner in which the Appropriations Limit is to be calculated:

The annual adjustment factors for inflation and population have been changed. Instead of using the lesser of California per capita income, or U.S. CPI, each agency may choose either the growth in the California per capita income, or the growth in assessed valuation due to new non-residential construction within the district. For population, instead of using only the population growth of an agency, each agency may choose to use the population growth within its county. These are both annual elections.

The revised annual adjustment factors will be applied to the 1986-87 limit for most agencies and each year in between in order to calculate the 1990-91 limit. The actual limits for the intervening years, however, are not affected.

Expenditures for "qualified capital outlay", which are capital assets with a value of more than \$100,000 and an expected life of 10 years or more, are excluded from the limit.

An agency which exceeds the limit in any one year may choose to not give a tax refund if they fall below the limit in the next fiscal year. They then have two more years to refund any remaining excess or to obtain a successful override vote.

In certain situations, proceeds of taxes may be spent on emergencies without having to reduce the limit in future years.

Each agency also conducts a review of its Appropriations Limit during its annual financial audit.

The law requires a governing body to annually adopt, by resolution, an appropriations limit for the following year, along with a recorded vote regarding which of the annual adjustment factors have been selected. The Orange County Sanitation District's appropriations limit and annual adjustment factors are adopted at the same meeting as the budget. The adjustment factors used for 2016-17 are the weighted average change in city population and the change in state per capita personal income.

The following table shows the annual appropriations limit for each of the last two years and the appropriations limit and the appropriations, or proceeds from taxes, for 2016-17. The increase in the limit is based upon population changes ranging from 0.18% to 2.16% for major cities within the District as provided by the State Department of Finance and a per capita personal income change of 5.37% as provided by the State Department of Finance.

### Annual Appropriation Limits:

2014-15	\$91,302,000
2015-16	\$95,684,000
2016-17	\$101,767,000

### Proceeds of Taxes (Appropriations)

2016-17	\$16,833,000
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As a result of the July 1998 consolidation of the District, a single limit is presented in contrast to individual limits shown in years prior to 1998. Population changes for representative cities have continued to be used in order to ensure consistency and to eliminate significant population growth in parts of the County outside of the District's service area. This method results in a lower limit than using the County-wide change.

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# 2016-17 & 2017-18 Budget

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## Budget Glossary

### **Accounting System:**

The set of records and procedures which are used to record, classify, and report information on the financial status and operations of an entity.

### **Accrual Basis Accounting:**

Under this accounting method, transactions are recognized when they occur, regardless of the timing of related cash receipts and disbursements.

### **Administrative and Clerical:**

An employee group that provides administrative and clerical support.

### **Ad Valorem Taxes:**

The District's allocated share of the property taxes assessed by the County representing a 2% annual increase in assessed values of property taxes.

### **Annual Budget:**

A budget applicable to a single fiscal year.

### **Appropriation Ordinance:**

The official legal document approved by the District's Board of Directors authorizing officials to obligate and expend resources.

### **Appropriation:**

An authorization made by the District's Board of Directors which permits officials to incur obligations against and to make expenditures of governmental resources. Operating appropriations are typically granted for a one-year period.

### **AQMD:**

Air Quality Management District. See also SCAQMD.

### **Assessed Valuation:**

The estimated value of real and personal property used by the Orange County Assessor as the basis for levying property taxes.

### **Balanced Budget:**

A budget in which the sum of estimated net revenues and appropriated fund balances is equal to appropriations.

### **Biennial Budget:**

A budget applicable to two individual fiscal years.

### **Biosolids:**

Treated sewage sludge that meets the USEPA pollutant and pathogen requirements for land application as an agricultural soil conditioner or surface disposal.

### **BLAST:**

A District program that stands for Building Leaders, Abilities and Skills for Tomorrow. The BLAST program is an employee designed leadership development program that aims to provide training and opportunities for staff at levels of the organization to develop themselves as leaders

### **Budget Document:**

The official financial spending and resource plan submitted by the General Manager, adopted by the Board of Directors, and made available to the public and other interested parties.

### **Budget Message:**

A written explanation by the General Manager of the proposed budget. The budget message explains principal budget and policy issues and presents an overview of the General Manager's budget recommendations.

### **Budget Calendar:**

The schedule of key dates which the District follows in preparing and adopting the budget.

### **Capital Facilities Capacity Charge:**

A one-time, nondiscriminatory charge imposed at the time a building or structure is newly connected to the District's system, directly or indirectly, or an existing structure or category of use is expanded or increased. This charge is to pay for District facilities in existence at the time the charge is imposed, or to pay for new facilities to be constructed in the future, that are of benefit to the property being charged. This charge does not apply to temporary facilities.

### **Capital Improvement Program:**

A plan over a period of five years setting forth each capital project, the amount to be expended in each year, and the method of financing capital expenditures.

### **Capital Outlay:**

Cash outlays which result in the acquisition of or additions to capital assets. Examples include land, buildings, machinery, equipment, and other improvements.

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# Budget Glossary

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**Capital Assets:**

Assets of significant value which have a useful life of several years. Examples are land, buildings, other improvements, machinery, and equipment.

**Cash Basis Accounting:**

A basis of accounting under which transactions are recognized only when cash is received or disbursed.

**CCTV:**

Closed-circuit television (CCTV), also known as video surveillance, is technology often used by the OCS&D to inspect and document the condition of underground sewer lines.

**CEQA:**

California Environmental Quality Act, is a statute that requires state and local agencies to identify the significant environmental impacts of their actions and to avoid or mitigate those impacts, if feasible.

**Certificates of Participation (COPs):**

A type of debt financing in which certificates are issued which represent an investor's participation in the stream of lease payments paid by the issuer. COPs are secured by the lease payments. Voter approval is not required prior to issuance.

**Comprehensive Annual Financial Report (CAFR):**

The official financial report of a government. It includes an audit opinion as well as basic financial statements and supporting schedules necessary to demonstrate compliance with legal and contractual requirements of the District.

**Contingency:**

A budgetary reserve set aside for emergencies or unforeseen expenditures not otherwise budgeted.

**Contingent Liabilities:**

Items which may become liabilities of the District but are undetermined at a given date, such as pending law suits, unsettled disputed claims, unfilled purchase orders, and uncompleted contracts.

**Contractual Services:**

Personal services provided to the District from the private sector or other public agencies.

**CRWQCB:**

California Regional Water Quality Control Board.

**Debt Service:**

Payment of interest and repayment of principal to holders of the District's debt instruments.

**Decision Package:**

A standardized format whereby departments may request budgetary consideration for new programs, positions, capital equipment, and position reclassification.

**Deficit:**

The excess of an entity's liabilities over its assets.

**Engineers:**

A professional engineers/employee group.

**Enterprise Fund:**

In governmental accounting, a fund that provides goods or services to the public for a fee that makes the entity self-supporting.

**Executive Manager:**

The group of employees which head each department.

**Expenditures / Expenses:**

Where accounts are kept on the accrual basis of accounting, expenses are recognized when goods are received or services rendered. Where accounts are kept on a cash basis, expenditures are recognized only when the cash payments are made.

**FEMA:**

Federal Emergency Management Agency. This agency provides federal grant monies for disaster relief.

**Fiscal Year:**

A 12-month period to which the annual operating budget applies and at the end of which a government determines its financial position and results of its operations. The District's fiscal year runs from July 1 - June 30.

**Five-Year Financial Forecast:**

Estimates of future revenues and expenditures to help predict the future financial condition of the community.

**FLSA:**

The Fair Labor Standards Act sets minimum wage, overtime pay, equal pay, and Child Labor Standards to private and public sector employees. Enforcement of the FLSA is assigned to the Department of Labor (DOL), Wage and Hour Division.

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## 2016-17 & 2017-18 Budget

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### **Full-Time Equivalents (FTE):**

The amount of time a regular, full-time employee normally works in a year. For example, a full-time employee (1 FTE) is budgeted to work 2,080 hours per year, while a .5 FTE is budgeted to work 1,040 hours per year.

### **Fund:**

An independent fiscal and accounting entity with a self-balancing set of accounts recording cash and/or other resources together with all related liabilities, obligations, reserves, and equities.

### **Fund Accounting:**

System used by nonprofit organizations, particularly governments. Since there is no profit motive, accountability is measured instead of profitability. The main purpose is stewardship of financial resources received and expended in compliance with legal requirements.

### **Fund Equity:**

The excess of an entity's assets over liabilities.

### **General Obligation Bonds:**

Bonds for which the full faith and credit of the insuring government are pledged for payment. Ad valorem property taxes are pledged to pay the bonds. A two-thirds voter approval is required prior to bond issuance.

### **Generally Accepted Accounting Principles (GAAP):**

Uniform standards for financial accounting and reporting. They govern the form and content of the basic financial statements of an entity.

### **Government Finance Officers Association (GFOA):**

A nonprofit, professional association, serving over 18,000 government finance professionals through the United States and Canada.

### **GFOA's Best Practices and Advisories:**

A listing of the Accounting, Auditing, and Financial Reporting, Treasury and Investment Management, Budgeting and Fiscal Policy, Debt Management, Retirement and Benefits Administration, and Economic Development and Capital Planning practices identified as contributing to improved government management by the Government Finance Officers Association of the United States and Canada.

### **GFOA's Distinguished Budget Presentation Award Program:**

The only national awards program in governmental budgeting. It represents a significant accomplishment in meeting the highest principles of governmental budgeting and satisfying nationally recognized guidelines for effective budget presentation.

### **Groundwater Replenishment System (GWRS):**

A joint project by the Orange County Water District (OCWD) and the District, the GWRS reclaims up to 100 million gallons a day of the District's secondary effluent. GWRS is the world's largest water purification system for indirect potable reuse. The system takes highly treated wastewater that would have previously been discharged into the Pacific Ocean and purifies it using a three-step advanced treatment process consisting of microfiltration, reverse osmosis and ultraviolet light with hydrogen peroxide. The process produces high-quality water that meets or exceeds all state and federal drinking water standards.

### **Improvements:**

Buildings, structures, or attachments to land such as sidewalks, trees, drives, tunnels, drains and sewers.

### **Interest:**

Revenue derived from the investment of idle cash and/or reserves.

### **Intergovernmental Services:**

Purchases from other governments of those specialized services typically performed by local governments.

### **Intergovernmental Revenue:**

Revenue received from other governmental agencies and municipalities.

### **IRWD:**

Irvine Ranch Water District is a California Special District formed in 1961 and incorporated under the California water code. IRWD provides potable water, sewer service and reclaimed (or recycled) water to its customers in Irvine and portions of Costa Mesa, Lake Forest, Newport Beach, Orange, Tustin and unincorporated areas of Orange County.

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# Budget Glossary

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**Levy:**

(Verb) To impose taxes, special assessments, or service charges for the support of governmental activities. (Noun) The total amount of taxes, special assessments, or service charges imposed by a government levying property taxes.

**Long-Term Debt or Long-Term Liabilities:**

Debt borrowed from a source outside the District with a maturity of more than one year after the date of issuance.

**Maintenance Employees:**

An employee group of the District.

**Manager Employees:**

The group of employees who assume management responsibilities for operating divisions.

**MGD:**

Million Gallons per Day is a measurement of water or wastewater flow.

**NPDES (National Pollution Discharge Elimination System):**

Permit system established by the U.S. Environmental Protection Agency to regulate discharge of treated sewage, storm water, and urban runoff.

**Object:**

An expenditure classification which refers to the type of item purchased or the service obtained. Examples include personnel, supplies, or contract services.

**OCWD:**

The Orange County Water District (OCWD) is a California special district that manages the groundwater basin beneath central and northern Orange County, California.

**OES:**

State Office of Emergency Services. This agency provides state grant monies for disaster relief.

**Operating Engineers:**

An employee group of the District.

**Operating Budget:**

The operating budget is the primary means by which most of the financing of acquisition, spending, and service delivery activities of a government are controlled.

**Other Revenues:**

Revenues from sources, other than those specifically identified, that are immaterial in amount and do not justify reporting as separate line items.

**Other Charges:**

Expenditures that do not fit in other categories, are immaterial in amount, and do not justify reporting as separate line items.

**Performance Measure:**

Represents the objectives of each department along with a target date for achieving the objective.

**Performance Results:**

A summary of major accomplishments and objectives that were met during the fiscal year.

**Permits:**

Revenues earned by the issuance of permits levied in accordance with the benefits conferred by the permit.

**Personnel:**

Salaries and benefits paid to the District's employees. Included are items such as special duty pay, insurance, and retirement.

**Personnel Benefits:**

Those benefits paid by the District as conditions of employment. Examples include insurance and retirement benefits.

**Professional Employees:**

An employee group consisting of technical experts, analysts, and planners.

**Program:**

Organizational units directed to attain specific purposes or objectives.

**Reserve:**

A term used to indicate that a portion of fund equity is restricted for a specific purpose.

**Resources:**

Total dollars available for appropriations including estimated revenues and beginning fund equity.

**Revenue Bonds:**

Bonds issued pledging future revenues such as sewer charges to cover debt payments. A majority voter approval is required prior to bond issuance.

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## 2016-17 & 2017-18 Budget

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### **Revenue Estimate:**

A formal estimate of how much revenue will be earned from a specific revenue source for some future period, typically a fiscal year.

### **Revenue:**

Income received by the District to support wastewater treatment services. This income may be in the form of property taxes, fees, user charges, grants, and interest.

### **Risk Register:**

The Risk Register is a compilation of the various risks facing the District, as seen by the District's management team.

### **Service Charges:**

Charges for specific services rendered.

### **Service Description:**

A description of the services or functions provided by each department or division.

### **SCADA (Supervisory Control And Data Acquisition):**

A system for remote monitoring and control that operates with coded signals over communication channels.

### **SCAQMD:**

The South Coast Air Quality Management District, also using the acronym SCAQMD, formed in 1976, is the air pollution agency responsible for regulating stationary sources of air pollution in the South Coast Air Basin, in Southern California.

### **Significant Changes:**

This section provides an overview of the changes adopted in the budget. Additionally, the significant impacts of budgetary changes are outlined (Budget Impact) along with dollar amounts (Increase/Decrease).

### **Strategic Goals:**

District-wide goals that demonstrate the District's long-term commitment to excellence and that establish the framework necessary to maintain the District's high level of service standards.

### **Strategic Plan:**

A planning effort to define the District's goals, responsibilities, and requirements over a specified future period. Key factors used in the planning effort include estimates for population growth, new construction, the volume of wastewater delivered to the plants, and viable water conservation and reclamation programs.

### **Supervisory Employees:**

An employee group whose members have responsibility for directing the work of line employees.

### **Supplemental Appropriation:**

An appropriation approved by the Directors after the initial budget is adopted.

### **Supplies:**

An expenditure classification for articles and commodities purchased for consumption or resale. Examples include office and operating supplies, fuel, power, water, gas inventory, or small tools and equipment.

### **SWRCB:**

The California State Water Resources Control Board (SWRCB) is one of six branches of the California Environmental Protection Agency.

### **Taxes:**

Compulsory charges levied by a government for the purpose of financing services performed for the common benefit.

### **Technical Services:**

Support services to the District's wastewater management program through environmental sampling, analysis and research, source control of industrial users, administration of compliance programs to meet federal, state and local environmental standards; provides leadership and influence in the development and implementation of environmental policies, laws, and regulations.



# Miscellaneous Statistics

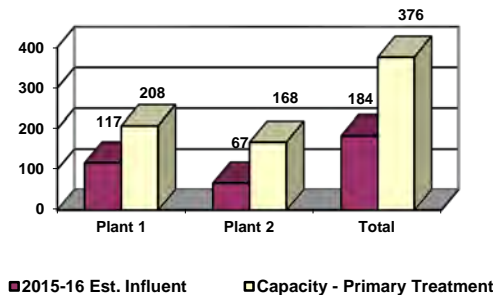
## General Information

Year of Formation ..... 1948  
 Form of Government..... County Sanitation District  
 Authority..... Section 4700 et. seq.  
 .....California Health & Safety Code  
 Service Area..... 479 sq. miles  
 Service Population ..... Approximately 2.6 million  
 2015-16 Assessed Value..... \$372.2 billion

Miles of Sewers..... 570 miles  
 On-Plant Pump Station.....2  
 Off-Plant Pump Stations ..... 15  
 Operating Authority .....RWQCB/NPDES Permit No.  
 .....CA0110604  
 .....Statewide WDR Order No. 2006-0003  
 Authorized Staff (Full-Time Equivalent) .....627.00

## Treatment Information

**Daily Influent Flow to Total Primary Capacity Comparison (in MGD)**



### 2014-15 Influent BOD:

Plant No. 1 ..... 300 milligrams per liter  
 Plant No. 2 ..... 260 milligrams per liter

### 2014-15 Influent Suspended Solids:

Plant No. 1 ..... 357 milligrams per liter  
 Plant No. 2 ..... 327 milligrams per liter

2014-15 Effluent BOD..... 9 milligrams per liter

2014-15 Effluent Suspended Solids.... 6 milligrams per liter

2014-15 Biosolids Produced & Reused .. 275,968 wet tons

### Primary Treatment Capacity (includes standby):

Plant No. 1 .....208 MGD  
 Plant No. 2 .....168 MGD  
 TOTAL .....376 MGD

### 2015-16 Estimated Average Daily Influent:

Plant No. 1 ..... 117 MGD  
 Plant No. 2 .....67 MGD  
 TOTAL .....184 MGD

### Secondary Treatment Capacity:

Plant No. 1 .....182 MGD  
 Plant No. 2 .....150 MGD  
 TOTAL .....332 MGD

### 2015-16 Estimated Electricity Generated:

Plant No. 1 .....22,967,000 kwh  
 Plant No. 2 .....28,968,000 kwh  
 TOTAL.....51,935,000 kwh

### Legend:

MGD – million gallons per day  
 kwh – kilowatts per hour

## Financial Information

	2014-15 Actual	2015-16 Projected	2016-17 Proposed	2017-18 Proposed
<b>Fees and Charges:</b>				
One-Time 3-Bedroom Residence Connection	\$3,588.00	\$3,588.00	\$3,710.00	\$3,710.00
Average Annual Single-Family Residence Fee	\$316	\$322	\$327	\$331
Local SRF Fee	\$216	\$216	\$216	\$108
District's Avg. Share of Ad Valorem Property Tax	1.80%	1.80%	1.80%	1.80%
Cost to Collect, Treat, & Dispose of One Million Gallons	\$2,070.97	\$2,099.42	\$2,167.44	\$2,219.24

### Summary of COP Issues:

May 2007A Refunding	\$ 91,885,000	February 2012A Refunding	100,645,000
December 2007B New Money	7,110,000	August 2012B Refunding	66,395,000
September 2008B New Money	8,815,000	August 2014A Refunding	85,090,000
April 2009A New Money	13,405,000	October 2014B Refunding	120,850,000
May 2010A New Money	80,000,000	February 2015A Refunding	127,510,000
November 2010C New Money	157,000,000	March 2016A Refunding	145,880,000
September 2011A Refunding	111,465,000	Total Outstanding COP Balance 7/1/16	<u>\$ 1,116,050,000</u>

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# 2016-17 & 2017-18 Budget

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## ORANGE COUNTY SANITATION DISTRICT

Estimated Population Served by the  
Orange County Sanitation District

	<b>Population as of <u>January 1, 2016</u></b>
Anaheim	358,136
Brea	43,710
Buena Park	83,347
Costa Mesa	114,603
Cypress	49,743
Fountain Valley	56,714
Fullerton	142,457
Garden Grove	177,303
Huntington Beach	195,212
Irvine	258,386
La Habra	62,064
La Palma	16,057
Los Alamitos	11,738
Newport Beach	84,270
Orange	141,420
Placentia	52,263
Santa Ana	342,930
Seal Beach	25,078
Stanton	39,751
Tustin	82,717
Villa Park	5,948
Westminster	94,073
Yorba Linda	<u>67,637</u>
Subtotal Cities <sup>(1)</sup>	2,505,557
Estimated Population Served in Unincorporated Areas <sup>(2)</sup>	<u>72,822</u>
	<u><u>2,578,379</u></u>

**Data Source:**

(1) Demographic Research Unit, State of California Department of Finance

(2) Center for Demographic Research, California State University, Fullerton.

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