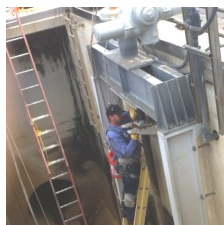
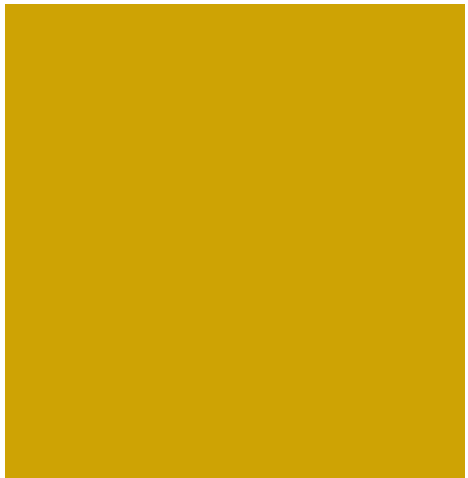
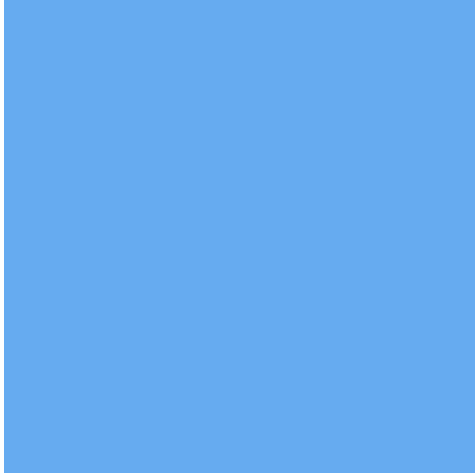




**ADOPTED**  
OPERATING  
AND  
CAPITAL BUDGET  
JULY 1, 2017 — JUNE 30, 2018



**CMSA ADOPTED BUDGET  
FISCAL YEAR 2017-2018: JULY 1, 2017 – JUNE 30, 2018**

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# **Central Marin Sanitation Agency**

## **Budget Acknowledgements**

### **Board of Commissioners**

Diane Furst, Chair

Thomas Gaffney, Vice Chair

Albert Boro, Secretary

Maribeth Bushey, Commissioner

Michael Boorstein, Commissioner

Dan Hillmer, Commissioner

### **Executive Team**

Jason R. Dow, P.E., General Manager

Loren Chris Finton, Treatment Plant Manager

Kenneth Spray, CPA, Administrative Services Manager

Brian Thomas, P.E., Technical Services Manager

### **Finance Team**

Heidi Lang, Financial Analyst

Ahn Ta, Personnel & Accounting Technician

Kate Brouillet, Administrative Assistant

**[www.cmsa.us/finance](http://www.cmsa.us/finance)**



GOVERNMENT FINANCE OFFICERS ASSOCIATION

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For the Fiscal Year Beginning

**July 1, 2016**

*Jeffrey R. Enos*

Executive Director



## **Message from the General Manager**

On behalf of the Board of Commissioners and staff of the Central Marin Sanitation Agency (CMSA), I am pleased to present the Agency's Fiscal Year 2017-18 (FY 18) Budget. This budget serves as the financial plan for FY 18, and details the resource requirements and costs associated with providing safe, effective, and environmentally sound wastewater services to approximately 105,000 residents, businesses, and institutions of Central Marin County. All the financial documents referenced in this document are available online at [www.cmsa.us/finance](http://www.cmsa.us/finance).

This is the Agency's seventh comprehensive budget using Government Finance Officers Association (GFOA) presentation guidelines. Our goal is to prepare high quality budgets and financial documents that are readily accessible and easily understandable to CMSA's Joint Powers Authority (JPA) members and ratepayers, customers, stakeholders, regulators, and other interested parties.

## **Achieving Outstanding Performance Past, Present, and into the Future**

Since 1985, CMSA has operated a regional wastewater treatment facility that receives, cleans, and discharges wastewater, and beneficially reuses biosolids that are collected from households and businesses within the Central Marin County, California service area. CMSA strives for, and will continue to maintain or exceed, high industry standards in all aspects of its business and operations. The Agency's high performance has been recognized by national, state, and regional industry groups in key areas:

- Achieved 100 percent compliance with the Environmental Protection Agency's National Pollutant Discharge Elimination System (NPDES) permit requirements for twelve consecutive years, through calendar year 2016.
- Received recognition from the GFOA for Excellence in Financial Reporting for the Agency's Comprehensive Annual Financial Report (fifteen consecutive years), Outstanding Achievement in Popular Annual Financial Reporting (seven consecutive years) and the Distinguished Budget Presentation Award (six consecutive years).
- Garnered state-level recognition of first place from the California Water Environment Association (CWEA) for outstanding Public Education Program of the Year, Public Education Person of the Year, and Maintenance Repair Person of the Year.

- Recognized by the regional CWEA Redwood Empire Section for Treatment Plant, Safety Program, and Public Education Program of the Year, as well as recognizing three Agency employees for exceptional performance in their respective professions.

### **Major Agency Objectives for FY 18**

- Exceed all NPDES permit requirements.
- Deliver recycled water to the JPA wastewater collection agencies for sewer line flushing.
- Deliver excess generated power to the local electrical utility grid.
- Operate the treatment facilities to minimize odors and public complaints.
- Prepare an Agency-wide facilities master plan.
- Finish construction of the maintenance facility modifications and a new storage building.
- Implement the Agency's recently adopted FY 18 Strategic Business Plan.
- Develop a new Five-Year Revenue Plan for the fiscal years 2018-19 to 2022-23.
- Maintain a safe work environment and promote a culture of safety as measured by no incidents of employee lost time injuries.
- Maintain a high level of service to customers in our service area and other clients outside the service area who contract for Agency services.

### **FY 2017-18 Budget**

The Agency is committed to developing fiscally responsible and sustainable annual budgets, and planning for the future through developing 10-Year Financial Forecasts and Capital Improvement Programs (CIP) with each annual budget.

The FY 18 Budget includes an expected operating surplus of approximately \$532,000. The budget includes an operating revenue increase of 2.5%, and an expenditure decrease of 1% from the fiscal year 2017. Debt service revenues total nearly \$5.0 million, of which approximately \$990,000 comprises debt service coverage used for capital purposes. The Agency plans to expend approximately \$3.8 million on 33 capital improvement activities using funds accumulated in the restricted and unrestricted capital reserve accounts. Detailed discussions of the FY 18 Budget, the Capital Improvement Program, and the 10-Year Financial Forecast can be found in Sections 7, 8, and 9, respectively.

The main features of the FY 18 Budget are:

- Total Operating Revenues of \$12.6 million, consisting of \$12 million available for FY 18 operating expenditures and \$630,000 reserved for future capital projects.
- Application of a 36-month wastewater flow and strength methodology for the allocation of the regional sewer service charges to the JPA member agencies. The allocation is based on the JPA member's proportionate share of the 12,995 million gallons of wastewater treated by CMSA during the April 1, 2014 to March 31, 2017 period, along with 29.4 million pounds of Biological Oxygen Demand (BOD) and 44.6 million pounds of Total Suspended Solids (TSS) during the April 1, 2014 to March 31, 2017 period. The FY 18 regional sewer service and capital charges CMSA will receive from its JPA member agencies is almost \$500,000 more than FY 17, as scheduled in the Agency's current Five-Year Revenue Program.
- The Agency expects to receive approximately \$1.7 million in revenues from other sources; the largest single source is approximately \$0.75 million from the state of California for providing wastewater services to San Quentin State Prison.
- Debt Service of \$4.95 million, or \$95.16 per Equivalent Dwelling Units (EDU), in the combined service area.
- Total Operating Expenditures of nearly \$11.5 million, an overall decrease of 1% from FY 17. The main changes to the FY 18 budget are due to scheduled salary and benefit increases of approximately 2%, and decreases in chemicals and fuels and general and administrative expenses of approximately 7% and 13%, respectively.

### **Making Significant Capital Investments in the Agency's Infrastructure**

The treatment and disposal of wastewater and reuse of its by-products is a highly regulated enterprise that requires significant capital infrastructure. CMSA operates an around-the-clock wastewater facility, and the various fixed assets and equipment used in the treatment processes are subjected to heavy usage, sometimes under a challenging operating environment. Capital assets are used to move large volumes of wastewater through the treatment facilities and are subjected to constant contact with wastewater and various chemicals used in the treatment processes. Agency staff monitors new technologies and operational approaches, and evaluates those that may improve the treatment process, save energy, reduce chemical usage, minimize greenhouse gas emissions, and meet changing regulatory requirements. The maintenance, replacement, and addition of capital assets are an essential part of the Agency's Capital Improvement Program (CIP) and Budget.

In FY 17, the Agency completed several multi-year projects, such as relining the organic waste receiving facility's storage tank, replacement of primary and secondary clarifier sluice gates, completing a major overhaul of the cogeneration engine, rehabilitating the aeration system diffusers, and replacing chemical tanks, all totaling approximately \$535,000. Additionally, the



Agency continued work on its solids handling building ventilation system improvements, totaling to date approximately \$500,000, and the maintenance building modifications totaling to date approximately \$850,000. Also in progress is a multiyear project to prepare a Facilities Master Plan that will be used in part to update the 10-year CIP. Budgeted capital improvements for the FY 18 amount to approximately \$3.8 million.

The total cost of the planned CIP over the next ten years is approximately \$36 million. The 10-year CIP focuses on replacing and rehabilitating aging infrastructure and assets, implementing new projects to reduce energy use and greenhouse gas emissions, meeting regulatory objectives, and increasing energy self-sufficiency. CIP funding sources are from ongoing capital-related service charges, debt coverage charges, capacity fees, and capital reserves. By the end of the FY 18 the Agency will have accumulated approximately \$7.2 million in capital reserves to finance higher priority projects of the current 10-Year CIP. The Agency plans to address the remaining 10-Year CIP funding requirements and newly identified requirements from the Facilities Master Plan in the development of the Agency's next Five-Year Revenue Plan for the period from the fiscal year 2018-19 to the fiscal year 2022-23.

### **Sustainable Budgeting for the Future**

The Agency has pursued a number of budget initiatives over the past few years to achieve long-term budgetary sustainability and financial stability. One such initiative was a methodology change for the allocation of sewer service charges to JPA members resulting in equitable allocation based upon their respective wastewater flow and strength. Another initiative was to establish a Five-Year Revenue Plan to provide JPA members ample time to incorporate Agency revenue requirements into respective financial plans and rate increase processes. The Agency fixed its debt service cost allocation to the JPA members based upon their 10-year average dwelling unit counts to smooth fluctuations. Lastly, CMSA locked-in a five-year, \$8.7 million contract with the State of California to provide wastewater services to San Quentin Prison.

On the expense reduction side, the Agency previously retired \$1.5 million in pension obligations by paying off its CalPERS side fund that resulted in budget savings of approximately \$300,000 per year for seven years, with two years of this cycle remaining. The Agency's most recent labor negotiations with its two employee groups resulted in a six-year agreement with employee cost-sharing for their pension contributions to CalPERS. The Agency took advantage of historically low interest rates to advance refund debt to defease and retire original issue debt from 2006. This transaction resulted in total savings of \$12 million to our customers over the period from the fiscal year 2015-16 to the fiscal year 2031-32.

The focus for the FY 18 will be on developing the next Five-Year Revenue Plan for the fiscal years 2018-19 through 2022-23, to deliver surplus electricity generated by the Agency cogeneration system, and to supply recycled water for sewer line flushing.

## **Our People Make Us a High-Performing Agency**

CMSA is recognized as a high performance wastewater utility within Marin County and the San Francisco Bay Area, and we are sought out by local agencies to provide various wastewater and environmental services. The Agency continues to be recognized by state and national organizations in the areas of permit compliance, facility operations, safety, and financial reporting. I am privileged to work alongside 43 talented, experienced, and dedicated professionals.

On behalf of all the employees, I would like to express our thanks and appreciation to the CMSA Board of Commissioners for supporting the Agency's mission, vision, and goals and in securing the necessary resources to enable us to achieve a recognized level of high performance in safeguarding public health and the environment.

We hope that the FY 18 Budget will provide the reader with a thorough understanding of the sources and uses of Agency resources. We welcome your comments, feedback, and suggestions for improving future budget publications.

Respectfully,

A handwritten signature in blue ink, appearing to read "J.R. Dow". The signature is fluid and cursive, with a large initial "J" and "D".

Jason R. Dow, P.E.  
General Manager

## **SECTION 1. ORGANIZATION**

### **Formation History and Organization**

Faced with wastewater collection and treatment challenges unique to Central Marin County and the need to meet the 1972 Federal Clean Water Act and subsequent State Water Code requirements, Sanitary Districts No. 1 (SD #1) and No. 2 (SD #2) of Marin County, the City of Larkspur (LARK), and the San Rafael Sanitation District (SRSD) united in 1979 to form a joint powers authority (JPA) and created the Central Marin Sanitation Agency (CMSA). San Quentin State Prison (SQSP), which represents the largest single customer of wastewater treatment services in the combined service area, opted not to join the JPA. The treatment facilities were constructed at a cost of \$84 million and were funded by federal (75%) and state (12.5%) clean water grants and local contributions (12.5%) from the four local wastewater agencies and SQSP. The CMSA wastewater treatment facility, the largest in Marin County, became operational in January 1985.

CMSA's governing body is a six-member Board of Commissioners (Board), appointed by the JPA members. Each JPA member determines the term for its appointed representative(s). SRSD and SD #1 each have two members on the Board, while LARK and SD #2 each have one.

The Board sets policy and adopts the annual budget for CMSA, and appoints the General Manager and Treasurer/Controller. The General Manager is the chief executive officer and the Treasurer/Controller is responsible for all financial operations.

### Agency Officials as of July 1, 2017

#### Board of Commissioners (year appointed):

Diane Furst, Chair, Sanitary District No. 2 (December 2014)  
Thomas Gaffney, Vice-Chair, Sanitary District No. 1 of Marin County (July 2016)  
Al Boro, Secretary, San Rafael Sanitation District (February 1990)  
Maribeth Bushey, Commissioner, San Rafael Sanitation District (January 2014)  
Michael Boorstein, Commissioner, Sanitary District No. 1 of Marin County (July 2016)  
Dan Hillmer, Alternate, City of Larkspur (October 2010)

#### Agency Managers (tenure):

Jason R. Dow, P.E., General Manager (employee since 1993, General Manager since 2002)  
Loren Chris Finton, Treatment Plant Manager (employee since 1997, Manager since 2010)  
Kenneth Spray, CPA, Administrative Services Manager (Manager since 2017)  
Brian Thomas, P.E., Technical Services Manager (Manager since 2013)

## Employees, Service Achievements, and Recognitions

The authorized staffing level for CMSA is 43 full-time positions, including a Health & Safety Manager position whose salary and benefit costs are shared with one other wastewater agency in Marin County. Characteristics of the workforce:

- 43 authorized positions
- Average age 45.8 years old
- Average length of service is 9.5 years
- 13 employees with over 10 years of service
- 30% of the current employees meet the minimum requirements for retirement benefits from the California Public Employees Retirement System

The exceptional dedication, experience and caliber of the workforce are reflected in the service achievements and recognitions that have been received by the Agency over the years. Below is a summary of the significant accomplishments and the most recent industry awards that have accompanied these accolades.

- **Record of Regulatory Compliance:** Recognition by the National Association of Clean Water Agencies (NACWA) with the 10-year Platinum Peak Performance Award (2005-2015). The award recognizes the achievement of obtaining 100% compliance with the National Pollutant Discharge Elimination System (NPDES) permit requirements for eleven consecutive calendar years. NACWA annually recognizes excellent performance at wastewater utilities through its Peak Performance Awards program. Less than two percent of all wastewater treatment facilities nationally have achieved NACWA Platinum Award status.
- **Certificate of Achievement for Excellence in Financial Reporting:** Recognition from the Government Finance Officers Association (GFOA) for the Agency's FY 2015-16 Comprehensive Annual Financial Report (CAFR). The Certificate of Achievement is the highest form of recognition in governmental accounting and financial reporting and its attainment represents a significant accomplishment by a governmental entity. This marks the fifteenth consecutive year that the Agency's CAFR has met the high standards of the GFOA for governmental accounting and financial reporting. The Agency continually strives to comply with GFOA guidelines and recommendations. All its financial reports—from the Annual Budget, Annual Financial Statements, and CAFR reports to the monthly Treasurer's, Investment and Quarterly Budget Status Reports—are transparent representations of the Agency's financial operations. Each of aforementioned reports are presented to the Board for review and acceptance and are posted on the Agency's website [www.cmsa.us/finance](http://www.cmsa.us/finance).

- **Award for Outstanding Achievement in Popular Annual Financial Reporting:** Recognition from the GFOA for the Agency’s FY 2015-16 Popular Annual Financial Report (PAFR). The PAFR Award is a prestigious national award recognizing conformance with the highest standards for preparation of state and local government popular reports. The PAFR is specifically designed to be readily accessible and easily understandable to the general public and other interested parties who do not have a background in public finance. This marks the seventh consecutive year that the Agency’s PAFR has met the high standards of the GFOA for governmental accounting and financial reporting.
- **Distinguished Budget Presentation Award:** Recognition from GFOA for the Agency’s FY 2016-17 Adopted Budget. The award is the highest form of recognition in governmental budgeting and its attainment represents a significant accomplishment by a governmental entity. The GFOA encourages public entities to prepare budget documents that fully explain the agency’s business, are transparent, and are designed to be readily accessible to the general public and other interested parties. The Budget Award deems the Agency’s Budget to be proficient as a policy document, financial plan, operational guide, and communication device for the Agency’s business. This marked the sixth consecutive year that the Agency’s budget has met the high standards of the GFOA for budget presentation.
- **State-level Awards from the California Water Environment Association (CWEA):** Recipients of Regional CWEA Awards (below) became eligible for consideration for state level CWEA recognition. In March 2017, the Agency was recognized by CWEA at the state level for the following achievements:

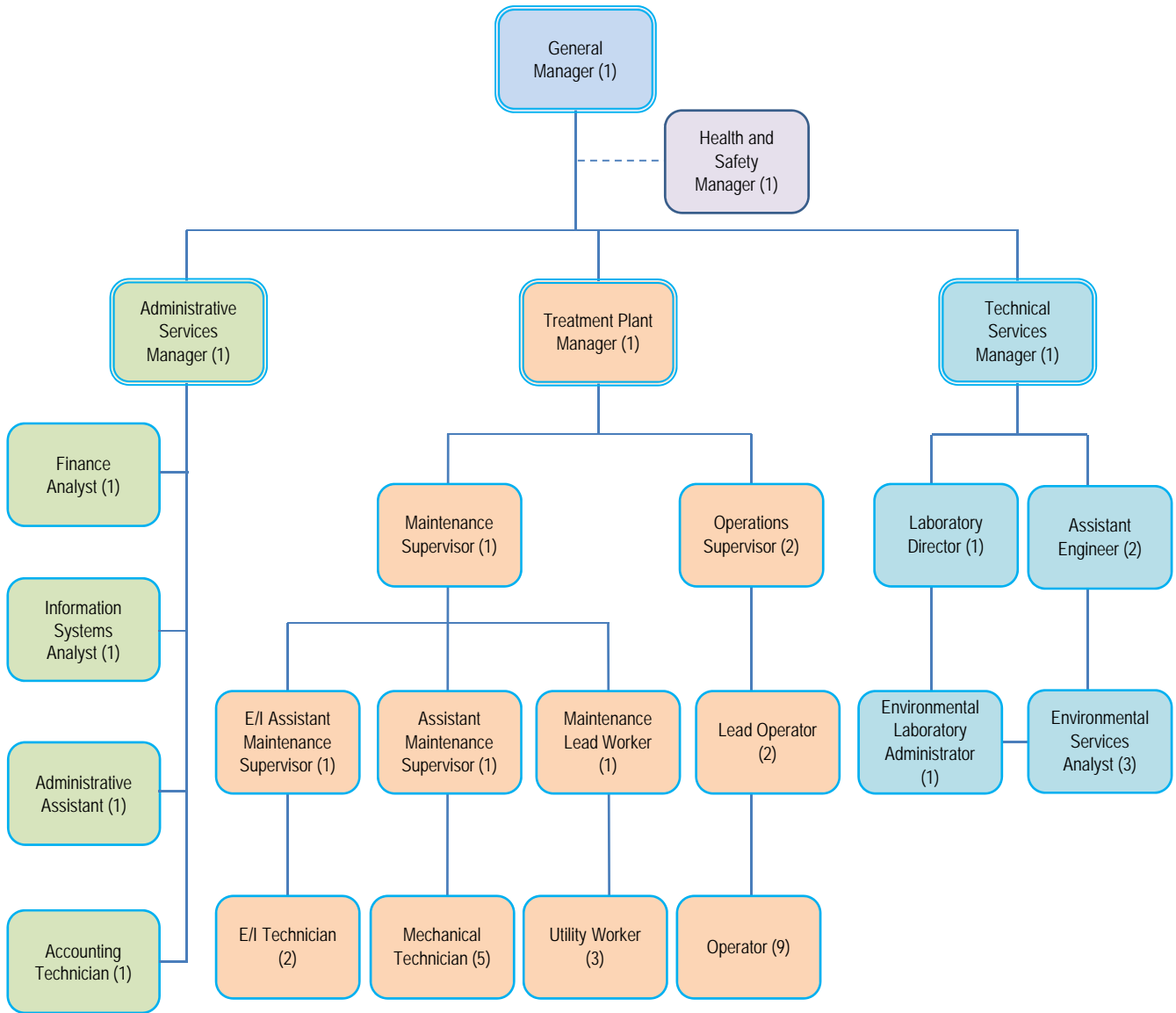
  - First Place - Community Engagement & Outreach: Wastewater Treatment Agencies of Marin for the cooperative public education program
  - First Place - Safety Program of the Year (25-75 employees)
  - First Place - Electrical Instrumentation Person of the Year, Jon Farr
  - Second Place - Community Engagement and Outreach Person of the Year, Gretchen Mueller
  - Second Place – Research Achievement of the Year: Biogas Study by Cal State Fullerton
  - Third Place – Treatment Plant of the Year (Medium size)
  - Third Place – Newsletter of the Year
- **Redwood Empire Section CWEA Awards:** In November 2016, Redwood Empire Section of the California Water Environment Association (CWEA) recognized the Agency for outstanding work in the disciplines listed below.

  - Treatment Plant of the Year (Medium size)
  - Engineering Achievement of the Year – Chemical Storage Room Rehabilitation Project
  - Newsletter of the Year

- Safety Program of the Year (25-75 employees)
- Community Engagement & Outreach: Wastewater Treatment Agencies of Marin for the cooperative public education program
- Abraham Clark for Operator-in-Training Murray McKinney Award
- Anthony Smith for Mechanical Technician of the Year
- Jose Gutierrez for Pretreatment, Pollution Prevention, and Stormwater (P3S) person of the Year
- Gretchen Mueller for Community Engagement and Outreach Person of the Year
- Rob Cole for Research Achievement of the Year (Biogas Study by Cal State Fullerton)



# CENTRAL MARIN SANITATION AGENCY



43 FULL TIME EQUIVALENT (FTE)  
EMPLOYEES  
July 1, 2017

**CMSA Authorized Staff Positions****FY 16****FY 17****FY 18****ADMINISTRATION**

General Manager	1	1	1
Administrative Assistant	1	1	1
Treatment Plant Manager	1	1	1
Administrative Services Manager	1	1	1
Financial Analyst	1	1	1
Personnel and Accounting Technician	1	1	1
Information Systems Analyst (Transferred from Engineering)	-	-	1
<b>Total Administration</b>	<b>6</b>	<b>6</b>	<b>7</b>

**COOPERATIVE AGREEMENTS** (formerly Non-Agency)

Health and Safety Manager (Replaced Safety Director)	-	-	1
Safety Director	1	1	-
<b>Total Cooperative Agreements</b>	<b>1</b>	<b>1</b>	<b>1</b>

**MAINTENANCE**

Maintenance Supervisor	1	1	1
Assistant Maintenance Supervisor	1	1	1
Maintenance Lead	1	1	1
Maintenance Repair	1	1	1
Mechanical Technician	4	4	4
Utility Worker	3	3	3
Electrical/Instrumentation Assistant Maintenance Supervisor	1	1	1
Electrical/Instrumentation Tech	2	2	2
<b>Total Maintenance</b>	<b>14</b>	<b>14</b>	<b>14</b>

**OPERATIONS**

Operations Supervisor	2	2	2
Lead Operator	4	4	4
Operator (Trainee, I-III)	7	7	7
<b>Total Operations</b>	<b>13</b>	<b>13</b>	<b>13</b>

**TECHNICAL SERVICES** (Reorganized Environmental Services and Engineering)

Technical Services Manager (Combined Environmental Services and Engineering Manager positions)	-	-	1
Assistant Engineer	-	-	2
Laboratory Director (New FY 18)	-	-	1
Environmental Laboratory Administrator	-	-	1
Environmental Services Analyst (I-II)	-	-	3
<b>Total Technical Services</b>	<b>-</b>	<b>-</b>	<b>8</b>

**ENVIRONMENTAL SERVICES** (Reorganized into Technical Services)

Environmental Services Manager	1	1	-
Environmental Laboratory Administrator	1	1	-
Environmental Services Analyst (I-II)	3	3	-
<b>Total Environmental Services</b>	<b>5</b>	<b>5</b>	<b>-</b>

**ENGINEERING** (Reorganized into Technical Services)

Engineering Manager	1	1	-
Associate Engineer (This FY 16 partially funded position was eliminated FY 17)	1	-	-
Assistant Engineer	1	2	-
Information Systems Analyst (Transferred to Administration)	1	1	-
<b>Total Engineering</b>	<b>4</b>	<b>4</b>	<b>-</b>

**TOTAL AUTHORIZED STAFFED POSITIONS****43****43****43**

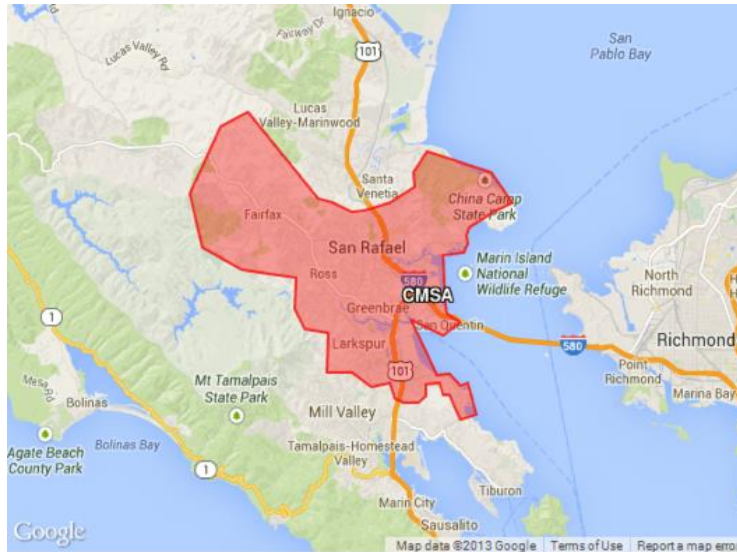


## SECTION 2. LOCATION AND SERVICE AREA, LOCAL DEMOGRAPHICS AND ECONOMY

### Location and Service Area

CMSA is located in San Rafael, California and is adjacent to the San Rafael side of the Richmond-San Rafael Bridge. The shaded area on the below map highlights the CMSA service area. It measures approximately 43.5 square miles, and encompasses the residents, businesses, and institutions within the City of Larkspur, the Towns of Corte Madera, Fairfax, Ross, and San Anselmo, portions of the City of San Rafael, the unincorporated areas of Ross Valley, San Quentin Village, and San Quentin State Prison (SQSP). The population served within this area is approximately 105,000.

The shaded area shows the location of CMSA service area.



### Local Demographics and Economy

Marin County has a total population 258,365 with a growth rate of less than one percent annually. The county's residents continue to have the highest average California per capita income of \$60,236, and a median per household income of \$93,257.

### Population of Cities, Towns, and Correctional Facilities in the CMSA Service Area

City of San Rafael (Approximately 2/3 of the city's population)	38,000
City of Larkspur	11,926
Town of Corte Madera	9,253
Town of San Anselmo	12,336
Town of Fairfax	7,441
Town of Ross	2,415
San Quentin State Prison	5,247
Unincorporated CMSA Service Area*	16,500

\*An approximation that includes San Quentin Village, Greenbrae, Kentfield, Sleepy Hollow, and the Tiburon Peninsula

Sources: United States Census Bureau State and County QuickFacts (2010 Census), Bureau of Economic Analysis; California Department of Finance Demographic Research Census 2010 and Population Factors; Bureau of Labor Statistics

Marin’s unemployment rate of 3.1% remains among the lowest in California and remains below the national level of 4.4% as of July 2017. Seven of the top ten employers in the CMSA service area as measured by number of employees are governmental entities. The majority of the remaining businesses employ fewer than 20 employees, and approximately 90% of these business enterprises include goods and services occupations.

Ten Largest Employers and Number of Employees in CMSA Service Area

San Quentin State Prison	1,832
Marin General Hospital	1,650
Dominican University	1,000
Golden Gate Transit	775
College of Marin	328
City of San Rafael	390
San Rafael City Schools	355
Tamalpais Union High School District	310
Kentfield Rehabilitation & Hospital	344
Marin Municipal Water District	246

The local real estate and housing market continued to improve during FY 17. The annual mean/median home sale price for a home in Marin was \$1,271,060/\$975,000 as reported by the Marin County assessor’s office website for the calendar year ending December 2016, compared to \$1,272,067/\$935,000 reported at end of December 2015. The upward trend continued January through June 2017 where the county reported at June 30th an average mean/median \$1,311,770/\$1,050,000 sales data statistics.

*Source: [www.marincounty.org/depts/ar/divisions/assessor/sales](http://www.marincounty.org/depts/ar/divisions/assessor/sales)*

Equivalent Dwelling Units (EDU’s)

Prior to July 2015, EDU’s had been used to determine the number of households served, as well as the sewer service charge (SSC) to set the Agency’s annual budget. An EDU refers to a unit of wastewater discharge, and is the estimated volume and strength generated by an average, single-family residence. Each JPA member agency is responsible for determining the number of EDU counts in its jurisdiction and works with the County Tax Collector to add the SSC to the property tax bill, which is the method used to collect SSC payments from its customers. The annual SSC EDU rate is established each July 1 in the CMSA adopted budget. The Agency’s EDU Rate is based on the total revenue budget for SSC, capital fee and debt service charged to members divided by the number of reported EDU. The EDU rate is used to determine fee schedules for waste haulers and industrial monitoring. Additional information can be found by referring to CMSA’s Fee Schedule Ordinance available on the [www.CMSA.us](http://www.CMSA.us) website.

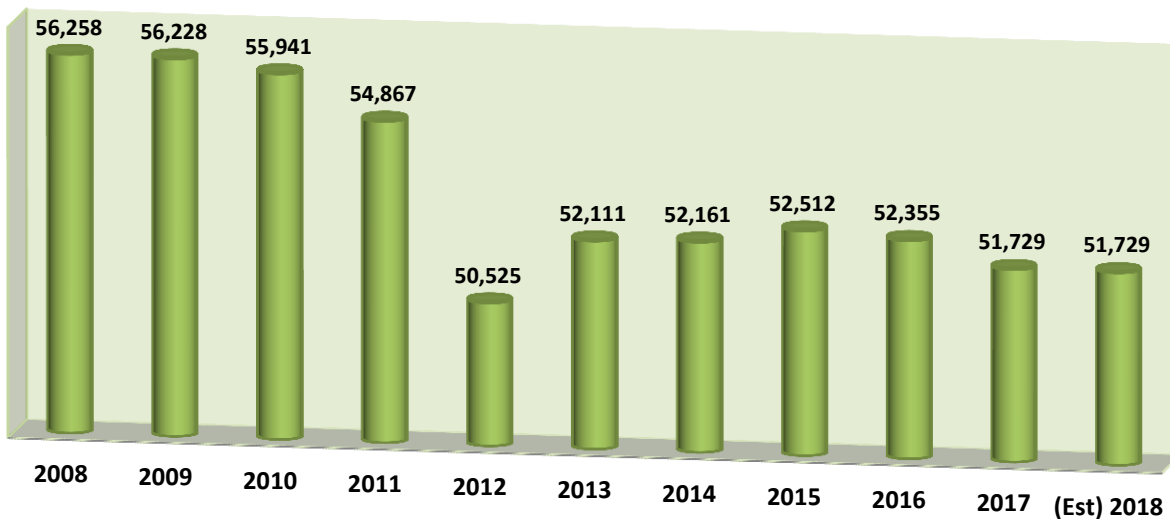
Beginning in FY 15, the Agency began to utilize two different units of measure for allocating total sewer and debt service charges to the JPA member agencies. The allocation of the SSC is now based solely on the strength and volume of wastewater discharged from each satellite collection system into CMSA for treatment, as indicated by measurements taken by CMSA the prior wet weather

period (the 12-month period April 1 to March 31 for strength, 36-month period April 1 to March 31 for volume).

The allocation of debt service is pursuant to the October 2016 Debt Service Payment Agreement between CMSA and the Member Agencies, as well as the Master Indenture between CMSA and the Bond Trustee. The proportionate allocation of the debt service payment and coverage to each member is based upon average EDU counts over a 10-year period from the fiscal year 2006-07 to the fiscal year 2015-16 reported for the JPA service area. This allocation method smooths out unit count fluctuations and promotes stable/predictable debt service costs to members.

The chart and table below displays the total EDU count within the CMSA service area for the last ten years, and estimates FY 18 to be the same as FY17. The number of residential EDUs tends to be stable in the Central Marin service area because there is generally very little commercial and residential development in central Marin County. The fluctuations from year-to-year are generally due to new sewer connections for new construction, variable water usage for commercial properties, and the number of EDUs assigned to SQSP. There were three consecutive years (FY 10-FY 12) of decreases in the total number of reported EDUs, with the significant decrease in FY 12 attributable to changing how the number of EDUs was determined for SQSP. Effective FY 13, CMSA entered into a service contract with the State of California for wastewater service for SQSP, and is now responsible for determining the prison's EDU count. The increased EDU count in FY 13 is the result of new construction for single family dwellings and a multi-unit residential development in the service area. Since FY 13 there has been little development. Additionally, increased drought-related water conservation efforts and reduced water consumption by commercial users have had a stabilizing effect on the EDU count.

**EDU Totals for CMSA Service Area Fiscal Year End June 30th**

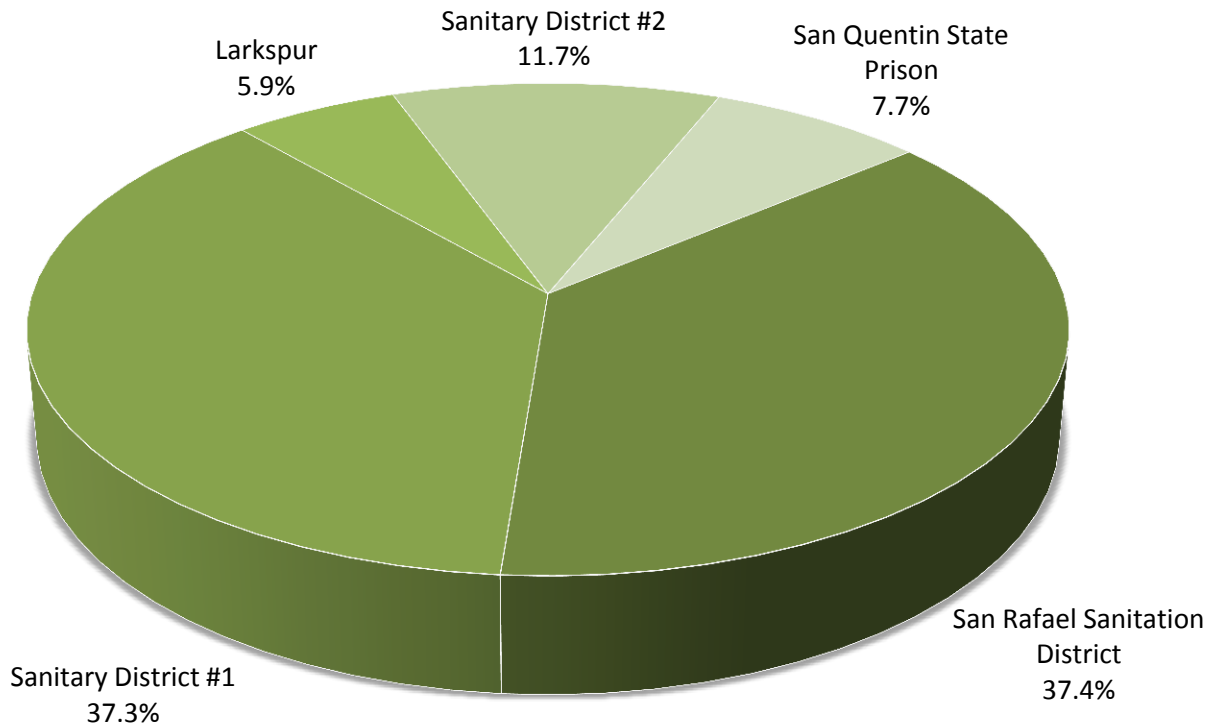


**EDU Count by JPA Member Agency and San Quentin State Prison FY 08 to FY 18 (Est)**

<b>Fiscal Year</b>	<b>San Rafael Sanitation District (SRSD)</b>	<b>Ross Valley Sanitary District (SD #1)</b>	<b>City of Larkspur (SD #1)</b>	<b>San Quentin State Prison (SQSP)</b>	<b>Sanitary District #2 (SD #2)</b>	<b>Total EDU Count</b>
(Est) 2018	19,332	19,298	3,039	4,005	6,055	<b>51,729</b>
2017	19,332	19,298	3,039	4,005	6,055	<b>51,729</b>
2016	19,555	19,700	3,019	4,005	6,076	<b>52,355</b>
2015	19,643	19,666	2,982	4,005	6,216	<b>52,512</b>
2014	19,703	19,498	2,949	4,005	6,006	<b>52,161</b>
2013	19,482	19,511	2,997	4,005	6,116	<b>52,111</b>
2012	19,409	18,835	3,079	3,247	5,955	<b>50,525</b>
2011	19,401	19,261	3,021	7,209	5,975	<b>54,867</b>
2010	19,575	19,709	3,050	7,529	6,078	<b>55,941</b>
2009	19,685	19,295	3,116	7,936	6,196	<b>56,228</b>
2008	19,617	19,112	3,107	8,227	6,195	<b>56,258</b>

The pie chart below shows the EDU count reported by each member agency as a percentage of the total number EDUs in the service area.

**EDU's by Member Agencies and San Quentin Prison as a Percentage of Total EDU's for FY 18**



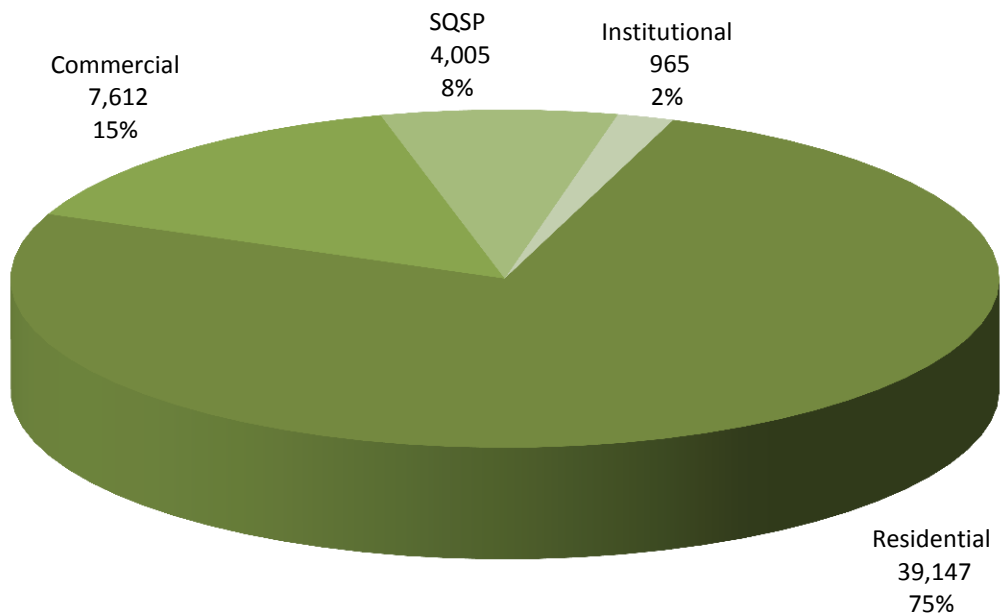
The table and chart below show the EDU count presented by connection type reported by participating JPA members. There are three types of connections: residential, commercial, and institutional. Institutional connections represent property tax exempt governmental entities (federal, state, county, city, and special district) that are billed separately because these institutions are not on the Marin County property tax rolls. EDU counts for these institutions are not included in county property tax reports.

**FY 18 EDU Count by Connection Types**

	San Rafael Sanitation District (SRSD)	Ross Valley Sanitary District (SD #1)	City of Larkspur (SD #1)	San Quentin State Prison (SQSP)	Sanitary District #2 (SD #2)	Total by Type
<b>Residential</b>	15,642	16,433	2,617	-	4,455	<b>39,147</b>
<b>Commercial</b>	3,515	2,351	361	-	1,385	<b>7,612</b>
<b>Institutional</b>	175	514	61	4,005	215	<b>4,970</b>
<b>Total</b>	<b>19,332</b>	<b>19,298</b>	<b>3,039</b>	<b>4,005</b>	<b>6,055</b>	<b>51,729</b>

Source: Property Tax Reports, County of Marin

**FY 18 EDU by Connection Type and San Quentin State Prison**



### SECTION 3. FACILITIES, WASTEWATER TREATMENT PROCESS, WORKLOAD, AND PERFORMANCE INDICATORS

#### Facilities

The CMSA wastewater treatment plant, pictured below, is a vital component of the central Marin wastewater management system. This extensive system includes over 70 pump stations, more than 450 miles of sewer pipelines located throughout the service area, as well as two major interceptors to transport the wastewater to the treatment plant, and a two-mile long outfall through which the treated wastewater is discharged into the San Francisco Bay. In full compliance with federal, state, and regional water pollution control laws and regulations, CMSA processes and disposes an average of 7.8 million gallons of wastewater a day during dry weather flows and 13 million gallons of wastewater per day during wet weather flows, and has treated in excess of 120 million gallons per day during peak rainfall periods.



(Clockwise upper left to right): Effluent Storage Pond, Maintenance Annex (red roof behind the pond), Chlorination/Dechlorination Building, Chlorine Contact Tanks, Effluent Pump Station, Secondary Clarifiers, Solids Handling Building, Organic Waste Receiving Facility, Digesters and Digester Building, Aeration Tanks, Biotowers, Primary Clarifiers and Blending Channel, Grit Building, and Headworks. The two orange-roofed buildings in the lower left are the Maintenance Building (top) and the Administration Building (bottom).

#### Wastewater Treatment Process

The diagram on the following page depicts the wastewater treatment process.



### A Headworks

The wastewater influent flows through mechanical screens where large material is removed. The wastewater then enters the aerated grit chambers where grit, sand, gravel, and granular materials are removed, rinsed, and stored for future hauling to a landfill.



### B Primary Clarifiers

The flow of wastewater slows as it moves through the long narrow clarification tanks. At this stage, grease rises to the surface while heavier materials settle to the bottom of the tanks. Ferric chloride and polymer are sometimes added during high storm flows to increase removal of the solids. These solids are then scraped off the top and bottom of the tanks and pumped to the digesters for treatment.



### C Biotowers

The biotowers are the first stage of dual biological treatment. During this stage, water leaving the primary clarifiers is pumped to the top of tall biological towers where it trickles down through fixed media. When the water comes in contact with the air, the oxygen allows bacteria to grow on the media and consume some of the dissolved organic material.



### D Aeration Tanks

The activated sludge process is the second stage of biological treatment. Tiny air bubbles released from the bottom of the tank provide air for microorganisms to consume organic matter. The organisms form a floc which enables them to settle in the secondary clarifiers.



### E Secondary Clarifiers

The secondary clarifiers settle out the activated sludge from the aeration tanks. Some of this secondary sludge is reused in the dual biological process for continual reseeded, and the rest is sent to the digesters, where it is treated and used in the production of biogas.



### F Disinfectant Contact Tanks

A computer-controlled dose of sodium hypochlorite is mixed with the treated effluent to kill pathogens. To complete the disinfection treatment process, a sodium bisulfite solution is added to the treated final effluent to neutralize any residual chlorine to protect marine life prior to discharging it to the Bay.



### G Effluent Pump Station

The Effluent Pump Station will discharge treated effluent even when high plant flows and high tides coincide. It's fully automated and can start, stop and control pumps as needed during wet weather. There are five pumps – four primary pumps and one back-up pump. The high efficiency diesel pump engines passed a stringent Air Board review before they were permitted for use.



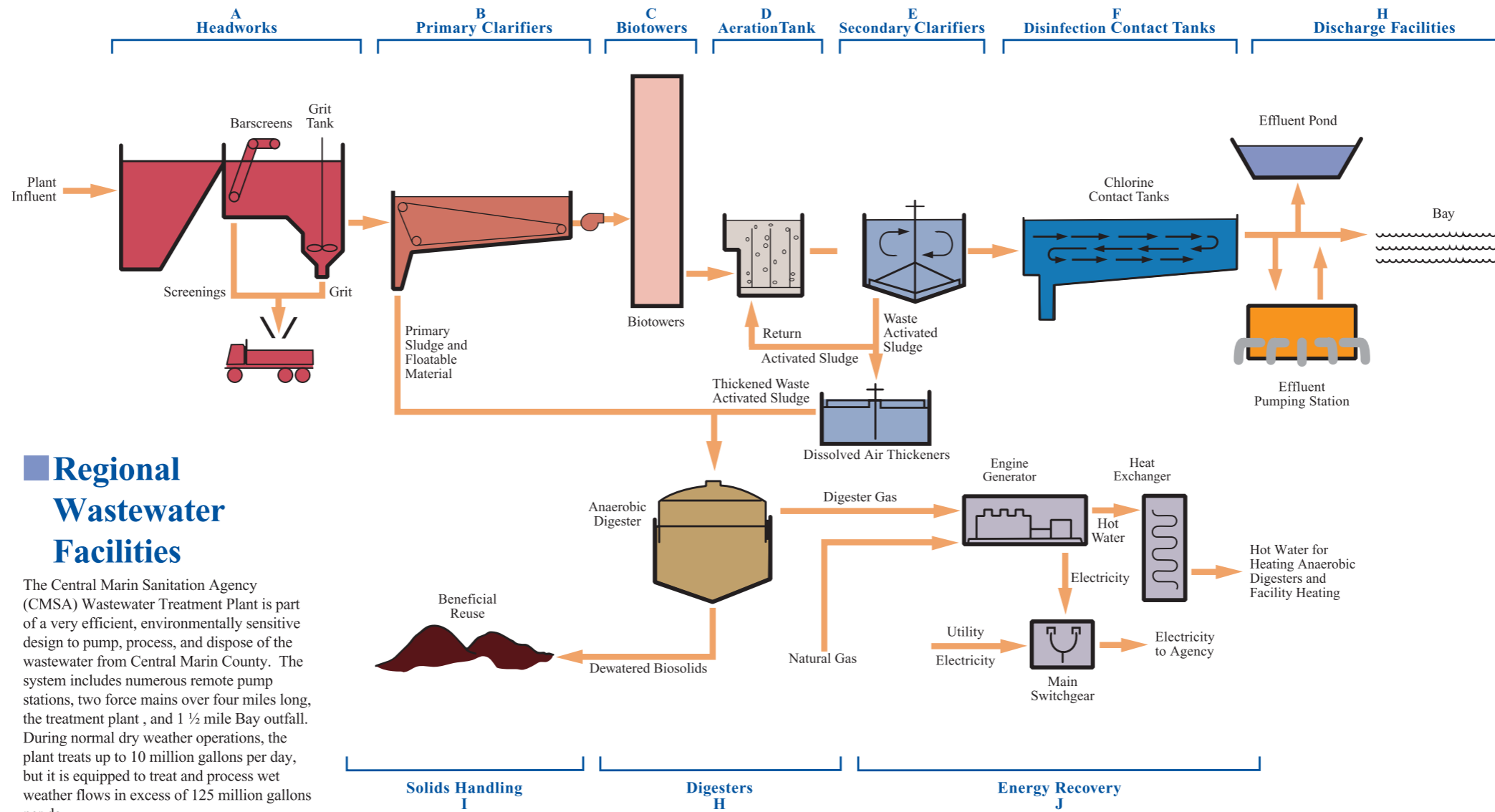
### H Discharge Facilities

Some of the treated wastewater is recycled and used for washdown and irrigation at the plant site. The remaining effluent is carried through an 84 inch pipeline more than a mile out into San Francisco Bay where it is discharged through 176 diffusers located 30 feet below the Bay surface.



### I Digesters

Solid materials (sludge and floatable material) removed in the primary and secondary clarifiers are heated so anaerobic bacteria can consume the organic matter. The digestion process reduces pathogens and odors and produces biogas. The treated product is called biosolids which are beneficially reused.



## Regional Wastewater Facilities

The Central Marin Sanitation Agency (CMSA) Wastewater Treatment Plant is part of a very efficient, environmentally sensitive design to pump, process, and dispose of the wastewater from Central Marin County. The system includes numerous remote pump stations, two force mains over four miles long, the treatment plant, and 1 ½ mile Bay outfall. During normal dry weather operations, the plant treats up to 10 million gallons per day, but it is equipped to treat and process wet weather flows in excess of 125 million gallons per day.

When wastewater arrives at the CMSA Treatment Plant, a complex treatment process begins:

## Process Schematic



### J Solids Handling

The digested biosolids are pumped to centrifuges where excess water is removed. The dewatered biosolids are hauled to a sanitary landfill for use as alternate daily cover, or utilized in a reuse process such as compost or land applied for agricultural use.



### K Energy Recovery

The biogas is produced in the digesters is used to heat plant process water and to generate electricity which supplies about one-half of the Agency's power needs. When digester biogas is not available, the engine generator switches to natural gas.

## Key Workload and Performance Indicators for FY 2016-17 and FY 2017-18 Projections

The following section summarizes the Agency's key workload and performance indicators for the July 1, 2016-June 30, 2017 fiscal period. The data presented is compiled from the *Performance Metric Report and NPDES, Process, and Maintenance Report* prepared for the monthly Board meeting agendas. The reports are publicly available in the consent calendar of the Board meeting agenda packets published on the CMSA website (<http://www.cmsa.us/board/agendas-and-minutes>). The wastewater treatment plant was designed and built to remove pollutants from influent flows which are accomplished through a physical and biological process. While some of the reported performance metrics can be directly correlated to specific parts of the budget, the majority of the metrics reported below are accomplished through the interconnection of responsibilities amongst the operations, technical services and maintenance departments that each have a duty to contribute to the successful operations of the wastewater treatment plant. The end goal of the total operating budget is to produce effluent wastewater that is 100% compliant with the Agency's NPDES permit requirements. The Agency had met all its NPDES permit requirements and did not have any NPDES Permit exceedances in the past eleven consecutive years. In FY17 CMSA experienced its first NPDES permit violation. The permit violation was due to extremely high flows related to severe winter storms.

**A. Volume of Wastewater Treated (FY 18 Total Operating Expenditures \$11,462,600):** The Agency received and treated approximately 5,228.7 million gallons of wastewater during FY 17. The table below shows the monthly wastewater volume, in million gallons, received as influent flow from each satellite collection entity: SRSD, SD #1, SQSP, SD #2. The total treated flow volume was significantly higher in FY 17 due to the significant storm events that occurred during the months of October through February. Flows outside of the wet weather period were similar to previous years. Future weather patterns are difficult to predict, therefore this statistic is not projected for FY 18. The total operating budget represents the total cost to treat the total influent flow into the treatment plant and discharging effluent flow into the San Francisco Bay that is 100% in compliance with the Agency's NPDES permit requirements.

	SRSD			SD #1			SQSP			SD #2			TOTAL		
	FY 15	FY 16	FY 17	FY 15	FY 16	FY 17	FY 15	FY 16	FY 17	FY 15	FY 16	FY 17	FY 15	FY 16	FY 17
Jul	96.2	88.6	89.5	120.2	107.7	113.6	11.6	10.2	11.0	28.8	27.9	25.8	256.8	234.4	239.8
Aug	97.0	92.3	92.4	133.5	107.2	118.2	11.6	9.7	10.4	28.5	27.9	26.1	270.6	237.1	247.2
Sep	95.1	89.9	86.4	113.1	103.8	108.9	10.5	8.9	9.7	28.5	27.5	25.7	247.2	230.1	230.7
Oct	99.1	88.3	114.3	118.6	109.2	141.4	11.2	9.5	10.1	29.0	28.5	33.0	257.9	235.5	298.9
Nov	107.2	90.7	128.5	131.3	107.7	176.7	11.2	8.5	9.9	34.8	26.7	35.2	284.5	233.6	350.2
Dec	309.8	117.7	200.7	405.8	170.2	296.4	19.8	10.4	11.1	83.5	45.4	48.9	818.9	343.7	557.1
Jan	122.3	229.3	338.8	158.4	331.4	524.5	11.9	13.8	15.6	32.9	68.5	74.0	325.5	643.0	952.7
Feb	143.8	111.5	312.5	180.3	168.0	462.9	10.8	9.4	14.7	35.0	32.4	74.1	369.9	321.3	864.2
Mar	124.7	225.5	176.2	146.5	337.6	251.5	10.9	14.0	11.9	29.6	54.1	44.4	311.7	631.2	483.9
Apr	122.2	112.6	162.4	135.9	152.4	233.4	10.8	10.4	11.3	29.3	31.3	39.0	298.2	306.7	446.1
May	97.8	100.8	107.6	125.0	129.1	152.2	10.0	10.9	10.2	27.8	28.4	30.7	260.6	269.2	300.7
Jun	83.4	86.5	95.4	108.8	115.4	125.9	9.6	10.8	9.9	26.1	24.6	27.7	227.9	237.3	258.9
<b>Total</b>	<b>1,498.6</b>	<b>1,433.7</b>	<b>1,904.7</b>	<b>1,877.4</b>	<b>1,939.7</b>	<b>2,703.6</b>	<b>139.9</b>	<b>126.5</b>	<b>135.8</b>	<b>413.8</b>	<b>423.2</b>	<b>484.6</b>	<b>3,929.7</b>	<b>3,923.1</b>	<b>5,228.7</b>
<b>% Total Flow</b>	<b>38.1%</b>	<b>36.5%</b>	<b>36.4%</b>	<b>47.8%</b>	<b>49.4%</b>	<b>51.7%</b>	<b>3.6%</b>	<b>3.2%</b>	<b>2.6%</b>	<b>10.5%</b>	<b>10.8%</b>	<b>9.3%</b>	<b>100.0%</b>	<b>100%</b>	<b>100%</b>



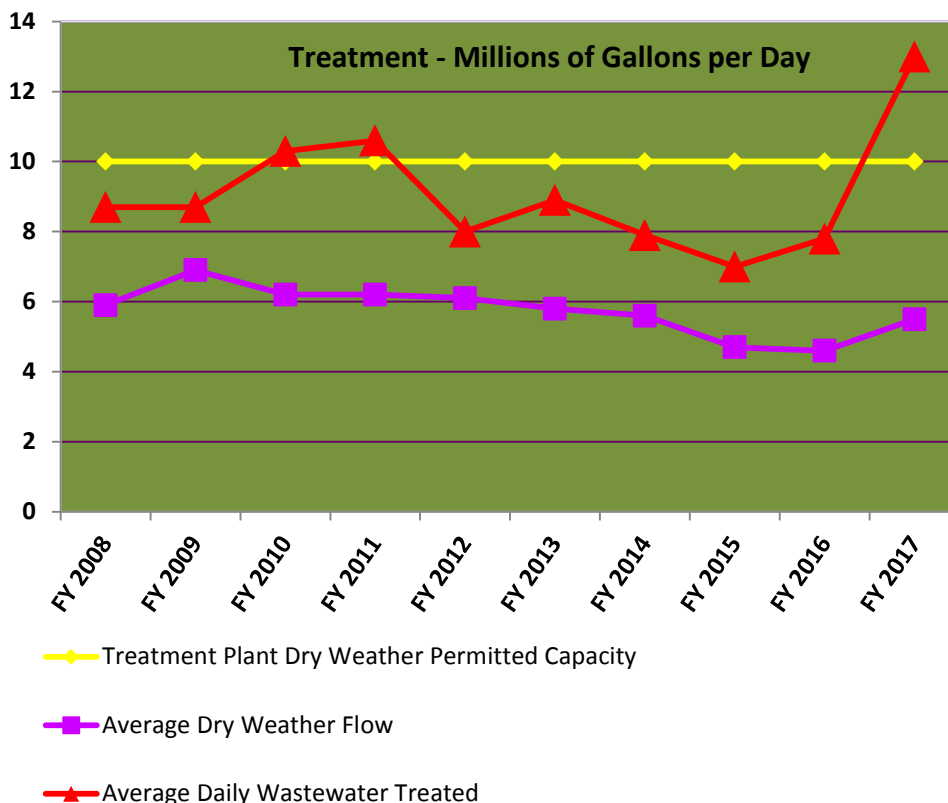
**Average Daily Effluent Flow.** The Agency’s permitted dry weather capacity is 10 million gallons per day. Below are the average daily dry weather flow, daily wastewater treated, and annual flows for the past six years.

MILLIONS GALLONS PER DAY	FY 12	FY 13	FY 14	FY 15	FY 16	FY 17	FY 18*
Dry Weather Flow (July-Sept)	6.1	5.8	5.6	4.7	4.6	5.5	5.5
Wastewater Treated	8.0	8.9	7.9	7.0	7.8	13.0	13.0
Total Annual Influent Flow Treated	3,931.3	3,988.4	3,738.7	3,929.7	3,923.1	5,228.7	5,228.7
TOTAL OPERATING BUDGET	\$9.06M	\$9.5M	\$10.08M	\$10.1M	\$10.8M	\$11.6M	\$11.5M

\*FY 18 has been projected to equal FY 17 annual flows

The graph below presents the average volume of wastewater treated and discharged into San Francisco Bay from FY 07 through FY 17.

- The yellow line is the Agency’s permitted dry weather flow, which has remained constant through several five-year NPDES permit cycles.
- The purple line shows the average dry weather flow each year during the months of July, August, and September.
- The red line represents the average annual daily wastewater treated and is higher than the purple line because it includes storm water that infiltrates into sewer pipelines during wet weather season rain events.



The increases in the average daily flow are due to higher than normal seasonal rainfalls during the wet weather months, and the sharp declines during FY 12, FY 14, and FY 15 are indicative of dry winters. The decrease in average dry weather flow beginning in FY 13 is associated with lower water usage by our customers due to their increased water conservation efforts during the drought that included installation of high-efficiency water fixtures.

The Agency reclaims anywhere from 10-15% of its treated water for irrigating landscaping, cooling down the cogeneration engine, hosing down and washing tanks and equipment, and diluting chemicals used in the treatment process. Reclaimed water is also used to maintain a wildlife sanctuary habitat for an endangered turtle at Remillard Park in the City of Larkspur.

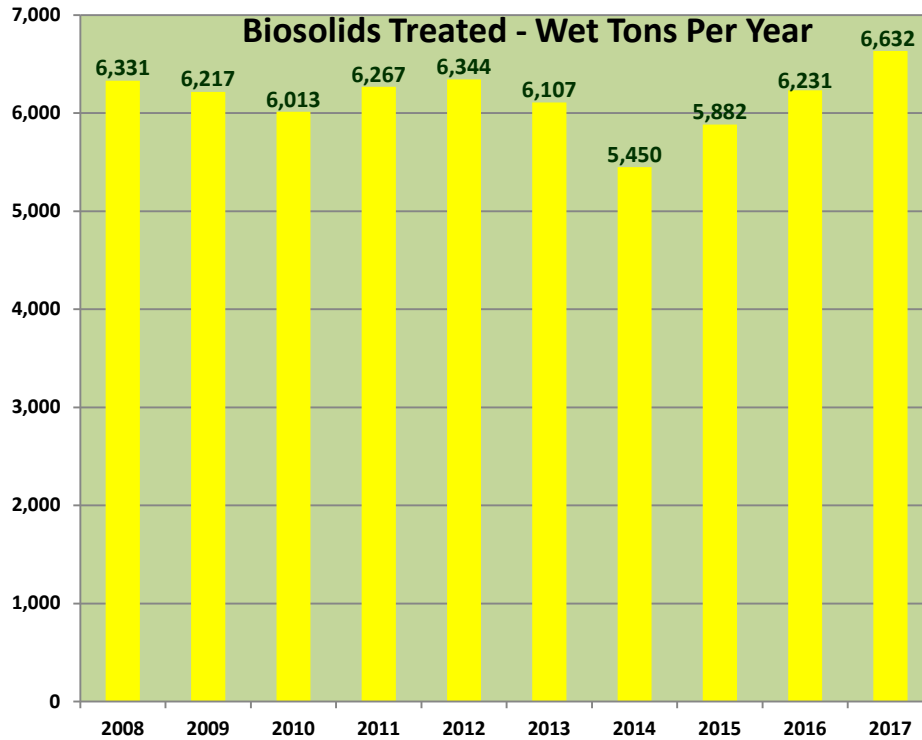
During FY 16, the Agency built a recycled water truck filling station. Our member agencies are using the recycled water for sewer flushing within our service area.

**B. Biosolids Management Production:** Biosolids are renewable by-products of the wastewater treatment process. CMSA beneficially reuses biosolids as alternative daily landfill cover during the wet weather season in Marin County, as fertilizer and soil amendments on agricultural land during the dry weather season in Solano County, and as a feedstock at the Lystek bio-fertilizer production facility. To further diversify biosolids management options, the Agency partnered with other wastewater agencies within the San Francisco Bay Area region to evaluate the feasibility of using biosolids as an alternative energy source. The quantity in wet tons of biosolids reused is the performance measure for this budget.

REPORTED WET TONS:	FY 13	FY 14	FY 15	FY 16	FY 17	FY 18
<b>Total Biosolids Management Budget*</b>	\$258K	\$266K	\$273K	\$276K	\$374K	\$388K
<b>Total Biosolids Reuse</b>	6,107	5,450	5,882	6,231	6,645	6,645
<b>Landfill Alternative Daily Cover</b>	4,073	3,582	3,740	4,131	3,676	3,676
<b>Lystek Bio-fertilizer**</b>					1,306	1,306
<b>Fertilizer/Soil Amendment</b>	2,034	1,868	2,142	2,100	1,663	1,663

*\*Reference: Technical Services Department Biosolids Management Budget*

The FY 18 Total Biosolids Management budget increase is attributed to delivery of two loads per week to the Lystek bio-fertilizer production facility. The FY 18 budget increase also includes cost index adjustments in the biosolids hauling and disposal contracts.



The bar chart above shows the annual volume of biosolids produced. The total wet tons of biosolids produced has generally remained stable over time even after CMSA began accepting FOG and foodwaste in 2013. High flows during wet weather can transport solids that had settled in the collection system to the treatment plant which increases biosolids production. Capital improvement projects at the treatment plant can also affect biosolids production. For example, the Digester Improvements Project in FY 14 required CMSA to operate with only one digester instead of two for several months which decreased biosolids production.

**C. Odor Alerts and Complaints:** Odors are routinely generated in the wastewater collection system and in treatment processes. The Agency has implemented a multi-phased approach to manage odor generation that includes: (1) Introduction of a calcium nitrite solution into the collection system to control the production of hydrogen-sulfide by microorganisms; (2) the addition of 50% strength hydrogen peroxide into the wastewater prior to entry into the facility’s headworks; and (3) the use of odor control masking agents when treatment processes are removed or placed into service. We routinely perform odor monitoring, and odor alerts are posted on the Agency website (www.cmsa.us) to inform the public and other interested parties of the potential generation of odors due to process changes, warm weather, and other environmental or operational factors. The performance measure for the Odor Control Budget is the number of alerts issued and the number of complaints received from people outside the treatment plant. The table below shows the number of posted alerts and public complaints received over the past five years. The Agency’s annual goal is zero complaints.

	FY 13	FY 14	FY15	FY16	FY 17	FY 18
<b>Total Odor Control Budget*</b>	\$610K	\$518K	\$474K	\$614K	\$610K	\$534K
<b>Number of Odor Alerts Issued</b>	48	43	45	44	64	40+/-
<b>Number of Odor Complaints Received</b>	1	2	1	0	2	0

*\*Reference: Operations Dept. line item budget-Chemicals: Nitrate, Hydrogen Peroxide, Odor Control accounts.*

**D. Conventional Pollutants Removed:** The Agency’s NPDES permit contains specific requirements for the removal of wastewater solids and organic material before the treated water is discharged into the San Francisco Bay. The table below shows the annual amount of conventional pollutants removed. This metric is an example where the operation, technical services, and maintenance department responsibilities and budgets interconnect to produce a desired outcome.

UNIT OF MEASURE: TONS	FY 13	FY14	FY15	FY 16	FY 17	FY 18
<b>Total Suspended Solids (TSS) Removed</b>	6,290	9,009	7,353	6,872	5937	6,300
<b>Organics (Biological Oxygen Demand – BOD) Removed</b>	4,294	5,294	4,949	4,638	5651	4,700

**E. Priority Pollutants Removal:** The Agency’s NPDES permit requires the removal of mercury and copper, as priority pollutants. The percentage of these pollutants removed from discharge into San Francisco Bay is shown in the table below. The Agency’s optimal goal is 100%, but a more realistic and achievable goal is between 90% and 95%. While the Technical Services Pretreatment Sampling budget monitors industrial waste, the Cooperative Agreements Countywide Public Education Program budget supports programs that educate the public how they can contribute to the removal of mercury and copper.

MONTHLY AVERAGE	FY 13	FY 14	FY15	FY 16	FY 17	FY 18
<b>Mercury</b>	97%	97%	99%	99%	96%	93%
<b>Copper</b>	96%	96%	95%	96%	93%	93%

**F. Biogas and Energy Production:** Biogas is produced in the treatment plant’s anaerobic digesters. This renewable resource is used as fuel in a cogeneration system that generates electricity to power Agency facilities. The volume of natural gas required to purchase from outside suppliers is reduced in proportion to the amount of biogas that is generated, which in turn reduces the need to purchase these utilities from outside suppliers. The organic waste receiving program that was launched in January 2014 has resulted in increased biogas production, and during the summer of 2016, the system ran nearly 24 hours per day over six weeks. This is reflected in the additional budgeted savings in natural gas purchases in FY 15 through FY 18. The estimated quantity of biogas and electrical energy produced and the economic value of natural gas savings is shown in the table below.

	FY 13	FY 14	FY 15	FY 16	FY 17	FY18
<b>Total Natural Gas Budget*</b>	\$ 180K	\$187K	\$121K	\$109K	\$80K	\$40K
<b>Biogas – million cubic feet</b>	62	73	79	92	106	104
<b>Energy Produced - kilowatts</b>	2,165	4,367	4,998	5,534	4781	6,000
<b>Value of Biogas Produced</b>	\$ 54,196	\$256,464	\$255,791	\$242,271	\$291,022	\$313,291

\*Reference: Operations Department line item budget.

**G. Work Orders Completed:** The Agency has over 4,000 assets that include the treatment plant facilities and systems, equipment, buildings, vehicles, computers, and other assets. These assets need to be proactively maintained (preventative work) and repaired, rehabilitated, or replaced as needed (corrective work). The Maintenance and Operations Department’s activities are scheduled and tracked using a computer-based asset management system. The table below shows number of work orders completed over the past five fiscal years. The number of work orders executed is a key performance measure of workplace productivity for the maintenance and operations departments.

BUDGET	FY 13	FY14	FY 15	FY 16	FY 17	FY 18
<b>Maintenance Department</b>	\$1.38M	\$1.48M	\$1.66M	\$1.78M	\$1.88M	\$2.01M
<b>Operations Department</b>	\$2.92M	\$2.91M	\$2.87M	\$3.19M	\$3.17M	\$3.15M
<b>TOTAL</b>	<b>\$4.34M</b>	<b>\$4.40M</b>	<b>\$4.53M</b>	<b>\$4.98M</b>	<b>\$5.05M</b>	<b>\$5.16M</b>

COMPLETED WORK ORDERS*	FY 13	FY14	FY 15	FY 16	FY 17	FY 18
<b>Preventative &amp; Corrective- # work orders</b>	N/A	1,225	1,830	1,694	1,747	1,750
<b>Preventative &amp; Corrective – total hours</b>	1,566	11,446	10,576	10,848	11,384	11,500
<b>Operational (Facilities, Safety, Housekeeping - # work orders</b>	N/A	257	451	446	371	400
<b>Operational (Facilities, Safety, Housekeeping – total hours</b>	1,237	3,345	8,039	22,038	24,376	24,500
<b>TOTAL # WORK ORDERS</b>		<b>1,482</b>	<b>2,281</b>	<b>2,140</b>	<b>2,118</b>	<b>2,150</b>
<b>TOTAL WORK ORDER HOURS</b>	<b>2,803</b>	<b>14,791</b>	<b>18,615</b>	<b>32,885</b>	<b>35,760</b>	<b>36,000</b>

\*Source: July Agenda consent item “Asset Management Program – Annual Report” available <http://www.cmsa.us/board/agendas-and-minutes>

The increasing number of work orders completed since FY 13 for various activities indicates the learning curve and time commitment associated with the build-up and successful

implementation of the asset management database, and is a measure of the increased reliability of reporting standards. The Maintenance and Operations budget represents the total cost, including salaries, equipment, tools, chemicals, and utilities expended to execute the work orders.

**H. Employee Training:** CMSA supports employee development. We strongly believe continued training is important to our employees’ professional development and job satisfaction, as well as for the effective functioning of the organization. Training includes mandatory topics such as safety and employment law (diversity, discrimination, harassment and ethics) and job specific educational courses. Methods of training include attendance at seminars and conferences, as well as computer-based webinars. The hours employees spend in training and development sessions is the key performance measure for referenced training accounts below the table.

	FY 13	FY 14	FY 15	FY 16	FY 17	FY 17
<b>Total Meetings/Training Budget</b>	\$65K	\$72K	\$82K	\$79K	\$85K	\$85K
<b>Internal Hours</b>	914	807	575	1800	1432	1500
<b>External Hours</b>	871	870	668	726	1160	1000

*Reference: Department budget accounts for Meetings/Training (6700-010), Conferences (6700-020), Outside Safety Training (6830-017-01)*

**I. Water Sample Analyses:** The Agency has a certified environmental laboratory where wastewater that enters (influent) and leaves (effluent) the plant is routinely sampled and analyzed for various compounds as required by the Agency’s NPDES permit. Samples from numerous treatment processes are also analyzed to ensure that the treatment systems are operating properly. The performance measure for the Permit Testing & Monitoring Budget is the number of tests that are performed to monitor water quality and permit compliance. The chart below shows the number of water sample analyses the laboratory performed, and the projection for FY 18.

	FY 13	FY 14	FY 15	FY 16	FY 17	FY 18
<b>Total Permit Testing &amp; Monitoring Budget*</b>	\$120K	\$123K	\$125K	\$128K	\$147K	\$150K
<b>NPDES Compliance Analyses</b>	5,485	5,482	5,661	6,187	2,852	2,400
<b>Process Control Analyses</b>	12,107	12,643	16,661	16,317	7,639	6,000
<b>Quality Control Testing</b>	5,609	5,697	5,650	5,771	2,154	5,700

*\*Reference: Technical Services line item budget accounts (6300-000, 6310-030, 6320-010.)*

There is significant decline in the reported NPDES compliance and process control analyses from FY 16 to FY 17. This is related to a change in how analyses are counted. CMSA no longer counts automated readings from field instruments as laboratory samples allowing for a more accurate representation of the analyses that were conducted within the laboratory.

**J. Number of Inspections Performed and Permits Issued:** The U.S. Environmental Protection Agency and the State Regional Water Resources Control Board require wastewater agencies such as CMSA to regulate commercial and industrial businesses in their service areas to ensure specific pollutants and materials are not discharged into the sanitary sewer system that can detrimentally affect the environment or wastewater treatment processes. Regulated businesses include restaurants, dental offices, car washes, dry cleaners, metal plating shops, auto repair facilities, manufacturing plants, and other business types that have the potential to produce environmentally harmful waste products. The Contract Service Revenues budget line items for FOG, Pollution Prevention, and the Mercury Source Control Program recover costs to perform inspections and issue permits for other local agencies where CMSA has contract to perform these services. The number of inspections completed and permits issued are shown in the table below and are the key performance measures for the referenced revenue line items. Fluctuations in the number of inspections are dependent upon customer compliance and by the number of new and existing businesses in the service area. Permits are issued for 1-, 2- or 3-year periods and the cyclical pattern is reflected in the number of permits renewed from FY 13 through the FY 18 budget.

	FY 13	FY 14	FY 15	FY 16	FY 17	FY 18
<b>Total FOG, Permit &amp; Inspections, and Mercury Source Revenue</b>	\$69K	\$94K	\$95K	\$98K	\$99K	\$102K
<b>Pretreatment and Pollution Prevention Inspections*</b>	332	332	333	374	224	240
<b>FOG Program Food Service Establishment Inspections*</b>	504	606	602	659	383	400
<b>Permits Issued and Renewed*</b>	47	77	198	50	106	68

*\*Reference: Schedule of Revenues and Other Financing Sources budget accounts 4030/4031/4033/4034/4035/4036/4037/4038-000-00.*

**K. Public Outreach and Education:** CMSA is the lead agency for a county-wide public education program. Staff and program participants utilize exhibits to educate the public about important environmental issues related to water quality, stormwater, and wastewater at many community-based events. Some of these include the Marin County Fair, local festivals, farmers’ markets, and Earth Day events. The program also hires a juggler to deliver educational and entertaining environmental messages to elementary school children. Attendance at public outreach and education events is a key performance measure for the Countywide Public Education budget. The Agency tracks the number of people who visit the public education booth and who take our environmental quiz, and the number of children who attend the educational school events. A calendar of events where CMSA will be in attendance is available on the Agency’s website [www.cmsa.us/localevents](http://www.cmsa.us/localevents).

	FY 13	FY 14	FY 15	FY 16	FY 17	FY 18
<b>Total Public Education Program Budget*</b>	\$32K	\$36K	\$36K	\$38K	\$37K	\$33K
<b>Public Education Events Visitors</b>	4,152	3,197	3,401	2,430	3,682	3,500
<b>School Education Events Student Attendance</b>	4,369	6,314	4,330	2,538	3,688	3,000

*\*Reference: Technical Services Department budget account 6821-000-02.*

## **SECTION 4. STRATEGIC BUSINESS PLAN**

The Agency's Strategic Business Plan (SBP) provides a guide to help the Agency chart a strategic path to effectively maintain and improve its operations and services. CMSA's SBP has been constructed to set priorities, focus energy and resources, and guide fundamental decisions and actions that will shape the Agency into the future.

In September 2015, the Board of Commissioners approved the development of the Agency's next SBP with a new conceptual format and schedule. Commissioners participated in strategic planning workshops and collaborated with Agency staff to review and revise the Agency's Mission, Vision, and Goals statements, and prepare new Value statements. These high-level strategic statements and the FY 2016-17 SBP template were approved by the Board at its June 2016 meeting. With these Board actions and its guidance, the Agency Strategic Planning Committee (ASPC) has now completed the development of the Agency's FY 2017-18 SBP, comprising Objectives and Actions in order to achieve the Board adopted Goals, and align with the new Mission, Vision, and Values statements.

The Agency's budget is closely aligned with the SBP, as the majority of the SBP strategic actions were included in the budget development process. The SBP focus for the FY 2017-18 will be on the activities listed below:

- Maintain the high performance of the treatment facility operations.
- Implement steps to supply the Agency's extra power to the local utility grid.
- Produce recycled water for outside use.
- Prepare an Agency facilities master plan.
- Prepare a multi-year revenue plan.
- Improve Agency information management systems.
- Develop avenues for broader dissemination of Agency information

The Board reviews and accepts the CMSA Strategic Business Plan for the following fiscal year, in this case the FY 2017-18, in July of each year and is available on the Agency website thereafter.



**SECTION 5. FINANCIAL REPORTING AND FINANCIAL POLICIES SUMMARY**

The Agency is a Joint Powers Authority and its activities are accounted for in a single enterprise fund. A comprehensive set of Board adopted financial policies provides direction to protect the Agency’s assets and investments through sound financial management. The Agency uses the accrual method of accounting in accordance with generally accepted accounting principles (GAAP) to produce its financial statements. The accrual method records revenue when earned and records expenses when incurred. The cash basis of accounting is used to produce the budget which records revenue when cash is received and records expenses when actually paid. The primary difference is that economic events are recognized at the time the transaction occurs regardless of when cash transactions occur. CMSA’s annual financial statements and the Agency’s compliance with policies and internal controls are audited by an independent outside auditor in accordance with generally accepted governmental auditing standards, and the statements meet the State Controller’s Minimum Audit Requirements for California Special Districts. The Agency’s audited financial statements are filed with the State Controller’s Office and the County of Marin Auditor-Controller, are provided to various bond rating agencies, and are available to the general public for review. CMSA’s Financial Policies Manual is available on the CMSA website at [www.cmsa.us/documents/administrative](http://www.cmsa.us/documents/administrative).

**CMSA Financial Policies Table of Contents**



*CMSA’s values: “Sound financial practices to safeguard the Agency’s assets. Effective asset management through appropriate short and long-term planning and sustainable practices.”*

## Financial Policies Summary

The Board adopted a comprehensive set of financial policies in October 2006 which are periodically reviewed and updated to align with GFOA best practices, recommendations from the Agency's independent auditors, and the latest GASB pronouncements. Since then, the Agency has undertaken a schedule to review one of its three major sets of policy documents annually on a rotating basis: Financial, Personnel, and Administrative. During FY 15, the Agency conducted a thorough review of its financial policies and revised selected policies. The policies that are included in the appendix were adopted by the Board in July 2015 with subsequent revisions approved during FY 17.

Major policy areas are displayed in the graphic on the previous page and each specific policy is listed and summarized below. The framework of the financial policies governs the overall financial management and fiscal health of the Agency and promotes accountability to effectively direct the financial planning, management, and operations of the Agency. The General Manager and Administrative Services Manager are responsible for ensuring staff compliance with financial policies. A summary of each policy area is presented below:

- **Internal Controls:** Defines authorization levels, signatory requirements, segregation of duties, internal documentation requirements, monthly financial review, cash receipts, security, fiduciary responsibilities, and other internal control policies and procedures that Agency staff is required to follow.
- **Financial Reporting:** Defines the internal monthly Board reports and external financial reports required to be prepared by the Agency, including the annual financial report, Comprehensive Annual Financial Report (CAFR), financial and payroll reporting required by the IRS and the State of California, and debt reporting.
- **Revenue Management:** Provides direction on the funding requirements and management of Agency revenues, with respect to its organizational budgets, goals, and objectives. Defines the types of revenue sources, such as service charge allocations for the JPA member agencies, debt service charges, capacity charges, CMSA service contracts, and other forms of revenue.
- **Treasury:** Defines the roles and responsibilities of the General Manager and Treasurer, and includes comprehensive investment guidelines that cover how assets are to be invested to maintain safety, liquidity, and yield.
- **Expenditure Management:** Defines management of expenditures, including the required levels of approval and documentation, and accounting for transactions in the proper accounting period. Revenue Management and Expenditure Management policies form the cash basis of budgeting—where the money comes from (revenues) and where the money goes (expenditures).
- **Financial Planning:** Defines the balanced budget and specific planning documents required to be adopted by the Board of Commissioners, including the budget, the 10-year capital improvement program, and 10-year financial forecast, as well as monthly reporting requirements.
- **Procurement Management:** Defines the levels of authority for purchase orders, and signatory requirements for all types of procurement expenditures, such as professional service agreements, construction contracts, equipment purchases, and materials and supplies purchases. This policy also includes guidelines for petty cash and credit card purchases.
- **Asset Management:** Defines the type of assets and the capitalization dollar thresholds for assets to be capitalized, the proper accounting for assets, disposal guidelines, and requires on-going asset condition assessment programs to facilitate projected replacement(s) and budget planning.

**SECTION 6. BUDGET DEVELOPMENT: BALANCED BUDGET, BASIS OF BUDGETING, ACCOUNTING, DEVELOPMENT AND ADMINISTRATION**

The Board approves and adopts a balanced budget prior to the start of the fiscal year beginning July 1. The Board, General Manager, and Agency staff each have their respective Agency, departmental, and program responsibilities to develop a financially responsible budget each fiscal year. Budget development is guided by financial policies and procedures, the strategic business plan, long and short-term organizational goals and objectives, the economic climate, and other external factors.

**FY 2017-18 Budget Calendar – Development, Adoption, and Administration**



**Balanced Budget:** The Budget is balanced when revenues and other financing sources (uses) equal expenditures. When revenues exceed expenditures, surplus funds are transferred into designated reserve accounts in accordance with the Agency's Financial Reserves Policy.

**Cash Basis of Budgeting:** The Agency's annual budget and 10-year forecast are based on the cash method of accounting and exclude non-cash depreciation and amortization expenses. Revenues are budgeted according to what is expected to be collected during the budget year, and expenditures are budgeted according to what is expected to be spent during the fiscal year. The cash basis recognizes revenue when cash is received and recognizes expenses when cash is spent.

**Accrual Basis of Accounting:** The Agency is an enterprise fund and accounts for all its financial activity utilizing the accrual method of accounting in accordance with all applicable Government Accounting Standards Board (GASB) pronouncements for accounting, and recognizes revenues, expenses, assets, and liabilities in the proper fiscal year. The accrual method recognizes transactions and events when they occur, regardless of when cash is received or spent. One of the primary differences between the cash basis of budgeting and the accrual basis of accounting is the accrual method matches revenues to expenses which gives a more accurate picture of the Agency's financial condition.

#### **Development, Adoption, and Administration**

The annual budget development cycle begins with an analysis of the current year budget compared to projected annual expenditures and long-term capital improvement program funding, and serves as the baseline for the upcoming year's budget. During the course of budget development, the General Manager and Administrative Services Manager meet with the Board Finance Committee to review options to balance the budget including possible refining of expenditure budgets and/or appropriate funds from various designated reserves. A proposed budget is presented to the Board in May during a publicly noticed meeting where customers and other stakeholders in the service area are encouraged to provide input on the budget for Board consideration. Any direction provided by the Board in May is incorporated into the final proposed budget, which is presented to the Board in June at a publicly noticed meeting for consideration of adoption. Once adopted, the budget serves as the revenue collection and spending plan for the July 1 to June 30 fiscal period.

During the course of the fiscal year, finance staff prepares, and management staff reviews, detailed monthly budget performance reports and corresponding revenue and expenditure analyses. Finance staff also prepares a quarterly budget status report for Board review which details the financial performance of the Agency, describes billings and revenue collections, and analyzes operations and capital expenditures. The quarterly budget performance reports are available for public review and are included in the Board meeting agenda packets which are available on the Agency website at [www.cmsa.us/board/agendas-and-minutes](http://www.cmsa.us/board/agendas-and-minutes).

**SECTION 7. FY 2017-18 BUDGET - DISCUSSION AND ANALYSIS**

Budget development for the FY 2017-18 began in January 2017. During the course of its development, the General Manager and Administrative Services Manager reviewed the work in progress and sought guidance from the Board Finance Committee on the major components of the FY 2017-18 Budget that consist of: (1) operating revenues, expenses, and debt service; (2) capital improvement project (CIP) expenditures and the 10-year CIP projections (Section 8); and (3) the 10-Year Financial Forecast assumptions (Section 9).

On June 13, 2017, the CMSA Board adopted a balanced FY 2017-18 Budget (revenues less expenditures and any balance transferred to/from reserves). The Adopted FY 18 Budget incorporated employee compensation adjustments that resulted from the approved six-year labor agreements with the Agency’s two employee groups in August 2014. This section presents two components of the Adopted Budget for both revenues and expenditures. Section 8 presents the third component of the Adopted Budget for capital expenditures.

CMSA’s primary source of revenue in the FY 18 Budget is sewer service charges received from JPA member agencies. In FY 14 the Agency transitioned from determining per unit treatment costs using Equivalent Dwelling Unit (EDU) to a cost structure based on the volume and strength of wastewater treated. This method is a fairer determination for the assignment of treatment costs, as it uses the cost-of-service principal in recognizing that each EDU does not produce the same volume and strength of wastewater. The Agency has now completed five years of calculating the wastewater strength from each JPA member’s flow and has incorporated 36-months of wastewater strength along with 36-months of wastewater volume in determining each JPA member’s FY 18 sewer service charges.

Table 1 shows the FY 16, FY 17, and FY 18 operating revenues and expenses, with surplus funds being transferred to the operating and unrestricted capital reserves. Major changes to FY 18 revenues and expenditures from FY 17 are discussed in the narrative following Table 1.

**Table 1: Overview of Operating Revenues and Expenditures for FY 16, 17 and 18**

	<b>FY 16 Adopted Budget</b>	<b>FY 17 Adopted Budget</b>		<b>FY 18 Adopted Budget</b>	<b>% Difference FY 18 to FY 17 Budget</b>
<b>Total Operating Revenues</b>	\$11,770,086	\$12,237,236		\$12,654,365	3.4%
<b>Total Operating Expenditures</b>	\$10,896,500	11,580,480		\$11,462,600	-1.0%
<b>Surplus/(Deficit)</b>	<b>\$ 873,586</b>	<b>\$ 656,756</b>		<b>\$ 1,191,765</b>	

*Note: Budget surpluses are transferred to designated reserve funds per Financial Policy #532.*

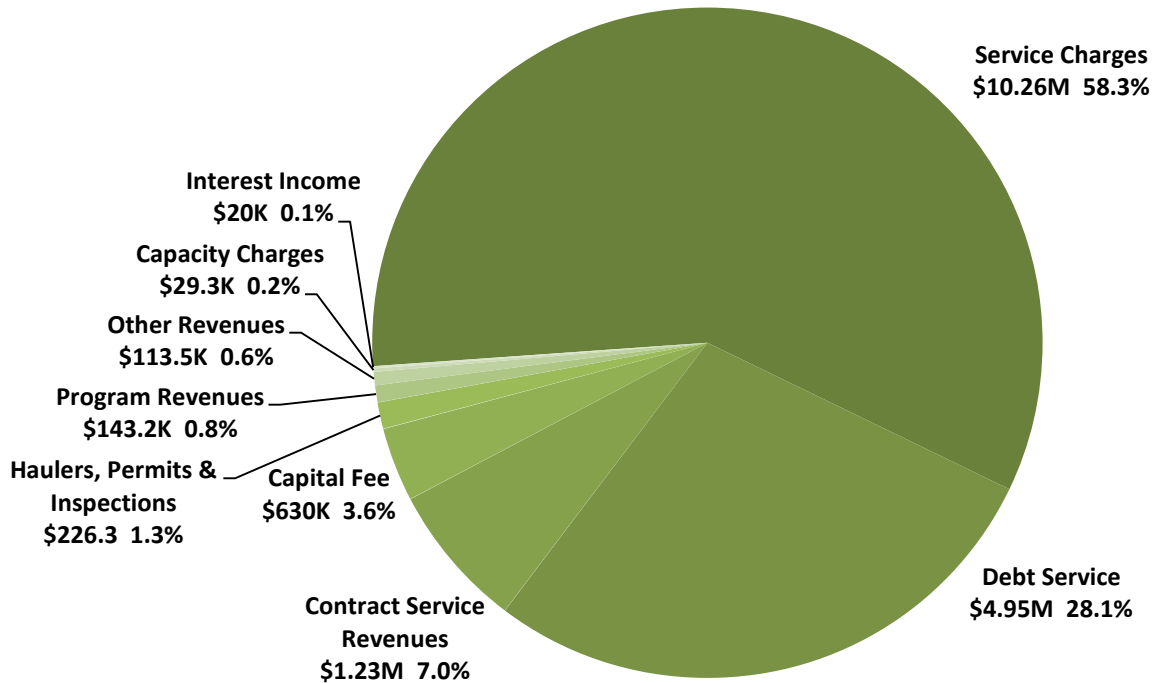
Total Operating Revenues increase by 3.4% and Total Operating Expenditures decrease by 1%, and the expected surplus of \$1.19M includes \$630,000 designated for future capital projects.

**Adopted FY 18 Revenues:** Table 2 summarizes revenues by source for FY 16, FY 17, and FY 18. A brief analysis that describes the difference between FY 17 and FY 18 revenue categories follows the pie chart below.

**Table 2: Revenues by Source for FY 16, FY 17, and FY 18 Adopted Budgets**

Revenue Sources by Category	FY 16 Adopted Budget	FY 17 Adopted Budget		FY 18 Adopted Budget	% Difference FY 18 to FY 17 Operating Budget	% Total Revenues
<b>Operating Revenues</b>						
Service Charges	\$ 9,467,549	\$ 9,865,358		\$10,263,165	4.0%	58.3%
Service Charge Capital Fee	430,000	530,000		630,000	18.9%	3.6%
Contract Service Revenues	1,495,041	1,425,138		1,228,950	-13.8%	7.0%
Program Revenues	134,543	128,990		143,200	11.0%	0.8%
Haulers, Permits & Inspection	194,252	211,250		226,250	7.1%	1.3%
Interest Income	30,700	56,500		113,500	100.0%	0.6%
Capacity Charges	-0-	-0-		29,300	100.0%	0.2%
Other Operating Revenues	20,000	20,000		20,000	0.0%	0.1%
<b>Total Operating Revenues</b>	<b>\$11,772,085</b>	<b>\$12,237,236</b>		<b>\$ 12,654,365</b>	<b>3.4%</b>	<b>71.9%</b>
<b>Debt Service</b>	<b>4,574,030</b>	<b>4,960,117</b>		<b>4,952,382</b>	<b>-0.2%</b>	<b>28.1%</b>
<b>TOTAL REVENUES</b>	<b>\$16,346,115</b>	<b>\$17,197,353</b>		<b>\$17,606,747</b>	<b>2.4%</b>	<b>100.0%</b>

**FY 18 Budget Revenues by Source**  
(Where the Money Comes From)



(A list of acronyms and their definitions used in the revenues and expenditures analyses can be found in Section 11 - Key Terms and Financial Glossary with Acronym Listing)

*Service Charges:* A fee collected for providing wastewater treatment service that is allocated to each JPA member based on wastewater flows and strength into CMSA from April 1, 2014 to March 31, 2017. Flow is measured in millions of gallons and strength factors are measured in pounds for mass of biological oxygen demand and mass of total suspended solids. The sewer service charges are budgeted to increase by 4% to fund increased operating expenses and to fund future capital projects as planned for in the 10-year financial forecast (Section 9).

*Service Charge Capital Fee:* A fee collected from JPA members to fund capital projects, the unspent residual of which, if any, flows into unrestricted capital reserves. The 18.9% had been planned for in past years in the Agency's 10-Year Forecast.

*Contract Services:* Revenues received for services provided by the Agency under contract to local agencies are expected to decrease by 13.8%.

- \$589,690 for SQSP wastewater services: 27.6% decrease in accordance with contract terms.
- \$108,110 for SQSP pump station maintenance: 2.5% increase for Bay Area CPI.
- \$49,950 for SQ Village: 51.1% increase in accordance with planned projects and contract terms.
- \$403,400 for SD 2 Pump Station Maintenance: 2.4% increase in accordance with contract terms and scheduled maintenance.
- \$16,500 for LGVSD FOG and Pollution Control Programs: 17.5% decrease due to services that will not be performed during FY 18.
- \$21,500 for SD #1 FOG Program: 13.2% increase from FY 17 with the addition of new restaurants in the service area.
- \$25,600 for SRSD FOG Program: 11.3% increase from FY 17 with the addition of new restaurants in the service area.
- \$2,200 for TCSD FOG Program: 4.8% increase due to planned services that will be performed during FY 18.
- \$7,500 for SD 2 FOG Program: 21.1% decrease due to services that will not be performed during FY 18.
- \$3,000 for Novato SD Dental Amalgam Program: 14.3% decrease from FY 17 as program enters less time intensive implementation phase.
- \$1,500 for Almonte SD FOG Program: No change from FY 18.

Program Revenues: Revenues received in accordance with agreements with program participants for the Health & Safety and Countywide Public Education programs. Revenues are expected to increase by a net 11%. The Health & Safety Program increased by 7.6% to engage a consultant to conduct a hazards analysis, while the Public Education program was increased by 17.5% due to the addition of a new educational video outreach program .

Haulers, Permits, and Inspection: Revenues received from charges for septage disposal at the CMSA facility from private waste haulers, permit fees for industrial waste dischargers, administrative costs for pollution prevention program inspections, and other services. Revenues are expected to increase by 7.1% due to increased participation and deliveries from septic haulers and food waste disposers, and increases for additional permits and related inspections. The Organic Foodwaste Receiving Facility was placed into operation in January 2014 and revenues received for deliveries to the facility are the funding source for its operation and maintenance.

Interest income: Revenue received from LAIF and CAMP is expected to increase 100%. The Agency has recognized that interest rates are generally higher, and has assumed a .8% interest rate for FY 18, .37% higher than FY 17.

Capacity Charges: Revenue received from new construction or converting former septic system properties to public sewer to purchase capacity in the sanitary sewer system. Capacity charges when received may be used for capital purposes only. The Agency had not previously budgeted for capacity charges due to little or no activity, but for the fiscal year 2017-18 has budgeted a nominal amount to serve as a placeholder.

The capacity charge fee for a single-family dwelling unit will increase 1.19% from \$5,863.20 to \$5,932.85 for the fiscal year 2017-18 as adjusted by the Engineering News Record (ENR) Construction Cost Index for the San Francisco Bay Area for the twelve month period from April to April. The Agency's capacity charge Fee Schedule Ordinance No. 2016-1 is available on the website at [www.cmsa.us/documents/ordinances](http://www.cmsa.us/documents/ordinances).

**Adopted FY 18 Operating Expenditures:** Over 90% of the budget is related to fixed operational expenses over which the Agency has limited control once agreements are in place, and include salaries, benefits, chemicals, biosolids hauling and disposal, permit sampling requirements, biosolids monitoring compliance, insurance, utilities, and several operating permits required by regulatory agencies. The remaining 9-10% represents maintenance and repair costs, and general and administrative expenses that include a varying degree of funds available for discretionary use.

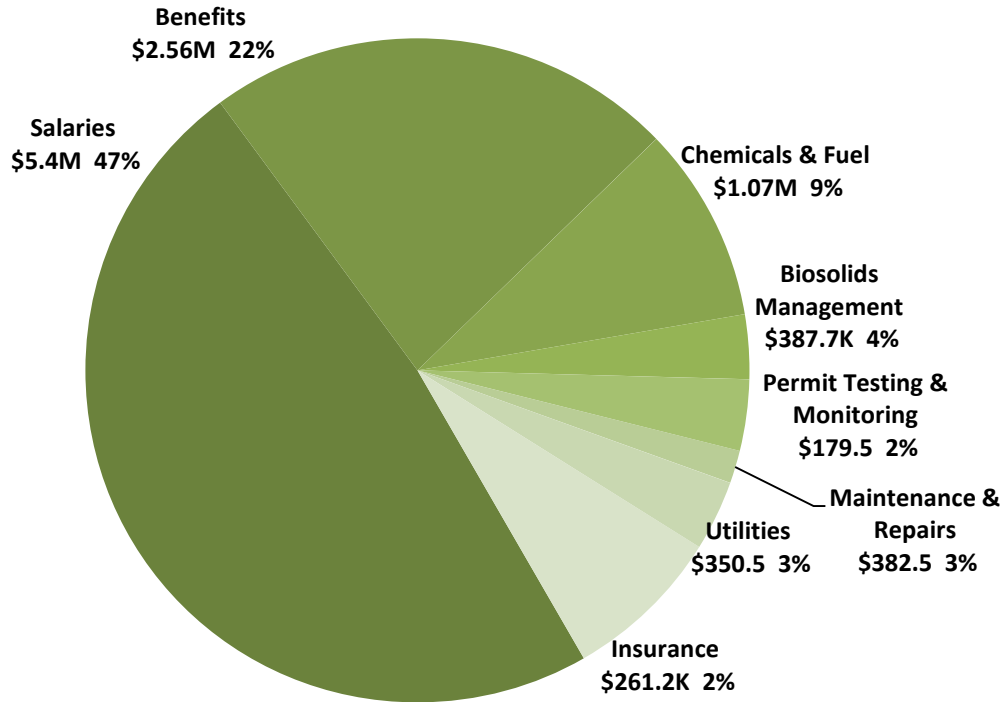
The Agency's FY 18 Adopted Budget is summarized in Table 3 on the next page, Budget by Category of Expenditures. The pie chart shows this information in a graphical display. A descriptive analysis for each expenditure category can be found following the pie chart.



**Table 3: Budget by Category of Expenditures for FY 16, FY 17, and FY 18 Adopted Budgets**

Expenditures by Category	FY 16 Adopted Budget	FY 17 Adopted Budget		FY 18 Adopted Budget	% of FY 18 Budget	% Difference FY 18 to FY 17 Budget
Salaries	\$ 4,874,200	\$ 5,283,600		\$ 5,401,800	47.1%	2.2%
Benefits	2,571,600	2,575,700		2,561,100	22.3%	-0.6%
Chemicals & Fuel	1,207,500	1,146,800		1,069,500	9.3%	-6.7%
Utilities	395,300	372,600		350,500	3.3%	-5.9%
Biosolids Management	275,900	373,920		387,700	3.4%	3.7%
Permit Testing & Monitoring	149,000	168,800		179,500	1.6%	6.3%
Maintenance & Repairs	391,000	382,500		382,500	3.1%	0.0%
General & Administrative	757,100	1,000,660		868,800	7.6%	-13.2%
Insurance	274,900	275,900		261,200	2.3%	-5.3%
<b>Total Expenditures</b>	<b>\$10,896,500</b>	<b>\$11,580,480</b>		<b>\$11,462,600</b>	<b>100.0%</b>	<b>-1.0%</b>

**FY 18 Budget by Category of Expenditure**  
(Where the Money is Spent)



Salaries: Salaries are budgeted to increase by 2.2% due to a 2% COLA salary adjustment for Agency employees effective July 1, 2017, other anticipated step adjustments for eligible staff. The Agency has started to stabilize salary growth as senior employees retire or as employees leave and new employees are appointed to the vacant position at the entry level salary step.

Benefits: Total employee benefit costs are very consistent between years with only a minor .6% decrease. Employee benefits include costs for retirement, medical, retiree medical, and other benefits. For retiree medical, the Agency contributes the full amount of the actuarially required contribution of approximately \$300,000 for direct medical costs and prefunding. Retiree medical costs include Agency paid minimum insurance premiums to PERS medical for eligible active and retired employees, plus reimbursement amounts paid to retirees for the employee portion withheld from pension checks, and prefunding amounts paid to the retiree medical trust known as CERBT (California Employers Retirement Benefit Trust). Transfers to the trust are irrevocable. The trust is a Section 115 trust that holds and accumulates amounts to be used for the exclusive benefit of eligible retirees and their beneficiaries. The trust is anticipated to be fully funded in approximately twelve years near or at which time benefits will be paid from the trust. Earnings of the trust will be self-supporting to pay benefit obligations from the trust.

Chemicals & Fuel: This category is budgeted to decrease by 6.7% due to planned reduced usage and decreased chemical costs. Significant savings were achieved in FY 14 when the Agency joined the Bay Area Chemical Consortium (BACC), a regional chemical purchasing cooperative. Chemical suppliers agreed to supply chemicals to the members of the cooperative at lower unit costs than what the Agency would be able to obtain on its own. In FY 18, the Agency continues to benefit from reduced bid prices from the cooperative, having received per unit price reductions for one out of five BACC chemicals. While the Agency can develop projections for the quantity of chemicals used, the cooperative helps reduce the challenges and risks associated with estimating the future volatility of commodity unit prices.

Utilities: This category for electricity, natural gas, and other utilities is budgeted to decrease 5.9%. Although the budget includes a 56% increase for garbage solid waste disposal and additional debris boxes, there is a 50% decrease for natural gas. The Agency has achieved significant savings through the production of its own biogas. In January 2014, the Organic Waste Receiving Station was placed into service providing the Agency the biogas production capability to power the cogeneration engine for 20 to 22 hours a day, up from eight hours a day prior to the Receiving Facility becoming operational, thereby reducing the need to purchase as much natural gas. In FY 18 the cogeneration system is expected to operate at over 22 hours a day on biogas produced at the Agency, and therefore expects to purchase 50% less natural gas.

Biosolids Management: This category is budgeted to increase by 3.7 % due to contractual rate increases.

Permit Testing and Monitoring: This category is budgeted to increase by a net 6%. There is a 100% increase for testing the underground tank secondary containment to be performed every three years and last tested in FY 15. The increase is offset by increases in lab supplies, underground tank overfill containment tests, and a contractual CPI adjustment for outside laboratory analyses.

Maintenance & Repairs: This category is budgeted the same as FY 17.

General & Administrative: This category is budgeted to decrease 13.2%. The budget includes decreases for professional memberships and affiliations, and regulatory services for compliance and permit consultants.

Insurance: This category is budgeted to decrease 5.3% primarily due to reduced workers' compensation premiums and offset by recommendations received from CSRMA for potential premium increases for property, and general liability insurance.

## Adopted Operating & Capital Budget for Fiscal Year July 1, 2017 – June 30, 2018 and Overview

The following section is the FY 18 budget document in its entirety that was adopted by the Central Marin Sanitation Agency on June 13, 2017. The outline provided below summarizes the Agency’s primary sources and uses of funds, to give the reader an understanding of the budget and its organization. This overview also assists the reader in locating additional detail within the budget document.

### Revenues: Where the Money Comes From

Below is a listing of the budget documents which describe the Agency’s source of funds.

DOCUMENT TITLE	BUDGET PURPOSE	EXPLANATION
<b>Funding requirements and Sources Summary</b> Section 7	A snapshot summary.	Displays total expenditures and total revenues and summarizes beginning reserves, anticipated reserve increases and uses, to estimate ending funding sources.
<b>Schedule of Revenues and Other Financing Sources</b> Section 7	Revenue budget requirements	A detailed revenue budget by revenue category that includes all line items in each revenue category.

### Expenditures: Where the Money Is Spent

The budget documents listed below describe the Agency use of funds in greater detail.

DOCUMENT TITLE	BUDGET PURPOSE	EXPLANATION
<b>Summary of Expenditures by Departments and Category</b> Section 7	Summarizes totals for operating budget by departments and by expenditure category.	The summary compares the Adopted Budgets for FY 17 and FY 18. FY 16 audited actuals are presented next to the FY 17 Adopted Budget.
<b>Departmental Operating Budgets</b> Section 7	The departmental budget documents show in greater detail how each department expects to spend their budgeted dollars during FY 18.  *Administration *Maintenance *Operations *Technical Services *Cooperative Agreement (a cost center that tracks reimbursable expenses related to services provided to other local agencies)	Descriptions of each department and its core function and responsibilities including a summary of Expenditures by Category, an Authorized Positions head count for three fiscal years, and FY 18 Department Initiatives.  Adopted Operating Budget detailed by line item account for three fiscal years for each department.  The Adopted Budget Explanation by line item account number includes an account description that explains what the budgeted dollars are spent on. Additional notes and information that affected the development of the budget are also included.

DOCUMENT TITLE	BUDGET PURPOSE	EXPLANATION
<b>Capital Improvement Program</b> (Section 8)	The Capital Improvement Program budget is presented in greater detail so the reader may “drill down” from the Adopted FY 17-18 Capital Improvement Program summary to the CIP Budget by line item account schedules, and to Account and Project Descriptions that provide explanations and information about how the budgeted dollars will be spent.	<p>The Adopted FY 17-18 Capital Improvement Program summary compares FY 18 Adopted Budget to FY 17 Adopted Budget and Projected Actual expenditures for FY 17 and provides a narrative about significant changes in the budget.</p> <p>Capital Improvement Program FY 18 Budget and 10-Year Forecast. This schedule shows the FY 17 Adopted Budget and FY 17 Projected Actual expenditures and the FY 18 Adopted Budget, and presents a projected 10-year forecast for planned activities by budget line item account.</p> <p>The Account/Project Descriptions and Full Page Project Descriptions are explanations of how the budget will be spent and provides additional detail about each project and future planned activities.</p>
<b>10-Year Financial Forecast</b> (Section 9)	Long-term strategic budgetary examination of future operations.	Projections for future planned operations provide decision-making guidance for the timing and needs for funding sources and requirements.
<b>Debt Obligation</b> (Section 10)	Debt Service payment to owners of the Agency’s Refunding Revenue Bonds Series 2015.	This schedule shows total principal and interest due for debt service for each fiscal year through FY 32.

## FUNDING REQUIREMENTS AND SOURCES SUMMARY

Funding Requirements	Actual 2015-16	Fiscal Year 2016-17	Year-End Projection 2016-17	Fiscal Year 2017-18	Amount Increase (Decrease)	Percent Increase (Decrease)
<i>Operating:</i>						
Salaries and Wages	\$ 4,962,161	\$ 5,283,599	\$ 5,117,065	\$ 5,401,800	\$ 118,201	2.2%
Employee Benefits	2,428,803	2,575,700	2,399,918	2,561,100	(14,600)	-0.6%
Chemicals & Fuels	1,093,460	1,146,800	1,073,227	1,069,500	(77,300)	-6.7%
Biosolids Management	279,341	373,920	334,887	387,700	13,780	3.7%
Permit Testing & Monitoring	121,095	168,800	127,322	179,500	10,700	6.3%
Maintenance & Repairs	339,686	382,500	387,910	382,500	-	0.0%
Utilities	324,147	372,600	303,053	350,500	(22,100)	-5.9%
Insurance	274,937	275,900	203,553	261,200	(14,700)	-5.3%
General & Administrative	613,775	1,000,660	736,759	868,800	(131,860)	-13.2%
Operating before debt and capital	10,437,405	11,580,479	10,683,694	11,462,600	(117,879)	-1.0%
Debt Service	3,659,224	3,968,094	3,968,094	3,961,906	(6,188)	-0.2%
Operating before capital	14,096,629	15,548,573	14,651,788	15,424,506	(124,067)	-0.8%
Capital Improvements	\$ 2,935,667	\$ 4,193,000	\$ 2,658,521	\$ 3,817,600	(375,400)	-9.0%
Total requirements	<u>\$ 17,032,296</u>	<u>\$ 19,741,573</u>	<u>\$ 17,310,309</u>	<u>\$ 19,242,106</u>	<u>\$ (499,467)</u>	-2.5%
Funding Sources	Actual 2015-16	Fiscal Year 2016-17	Year-End Projection 2016-17	Fiscal Year 2017-18	Amount Increase (Decrease)	Percent Increase (Decrease)
Service Charges	\$ 9,467,549	\$ 9,865,358	\$ 9,865,358	\$ 10,263,165	\$ 397,807	4.0%
Capital Fee	430,000	530,000	530,000	630,000	100,000	18.9%
Debt Service Charge	4,574,030	4,960,118	4,960,118	4,952,382	(7,736)	-0.2%
Capacity Charges	162,705	-	185,000	29,300	29,300	-
Contract Service Revenues	1,641,615	1,425,138	1,450,151	1,228,950	(196,188)	-13.8%
Program Revenues	124,926	128,990	132,949	143,200	14,210	11.0%
Haulers, Permits & Inspections	256,939	211,250	244,100	226,250	15,000	7.1%
Other Revenues	81,235	20,000	28,470	20,000	-	0.0%
Interest Income	376,752	56,500	66,024	113,500	57,000	100.9%
Other Financing Sources	-	-	-	-	-	-
Subtotal funding sources	17,115,751	17,197,354	17,462,170	17,606,747	409,393	2.4%
Reserve (Increase) Usage	(83,455)	2,544,219	(151,861)	1,635,359	(908,860)	-35.7%
Total funding sources	<u>\$ 17,032,296</u>	<u>\$ 19,741,573</u>	<u>\$ 17,310,309</u>	<u>\$ 19,242,106</u>	<u>\$ (499,467)</u>	-2.5%

**SCHEDULE OF REVENUES AND OTHER FINANCING SOURCES**

Account #	Description	Actual 2015-16	Fiscal Year 2016-17	Fiscal Year 2017-18	Amount Increase (Decrease)	Percent Increase (Decrease)
<u>Service Charges to Members<sup>1</sup></u>						
4010-000-00	SRSD	\$ 4,196,018	\$ 4,231,633	\$ 4,249,977	\$ 18,344	0.4%
4010-000-00	SD #1	4,409,984	4,762,416	5,162,372	399,956	8.4%
4010-000-00	SD #2	861,547	871,309	850,816	(20,493)	-2.4%
Totals		<u>\$ 9,467,549</u>	<u>\$ 9,865,358</u>	<u>\$ 10,263,165</u>	<u>\$ 397,807</u>	4.0%
<u>Capital Fee to Members<sup>1</sup></u>						
4010-000-00	SRSD	\$ 190,576	\$ 227,337	\$ 260,883	\$ 33,546	14.8%
4010-000-00	SD #1	200,294	255,853	316,890	61,037	23.9%
4010-000-00	SD #2	39,130	46,810	52,227	5,417	11.6%
Totals		<u>\$ 430,000</u>	<u>\$ 530,000</u>	<u>\$ 630,000</u>	<u>\$ 100,000</u>	18.9%
<u>Debt Service Cost to Members<sup>2</sup></u>						
4011-000-00	SRSD	\$ 1,710,994	\$ 1,852,642	\$ 1,859,855	\$ 7,213	0.4%
	SD #1	1,972,742	2,152,400	2,131,911	(20,489)	-1.0%
	SD #2	541,441	575,641	579,510	3,869	0.7%
	SQSP	348,853	379,434	381,106	1,672	0.4%
Totals		<u>\$ 4,574,030</u>	<u>\$ 4,960,117</u>	<u>\$ 4,952,382</u>	<u>\$ (7,735)</u>	-0.2%
<u>Capacity Charges</u>						
4020-010-00	SRSD	\$ 67,986	\$ -	\$ 11,720	\$ 11,720	
4020-020-00	SD #1	89,054	-	11,720	11,720	
4020-030-00	SD #2	5,665	-	5,860	5,860	
Totals		<u>\$ 162,705</u>	<u>\$ -</u>	<u>\$ 29,300</u>	<u>\$ 29,300</u>	

Note 1: See flow-strength tables in appendix to budget

Note 2: See EDU allocation table in appendix to budget

**SCHEDULE OF REVENUES AND OTHER FINANCING SOURCES**

Account #	Description	Actual 2015-16	Fiscal Year 2016-17	Fiscal Year 2017-18	Amount Increase (Decrease)	Percent Increase (Decrease)	Notes
<u>Contract Service Revenues</u>							
4601-000-00	San Quentin State Prison Wastewater Services	\$ 1,017,120	\$ 813,946	\$ 589,690	\$ (224,256)	-27.6%	O&M plus capital * 3.89% (see appendix)
4601-001-00	San Quentin State Prison Pump Station Maint	123,736	105,473	108,110	2,637	2.5%	Bay Area CPI Jan-Jan at 3.0%
4602-000-00	San Quentin Village Wastewater Services	37,735	33,056	49,950	16,894	51.1%	FY18 budget to Marin County PW
4600-000-00	SD#2 Pump Stations	367,647	394,063	403,400	9,337	2.4%	FY18 Corte Madera PS Budget
4031-000-00	LGVSD - FOG & pollution prevention	22,360	20,000	16,500	(3,500)	-17.5%	Source control service estimate
4033-000-00	SD #1 - FOG	19,990	19,000	21,500	2,500	13.2%	Source control service estimate
4034-000-00	SRSD - FOG	27,656	23,000	25,600	2,600	11.3%	Source control service estimate
4035-000-00	TCSD - FOG	5,987	2,100	2,200	100	4.8%	Source control service estimate
4036-000-00	SD #2 - FOG	12,223	9,500	7,500	(2,000)	-21.1%	Source control service estimate
4037-000-00	Novato SD - Dental Amalgam	4,267	3,500	3,000	(500)	-14.3%	Source control service estimate
4038-000-00	Almonte SD - FOG	2,894	1,500	1,500	-	0.0%	Source control service estimate
	Total contract service revenues	<u>\$ 1,641,615</u>	<u>\$ 1,425,138</u>	<u>\$ 1,228,950</u>	<u>\$ (196,188)</u>	<u>-13.8%</u>	
<u>Program Revenues</u>							
4070-000-00	Health & Safety Program	\$ 87,115	\$ 85,000	\$ 91,500	\$ 6,500	7.6%	Shared program with Novato Sanitary
4080-001-00	County-wide Public Education Program	37,811	43,990	51,700	7,710	17.5%	Multi-agency program budget
4080-002-00	Outside Safety Training	-	-	-	-	-	
	Total program revenues	<u>\$ 124,926</u>	<u>\$ 128,990</u>	<u>\$ 143,200</u>	<u>\$ 14,210</u>	<u>11.0%</u>	
<u>Haulers, Permits &amp; Inspection</u>							
4030-000-00	Permit and Inspection Fees	\$ 19,572	\$ 20,000	\$ 24,000	\$ 4,000	20.0%	Permitting of regulated businesses
4050-010-00	Revenue from Haulers - Septic	99,518	65,000	70,000	5,000	7.7%	\$83.30 per 1,000 gal plus sampling fee
4050-020-00	Revenue from Haulers - RV	380	250	250	-	0.0%	\$10 per load
4050-030-00	Revenue from Haulers - FOG	90,793	85,000	90,000	5,000	5.9%	Tiered pricing per fee ordinance
4050-035-00	Revenue from Haulers - Liquid Waste	3,712	5,000	2,000	(3,000)	-60.0%	Price negotiated per truckload
4050-040-00	Revenue from Foodwaste Disposal	42,963	36,000	40,000	4,000	11.1%	Tipping fee from Marin Sanitary Service
	Total haulers, permits & inspection	<u>\$ 256,938</u>	<u>\$ 211,250</u>	<u>\$ 226,250</u>	<u>\$ 15,000</u>	<u>7.1%</u>	
<u>Interest Income</u>							
4910-002-00	Interest Income - LAIF	\$ 61,084	\$ 55,000	\$ 112,000	\$ 57,000	103.6%	LAIF yield at .8%
4910-011-00	Investment Interest - CAMP	1,305	1,500	1,500	-	0.0%	CAMP yield at .5%
	Total interest income	<u>\$ 62,389</u>	<u>\$ 56,500</u>	<u>\$ 113,500</u>	<u>\$ 57,000</u>	<u>100.9%</u>	
<u>Other Revenues</u>							
4990-000-00	Other non-operating revenue	\$ 33,882	\$ 20,000	\$ 20,000	\$ -	0.0%	Miscellaneous infrequent items
4990-011-00	CAMP non-operating revenue	-	-	-	-	-	
	Total other revenues	<u>\$ 33,882</u>	<u>\$ 20,000</u>	<u>\$ 20,000</u>	<u>\$ -</u>	<u>0.0%</u>	



**Central Marin Sanitation Agency  
Adopted FY 2017-18 Operating Budget**

Summary of Expenditures by Departments and Category

Operating Expenditures by Department	FY 15-16	FY 16-17	FY 17-18	% Change
	Audited Actuals	Adopted Budget	Adopted Budget	FY18 Adopted Budget from FY17 Adopted Budget
ADMINISTRATION	4,027,887	4,484,300	4,554,500	1.6%
MAINTENANCE	1,739,350	1,881,100	2,008,700	6.8%
OPERATIONS	3,009,595	3,173,800	3,150,600	-0.7%
TECHNICAL SERVICES (formerly Engineering and Environmental Services)	1,660,572	2,041,280	1,748,800	-14.3%
<b>TOTAL</b>	<b>\$ 10,437,404</b>	<b>\$ 11,580,480</b>	<b>\$ 11,462,600</b>	<b>-1.0%</b>

Operating Expenditures by Category	FY 15-16	FY 16-17	FY 17-18	% Change	Adopted % of Budget
	Audited Actuals	Adopted Budget	Adopted Budget	FY18 Adopted Budget from FY17 Adopted Budget	
SALARIES	4,962,161	5,283,600	5,401,800	2.2%	47.1%
BENEFITS *	2,428,803	2,575,700	2,561,100	-0.6%	22.3%
<b>SUB-TOTAL</b>	<b>7,390,963</b>	<b>7,859,300</b>	<b>7,962,900</b>	<b>1.3%</b>	<b>69.47%</b>
CHEMICALS & FUELS	1,093,460	1,146,800	1,069,500	-6.7%	9.3%
BIOSOLIDS MANAGEMENT	279,341	373,920	387,700	3.7%	3.4%
PERMIT TESTING & MONITORING	121,095	168,800	179,500	6.3%	1.6%
MAINTENANCE & REPAIRS	339,685	382,500	382,500	0.0%	3.3%
UTILITIES	324,147	372,600	350,500	-5.9%	3.1%
INSURANCE	274,937	275,900	261,200	-5.3%	2.3%
GENERAL & ADMINISTRATIVE	613,777	1,000,660	868,800	-13.2%	7.6%
<b>SUB-TOTAL</b>	<b>3,046,441</b>	<b>3,721,180</b>	<b>3,499,700</b>	<b>-6.0%</b>	<b>30.53%</b>
<b>TOTAL</b>	<b>\$ 10,437,404</b>	<b>\$ 11,580,480</b>	<b>\$ 11,462,600</b>	<b>-1.0%</b>	<b>100.00%</b>

Benefit Expenditures	FY 15-16	FY 16-17	FY 17-18	% Change	Adopted % of Budget
	Audited Actuals	Adopted Budget	Adopted Budget	Change	
RETIREMENT (CALPERS CLASSIC, PEPRA, UAL)	950,859	1,011,900	1,030,600	18,700	1.8%
<i>RETIREMENT - CALPERS CLASSIC</i>	598,276	526,503	494,128	(32,375.00)	
<i>RETIREMENT - CALPERS PEPRA</i>	-	81,700	55,400	(26,300)	
<i>RETIREMENT - CALPERS UNFUNDED ACCRUED LIABILITY</i>	352,583	403,697	481,072	77,375	
RETIREMENT - CALPERS SURVIVORS	1,722	2,600	2,700	100	3.8%
RETIREMENT - SOCIAL SECURITY/MEDICARE	79,535	78,200	84,000	5,800	7.4%
CALPERS MEDICAL - ACTIVE EMPLOYEES	907,646	967,500	908,500	(59,000)	-6.1%
DENTAL - ACTIVE EMPLOYEES	102,955	115,700	117,000	1,300	1.1%
LIFE INSURANCE, AD&D, LTD - ACTIVE EMPLOYEES	32,889	24,400	25,100	700	2.9%
VISION - ACTIVE EMPLOYEES	10,588	11,300	11,600	300	2.7%
MARA - ACTIVE EMPLOYEES	24,803	31,000	34,600	3,600	11.6%
CALPERS MEDICAL - RETIRED EMPLOYEES	169,368	177,700	198,200	20,500	11.5%
ANNUAL OPEB CONTRIBUTION	118,155	116,500	107,400	(9,100)	-7.8%
BENEFIT ADMINISTRATION FEES	-	-	6,400	6,400	100.0%
<b>TOTAL *</b>	<b>2,398,519</b>	<b>2,536,800</b>	<b>2,526,100</b>	<b>(10,700)</b>	<b>-0.4%</b>

\* Benefit line items for uniforms and unemployment benefits are excluded from the Benefit Expenditures FY 17-18 table.

## **Discussion: Comparison between FY 16-17 Adopted to FY 17-18 Adopted Budget**

### **Salaries**

- Salary increase of 2% for represented per MOU and 2% for unrepresented employees per compensation/benefit agreement.
- 21 Employees eligible to receive step advancement.
- 1 new Health and Safety Manager position with lower salary than the Safety Director and 1 new Laboratory Director position with lower salary than the Environmental Services Manager.
- Eliminated Safety Director and Environmental Services Manager positions.
- Compensatory time, vacation and holiday time cash-outs included.
- Two entry level positions added to facilitate succession planning and training prior to two expected retirements.

### **Benefits**

- Retirement expenses: Eliminated 8% Employer Paid Member Contribution (EPMC) from the Classic employee retirement calculation submitted to CalPERS.
- Agency Other Post Employee Benefit (OPEB) retiree medical cost is lower as a result of increased OPEB assets resulting in lower annual required contributions in the most recent GASB 45 Actuarial Valuation as of January 1, 2015.
- Benefit administration fees are budgeted separately from benefits paid for employees.

### **Chemicals**

- Decrease in chemical procurement costs (hydrogen peroxide, nitrate, odor control, polymer) due to reduced unit costs per gallon, and projected reduced usage for some chemicals.
- Higher fuel costs due to 2017-2018 U.S. Energy Information Administration cost predictions for higher gasoline and diesel fuels.

### **Biosolids Management:**

- Biosolids management costs expected to increase 3.7% which includes a 2% CPI increase and a 1.5% increase in the Lystek facility fee for a full year of deliveries and increased biosolids production. (FY 17 was a partial year.)
- Hauling costs expected to increase a total of 4% using the annual San Francisco Bay Area Consumer Price Index and increased deliveries to the Lystek and Solano County land application sites.

### **Permit Testing and Monitoring:**

- 60% increase for laboratory equipment for several one-time purchases in FY 18.
- Biosolids monthly monitoring costs expected to decrease 50% based on actual costs incurred during FY 17.
- Decrease in long-term contract pricing for NPDES permit sampling and testing due to changes in new regulations required by the Regional Water Board.

- County requirements for the monthly inspection of the underground tank overfill containment will increase 28%. The Agency no longer has a qualified in-house inspector and it was determined it will be more cost effective and time efficient to outsource this regulatory requirement.
- Secondary containment testing for the Agency's two underground fuel tanks takes place every three years and is scheduled for FY 18. The last test was in FY 15.

### **Utilities**

- Reduction in natural gas procurement due to increased biogas production from organic waste program expecting 94% uptime running the cogeneration system.
- 6% increase Marin Sanitary Service garbage rates.

### **Maintenance and Repairs**

- There are no noteworthy budget changes expected for this category of expense.

### **Insurance**

- Property and general liability insurance are estimated to be 5% lower.
- Workers' Compensation insurance is budgeted 12% lower based on FY 17 actual expenses.

### **General & Administrative**

- Reduced regulatory consultant fees related to the renewal of the NPDES permit which is expected to be completed during the first quarter of FY 18.
- Decreased membership costs, permits, and professional services for process control and engineering support.

**Administration**

The Administration Department provides administrative, financial, human resources, and information technology related services for the Agency. The Board of Commissioners appoints the General Manager who is the chief of staff to the Board and is responsible for the overall management and operations of the Agency.

The Department is responsible for the following functions:

- Provides administrative support to the Board of Commissioners
- Represents the Agency on legal and regulatory matters
- Maintains intergovernmental relations with the four JPA member agencies, local governments in Marin County, and government agencies in the region
- Communicates Agency initiatives to stakeholders and the public
- Develops, implements, and manages the Agency’s annual budget
- Manages the Agency’s finances and investments
- Provides human resource services to departments and employees
- Ensures the safety of agency employees and assets through insurance protection and risk management programs provided by the California Sanitation Risk Management Authority (CSRMA)
- Provides oversight for the Health & Safety Program
- Maintains the Agency’s communication and information technology systems

<b>Administration Expenditures by Category</b>	<b>FY 16 Audited Actuals</b>	<b>FY 17 Adopted Budget</b>	<b>FY 18 Adopted Budget</b>
<b>SALARIES</b>	\$1,027,677	\$1,081,100	\$1,222,000
<b>BENEFITS</b>	2,428,803	2,575,700	2,561,100
<b>SUBTOTAL</b>	<b>\$3,456,480</b>	<b>\$3,656,800</b>	<b>\$3,783,100</b>
<b>INSURANCE</b>	274,937	275,900	261,200
<b>GENERAL &amp; ADMINISTRATIVE</b>	296,470	551,600	510,200
<b>SUBTOTAL</b>	<b>\$ 571,407</b>	<b>\$ 27,500</b>	<b>\$ 771,400</b>
<b>TOTAL</b>	<b>\$4,027,887</b>	<b>\$4,484,300</b>	<b>\$4,554,500</b>

<b>Authorized Positions</b>	<b>FY 16</b>	<b>FY 17</b>	<b>FY 18</b>
General Manager	1	1	1
Administrative Assistant	1	1	1
Treatment Plant Manager	1	1	1
Administrative Services Manager	1	1	1
Financial Analyst	1	1	1
Personnel and Accounting Technician	1	1	1
Information Systems Analyst*	-	-	1
Health and Safety Manager	-	-	1
Safety Director	1	1	-
<b>TOTAL</b>	<b>7</b>	<b>7</b>	<b>8</b>

\*Transferred from Technical Services

**Central Marin Sanitation Agency**  
**Adopted FY 2017-18 Operating Budget**

Line Item Accounts

**\*Position Code**

GM General Manager  
 ASM Administrative Services Manager  
 OS Operations Supervisor  
 ISA Information Systems Analyst  
 AE Assistant Engineer  
 AA Administrative Assistant

**ADMINISTRATION**

Account #	Account Name	*By	FY 15-16 Audited Actuals	FY 16-17 Adopted Budget	FY 17-18 Adopted Budget	% Change FY18 Adopted Budget from FY17 Adopted Budget	Budget Account Description
<b>SALARIES &amp; BENEFITS</b>							
5010-010-01	Salaries, Wages & Compensation	ASM	1,019,232	1,071,000	1,214,500	13.40%	Salaries for 8 full-time employees and CMSA's 58.33% share of the Health & Safety Manager salary. FY 18 increases are for transferring the Information Systems Analyst position to Administration, a 2% COLA salary increase for employees, two step adjustments, and leave balance cash-outs.
5010-020-01	Overtime	GM	8,444	10,100	7,500	-25.74%	Authorized overtime to complete special activities or assignments, and employee compensatory time leave balance cash-outs.
<b>Subtotal Salaries &amp; Wages</b>			<b>1,027,677</b>	<b>1,081,100</b>	<b>1,222,000</b>	<b>13.03%</b>	
5020-020-01	Retirement CalPERS - Classic	ASM	950,859	930,200	975,200	4.84%	Employer contributions for CalPERS 2.7% @ 55 for Classic employee retirement program. The FY 18 employer contribution rate is 11.675% for Classic employees and FY 18 includes a \$481K UAL (unfunded accrued liability) payment. Beginning FY 17 employees fully reimbursed the Agency for the EPMC (employer-paid member contributions). The 8% Employer Paid Member Contribution (EPMC) has been eliminated from the FY 18 Budget.
5020-021-01	Retirement CalPERS-PEPRA	ASM	-	81,700	55,400	-32.19%	Employer contributions for CalPERS 2% @ 62 retirement program for PEPRA employees hired after January 1, 2013. The FY 18 employer PEPRA contribution rate is 6.533%. The decrease is due to using the correct PEPRA rate.
5020-022-01	Retirement CalPERS-Survivors	ASM	1,722	2,600	2,700	3.85%	Annual Survivors Benefit premium.
5020-030-01	Retirement - SS / Medicare	ASM	79,535	78,200	84,000	7.42%	Employer's 1.45% share of Medicare for all employees. Increase is function of salary and step increases in all departments.
5030-010-01	Benefits-CalPERS Medical	ASM	907,646	967,500	908,500	-6.10%	Budget based upon current CalPERS Kaiser family rate effective January through December 2017, and an estimated 4.5% premium increase for January through June 2018.
5030-001-01	Benefits-Dental	ASM	102,955	115,700	117,000	1.12%	Employer paid dental benefits.
5030-003-01	Benefits-Life Insurance, AD&D, LTD	ASM	32,889	24,400	25,100	2.87%	Employer paid life, accidental death & dismemberment, and long-term disability insurances.
5030-004-01	Benefits-Vision	ASM	10,588	11,300	11,600	2.65%	Employer paid vision benefits.
5030-015-01	Benefits-MARA	ASM	24,803	31,000	34,600	11.61%	MARA: Medical-After-Retirement-Account. Employer contribution of 1.5% of base salary for 20 employees (FY 17 was 19 employees). Budget increase is a function of salary adjustments, and is offset by the administrative fee being included in the new Benefit Administrative Fees account 5050-001-01.

**Central Marin Sanitation Agency**  
**Adopted FY 2017-18 Operating Budget**

Line Item Accounts

**\*Position Code**

GM General Manager  
 ASM Administrative Services Manager  
 OS Operations Supervisor  
 ISA Information Systems Analyst  
 AE Assistant Engineer  
 AA Administrative Assistant

**ADMINISTRATION**

Account #	Account Name	*By	FY 15-16 Audited Actuals	FY 16-17 Adopted Budget	FY 17-18 Adopted Budget	% Change FY18 Adopted Budget from FY17 Adopted Budget	Budget Account Description
5030-020-01	Retired Employees Medical Benefits	ASM	169,368	177,700	198,200	11.54%	Medical benefits for retired employees at the SF-Bay Area PERS Kaiser single rate. The spouses of four former SRSD employees who transferred to CMSA also receive medical benefits. In FY 18 there is one new and four anticipated retirees. The increase is offset by two additional retirees turning age 65 with a consequent enrollment in the lower cost Medicare supplement plans.
5030-025-01	Annual OPEB Contribution	ASM	118,155	116,500	107,400	-7.81%	Prefunding of the Agency's post-employment health benefit obligations for current retirees and employees. The prefunding amount is the annual FY 18 estimated OPEB expense in the Agency's January 1, 2015 GASB actuarial report minus retiree medical premiums.
5050-000-01	Unemployment Benefits Claimed	ASM	10,515	10,000	10,000	0.00%	An allowance for unemployment benefits paid to State Employment Development Department (EDD) for claims filed by separated employees.
5050-001-01	Benefit Administration Fees	ASM			6,400	0.00%	New account: Administrative fees charged for medical, MARA, and NAVIA Flex 125 plans.
5060-000-01	Uniforms	AE	19,769	28,900	25,000	-13.49%	Contracted service to provide uniforms, jackets, fire resistant clothing and miscellaneous related work clothing for staff, and towel and floor mat cleaning services.
<b>Subtotal Benefits</b>			<b>2,428,803</b>	<b>2,575,700</b>	<b>2,561,100</b>	<b>-0.57%</b>	
<b>Total Salaries &amp; Benefits</b>			<b>3,456,480</b>	<b>3,656,800</b>	<b>3,783,100</b>	<b>3.45%</b>	
<b>INSURANCE</b>							
6800-010-01	Property Insurance	ASM	52,894	55,600	58,400	5.04%	Annual property insurance coverage from the California Sanitation Risk Management Authority (CSRMA) for all Agency buildings and structures. The increase is based on FY 17 Adopted Budget plus 5% per CSRMA's recommendation.
6800-020-01	General Liability & Auto Insurance	ASM	45,989	46,300	48,700	5.18%	CSRMA pooled insurance coverage for general, automobile, and error and omission liability premiums. FY 18 increase is based on FY 17 Adopted Budget plus a 5% increase recommended by CSRMA.
6800-030-01	Pollution Liability Insurance	ASM	945	1,000	1,100	10.00%	CSRMA pollution liability insurance for cleanup costs resulting from underground fuel storage tank system leaks and releases and other pollution caused losses.
6800-040-01	Employee/ Commissioner's Bonds	ASM	1,619	2,200	2,200	0.00%	CSRMA public official bonds for four Agency employees who are authorized to sign Agency checks, and includes employees who handle agency funds such as petty cash.

**Central Marin Sanitation Agency**  
**Adopted FY 2017-18 Operating Budget**

Line Item Accounts

**\*Position Code**

GM General Manager  
 ASM Administrative Services Manager  
 OS Operations Supervisor  
 ISA Information Systems Analyst  
 AE Assistant Engineer  
 AA Administrative Assistant

**ADMINISTRATION**

Account #	Account Name	*By	FY 15-16 Audited Actuals	FY 16-17 Adopted Budget	FY 17-18 Adopted Budget	% Change FY18 Adopted Budget from FY17 Adopted Budget	Budget Account Description
6800-050-01	Commercial Crime Insurance	ASM	-	800	800	0.00%	This insurance covers instances of public employee dishonesty. It is intended to cover all employees not covered under the employee/public official bonds.
5040-000-01	Workers' Compensation Insurance	ASM	173,490	170,000	150,000	-11.76%	CSRMA workers' compensation (WC) insurance for Agency employees.
<b>Subtotal Insurance</b>			<b>274,937</b>	<b>275,900</b>	<b>261,200</b>	<b>-5.33%</b>	
<b>GENERAL ADMINISTRATIVE</b>							
6700-010-01	Meetings/Training	GM	2,486	5,200	5,200	0.00%	Expenses associated with staff travel, training, and attendance at single-day professional meetings and seminars. Includes allowed expenses pursuant to the Agency's travel expense reimbursement policy.
6700-020-01	Conferences	GM	19,357	23,600	25,000	5.93%	Expenses associated with staff attendance at multi-day professional conferences, seminars, and training events outlined in the Agency's travel expense reimbursement policy.
6710-010-01	Commissioners Meeting Fees & Conferences	GM	7,500	11,600	11,600	0.00%	Pursuant to Commission compensation policy, CMSA Commissioners receive \$100 per day of service. There is an allowance for Commissioners conference attendance.
6805-000-01	Professional Affiliation Memberships	ASM	1,792	3,550	4,400	23.94%	Professional memberships, license and registration requirements for department staff.
6805-001-01	BACWA Membership	GM	15,803	8,000	8,000	0.00%	Annual membership dues to the Bay Area Clean Water Agencies (BACWA). BACWA is comprised of 5 members and over 25 associate members, such as CMSA.
6805-011-01	BACWWE Education Program	GM	-	8,000	8,000	0.00%	Agency sponsorship for the Bay Area Consortium for Water & Wastewater Education Program. The consortium is comprised of 20 partnering agencies.
6805-002-01	NBWA Membership	GM	8,436	6,000	6,000	0.00%	Annual membership dues to the North Bay Watershed Association (NBWA), which is comprised of 16 governmental agencies from the North San Pablo Bay watershed.
6805-003-01	CASA Membership	GM	15,600	16,000	16,000	0.00%	Annual membership dues to the California Association of Sanitation Agencies (CASA).
6805-004-01	NACWA Membership	GM	9,308	9,400	12,500	32.98%	Annual membership dues to the National Association of Clean Water Agencies (NACWA). NACWA represents the wastewater industry nationwide on regulatory and legislative issues.
6805-005-01	Bay Area Biosolids Coalition	GM	-	25,000	12,500	-50.00%	Agency membership for SF Bay Area Biosolids-to-Energy coalition, which is comprised of 19 regional wastewater agencies.

**Central Marin Sanitation Agency**  
**Adopted FY 2017-18 Operating Budget**

Line Item Accounts

**\*Position Code**

GM General Manager  
 ASM Administrative Services Manager  
 OS Operations Supervisor  
 ISA Information Systems Analyst  
 AE Assistant Engineer  
 AA Administrative Assistant

**ADMINISTRATION**

Account #	Account Name	*By	FY 15-16 Audited Actuals	FY 16-17 Adopted Budget	FY 17-18 Adopted Budget	% Change FY18 Adopted Budget from FY17 Adopted Budget	Budget Account Description
6815-000-01	Office Expenses	AA	28,584	29,500	29,500	0.00%	Costs associated with the Agency's administrative operations, including office supplies, copier lease, office furniture, office equipment service and repairs, and other related expenses.
6815-001-01	Safety Supplies	OS	22,298	47,350	37,300	-21.22%	Annual expenses for safety training, first aid and emergency supplies, defibrillator and fire extinguisher testing, various one time purchases and safety assessment expenses to correct workplace hazards.
6815-002-01	Information Technology Equipment & Software	ISA	497	1,800	26,400	1366.89%	Expenses related to Information Technology equipment and software licenses and upgrades. Account 6815-003-05 Software License & Support has been transferred from Technical Services into Administration. Budget includes security camera for front entrance of the administration building.
6820-000-01	Printing & Publications	AA	4,111	4,500	3,000	-33.33%	Expenses associated with newspaper subscriptions, publication of notices, and copy services at local print shops.
6830-001-01	General Professional Services	GM	59,721	51,000	51,000	0.00%	Expenses for general governmental and human resource services such as recruitments, background reference checks, and employment law staff training and development.
6830-002-01	Regulatory Services	GM	-	125,000	51,000	-59.20%	Consultation and advice on regulatory compliance and permit issues.
6830-005-01	Finance & Audit Services	ASM	32,747	25,250	25,300	0.20%	Expenses for professional services related to the financial operations of the Agency: annual audit of financial statements; annual maintenance fee for financial software license renewal and financial software support; GFOA Award program fees; actuarial, financial and operational analyses.
6830-010-01	Labor Relations Consulting	GM	8,760	9,200	9,400	2.17%	IDEA annual fee for labor relations and negotiations services. Budget adjusted to align with actual anticipated expense.
6830-015-01	Legal Services	GM	15,191	30,000	30,000	0.00%	Expenses for general, employment law, and construction/contract legal services.
6830-016-01	Health & Safety Program, CMSA Share	ASM	3,500	10,100	36,300	259.41%	This account represents the Agency's share (58.33%) of the Health & Safety Program non-salary costs. The remaining 41.7% of the Health & Safety Program budget is included in Non-Agency Expenses. New in FY 18, the budget also includes CMSA's equally shared cost of the .25 FTE equivalent Safety Director.
6830-017-01	Outside Safety Training Services	ASM	8,535	15,600	13,100	-16.03%	Training expenses for required safety programs that include hearing tests, first-aid/CPR, incident command training, traffic control, defensive driving, and many other Cal/OSHA programs that facilitate a safe work environment. Budget increase is for ARC Flash and Qualified Employee Electrical trainings.
6830-025-01	Employee Assistance Services	AA	1,815	1,850	2,000	8.10%	Confidential professional counseling benefit provided to employees. The fee is increased annually.



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GM General Manager  
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 ISA Information Systems Analyst  
 AE Assistant Engineer  
 AA Administrative Assistant

**ADMINISTRATION**

Account #	Account Name	*By	FY 15-16 Audited Actuals	FY 16-17 Adopted Budget	FY 17-18 Adopted Budget	% Change FY18 Adopted Budget from FY17 Adopted Budget	Budget Account Description
6830-060-01	Employee Health Maintenance Services	AA	3,792	2,500	2,500	0.00%	Expense for workplace safety related physicals, pre-employment exams, and urgent care at Kentfield Medical Clinic.
6840-010-01	Internet & Telephone Service	ISA	22,553	23,400	23,900	2.14%	Expenses associated with telephone, internet and email services, including cell phones, portable radios, and data plan expenses for Agency staff.
6855-000-01	Postage/Shipping	AA	4,280	5,900	5,900	0.00%	Postage, postage meter rental, and overnight shipping expense.
6859-000-01	Bank Fees & Analysis Charges	ASM	2,043	2,300	2,300	0.00%	Bank fees and investment expenses for California Asset Management Program and Westamerica Bank accounts. Finance charges and late payment fees.
6859-000-10	Bank Fees - Revenue Bond	ASM	-	-	2,100	0.00%	Bank fees for the Refunding Revenue Bonds Series 2015.
6860-000-01	Trade Discounts	ASM	(1,720)	-	-	0.00%	Account used to record vendor payment discounts received and taken for paying bills within payment terms.
6890-010-01	Contingency	GM	-	50,000	50,000	0.00%	Funds available for transfer to other operating budget accounts for unplanned and unanticipated activities. Transfers from this account require GM approval.
6990-000-01	Other Non-Operating Expenses	ASM	(518)	-	-	0.00%	No budget. Account used for accounting adjustments such as general ledger account reconciliations, prior year audit adjustments, and expenditures associated with prior year activities such as unexpected bills received for prior fiscal year goods and services as well as service charge refunds.
<b>Subtotal General &amp; Administrative</b>			<b>296,470</b>	<b>551,600</b>	<b>510,200</b>	<b>-7.51%</b>	
<b>Subtotal (excluding Salary and Benefits)</b>			<b>571,407</b>	<b>827,500</b>	<b>771,400</b>	<b>-6.78%</b>	
<b>Total Administration</b>			<b>4,027,887</b>	<b>4,484,300</b>	<b>4,554,500</b>	<b>1.57%</b>	

**Maintenance**

The Maintenance Department is responsible for maintaining Agency facilities, infrastructure, and assets, which include buildings, grounds, treatment facilities, vehicles, and equipment. Certified maintenance technicians and utility workers perform a wide variety of corrective and preventive maintenance and repairs on all assets and equipment in the wastewater treatment plant and related facilities. The department utilizes a computerized maintenance management system for scheduling corrective and preventive maintenance to manage its fixed assets, and to track repairs and maintenance activities with their associated costs.

The Electrical and Instrumentation group is responsible for maintaining the Agency’s process control systems, electrical and instrumentation equipment, and various electro-mechanical systems, and supports maintenance of communication systems, and information technology infrastructure.

Under contractual service agreements with the California Department of Corrections (San Quentin), County of Marin, and Sanitary District #2, the department maintains collection system assets such as pump stations, force mains, and gravity sewers.

<b>Maintenance Expenditures by Category</b>	<b>FY 16 Audited Actuals</b>	<b>FY 17 Adopted Budget</b>	<b>FY 18 Adopted Budget</b>
<b>SALARIES</b>	\$1,384,756	\$1,482,900	\$1,609,500
<b>SUBTOTAL</b>	<b>\$1,384,756</b>	<b>\$1,482,900</b>	<b>\$1,609,500</b>
<b>LUBRICANTS, PROPANE, OTHER MAINTENANCE &amp; REPAIRS</b>	5,824	6,000	6,000
<b>GENERAL &amp; ADMINISTRATIVE</b>	333,861	376,500	376,500
<b>SUBTOTAL</b>	14,909	15,700	16,700
<b>TOTAL</b>	<b>\$ 354,594</b>	<b>\$ 398,200</b>	<b>\$ 399,200</b>
<b>TOTAL</b>	<b>\$1,739,350</b>	<b>\$1,881,100</b>	<b>\$2,008,700</b>

<b>Authorized Positions</b>	<b>FY 16</b>	<b>FY 17</b>	<b>FY 18</b>
Maintenance Supervisor	1	1	1
Assistant Maintenance Supervisor	1	1	1
Maintenance Lead	1	1	1
Maintenance Repair	1	1	1
Mechanical Technician	4	4	4
Utility Worker	3	3	3
Assistant Maintenance Supervisor-(E/I)	1	1	1
Electrical/Instrumentation Tech	2	2	2
<b>TOTAL</b>	<b>14</b>	<b>14</b>	<b>14</b>

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Line Item Accounts

**\*Position Code**

ASM Administrative Services Manager  
 TPM Treatment Plant Manager  
 MS Maintenance Supervisor  
 EIAMS Electrical Instrumentation Assistant Maintenance Supervisor

**MAINTENANCE**

Account #	Account Name	*By	FY 15-16 Audited Actuals	FY 16-17 Adopted Budget	FY 17-18 Adopted Budget	% Change FY18 Adopted Budget from FY17 Adopted Budget	Budget Account Description
<b>SALARIES &amp; WAGES</b>							
5010-010-03	Salaries, Wages & Compensation	ASM	1,281,303	1,426,000	1,554,300	9.00%	Salaries for 14 full-time employees. FY 18 includes a 2% COLA salary increase for represented and unrepresented employees, seven step adjustments and leave balance cash-outs. Includes funding for potential six month overlap for an Electrical/Instrumentation Tech I to facilitate cross-training prior to the retirement of one employee.
5010-103-10	Transfer to CIP	ASM	24,752	(20,600)	(33,300)	61.65%	Transfer of salary expenses for staff assigned to CIP funded projects (.36 FTE).
5010-020-03	Overtime	TPM	31,652	28,000	33,300	18.93%	Authorized overtime to complete unexpected maintenance activities or assignments that require work after an employee's regularly scheduled shift. Budget increase due to salary adjustments plus anticipated comp-time cashed out.
5010-021-03	Stand-by Duty	TPM	47,049	49,500	55,200	11.51%	24/7 Stand-by duty for qualified maintenance staff to respond to emergency repair work and equipment failures. Pursuant to MOU and personnel policies, employees are paid to remain fit for duty and to respond within 1 hour when called. Sanitary District #2 funds one half of this expense. FY 18 increase is function of salary and step increases.
<b>Subtotal Salaries &amp; Wages</b>			<b>1,384,756</b>	<b>1,482,900</b>	<b>1,609,500</b>	<b>8.54%</b>	
<b>MAINTENANCE &amp; REPAIRS (M&amp;R)</b>							
6400-030-03	Lubricants, Propane, Other	MS	5,824	6,000	6,000	0.00%	Lubricants used for facility assets and equipment (cogeneration and stand-by power systems excluded), propane for the forklift, and welding and calibration gases.
6500-000-03	Utility Supplies	MS	7,393	8,000	7,000	-12.50%	Janitorial and general facility maintenance and cleaning supplies.
6510-001-03	Outside Services & Parts	TPM	36,102	30,000	30,000	0.00%	Service repair costs performed by outside providers for machining, fabrication, vacuum services, specialty repair work, and related parts, equipment, and supplies.
6510-004-03	Fleet Maintenance	MS	12,089	20,000	20,000	0.00%	This account is for preventative, predictive, and corrective maintenance on the Agency's fleet vehicles, and includes purchases of batteries, oil, tires, and other consumables. The Agency's fleet consists of 10 vehicles, two forklifts, a skid steer loader, 14 electric carts, and 6 bicycles.
6510-007-03	Hazardous Waste Disposal Service	MS	12,473	20,000	25,000	25.00%	Safe disposal of wastes such as oils, greases, oil and air filters, coolants, paints, solvents, light bulbs, batteries, and air purification medias (siloxane, hydrogen sulfide, and activated carbon).

**Central Marin Sanitation Agency**  
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Line Item Accounts

**\*Position Code**

ASM Administrative Services Manager  
 TPM Treatment Plant Manager  
 MS Maintenance Supervisor  
 EIAMS Electrical Instrumentation Assistant Maintenance Supervisor

**MAINTENANCE**

Account #	Account Name	*By	FY 15-16 Audited Actuals	FY 16-17 Adopted Budget	FY 17-18 Adopted Budget	% Change FY18 Adopted Budget from FY17 Adopted Budget	Budget Account Description
6510-008-03	Facilities Maintenance	MS	19,237	20,000	20,000	0.00%	Planned preventive and corrective repairs to maintain non-process specific facility structures such as roof and gutter systems, doors and door hardware, flooring, and painted surfaces (outside contractors if specialty work is required). This budget also includes funds for facility pest control services.
6510-009-03	Electrical Equipment	EIAMS	17,000	23,000	23,000	0.00%	Allowance for procurement of routine electrical equipment such as conduit, wiring, electrical connectors, fitting, consumable electrical supplies, and facility lighting (light bulbs, tubes, LED lights).
6510-010-03	Plant Pumps	MS	19,040	20,000	18,000	-10.00%	Allowance for routine consumable parts and equipment such as impellers, gasket material, and volutes.
6510-011-03	Process Tank Maintenance	MS	12,067	25,000	20,000	-20.00%	Allowance for routine consumable parts and equipment for facility process tanks and the primary heat exchange (excludes heat exchangers utilized by the cogeneration system).
6510-012-03	Centrifuge Maintenance	MS	8,974	20,000	20,000	0.00%	Consumable items for annual preventive and corrective maintenance for three centrifuges and their system components.
6510-013-03	Process (Filter) Media Replacement	MS	20,845	25,000	25,000	0.00%	Biogas and air purification media for facility equipment. Budget is for the purchase of media for one sulfatreat tank, one siloxane tank, and one odor scrubbing filter replacement per year.
6510-014-03	Organic Waste Receiving Facility	MS	47,571	40,000	45,000	12.50%	Allowance for consumable items required for maintaining the Organic Waste Receiving Station. The FY 18 budget assumes performing two complete mixing pump impellor/cutter bar changeouts, purchasing one set of paddle finisher screens, spare hoses, glycerin, rock trap grinder parts, and other critical spare inventory items.
6510-015-03	Boilers and Hot-water Systems	MS	9,998	10,000	8,000	-20.00%	Consumable items required for maintaining two dual fueled hot water boilers and the hot water recirculation systems. Budget includes annual specialized boiler system inspection work to examine the brick and burner assemblies, the fuel regulating systems, and associated pumps and piping.
6510-016-03	Effluent Pump Station	MS	3,780	8,000	8,000	0.00%	Allowance for parts and consumable items within the Effluent Pump Station and its above ground diesel tank. Includes pump and engine parts, driveshafts, fuel conveyance, diesel storage tanks, motor controls, and fire protection systems.
6510-020-03	Cogen/Emergency Generator Maintenance	MS	50,830	50,000	50,000	0.00%	Routine parts and equipment for scheduled cogeneration system and standby diesel generator maintenance. The budget assumes three 2,000 hour maintenance procedures on the cogeneration system and one annual maintenance procedure on the emergency standby diesel generator.

**Central Marin Sanitation Agency**  
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Line Item Accounts

**\*Position Code**

ASM Administrative Services Manager  
 TPM Treatment Plant Manager  
 MS Maintenance Supervisor  
 EIAMS Electrical Instrumentation Assistant Maintenance Supervisor

**MAINTENANCE**

Account #	Account Name	*By	FY 15-16 Audited Actuals	FY 16-17 Adopted Budget	FY 17-18 Adopted Budget	% Change FY18 Adopted Budget from FY17 Adopted Budget	Budget Account Description
6520-000-03	Groundskeeping	MS	44,099	45,000	45,000	0.00%	Facility landscaping services and supplies to maintain the Agency's property. Services include fire-defensible space maintenance, weed abatement, and clean-up project work.
6530-000-03	Small Tools & Equipment	MS	12,259	12,500	12,500	0.00%	Purchase and repair of hand, power, and pneumatic tools utilized in the day-to-day maintenance of assets and equipment.
<b>Subtotal Maintenance &amp; Repairs</b>			<b>339,685</b>	<b>382,500</b>	<b>382,500</b>	<b>0.00%</b>	
<b>GENERAL &amp; ADMINISTRATIVE</b>							
6700-010-03	Meetings/Training	TPM	3,003	4,000	4,000	0.00%	Expenses associated with attendance at single-day meetings, seminars, technical certification courses, and professional development. Includes allowed expenses pursuant to the Agency's expense reimbursement policy.
6700-020-03	Conferences	TPM	7,495	7,000	8,000	14.29%	Expenses associated with multi-day professional conferences, seminars, and training events outlined in the Agency's travel and expense reimbursement policy.
6805-000-03	Professional Affiliation Memberships	TPM	4,395	4,400	4,400	0.00%	Professional memberships and annual certification renewal fees for 14 maintenance and electrical / instrumentation technicians.
6830-030-03	Underground Service Alert (USA)	MS	16	300	300	0.00%	Annual Underground Service Alerts fee to identify utility locations prior to any type of digging or excavation work.
<b>Subtotal General &amp; Administrative</b>			<b>14,909</b>	<b>15,700</b>	<b>16,700</b>	<b>6.37%</b>	
<b>Subtotal (excluding Salary and Benefits)</b>			<b>354,594</b>	<b>398,200</b>	<b>399,200</b>	<b>0.25%</b>	
<b>Total Maintenance</b>			<b>1,739,350</b>	<b>1,881,100</b>	<b>2,008,700</b>	<b>6.78%</b>	

**Operations**

The Operations Department performs various activities essential to the operation and process control of a regional wastewater facility. Treatment, disposal, and reuse of wastewater is in full compliance with state and federal water pollution control laws and regulations.

The department is responsible for the following functions:

- Monitor and adjust treatment processes
- Ensure facilities are operated to achieve and exceed permit compliance
- Monitor local agency pump stations and related assets
- Order treatment chemicals and maintain inventories
- Conduct pilot testing and studies to improve and/or optimize treatment
- Monitor and operate systems to control the generation of wastewater odors
- Track the performance of all treatment and energy generation systems
- Operate an organic waste receiving facility
- Operate a power generation system
- Oversee and operate the Agency’s recycled water truck fill facility

<b>Operations Expenditures by Category</b>	<b>FY 16 Audited Actuals</b>	<b>FY 17 Adopted Budget</b>	<b>FY 18 Adopted Budget</b>
<b>SALARIES</b>	\$1,544,577	\$1,577,400	\$1,678,600
<b>SUBTOTAL</b>	<b>\$1,544,577</b>	<b>\$1,577,400</b>	<b>\$1,678,600</b>
<b>CHEMICALS &amp; FUELS</b>	1,093,460	1,146,800	1,069,500
<b>UTILITIES</b>	324,148	372,600	350,500
<b>GENERAL &amp; ADMINISTRATIVE</b>	47,410	77,000	52,000
<b>SUBTOTAL</b>	<b>\$1,465,018</b>	<b>\$1,596,400</b>	<b>\$1,472,000</b>
<b>TOTAL</b>	<b>\$3,009,595</b>	<b>\$3,173,800</b>	<b>\$3,150,600</b>

<b>Authorized Positions</b>	<b>FY 16</b>	<b>FY 17</b>	<b>FY 18</b>
Operations Supervisors	2	2	2
Lead Operators	4	4	4
Operators (Trainee, I-III)	7	7	7
<b>TOTAL</b>	<b>13</b>	<b>13</b>	<b>13</b>

**Central Marin Sanitation Agency**  
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Line Item Accounts

**\*Position Code**

ASM Administrative Services Manager  
 OS Operations Supervisor  
 TPM Treatment Plant Manager

**OPERATIONS**

Account #	Account Name	*By	FY 15-16 Audited Actuals	FY 16-17 Adopted Budget	FY 17-18 Adopted Budget	% Change FY18 Adopted Budget from FY17 Adopted Budget	Budget Account Description
<b><u>SALARIES &amp; WAGES</u></b>							
5010-010-04	Salaries, Wages & Compensation	ASM	1,422,261	1,461,200	1,554,300	6.37%	Salaries for 13 full-time employees. Includes a COLA increase of 2% for represented and unrepresented employees, six step adjustments, and leave balance cash-outs. Includes funding for potential six month overlap for an Operator-in-Training to facilitate cross-training prior to the retirement of one employee.
5010-104-10	Transfer to CIP	ASM	9,922	(10,200)	(16,700)	63.73%	Transfer of salary expenses for staff assigned to CIP funded projects (.36 FTE).
5010-020-04	Overtime	OS	100,496	107,900	122,200	13.25%	Authorized overtime to ensure facilities are properly staffed 24 hours/day and to complete specified activities or assignments. Budget increase adjusted FY 17 Adopted by 5% (2% salary increase plus 3% for step adjustments) and includes comp-time cashed-out.
5010-022-04	OPS Wet Weather Stand-by Duty	TPM	11,898	18,500	18,800	1.62%	24/7 Stand-by duty provided by qualified operations staff during the wet weather season (November-April). Pursuant to MOU and personnel policies, employees are paid to remain fit for duty and must respond within 1 hour after being called in for emergency situations.
<b>Subtotal Salaries &amp; Wages</b>			<b>1,544,577</b>	<b>1,577,400</b>	<b>1,678,600</b>	<b>6.42%</b>	
<b><u>CHEMICALS &amp; FUEL</u></b>							
6100-010-04	Ferric Chloride	OS	61,102	60,100	65,800	9.48%	Ferric chloride is used to improve settling in the primary clarifiers during storm related flow events, inhibits hydrogen sulfide production in the digesters, reduces struvite formations in pipelines, and is used as a coagulant in the biosolids dewatering process. This budget is based upon annual usage over the past three years, which averaged 126 dry tons. Increased expense due to higher ferric chloride unit cost for FY 18.
6100-020-04	Polymer-Cationic	OS	147,321	174,700	104,800	-40.01%	Polymer is added to centrifuge feed sludge to enhance the efficiency of solids removal, and is also injected into the flow stream for sludge thickening units to increase solids capture which reduces hydraulic loading in the digesters. The decrease is attributed to the actual usage of polymer which has been less than the manufacturer's recommendations.
6100-030-04	Odor Control	OS	11,993	21,500	19,000	-11.63%	A chemical agent used to mask odorous compounds produced by some wastewater processes. Odorants are delivered in 55 gallon barrels. The FY 18 budget is based on a 3-year average use of 13 barrels.

**Central Marin Sanitation Agency**  
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Line Item Accounts

**\*Position Code**

ASM Administrative Services Manager  
 OS Operations Supervisor  
 TPM Treatment Plant Manager

**OPERATIONS**

Account #	Account Name	*By	FY 15-16 Audited Actuals	FY 16-17 Adopted Budget	FY 17-18 Adopted Budget	% Change FY18 Adopted Budget from FY17 Adopted Budget	Budget Account Description
6100-040-04	Calcium Nitrate	OS	327,648	362,500	294,900	-18.65%	Calcium nitrate salts are the first of a two-phase odor control system used in the collection system upstream of the wastewater treatment plant. Nitrate injection in strategic locations inhibits hydrogen sulfide formation. Use is projected at 133K gallons for FY 18. Reduced expense due to lower bid opening unit costs.
6100-050-04	Hydrogen Peroxide	OS	236,129	226,100	220,000	-2.70%	Hydrogen peroxide is the second phase of the odor control system. It is injected into the system interceptors upstream of the headworks. The budget is based on the amount of hydrogen peroxide solution used in the recent three years and is projected at 100K gallons for FY 18.
6100-060-04	Sodium Hypochlorite	OS	147,816	129,200	168,000	30.03%	Sodium hypochlorite is used for effluent and recycled water disinfection, and in three treatment plant odor control scrubbers. The budget is based on the 3-year average use, and the increased expense is due to higher FY 18 bid opening unit costs.
6100-070-04	Sodium Bisulfite	OS	151,398	156,700	180,200	15.00%	Sodium bisulfite is used to neutralize the chlorine residual in the effluent prior to its discharge into the San Francisco Bay. The budget is based upon continued increased usage over recent years to ensure the Agency's NPDES permit limits are met. The budget estimate is for 170K gallons during FY 18.
6400-020-04	Gasoline, Diesel, Oil, & Fuel	OS	10,053	16,000	16,800	5.00%	Gasoline for vehicles and landscaping equipment, and diesel for emergency engine generators, and the effluent pump station pumps. The budget is for 2,000 gallons of gasoline and 3,500 gallons of diesel. The increase in price is based on projected 2017-2018 fuel prices.
<b>Subtotal Chemicals &amp; Fuel</b>			<b>1,093,460</b>	<b>1,146,800</b>	<b>1,069,500</b>	<b>-6.74%</b>	
<b>UTILITIES</b>							
6835-010-04	Natural Gas	OS	50,961	80,100	40,000	-50.06%	Supplemental fuel for the cogeneration system, and fuel for the boilers when the cogen system is offline. This budget is based on purchasing 7,000 therms per month at an estimated cost of \$0.48/therm delivered. The reduction this fiscal year is due to the Agency's cogeneration system operating at approximately 22+ hours a day on Agency produced biogas.
6835-020-04	Electricity	OS	205,821	221,500	204,000	-7.90%	Electricity to supplement the cogeneration system output and to supply power when the cogenerator is offline for maintenance.
6835-030-04	Water	OS	5,422	8,500	9,000	5.88%	Potable water for CMSA and the San Quentin junction box odor control facility. The Marin Municipal Water District doubled its service charge and implemented a new watershed management fee in January 2017, and has also announced a 5% rate increase beginning FY 18.



**Central Marin Sanitation Agency**  
**Adopted FY 2017-18 Operating Budget**

Line Item Accounts

**\*Position Code**

ASM Administrative Services Manager  
 OS Operations Supervisor  
 TPM Treatment Plant Manager

**OPERATIONS**

Account #	Account Name	*By	FY 15-16 Audited Actuals	FY 16-17 Adopted Budget	FY 17-18 Adopted Budget	% Change FY18 Adopted Budget from FY17 Adopted Budget	Budget Account Description
6835-040-04	Garbage	OS	61,944	62,500	97,500	56.00%	Solid waste disposal for garbage, green waste, recycling, and debris box disposal of headworks screenings, grit, non-recyclable wastes, and Organic Waste Receiving Station debris. The increase is for projected additional waste bins and debris boxes, and a 6.21% garbage rate increase.
<b>Subtotal Utilities</b>			<b>324,148</b>	<b>372,600</b>	<b>350,500</b>	<b>-5.93%</b>	
<b><u>GENERAL &amp; ADMINISTRATIVE</u></b>							
6210-000-04	Operations - General	TPM	7,970	6,000	6,000	0.00%	Small tools, equipment, parts, and other miscellaneous supplies.
6700-010-04	Meetings/Training	TPM	2,931	5,000	5,000	0.00%	Expenses associated with attendance at single-day professional meetings, seminars, and certification trainings. Includes allowed expenses pursuant to the Agency's expense reimbursement policy.
6700-020-04	Conferences	TPM	905	4,500	4,500	0.00%	Expenses associated with multi-day professional conferences, seminars, and training events outlined in the Agency's travel and expense reimbursement policy.
6805-000-04	Professional Affiliation Memberships	TPM	4,442	6,500	6,500	0.00%	Professional memberships and certification renewal requirements for operators. The budget includes 13 annual membership renewals and 14 treatment plant operator certification renewal fees.
6810-010-04	BAAQMD Permit	TPM	14,719	25,000	20,000	-20.00%	Bay Area Air Quality Management District (BAAQMD) permit fees for the cogeneration engine, emergency engine, five effluent pump station engines, and fuel dispensers. Budget decreased because FY 17 equipment fees were less than anticipated.
6830-001-04	Professional Services: Process Control	TPM	16,443	30,000	10,000	-66.67%	Professional wastewater consulting services for evaluation of process control options for reliability, efficiency, and other improvements, and advice on process control issues, training of staff on process analysis, and conducting special studies.
<b>Subtotal General &amp; Administrative</b>			<b>47,410</b>	<b>77,000</b>	<b>52,000</b>	<b>-32.47%</b>	
<b>Subtotal (excluding Salary and Benefits)</b>			<b>1,465,018</b>	<b>1,596,400</b>	<b>1,472,000</b>	<b>-7.79%</b>	
<b>Total Operations</b>			<b>3,009,595</b>	<b>3,173,800</b>	<b>3,150,600</b>	<b>-0.73%</b>	

**Technical Services (formerly Engineering and Environmental Services)**

The Technical Services Department provides full engineering support for the Agency and is responsible for all regulatory compliance activities required by the Agency’s National Pollutant Discharge Elimination System (NPDES) permit. Technical Services is responsible for the following functions:

- Designs small maintenance and capital projects and oversees the design of larger projects outsourced to engineering consulting firms.
- Manages construction contracts and projects and associated engineering and construction records.
- Assists with conducting operational studies, and energy efficiency and greenhouse gas emission evaluations.
- Negotiates and administers the Agency’s service and commodity contracts for employee uniforms, biosolids hauling and reuse, natural gas supply, and procurement of chemicals used in the wastewater and biosolids treatment processes.
- Chairs the Agency’s Capital Improvement Planning Committee which develops, implements, and manages the Agency’s 10-year Capital Improvement Program (CIP) and prepares the annual CIP budget with 10 year forecast.
- Assists with Underground Service Alert (U.S.A) utility locating services.
- Maintains the Agency’s information systems for process control, communications, business services, and administrative applications.
- Regulates commercial and industrial disposal of wastewater into the collection and treatment systems.
- Operates an accredited laboratory which performs the majority of routine testing required in the Agency’s NPDES permit and oversees specialized outside analytical testing services.
- The department provides regulatory enforcement and program administration services under contract with wastewater and other local agencies in Marin County for source control programs; storm water enforcement; and leads the countywide Public Education Outreach Program.

<b>Technical Services Expenditures by Category</b>	<b>FY 16 Audited Actuals</b>	<b>FY 17 Adopted Budget</b>	<b>FY 18 Adopted Budget</b>
<b>SALARIES</b>	\$1,005,150	\$1,142,200	\$ 891,700
<b>SUBTOTAL</b>	<b>\$1,005,150</b>	<b>\$1,142,200</b>	<b>\$ 891,700</b>
<b>BIOSOLIDS DISPOSAL</b>	279,341	373,920	387,700
<b>PERMIT TESTING &amp; MONITORING</b>	121,094	168,800	179,500
<b>GENERAL &amp; ADMINISTRATIVE</b>	254,987	356,360	289,900
<b>SUBTOTAL</b>	<b>\$655,422</b>	<b>\$ 899,080</b>	<b>\$ 857,100</b>
<b>TOTAL</b>	<b>\$1,660,572</b>	<b>\$2,041,280</b>	<b>\$1,748,800</b>

<b>Authorized Positions</b>	<b>FY 16</b>	<b>FY 17</b>	<b>FY 18</b>
Technical Services Manager	1	1	1
Associate Engineer*	1	-	-
Assistant Engineer	1	2	2
Information Systems Analyst**	1	1	-
Environmental Services Manager	1	1	-
Laboratory Director***	-	-	1
Environmental Laboratory Administrator****	1	1	1
Environmental Services Analyst (I-II)****	3	3	3
<b>TOTAL</b>	<b>9</b>	<b>9</b>	<b>8</b>

\* The FY 15-16 included a partially funded Associate Engineer which had been removed for FY 16-17.

\*\* Transferred to Administration department.

\*\*\* New Laboratory Director position for FY 17-18. The Engineering and Environmental Services departments were reorganized during FY 16-17 into Technical Services. The Laboratory Director position was created to replace the eliminated Environmental Services Manager position.

\*\*\*\* For FY 17-18 these positions transferred from the former Environmental Services department into Technical Services as part of the reorganization that took place during FY 16-17.

**Central Marin Sanitation Agency**  
**Adopted FY 2017-18 Operating Budget**

Line Item Accounts

**\*Position Code**

GM General Manager  
 ASM Administrative Services Manager  
 TSM Technical Services Manager  
 LD Lab Director

**TECHNICAL SERVICES (formerly Engineering and Environmental Services)**

Account #	Account Name	*By	FY 15-16 Audited Actuals	FY 16-17 Adopted Budget	FY 17-18 Adopted Budget	% Change FY18 Adopted Budget from FY17 Adopted Budget	Budget Account Description
<b>SALARY &amp; WAGES</b>							
5010-010-05	Salaries, Wages & Compensation	ASM	899,458	1,201,900	1,010,000	-15.97%	Salaries for 8 full-time employees and includes a 2% COLO salary increase of for employees, 5 step adjustments, and leave balance cash-outs.
5010-105-10	Transfer to CIP	GM	87,315	(85,900)	(135,200)	57.39%	Transfer of salary expenses for staff assigned to CIP funded projects (1.46 FTE).
5010-020-05	Overtime	TSM	12,166	12,000	9,700	-19.17%	Authorized overtime to complete special activities or assignments, and employee compensatory time leave balance cash-outs.
5010-022-02	Wet Weather Stand-by Duty	TSM	6,211	14,200	7,200	-49.30%	24/7 Stand-by duty provided by qualified operations staff during the wet weather season (November-April). Pursuant to MOU and personnel policies, employees are paid to remain fit for duty and must respond within 1 hour after being called in for emergency situations. Beginning FY 18 standby duty will scheduled based upon forecasted storm weather events which accounts for the decrease.
<b>Subtotal Salary &amp; Wages</b>			<b>1,005,150</b>	<b>1,142,200</b>	<b>891,700</b>	<b>-21.93%</b>	
<b>BIOSOLIDS MANAGEMENT</b>							
6200-010-02	Biosolid Reuse Fees	TSM	189,220	265,600	275,000	3.54%	Biosolids are beneficially reused at Redwood Landfill for alternative daily cover, land application sites in Sonoma and Solano counties for soil augmentation, and at the Lystek facility for further processing into a fertilizer. Each of these facilities charges fees to accept biosolids.
6200-050-02	Biosolids Hauling	TSM	90,121	108,320	112,700	4.04%	Approximately one load per day of biosolids is hauled from CMSA to one of the biosolids reuse sites.
<b>Subtotal Biosolids Management</b>			<b>279,341</b>	<b>373,920</b>	<b>387,700</b>	<b>3.69%</b>	
<b>PERMIT TESTING &amp; MONITORING</b>							
6300-000-02	Lab Supplies	LD	46,769	46,750	74,700	59.79%	Laboratory and source control program supplies including all chemicals, glassware, reagents, consumables, containers, filters, bioassay, de-ionized water system, sampling, and inspection equipment. This budget includes several one time replacement equipment purchases that will not occur again for several years.
6310-030-02	Biosolids Monitoring: Contract Lab Services	LD	9,700	20,100	10,100	-49.75%	Laboratory analysis cost associated with biosolids monthly and semiannual regulatory monitoring requirements. Decreased based upon aligning the budget to actual expenditures.
6320-010-02	NPDES Permit Sampling & Testing	LD	54,088	80,200	65,200	-18.70%	Outsourced laboratory analysis cost associated with NPDES permit compliance orders. Includes monthly, quarterly, semiannual, annual and permit period monitoring requirements. Budget has been reduced to align with actual costs incurred during FY 17.

**Central Marin Sanitation Agency**  
**Adopted FY 2017-18 Operating Budget**

Line Item Accounts

**\*Position Code**

GM General Manager  
 ASM Administrative Services Manager  
 TSM Technical Services Manager  
 LD Lab Director

**TECHNICAL SERVICES (formerly Engineering and Environmental Services)**

Account #	Account Name	*By	FY 15-16 Audited Actuals	FY 16-17 Adopted Budget	FY 17-18 Adopted Budget	% Change FY18 Adopted Budget from FY17 Adopted Budget	Budget Account Description
6320-020-02	Pretreatment Sampling	TSM	8,885	16,350	14,300	-12.54%	Contract for lab analysis of pretreatment samples and monitoring industrial waste.
6330-010-02	Underground Tank Testing: Overfill Containment	TSM	1,652	5,400	6,900	27.78%	Annual testing and monitoring of underground gasoline and diesel tank overfill and secondary. The Agency previously conducted these inspections in-house, and rather than train the new Laboratory Director, has determined it is more time efficient and cost effective to outsource this regulatory requirement.
6330-020-02	Underground Tank Testing: Secondary Containment	TSM	-	-	8,300	100.00%	Testing of underground tank secondary containment every three years as required by state regulation. Testing will be scheduled during FY 18, the last testing occurred in FY 15.
<b>Subtotal Permit Testing &amp; Monitoring</b>			<b>121,094</b>	<b>168,800</b>	<b>179,500</b>	<b>6.34%</b>	
<b>GENERAL &amp; ADMINISTRATIVE</b>							
6700-010-05	Meetings/Training	TSM	2,370	7,000	4,500	-35.71%	Expenses associated with single-day professional meetings and training seminars. Includes allowed expenses pursuant to the Agency's expense reimbursement policy.
6700-020-05	Conferences	TSM	9,415	13,200	15,800	19.70%	Expenses associated with multi-day professional conferences, seminars, and training events per the Agency's expense reimbursement policy.
6805-000-05	Professional Affiliation Memberships	TSM	3,035	4,100	4,000	-2.44%	Professional society memberships and registration fees mostly related to Water Environment Association (WEF) and California Water Environment Association (CWEA) memberships.
6810-000-02	Annual NPDES Permit	TSM	48,060	55,000	55,000	0.00%	Annual renewal fee for SWRCB administration of the NPDES permit and pretreatment program fee. The State Water Board has not reported its FY 18 NPDES permit fee structure.
6810-040-02	ELAP Certification	TSM	2,359	3,560	6,700	88.20%	Fees for annual renewal of the laboratory certification, inspections, required testing, certificates, and ELAP operating costs.
6810-050-02	Regional Monitoring Program SFEI	TSM	21,401	33,000	30,000	-9.09%	CMSA's NPDES permit requires participation in the Regional Monitoring Program (RMP) for the San Francisco Bay, which is administered by the San Francisco Estuary Institute.
6810-051-02	Clean Bay Collaborative Fees	TSM	19,510	25,500	25,500	0.00%	SF Bay NPDES dischargers are required to perform regional monitoring tests and perform studies to determine impacts to the bay. Organization participants conduct studies and tests related to TMDL development, nutrients, mercury, and PCB permit work that focus on Bay Area Clean Water Agencies (BACWA) priorities to protect the SF Bay.
6810-060-02	CUPA Fees	TSM	4,093	6,400	4,200	-34.38%	Certified Unified Program Agency fees are paid to the County of Marin for the Agency's underground storage tanks and hazardous materials storage.
6810-070-02	Stormwater Annual	TSM	1,457	1,800	1,800	0.00%	SWRCB permit for the Agency's industrial site stormwater permit.

**Central Marin Sanitation Agency**  
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Line Item Accounts

**\*Position Code**

GM General Manager  
 ASM Administrative Services Manager  
 TSM Technical Services Manager  
 LD Lab Director

**TECHNICAL SERVICES (formerly Engineering and Environmental Services)**

Account #	Account Name	*By	FY 15-16 Audited Actuals	FY 16-17 Adopted Budget	FY 17-18 Adopted Budget	% Change FY18 Adopted Budget from FY17 Adopted Budget	Budget Account Description
6810-080-02	BAPPG Membership	TSM	-	1,500	1,800	20.00%	CMSA Agency's Storm Water Permit fee.
6810-090-02	eNPDES Software	TSM	950	1,300	1,300	0.00%	Annual electronic reporting software maintenance fee that includes support and filing updates required by the State Water Board and EPA.
6815-002-02	Source Control	TSM	11,967	12,000	12,000	0.00%	Development, hosting, and upgrades for the software database used to manage the Agency's Pretreatment and Pollution Prevention Programs.
6821-000-02	Public Education Program: CMSA portion	GM	22,573	37,200	32,500	-12.63%	CMSA's share of the Countywide Public Education Program for expenses associated with participating in public outreach events, hosting school programs, and educational materials for the program.
6815-000-05	Office Expenses	TSM	-	500	500	0.00%	Office supplies: ink cartridges, paper for large-format printer/plotter, and other miscellaneous office expense.
6815-002-05	Information Systems	TSM	542	700	700	0.00%	Allowance for engineering productivity and project management software.
6815-003-05	Software License & Support	TSM	7,791	18,100	-	-100.00%	No Budget: Licensing fees for Nexgen (CMMS), Ignition( SCADA), AutoCAD (drafting), and virtual server maintenance software have been moved to Administrative Services.
6820-000-05	Printing & Publications	TSM	496	1,000	1,000	0.00%	Allowance for printing/shipping/advertising expenses for documents not assigned to specific CIP project contracts and for mailing expenses related to maintaining CMSA's list of prequalified contractors.
6830-001-05	Professional Svcs - Special Studies	GM	-	45,000	45,000	0.00%	A consultant will prepare a gap analysis of the current CMMS system and provide basic asset management training engineering and maintenance staff. An allowance is included for other unplanned studies.
6830-002-05	Cathodic Protection	TSM	6,868	9,500	7,600	-20.00%	Periodic cathodic protection monitoring of the land portion of the Marine Outfall, sections of the Ross Valley Interceptor, the San Rafael interceptor, various buried pipelines on Agency property, San Rafael Sanitation District Simms Force Main, and the South Francisco casing. Annual costs will vary from year to year due to monitoring frequencies for different facilities.
6830-019-05	Professional Svcs - Engineering Support	GM	92,100	80,000	40,000	-50.00%	This account is used to fund engineering consultant services.
<b>Subtotal General &amp; Administrative</b>			<b>254,987</b>	<b>356,360</b>	<b>289,900</b>	<b>-18.65%</b>	
<b>Subtotal (excluding Salary and Benefits)</b>			<b>655,422</b>	<b>899,080</b>	<b>857,100</b>	<b>-4.67%</b>	
<b>Total Engineering</b>			<b>1,660,572</b>	<b>2,041,280</b>	<b>1,748,800</b>	<b>-14.33%</b>	

**Cooperative Agreement Expenses - CMSA Services Provided Under Contract to Other Local Agencies**

The Agency provides services under contract to other local agencies for wastewater treatment services, pump station and collection system maintenance, administration of Pollution Prevention or Source Control Programs, and a Dental Amalgam Reduction Program. The Agency also serves as the lead agency to administer the cooperative Health & Safety Program and the County-wide Public Education Program.

With the exception of the Health & Safety Program, the budget in this cost center is to track the non-employee compensation portion of the contract expenses incurred on behalf of the contracting agencies. Each contracting agency has agreed to reimburse CMSA the costs of services rendered by CMSA in accordance with the terms of their respective contracts.

The tables below illustrate the relationship between the amount of projected revenues from each contracting agency in FY 17-18 and estimated expenses incurred by CMSA for its services.

Cooperative Agreement Services	FY 16 Audited Actuals	FY 17 Adopted Budget	FY 18 Adopted Budget
<b>CONTRACT SERVICE REVENUES</b>			
San Quentin State Prison Wastewater Services	\$1,017,120	\$ 813,946	\$ 589,690
San Quentin State Prison Pump Station Maintenance	123,736	105,473	108,110
San Quentin Village Wastewater Services	37,736	33,056	49,950
SD#2 Pump Stations	367,647	394,063	403,400
LGVSD - FOG & Pollution Prevention	22,360	20,000	16,500
SD #1 – FOG	19,990	19,000	21,500
SRSD – FOG	27,656	23,000	25,600
TCSO – FOG	5,987	2,100	2,200
SD #2 – FOG	12,223	9,500	7,500
Almonte SD – FOG	2,894	3,500	1,500
Novato SD - Dental Amalgam	4,267	1,500	3,000
<b>SUBTOTAL CONTRACT SERVICE REVENUES</b>	<b>\$1,641,615</b>	<b>\$1,425,138</b>	<b>\$1,228,950</b>
Health and Safety Program	87,115	85,000	91,500
County-wide Education Program	37,811	43,990	51,700
<b>SUBTOTAL PROGRAM REVENUES</b>	<b>\$ 124,926</b>	<b>\$ 128,990</b>	<b>\$ 143,200</b>
<b>TOTAL CONTRACT SERVICE REVENUES</b>	<b>\$1,766,541</b>	<b>\$1,554,128</b>	<b>\$1,372,150</b>

<b>COOPERATIVE AGREEMENT SERVICE EXPENDITURES (EXCLUDING ADMINISTRATIVE OVERHEAD CHARGES)</b>			
San Quentin State Prison Wastewater Services	\$1,017,120	\$ 816,946	\$ 589,690
San Quentin State Prison Pump Station Maintenance	111,936	93,952	96,110
San Quentin Village Wastewater Services	34,690	28,792	45,473
SD#2 Pump Stations	318,687	348,520	356,946
LGVSD - FOG & Pollution Prevention	18,328	16,393	13,525
SD #1 - FOG	18,173	17,273	19,545
SRSD - FOG	25,142	20,909	23,273
TCSO - FOG	4,907	1,721	1,803
SD #2 - FOG	11,112	8,636	6,818
Almonte SD – FOG	2,631	3,182	1,364
Novato SD - Dental Amalgam	3,497	1,230	2,459
<b>SUB-TOTAL COOPERATIVE AGREEMENT EXPENDITURES</b>	<b>\$1,566,223</b>	<b>\$1,354,554</b>	<b>\$1,157,006</b>
Health & Safety Program	84,481	82,372	89,271
County-wide Education Program	32,879	38,252	44,957
<b>SUB-TOTAL PROGRAM EXPENDITURES</b>	<b>\$ 117,360</b>	<b>\$ 120,624</b>	<b>\$ 134,228</b>
<b>TOTAL COOPERATIVE AGREEMENT EXPENDITURES</b>	<b>\$1,683,583</b>	<b>\$1,475,178</b>	<b>\$1,291,233</b>

**Central Marin Sanitation Agency**  
**Adopted FY 2017-18 Operating Budget**

Line Item Accounts

**\*Position Code**

ASM Administrative Services Manager  
 GM General Manager  
 HSM Health & Safety Manager  
 LD Lab Director  
 MS Maintenance Supervisor  
 TPM Treatment Plant Manager

**COOPERATIVE AGREEMENT EXPENSES: CMSA Services Provided Under Contract to Other Local Agencies**

Account #	Account Name	*By	FY 15-16 Audited Actuals	FY 16-17 Adopted Budget	FY 17-18 Adopted Budget	% Change FY18 Adopted Budget from FY17 Adopted Budget	Budget Account Description
<b>ADMINISTRATION - HEALTH &amp; SAFETY PROGRAM</b>							
5010-010-06	Salaries, Wages & Compensation	ASM	55,399	56,800	46,600	-17.96%	Novato Sanitary Distict's (NSD) share of the new Health & Safety Manager position salary is 41.67% and includes car allowance and leave cash-outs. The decrease is due to a reduction in salary for the new position. The Agency's share is 58.33% and is allocated to the Administration Budget.
5020-020-06	CalPERS Retirement	ASM	7,043	11,600	10,239	-11.74%	Employer and employer-paid employee contributions for CalPERS 2.7% @ 55 retirement program. The decrease is due to savings from creating the Health & Safety Manager and eliminating the Safety Director position.
5020-030-06	SS / Medicare	ASM	703	800	700	-12.48%	Employer's 1.45% share of Medicare.
5030-010-06	Employee Health Benefits	ASM	10,633	11,400	4,600	-59.65%	Employer paid contributions for employee benefits includes insurance coverage for health, dental, vision, life, accident and disability. Budget decrease is due to employee only health benefit coverage (FY 17 was family coverage).
5030-015-06	Employee Benefits- MARA	ASM	742	850	700	-15.40%	MARA: Is a medical after retirement employer paid contribution totaling 1.5% of base salary and \$180 per year administration fee (formerly .1% of base salary). The decrease is due to savings from new Health & Safety Manager position and eliminating the Safety Director position.
5030-020-06	Retiree Health Benefits	ASM	2,454	2,650	2,700	0.00%	Medical benefits for one retired employee and one surviving spouse. No significant increase is anticipated for retired Safety Director medicare Kaiser benefits.
5065-000-06	Shoes	ASM	-	100	100	0.00%	Safety shoes are part of the safety clothing provided for employees per CMSA safety policies.
6830-016-06	Health & Safety Manager Program Expenses	HSM	2,500	6,700	8,500	26.86%	Professional services, materials, supplies and memberships, to administer the Safety Program for two participating agencies. NSD's program share is 41.7% of program costs. CMSA's 58.33% share is budgeted to 6830-016-01.
6830-017-06	Prof'l Service: Outside Safety	HSM	-	-	11,200	0.00%	Training expenses for required safety programs that include hearing tests, first-aid/CPR, incident command training, traffic control, defensive driving, and many other Cal/OSHA programs that facilitate a safe work environment. Budget increase is for addomg this line which had been omitted from previous budgets.
<b>Subtotal Administration</b>			<b>79,475</b>	<b>90,900</b>	<b>85,339</b>	<b>-6.15%</b>	



**Central Marin Sanitation Agency**  
**Adopted FY 2017-18 Operating Budget**

Line Item Accounts

**\*Position Code**

ASM Administrative Services Manager  
 GM General Manager  
 HSM Health & Safety Manager  
 LD Lab Director  
 MS Maintenance Supervisor  
 TPM Treatment Plant Manager

**COOPERATIVE AGREEMENT EXPENSES: CMSA Services Provided Under Contract to Other Local Agencies**

Account #	Account Name	*By	FY 15-16 Audited Actuals	FY 16-17 Adopted Budget	FY 17-18 Adopted Budget	% Change FY18 Adopted Budget from FY17 Adopted Budget	Budget Account Description
<b>TECHNICAL SERVICES</b>							
6821-000-06	Countywide Public Education Program	GM	31,666	42,500	45,000	5.88%	Program expenditures to administer the County Wide Education Program for 5 participating agencies such as promotional materials, booth registration fees, public outreach program costs, sponsorships, supplies and memberships. CMSA's 58.3% share of the program cost is budgeted to Technical Services account 6821-000-02. Increase is due to adding \$10K to produce a new educational video.
<b>Subtotal Technical Services</b>			<b>31,666</b>	<b>42,500</b>	<b>45,000</b>	<b>5.88%</b>	
<b>MAINTENANCE</b>							
6600-000-06	SD-2 Pump Stations	MS	87,594	120,050	117,200	-2.37%	SD#2 pump station maintenance costs repair services, parts, supplies, equipment and recommended maintenance and capital expenditures. The decrease is attributable to fewer planned maintenance projects.
6600-001-06	SQSP Pump Station Maintenance	TPM	144,212	44,300	44,300	0.00%	SQSP pump station maintenance costs include labor, mileage, repair services, parts, supplies, equipment and recommended maintenance and capital expenditures. The increase is due to a contractual CPI price adjustment.
6600-002-06	SQ Village WW System Maintenance	TPM	1,519	33,050	25,700	-22.24%	SQV wastewater maintenance costs include labor, mileage, repair services, parts, supplies, equipment and recommended maintenance and capital expenditures. The increase is due to a contractual increase and anticipated higher maintenance costs.
<b>Subtotal Maintenance</b>			<b>233,326</b>	<b>197,400</b>	<b>187,200</b>	<b>-5.17%</b>	
<b>Total Cooperative Agreement Expenses</b>			<b>344,467</b>	<b>330,800</b>	<b>317,539</b>	<b>-4.02%</b>	

**SECTION 8. CAPITAL IMPROVEMENT PROGRAM**

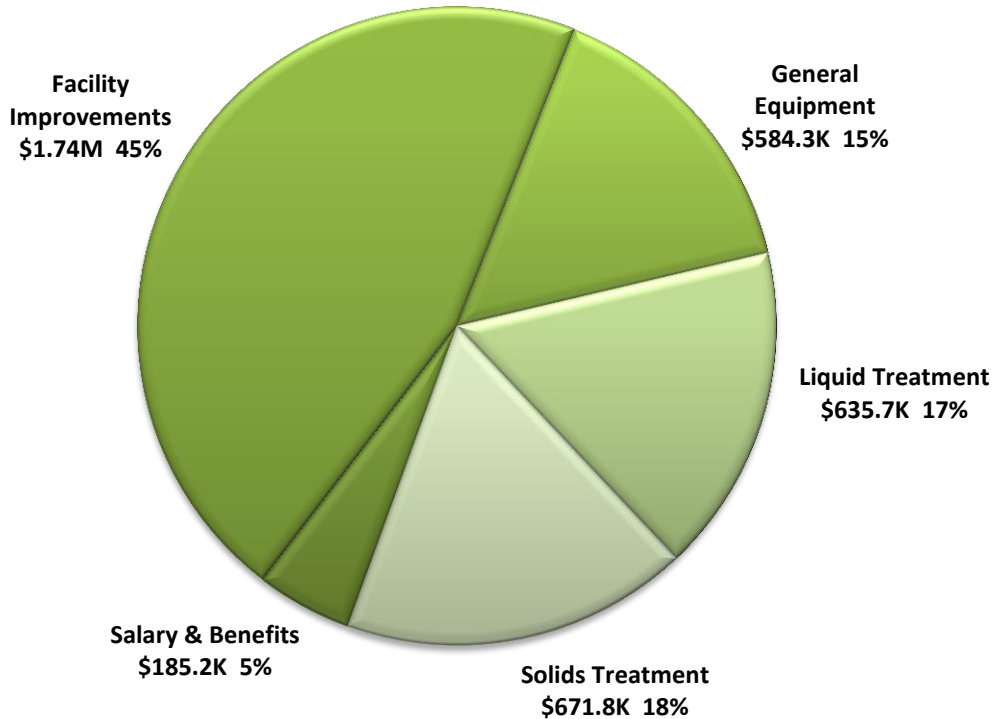
The treatment and disposal of wastewater and its beneficial reuse of by-products is a highly regulated enterprise that requires significant capital infrastructure. CMSA operates an around-the-clock wastewater facility, and the various assets and equipment necessary for the treatment processes are subjected to heavy use in a sometimes harsh operating environment. These assets are subjected to constant contact with wastewater and chemicals used in the treatment process. Agency staff monitors the development of new technologies and considers processes that may improve treatment methods, save energy, reduce chemical usage, and assist with meeting changing regulatory requirements. The maintenance, replacement, and addition of capital assets are an essential part of the Agency’s Capital Improvement Program (CIP) budget.

The CIP identifies capital expenditures over the next ten years so that the Agency may develop appropriate funding plans to implement future capital activities. The 10-Year CIP includes the replacement and rehabilitation of existing capital assets, as well as the acquisition or construction of new capital assets. Included within the 10-Year CIP is the FY 18 budget for capital projects and asset repair and replacement activities shown in the table below. These initiatives are organized into five categories: 1) Salary and Benefits for CIP Management, 2) Facility Improvements, 3) General Equipment, 4) Liquid Treatment Equipment and Systems, and 5) Solids Treatment and Energy Generation Equipment and Systems.

Capital expenditures are cash transactions made by the Agency that result in the acquisition or construction of a capital asset. A capital asset is any asset valued over \$5,000 with a useful life of over one year. Examples include land, buildings, machinery, vehicles, and equipment. All capital assets that the Agency plans to acquire or construct are included in the FY 18 CIP.

	<b>FY 16 Adopted Amended Budget</b>	<b>FY 17 Adopted Budget</b>	<b>FY 18 Adopted Budget</b>	<b>FY 18 Projects</b>
<b><u>CIP Categories:</u></b>				
1. Salary & Benefits for CIP Management	\$ 178,200	\$ 181,800	\$ 185,200	2 FTE
2. Facility Improvements	1,767,900	1,335,500	1,740,600	7
3. General Equipment	381,700	368,400	584,300	10
4. Liquid Treatment Equipment and Systems	828,000	1,283,800	635,700	11
5. Solids Treatment and Energy Generation Equipment and Systems	1,389,000	1,023,500	671,800	5
<b>TOTAL CIP PROJECTS</b>	<b>\$4,544,800</b>	<b>\$4,193,000</b>	<b>\$3,817,600</b>	<b>35</b>

## FY 18 Capital Improvement Program



### Major Capital Projects

The 10-Year CIP includes many important projects to maintain or improve the operation of the Agency's facilities. Within the CIP, several projects have additional Detailed Project Descriptions that further explain the scope, schedule, and budget for the project. Two major projects in FY 18 are:

- **Maintenance Facility Modifications:** Since the Maintenance Building and Maintenance Annex were constructed (1985 and 1995, respectively), the Agency's inventory and work space needs have changed. In FY 14, Agency staff conducted an internal needs assessment to identify the scope of modifications to the Maintenance Building and Annex. In FY 15, the Agency selected FME Architecture to prepare a formal needs assessment and to initiate the design phase of the project. In FY 16, FME prepared design documents that included modifications to the Maintenance Building to create office spaces, enclose the open side of the building for storage, and construct a new storage building adjacent to the Maintenance Annex. Grading improvements between the Administration Building and the Maintenance Building for better access were also included in the project. The design documents were submitted to the San Rafael Planning, Building, and Fire Departments for review and comment. FME addressed their comments and the plans were approved by the Building Department in August 2016. The project will be publically bid and constructed in FY 17 and 18. This project will not have a significant impact on future operational budgets other than to provide storage space for equipment that is currently exposed to the elements.

- Odor Control System Improvements: The Agency is working to implement improvements to ventilation in the solids handling building truck loading area in order to improve working conditions while operators load biosolids trucks. The current working environment is odorous and subject to truck exhaust during biosolids loading. The design improvements include supplemental ventilation of the sludge loading room by mounting a new supply air system on the roof with ducting, and a new exhaust air system on the opposite side of the building which also includes ducting and a new exhaust fan. The consultant's scope of work was amended in June 2016 to incorporate fire safety protection improvements that minimize the potential of an explosive atmosphere being present in the building. This will be accomplished by increasing the air flow through the building, modifying ducting to eliminate "dead spaces," and installing monitoring equipment and alarms to notify staff if there is an equipment failure. Design was completed in the fall of 2016, the Board authorized the project, and construction is underway.

### **10-Year Capital Improvement Program Planning and Funding**

The Agency annually updates its 10-Year CIP as part of the budget development process. The FY 18 CIP Budget and 10-year CIP schedule were prepared by an interdisciplinary CIP team comprising managers and supervisors from the Engineering, Operations, and Maintenance departments. The CIP team is responsible for developing and managing the annual CIP Budget, determining the appropriate delivery method for each project and activity, and monitoring and reporting of CIP activities. The General and Administrative Services Managers are responsible for working with the Board Finance Committee to develop long-term funding options for the 10-Year CIP.

The plan undergoes several levels of review. Each project or activity included in the CIP is individually evaluated to 1) determine its operational necessity, 2) ascertain if there is a less expensive alternative, 3) identify opportunities to reduce energy consumption and/or greenhouse gas emissions, and 4) create a project development schedule. Depending on the scale of the project, large, multi-year construction projects will typically have evaluation, study, and/or pre-design elements incorporated into the CIP. Costs for large projects greater than \$500,000 are estimated by engaging consulting engineers to prepare cost estimates, while cost estimates for smaller scale projects are determined by either surveying other public agencies or by utilizing costs from similar projects conducted by CMSA. Once the budget has been adopted, the Agency is required to comply with the Uniform Public Construction Cost Accounting Act to acquire the assets and deliver the project. All construction and professional service contracts and purchases that are over the dollar threshold set by the aforementioned Act and CMSA policies require Board approval at an open public meeting.

The total cost of the CIP over the next ten years is approximately \$36 million. This 10-year CIP scope focuses primarily on replacing aging infrastructure and assets, and is funded by capacity charges and capital reserves (which include capital charges and debt service coverage revenues). By the end of the FY 18 the Agency will have accumulated approximately \$7.2 million in capital reserves to finance higher priority projects of the current 10-Year CIP. The Agency plans to address the remaining 10-Year CIP funding requirements and newly identified requirements from the Facilities Master Plan in the development of the Agency's next Five-Year Revenue Plan for the period from the fiscal year 2018-19 to the fiscal year 2022-23.

## **Other Sources of Capital Funding**

When there is a new connection to the sanitary sewer system from a home or business in the CMSA service area, the Agency receives a capacity charge. The intent of the charge is to ensure that all new users pay their fair share of the wastewater treatment and disposal systems costs. The charge is based on the idea that wastewater services and capacity are available on a first-come-first-serve basis. Each JPA Member agency charges a separate collection system connection fee. For a new connection, the JPA member agency collects the combined connection fee and capacity charge from the property owner/developer, and the capacity charge portion of the fee is remitted to CMSA. Central Marin County is a well-developed region with very little large scale residential or commercial expansions generally occurring in the combined CMSA service area. The Agency previously did not budget for capacity charges as there were little or no charges collected. However, the Agency now budgets a nominal amount of capacity charges as a placeholder for the fees. Capacity charges received during the fiscal year are accounted for per requirements of the California Government Code that CMSA disclose the amount of capacity charges collected within 180 days after the fiscal year and identify the public improvements or projects that were funded by the capacity charges. The amount of capacity charges that the Agency has received each fiscal year and the capital improvements funded by these charges can be found in the Agency's Comprehensive Annual Financial Report which is available on the Agency's website: <http://www.cmsa.us/finance/budget>.

## **Refining Capital Infrastructure Planning and Budgetary Impacts**

Over the last several years, the Agency invested in the development and use of a computerized asset management system. An important aspect of an asset management system is the ability to schedule maintenance and monitor operating performance of capital assets. The system database accumulates information on each asset, and the data is used to determine when it is no longer economically feasible to maintain an asset and when a replacement should be considered.

In the last five GFOA Budget presentations, the Agency had attempted to address the impact of CIP investments on future operating budgets. Most capital projects are approved to replace existing assets. Once a decision has been made to replace an existing asset, the Agency incorporates elements of operational savings such as energy efficiency, reduced chemical usage, or improved operational reliability, into the selection of the new asset. When capital assets are placed in service, the savings or increased operating costs are quantified and incorporated into the planning of the annual budget.

## **Fiscal Year 18 and 10-Year CIP Budget Documents**

Refer to the following documents for detailed information on the 10-Year CIP:

- [10 Year Capital Improvement Program Schedule](#). The schedule shows the Agency's planned capital activities for the next ten fiscal years. Included in this display are the Projected Expenditures for FY 18 projects and the Adopted FY 18 CIP project budgets.
- [Capital Improvement Program – Account/Project Descriptions](#). Each project, initiative, and activity in the 10-Year CIP expenditure plan is described by budget account number and

serves to guide Agency staff in the execution of budgeted activities. The document identifies replacement schedules for equipment and assets and is a reference when assigning account numbers for purchase orders and payment of goods and services.

- Detailed Project Descriptions. Each large or multi-year initiative has a dedicated planning level document which describes the major capital project by its scope, justification, costs by fiscal year and activity, and includes photograph(s) of the project being described. Capital investments made in these projects during FY 18 may have a direct impact on the FY 18 operating budget.

### Adopted FY 17-18 Capital Improvement Program

Category	FY 16-17 Adopted Budget	FY 16-17 Projected Actuals	FY 17-18 Adopted Budget	# of Activities
Facility Improvements	\$ 1,335,500	\$ 922,852	\$1,740,600	7
General Equipment	368,400	253,893	584,300	10
Liquid Treatment Equipment and Systems	1,283,800	838,730	635,700	11
Solids Treatment and Energy Generation	1,023,500	464,846	671,800	5
Staff Costs	178,200	178,200	185,200	2.0 FTE
<b>Total</b>	<b>\$ 4,189,400</b>	<b>\$2,658,521</b>	<b>\$3,817,600</b>	33

#### FY 17-18 Priority Projects

- 1) Maintenance Facility Modifications (\$800K): Construct improvements to add office and storage space in the maintenance building, and to build a second building by the maintenance annex.
- 2) PG&E Interconnection Agreement Modification (\$525K): Complete the PG&E interconnection agreement modification process and install electrical equipment to allow for power export.
- 3) Hillside Slope Stabilization (\$400K): This is a new project related to the design and construction of soil stabilization measures to repair the landslides on the Andersen Drive hillside. CMSA submitted a request for FEMA funding to repair the slope failures. However, the total estimated project amount is budgeted since it is uncertain if the repair activities are eligible for FEMA funding.
- 4) Agency Facilities Master Plan (\$260k): Finish the study to provide planning guidance for infrastructure management, regulatory changes, renewable resource recovery, sea level rise, biosolids management alternatives, and treatment process optimization.
- 5) Laboratory Equipment (\$167K): Purchase and implementation of a Water Information Management System (WIMS) and a Laboratory Information Management System (LIMS). Implementation of WIMS will allow staff to better manage, share, and report data to internal and external stakeholders. The LIMS system will improve operational efficiency in the laboratory and is a necessary system that will be needed if proposed laboratory accreditation standards are implemented. Also includes an allowance of \$21,000 for laboratory equipment.
- 6) Facility Paving / Site Work (\$148k): Construction activities to improve drainage and repair damaged paving adjacent to the solids handling building and digesters.

7) Piping, Valves, & Operators (\$131K): Contractor replacement of existing expansion joints on large diameter piping that are showing signs of deterioration.

8) Chemical Pumps (\$113K): Replacement of polymer, peroxide, and hypochlorite chemical metering pumps that have reached the end of their lifecycle.

### **CIP Notes**

The San Francisco Construction Cost Index (CCI) published by Engineering News Record increased by 4.07% from December 2015 through December 2016. The 5-year average San Francisco CCI (2012 through 2016) results in a cost escalation rate of 2.63%. These escalation rates are used to increase costs allowances in outer years of the 10-Year CIP.

The 10-Year CIP includes a column with abbreviations that identifies the proposed delivery method(s) for each capital account. The following table relates the abbreviation to the delivery method.

<b>Abbreviation</b>	<b>Delivery Method</b>
M	Maintenance project, self-performed
MC	Maintenance contract
PO	Purchase order, equipment only procurement
PSA	Professional service agreement
IB	Informally bid
FB	Formally bid



**Central Marin Sanitation Agency  
Capital Improvement Program  
FY 18 Adopted Budget and 10-Year Forecast**

GL Account Number	PM*	Delivery Method	Prior FYs' Costs	Adopted Budget For FY 17	Projected FY 17 Actuals	10-year CIP											Project Totals	
						1 Adopted FY 18	2 FY 19	3 FY 20	4 FY 21	5 FY 22	6 FY 23	7 FY 24	8 FY 25	9 FY 26	10 FY 27	Total FY 18 - FY 27		
<b>Facility Improvements</b>																		
7300-103-10	TSM	Effluent Storage Pond Rehabilitation	FB	-	-	-	-	-	-	37,400	1,184,400	-	-	-	-	-	1,221,800	1,221,800
7300-700-10	TSM	Agency Facilities Master Plan (3)	PSA	360,800	230,000	260,000	-	-	-	-	-	-	-	-	-	-	260,000	490,000
7300-956-00	TSM	Industrial Coatings & Concrete Rehabilitation	IB/MC	16,900	839	65,000	55,000	187,600	95,900	20,300	23,100	23,700	24,300	25,000	25,600	25,600	545,500	
7300-987-00	TSM	Outfall Inspection & Repairs	IB/MC	30,900	23,700	32,200	33,000	408,900	34,800	35,700	36,700	37,600	38,600	39,600	40,700	40,700	737,800	
7400-103-10	TSM	Maintenance Facility Modifications (3)	FB	161,740	786,300	627,000	-	-	-	-	-	-	-	-	-	-	800,000	1,588,740
7400-956-00	TSM	Facility Paving/Site Work	IB/MC	130,600	5,000	148,400	10,300	131,300	10,800	11,100	140,200	11,700	12,000	162,100	12,600	650,500		
7400-600-00	TSM	Hillside Slope Stabilization	FB	-	32,321	400,000	-	-	-	-	-	-	-	-	-	-	400,000	
7400-960-00	TSM	Facility Roofs Rehabilitation	MC/IB/FB	10,000	3,992	35,000	-	75,500	921,400	-	-	-	-	-	-	-	1,031,900	1,035,892
<b>Subtotal - Facility Improvements</b>				<b>1,335,500</b>	<b>922,852</b>	<b>1,740,600</b>	<b>98,300</b>	<b>803,300</b>	<b>1,062,900</b>	<b>104,500</b>	<b>1,384,400</b>	<b>73,000</b>	<b>74,900</b>	<b>226,700</b>	<b>78,900</b>	<b>5,647,500</b>		
<b>General Equipment</b>																		
7300-672-00	ISA	Process Control	M/MC	35,500	8,824	37,900	29,000	30,500	31,300	47,200	33,000	33,900	34,800	35,700	36,600	349,900		
7300-672-10	TSM/ISA	Security / Fire Systems	MC	-	1,400	13,900	-	4,000	-	4,200	-	4,400	-	4,700	-	31,200		
7300-683-00	MS/TSM	Fuel Storage Tanks	IB/MC	10,000	491	35,000	-	112,400	-	-	-	-	-	-	-	147,400		
7410-851-00	ISA	IT Hardware and Communication Equip	M	54,400	48,231	56,900	13,700	14,400	14,800	15,200	45,000	16,000	16,400	16,900	17,300	226,600		
7420-701-00	MS	Agency Vehicle Replacement	IB/PO	59,000	36,260	51,000	43,000	72,000	73,000	67,300	40,000	70,600	52,600	175,400	79,300	724,200		
7430-958-00	LD	Laboratory Equipment	PO	14,300	14,000	166,600	31,100	61,600	16,600	6,600	6,600	19,100	37,100	6,600	6,600	358,500		
7450-002-00	MS	Electrical Equipment	M/IB	83,700	65,000	120,100	74,100	64,200	65,800	79,500	81,400	57,700	59,000	68,800	71,600	742,200		
7450-002-10	MS	Plant Lighting	IB	26,000	26,000	26,000	18,800	19,300	19,700	20,200	20,600	21,100	-	-	-	145,700		
7450-102-00	MS	Process Instrumentation	M	60,000	52,000	51,900	51,200	43,800	44,800	45,700	46,800	47,800	48,400	50,100	52,100	482,600		
7450-105-00	MS	Electrical Distribution System Rehabilitation	PSA/FB	25,500	1,687	25,000	-	-	1,164,200	-	187,900	-	196,900	-	-	1,574,000		
<b>Subtotal - General Equipment</b>				<b>368,400</b>	<b>253,893</b>	<b>584,300</b>	<b>260,900</b>	<b>422,200</b>	<b>1,430,200</b>	<b>285,900</b>	<b>461,300</b>	<b>270,600</b>	<b>445,200</b>	<b>358,200</b>	<b>263,500</b>	<b>4,782,300</b>		
<b>Liquids Treatment Equipment and Systems</b>																		
7300-685-00	TSM	Bio-Tower Rotary Distributor Replacement	IB	-	126,700	-	-	131,900	-	-	-	-	-	-	-	-	131,900	131,900
7300-700-00	MS	Plant Pumps	MC/M	160,000	27,421	74,800	61,200	62,500	63,900	65,300	66,800	68,300	69,100	71,400	74,300	677,600		
7300-719-00	MS	Chemical Pumps	M	40,000	35,125	113,000	48,900	75,000	150,000	65,000	175,000	54,500	55,300	57,200	59,500	853,400		
7300-720-00	MS	Gates Rehabilitation	M/IB	87,900	111,110	35,000	73,400	74,900	76,700	78,400	10,000	81,900	82,900	85,700	89,200	688,100		
7300-727-00	MS	Headworks Equipment	M	70,000	13,022	50,000	26,500	27,900	900,000	29,400	105,200	31,000	31,800	32,600	33,500	1,267,900		
7300-981-00	TSM	Odor Control System Improvements (3)	PSA/FB	112,420	370,000	310,000	-	1,183,300	-	-	1,347,200	-	-	-	1,494,600	4,053,600	4,476,020	
7300-983-00	MS	Process Tank Maintenance	M/IB	35,000	33,500	85,000	79,800	81,800	59,700	61,200	62,700	64,100	65,700	68,400	71,200	699,600		
7400-965-00	TSM/MS	Primary Clarifiers Rehabilitation	MC/M	10,000	10,000	33,400	20,800	-	-	130,600	133,600	136,400	138,400	155,800	162,100	911,100		
7300-990-00	MS	Secondary Clarifiers Rehabilitation	PSA/IB	75,000	-	-	252,200	257,700	325,700	157,600	-	-	-	-	-	993,200		
7300-995-00	TPM	Aeration System Rehabilitation	M/IB	51,000	51,000	20,100	15,000	-	-	-	-	26,000	-	-	-	61,100		
7400-966-00	TSM	Critical Buried Pipe Inspection/Repairs	PSA	97	100,000	121,552	-	183,600	-	-	-	-	-	-	157,900	341,500	463,149	
7430-855-00	MS	Chemical Tanks	M/IB	40,000	40,000	40,000	87,200	27,900	57,100	58,500	35,900	42,900	2,500	45,000	54,200	451,200		
7430-857-00	MS	Piping, Valves & Operators	M	95,700	77,000	130,900	70,100	56,300	57,600	58,800	60,100	61,500	62,200	68,700	71,500	697,700		
7450-104-10	TSM	Influent Flow Meter Improvement	PSA	22,500	9,000	25,000	-	-	-	-	-	-	-	-	-	25,000		
<b>Subtotal - Liquids Treatment Equipment and Systems</b>				<b>1,283,800</b>	<b>838,730</b>	<b>635,700</b>	<b>1,050,600</b>	<b>1,847,300</b>	<b>1,690,700</b>	<b>704,800</b>	<b>1,996,500</b>	<b>566,600</b>	<b>507,900</b>	<b>584,800</b>	<b>2,268,000</b>	<b>11,852,900</b>		
<b>Solids Treatment and Energy Generation Equipment and Systems</b>																		
7300-678-00	TSM	Emergency Generator Assessment & Improvement	PSA/FB	-	-	-	-	-	77,600	1,931,500	-	-	-	-	-	2,009,100		
7300-691-00	TSM	Digester Inspection, Cleaning & Cover Replacement	FB	-	-	-	-	-	856,600	875,600	-	-	-	-	-	1,732,200		
7300-715-00	TSM/MS	Centrifuge Maintenance	PSA/FB	3,139	235,300	-	-	150,000	-	250,000	1,700,000	-	-	-	-	2,100,000	2,103,139	
7300-722-00	MS	Cogeneration Maintenance (3)	M/IB/FB	359,600	228,328	86,300	100,500	362,000	1,943,200	1,637,500	62,700	64,100	65,700	74,700	77,700	4,474,400		
7300-724-00	MS	Hot Water Systems	M/PSA	110,200	-	34,000	14,400	14,700	15,000	15,300	15,600	15,900	16,800	16,800	17,500	176,000		
7300-725-00	MS	Boilers Rehabilitation or Replacement	IB	-	-	-	72,000	-	-	-	-	-	520,400	-	-	592,400		
7300-977-00	MS	Sludge Recirculating Pump Grinders	M	16,900	10,000	18,000	18,300	18,700	19,100	19,600	20,000	20,400	20,700	21,400	22,300	198,500		
7300-978-00	MS	Biosolids Hoppers Maintenance	M	-	-	8,500	-	9,000	-	9,300	-	9,700	-	10,500	-	47,000		
7300-660-00	TSM	PG&E Interconnection Agreement Modification	PSA/IB	130,000	130,000	525,000	-	-	-	-	-	-	-	-	-	525,000		
<b>Subtotal - Solids Treatment and Energy Generation Equipment and Systems</b>				<b>977,000</b>	<b>464,846</b>	<b>671,800</b>	<b>355,200</b>	<b>404,400</b>	<b>3,161,500</b>	<b>6,188,800</b>	<b>98,300</b>	<b>110,100</b>	<b>623,600</b>	<b>123,400</b>	<b>117,500</b>	<b>11,854,600</b>		
<b>CMSA Staff Costs for CIP (2)</b>				<b>178,200</b>	<b>178,200</b>	<b>185,200</b>	<b>190,100</b>	<b>195,100</b>	<b>200,200</b>	<b>205,500</b>	<b>210,900</b>	<b>216,400</b>	<b>222,100</b>	<b>227,900</b>	<b>233,900</b>	<b>2,087,300</b>		
<b>(Continued on next page) Annual CIP Totals</b>				<b>4,142,900</b>	<b>2,658,521</b>	<b>3,817,600</b>	<b>1,955,100</b>	<b>3,672,300</b>	<b>7,545,500</b>	<b>7,489,500</b>	<b>4,151,400</b>	<b>1,236,700</b>	<b>1,873,700</b>	<b>1,521,000</b>	<b>2,961,800</b>	<b>36,224,600</b>		

**Central Marin Sanitation Agency  
Capital Improvement Program  
FY 18 Adopted Budget and 10-Year Forecast**

\* PM indicates the project manager for the account.

**(1) BOLD items are individual Capital Improvement Projects, or larger, nonrecurring maintenance projects.**

(2) CMSA Staffing costs (compensation and benefits) for identified CIP projects.

(3) CIP Projects in FY 17 that will have staff time charged to the CIP.

<b>Projected Annual Escalation Rate:</b>	<b>2.63%</b>	(rolling 5-year average of ENR San Francisco Construction Cost Index (CCI) annual changes 12/2012-07/2016).								
<b>Escalation Factors</b>	1.0263	1.0533	1.0810	1.1094	1.1385	1.1685	1.1992	1.2307	1.2631	

<b>2015 to 2016 CCI % Change</b>	<b>4.07%</b>
	1.0407

<b>Delivery Methods</b>	
M	Maintenance project, self performed
MC	Maintenance Contract
PO	Purchase Order, equipment only
PSA	Professional Services Agreement
IB	Informally Bid
FB	Formally Bid

**CENTRAL MARIN SANITATION AGENCY  
CAPITAL IMPROVEMENT PROGRAM - ACCOUNT / PROJECT DESCRIPTIONS  
ADOPTED FY 18 BUDGET AND 10-YEAR PROJECTION**

<b>Facility Improvements</b>		
<b>ACCOUNT NUMBER</b>	<b>ACCOUNT / PROJECT TITLE</b>	<b>ACCOUNT / PROJECT DESCRIPTION</b>
7300-103-10	Effluent Storage Pond Rehabilitation	See Full Page Description
7300-700-10	Agency Facilities Master Plan	See Full Page Description
7300-956-00	Industrial Coatings & Concrete Rehabilitation	<p>Scheduled industrial coating rehabilitation program for process structures and metal equipment, and treatment plant deck traffic coatings. Coating rehabilitation will be included as part of a larger project when appropriate. The condition of concrete structures will be periodically assessed and projects will be added as needed.</p> <p>FY 18 - Epoxy injection to seal cracks in the gallery system. Rehabilitate the bisulfite room floor coating. Repair ferric chloride tank concrete containment area and apply a protective industrial coating.</p> <p>FY 19 - Reapply epoxy coating on grit tank hand rails. Repair coating on the chlorine contact tanks 5 &amp; 6 piping.</p> <p>FY 20 - Replace headworks structural metal (skylights, pipe supports, etc.) and apply new epoxy coatings.</p> <p>FY 21 - Repair wear coats on Headworks and Secondary Clarifier decks.</p> <p>FY 22 – 27 - Allowance for industrial coatings as needed.</p>
7300-987-00	Outfall Inspection & Repairs	<p>Ongoing underwater inspection and maintenance of the marine outfall diffuser section. Activities include diver inspections of diffusers and risers, survey of diffuser check valve levels above shifting bay floor sediments, extending or replacing risers and diffuser check valves as needed, and periodic monitoring and removal of solids deposition inside outfall pipe.</p> <p>FY 18 - Inspect the diffuser section of the outfall, and to replace up to 5 broken diffusers if found during the inspection.</p> <p>FY 19 - Routine inspection and riser extension or replacement (assumed 5 total), as needed.</p> <p>FY 20 - Allowance for outfall diffuser section interior cleaning. If the previous year’s interior solids monitoring indicates the solids accumulation is minor, it will be deferred until a future year based on the solids accumulation rate from FY 14 to FY 19. Cost estimate based on escalating the \$300,000 costs from FY 09.</p> <p>FY 21 – FY 27 - Routine inspection and riser extension or replacement (assumed 5 per year), as needed.</p>
7400-103-10	Maintenance Facility Modifications	See Full Page Description

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<b>Facility Improvements</b>		
<b>ACCOUNT NUMBER</b>	<b>ACCOUNT / PROJECT TITLE</b>	<b>ACCOUNT / PROJECT DESCRIPTION</b>
7400-956-00	Facility Paving/Site Work	<p>This account is for paving repairs and associated site work on internal plant roads, walkways, parking lots, and other pavement, and for re-grading, cleaning, and replacing gravel in drainage ditches.</p> <p>FY 18 - Allowance for a major plant paving project around the solids handling building. The paving project will include drainage improvements to minimize standing water during rain events.</p> <p>FY 20 - Allowance for a major plant paving project (plant road from gate to FOG/F2E station).</p> <p>FY 23 - Allowance for a major plant paving project (employee parking area).</p> <p>FY 26 - Allowance for a major plant paving project (plant road from primary clarifiers to solids handling building).</p>
7400-600-00	Hillside Slope Stabilization	<p>Several significant landslides occurred on the hillside adjacent to Andersen Drive this past winter. These slope failures will require geotechnical design to recommend the appropriate construction measures required to stabilize the hillside. The budget allowance is based on a previous geotechnical report for a similar, but smaller, slope failure that occurred several years ago. CMSA submitted a request for FEMA funding to repair the slope failures. However, the total estimated project amount is included in the budget since it is uncertain if the repair activities are eligible for FEMA funding.</p>
7400-960-00	Facility Roofs Rehabilitation	See Full Page Description

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<b>General Equipment</b>		
<b>ACCOUNT NUMBER</b>	<b>ACCOUNT / PROJECT TITLE</b>	<b>ACCOUNT / PROJECT DESCRIPTION</b>
7300-672-00	Process Control	<p>Allowances for purchasing spare Programmable Logic Controllers (PLCs), and ongoing replacement, upgrades, and improvements to the Agency’s process control system including, new instruments, servers and computers, and PLC and Human Machine Interface (HMI) hardware and software. Annual allowance is based on escalated costs from previous years. Actual cost estimates are used for specifically identified equipment.</p> <p>FY 18 - Routine PLC and HMI hardware replacement, including the Waste Activated Sludge (WAS) pump Variable Frequency Drives (VFDs) and PLCs. Conduct a radio path survey to hilltop repeater.</p> <p>FY 19 - 21 - Routine PLC and HMI hardware replacement. Identify and purchase critical spares. Battery replacement at hilltop repeater.</p> <p>FY 22 - Routine PLC and HMI hardware replacement and replace SCADA servers. Identify and purchase critical spares.</p> <p>FY 23 - 24 - Routine PLC and HMI hardware replacement. Identify and purchase critical spares.</p> <p>FY 25 - SCADA system software review and potential upgrades.</p> <p>FY 26 – 27 - Routine PLC and HMI hardware replacement.</p>
7300-672-10	Security / Fire Systems	<p>This is for projects related to the Agency’s physical security and fire protections systems, and includes a biannual allowance to purchase replacement equipment as needed.</p> <p>FY 18 - Procure signage and equipment to address issues discovered during regular fire system inspections.</p>
7300-683-00	Fuel Storage Tanks	<p>Allowance to replace one of the existing underground fuel storage tanks with an above ground storage tank. This replacement would be triggered by one of the underground tanks failing or by a change in regulatory requirements. It is expected that any regulatory change would provide sufficient time for the replacement to occur in the fiscal year following the change.</p> <p>FY 18 - Replace the regular gas fuel station leak monitoring controller.</p>
7410-851-00	IT Hardware and Communication Equip	<p>Routine repair and regular replacement of Information Technology hardware and software, such as office computers, printers, scanners, and digital telephone equipment and its supporting servers, and voice radio equipment used by Agency staff.</p> <p>FY 18 - Allowance for equipment listed above and replacement of the SCADA and office data storage servers and new Windows server licensing. Upgrade the plant wide UHF voice radio repeater, PA system, and phone system for better onsite communications and alerts.</p> <p>FY 19 - 21 - Allowance for equipment listed above.</p> <p>FY 22 - Allowance for equipment listed above and replacement of the data servers on which all Agency business and SCADA virtual servers run.</p> <p>FY 23 – 27 - Allowance for equipment listed above.</p>

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<b>General Equipment</b>		
<b>ACCOUNT NUMBER</b>	<b>ACCOUNT / PROJECT TITLE</b>	<b>ACCOUNT / PROJECT DESCRIPTION</b>
7420-701-00	Agency Vehicle Replacement	<p>Purchase new vehicles or equipment for passenger vehicles, trucks, forklift, bicycles and electric carts as they reach or exceed their expected useful lives.</p> <p>FY 18 - Replace the Ford Explorer and one electric cart. Purchase five bicycles.  FY 19 - Replace one carpool vehicle and one electric cart.  FY 20 - Replace pump station truck and one electric cart.  FY 21 - Replace one carpool vehicle, one forklift and one electric cart.  FY 22 - Replace Toyota Highlander, replace tires on all-terrain forklift, and environmental services tri-cycle.  FY 23 - Replace F150 environmental services truck  FY 24 - Replace skid steer loader, replace batteries for administration Prius.  FY 25 - Replace Ford E250 van.  FY 26 - Replace F450 flatbed with a mechanic's truck, and one electric cart.  FY 27 - Replace a maintenance vehicle and one electric cart.</p>
7430-958-00	Laboratory Equipment	<p>This account includes allowances for scheduled replacement of laboratory equipment such as, autoclaves, pumps, collection/sampler systems, washers, incubators, bioassay system, etc.</p> <p>FY 18 - Replace effluent and influent samplers, centrifuge, and a chlorine titrator. Purchase, install, setup and utilize a Laboratory Information Management System (LIMS) and a Water Information Management System (WIMS) including a new Microsoft SQL server license.  FY 19 - Replace biotower and primary effluent samplers, micro incubator and a chlorine titrator.  FY 20 - Replace bioassay system, two balances and a chlorine titrator.  FY 21 - Replace a fecal coliform water bath, desiccator, and a chlorine titrator.  FY 22 - Replace a chlorine titrator.  FY 23 - Replace a chlorine titrator.  FY 24 - Replace enterococcus incubator, enterococcus sealer and a chlorine titrator.  FY 25 - Replace the four composite samplers, pH meter and a chlorine titrator.  FY 26 - 27 - Replace a chlorine titrator.</p>

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<b>General Equipment</b>		
<b>ACCOUNT NUMBER</b>	<b>ACCOUNT / PROJECT TITLE</b>	<b>ACCOUNT / PROJECT DESCRIPTION</b>
7450-002-00	Electrical Equipment	<p>This account includes allowances for planned maintenance, upgrading, and replacement of Agency electrical components: individual motor controls and equipment panels, dry transformers, variable frequency drives, and electrical equipment to support process equipment.</p> <p>FY 18 - Replace two sump pump panels, replace three dry transformers, and replace four electronic sluice gate actuators. Purchase 10 permanent power meters capable of monitoring 60 pieces of equipment to be installed in local MCCs to continuously monitor and trend power usage.</p> <p>FY 19 - Rebuild / replace two sump pump panels, replace three dry transformers, and replace three electric sluice gate actuators.</p> <p>FY 20 - Replace three dry transformers and three electric sluice gate actuators.</p> <p>FY 21 - Replace three dry transformers and three electric sluice gate actuators.</p> <p>FY 22 - Replace Control Room uninterruptible power source, replacement of one reclaimed water or carrier water pump motor and motor controls; replace three dry transformers and three electric sluice gate actuators.</p> <p>FY 23 - Condition assessment of Effluent Pump Station electric motors and controls; replace three dry transformers and three electric sluice gate actuators.</p> <p>FY 24 – 27 - Allowance for replacement of equipment as determined by condition assessment.</p>
7450-002-10	Plant Lighting	<p>This account includes allowances to replace low efficiency lights with LED lighting that consumes less power and reduces light pollution. Each project is grouped by lighting fixture type and will be completed by staff or an electrical contractor.</p> <p>FY 18 - Replace high pressure sodium (HPS) lighting along the plant roads, HPS pendants in the headworks, galleries, and solids handling building, and compact florescent lights (CFL) at the secondary clarifiers.</p> <p>FY 19 - Replace HPS and CFL lighting at the OWRF, chemical storage building, galleries, and the polymer storage area.</p> <p>FY 20 - Replace HPS and CFL lighting at the digesters, galleries, and biotowers.</p> <p>FY 21 - Replace HPS and CFL lighting at the aeration basins and chlorine contact tanks.</p> <p>FY 22 - Replace HPS and CFL lighting at the maintenance annex, headworks, gallery B, and administration building.</p> <p>FY 23 - Replace HPS and CFL lighting at final effluent structures.</p> <p>FY 24 - Replace remaining lighting at the headworks.</p>

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<b>ACCOUNT NUMBER</b>	<b>ACCOUNT / PROJECT TITLE</b>	<b>ACCOUNT / PROJECT DESCRIPTION</b>
7450-102-00	Process Instrumentation	<p>This account includes allowances for ongoing repair, replacement or upgrading of 4 to 6 obsolete meters, sensors, and transmitters per year, and to provide local process status information and transmit it to the treatment plant's SCADA system. Annual allowance is based on equipment costs from previous years and has been escalated to current and future dollars.</p> <p>FY 18 – Allowance for above equipment, plus replace two butterfly flow control valve operators in the biotower basement and the flow probe in the San Rafael influent meter. Install a third chlorine analyser to monitor 3W residual.</p> <p>FY 19 – Allowance for above equipment, plus replace two pressure transmitters on chlorine contact tanks 5 and 6.</p> <p>FY 20-27 – Allowance for above equipment.</p>
7450-105-00	Electrical Distribution System Rehabilitation	<p>This account includes an allowance for testing of the Facility wiring, breakers, and motor control centers (MCCs).</p> <p>FY 18 - Complete air handling systems upgrades by installing fans in the remaining identified plant areas to allow the area to be unclassified per NFPA 820 standards. Some of the identified process areas will be upgraded as part of another CIP projects. Staff will perform a visual and thermal condition assessment of all MCCs during scheduled preventative maintenance activities.</p> <p>FY 21 - Upgrade the Main Switchgear to coincide with the planned improvements to the cogeneration system and backup power generator.</p> <p>FY 23 - Allowance for refurbishment or replacement of MCCs or components based on condition assessment findings.</p> <p>FY 25 - Allowance for refurbishment or replacement of MCCs or components based on condition assessment findings.</p>



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<b>Liquid Treatment Processes and Equipment</b>		
<b>ACCOUNT NUMBER</b>	<b>ACCOUNT / PROJECT TITLE</b>	<b>ACCOUNT / PROJECT DESCRIPTION</b>
7300-685-00	Bio-Tower Rotary Distributor Replacement	See Full Page Description
7300-700-00	Plant Pumps	<p>Scheduled replacement of centrifugal, positive displacement, and chopper pumps. These pumps transport primary sludge, waste activated sludge, contact tank scum, and other liquids throughout the Agency facilities. This account includes the digester mixing pumps and Organic Waste Receiving Facility (OWRF) pumps.</p> <p>FY 18 - Replace two process waste pumps, one headworks sample pump, two final effluent sample pumps, and three primary sludge pumps.</p> <p>FY 19 - Replace two digester basement chopper pumps, four primary grit pumps, three primary sludge pumps, and one OWRF mixing pump.</p> <p>FY 20 - Refurbish one biotower pump, one centrifuge feed pump, one secondary system scum pump, three primary sludge pumps, and two hot water pumps. Procure one digester mix pump as a critical spare and replacement while one is being refurbished.</p> <p>FY 21 - Refurbish one biotower pump, and one centrifuge feed pump. Replace three primary sludge feed pumps, three hot water pumps, and two plant sump pumps.</p> <p>FY 22 - Refurbish two tank drain pumps in secondary system basement, two recycled water pumps, one scum pump, and two carrier water pumps. Replace three sludge pumps, one headworks sample pump, and two sump pumps. Perform a condition assessment on five effluent pump station pumps.</p> <p>FY 23 - Refurbish one carrier water pump and one recycled water pump. Allowance to replace additional pumps identified by condition assessments.</p> <p>FY 24 - Refurbish two digester mix pumps. Allowance to replace additional pumps identified by condition assessments.</p> <p>FY 25 -27 - Allowance to replace pumps identified by condition assessments.</p>

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<b>Liquid Treatment Processes and Equipment</b>		
<b>ACCOUNT NUMBER</b>	<b>ACCOUNT / PROJECT TITLE</b>	<b>ACCOUNT / PROJECT DESCRIPTION</b>
7300-719-00	Chemical Pumps	<p>This account includes an allowance for regular refurbishment or replacement, based on a condition assessment, of pumps and related equipment for the delivery of specific chemicals at various treatment unit processes. Chemical pumps include those for ferric chloride, hydrogen peroxide, calcium nitrate, sodium hypochlorite, emulsion polymer, and sodium bisulfite.</p> <p>FY 18 - Purchase two skid-mounted polymer metering pumps. Replace one chemical induction mixer, two peroxide metering pumps, one polymer activation unit, and one skid-mounted sodium hypochlorite metering pump.</p> <p>FY 19 - Above allowances plus, refurbish two solids handling polymer activation units.</p> <p>FY 20 - Replace eight nitrate solution metering pumps, and replace one chemical induction mixer.</p> <p>FY 21 - Replace five disinfection (chlorine solution) metering pumps and one chemical induction mixer.</p> <p>FY 22 - Refurbish one polymer feed pump and one chemical induction mixer. Replace two headworks ferric chloride metering pumps.</p> <p>FY 23 - Replace five sodium bisulfite metering pumps, two chemical transfer pumps, and one chemical induction mixer.</p> <p>FY 24 -27 - Above allowances to replace chemical pumps based on condition assessment.</p>
7300-720-00	Gates Rehabilitation	<p>Maintenance and replacement, as needed, of large gates and their operators, hiring outside specialized contractors to install them. These gates control flow into, through, and between processes, and isolate process tanks for repair or maintenance. Many of them will be replaced with stainless steel gates, which are expected to have a longer service life due to being more corrosion resistant and having sealing surfaces that can be refurbished. Scheduled work may change in future years based on ongoing condition assessment inspection results.</p> <p>FY 18 - Replace the pond gate in the triangle pit at the head of the chlorine contact tanks (CCTs). Allowance for one additional medium sized gate if needed.</p> <p>FY 19 - Transition ten hydraulically operated primary clarifier influent gates over to electric actuated gates.</p> <p>FY 20 - Replace Ross Valley and San Rafael influent gates entering inside the headworks building. The hydraulic actuators will be converted to electric actuators.</p> <p>FY 21 -22 - Allowances to replace gates as needed based on condition assessment.</p> <p>FY 23 - Condition assessment on large 84" and 72" outfall and 54" pond isolation gates.</p> <p>FY 24 - Replace or refurbish medium triangle pit / pond isolation gates, refurbish three large inlet gates for CCTs 1 – 4.</p> <p>FY 25-27 - Allowance to replace gates as needed based on condition assessment.</p>

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<b>Liquid Treatment Processes and Equipment</b>		
<b>ACCOUNT NUMBER</b>	<b>ACCOUNT / PROJECT TITLE</b>	<b>ACCOUNT / PROJECT DESCRIPTION</b>
7300-727-00	Headworks Equipment	<p>Ongoing repair and replacement of Headworks and grit handling equipment such as valves, pipes, hydraulic systems, grit hoppers, classifier components, grit pumps and augers. This equipment operates in a very corrosive and erosive environment, and it collects, transports, dewateres, and stores screenings and grit from plant influent.</p> <p>FY 18 - Allowance for above equipment, plus replacement of the odor scrubber exhaust fan.  FY 19 - Allowance for above equipment  FY 20 - Allowance for above equipment  FY 21 – Project to replace grit handling system including grit classifiers, hoppers, and piping.  FY 22 - Allowance for above equipment, plus a condition assessment of headworks hydraulic system.  FY 23 - Allowance for above equipment, plus hydraulic system rehabilitation based on the condition assessment results.  FY 24 – 27 - Allowance for above equipment.</p>
7300-981-00	Odor Control System Improvements	See Full Page Description
7300-983-00	Process Tank Maintenance	<p>Refurbishment and replacement of mechanical equipment in all process tanks and systems throughout the treatment Plant.</p> <p>FY 18 - Replace headworks channel air diffusers. Conduct an analysis to determine if the headworks blowers should be replaced with new, energy efficient units. Install safe access gates onto six chlorine contact tanks. Piping and pumping improvements to increase the capacity of the blend channel drain system.  FY 19 - Refurbish grit air blowers. Install safe access gates onto four secondary clarifiers.  FY 20 - Refurbish or repair reclaimed water piping which supports tank wash down equipment. Refurbish the OWRF paddle finisher. Assess condition of OWRF receiving tank coating.  FY 21 - Perform a condition assessment of both siloxane media vessels and appurtenances.  FY 22 - General tank related replacement of equipment as determined by internal condition assessment.  FY 23 - Assess condition of hydrogen sulfide media filters vessels and general tank related replacement of equipment as determined by condition assessment.  FY 24 - 27 - General tank related replacement of equipment as determined by condition assessment.</p>

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<b>Liquid Treatment Processes and Equipment</b>		
<b>ACCOUNT NUMBER</b>	<b>ACCOUNT / PROJECT TITLE</b>	<b>ACCOUNT / PROJECT DESCRIPTION</b>
7400-965-00	Primary Clarifiers Rehabilitation	<p>There are seven primary clarifiers in the treatment plant. Five of the clarifiers were installed during the original plant construction and two were installed during the Wet Weather Improvement Project. The mechanical equipment in the five original clarifiers has been upgraded to non-corroding, non-metallic components. However, there are other metal surfaces that require periodic industrial coating. Additionally, the mechanical equipment will require replacement in the future.</p> <p>FY 18 - Refurbish reclaimed water piping and hose bibs in five original clarifiers.  FY 19 - Replace primary drive units on all five original primary clarifiers.  FY 22 - Industrial coatings in clarifier #1. Purchase and install FRP launder &amp; weir material for primary clarifier #2.  FY 23 - Industrial coatings in clarifier #2. Purchase and install FRP launder &amp; weir material for primary clarifier #3.  FY 24 - Industrial coatings in clarifier #3. Purchase and install FRP launder &amp; weir material for primary clarifier #4.  FY 25 - Industrial coatings in clarifier #4. Purchase and install FRP launder &amp; weir material for primary clarifier #5.  FY 26 - Industrial coating and piping repairs in clarifier #5  FY 27 - Industrial coating and piping repairs in clarifier #6</p>
7300-990-00	Secondary Clarifiers Rehabilitation	<p>Replacement of three secondary clarifiers' sludge collector mechanisms, large drive turntables that are nearing the end of their expected life. Condition assessments indicate the three turntables needing replacement can be expected to last until the scheduled metal coating projects for their clarifiers.</p> <p>FY 19 - Replace main drive assembly, the turntable drive gear box, and apply industrial coatings in Secondary Clarifier No. 4. Replace walkway deck plates and kickboards.  FY 20 - Replace main drive assembly and apply industrial coatings in Secondary Clarifier No. 1. Replace walkway deck plates and kickboards.  FY 21 - Replace main drive assembly, the turntable drive gear box, and apply industrial coatings in Secondary Clarifier No. 3. Replace walkway deck plates and kickboards.  FY 22 - Apply industrial coating in Secondary Clarifier No. 2. Replace walkway deck plates and kickboards.</p>
7300-995-00	Aeration System Rehabilitation	<p>This new account includes replacement and rehabilitation of aeration system equipment.</p> <p>FY 18 - Replace aeration diffuser membranes in all four tanks.  FY 19 - Replace channel air diffusers  FY 24 - Replace aeration diffuser membranes in all four tanks.</p>
7400-966-00	Critical Buried Pipe Inspection / Repairs	See Full Page Description

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<b>Liquid Treatment Processes and Equipment</b>		
<b>ACCOUNT NUMBER</b>	<b>ACCOUNT / PROJECT TITLE</b>	<b>ACCOUNT / PROJECT DESCRIPTION</b>
7430-855-00	Chemical Tanks	<p>Replacement of chemical storage tanks used throughout the treatment plant and in the collection system as they approach their service life. Tanks include five sodium hypochlorite, two sodium bisulfite, two hydrogen peroxide, two polymer, four calcium nitrate, and three ferric chloride tanks. The replacement schedule is subject to change based on annual condition assessment inspection results.</p> <p>FY 18 - Assess solid handling building bulk polymer storage tank. Replace the Greenbrae nitrate tank.  FY 19 - Replace the North Francisco nitrate tank.  FY 20 - Replace one sodium hypochlorite tank, the West Railroad nitrate tank.  FY 21 - Replace one sodium hypochlorite tank and the Paradise nitrate tank.  FY 22 - Replace one sodium hypochlorite tank and assess headworks bulk ferric chloride storage tanks.  FY 23 - Replace sodium bisulfite tank.  FY 24 - Replace sodium bisulfite tank.  FY 25 - Perform an assessment on the effluent pump station's convault diesel storage tank.  FY 26 - 27 - Allowance for an unspecified tank replacement.</p>
7430-857-00	Piping, Valves & Operators	<p>There are over 750 plug valves in the treatment plant's process systems, ranging in size up to 12" in diameter. This account includes annual allowances for routine maintenance and periodic replacement of these valves, their operators, and associated piping. This allowance may change as ongoing condition assessments are completed.</p> <p>FY 18 - Replace 6 expansion joints; four in the biotower basement (36" dia.) and two at flow control valves in Gallery H.  FY 19 - Replace 10 expansion joints in Agency gallery system small diameter process piping.  FY 20 - Replace valves associated with Digester #1.  FY 21 - Replace valves associated with Digester #2.</p>
7450-104-10	Influent Flow Meter Improvement	<p>Both the 45" San Rafael Interceptor and the 54" Ross Valley Interceptor were fitted with insertion magnetic-type meters in FY 11. Having both the original ultrasonic meters plus the magnetic meters can improve their accuracy in measuring large flow variations.</p> <p>FY 18 - Study to survey available technologies for possible improvement of meter accuracy in light of the collection system's large seasonal flow variations. FY 19 CIP will include project funding based on the results of the survey.</p>

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<b>Solids Treatment And Energy Generation Processes and Equipment</b>		
<b>ACCOUNT NUMBER</b>	<b>ACCOUNT / PROJECT TITLE</b>	<b>ACCOUNT / PROJECT DESCRIPTION</b>
7300-678-00	Emergency Generator Assessment & Improvement	<p>The emergency generator provides power to Agency Facilities when utility power is not available and the cogeneration system is offline. The emergency generator system was installed in 1985 and consists of an electrical generator connected to a diesel fueled reciprocating engine. While the equipment is relative old, it has had minimal usage and is maintained per manufacturer’s recommendations.</p> <p>FY 21 - A consultant will conduct an assessment of the generator for condition, air emissions and reliability. The budget includes an allowance for a preliminary design report that will include an estimate to rehabilitate or replace the equipment.</p> <p>FY 22 - Allowance to fund design and installation of a replacement emergency generator based on findings of the assessment and preliminary design report.</p>
7300-691-00	Digester Inspection, Cleaning and Cover Replacement	<p>This account includes allowance for periodic cleaning and inspection of each anaerobic digester every 7 years based on conservative estimates of their membrane covers’ service life. Agency staff will drain the tanks to allow a contractor to remove material that has accumulated inside of the tanks. A specialty contractor will replace the membrane covers after the cleaning is complete and then staff will return each digester to service.</p> <p>FY 19 - Engage the cover manufacturer to perform a condition assessment of the covers to estimate their remaining useful life. Allowances in FY 20 and 21 may be differed to later years based on the assessment findings.</p> <p>FY 20 - Allowance to clean and inspect the interior of Digester No. 1 and replace its dual membrane cover.</p> <p>FY 21 - Allowance to clean and inspect the interior of Digester No. 2 and replace its dual membrane cover.</p>
7300-715-00	Centrifuge Maintenance	See Full Page Description

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<b>Solids Treatment And Energy Generation Processes and Equipment</b>		
<b>ACCOUNT NUMBER</b>	<b>ACCOUNT / PROJECT TITLE</b>	<b>ACCOUNT / PROJECT DESCRIPTION</b>
7300-722-00	Cogeneration Maintenance	<p>The cogeneration engine runs continuously, utilizing plant biogas and natural gas to generate most of the Agency's electrical power, and to supply the Agency's hot water needs. This account includes allowances for purchase critical spare parts and larger maintenance activities for the engine. Larger maintenance activities include onsite, upper and lower end rebuilds involving the cylinder heads and liners, valves and pistons; or off-site overhaul work that includes a complete disassembly and reassembly with machining to restore the engine and generator to original factory specifications. Although the engine life can be extended with proper periodic major overhauls, cogeneration technologies are continuing to improve and become more efficient. The design and replacement of the cogeneration technology is currently planned to begin in FY 19 and end in FY 22. This schedule may change give the expansion of the OWRP program and/or increases in energy efficiency drivers.</p> <p>FY 18 - Replace thermocouples. Replace on system heat exchangers.  FY 19 - Onsite engine upper end rebuild and replace turbo chargers, plus allowance for technology survey.  FY 20 - Budget assumes design of replacement cogeneration technology and replacement of thermocouples and turbo chargers. If current engine is to be kept in service or used as a reliable backup system, major offsite overhaul for engine, five year generator preventive maintenance, and replace turbo chargers.  FY 21 - Budget assumes procurement and beginning installation of a replacement cogeneration technology.  FY 22 - Budget assumes completion of the installation of a replacement cogeneration technology.  FY 23 - 27 - Allowance for major maintenance of the cogeneration facility.</p>
7300-724-00	Hot Water Systems	<p>Repairs and replacement of hot water system pumps, valves, flex fittings and piping as needed to maintain the hot water system that supplies hot water to the digesters, other Agency facilities, and the administration building.</p> <p>FY 18 - Install isolation valves in the system to allow for better maintenance and allowance for system repairs.  FY 19 - FY 27 - Allowance for system repairs.</p>
7300-725-00	Boilers Rehabilitation or Replacement	<p>Scheduled inspection, repair and/or replacement of boiler tubes that are used to heat water for the Agency's hot water systems when the cogeneration engine is offline.</p> <p>FY 19 - Allowance for major maintenance including inspection, repair, and/or replacement of boiler tubes as needed. If necessary, plan for an upgrade or replacement to meet anticipated new, more stringent emissions regulations.  FY 25 - Replacement of two existing boilers, upgraded to meet future Bay Area Air Quality Management District requirements</p>
7300-977-00	Sludge Recirculating Pump Grinders	<p>An annual allowance for replacement of two sludge grinders' high-wear cutter cassettes.</p>

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<b>Solids Treatment And Energy Generation Processes and Equipment</b>		
<b>ACCOUNT NUMBER</b>	<b>ACCOUNT / PROJECT TITLE</b>	<b>ACCOUNT / PROJECT DESCRIPTION</b>
7300-978-00	Biosolids Hoppers - Maintenance	An allowance for monitoring and minor repairs to biosolids hoppers, gates, and hydraulic actuators. When centrifuges are scheduled for replacement, improvements to the hoppers will be coordinated with that project.  FY 18 -27 - Allowance for minor maintenance of mechanical equipment every other year.
7300-660-00	PG&E Interconnection Agreement Modification	It is expected that PG&E will issue a new Interconnection Agreement (IA) by the end of FY 17 that will allow the Agency to deliver power to the electrical grid. Per the terms of the new IA, the Agency will need to design and construct approximately \$100,000 of onsite engine control and electrical equipment improvements to meet PG&E standards. CMSA is also required to fund the cost for PG&E to install a new electrical disconnect at an estimated cost of \$80,000.  CMSA submitted a State Revolving Fund (SRF) Green Project Reserve grant application with a Plan of Study that includes consultant tasks to define operational limits for biogas and power generation, OWRF expansion, IA modification, CEQA/NEPA environmental review, air quality permitting, financial funding review and project management activities. The total estimated cost for the Plan of Study is \$666,859, of which \$500,000 is available for reimbursement. Because CMSA is required to contribute \$166,859 and will only be reimbursed for expenses incurred, an allowance of \$350,000 has been included in this account to cover costs while waiting for reimbursement.
No Account Number	CMSA Staff Costs for CIP Projects	Capitalization of compensation and benefits for CMSA staff time to manage design of, contracting for, and construction of CIP projects, as listed below. Costs for FY 18 are based on actual estimated staff time, totaling 2 Full Time Equivalencies (FTE's). Costs for future years are based on a one FTE allowance, and will be modified for each current fiscal year in that year's CIP budget. The projects identified for staff cost capitalization in FY 18 are:  7300-700-10 Agency Facilities Master Plan 7400-103-10 Maintenance Facility Modifications 7300-981-00 Odor Control System Improvements 7300-715-00 Centrifuge Maintenance 7300-660-00 PG&E Interconnection Agreement Modification



<b>Effluent Storage Pond Rehabilitation (GL 7300-103-10)</b>			
<b>Type of Project</b>	Design and Capital Construction	<b>Lead Department</b>	Engineering
<b>Project Delivery</b>	Formally bid construction		
<b>Description and Justification</b>	The effluent storage pond was constructed over a deep layer of Young Bay Mud that settles unevenly under the Pond. This causes loss of capacity due to berm settling, and small areas of shallow standing water after the Pond is emptied due to bottom settling. The berm was reconstructed and raised in 2007, including a new geotextile liner and new sections of intake and outlet piping. There is an allowance for surveying in FY 22 and potential renovation of berms and bottom in FY 23; these activities were originally scheduled for FY 18 and have been deferred based on very little observed new subsidence in the reconstructed berm.		
<b>Elements</b>	FY 22 - Survey entire berm, top road, and pond bottom for excessive or uneven settlement; FY 23 - Based on survey results, allowance for re-grading the pond bottom and / or raising the berm, including extending and re-anchoring the buried extra liner material and rebuilding the service road on top of the berm.		
<b>Risk Assessment</b>	This is a low risk project because berm settlement does not occur rapidly. Berm condition will be regularly monitored and the survey timing can be adjusted if necessary.		

**Projected Expenditures FY 18 - 27**

FY 22	\$37,400
FY 23	1,184,000
<b>FY 18 – 27 Total</b>	<b>\$1,221,800</b>

**Implementation Schedule**

<b>Schedule</b>	<b>Activity Description</b>	<b>Cost</b>
Prior FYs	Maintenance work to regrade the pond bottom for improved drainage and vegetation control.	\$90,054
FY 22	Allowance to survey and design improvements to berm, road, and/or pond bottom.	37,400
FY 23	Allowance to raise pond berm and extend and re-anchor cover.	1,184,000
<b>Project Total</b>		<b>\$1,311,854</b>

**Project Photo**



**Effluent Storage Pond**

Agency Facilities Master Plan (GL 7300-700-10)			
Type of Project	Planning Study	Lead Department	Engineering
Project Delivery	Request for Proposals		
Description and Justification	This Master Plan will include several elements to guide the Agency in planning future projects. A traditional master plan primarily considers the impacts related to growth. Because there is limited potential for growth in the Agency's service area, this study will focus on the condition of the Agency's aging facilities, impacts associated with potential regulatory changes, reduction in energy usage and GHG emissions, operational improvements, and climate change. The Master Plan recommendations will be presented to the Board and selected activities and projects will be incorporated into the FY 19 10-Year CIP and Revenue Program.		
Elements	<ul style="list-style-type: none"> <li>- Recommendations for if and when aging infrastructure should be replaced in-kind or retrofitted with a newer technology that reduces electrical consumption or GHG emissions.</li> <li>- Agency specific options for additional biogas use including energy generation, natural gas pipeline injection, and a vehicle fueling station</li> <li>- Evaluation of potential regulatory changes including nutrient limits</li> <li>- Evaluation of biosolids management practices and identification of future alternatives</li> <li>- Potential facility and/or equipment improvements to address sea level rise.</li> <li>- Identify feasible locations and sizes for solar power facilities</li> <li>- A calibrated treatment plant model that can be used to simulate changes in operational strategy and for training of new operations staff.</li> </ul>		
Risk Assessment	The Agency should regularly conduct master planning activities to assess potential risks associated with infrastructure management, regulatory changes, and capacity restrictions. Because there are no immediate drivers to alter the facility, this project is considered low risk.		
<b>Projected Expenditures FY 18 - 27</b>			
			FY 18
			\$260,000
			<b>FY 18 – 27 Total</b>
			<b>\$260,000</b>
<b>Implementation Schedule</b>			
<b>Schedule</b>	<b>Activity Description</b>	<b>Cost</b>	
FY 17	Develop and issue an RFP to select a consultant and begin preparation of the Master Plan.	\$230,000	
FY 18	Complete the Master Plan.	260,000	
Project Total			<b>\$490,000</b>

**Project Photos:**



**Agency Facilities**



**Organic Waste Receiving Facility**



**Effluent Pumps**

<b>Maintenance Facility Modifications (GL 7400-103-10)</b>			
<b>Type of Project</b>	Design and Capital Construction	<b>Lead Department</b>	Engineering
<b>Project Delivery</b>	Formally bid		
<b>Description and Justification</b>	Since the Maintenance Building and Maintenance Annex were constructed (1985 and 1995, respectively), the Agency's inventory and work space needs have changed. This multi-year project includes expansion and remodeling of the original Maintenance Building and construction of a new storage structure to better meet current Agency needs.		
<b>Elements</b>	<p>FY 15 - (Completed) Selected a designer for the identified modifications, prepared a needs assessment, initiated the design phase, and modified final effluent sample vault drain system to eliminate flow restrictions.</p> <p>FY 16 - (Completed) Completed the maintenance building improvement design, including permitting by the San Rafael Planning and Building Departments.</p> <p>FY 17 – Bid the project and initiated construction of maintenance building modifications to create an office space, enclose open side of the maintenance building for storage and construct a new structure adjacent to the maintenance annex.</p> <p>FY 18 – Complete construction activities.</p>		
<b>Risk Assessment</b>	This low risk project will increase the operational efficiency by improving work spaces and materials storage areas.		
<b>Projected Expenditures FY 18 - 27</b>			
			FY 18
			\$800,000
			<b>FY 18 – 27 Total</b>
			<b>\$800,000</b>
<b>Implementation Schedule</b>			
<b>Schedule</b>	<b>Activity Description</b>	<b>Cost</b>	
Prior FYs (Completed)	Structural assessment, needs assessment by design architect, and developed scope of design work	\$58,785	
FY 16 (Completed)	Design of maintenance building modifications and new structure	102,955	
FY 17 (Projected Actual)	Publicly bid the project and initiate construction.	627,000	
FY 18	Allowance to complete construction including, construction management services, architectural services during construction, and a 10% construction contingency.	800,000	
<b>Project Total</b>			<b>\$1,588,740</b>

### Project Photos



**Maintenance Building and Covered Portico**



**Area to be enclosed for additional storage**

<b>Facility Roofs Rehabilitation (GL 7400-960-00)</b>			
<b>Type of Project</b>	Design and Capital Construction	<b>Lead Department</b>	Engineering
<b>Project Delivery</b>	Formally bid		
<b>Description and Justification</b>	In FY 2015, the Agency had a roofing expert survey all its building roofs. The assessment indicated that the original standing seam metal roofs are in good condition. Therefore, planned replacement of the roofs has been postponed. This item contains allowances to rehabilitate the standing seam metal roofs on the Administration, Maintenance, Aeration and Secondary Clarifier control buildings and the Maintenance Annex, and to perform minor repairs on their supporting structures, if required.		
<b>Elements</b>	FY 15 - (Completed) Develop hire a specialty inspector to inspect the standing seam metal roofs, gutters, and their supporting wooden structures and including seismic retrofit implications; FY 17 - Repair the administration building roofing system in the entryway; FY 18 - Replace gutters on the aeration system and secondary clarifier control buildings; FY 20 - Prepare construction documents to bid and perform a contract for roof system replacement, structural repairs, and/or seismic upgrades; FY 21 - Construct upgrades to the structures.		
<b>Risk Assessment</b>	This is a medium risk project. A recent roof inspection indicated that the roof system for the Administration building is in good condition but that it will require rehabilitation in the future.		
<b>Projected Expenditures FY 18 – 27</b>			
		FY 18	\$35,000
		FY 20	75,500
		FY 21	921,400
		<b>FY 18 – 27 Total</b>	<b>\$1,031,900</b>
<b>Implementation Schedule</b>			
<b>Schedule</b>	<b>Activity Description</b>		<b>Cost</b>
FY 17 (Completed)	Repair leaks in administration building entryway and breakroom exit.		3,992
FY 18	Gutter replacement for the aeration system and secondary clarifier control buildings		35,000
FY 20	Prepare construction documents for necessary upgrades		75,500
FY 21	Planned construction for roof replacement and structural / seismic upgrades or repairs. May be deferred, depending on inspection results		921,400
		<b>Project Total</b>	<b>\$1,036,186</b>

### Project Photo



**Maintenance Building with standing seam metal roofs.**

<b>Biotower Rotary Distributor Replacement (GL 7300-685-00)</b>			
<b>Type of Project</b>	Design and Capital Construction	<b>Lead Department</b>	Engineering
<b>Project Delivery</b>	Informally bid		
<b>Description and Justification</b>	The biotowers are the first of two secondary treatment processes, and remove some of the biochemical oxygen demand (BOD) from the primary effluent before treatment in the aeration tanks. The rotary distributor is the critical moving part, spreading wastewater evenly on the filter media. These critical components operate in a harsh environment and they have about a 25 to 30-year life expectancy. The rotary distributor and top level of filter media in Biotower No. 1 were replaced in 2010.		
<b>Elements</b>	<ul style="list-style-type: none"> <li>- Replace galvanized-steel distributor mechanism and plastic spreader nozzles;</li> <li>- Replace distributor bearing;</li> <li>- Replace or recoat the cast iron turntable on which the mechanism turns; and</li> <li>- Replace the top tier of media that is subject to weather damage.</li> </ul>		
<b>Risk Assessment</b>	This is a medium risk project. The rotary distributor is operating but has significant corrosion. The upper media bed needs to be replaced due to weather damage. The project description and timing may change based on the Facilities Master Plan findings.		
<b>Projected Expenditures FY 18 – 27</b>			
			FY 17
			\$131,900
			<b>FY 18 – 27 Total</b>
			<b>\$131,900</b>
<b>Implementation Schedule</b>			
<b>Schedule</b>	<b>Activity Description</b>		<b>Cost</b>
FY19	Develop and execute contract for rotary distributor and bearing replacement and replacement of Agency-supplied media		\$106,000
	Allowance for procurement of media replacement		25,900
<b>Project Total</b>			<b>\$131,900</b>

**Project Photos:**



**Original base & turntable, Biotower No. 2**



**New rotary distributor, Biotower No. 2**

<b>Odor Control System Improvements (GL 7300-981-00)</b>		
<b>Type of Project</b>	Design and Capital Construction	<b>Lead Department</b> Engineering
<b>Project Delivery</b>	Formally bid	
<b>Description and Justification</b>	Some wastewater treatment processes produce odorous and/or corrosive gasses. The existing odor control scrubbers serve as one component of the Agency's overall odor control management program. Odor control scrubbers located in the Headworks, Biotower basement, and Solids Handling Building (SHB) are approaching the end of their service life. A consulting firm prepared a conceptual design report with limited sampling to evaluate the overall scrubber performance and cost estimates to replace each unit with activated carbon media system. While sampling showed existing scrubbers were not overly efficient, they are capable of removing odors to a level that did not impact our surrounding neighbors. The cost to replace the units is estimated to be \$4.3 million. The consultant conducted additional testing in FY 16 and verified that while the scrubbers operate below optimum level, they effectively remove odors. Scrubbers will be monitored and funding will be adjusted if performance significantly degrades. The scrubber replacement or upgrade schedule may change based on the Facilities Master Plan findings.	
<b>Elements</b>	FY 15 – (Completed) Consultant performed a condition assessment, analyzed alternative technologies, and prepared a preliminary design recommendation. FY 16 – (Completed) Design ventilation improvements in the SHB to improve atmospheric conditions during biosolids truck loading and meet NFPA 820 requirements. FY 17 – Finalize design and initiate the construct the ventilation improvements in the SHB. FY 18 – Complete the construction of the SHB ventilation improvements. FY 20, 23, & 27 – Allowances to design and construct scrubber replacements or upgrades.	
<b>Risk Assessment</b>	This is a low risk project because the odor scrubbers are operating with minor issues.	
<b>Projected Expenditures FY 18 - 27</b>		
	FY 18	\$28,500
	FY 20	1,183,300
	FY 23	1,347,200
	FY 27	1,494,600
	<b>FY 18 – 27 Total</b>	<b>\$4,053,600</b>
<b>Implementation Schedule</b>		
<b>Schedule</b>	<b>Activity Description</b>	<b>Cost</b>
Prior FYs (Completed)	Odor control and equipment analysis with recommendation report. Design SHB ventilation and NFPA 820 improvements.	\$112,420
FY 17 (Projected Actual)	Finalize design, publically bid, and begin construction of the SBH ventilation and NFPA 820 improvements.	319,200
FY 18	Complete the SBH ventilation and NFPA 820 improvements.	28,500
FY 20	Design and construct replacement or upgrades for one scrubber	1,183,300
FY 23	Design and construct replacement or upgrades for one scrubber	1,347,200
FY 27	Design and construct replacement or upgrades for one scrubber	1,494,600
	<b>Project Total</b>	<b>\$4,485,220</b>

**Project Photos:**



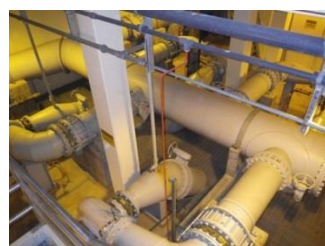
**Odor control scrubbers, with air handlers, two views.**

<b>Critical Buried Pipe Inspection and Repairs (GL 7400-966-00)</b>		
<b>Type of Project</b>	Inspection and Capital Construction	<b>Lead Department</b> Engineering
<b>Project Delivery</b>	Inspection – Request for Proposals; Repairs - Formally bid	
<b>Description and Justification</b>	The San Rafael and Ross Valley Interceptors are large diameter buried force mains and are the only pipelines that convey wastewater from the satellite collection agency service areas to the treatment plant. This project will evaluate options to inspect the interceptors and conduct the inspections where feasible. Within the treatment plant there are several large diameter pipelines that transfer water between treatment process including the Primary Effluent pipeline and the Return Activated Sludge pipelines. The treatment plant pipelines contain elastomeric joints that are nearing the end of their service lives. Inspecting these critical buried pipe flex joints may require diver inspection or robotic inspection technology because the pipelines are difficult to keep dewatered. Inspections of the treatment plant pipelines have been differed until after the Agency Facilities Master Plan.	
<b>Elements</b>	FY 16 - Inspected the portions of the San Rafael Interceptor and the Ross Valley Interceptor which CMSA is responsible for maintaining. The scope of work was expanded to include inspection of the entire length of each pipeline; FY 17 - Completed the San Rafael and Ross Valley Interceptors inspection project. FY 19 - Allowance for interior inspection of the pipelines, elastomeric joints, and selected sumps, with possible uncovering of the exterior of some buried joints throughout the Agency Facility. Includes possible internal sealing of some or all of the elastomeric joints and external pipe repairs, based on inspection results. FY 27 – Allowance to inspect the San Rafael and Ross Valley Interceptors.	
<b>Risk Assessment</b>	This is a medium risk project because the condition of the pipelines and flexible joints is unknown. However, the pipelines have not leaked or shown signs of corrosion.	
<b>Projected Expenditures FY 18 - 27</b>		
	FY 19	183,600
	FY 27	157,900
	<b>FY 18 – 27 Total</b>	<b>\$341,500</b>
<b>Implementation Schedule</b>		
<b>Schedule</b>	<b>Activity Description</b>	<b>Cost</b>
FY 16 (Complete)	Begin the inspection of the San Rafael and Ross Valley Interceptors	\$97
FY 17 (Projected Actual)	Complete the inspection of the San Rafael and Ross Valley Interceptors	121,552
FY 19	Allowance for internal inspection and possible repair of pipeline joints throughout the Agency Facilities.	183,600
FY 27	Inspect the San Rafael and Ross Valley Interceptors	157,900
	<b>Project Total</b>	<b>\$463,149</b>

**Project Photos:**



**Biotower effluent pipe**



**Primary Effluent pipe manifold**

<b>Centrifuge Maintenance (GL 7300-964-10)</b>			
<b>Type of Project</b>	Design and Capital Construction	<b>Lead Department</b>	Engineering
<b>Project Delivery</b>	Informally and formally bid		
<b>Description and Justification</b>	The Agency dewateres digested sludge with three high speed centrifuges. The centrifuges rotate at high speeds to remove water and produce biosolids. The high speed rotation and corrosive operating environment necessitate a significant amount of routine maintenance for optimum performance. The centrifuges are scheduled for major 5-year preventive maintenance procedures beginning in FY 19. Prior to the 5-year maintenance cycle, a consultant performed a condition assessment to estimate the remaining useful life of the centrifuges and refurbishment versus replacement was studied in the Facility Master Plan. A replacement technology must be capable of meeting current Agency performance standards while requiring less energy, and lower annual maintenance costs. The project description, budget, and/or schedule may change based on the Facilities Master Plan findings.		
<b>Elements</b>	FY 16 - Perform major condition assessment of the centrifuges; FY 19 - Allowance to refurbish two centrifuge hydraulic systems; FY 21 – Begin design of centrifuge replacement, if recommended in the Facility Master Plan; FY 22 - Construct the centrifuge replacement.		
<b>Risk Assessment</b>	This is a low risk project because the existing centrifuges with proper maintenance are expected to operate and meet the Agency’s needs.		
<b>Projected Expenditures FY 18 – 27</b>			
		FY 19	150,000
		FY 21	250,000
		FY 22	1,700,000
		<b>FY 18 – 27 Total</b>	<b>\$2,100,000</b>
<b>Implementation Schedule</b>			
<b>Schedule</b>	<b>Activity Description</b>	<b>Cost</b>	
FY 16 (Completed)	Perform condition assessment	\$3,139	
FY 17 (Projected Actual)	No maintenance activities were required. The preliminary design study originally planned for this year was included in the Facility Master Plan.	0	
FY 19	Allowance for refurbishment or new system design	150,000	
FY 21	Construct the centrifuge replacement	250,000	
FY 22	Rehabilitate dewatering equipment	1,700,000	
	<b>Project Total</b>	<b>\$2,353,139</b>	

**Project Photos:**



**Existing Centrifuges**



**Biosolids Hoppers**



## **SECTION 9. FY 2017-18 Adopted Budget—10-Year Financial Forecast**

The Agency adopts with each budget a 10-year financial forecast to accompany the budget. The forecast is a model of revenues, expenses, capital, and reserves, and essentially sets forth a strategic plan to guide funding-sources-and-uses-decisions for the operating and capital budgets. The financial forecast consists of four sections, the Preliminary Assumptions Section, and Sections I, II, and III, Operating Surplus (Shortfall), Capital Improvement Program, and Reserve Reconciliation, respectively.

The first section, preliminary assumptions, is to assign assumption values for expenditures and revenues except regional sewer charges to establish a 10-year forecast for operating and capital programs. Year 1 of the forecast is the adopted budget for the given fiscal year and is the base year for the forecast. All future projection values derive from the base year. Amounts for debt service and debt service coverage are specific amounts from the debt service amortization tables. Amounts for the capital improvements program are per the 10-year CIP schedule. Revenue from capacity charges increases annually by the ENR index per the ordinance for the same. The forecast is constructed to *project* future expenses and capital and to *limit* revenues from service charges and the capital fee only to known values authorized by the Board. In this manner, it will be clearly apparent when there will be a revenue shortfall and how long reserves will last without revenue increases.

Section I – Operating Surplus (Shortfall) is a summary of the operating budget that reflects either a surplus, funded, or a shortfall, not funded. Funding for the operating budget comes primarily from sewer service charges from JPA members together with “all other revenues” such as contract services, program revenues, haulers, permits, and inspections. Operating expenses includes all expenses except depreciation, debt service, and capital. Debt service and capital are funded from separate dedicated sources.

Section II represents funding for the Capital Improvement Program. Projects and amounts of the capital improvement program are per the 10-year CIP schedule. Funding for the capital improvement program comes from the capital fee collected from JPA members, the debt service coverage amount also collected from JPA members, capacity charges received from new development, and from capital reserves to the extent available.

Section III is a reconciliation of the three types of designated reserves, Unrestricted Operating Reserve, Unrestricted Capital Reserve, and Restricted Capital Reserve. Beginning balances for each of these reserve types is the amount per the treasurer’s report. Unrestricted operating reserves are maintained at 25% of operating costs before debt and capital. Excess amounts of unrestricted operating reserves are transferred to unrestricted capital reserves to be used to fund capital. Restricted capital reserves consists of capacity charges and debt coverage fees collected and are used exclusively for capital. Any differences to fund capital comes from unrestricted capital reserves to the extent available.

The financial forecast document is a representation of the model for funding the Agency’s operating and capital programs.

**CENTRAL MARIN SANITATION AGENCY  
10-YEAR FINANCIAL FORECAST**

Line No.	Description	Assump	Adopted Budget	Projected Actual	Adopted Budget	Forecast Expenses and Capital Improvement Program Years 2 thru 10									
			FY 16-17	FY 16-17	Year 1 FY 17-18	Year 2 FY 18-19	Year 3 FY 19-20	Year 4 FY 20-21	Year 5 FY 21-22	Year 6 FY 22-23	Year 7 FY 23-24	Year 8 FY 24-25	Year 9 FY 25-26	Year 10 FY 26-27	
<b>Section: Preliminary Assumptions</b>															
<b>Funding Requirements:</b>															
a	Salaries and wages	3.0%	\$ 5,283,599	\$ 5,117,065	\$ 5,401,800	\$ 5,563,900	\$ 5,730,800	\$ 5,902,700	\$ 6,079,800	\$ 6,262,200	\$ 6,450,100	\$ 6,643,600	\$ 6,842,900	\$ 7,048,200	
b	Employee benefits	2.0%	2,575,700	2,399,918	2,561,100	2,612,300	2,664,500	2,717,800	2,772,200	2,827,600	2,884,200	2,941,900	3,000,700	3,060,700	
c	Chemicals and fuels	1.5%	1,146,800	1,073,227	1,069,500	1,085,500	1,101,800	1,118,300	1,135,100	1,152,100	1,169,400	1,186,900	1,204,700	1,222,800	
d	Biosolids management	1.5%	373,920	334,887	387,700	393,500	399,400	405,400	411,500	417,700	424,000	430,400	436,900	443,500	
e	Permit testing and monitoring	1.0%	168,800	127,322	179,500	181,300	183,100	184,900	186,700	188,600	190,500	192,400	194,300	196,200	
f	Maintenance and repairs	1.5%	382,500	387,910	382,500	388,200	394,000	399,900	405,900	412,000	418,200	424,500	430,900	437,400	
g	Utilities	1.0%	372,600	303,053	350,500	354,000	357,500	361,100	364,700	368,300	372,000	375,700	379,500	383,300	
h	Insurance	2.5%	275,900	203,553	261,200	267,700	274,400	281,300	288,300	295,500	302,900	310,500	318,300	326,300	
i	General and administrative (operating)	2.0%	1,000,660	736,759	868,800	886,200	903,900	922,000	940,400	959,200	978,400	998,000	1,018,000	1,038,400	
j	Operating before debt and capital		11,580,479	10,683,694	11,462,600	11,732,599	12,009,400	12,293,401	12,584,600	12,883,200	13,189,700	13,503,900	13,826,200	14,156,801	
k	Debt service		3,968,094	3,968,094	3,961,906	3,973,206	3,967,331	3,957,006	3,966,006	3,965,706	3,942,381	3,944,506	3,939,381	3,988,756	
l	Operating before capital		15,548,573	14,651,788	15,424,506	15,705,805	15,976,731	16,250,407	16,550,606	16,848,906	17,132,081	17,448,406	17,765,581	18,145,557	
m	Capital improvement program		4,193,000	2,658,521	3,817,600	1,955,100	3,672,300	7,545,500	7,489,500	4,151,400	1,236,700	1,873,700	1,521,000	2,961,800	
n	<b>Total funding requirements</b>		<b>\$ 19,741,573</b>	<b>\$ 17,310,309</b>	<b>\$ 19,242,106</b>	<b>\$ 17,660,905</b>	<b>\$ 19,649,031</b>	<b>\$ 23,795,907</b>	<b>\$ 24,040,106</b>	<b>\$ 21,000,306</b>	<b>\$ 18,368,781</b>	<b>\$ 19,322,106</b>	<b>\$ 19,286,581</b>	<b>\$ 21,107,357</b>	
<b>Funding Sources:</b>															
o	Unrestricted - Regional sewer service charges	0.0%	\$ 9,865,358	\$ 9,865,358	\$ 10,263,165	\$ 10,263,165	\$ 10,263,165	\$ 10,263,165	\$ 10,263,165	\$ 10,263,165	\$ 10,263,165	\$ 10,263,165	\$ 10,263,165	\$ 10,263,165	
p	Unrestricted - Capital fee (enter increments of \$100,000)	-	530,000	530,000	630,000	630,000	630,000	630,000	630,000	630,000	630,000	630,000	630,000	630,000	
q	Unrestricted - All other revenues	1.5%	1,841,878	1,921,694	1,731,900	1,757,879	1,784,247	1,811,010	1,838,176	1,865,748	1,893,734	1,922,140	1,950,973	1,980,237	
r	Restricted capital - Debt service charge		3,968,094	3,968,094	3,961,906	3,973,206	3,967,331	3,957,006	3,966,006	3,965,706	3,942,381	3,944,506	3,939,381	3,988,756	
s	Restricted capital - Debt service coverage		992,024	992,024	990,477	993,302	991,833	989,252	991,502	991,427	985,595	986,127	984,845	997,189	
t	Restricted capital - Capacity charges	2.6%	-	185,000	29,300	30,071	30,861	31,673	32,506	33,361	34,238	35,139	36,063	37,011	
u	Subtotal funding sources before reserve (increase) usage		17,197,354	17,462,170	17,606,748	17,647,622	17,667,437	17,682,106	17,721,354	17,749,407	17,749,114	17,781,077	17,804,427	17,896,359	
v	Reserve (Increase) Usage		2,544,220	(151,861)	1,635,359	13,283	1,981,594	6,113,801	6,318,752	3,250,900	619,667	1,541,029	1,482,154	3,210,998	
w	<b>Total funding sources</b>		<b>\$ 19,741,573</b>	<b>\$ 17,310,309</b>	<b>\$ 19,242,106</b>	<b>\$ 17,660,905</b>	<b>\$ 19,649,031</b>	<b>\$ 23,795,907</b>	<b>\$ 24,040,106</b>	<b>\$ 21,000,306</b>	<b>\$ 18,368,781</b>	<b>\$ 19,322,106</b>	<b>\$ 19,286,581</b>	<b>\$ 21,107,357</b>	
x	Control total		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	

**NOTES ON FORECAST:**

1. The purpose of the above section (Preliminary Assumptions) is to assign assumption values for expenditures and revenues except regional sewer charges to establish a 10-year pro-forma forecast
2. Regional sewer charges will be developed by staff and the Finance Committee, and reviewed by the JPA managers, as part of revenue plan development
3. The above forecast is in the form of a balanced budget and is NOT FUNDING. FUNDING IS SHOWN BELOW IN SECTIONS I, II, and III
4. Beginning reserve balances for Section III are per the Treasurer's Report
5. Transfer operating surpluses to unrestricted capital reserve as necessary to maintain Board established 25% unrestricted operating reserve
6. Transfer unrestricted capital reserves to fully fund CIP Section II until depleted for forecast purposes
7. After step 6 above, unfunded capital is shown in red, if applicable
8. Projected costs determine necessary revenues for the revenue plan
9. Regional sewer service charges plus "All other revenues" fund operating expenses
10. A separate debt service fee pays for the costs of debt service
11. Capacity charges, the debt service coverage fee, the capital fee, and unrestricted capital reserve usage fund the capital program
12. Unrestricted operating reserve beginning balance contains amount per treasurer's report plus \$100,000 insurance reserve plus \$250,000 contingency reserve

**CENTRAL MARIN SANITATION AGENCY  
10-YEAR FINANCIAL FORECAST**

Line No.	Description	Assump	Adopted Budget FY 16-17	Projected Actual FY 16-17	Adopted Budget Year 1 FY 17-18	Forecast Expenses and Capital Improvement Program Years 2 thru 10								
						Year 2 FY 18-19	Year 3 FY 19-20	Year 4 FY 20-21	Year 5 FY 21-22	Year 6 FY 22-23	Year 7 FY 23-24	Year 8 FY 24-25	Year 9 FY 25-26	Year 10 FY 26-27
<b>Section I - Operating Surplus (Shortfall)</b>														
1	Total operating costs before debt and capital		\$ 11,580,479	\$ 10,683,694	\$ 11,462,600	\$ 11,732,599	\$ 12,009,400	\$ 12,293,401	\$ 12,584,600	\$ 12,883,200	\$ 13,189,700	\$ 13,503,900	\$ 13,826,200	\$ 14,156,801
2	Service charges and other revenues		11,707,236	11,787,052	11,995,065	12,021,044	12,047,412	12,074,175	12,101,341	12,128,913	12,156,899	12,185,305	12,214,138	12,243,402
3	Total operating surplus (shortfall)		\$ 126,757	\$ 1,103,358	\$ 532,465	\$ 288,445	\$ 38,012	\$ (219,226)	\$ (483,260)	\$ (754,287)	\$ (1,032,801)	\$ (1,318,594)	\$ (1,612,062)	\$ (1,913,399)
<b>Section II - Capital Improvement Program</b>														
4	<b>Total Annual CIP to Fund (10-Year CIP)</b>		\$ 4,193,000	\$ 2,658,521	\$ 3,817,600	\$ 1,955,100	\$ 3,672,300	\$ 7,545,500	\$ 7,489,500	\$ 4,151,400	\$ 1,236,700	\$ 1,873,700	\$ 1,521,000	\$ 2,961,800
6	1. Restricted - other financing sources (e.g., bonds, loans, grants)		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
7	2. Restricted - Capacity charges		-	185,000	29,300	30,071	30,861	31,673	32,506	33,361	34,238	35,139	36,063	37,011
8	3. Restricted - Debt Service Coverage (i.e., covenant req)		914,806	914,806	992,024	990,477	993,302	991,833	989,252	991,502	991,427	985,595	986,127	984,845
9	4. Unrestricted - Capital Fee		530,000	530,000	630,000	630,000	630,000	630,000	630,000	630,000	630,000	630,000	630,000	630,000
10	5. Unrestricted - General Cap Rsv (Inc) Draw (step 2)		2,748,194	1,028,715	2,166,277	304,553	2,018,137	4,073,642	-	-	-	-	-	-
11	Total Available Funding		\$ 4,193,000	\$ 2,658,521	\$ 3,817,601	\$ 1,955,100	\$ 3,672,300	\$ 5,727,148	\$ 1,651,758	\$ 1,654,863	\$ 1,655,665	\$ 1,650,734	\$ 1,652,190	\$ 1,651,857
12	<b>Control Total / (Unfunded Capital)</b>		\$ -	\$ -	\$ 1	\$ 0	\$ (0)	\$ (1,818,352)	\$ (5,837,742)	\$ (2,496,537)	\$ 418,965	\$ (222,966)	\$ 131,190	\$ (1,309,943)
<b>Section III - Reserve Reconciliation</b>														
13	<b>Restricted capital reserve balance - beg (Treas Report)</b>		\$ 914,806	\$ 914,806	\$ 992,024	\$ 990,477	\$ 993,302	\$ 991,833	\$ 989,252	\$ 991,502	\$ 991,427	\$ 985,595	\$ 986,127	\$ 984,845
18	Capacity charges revenue		-	185,000	29,300	30,071	30,861	31,673	32,506	33,361	34,238	35,139	36,063	37,011
19	Capacity charges usage for capital		-	(185,000)	(29,300)	(30,071)	(30,861)	(31,673)	(32,506)	(33,361)	(34,238)	(35,139)	(36,063)	(37,011)
20	Debt coverage collection - current year		992,024	992,024	990,477	993,302	991,833	989,252	991,502	991,427	985,595	986,127	984,845	997,189
21	Debt coverage usage - prior year		(914,806)	(914,806)	(992,024)	(990,477)	(993,302)	(991,833)	(989,252)	(991,502)	(991,427)	(985,595)	(986,127)	(984,845)
22	Net change		77,218	77,218	(1,547)	2,825	(1,469)	(2,581)	2,250	(75)	(5,831)	531	(1,281)	12,344
23	<b>Restricted capital reserve balance - end</b>		\$ 992,024	\$ 992,024	\$ 990,477	\$ 993,302	\$ 991,833	\$ 989,252	\$ 991,502	\$ 991,427	\$ 985,595	\$ 986,127	\$ 984,845	\$ 997,189
24	<b>Unrestricted capital reserve balance - beg (Treas Report)</b>		\$ 7,526,179	\$ 7,526,179	\$ 8,004,023	\$ 6,175,485	\$ 6,091,779	\$ 4,073,642	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
25	Capital fee revenue		530,000	530,000	630,000	630,000	630,000	630,000	630,000	630,000	630,000	630,000	630,000	630,000
26	Unrestricted operating reserve transfer-in (step 1)		305,762	1,506,559	337,739	220,847	-	-	-	-	-	-	-	-
27	Capital fee usage to fund CIP		(530,000)	(530,000)	(630,000)	(630,000)	(630,000)	(630,000)	(630,000)	(630,000)	(630,000)	(630,000)	(630,000)	(630,000)
28	Unrestricted capital reserve draw (enter CIP control total) (step 2)		(2,748,194)	(1,028,715)	(2,166,277)	(304,553)	(2,018,137)	(4,073,642)	-	-	-	-	-	-
29	Net change		(2,442,432)	477,844	(1,828,538)	(83,706)	(2,018,137)	(4,073,642)	-	-	-	-	-	-
30	<b>Unrestricted capital reserve balance - end</b>		\$ 5,083,747	\$ 8,004,023	\$ 6,175,485	\$ 6,091,779	\$ 4,073,642	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
31	<b>Unrestricted operating reserve balance - beg (Treas Report) (Note 12)</b>		\$ 3,074,125	\$ 3,074,125	\$ 2,670,924	\$ 2,865,650	\$ 2,933,248	\$ 2,971,260	\$ 2,752,034	\$ 2,268,774	\$ 1,514,487	\$ 481,686	\$ (836,908)	\$ (2,448,970)
32	Service charges and other revenues		11,707,236	11,787,052	11,995,065	12,021,044	12,047,412	12,074,175	12,101,341	12,128,913	12,156,899	12,185,305	12,214,138	12,243,402
33	Operating expenses		(11,580,479)	(10,683,694)	(11,462,600)	(11,732,599)	(12,009,400)	(12,293,401)	(12,584,600)	(12,883,200)	(13,189,700)	(13,503,900)	(13,826,200)	(14,156,801)
34	Unrestricted operating reserve transfer-out (excess or draw) (step 1)		(305,762)	(1,506,559)	(337,739)	(220,847)	-	-	-	-	-	-	-	-
35	Net change		(179,005)	(403,201)	194,726	67,598	38,012	(219,226)	(483,260)	(754,287)	(1,032,801)	(1,318,594)	(1,612,062)	(1,913,399)
36	<b>Unrestricted operating reserve balance - end</b>		\$ 2,895,120	\$ 2,670,924	\$ 2,865,650	\$ 2,933,248	\$ 2,971,260	\$ 2,752,034	\$ 2,268,774	\$ 1,514,487	\$ 481,686	\$ (836,908)	\$ (2,448,970)	\$ (4,362,369)
37	<b>(25% of operating costs before debt and capital)</b>		25%	25%	25%	25%	25%	22%	18%	12%	4%	-6%	-18%	-31%
38	Net change		(2,544,220)	151,861	(1,635,359)	(13,283)	(1,981,594)	(4,295,449)	(481,010)	(754,362)	(1,038,632)	(1,318,063)	(1,613,344)	(1,901,055)
39	<b>Reserve balance total - beg</b>		\$ 11,515,110	\$ 11,515,110	\$ 11,666,971	\$ 10,031,612	\$ 10,018,329	\$ 8,036,734	\$ 3,741,286	\$ 3,260,276	\$ 2,505,913	\$ 1,467,281	\$ 149,219	\$ (1,464,125)
40	<b>Reserve balance total - end</b>		\$ 8,970,891	\$ 11,666,971	\$ 10,031,612	\$ 10,018,329	\$ 8,036,734	\$ 3,741,286	\$ 3,260,276	\$ 2,505,913	\$ 1,467,281	\$ 149,219	\$ (1,464,125)	\$ (3,365,180)

## SECTION 10. DEBT OBLIGATIONS

The Agency took advantage of historically low interest rates in the fiscal year 2015 by refunding its Series 2006 Revenue Bonds to realize savings through lower interest rates. On April 22, 2015, the Agency issued \$49,310,000 of Series 2015 Revenue Bonds at a premium of \$5,344,174, with an interest rate average of 2.78% percent. The proceeds from the 2015 bonds were placed in an escrow account and used 1) to make debt service payments on the existing Series 2006 Bonds through September 1, 2016, and 2) to redeem the outstanding Series 2006 Revenue Bonds when they become callable. The Agency's sole, ongoing debt service obligation is the Series 2015 bonds, which are fully registered, with principal due annually on September 1, and interest payable semi-annually on March 1 and September 1. The transaction resulted in cost savings of over \$15 million for the fiscal years from 2015-16 to 2031-32.

The table below displays the amount of outstanding debt service obligations through 2032.

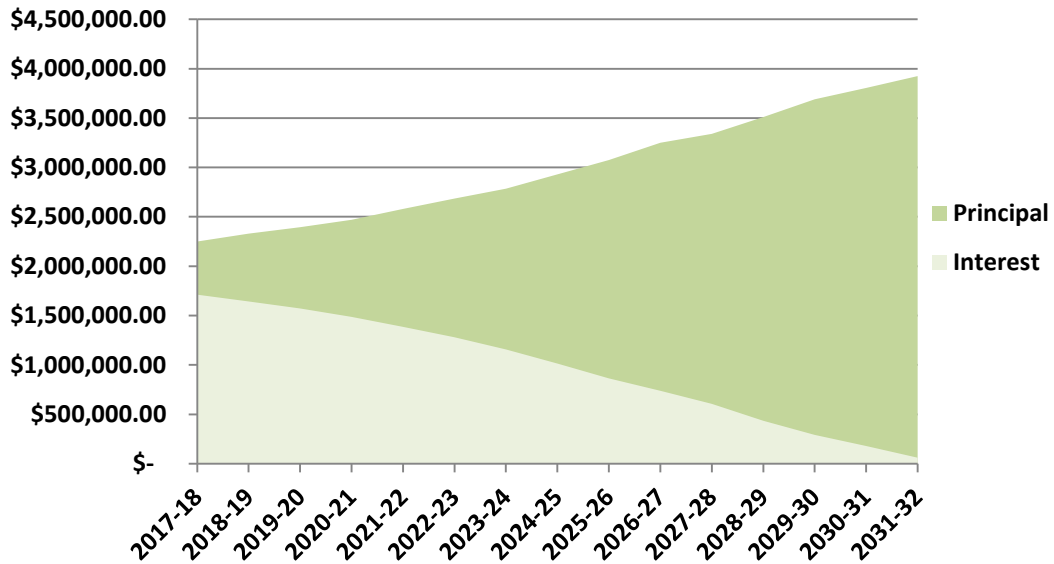
### Refunding Revenue Bonds Series 2015 Debt Service Schedule Remaining to 2032

Fiscal Year	Principal	Interest	Total
2017-18 (Budgeted)	\$2,250,000	\$1,711,906	\$3,961,906
2018-19	2,330,000	1,643,206	3,973,206
2019-20	2,395,000	1,572,331	3,967,331
2020-21	2,470,000	1,487,006	3,957,006
2021-22	2,580,000	1,386,006	3,966,006
2022-23	2,685,000	1,280,706	3,965,706
2023-24	2,785,000	1,157,381	3,942,381
2024-25	2,930,000	1,014,506	3,944,506
2025-26	3,075,000	864,381	3,939,381
2026-27	3,250,000	738,756	3,988,756
2027-28	3,340,000	606,506	3,946,506
2028-29	3,510,000	435,256	3,945,256
2029-30	3,690,000	292,156	3,982,156
2030-31	3,805,000	179,731	3,984,731
2031-32	3,925,000	61,328	3,986,328
<b>Total Refunding Revenue Bond Series 2015 Debt Outstanding as of July 1, 2017</b>	<b>\$45,020,000</b>	<b>\$14,431,166</b>	<b>\$59,451,166</b>

Each JPA Member is obligated to pay its proportionate share of the semi-annual debt service payments, and a payment for debt service coverage (equivalent to 25% of the annual debt service) pursuant to the Debt Service Payment Agreement between CMSA and the Member Agencies, as well as the Master Indenture between CMSA and the Bond Trustee. The proportionate allocation of the debt service payment and coverage to each member is based upon average EDU counts over a 10-year period from the fiscal year 2006-07 to the fiscal year 2015-16 reported for the JPA service area. This allocation method smooths out unit count fluctuations and promotes stable/predictable debt service costs to members.

**Debt Limits:** The Agency is an enterprise business activity supported by user fees with no revenues from taxes, and accordingly, is not subject to legal debt limitation.

**Debt Service Payment Schedule  
Fiscal Years 2018-2032**



In accordance with the Agency’s Financial Policy on Reserves, debt service coverage funds are restricted for capital project use with the limitation that the amount collected during each fiscal period cannot be expended in the same period. The annual budget appropriates funds from Restricted Reserves for Capital Projects to fund current year Capital Improvement Program (CIP) activities. The FY 18 Budget appropriates approximately \$990,000 to be spent from the Restricted Reserves for CIP activities. Because debt service obligations are collected from JPA Members, the existing debt level has little impact on the Agency’s current operations. Details for the Agency’s FY 18 CIP can be found in Section 8 – Capital Improvement Program.

The table below displays the debt service payment and coverage collection since FY 2006-07.

<b>Debt Service Charges per Equivalent Dwelling Unit</b>				
<b>Fiscal Year</b>	<b>Debt Service Charges/EDU</b>	<b>Principal Retired</b>	<b>Interest Paid</b>	<b>25% Coverage Collected</b>
<b>Series 2015 Revenue Bonds</b>				
2017-18	\$95.16	\$2,250,000	\$1,711,906	\$990,477
2016-17	94.74	2,195,000	1,773,094	992,023
2015-16	87.10	2,095,000	1,564,224	914,806
<b>Series 2006 Revenue Bonds</b>				
2014-15	\$110.75	\$2,135,000	\$2,517,501	\$1,163,125
2013-14	111.69	2,040,000	2,616,539	1,164,135
2012-13	113.51	1,955,000	2,701,751	1,164,188
2011-12	106.08	1,880,000	2,775,914	1,163,979
2010-11	103.95	1,805,000	2,849,708	1,163,677
2009-10	103.44	1,735,000	2,918,251	1,163,313
2008-09	104.19	1,670,000	2,986,351	1,164,088
2007-08	71.63	-	3,019,751	754,938
2006-07	33.15	-	1,107,242	276,811

## SECTION 11. KEY TERMS AND FINANCIAL GLOSSARY WITH ACRONYM LISTING

- **ASSETS:** Anything of material and economic value or usefulness that is owned by the entity.
- **BAY AREA CLEAN WATER AGENCIES (BACWA):** A joint powers agency formed under the California Government Code by the five largest wastewater treatment agencies that provide sanitary sewer services to the more than seven million people living in the nine county San Francisco Bay Area. CMSA is one of BACWA's 65 principal and associate members.
- **BAY AREA CHEMICAL CONSORTIUM (BACC):** A cooperative group of over 50 public water and wastewater agencies in northern California whose primary purpose is to seek competitive bids from vendors to supply and deliver chemicals for water and/or wastewater treatment.
- **BAY AREA AIR QUALITY MANAGEMENT DISTRICT (BAAQMD):** A government agency that regulates sources of air pollution within the nine San Francisco Bay Area Counties.
- **BOND PREMIUM:** A bond that is priced higher than its stated face (par) value.
- **CAPITAL ASSETS:** Includes Agency land, treatment plant, outfall, facilities, buildings, and equipment net of depreciation.
- **CAPITAL EXPENDITURE:** An expenditure of \$5,000 or more that is used to purchase a capital asset with a useful life of one year or more, or an investment that improves the useful life of an existing asset.
- **CAPITAL IMPROVEMENT PROGRAM (CIP):** A plan that describes and explains the Agency's capital and asset management projects, delineated by type of project and funding source, over ten fiscal years. The CIP is a planning document that provides the Agency with an opportunity to evaluate and assess its capital needs from financial, engineering, operational and planning perspectives.
- **CAPACITY CHARGE:** A one-time fee charged to all new users connecting to, and creating additional demand on, the sanitary and sewer treatment systems and is a funding mechanism by which the cost of the facilities to serve them are paid for. Government code requires capacity charges to fund capital projects.
- **COMPUTERIZED MAINTENANCE MANAGEMENT SYSTEM (CMMS):** A software program that is used for inventory control, procurement management, fixed asset condition assessment, maintenance repair management, and asset reporting. The Agency uses a CMMS product called NEXGEN.
- **CONTRACT SERVICE REVENUES:** Services provided by the Agency under contract to other local agencies for pump station and collection system maintenance, the various source control programs, a new service to assure safe disposal of amalgam and mercury contaminants.
- **CURRENT AND OTHER ASSETS:** Assets that can easily be converted to cash or consumed within one year. Includes cash, investments, receivables, prepaid expenses, deposits with others (example: OPEB asset).
- **CURRENT LIABILITIES:** Payment obligations owed by the Agency within the next 12 months.
- **EQUIVALENT DWELLING UNIT (EDU):** An EDU is one single-family residence.
- **ENTERPRISE FUND:** A government accounting fund that provides goods or services to the public for a fee that makes the entity self-supporting.
- **FLOW(S):** The total incoming sewage flow(s) to CMSA from JPA member agencies measured in millions of gallons and collected for the previous April 1 to March 31. It is used to calculate the sewer service charge and allocate to each JPA member agency its respective portion of the sewer charge.
- **FOG:** Fats, Oils and Grease
- **FULL TIME EQUIVALENT (FTE):** a position converted to a decimal equivalent of a full-time employee position.

- **HAULERS, PERMITS and INSPECTION REVENUE:** Fees and charges for use of Agency septage receiving facility, permit fees for commercial and industrial waste regulated commercial and industrial dischargers, reimbursement of Agency labor, and administrative costs for performing inspections and other services.
- **INVESTED IN CAPITAL ASSETS, NET OF RELATED DEBT:** Represents amounts invested in capital assets less accumulated depreciation and any outstanding debt used to acquire the assets.
- **JOINT POWERS AGREEMENT (JPA):** An agreement between two or more local government agencies to form a separate governmental entity distinct from the member governments. It authorizes the powers the JPA is allowed to exercise.
- **LIABILITIES:** What the Agency owes others.
- **MCSTOPP:** Marin County Stormwater Pollution Prevention Program
- **MEDICAL AFTER RETIREMENT ACCOUNT (MARA):** An employer paid contribution to participating employee's MARA account. The accumulated funds, owned by the individual, can be spent on qualified medical expenses during retirement.
- **NET POSITION:** The difference between total assets and total liabilities.
- **NON-CURRENT LIABILITIES:** Payment obligations owed by the Agency more than 12 months in the future.
- **NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES):** A federal permit that establishes the quality requirements of the Agency's treatment waters, and requires the Agency to manage and maintain pretreatment, pollution prevention, mercury reduction and public education programs.
- **OTHER NON-OPERATING REVENUE:** Includes CSRMA dividends, CalCARD prompt payment incentive rebates, settlement claims, the occasional sale of assets, SDI disability reimbursements, and other miscellaneous revenue sources.
- **OPEB:** Other post-employment benefits which are specifically medical benefits for retired employees.
- **PEPRA:** Public Employees' Pension Reform Act established a cap on the amount of compensation that can be used to calculate a retirement benefit for new public employees hired on or after January 1, 2013.
- **PROGRAM REVENUES:** The Agency is the lead coordinator for the Safety Director, Countywide Education, and Outside Safety Training programs. Costs incurred by CMSA are allocated to the districts that participate in the programs. The Agency invoices participating districts quarterly for Safety Director and Countywide Education expenditures in accordance with agreements with program participants.
- **RESTRICTED CASH:** Cash and investments not available for immediate use and set aside for specific, contractual purposes.
- **REVENUE BOND:** Debt obligation for which interest and principal payments are secured by the debt service portion of service charge revenues.
- **SANITARY DISTRICT No. 2 (SD#2):** SD#2 is a CMSA JPA member, and comprises the Town of Corte Madera and unincorporated properties on the Tiburon peninsula.
- **SERVICE CHARGE:** A fee for wastewater treatment service and payment of the revenue bond debt service.
- **UNRESTRICTED CASH:** Cash and investments available to use for operations and not tied to a specific expenditure or reserve.
- **WATER ENVIRONMENT FEDERATION (WEF):** A not-for-profit technical and educational organization of 36,000 individual members and 75 affiliated Member Associations representing water quality professionals around the world.

## **ACRONYM LISTING**

AM	Asset Management
BACC	Bay Area Chemical Consortium
BACWA	Bay Area Clean Water Agencies
BAPPG	Bay Area Pollution Prevention Group
BAAQMD	Bay Area Air Quality Management District
BOD	Biological Oxygen Demand
CAFR	Comprehensive Annual Financial Report
CalPERS	California Public Employees' Retirement System
CAMP	California Asset Management Program
CASA	California Association of Sanitation Agencies
CIP	Capital Improvement Program
CMMS	Computerized Maintenance Management System
CMSA	Central Marin Sanitation Agency
COLA	Cost of Living Adjustment
CPI	Consumer Price Index
CSRMA	California Sanitation Risk Management Authority
CUPA	Certified Unified Program Agencies
CWEA	California Water Environment Association
DAFs	Dissolved Air Flotation Thickeners
EDU	Equivalent Dwelling Unit
ELAP	Environmental Laboratory Approval Program
F2E	Food-to-Energy
FOG	Fats, Oils, and Grease program (see Contract Service Revenues)
FTE	Full Time Equivalent
FW	Food Waste
FY	Fiscal Year
GASB	Government Accounting Standards Board
GFOA	Government Finance Officers Association
G&A	General & Administrative
IW	Industrial Waste
JPA	Joint Powers of Authority



LAIF	Local Agency Investment Fund (see Interest Income)
LARK	City of Larkspur
LGVSD	Las Gallinas Sanitary District (see Contract Service Revenues)
MARA	Medical After Retirement Account
NACWA	National Association of Clean Water Agencies
NBWA	North Bay Watershed Association
NPDES	National Pollutant Discharge Elimination System
OPEB	Other Post-Employment Benefits (retiree medical benefits)
PAFR	Popular Annual Financial Report
SBP	Strategic Business Plan
SD #1	Sanitary District #1, JPA Member (aka RVSD, Ross Valley Sanitary District)
SD #2	Sanitary District #2, JPA Member
SDI	State Disability Insurance
SQSP	San Quentin State Prison
SQ Village	San Quentin Village
SQVSMMD	San Quentin Village Sewage Maintenance District
SRSD	San Rafael Sanitation District, JPA Member
SSC	Sewer Service Charge
SWRCB	State Water Resources Control Board
TCSD	Tamalpais Community Services District (see Contract Service Revenues)
TSS	Total Suspended Solids
USA	Underground Service Alert
WAS	Waste Activated Sludge

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**CENTRAL MARIN SANITATION AGENCY**  
 Adopted Budget for the Fiscal Year 2017-18  
**SCHEDULE OF REVENUE ALLOCATION TABLES**

Description	Fiscal Year 2016-17	Fiscal Year 2017-18	Amount Increase (Decrease)	Percent Increase (Decrease)
Flow-Strength Allocation Table (for service charges and capital fee)	36M Flow <u>36M Strength</u>	36M Flow <u>36M Strength</u>		
SRSD	42.89%	41.41%		
SD #1	48.27%	50.30%		
SD #2	8.83%	8.29%		
Totals	<u>100.00%</u>	<u>100.00%</u>		
Allocation of Service Charges to Members	\$ 9,865,358	\$ 10,263,166	\$ 397,808	4.0%
SRSD	4,231,633	4,249,977	18,345	0.4%
SD #1	4,762,416	5,162,372	399,956	8.4%
SD #2	871,309	850,816	(20,493)	-2.4%
Totals	<u>\$ 9,865,358</u>	<u>\$ 10,263,166</u>	<u>\$ 397,808</u>	4.0%
Allocation of Capital Fee to Members	\$ 530,000	\$ 630,000	\$ 100,000	18.9%
SRSD	227,337	260,883	33,546	14.8%
SD #1	255,853	316,890	61,037	23.9%
SD #2	46,810	52,227	5,417	11.6%
Totals	<u>\$ 530,000</u>	<u>\$ 630,000</u>	<u>\$ 100,000</u>	18.9%
<u>bt Service Cost - Refunding Revenue Bonds Series 2015</u>				
Service charges-debt service principal	\$ 2,195,000	\$ 2,250,000	\$ 55,000	2.5%
Service charges-debt service interest	1,773,094	1,711,906	(61,188)	-3.5%
Service charges-debt service coverage	992,024	990,477	(1,547)	-0.2%
Total debt service cost	<u>\$ 4,960,118</u>	<u>\$ 4,952,383</u>	<u>\$ (7,735)</u>	-0.2%
EDU Count (for debt service allocation)				
SRSD (Effective FY 2017-18 fixed at 19,545)	19,555	19,545	(10)	-0.1%
SD #1 (Effective FY 2017-18 fixed at 22,404)	22,719	22,404	(315)	-1.4%
SD #2 (Effective FY 2017-18 fixed at 6,090)	6,076	6,090	14	0.2%
SQSP (Effective FY 2017-18 fixed at 4,005)	4,005	4,005	-	0.0%
Total EDU's	<u>52,355</u>	<u>52,044</u>	<u>4</u>	0.0%
Allocation of Debt Service Costs to Members				
SRSD	\$ 1,852,642	\$ 1,859,855	\$ 7,213	0.4%
SD #1	2,152,400	2,131,911	(20,489)	-1.0%
SD #2	575,641	579,510	3,869	0.7%
SQSP	379,434	381,106	1,672	0.4%
Totals	<u>\$ 4,960,118</u>	<u>\$ 4,952,383</u>	<u>\$ (7,735)</u>	-0.2%

**CENTRAL MARIN SANITATION AGENCY**  
 Adopted Budget for the Fiscal Year 2017-18  
**FY 2017-18 Initial Allocation of Service Charges using Flow and Strength (with SQSP)**

**I. Allocation of treatment costs by Flow and Strength**

A. Flow volume	50.6%
B. Biological Oxygen Demand mass (BOD, Strength)	24.7%
C. Total Suspended Solids mass (TSS, Strength)	24.7%
<b>Total Distribution</b>	<b>100.0%</b>

**A. Annual (April to March) Flows volume into CMSA in million gallons**

	<b>SRSD</b>	<b>SD #1</b>	<b>SD #2</b>	<b>SQSP</b>	<b>Total CMSA Plant Influent Flow</b>
April 1, 2014 to March 31, 2015	1,521.91	1,953.05	424.90	143.97	4,043.83
April 1, 2015 to March 31, 2016	1,435.31	1,912.90	422.01	129.48	3,899.70
April 1, 2016 to March 31, 2017	1,844.03	2,597.79	472.68	136.90	5,051.40
<b>Total 48 month Flow</b>	<b>4,801.25</b>	<b>6,463.74</b>	<b>1,319.59</b>	<b>410.35</b>	<b>12,994.93</b>
<b>% of Flow</b>	<b>36.9%</b>	<b>49.7%</b>	<b>10.2%</b>	<b>3.2%</b>	<b>100.0%</b>

**B. Annual (April to March) Mass of Biological Oxygen Demand (BOD) in pounds**

	<b>SRSD</b>	<b>SD #1</b>	<b>SD #2</b>	<b>SQSP</b>	<b>Total CMSA Plant Influent BOD</b>
April 1, 2014 to March 31, 2015	4,451,240	5,101,508	447,649	509,759	10,510,157
April 1, 2015 to March 31, 2016	3,892,566	4,358,760	592,658	306,804	9,150,787
April 1, 2016 to March 31, 2017	4,293,860	4,450,865	674,224	355,347	9,774,296
<b>Total 48 month BOD</b>	<b>12,637,666</b>	<b>13,911,133</b>	<b>1,714,531</b>	<b>1,171,910</b>	<b>29,435,240</b>
<b>% of Total BOD</b>	<b>42.9%</b>	<b>47.3%</b>	<b>5.8%</b>	<b>4.0%</b>	<b>100.0%</b>

**C. Annual (April to March) Mass of Total Suspended Solids (TSS) in pounds**

	<b>SRSD</b>	<b>SD #1</b>	<b>SD #2</b>	<b>SQSP</b>	<b>Total CMSA Plant Influent TSS</b>
April 1, 2014 to March 31, 2015	7,812,006	8,343,902	699,225	1,503,385	18,358,519
April 1, 2015 to March 31, 2016	5,569,476	6,827,531	934,372	398,325	13,729,703
April 1, 2016 to March 31, 2017	5,543,868	5,629,170	905,498	457,495	12,536,031
<b>Total 48 month TSS</b>	<b>18,925,350</b>	<b>20,800,603</b>	<b>2,539,095</b>	<b>2,359,205</b>	<b>44,624,253</b>
<b>% of Total TSS</b>	<b>42.4%</b>	<b>46.6%</b>	<b>5.7%</b>	<b>5.3%</b>	<b>100.0%</b>

**II. Allocation of Sewer Service Charges to JPA Members**

This is determined by multiplying the allocation of treatment costs by volume and strength (Section I) by each member's share of the flow (Section A), BOD (B) and TSS (C)

	<b>SRSD</b>	<b>SD #1</b>	<b>SD #2</b>	<b>SQSP</b>	<b>Total Allocation</b>
FY 2017-18 Budget	39.78%	48.36%	7.98%	3.89%	100.00%

**CENTRAL MARIN SANITATION AGENCY**  
 Adopted Budget for the Fiscal Year 2017-18  
**FY 2017-18 Initial Allocation of Service Charges using Flow and Strength (without SQSP)**

**I. Allocation of treatment costs by Flow and Strength**

A. Flow volume	50.6%
B. Biological Oxygen Demand mass (BOD, Strength)	24.7%
C. Total Suspended Solids mass (TSS, Strength)	24.7%
<b>Total Distribution</b>	<b>100.0%</b>

**A. Annual (April to March) Flows volume into CMSA in million gallons**

	<b>SRSD</b>	<b>SD #1</b>	<b>SD #2</b>	<b>Total CMSA Plant Influent Flow</b>
April 1, 2014 to March 31, 2015	1,521.91	1,953.05	424.90	3,899.86
April 1, 2015 to March 31, 2016	1,435.31	1,912.90	422.01	3,770.22
April 1, 2016 to March 31, 2017	1,844.03	2,597.79	472.68	4,914.50
<b>Total 48 month Flow</b>	<b>4,801.25</b>	<b>6,463.74</b>	<b>1,319.59</b>	<b>12,584.58</b>
<b>% of Flow</b>	<b>38.2%</b>	<b>51.4%</b>	<b>10.5%</b>	<b>100.0%</b>

**B. Annual (April to March) Mass of Biological Oxygen Demand (BOD) in pounds**

	<b>SRSD</b>	<b>SD #1</b>	<b>SD #2</b>	<b>Total CMSA Plant Influent BOD</b>
April 1, 2014 to March 31, 2015	4,451,240	5,101,508	447,649	10,000,397
April 1, 2015 to March 31, 2016	3,892,566	4,358,760	592,658	8,843,984
April 1, 2016 to March 31, 2017	4,293,860	4,450,865	674,224	9,418,949
<b>Total 48 month BOD</b>	<b>12,637,666</b>	<b>13,911,133</b>	<b>1,714,531</b>	<b>28,263,330</b>
<b>% of Total BOD</b>	<b>44.7%</b>	<b>49.2%</b>	<b>6.1%</b>	<b>100.0%</b>

**C. Annual (April to March) Mass of Total Suspended Solids (TSS) in pounds**

	<b>SRSD</b>	<b>SD #1</b>	<b>SD #2</b>	<b>Total CMSA Plant Influent TSS</b>
April 1, 2014 to March 31, 2015	7,812,006	8,343,902	699,225	16,855,133
April 1, 2015 to March 31, 2016	5,569,476	6,827,531	934,372	13,331,379
April 1, 2016 to March 31, 2017	5,543,868	5,629,170	905,498	12,078,536
<b>Total 48 month TSS</b>	<b>18,925,350</b>	<b>20,800,603</b>	<b>2,539,095</b>	<b>42,265,048</b>
<b>% of Total TSS</b>	<b>44.8%</b>	<b>49.2%</b>	<b>6.0%</b>	<b>100.0%</b>

**II. Allocation of Sewer Service Charges to JPA Members**

This is determined by multiplying the allocation of treatment costs by volume and and strength (Section I) by each member's share of the flow (Section A), BOD (B) and TSS (C)

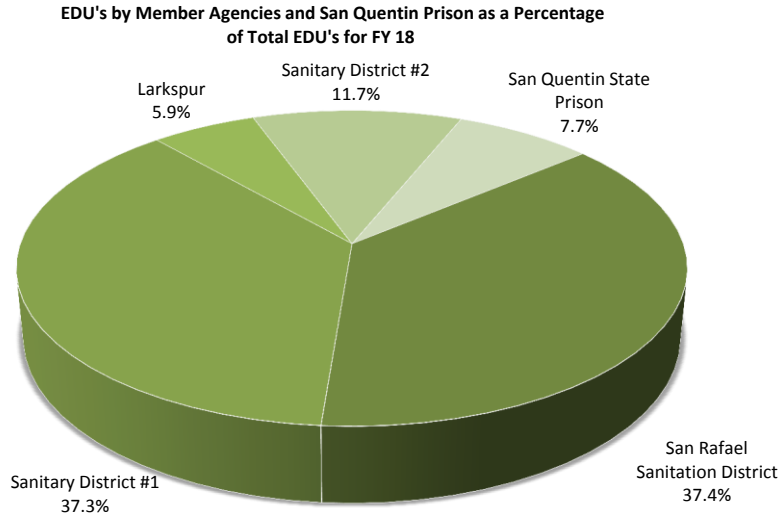
	<b>SRSD</b>	<b>SD #1</b>	<b>SD #2</b>	<b>Total Allocation</b>
FY 2017-18 Budget	41.41%	50.30%	8.29%	100.00%

**CENTRAL MARIN SANITATION AGENCY**  
Member Agencies and San Quentin Prison Equivalent Dwelling Units (EDU's)

Status	Fiscal Year	San Rafael	Sanitary	City of	San Quentin	Sanitary	Total EDU	% Change	
		Sanitation District (SRSD)	District #1 (SD #1)	Larkspur	State Prison (SQSP)	District #2 (SD #2)			
Actual	1985-86	17,089	17,913	2,774	3,569	4,757	46,102		
Actual	1986-87	17,704	18,059	2,774	3,489	4,842	46,868	766	1.7%
Actual	1987-88	18,040	18,447	2,773	3,489	5,267	48,016	1,148	2.4%
Actual	1988-89	18,200	18,335	2,768	2,892	5,267	47,462	(554)	-1.2%
Actual	1989-90	19,140	18,947	2,974	3,630	5,304	49,995	2,533	5.3%
Actual	1990-91	18,933	18,852	2,998	3,227	5,201	49,211	(784)	-1.6%
Actual	1991-92	18,437	19,620	3,042	3,785	5,709	50,593	1,382	2.8%
Actual	1992-93	18,455	19,480	3,078	3,960	5,695	50,668	75	0.1%
Actual	1993-94	18,362	18,958	3,015	4,148	5,358	49,841	(827)	-1.6%
Actual	1994-95	17,897	18,881	3,041	3,926	5,273	49,018	(823)	-1.7%
Actual	1995-96	18,201	18,892	3,081	4,371	5,290	49,835	817	1.7%
Actual	1996-97	18,290	18,820	3,132	5,513	5,412	51,167	1,332	2.7%
Actual	1997-98	18,431	18,827	3,042	5,800	5,454	51,554	387	0.8%
Actual	1998-99	18,518	19,538	3,157	3,500	5,524	50,237	(1,317)	-2.6%
Actual	1999-00	18,663	19,424	3,157	4,143	5,524	50,911	674	1.3%
Actual	2000-01	19,314	19,324	3,123	4,421	5,532	51,714	803	1.6%
Actual	2001-02	19,531	19,524	3,123	4,422	5,665	52,265	551	1.1%
Actual	2002-03	19,879	18,859	3,005	4,752	5,693	52,188	(77)	-0.1%
Actual	2003-04	19,515	19,022	3,116	4,609	5,883	52,145	(43)	-0.1%
Actual	2004-05	19,603	19,029	3,111	5,090	5,840	52,673	528	1.0%
Actual	2005-06	19,586	18,842	3,085	7,883	6,094	55,490	2,817	5.3%
Actual	2006-07	19,382	19,074	3,057	8,215	6,091	55,819	329	0.6%
Actual	2007-08	19,617	19,112	3,107	8,227	6,195	56,258	439	0.8%
Actual	2008-09	19,685	19,295	3,116	7,936	6,196	56,228	(30)	-0.1%
Actual	2009-10	19,575	19,709	3,050	7,529	6,078	55,941	(287)	-0.5%
Actual	2010-11	19,401	19,261	3,021	7,209	5,975	54,867	(1,074)	-1.9%
Actual	2011-12	19,409	18,835	3,079	3,247	5,955	50,525	(4,342)	-7.9%
Actual	2012-13	19,482	19,511	2,997	4,005	6,116	52,111	1,586	3.1%
Actual	2013-14	19,703	19,498	2,949	4,005	6,006	52,161	50	0.1%
Actual	2014-15	19,643	19,666	2,982	4,005	6,216	52,512	351	0.7%
Actual	2015-16	19,555	19,700	3,019	4,005	6,076	52,355	(157)	-0.3%
Actual	2016-17	19,332	19,298	3,039	4,005	6,055	51,729	(626)	-1.2%

Note 1: Effective for the FY 2017-18, the EDU table shown above showing actual reported EDUs is for informational purposes only. Member EDU counts have been fixed for debt service allocation purposes.

	SRSD	SD#1	Larkspur	SD#2	SQP	TOTAL
<b>FY 18</b>	<b>19,332</b>	<b>19,298</b>	<b>3,039</b>	<b>6,055</b>	<b>4,005</b>	<b>51,729</b>
<b>% of Total</b>	<b>37.4%</b>	<b>37.3%</b>	<b>5.9%</b>	<b>11.7%</b>	<b>7.7%</b>	<b>100.0%</b>



FY 17-18 Adopted Budget - Health & Safety Program

TABLE 1 - CORE PROGRAM	Adopted FY 17	Projected FY 17	Adopted FY 18	Comments
<u>Line-Items</u>				
<u>Fixed Expenses</u>				
Salary - Health & Safety Manager (1 FTE)	137,105	137,105	111,839	2% Increase effective 07/01/17 + Merit. CMSA 58.3% & NSD 41.7%.
Benefits - CalPERS Retirement	61,392	61,392	24,574	CMSA 58.3% & NSD 41.7%.
Benefits - SS/Medicare			1,681	
Benefits - Health			11,040	
Benefits - MARA			1,680	
Benefits - Retiree Health (2)	5,888	5,888	6,481	
Admin (5% of Health & Safety Manager salary)	6,855	6,855	5,592	FY15 reduced from 15% to 5% - applies to NSD Share
Car Allowance - Health & Safety Manager (1 FTE)	4,800	4,800	4,800	\$400/month
<b>Subtotal Salaries &amp; Benefits - Health &amp; Safety Manager</b>	<b>216,040</b>	<b>216,040</b>	<b>167,687</b>	
Salary - ASRS&SO (.25 FTE)			35,842	.25 FTE cost shared equally
Benefits - ARS&SO (FY18: .25 FTE)			11,593	.25 FTE cost shared equally
Car Allowance - ARS&SO Salary (.25 FTE)			1,200	\$400/month @ .25 FTE cost shared equally
<b>Subtotal Salaries &amp; Benefits - ARS&amp;SO</b>			<b>48,635</b>	Administrative, Risk Services & Safety Officer (ARS&SO)
<b>Subtotal Salaries &amp; Benefits less Admin (5% of salary)</b>	<b>209,185</b>	<b>209,185</b>	<b>210,730</b>	<b>Direct S&amp;B expenses</b>
<u>Variable Expenses</u>				
Safety Shoes	200	200	200	
Professional Services	6,000	1,000	6,000	Laboratory analysis for sampling. Rent Industrial Hygiene equipment, Hire IH consultant to conduct hazards analysis.
Publications	1,300	648	1,300	Mancomm, CalOSHA Reporter, ANSI/NFPA standards
Memberships	750	712	750	NSC, CWEA, American Society Safety Engineers
Office Supplies	450	375	450	
Training Materials	2,000	1,355	2,000	Training Supplies, DVDs
Computer Software/Supply	3,600	3,345	3,600	Keller On-Line, MSDS Online
Pump Station Safety Assessment	-	-	-	
Seminars/Conferences	-	-	6,200	(DT) CASA Conference. (KT) CWEA Classes, Fall Protection Training, Forklift Training and Workers Compensation training .
<b>Subtotal Variable Expenses</b>	<b>14,300</b>	<b>7,635</b>	<b>20,500</b>	
<b>Total Health &amp; Safety Director Program Expenses</b>	<b>230,340</b>	<b>223,675</b>	<b>236,822</b>	
Total H&S Director Program Expenses to be allocated (CMSA's share 58.3% and NSD's share 41.7%):				<b>188,187</b> Core Program less .25 FTE ASR&SO (cost shared equally)
<u>Testing/Training Expenses</u>				
Testing and Training-CMSA	15,616	7,300	13,100	Hearing tests, Incident Command, Arc Flash, Qualified EE Electrical, Defensive driving, CPR, Rigging training, Traffic Control
Testing and Training-NSD	10,096	4,600	11,200	
<b>Subtotal Testing and Training</b>	<b>25,712</b>	<b>11,900</b>	<b>24,300</b>	
<b>Total Program Expenses</b>	<b>256,052</b>	<b>235,575</b>	<b>261,122</b>	

**FY 18 Distribution of Health & Safety Program Expenses to Participating Districts - Adopted Budget**

Method of Distribution: Each District has an equal share 50% of the total expense.  
 The remaining 50% of the program cost is distributed by the number of authorized positions for each District.

**Total Cost Core Program**                      **188,187** Excludes .25 FTE Safety Director (costs shared equally)  
**50% of Total Expense**                      \$     94,094

<b>Agency</b>	<b>Distribution on 50% of Program Cost</b>	<b>Number of Authorized Positions*</b>	<b>Percentage of Total Number of Employees</b>	<b>Distribution on remaining 50% of Program Cost</b>	<b>Total Annual Payment</b>	<b>Total Percentage</b>
<b>CMSA*</b>	47,047	42	66.7%	62,729	109,776	58.3%
<b>NSD*</b>	47,047	21	33.3%	31,365	78,411	41.7%
<b>Total</b>	<b>94,094</b>	<b>63</b>	<b>100.0%</b>	<b>94,094</b>	<b>188,187</b>	<b>100.0%</b>
Participating Districts Total:					78,411	41.7%

\*Authorized positions excludes CMSA Health & Safety Manager and NSD Administrative, Risk Services & Safety Officer positions



**CENTRAL MARIN SANITATION AGENCY**  
Public Education Committee Annual Budget FY 2017-2018

Item	Fiscal Year 2015-16	Fiscal Year 2016-17	Fiscal Year 2017-18	2017-18 Add 15% Budget	Agency	%	Budget	2017-18 Add 15% Budget
Event Enrollment (Booth costs and event support)	\$ 16,000	\$ 15,000	\$ 15,000	\$ 17,250	CMSA	40.6%	\$ 30,734	
Juggler Show (20 shows per year annual cost)	10,000	10,000	10,000	11,500	LGVSD	13.2%	9,992	11,500
Pharmaceutical Take Back	25,000	14,000	-	-	NSD	24.8%	18,774	21,600
Fast Forward/Kidspeak Publication (110,000 copies)	4,000	4,000	4,000	4,600	SASM	11.6%	8,781	10,000
Logo Development (for Marin County Fair 2017)	3,000	3,000	3,000	3,450	SMCSD	6.8%	5,148	6,000
Awards ( 6 plaques - purchase plaques local and state)	1,300	1,000	1,000	1,150	SD5	3.0%	2,271	2,600
Meeting Expenses (copies, demo promo/brochure items)	500	500	500	575				
Educational Video reproduction/updating			10,000	11,500				
Booth Set Up Supplies (numerous events throughout year)	2,000	2,000	2,000	2,300				
Brochures (printing/updates - does not include development)	1,200	1,200	1,200	1,380				
MCSTOPPP Calendar Support (1 month - reduced from 2 months)	3,000	3,000	-	-				
Promotional Items (for both FY 16-17 and some FY 17-18)	20,000	24,000	24,000	27,600				
STRAW - Students and Teachers Restoring A Watershed*		4,000	-	-				
Contingency	5,000	5,000	5,000	5,750				
<b>Total</b>	<u>\$ 91,000</u>	<u>\$ 86,700</u>	<u>\$ 75,700</u>	<u>\$ 87,055</u>		<u>100.0%</u>	<u>\$ 75,700</u>	<u>\$ 51,700</u>

Note: Financial support for STRAW was dropped per the GM, support for the pharmaceutical take back program ended in 2017, and MCSTOPPP will not publish an annual county wide calendar. This resulted in a savings of \$21,000. One new outreach program has been added. At the last several public education meetings we have been brainstorming on ways to freshen up our outreach efforts. One of the ways is to develop a new video. With updated facts, images, new interviews, and testimonials we could stay relevant and incorporate some of the new technologies and issues in our sewer system today. We have budgeted \$10,000 for the development of the new video.



**Central Marin Sanitation Agency**

# **Financial Policies Manual**

**Issue Date:**

**07/22/2015**

**Revisions:**

**April 14, 2015**

**July 22, 2015**

**October 12, 2016**

**March 16, 2017**

**June 13, 2017**





# Central Marin Sanitation Agency

## FINANCIAL POLICIES MANUAL

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<b>POLICY #:</b>	<b>501</b>
<b>SECTION:</b>	<b>FINANCIAL – FINANCIAL POLICIES</b>
<b>SUBJECT:</b>	<b>Policy Framework</b>
<b>DATE:</b>	<b>07/22/2015</b>

**PURPOSE**

Financial policies are key components to sound fiscal management and direct proactive steps toward effectively managing and conducting financial operations. The purpose of this Policy Framework is to provide guidance and direction for developing the financial policies. The development of these policies aligns with the Agency’s Mission Statement of, *“protecting its assets and investments through sound financial policies and business practices.”*

The CMSA Financial Policy Manual guides the Board of Commissioners, General Manager, and Agency staff (i.e., all stakeholders) in shaping financial decisions and actions. These policies give directions for making informed choices regarding important aspects of quality public services, and on effectively handling and safeguarding financial and physical assets. They define, promote, control, and ensure participation by each stakeholder on his/her roles, responsibilities, and relationships with respect to financial matters and administration. It is accepted as standard business practice to have financial policies in place. They are also used as good training tools for new employees and for refreshing ongoing financial skills and operations.

**POLICIES VS. PROCEDURES**

The focus of the financial policies is to provide concise and comprehensive direction from the Board with respect to the proper actions to take in managing and conducting the Agency’s financial affairs. Each policy is organized to provide succinct, explicit, and current direction to designated stakeholders. These policies are linked to and complement financial procedures. Procedures are separately detailed with specific directions and steps for implementing the policies. Generally, policies tend to be less specific than procedures. Policies should pass the test of time, while procedures, keeping with the intent of the policies, may change more frequently to adapt to changes in operational needs and technology. Financial procedures are maintained by the Finance/Administration Department.

**POLICY FRAMEWORK**

Agency staff shall develop, and the Board shall approve, financial policies that promote accountability, stability, and continuity. The policy development process also encourages active participation by specific stakeholders who have a vested interest in the Agency’s financial planning, management, and operations.



Financial policies shall be actionable and shall set controls to be used for prudent financial decision-making, and shall standardize financial operations by defining roles and responsibilities. They shall define and outline appropriate financial management and behavior. All Agency employees may be subject to disciplinary actions under Personnel Policy #405, *Progressive Discipline* for violation of any financial policies. In their intent, they shall promote and incorporate long-term perspectives and strategic thinking by framing overall operational policies, goals, and objectives. They shall establish links to these broad organizational goals and objectives, while focusing on fiscal results and outcomes for the Agency.

Agency staff shall periodically bring the financial policies to the Board for review and consideration for making recommended changes.



<b>POLICY #:</b>	<b>502</b>
<b>SECTION:</b>	<b>FINANCIAL – INTERNAL CONTROLS</b>
<b>SUBJECT:</b>	<b>Internal Controls and Fraud Prevention</b>
<b>DATE:</b>	<b>07/22/2015</b>

**PURPOSE**

The purpose of the Internal Controls and Fraud Prevention Policy is to provide direction on managing the Agency’s internal accounting methods and practices and to prevent fraudulent activities and misuse of Agency funds in accordance with California Government Code Section 6500, et seq.

**POLICY**

**I. Internal Controls**

Agency staff shall establish and maintain procedures, documents and systems of internal controls to safeguard financial assets, to manage financial assets in an accountable, secure, efficient, and effective manner, and to ensure accurate financial data. The Administrative Services Manager shall be responsible for this function.

**II. Internal Accounting Practices**

Agency staff shall perform internal accounting practices in accordance with *Generally Accepted Accounting Principles (GAAP)* for government agencies, including applicable *Financial Accounting Standards Board (FASB)* pronouncements, and all relevant *Governmental Accounting Standards Board (GASB)* pronouncements.

Agency staff shall ensure that:

- A. Each employee understands his/her role, responsibility, and accountability when conducting financial transaction for the Agency;
- B. All transactions are properly authorized;
- C. Accounting records and documentation are properly maintained;
- D. Access to both assets and records are effectively controlled; and
- E. General ledger accounts are periodically reviewed for their reasonableness, and for the validity and accuracy of the underlying items they represent.

If any of these practices are found to be improperly implemented or maintained, Agency staff shall take immediate remedial action to improve and/or change the practice. (See Policy #503, *Ethics*).





### **III. Internal Review and Recommendations**

The Administrative Services Manager shall perform a periodic review of all financial policies, procedures, and practices, and make recommendations for changes and updates to the General Manager. As appropriate, the General Manager shall make policy change recommendations to the Board of Commissioners for its review and approval, and/or direct Agency staff to make appropriate procedural changes.

### **IV. Public Fiduciary Liability**

The General Manager shall recommend, for Board review and approval, methods for reducing and mitigating risks associated with potential public fiduciary liabilities such as claims made against the Agency for any alleged wrongful fiduciary act and/or breach of fiduciary duties for which the Agency might be responsible. The General Manager shall consult with the California Sanitation Risk Management Authority and other respected resources to make recommendations regarding the procurement of public official bonds, fiduciary liability insurance, and establishing other mechanisms for reducing and mitigating such risks.

### **V. Audits**

Internal control and financial audits shall be performed annually by an independent firm of certified public accountants and coordinated by the Administrative Services Manager in accordance with *Generally Accepted Auditing Standards*, the Agency's Joint Powers Agreement (Section 11), and applicable State laws. The Administrative Services Manager shall incorporate the financial audit results into the financial section of the Comprehensive Annual Finance Report (CAFR). Agency staff shall implement auditor recommendations for improved internal controls. The Board shall annually review and approve the audits and accept the CAFR (see Policy #510, *Financial Reporting*). In addition, based on the recommendation of the General Manager from an evaluative process, the Board shall periodically review and approve the selection of the independent auditor to perform the annual financial audit.

### **VI. Segregation of Duties**

In implementing this policy and related procedures, Agency staff shall segregate financial transaction roles, responsibilities, and duties to the extent possible to safeguard assets against the risk of loss, mishandling, misuse, and fraud.

### **VII. Operating Fund Account**

The Board shall approve the selection of a federally insured banking institution that would be entrusted to securely handle and transact, at Agency staff direction, any funds deposited in the Agency's Operating Fund Account. The General Manager shall periodically recommend to the Board the selection through an evaluative process of a new banking institution due to changes in current banking institution performance,



banking market conditions, or for other benefits or advantages to the Agency. The evaluation shall include, but is not limited to, qualifications associated with banking services provided, fees charged, and financial and administrative benefits for the Agency. The Administrative Services Manager shall develop procedures to manage the daily and routine operations of the Account and its cash balances

#### **VIII. Authorized Check Signers**

Agency staff shall require that all checks disbursed from the Agency's operating account have two signatures and be for valid, documented, and approved expenses of the Agency. At no time or occasion shall blank checks be signed. The Board shall designate authorized check signers who may include the General Manager, Board members, and Agency staff. The General Manager shall seek Board authorization to update authorized check signers whenever a previously designated check signer is no longer affiliated with the Agency.

#### **IX. Wire Transfers**

The Agency utilizes an operating account and several investment accounts to properly manage its funds. The General Manager, Administrative Services Manager, and Agency staff appointed by the General Manager shall be authorized to transfer funds between these accounts. Agency staff shall accept wire transfer payments to its operating account for services rendered after review and approval by the Administrative Services Manager.

#### **X. Vault Security**

Agency staff shall store vital Agency financial and administrative records, all cash, blank check stock, processed and voided checks, and spare door keys and access cards in the vault, which is a fire-resistant locked closet located in the front office area of the Administration building. The General Manager shall designate which Administration and Finance staff shall be given possession of the key to the vault.

#### **XI. Payments to Agency and Bank Deposits**

Agency staff shall deposit in the bank all payments to the Agency on a weekly basis based on appropriate financial procedures. Deposit of cash receipts shall be performed by designated staff and verified by the Personnel and Accounting Technician. Prior to the time in which the receipts are processed for bank deposit, Agency staff shall store checks and cash in the Agency vault.

#### **XII. Petty Cash**

Agency staff shall securely maintain petty cash funds for small cash transaction purposes. Disbursements from petty cash shall be pursuant to Policy #562, *Purchasing Policy*, and associated procedures. At no time or occasion shall checks be cashed out of



petty cash currency, or petty cash funds borrowed for any purpose. Agency staff shall keep petty cash in a locked box in the Agency vault.

**XIII. RV Disposal Receipts**

Agency staff shall securely maintain funds to conduct payment transactions for Recreational Vehicle (RV) customers utilizing the Agency facilities to offload wastewater. RV cash receipts will be reconciled semi-annually to the sales/money receipts book. At no time or occasion shall checks be cashed out or funds borrowed from held currency. Agency staff shall keep these RV funds in the Agency vault.



<b>POLICY #:</b>	<b>503</b>
<b>SECTION:</b>	<b>FINANCIAL – INTERNAL CONTROLS</b>
<b>SUBJECT:</b>	<b>Ethics</b>
<b>DATE:</b>	<b>07/22/2015</b>

**PURPOSE**

The Agency’s Mission Statement promotes achievement of the Agency’s purpose and vision by protecting its assets and investments through sound financial policies and practices. The Board of Commissioners, General Manager, and Agency staff shall serve as stewards of the public’s resources, trust, and confidence, and thus shall be held to the high standards of ethical fiscal conduct in the public’s interest as opposed to personal interests. The purpose of the Ethics Policy is to affirm required standards of conduct and practices with respect to financial roles and responsibilities.

**POLICY**

**I. General**

The Board shall establish and maintain financial policies for standards of ethical responsibility. Commissioners and Agency staff should understand that improper financial and contractual activities could damage the reputation of, and confidence in, the Agency and its employees, and could result in serious adverse financial and legal consequences for the Agency.

Each Board member and Agency staff shall conduct him/herself in his/her official business dealings in practice and appearance according to ethical fiscal standards, regulatory requirements, and the public trust. Agency staff shall develop and implement methods and controls for preventing, avoiding, and reducing potential ethical fiscal improprieties, conflicts, and fraudulent behavior, and to ensure procedures and structures are in place to properly implement this Policy. The General Manager, as necessary, will periodically schedule appropriate ethics training for Commissioners and designated Agency staff as required by the California Government Code.

**II. Violation of this Policy and Related Financial Policies**

The General Manager or designee shall investigate any allegation and/or observation of improprieties that would violate this Policy and other financial policies. If a violation is determined to have occurred, the General Manager shall handle the matter under the Agency’s Personnel Policies, which may result in disciplinary action.

**III. Reporting Unethical and Fraudulent Behavior**

Agency staff shall report any observation in practice or appearance of a violation of the Agency’s financial policies, procedures, and resolutions including this Policy to their



supervisor or the General Manager, who will investigate the matter. A verbal or written report will be considered a personnel matter and will be handled with strict confidentiality under the Agency's Personnel Policies. If the suspect employee is the General Manager, Agency staff have a responsibility to contact the Chairperson of the Board of Commissioners.

#### **IV. Whistleblower Provision**

Agency staff who report unethical or fraudulent behavior are protected by the provisions in the California Government Code Sections 8547-8547.12, Article 3, known as the "California Whistleblower Protection Act."

#### **V. Use of Public Funds**

Agency staff shall make expenditures of Agency funds only after the transaction has been properly reviewed, approved and authorized as established by *Internal Controls, Expenditure Management, Financial Planning, Procurement Management, and Asset Management* policies (501, 540, 550, 560, and 570, et seq.), and related procedures. Agency staff shall only receive funds for authorized and approved Agency activities as established by *Internal Controls, Revenue Management, and Financial Planning* policies (501, 520, and 550, et seq.), and related procedures. Agency staff shall not spend or receive public funds for any "public purposes" they choose; all funds of the Agency shall be utilized solely for Board adopted purposes (California Government Code section 8314).

Agency staff shall be prohibited from the practice and appearance of potentially fraudulent activities that could involve, and are not limited to, the following activities: borrowing Agency funds, accounting or recordkeeping that results in borrowing schemes, contract or bid rigging, pilfering or petty theft, unapproved reimbursement of funds, unauthorized disposal or taking possession of surplus or unused Agency property and supplies, double accounting or making double payments, false claims, payroll and benefit fraud, and false programming or hacking of electronic and automated financial systems and transactions.

Each Board member shall comply with Agency Board of Commissioners' Policy No. 4, *Reimbursement Policy for Travel/Expenses for Agency Officials*.

#### **VI. Conflict of Interest**

Government Code section 87300 requires every state and local government agency to adopt a Conflict of Interest Code to prohibit and prevent financial conflicts of interest. In addition to this Ethics Policy, the Board has also adopted a Resolution and a Personnel Policy that address conflicts of interest.

Commissioners and Agency staff shall not make, participate in making, or in any way attempt to use their official positions to influence an Agency decision in which they know or have reason to know that they have a financial interest (California Government



Code section 87100, et seq.). In addition, Commissioners and Agency staff shall not be financially interested in contracts they enter on behalf of the Agency. Commissioners and Agency staff shall avoid contractual improprieties that could occur both in practice and appearance (California Government Code section 1090, et seq.).

Commissioners and Agency staff shall not engage in any employment or enterprise for compensation that is inconsistent, incompatible, or in conflict with their official duties and responsibilities associated with the Agency (California Government Code section 1126). Each Commissioner and designated Agency staff, as stated in the Agency's Conflict of Interest Code, shall file Form 700: Statement of Economic Interests with the Marin County Office of Elections. The General Manager shall make the statements available for public inspection and reproduction (California Government Code section 81008).

## **VII. Bribery and Extortion**

Federal and California law both prohibit bribery and extortion of or involving public officials and employees. Commissioners and Agency staff shall not ask, receive, or agree to receive a bribe, and shall not demand or extort money in return for the performance of their official duties. A bribe involves asking for, giving, receiving, and accepting anything of value for gaining present or prospective advantage, performance, and/or influence in any affairs of the Agency (California Penal Code sections 7(6) and 68).

## **VIII. Extra Compensation**

Commissioners and Agency staff shall explicitly uphold the California Constitution, Article XI, section 10 that prohibits “*extra compensation*”:

*“...A local government body may not grant extra compensation or extra allowance to a public officer, public employee, or contractor after service has been rendered or a contract has been entered into and performed in whole or in part, or pay a claim under an agreement made without authority of law.”*

## **IX. Gifts to Employees and Officials**

Commissioners and Agency staff shall explicitly follow the California Political Reform Act (Government Code sections 86203, 89503, and 89506) and relevant U.S. Internal Revenue Service codes and pronouncements that set forth the rules and provisions that must be followed by public employees and officials related to the receipt of gifts and applicable taxes. These state laws limit the value of gifts that may be accepted by the Board and Agency employees. These government codes cover a broad subject area regarding gifts including, but not limited to, the maximum amount of gifts that public employees and officials may receive (amounts are set by the California Fair Political Practices Commission), lobbyist limitations, special rules for gifts of travel, exceptions to



the gift limitations, and other regulations regarding gifts. See website [www.fppc.ca.gov](http://www.fppc.ca.gov) for more information.

**X. Honoraria Ban**

Commissioners and Agency staff shall explicitly follow California Government Code 89502, which prohibits public officials from accepting honoraria. Honoraria is defined as any payment made in consideration for any speech given, article published, or attendance at any public or private conference, convention, meeting, social event, meal, or like gathering.

**XI. Gifts of Public Funds**

Commissioners and Agency staff shall explicitly uphold California Constitution, Article XVI, section 6 that prohibits public agencies from making gifts of public funds:

*“... shall have no power... to make any gift or authorize the making of any gift of any public money or thing of value to any individual, municipal or other corporation whatever the purpose...”*

**XII. Receiving Private Donated Funds**

The Board shall receive donated funds and/or property of value from private individuals, corporations, and organizations on behalf of the Agency when such funds or property are directly related to the mission, public purpose, and operations of the Agency. The Board shall not receive such donations in exchange for compensation, services, and/or any item of value that would benefit the donator in fact, practice, or appearance, other than those derived from tax-exempt donations prescribed in federal and state tax laws. The General Manager shall review, approve, and accept items of de minimus value on behalf of the Agency. The Board shall review and consider accepting all other donations.

<b>POLICY #:</b>	<b>510</b>
<b>SECTION:</b>	<b>FINANCIAL – FINANCIAL REPORTING</b>
<b>SUBJECT:</b>	<b>General</b>
<b>DATE:</b>	<b>07/22/2015</b>

**PURPOSE**

The purpose of the Financial Reporting Policy is to provide Agency staff direction on external financial reporting requirements.

**POLICY**

**I. Comprehensive and Popular Annual Financial Reports**

Agency staff shall prepare a Comprehensive Annual Financial Report (CAFR), which shall include an audited financial report. The Board of Commissioners shall review and accept the CAFR by no earlier than the date of the auditor’s opinion letter to the Agency, and no later than December 31<sup>st</sup> of the fiscal year end for which the report is prepared.

The CAFR shall be prepared in accordance with *Generally Accepted Accounting Principles (GAAP)* for government agencies and relevant Government Accounting Standards Board (GASB) statements. It shall be produced in three sections: introductory, financial, and statistical. The financial section shall be audited by an independent firm of certified public accountants in accordance with *Generally Accepted Auditing Standards*.

The Agency will also prepare a Popular Annual Financial Report (PAFR) as a companion to the CAFR. The CAFR and PAFR will be submitted to the Government Finance Officers Association (GFOA) for evaluation and consideration of the Certificate of Achievement for Excellence in Financial Reporting and the Award for Outstanding Achievement in Popular Annual Financial Reporting, respectively.

**II. External Filings and Reporting**

In addition to the CAFR, Agency staff shall comply with other required external filings and reports as listed in the table below.

<b>Report Category/Report</b>	<b>Frequency</b>
<b>Financial Reporting:</b>	
CAFR with audited financial statements	Annual
State Controller’s Special Districts Financial Transactions Report	Annual
<b>Payroll Reporting:</b>	
Federal and State Tax Withholding Deposits	Bi-weekly
Forms 941 (Federal) / DE 6 (State)	Quarterly
Forms W2 (Federal) / W3 (Federal) / DE 7 (State)	Annual
State Controller’s Government Compensation of California Report	Annual





Report Category/Report	Frequency
<b>Debt Reporting (see Policy #511):</b>	
Audited Financial Statements from CMSA and each JPA member agency (Securities and Exchange Commission)	Annual
Disclosures to bondholders and other interested parties (Securities and Exchange Commission)	Event Driven
<b>Other Reporting:</b>	
Diesel fuel taxes (State)	Annual
Forms 1099 (Federal) / 1096 (Federal)	Annual



<b>POLICY#:</b>	<b>511</b>
<b>SECTION:</b>	<b>FINANCIAL – FINANCIAL REPORTING</b>
<b>SUBJECT:</b>	<b>Continuing Disclosure Procedures for Agency Issued Debt</b>
<b>DATE:</b>	<b>04/14/2015</b>

## **I. PURPOSE**

Each debt issued by the Central Marin Sanitation Agency (the “Agency”) will have its own specific set of Continuing Disclosure Undertakings. The purpose of this policy is to ensure that the Agency satisfies all debt-related disclosure requirements and identifies the responsible Agency staff.

The continuing disclosure procedures (“Continuing Disclosure Procedures” or “Procedures”) of the Agency, presented below, are intended to (a) ensure that the Agency’s Continuing Disclosure Documents (as defined below) are accurate and comply with all applicable federal and state securities laws, and (b) promote best practices regarding the preparation of the Agency’s Continuing Disclosure Documents.

## **II. DEFINITIONS**

“Continuing Disclosure Documents” means any documents filed with the Municipal Securities Rulemaking Board (“MSRB”) pursuant to Continuing Disclosure Undertakings or otherwise, including: (a) annual continuing disclosure reports filed with the MSRB and (b) event notices and any other filings with the MSRB.

“Continuing Disclosure Undertakings” means any continuing disclosure agreements or certificates entered into by the Agency in order to assist an underwriter for the Agency’s bonds or other evidences of indebtedness in complying with Rule 15c2-12 of the Securities Exchange Act of 1934, as amended.

“Official Statements” means preliminary and final official statements, private placement memoranda and remarketing memoranda relating to the Agency’s securities, together with any supplements, for which a continuing disclosure obligation is required.

## **III. DISCLOSURE COORDINATOR**

- A. *Appointment.* The Administrative Services Manager shall serve as the Disclosure Coordinator for the Agency. The Administrative Services Manager, with the approval of the General Manager, may designate another member of the Agency staff to serve as the Disclosure Coordinator.
- B. *Responsibilities.* The Disclosure Coordinator is responsible for:
  - 1) Preparing and filing the Continuing Disclosure Documents, to the extent such filings are not prepared and filed by the Disclosure Consultant. The



Disclosure Consultant may be the Agency's Bond Counsel, Financial Advisor, or Trustee;

- 2) In anticipation of preparing Continuing Disclosure Documents, soliciting audited financial statements from CMSA's JPA member agencies and other "material" information (as defined in Securities and Exchange Rule 10b-5) from Agency departments;
- 3) Following up with others, including management of outside consultants assisting the Agency (if any), in the preparation and dissemination of Continuing Disclosure Documents to make sure that assigned tasks have been completed on a timely basis and making sure that the filings are made on a timely basis and are accurate;
- 4) Ensuring the timely filing of the Agency's Continuing Disclosure Undertakings with the MSRB by the Disclosure Coordinator, Consultant or other party;
- 5) Serving as a "point person" for personnel to communicate issues or information that should be or may need to be included in any Continuing Disclosure Document;
- 6) Monitoring compliance by the Agency with these Continuing Disclosure Procedures, including timely dissemination of the annual report and event filings as described in the Agency's Continuing Disclosure Undertakings;
- 7) Recommending changes to these Continuing Disclosure Procedures to the General Manager as necessary or appropriate;
- 8) Maintaining records documenting the Agency's compliance with these Continuing Disclosure Procedures.
- 9) Reviewing compliance with and providing appropriate certifications in connection with the various covenants in bond documents, such as maintenance of revenues and coverage tests. The Disclosure Coordinator shall review the bond documents to determine which covenants require an annual or regular certification and maintain a list.

#### **IV. CONTINUING DISCLOSURE FILINGS**

##### **A. Overview of Continuing Disclosure Filings**

Under the Continuing Disclosure Undertakings, the Agency is required to file annual reports for the Agency and each JPA agency with the MSRB's Electronic Municipal Market Access ("EMMA") system in accordance with such agreements in each year. Such annual reports are required to include certain updated financial and operating information (or may refer to a publicly-available



document), which varies among the different obligations issued by the Agency, and the Agency's audited financial statements.

The Agency is also required under the continuing disclosure undertakings to file notices of certain events with EMMA.

**B. Annual Reports**

The Disclosure Coordinator shall ensure that the preparation of the Agency's annual reports shall commence as required under each specific continuing disclosure obligation. Before the Agency's annual report is submitted to EMMA, the Disclosure Coordinator shall verify its content and accuracy. Prior to each filing, the Disclosure Coordinator will discuss any questions or concerns regarding the annual report with the General Manager and outside consultants as described in IV. D. below.

**C. Event Filings**

If any of the Disclosure Coordinator, General Manager or Administrative Services Manager becomes aware of any of the material events listed in any of the Continuing Disclosure Undertakings, such person shall notify the others and discuss the event to determine whether a filing is required or is otherwise desirable. The Disclosure Coordinator may contact outside consultants with any questions as described in IV. D. below.

**D. Uncertainty**

The Disclosure Coordinator may, after consultation with the General Manager and Administrative Services Manager, direct questions regarding this Policy or disclosure to the disclosure counsel, bond counsel or Agency counsel or such other counsel or consultant he/she deems appropriate.

**V. DOCUMENTS TO BE RETAINED**

The Disclosure Coordinator shall be responsible for retaining records demonstrating compliance with these Continuing Disclosure Procedures. The Disclosure Coordinator shall retain an electronic or paper file ("Disclosure File") for each continuing disclosure annual report that the Agency completes. Each Disclosure File shall include final versions of Continuing Disclosure Documents; written confirmations, certifications, letters and legal opinions described herein; and copies of these Continuing Disclosure Procedures and a list of individuals to whom they have been distributed and the dates of such distributions. The Disclosure File shall be maintained by the Agency for a period of five years from the later of the date of delivery of the securities referenced in the Continuing Disclosure Document, or the date the Continuing Disclosure Document is published, posted, or otherwise made publicly available, as applicable.



**VI. EDUCATION**

The General Manager and the Administrative Services Manager shall ensure that the Disclosure Coordinator is properly trained to understand and perform his/her responsibilities. Such training may include training sessions conducted by consultants with expertise in municipal securities disclosure, attendance at conferences, or other appropriate methods identified by the General Manager or the Administrative Services Manager.

**VII. AMENDMENTS**

Any provision of these Continuing Disclosure Procedures may be waived or amended at any time by written confirmation of the General Manager upon consultation with the Administrative Services Manager.



<b>POLICY #:</b>	<b>520</b>
<b>SECTION:</b>	<b>FINANCIAL – REVENUE MANAGEMENT</b>
<b>SUBJECT:</b>	<b>General</b>
<b>DATE:</b>	<b>07/22/2015</b>

**PURPOSE**

The purpose of the Revenue Management Policy is to provide staff direction on the management of Agency’s revenues with respect to its organizational budgets, goals, and objectives.

**BACKGROUND**

Joint Power Agreement (JPA) Member Agencies and San Quentin State Prison (satellite collection agencies) collect and transport wastewater to CMSA for treatment and disposal. Section 14 of the JPA binds the JPA members to pay the CMSA Regional Charges and specifies the manner in which CMSA determines the allocation of the Regional Charge for CMSA services.

The manner in which each Member Agency determines the CMSA Regional Charge for the property owners and businesses within its respective district is solely the purview of the Member.

The Agency’s ability to receive revenues for non-regional charges is derived from the Agency’s Sewer Use and Fee Ordinances and by contractual arrangements.

**REVENUE SOURCES**

CMSA’s service charge is established by the Board of Commissioners based on the Agency’s total funding requirements. These requirements take into account the Agency’s necessary operational and capital expenses, other revenue sources, the use and level of reserve cash, debt service requirements, and long-term financial forecasts, among other considerations, when determining and approving the service charges.

**I. Service Charges (Regional Charge)**

The Majority of the Agency revenues are from Regional Service Charges collected from its JPA Member Agencies and contract revenues for CMSA wastewater services provided to San Quentin State Prison. In accordance with Section 14 of the JPA, the Board can base these charges on the number of equivalent dwelling units (EDUs), measured flow volume, or measured flow volume and wastewater quality (strength).

EDUs are calculated by each Member Agency for each property in its service area. An EDU is an estimation of an average wastewater flow discharged from one single-family household.



Businesses may contain multiple EDUs depending upon the volume of wastewater discharge, while industrial dischargers' EDU is based on flow and strength. Each Member Agency provides the total EDU count for its service area to CMSA.

Collection agency flows are continuously measured by flow meters and recorded by the CMSA process control system, and can be totalized for any period of time. Flow measurements from existing flow meters on influent forcemains are used to quantify each collection agency's influent volumes. Flows are continuously measured for San Rafael Sanitation District, Ross Valley interceptor, Sanitary District No. 2 of Marin County, and San Quentin State Prison, and calculated for Sanitary District No. 1 (Ross Valley Sanitary District).

## **II. All Other Revenues**

Other Agency revenues consist of capacity charges, contract service revenues, investment and interest income, environmental compliance permit and inspection fees, septic hauler disposal fees, tipping fees, program expense reimbursements to CMSA, and miscellaneous charges for other services.

## **PROCEDURES**

### **I. Service Charges**

Service charges shall be billed and collected quarterly from the Member Agencies at the beginning of each quarter, set at one fourth of the annual budgeted amount. A service charge adjustment will be made with the fourth quarter invoice to reflect any changes between the service charge allocation amounts used to develop the budget and the actual amounts for each member agency, as described in each allocation procedure below.

The Board and its Finance Committee will review the Regional Charge allocations during the development of the Agency's annual budget. The annual budgeted service charge amount will be set to equal the net revenue needed to fund the Agency's annual operations and the current and future capital improvement program activities. Net revenue is defined to be total Agency budgeted revenues less estimated revenues for contract services, program services, interest income, fees from haulers, permits and inspections, and other operating revenues. Budgeted revenues do not include revenues for debt service and connection fees.

#### **A. Service Charge Allocation using Equivalent Dwelling Units (EDU)**

Member Agency service charge payments to CMSA may be based on each member's previous year's actual EDU count that is reported to CMSA. The Board shall set the exact EDU rate for the Agency's service charge during the annual budget process for the upcoming fiscal year.



During the development of the annual budget, CMSA will use the prior year's reported actual EDU count to develop the revenue budget. By March 15th, the Member Agencies report their actual count of EDUs to CMSA for that fiscal year. Member Agencies will provide supporting documentation to substantiate their reported counts. These documents must include:

- 1) Reports from the Marin County Auditor-Controller that summarizes the number of EDU (sanitary units) that each district has placed on the property tax roll.
- 2) Listing of EDUs for governmental or other entities that each district bills directly for sewer services charges. Typically, these are entities that are not on the County's property tax rolls.
- 3) Any variances between the reported actual EDU and the sum of EDU count from items 1 and 2. These could be EDU adjustments that the district granted to its ratepayers after the sanitary units were placed on the property tax rolls.

Staff will analyze the EDU count and supporting information received from each Member Agency and consult with each Member Agency as appropriate. The EDU data reported by the Member Agencies will be used to prepare the revenue presentation for the Third Quarter Budget Report that is provided to the Board in April. In the event complete EDU information is not available, staff will seek Board direction on how to calculate the fourth quarter invoices.

Once Agency staff has verified the reported actual EDU counts in the supporting documents, Finance staff will reconcile the EDU counts used in the budget with the actual reported EDU counts, and invoice each Member Agency accordingly.

## **B. Service Charge Allocation using Flow Volumes**

The Board will establish the measurement period for using flow volumes to determine the service charge allocation. The minimum measurement period will be 12 months and the maximum period will be 36 months. The measurement period will be in 12-month increments.

### **1) Allocation of Regional Charges by Flow Volume**

Once the upcoming revenue budget has been developed, the Finance staff prepares an allocation of the service charges based on the prior flow volumes in 12-month increments. Each satellite collection agency's allocation for the upcoming fiscal year will be included in the draft and adopted Agency budgets.

Percentage allocations are based only on volumetric flow measurements as recorded by CMSA flow meter data. The allocations are determined using the equations below:





$$Volume_{Total} = Volume_{SRSD} + Volume_{SD1} + Volume_{SD2}$$

$$\% Allocation_{Agency} = \frac{Volume_{Agency}}{Volume_{Total}}$$

$$Regional\ Charge\ Allocation_{Agency} = \% Allocation_{Agency} \times CMSA\ Net\ Revenue_{Total}$$

2) Collection of Regional Charge

Once the Agency's budget has been adopted, the Agency will invoice each satellite collection agency for its respective portion of the regional charge on a quarterly basis starting on July 1 of each fiscal year. Each quarterly invoice will represent one-fourth of the allocated annual regional charge.

Prior to the issuance of the fourth quarterly invoice, the Administrative Services Manager (ASM) will recalculate the current fiscal year's regional charge allocation based on the flow volumes for the most current April 1 to March 31 measurement period period. The adjustment between the budgeted and current regional charge allocation will be reflected on the invoice for the fourth quarter.

**C. Service Charge Allocation using Volume/Quality (Flow/Strength)**

1) Calculation of annual volume of the wastewater generated from each satellite collection entity.

Each April, the Operations department will provide Finance staff with the annual volume of wastewater generated from each satellite collection entity for the previous April 1 to March 31 period or prior 36-month period.

2) Calculation of annual wastewater quality (strength) from each satellite collection entity.

Quality is defined as the amount (lbs) of Total Suspended Solids (TSS) and Biological Oxygen Demand (BOD) in a collection agency's wastewater transported to CMSA. Quality samples will be periodically collected by Environmental Services staff and analyzed in the CMSA laboratory. Each April, the Environmental Services department will provide Finance staff with the wastewater quality information for each satellite collection entity.

3) Allocation of regional charges by flow volume and quality.

Once the upcoming revenue budget has been developed, the Finance staff will prepare an allocation of the regional charges based on the



selected April 1 to March 31 time period. Each satellite collection agency's allocation for the upcoming fiscal year will be included in the draft and adopted Agency budgets.

The Agency's Annual Net Revenues will be assigned to flow, BOD and TSS based on the allocations developed in 2013 (Bartle Wells) and accepted by the Board in April 2013: Flow – 50.6%, BOD – 24.7%, and TSS – 24.7%

Using the percentage allocations listed above and influent flow and quality data, unit costs (i.e., \$/1,000 gallons of flow, \$/lb of BOD and \$/lb of TSS) are then used to allocate CMSA's Regional Charge to each collection agency based on its respective flow, BOD and TSS costs, using the following equations:

$$Net\ Revenue_{Total} = Revenue_{Flow} + Revenue_{BOD} + Revenue_{TSS}$$

$$Unit\ Cost_{Flow} = \frac{Revenue_{Flow}}{Total\ Gallons}$$

$$Unit\ Cost_{BOD} = \frac{Revenue_{BOD}}{Total\ Pounds\ BOD}$$

$$Unit\ Cost_{TSS} = \frac{Revenue_{TSS}}{Total\ Pounds\ TSS}$$

$$Regional\ Charge\ Allocation_{Agency} = Unit\ Cost_{Flow} \times Flow_{Agency} + Unit\ Cost_{BOD} \times BOD_{Agency} + Unit\ Cost \times TSS_{Agency}$$

4) Collection of regional charge.

Once the Agency's budget has been adopted, the Agency will invoice each satellite collection agency for its respective portion of the regional charge on a quarterly basis starting on July 1 of each fiscal year. Each quarterly invoice will represent one-fourth of the allocated annual regional charge.

Prior to the issuance of the fourth quarterly invoice, Finance staff will recalculate the current fiscal year's regional charge allocation based on the flow volumes and quality for the most current April 1 to March 31 period. The adjustment between the budgeted and current regional charge allocation will be reflected on the invoice for the fourth quarter.



## **II. Debt Service Charge**

Per the Payment Agreement for Treatment Services (debt service agreement) between CMSA and the Member Agencies, each Member Agency's proportional EDU share of the bond debt service shall be billed and collected semi-annually during each fiscal year. The payment shall be based on the budgeted EDU count. Each Member Agency's semi-annual payment share shall be calculated to include the actual debt service amount and bond coverage requirements. An adjustment will be made in the subsequent fiscal year's debt service payment for the recalculation of the prior year's debt service payment based on the actual EDU count information.

## **III. Capacity Charge**

A one-time capacity charge shall be collected by the appropriate Member Agency for an initial connection to the wastewater collection system in the CMSA service area. This charge shall be set by the Board by ordinance. Each member agency shall collect both the CMSA capacity charge and the Member Agency's connection fee. After collection, the Member Agency shall remit the capacity charge portion to CMSA.

The number of connections that occur each fiscal year is unpredictable because connections vary due to new constructions or other construction activities that would trigger a connection fee. Thus, the Board shall consider various economic factors when budgeting capacity charge revenue for the fiscal year. The Board shall approve through the annual budget process and Agency staff shall account for use of capacity charges to fund capital projects per California Government Code Section 66006.

## **IV. Permit and Inspection Fees**

The Board shall set by ordinance specific fees that Agency staff will collect for services related to environmental, public health, and regulatory responsibilities under the Agency's jurisdiction (see Ordinances: 2013-1, Sewer Use Ordinance, and 2013-2, Fee Ordinance). When setting a fee, the timeframe in which the fee is valid shall be set and the fee will be calculated to recover the full cost of the services as described below under "Fees for Service."

## **V. Fees for Service**

Fees charged to outside agencies for Agency provided services under contract shall be based on mutually agreed-to terms, under which the Agency recovers the full cost of providing such services. The principles of cost accounting shall apply for recovery of direct materials, direct labor, and administrative overhead. Labor charges shall be recovered using the weighted labor rate that includes the cost of salaries and benefits and other considerations. Contract revenues shall be billed monthly, while program revenues are billed quarterly. Receivables for environmental compliance, on-site disposal, and similar items shall be recorded as they occur.



## **VI. Accounts Receivable**

According to *Generally Accepted Accounting Principles* (GAAP), Agency staff shall record a receivable for sewer service charges, capacity charges, permit and inspection fees, and other fees for service when the revenue is due to the Agency. The Finance department will conduct a monthly reconciliation of accounts receivable and identify outstanding payments due to CMSA. Accounts receivable shall be accrued to the proper accounting period based upon the date the services were performed.





<b>POLICY #:</b>	<b>521</b>
<b>SECTION:</b>	<b>FINANCIAL – REVENUE MANAGEMENT</b>
<b>SUBJECT:</b>	<b>Agency Service Contracts</b>
<b>DATE:</b>	<b>07/22/2015</b>

### **PURPOSE**

The purpose of the Agency Service Contracts Policy is to provide Agency staff with direction for responding to a request from a public entity for CMSA services.

### **POLICY**

The General Manager will receive all written requests from public entities for CMSA services and will ask the appropriate Department Manager to conduct a feasibility review for the provision of the requested services. The General Manager will then determine if the Agency has the existing resources, staff expertise, and capacity to provide the services being requested. The Agency will recover the full costs for all services provided including staff compensation and benefits, and Agency overhead. If a mutually beneficial contract is feasible, a draft proposal will be brought to the Board of Commissioners for review, discussion, and consideration of authorization to negotiate an agreement with the public entity requesting CMSA's services.

The General Manager will present the negotiated agreement to the CMSA Board for consideration of approval. Once approved by the Board, the agreement will be executed by CMSA after the governing board or designated official of the entity requesting CMSA services has also approved and executed the agreement.





<b>POLICY #:</b>	<b>530</b>
<b>SECTION:</b>	<b>FINANCIAL – TREASURY</b>
<b>SUBJECT:</b>	<b>General</b>
<b>DATE:</b>	<b>07/22/2015</b>

## **PURPOSE**

The purpose of this Treasury Policy is to provide direction for managing the Agency’s treasury and investments, and to ensure fiduciary responsibility and prudent review, planning, and approval of treasury transactions. Also, see Policies 531, *Investments* and 532, *Reserve*.

### **I. Treasurer/Controller Appointment**

Based on the General Manager’s recommendation, the Board of Commissioners shall appoint a Treasurer/Controller to manage, secure, control, account, audit, report, and develop effective procedures for controlling and handling financial assets and investments to the benefit of the Agency in accordance with the 1979 Joint Exercise of Powers Agreement (amended) and Government Code 6505.5, et seq.

### **II. Treasurer/Controller’s Report**

Agency staff shall prepare monthly Treasurer/Controller’s Reports containing summary information for each operating account in use by the Agency. The reports shall contain information with respect to Agency cash receipts, cash disbursements, and account balances. Staff shall also prepare monthly a detailed Operating Account Disbursement Register Report that lists and describes all operating account cash disbursements during the reporting month. The Board shall review and accept the Treasurer/Controller’s Operating Account Disbursement Register Reports.

### **III. Schedule of Investments**

Agency staff shall prepare a monthly Schedule of Investments report containing a summary of the Agency’s investment accounts activity including each individual investment: description of investment instrument, issuer name, maturity date, credit rating, yield to maturity, purchase price, par value, current market value, and the source of the valuation. The Board shall review and approve the Schedule of Investments.

### **IV. Bank Reconciliation**

Agency staff shall perform a monthly reconciliation of the Agency’s operating bank account, investment accounts, and bond fund accounts. The Agency staff who prepares the accounts payable shall not perform the bank reconciliation.







<b>POLICY #:</b>	<b>531</b>
<b>SECTION:</b>	<b>FINANCIAL – TREASURY</b>
<b>SUBJECT:</b>	<b>Investments</b>
<b>DATE:</b>	<b>06/13/2017</b>

## **PURPOSE**

The purpose of the Investment Policy is to provide guidelines for prudent investment of the Agency’s cash. This Policy covers all funds and investment activities under the direction of the Agency in accordance with California Government Code Sections 53600, et seq.

## **STATEMENT OF INVESTMENT POLICY**

Every June, the General Manager and Treasurer shall submit to the Agency’s Board this Investment Policy, where the Board shall review any changes in the policy and approve it at a public meeting.

## **OBJECTIVES**

The Agency shall design and manage investments with a high degree of professionalism worthy of the public trust. The primary objectives, in order of priority of the Agency’s investment activities, shall be:

### **I. Safety**

Safety of principal is the foremost objective. Investments of Agency shall be made in a manner that seeks to ensure preservation of capital.

### **II. Liquidity**

The investment portfolio shall remain sufficiently liquid to enable Agency to meet cash flow requirements which might be reasonably anticipated.

### **III. Yield**

Investment return becomes a consideration only after the basic measurements of safety and liquidity have been met.

## **PRUDENCE**

The Agency shall follow Section 53600.3 of the California Government Code that identifies as trustees those entities, i.e. California Asset Management Program (CAMP) and Local Agency Investment Fund (LAIF), authorized to make investment decisions on behalf of a local agency. Trustees are fiduciaries and are therefore subject to the prudent investor standard when making investment decisions on behalf of the Agency. Investments shall be made with care, skill, prudence, and diligence under the circumstances then prevailing, including, but not



limited to, the general economic conditions and the anticipated needs of the Agency, that a prudent person acting in a like capacity and familiarity with those matters would use in the conduct of funds of a like character and with like aims, to safeguard the principal and maintain the liquidity needs of Agency.

### **DELEGATION OF AUTHORITY**

The Board of Commissioners shall delegate authority to invest the Agency's funds for a one-year period to the Treasurer, who shall thereafter assume full responsibility for those transactions until the delegation of authority is revoked or expires. Subject to review, the Board may renew the delegation of authority each year. No person may engage in an investment transaction except as provided under the limits of this Policy.

The Treasurer may delegate day-to-day investment decision-making and execution authority to an Investment Advisor. The Advisor shall follow this Policy and such other written instructions as are provided.

The Treasurer and the delegated staff acting in accordance with Policy and associated procedures and exercising due diligence shall be relieved of personal responsibility for an individual security's credit risk or market price changes, provided deviations from expectations are reported in a timely fashion and appropriate action is taken to control adverse developments.

### **INTERNAL CONTROLS**

The Treasurer shall establish a system of controls to regulate the activities of internal staff and any external investment advisors, and be responsible for all transactions undertaken by these persons. No person may engage in an investment transaction except as provided under the terms of this Policy, other Treasury and Internal Controls policies, and the associated procedures established by the Treasurer and General Manager.

### **ETHICS AND CONFLICTS OF INTEREST**

All participants in the investment process shall seek to act responsibly as custodians of the public trust according to this Policy and Policy # 503, *Ethics*. Officers and employees involved in the investment process shall refrain from personal business activities that could conflict with proper execution of the investment program, or which could impair their ability to make impartial investment recommendations and decisions.

### **TYPES OF AGENCY INVESTMENTS**

The Agency shall be governed by California Government Code Sections 53600, et seq. Within the investments permitted by the Government Code, the Agency seeks to further restrict



eligible investments to those listed below. In the event an apparent discrepancy is found between this Policy and the Government Code, the more restrictive parameters shall take precedence.

The Agency's portfolio shall be diversified by security type and institution to avoid incurring unreasonable and avoidable risks regarding specific security types or individual financial institutions. Where this section specifies a percentage limitation for a particular category of investment, that percentage is applicable only at the date of purchase.

#### **I. United States Treasury Issues**

United States Treasury notes, bonds, bills, or certificates of indebtedness, or those for which the faith and credit of the United States are pledged for the payment of principal and interest. There is no limitation as to the percentage of the portfolio that may be invested in this category.

#### **II. Federal Agency Obligations**

Federal Agency or United States government-sponsored enterprise obligations, participations, or other instruments, including those issued by or fully guaranteed as to principal and interest by federal agencies or United States government-sponsored enterprises. There is no limitation as to the percentage of the portfolio that may be invested in this category; however, not more than 30 percent of the portfolio shall be placed in any one Agency. Furthermore, purchases of callable Federal Agency obligations are limited to a maximum of 20 percent of the portfolio. In addition, purchases of Federal Agency mortgage-backed securities issued by or fully guaranteed as to principal and interest by government agencies are limited to a maximum of 20 percent of the portfolio.

#### **III. Medium-Term Notes**

Medium-term notes, defined as all corporate and depository institution securities with a maximum remaining maturity of five years or less, issued by corporations organized and operating within the United States or depository institutions licensed by the United States or any state and operating within the United States. Eligible investment shall be rated A by one or more nationally recognized rating service. A maximum of 30 percent of the portfolio may be invested in this category. The amount invested in medium-term notes with any one issuer in combination with any other investments from that financial institution or issuer shall not exceed 20 percent of the portfolio.

#### **IV. Municipal Securities**

Bonds, notes, warrants, or other evidences of indebtedness issued by the State of California or any California local agency. Securities eligible for purchase shall be rated A, as rated by one or more nationally recognized statistical-rating organization. A maximum of 30 percent of the Agency's portfolio may be invested in this category.



## **V. Negotiable Certificates of Deposit**

Negotiable certificates of deposit (NCD) issued by a nationally or state chartered bank, a savings association or a federal association, a state or federal credit union, or a state-licensed branch of a foreign bank. No investments shall be made in a bank or credit union if a member of the Board, or any person with investment decision making authority also serves on the board of directors, or any committee appointed by the board of directors of the bank or credit union issuing the NCD. Purchases are limited to institutions which have long-term debt rated A or higher with a nationally recognized rating service; and/or have short-term debt rated at least A with a nationally recognized rating service. NCD may not exceed two years in maturity. A maximum of 30 percent of the portfolio may be invested in this category. The amount invested in NCD with any one financial institution in combination with any other investments from that financial institution or issuer shall not exceed 20 percent of the portfolio.

## **VI. Banker's Acceptances**

Banker's Acceptances, otherwise known as bills of exchange or time drafts, are those which are drawn on and accepted by a commercial bank. Purchasers are limited to issuers whose short-term debt is rated A-1/P-1. Banker's Acceptances cannot exceed a maturity of 180 days. A maximum of 25 percent of the portfolio may be invested in this category. Furthermore, the amount invested in Banker's Acceptances with any one financial institution in combination with any other investments from that financial institution or issuer shall not exceed 20 percent of the portfolio.

## **VII. Commercial Paper**

Commercial paper of prime quality of the highest ranking or of the highest letter and number rating as provided for by a nationally recognized statistical-rating organization. The entity that issues the commercial paper shall meet all of the following conditions in either paragraph (A) or paragraph (B):

- A. The entity meets the following criteria:
  - 1) Is organized and operating in the United States as a general corporation.
  - 2) Has total assets in excess of five hundred million dollars (\$500,000,000).
  - 3) Has debt other than commercial paper, if any, that is rated AA or higher by a nationally recognized statistical-rating organization.
  
- B. The entity meets the following criteria:
  - 1) Is organized within the United States as a special purpose corporation, trust, or limited liability company.
  - 2) Has program-wide credit enhancements including, but not limited to, over collateralization, letters of credit, or surety bond.



- 3) Has commercial paper that is rated AA-1 or higher, or the equivalent, by a nationally recognized statistical-rating organization.

Eligible commercial paper shall have a maximum maturity of 270 days or less and not represent more than 10 percent of the outstanding paper of an issuing corporation. A maximum of 25 percent of the portfolio may be invested in this category. Furthermore, the amount invested in commercial paper with any one issuer in combination with any other investments from that financial institution or issuer shall not exceed 20 percent of the portfolio.

## **VIII. Repurchase Agreements**

- A. Repurchase agreements are to be used solely as short-term investments not to exceed 30 days. The Agency may enter into repurchase agreements with primary government securities dealers rated AA or better by two nationally recognized rating services. Counterparties should also have:
  - 1) A short-term credit rating of at least A-1/P-1;
  - 2) Minimum assets and capital size of \$25 billion in assets and \$350 million in capital;
  - 3) Five years of acceptable audited financial results; and
  - 4) A strong reputation among market participants.
- B. The following collateral restrictions shall be observed:
  - 1) Only U.S. Treasury securities or Federal Agency securities are acceptable collateral. All securities underlying repurchase agreements shall be delivered to the Agency's custodian bank versus payment or be handled under a properly executed tri-party repurchase agreement.
  - 2) The total market value of all collateral for each repurchase agreement shall equal or exceed 102 percent of the total dollar value of the money invested by the Agency for the term of the investment.
  - 3) For any repurchase agreement with a term of more than one day, the value of the underlying securities shall be reviewed on an on-going basis according to market conditions. Market value shall be calculated each time there is a substitution of collateral.
  - 4) The Agency or its trustee shall have a perfected first security interest under the Uniform Commercial Code in all securities subject to repurchase agreement. The Agency shall have properly executed a PSA agreement with each counter party with which it enters into repurchase agreements. A maximum of 25 percent of the portfolio may be invested in this category.



## **IX. Time Certificates of Deposit**

Time Certificates of Deposit (TCDs) placed with commercial banks and savings and loans. The purchase of TCDs from out-of-state banks or savings and loans is prohibited. The amount on deposit shall not exceed the shareholder's equity the financial institution. To be eligible for purchase, the financial institution shall have received a minimum overall satisfactory rating for meeting the credit needs of California Communities in its most recent evaluation, as provided Government Code Section 53635.2. TCDs are required to be collateralized as specified under Government Code Section 53630, et seq.

The Agency, at its discretion, may waive the collateralization requirements for any portion that is covered by federal insurance. The Agency shall have a signed agreement with the depository per Government Code Section 53649. TCDs may not exceed one year in maturity. A maximum of 20 percent of the portfolio may be invested in this category. Furthermore, the amount invested in TCDs with any one financial institution in combination with any other investments from that financial institution or issuer shall not exceed 20 percent of the portfolio.

## **X. Passbook Savings Accounts**

Passbook savings accounts placed with commercial banks and savings and loans. To be eligible to receive deposits, the financial institution shall have received a minimum overall satisfactory rating for meeting the credit needs of California Communities in its most recent evaluation, as provided Government Code Section 53635.2. Passbook savings accounts are required to be collateralized as specified under Government Code Section 53630 et. seq.

The Agency, at its discretion, may waive the collateralization requirements for any portion that is covered by federal insurance. The Agency shall have a signed agreement with the depository per Government Code Section 53649. A maximum of 20 percent of the portfolio may be invested in this category. Furthermore, the amount invested in passbook savings accounts with any one financial institution in combination with any other investments from that financial institution or issuer shall not exceed 20 percent of the portfolio.

## **XI. Money Market Funds**

Shares of beneficial interest issued by diversified management companies that are money market funds registered with the Securities and Exchange Commission under the Investment Company Act of 1940 (15 U.S.C. Sec. 80a-1, et seq.).

- A. The company shall have met either of the following criteria:
- 1) Attained the highest ranking or the highest letter and numerical rating provided by not less than two nationally recognized statistical rating organizations.
  - 2) Retained an investment adviser registered or exempt from registration



with the Securities and Exchange Commission with not less than five years' experience managing money market mutual funds with assets under management in excess of five hundred million dollars (\$500,000,000).

A maximum of 10 percent of the portfolio may be invested in this category.

**XII. California Asset Management Program (CAMP)**

Shares of beneficial interest issued by a joint powers authority organized pursuant to Government Code Section 6509.7 that invests in the securities and obligations authorized in subdivisions (a) to (n), inclusive of to Government Code Section 53601. There is no limitation as to the percentage of the portfolio that may be invested in this category.

**XIII. State of California Local Agency Investment Fund (LAIF)**

There is no limitation as to the percentage of the portfolio that may be invested in this category. However, the amount invested may not exceed the maximum allowed by LAIF.

**Authorized Investments**

The Treasurer and/or the authorized Investment Advisor shall have the authority to invest the Agency's financial resources as shown in the table below.

<b>Investment Type</b>	<b>Authorized for the Investment Advisor</b>	<b>Authorized for the Agency Treasurer</b>
United States Treasury Issues	X	X
Federal Agency Obligations	X	X
Medium-Term Notes	X	
Municipal Securities	X	X <sup>(1)</sup>
Negotiable Certificates of Deposit <sup>(2)</sup>	X	X
Banker's Acceptances	X	
Commercial Paper	X	
Repurchase Agreements	X	
Time Certificates of Deposit <sup>(2)</sup>	X	X
Passbook Savings Accounts <sup>(2)</sup>	X	X
Money Market Funds	X	X
CAMP	X	X
LAIF	X	X

(1) Municipal Securities must have an AAA rating.

(2) Negotiable Certificates of Deposit, Time Certificates of Deposit, and Passbook Savings Accounts must be FDIC insured.





## **TERM OF INVESTMENTS**

It is the objective of the Agency to accurately monitor and forecast revenues and expenditures so that the Agency can invest funds to the fullest extent possible. Funds of the Agency shall be invested in accordance with sound treasury management principles.

Where this Policy does not specify a maximum remaining maturity at the time of the investment, no investment shall be made in any security, other than a security underlying a repurchase agreement, that at the time of the investment has a term remaining to maturity in excess of five years, unless the Board has granted express authority to make that investment either specifically or as a part of an investment program approved by the Board no less than three months prior to the investment.

## **PROHIBITED INVESTMENTS**

Any investment in a security not specifically listed above, but otherwise permitted by the California Government Code, is prohibited. Section 53601.6 of the Government Code specifically disallows investments in invoice floaters, range notes, or interest-only strips that are derived from a pool of mortgages. In addition to the limitations in Government Code Section 53601.6, this Policy further restricts investments as follows:

- I. No investment shall be made that has either (a) an embedded option or characteristic which could result in a loss of principal if the investment is held to maturity, or (b) an embedded option or characteristic which could seriously limit accrual rates or which could result in zero accrual periods.
- II. No investment shall be made that could cause the portfolio to be leveraged.
- III. Any security that could result in zero interest accrual if held to maturity shall not be made.

## **BANKS AND SECURITIES DEALERS**

The Treasurer, with the concurrence of the General Manager, is authorized to make investments based on the recommendations of the Board approved investment advisor. For investments made by an investment advisor, the Board authorizes the investment advisor to use broker/dealers and financial institutions that the investment advisor has reviewed and approved for investment purposes. The investment advisor's approved list shall be made available to the Agency upon request.

## **PURCHASE, PAYMENT, DELIVERY, AND SAFEKEEPING**

A competitive bid process shall be used to place all investment transactions. All security transactions entered into by or on behalf of Agency shall be conducted on a delivery vs.



payment basis. All securities shall be held in Agency's name by a third party custodian designated by the Treasurer.

The only exception to the foregoing shall be depository accounts and securities purchases made with:

- I. Local government investment pools;
- II. Time certificates of deposit, and,
- III. Money market mutual funds, since the purchased securities are not deliverable.

Evidence of each of these investments shall be held by the Treasurer.

### **PERFORMANCE**

The Agency seeks to attain market rates of return on its investments throughout economic cycles, consistent with constraints imposed by its safety objectives and cash flow consideration. The Treasurer shall continually monitor and evaluate the portfolio's performance.

### **REPORTING**

The Treasurer shall submit a monthly investment report to the Board. The report shall include the following information for each individual investment: description of investment instrument, issuer name, maturity date, credit rating, yield to maturity, purchase price, par value, current market value and the source of the valuation.

The report also shall:

- I. State compliance of the portfolio to the statement of investment policy, or manner in which the portfolio is not in compliance,
- II. Include a description of any of the Agency's funds, investments or programs that are under the management of contracted parties, including lending programs, and
- III. Include a statement denoting the ability of the Agency to meet its expenditure requirements for the next six months, or provide an explanation as to why sufficient money may or may not be available.

The report shall include a list of monthly investment transactions. This monthly report shall be submitted with the Board's monthly meeting agenda for public review.





<b>POLICY #:</b>	<b>532</b>
<b>SECTION:</b>	<b>FINANCIAL – TREASURY</b>
<b>SUBJECT:</b>	<b>Reserve</b>
<b>DATE:</b>	<b>07/22/2015</b>

## **PURPOSE**

The purpose of the Reserve Policy is to ensure that the Agency has sufficient funding available to meet its operating and capital obligations. Establishment of reserves also provides better alignment of the Agency’s resources identified in long-term financial plans to the funding requirements for the 10-Year Capital Improvement Plan. Adequate reserves promote the Agency’s bond ratings in the capital markets; provide financing flexibility; avoid potential restrictive debt covenants; mitigate current and future risk; and ensure the JPA Member Agencies stable service charges.

## **POLICY**

### **I. General**

The Agency’s reserves shall be held in the Agency’s Local Agency Investment Fund (LAIF) or California Asset Management Program (CAMP) accounts, either as short- or long-term investments in accordance with the Agency’s Investment policy (Policy #531).

### **II. Reserve Fund Designations**

The establishment of reserve designations better links the Agency’s available cash resources, as reported in the Agency’s Year-end Financial Statements, to the Annual Budget and Capital Improvement Program. The integration of reserve designations makes the annual budget a more comprehensive document because it accounts for the accumulation and usage of all available resources instead of just the anticipated revenues and expenditures for that fiscal year. This expanded budget view can be used to explain future sewer service charges or capital borrowing to all interested stakeholders. The establishment of cash reserve designations also enhances long-term planning and management of the Agency’s financial resources.

### **III. Development, Management, Oversight, and Reporting of Reserves**

The development, management, and oversight of Agency reserves is intended to be aligned with the development, management, and oversight of the Agency budget. During the annual budget development process, the Treasurer/Controller develops an initial projection for the Agency expenses and revenues for the upcoming year. The General Manager and Treasurer/Controller will propose allocations to and from the reserves based on this reserve policy, Agency priorities, and/or direction from the Board. The accumulation and uses of the reserves are a component of the annual



budget and are subject to Board review and approval. The annual budget will also report the final status of the reserves for the prior year based on the audited financial statements.

Consistent with established policy on the budget (Policy #550), the General Manager, with approval from the Chair of the Board, is authorized to expend up to \$100,000 directly from any of the unrestricted reserve accounts in the event of an emergency situation that would directly and critically affect the Agency's operations. The General Manager shall report to the Board the circumstances requiring the expenditures at its next meeting. Otherwise, Board approval is required prior to any transfer or expenditures of reserve funds that were not previously budgeted.

Board authorization is required to establish any new reserve designations.

#### **IV. Reserve Types**

Two major types of reserve funds have been established: Restricted Reserves and Unrestricted Reserves.

##### **A. Restricted Reserves**

These reserves represent assets that are legally or contractually obligated for a specific purpose. Typically, the Board does not have the authority to modify or remove these restrictions or reserves.

##### **B. Unrestricted Reserves**

These reserves represent assets for future spending plans or concerns about the availability of future funding. The Board does have the authority to establish, modify, or remove these reserves.

Deductions (i.e., payments) from either reserve type shall follow documented Agency administrative and procurement policies and procedures. Any new or removal of reserve types will require an update to this policy and subsequent Board approval.

#### **V. Designations for Reserves**

The Agency has established the following designations for the restricted and unrestricted reserves.

##### **A. Designations for Restricted Reserves**

- 1) Capacity Charges – (Sewer) Connection Fee: The CA Government Code requires separate accounting of capacity charges and the application of interest to outstanding balances. The Agency shall use capacity charges on a first-in-first-out basis to finance current year capital projects. In the event that the amount collected in any given year exceeds capital project expenses, the Agency would have to hold the excess funds for future use. Should this situation occur, the excess funds will be placed in this



Capacity Charge Reserve. Staff would then recommend these funds as a proposed funding source for the following fiscal year's Capital Improvement Program.

- 2) Coverage from Debt Service: This is a contractually obligated requirement from the 2015 Revenue Bond Rate Covenant and represents 25% of the debt service payment that is collected from the JPA Member Agencies semi-annually. The expenditure of these funds is solely for the Capital Improvement Program.

The funds are added to this reserve after each debt service contribution from the Member Agencies. Funds received in the fiscal period collected cannot be expended in that same fiscal year. Funds remain in this reserve until budgeted; these funds are preferentially used to fund approved projects from the Capital Improvement Program.

The distinction between this restricted reserve and the unrestricted Capital Improvement Program Reserve is in the source of funding. The Reserve for Coverage for Debt Service is considered to be restrictive due to Bond Indenture requirements that limit its usage to capital expenditures. The Capital Improvement Program Reserve is considered to be unrestrictive because its source is from service charges and/or other general purpose revenues and thus could be available to fund non-Capital expenses.

#### B. Designations for Unrestricted Reserves

The source of funds for these reserves is from service charges and/or other general purpose revenues. When funds are available for unrestricted reserves, they should be allocated to maintain the reserve requirements in the following preferential order listed below. All allocations to reserves are subject to Board review and approval.

- 1) Operating Reserve for Economic Uncertainties: This reserve represents three months funding for general Agency operations. Funding will be adjusted annually (linked to the annual operating budget) to maintain three months (25% of annual Adopted Budget) of operational funding.
- 2) Self-Insurance Reserve and Deductibles: This reserve represents the deductible portion for the various insurance policies carried by the Agency. The Agency funds insurance premiums from the operating budget; however the operating budget would not be able to absorb the deductible portion for insurance claims that are filed. The funding level is \$100,000 and should be adjusted if there are changes to policy coverages or deductibles.



- 3) Capital Improvement Program: This Reserve funds projects and initiatives from the Capital Improvement Program. The target funding level will be determined in conjunction with the Agency's 10-Year Capital Improvement Program and financial model.

The distinction between this reserve and the Coverage from Debt Service Reserve is the source of funding. This reserve is considered to be unrestrictive because its source is from service charges and/or other general purpose revenues and thus could be available to fund non-Capital expenses at the Board's discretion. The Coverage from Debt Service Reserve is considered to be restrictive due to Bond Indenture requirements that limit its usage to capital expenditures.

- 4) Contingency, Emergency, and Future Designations: This reserve would serve as a contingency for unforeseen or unanticipated emergencies and other to-be-determined items. The funding level is \$250,000.



<b>POLICY #:</b>	<b>540</b>
<b>SECTION:</b>	<b>FINANCIAL – EXPENDITURE MANAGEMENT</b>
<b>SUBJECT:</b>	<b>General</b>
<b>DATE:</b>	<b>07/22/2015</b>

## **PURPOSE**

The purpose of the Expenditure Management Policy is to provide direction to staff on how the Agency’s expenses shall be handled to comply with organizational mission, goals, objectives, and budgets.

## **BACKGROUND**

The budget adopted by the CMSA board serves as the policy document governing Agency expenditures. Expenditures are managed and categorized as Agency-wide, by department, and by major or special funding sources as shown in the Adopted Budget.

CMSA’s largest percentage of operating expenditures is for employees’ salaries and benefits. Other operating expenditures include professional services, studies, operating permits and fees, chemicals, utilities, materials and supplies, facilities maintenance, equipment, and miscellaneous administrative expenditures. Capital expenditures include salaries and benefits for employees who work on designated capital projects; construction and related professional services contract payments; equipment acquisition costs; and associated materials and supplies procurement.

## **POLICY**

### **I. Employee Compensation and Benefits**

Agency staff shall follow applicable federal and state laws and regulations for administering the Agency’s employee compensation and benefits. The specifics of Agency compensation and benefits are defined in Agency documents, such as:

- A. Personnel Policies and Procedures manual;
- B. Memorandums of Understanding and other agreements with employee groups;
- C. Agreements with CalPERS for health and retirement benefits; and
- D. Other agreements with other benefits providers.

Agency staff shall perform payroll processing on a bi-weekly basis covering a two-week period beginning on Sunday, ending on Saturday, with payment on the following Friday. Other types of payroll transactions such as merit award pay and leave cash-out will also be processed in conjunction with the bi-weekly payroll schedule. All payroll changes





shall require a completed personnel action form with authorization by the appropriate managers prior to any changes being made in the payroll system.

## **II. Accounts Payable**

Agency staff shall adhere to the following policies when conducting Agency procurement and expenditure activities:

#501—*Policy Framework*

#560—*Signature Authority*

#561—*Contracting*

#562—*Purchasing*

All expenditures will include the appropriate support documentation (e.g., purchase order, invoice, account statement, receipt, and packing slip) and shall be approved by the Department Manager and/or General Manager. According to Generally Accepted Accounting Principles (GAAP), Finance staff shall review and record in a timely manner all accounts payable to ensure the proper recognition of expenses and liabilities. Finance staff shall charge payables to the proper accounting period based upon the date the services were provided and perform a monthly reconciliation of accounts payable.

## **III. Petty Cash**

Agency staff shall maintain a petty cash account that can be used for cash transactions of \$50 or less. Disbursements from petty cash shall be pursuant to Policy #562, *Purchasing*.



<b>POLICY #:</b>	<b>541</b>
<b>SECTION:</b>	<b>FINANCIAL – EXPENDITURE MANAGEMENT</b>
<b>SUBJECT:</b>	<b>Travel, Training, and Other Business Expense Reimbursements</b>
<b>DATE:</b>	<b>07/22/2015</b>

**PURPOSE**

The purpose of the *Travel, Training and Other Business Expense Reimbursement Policy* is to define the authorization, payment, and reimbursement of travel, training, and other business expenses incurred by Agency staff while conducting Agency business. The expenses include routine business-related activities as well as registration, travel, lodging, meals, and incidental expenses while attending Agency approved or sponsored training, seminars, conferences, and meetings of professional and/or public organizations.

**POLICY**

**I. General**

The General Manager shall establish procedures for authorizing, paying, restricting, and reimbursing employees for travel, training, and other business-related expenses incurred by Agency staff. Travel per diem rates shall be adjusted at the beginning of each calendar year based on the change in the Consumer Price Index-Urban/San Francisco-Oakland-San Jose for the prior February-to-February period, rounded up to the nearest \$0.50. The Board shall review and approve the per diem rates when they exceed 120% of the February 2015 rates.

The per diem rates for meals, gratuities, and incidentals as of February 1, 2015 are as follows:

<b>TRAVEL PERIOD</b>	<b>FEBRUARY 1, 2015 PER DIEM</b>	<b>MAXIMUM PER DIEM RATE (120% of FEB. 2015)</b>
Overnight Travel per 24-hour period	\$84.00	\$101.00
Travel between 12 and 24 hours	\$63.00 or 75% of Overnight Travel Rate	\$76.00
Daily travel less than 12 hours	Breakfast \$12.00 Lunch \$15.00 Dinner \$24.00	Breakfast \$14.50 Lunch \$18.00 Dinner \$29.00



An employee who has been issued a State of California Purchase Card (Agency credit card) shall also comply with Policy #562, *Purchasing*, when using the purchase card for travel and training related expenses. Each employee is responsible for the expenses that he/she incurs while traveling on Agency business. The employee is encouraged to consult with his/her supervisor should he/she have any questions about his/her travel related expenses.

## **II. Required Authorization**

Agency staff shall obtain supervisory, department manager, and/or General Manager approval, as prescribed in the established procedures, prior to incurring any Agency expenses related to travel or other business functions. When alternatives are available, the Agency will pay for the least cost alternative.

All Agency staff shall provide a full accounting for all meeting and travel related expenses, with receipts, regardless of whether the expense was advanced or prepaid by the Agency or incurred directly by the employee. The accounting will be submitted to the employee's supervisor, department manager, Administrative Services Manager, and/or General Manager for approval. The Administrative Services Manager will review the accounting and determine the reimbursement to the employee or the repayment for advances to the Agency, whichever is applicable.

The decision of the General Manager shall be final in situations where there are conflicts of opinion regarding the appropriateness of reimbursements.

## **III. Federal Income Tax Withholding (FITW)**

This Policy and related procedures shall comply with the IRS definition of reimbursements and accountable expenditures per *IRS Publication 463*. Advances or reimbursements made to employees for purposes specified in this Policy are generally not subject to FITW, and thus not reported as other compensation on the employee's annual W2-Wage and Tax Statement. Any employee who does not follow this Policy when requesting an advance and/or reimbursement will be solely responsible for any federal and state tax liabilities that result from the receipts of Agency funds.



<b>POLICY #:</b>	<b>550</b>
<b>SECTION:</b>	<b>FINANCIAL – FINANCIAL PLANNING</b>
<b>SUBJECT:</b>	<b>Annual Budget</b>
<b>DATE:</b>	<b>07/22/2015</b>

## **PURPOSE**

The Adopted Budget is a document specifying the allocation of Agency resources for the priorities approved by the Board of Commissioners for the fiscal year. The Agency’s annual budget details revenues, operating and capital expenditures, and use of reserves. The adoption of a fiscal year budget by the CMSA Board is a statutory requirement for California public agencies, and is also specified in the Agency’s Joint Powers Agreement.

## **POLICY**

The Board of Commissioners shall adopt a comprehensive balanced annual budget for the Agency prior to the start of each fiscal year (July 1 to June 30). A budget is considered to be balanced, 1) when all sources of operating revenue, including the use of reserves, is at least equal to the operating expenses and capital funding requirements, and 2) the Agency has satisfied any bonding and debt service obligations. The annual budget that is presented to the Board for adoption shall include the following components:

- Departmental budgets with three-year budget comparisons: prior fiscal year, current fiscal year approved budget and projected expenditures, and proposed budget for the upcoming fiscal year;
- Descriptions and explanations of specific revenues and expenditure categories and line-items;
- Identification of Agency staff responsible for routinely monitoring, tracking, and making transaction decisions with respect to specific budget categories and/or line-items within each department budget;
- Allocation of Regional/Sewer Service Charges to JPA Members;
- Allocation of Debt Service Charges to JPA Members;
- 10-Year Capital Improvement Program with budget allocations for upcoming capital projects and initiatives;
- Proposed accumulations and uses for Agency reserves; and
- 10-Year Financial Forecast.



## I. **Budget Development**

The annual budget represents the Agency's financial blueprint to maintain effective wastewater operations that comply with the Agency's various operating permit requirements. The budget describes the funding requirements and operating costs associated with providing wastewater treatment services and the maintenance, replacement, and improvement of the facility infrastructure and assets. It shall include, but is not limited to, the following sections:

### A. Revenue Budget

The Revenue Budget shall detail and describe each salient revenue category, including, but not limited to, sewer service charges, capacity charge connection fees, permit fees, revenues from contract and program services, fees for wastewater disposal at Agency facilities, and revenues for debt service payments and coverage. (See Policy #520, *Revenue Management*).

### B. Expenditure Budget

The Expenditure Budget shall be organized by department. Specific line-items for each department shall be detailed, described, and explained for each salient operating expenditure category, including, but not limited to, salaries, benefits, professional services and studies, permits and fees, materials and supplies, facilities maintenance, equipment, treatment plant operations, and miscellaneous administrative expenses.

### C. 10-Year Capital Improvement Program (CIP)

The CIP shall include the proposed capital expenditure budget for the upcoming fiscal year as well as the planned projects and initiatives for the following nine fiscal years. Each project shall be clearly described. The Board shall approve the following fiscal year proposed projects as part of the annual budget approval, and conceptually approve the projects shown in the following nine fiscal years. (See Policy #551, *Capital Improvement Plan*).

### D. 10-Year Financial Forecast

The Forecast shall present a multi-year comparison of the previous fiscal year's actual performance, current fiscal year's projected performance, and a ten-year projection of future revenues by all sources, expenditures, and the accumulation and use of reserves. The forecast shall guide the Board in determining current and future operating and CIP funding to meet the Agency's financial and operational needs and objectives. (See Policy #552, *10-Year Financial Forecast*).

At the discretion of the Board, the annual budget may also include policy statements, directives, and funding plans (e.g., grant, long-term and/or debt financing strategies) that explain and describe operational, capital, and/or organizational approaches for managing and handling the Agency's business and assets. Statements regarding



performance accomplishments, objectives, and measurements may be included.

The General Manager shall present a draft annual budget to the Board for review no later than the May Board meeting, prior to the start of each fiscal year. The Board shall approve the annual budget no later than the June Board meeting, prior to the start of each fiscal year.

## **II. Budget Reporting**

During the fiscal year, the Agency's actual revenues and expenditures shall be tracked to the appropriate budget line-items in managing the Agency's financial and operational condition. Quarterly budget status reports of revenues, and operating and capital expenditures by category shall be provided to the Board for its review.

## **III. Budget Amendments**

In the event of unforeseen or unanticipated circumstances, amendments to the adopted fiscal year budget may be necessary. Budget amendments shall be considered when funds are justified, available, and necessary to maintain the Agency's ongoing operational and financial performance, and service expectations as directed by the Board.

The Board shall approve budget amendments (except those authorized by the General Manager as noted below) that would increase the total aggregate fiscal year budget, based on the evaluation and recommendation of the General Manager that the proposed amendment meets the intent and purpose of this Policy.

The General Manager shall establish and approve procedures for department managers to, 1) request budget transfers within the adopted operating and capital budgets that do not increase the total aggregate fiscal year budget, and 2) to request budget amendments that would increase the total aggregate fiscal year budget subject to the General Manager's and/or Board's review and approval.

In the event of an emergency, the General Manager can approve budget amendments that would increase the Agency annual budget, with the conditions that, 1) these amendments are necessary to maintain the Agency's ongoing and routine operations, and 2) the aggregate amounts of the amendments cannot exceed \$100,000. The General Manager shall notify the Chair of the Board about the situation and the reason for the budget amendment, and report to the Board about these actions at its next scheduled meeting.





<b>POLICY #:</b>	<b>551</b>
<b>SECTION:</b>	<b>FINANCIAL – FINANCIAL PLANNING</b>
<b>SUBJECT:</b>	<b>Capital Improvement Program</b>
<b>DATE:</b>	<b>07/22/2015</b>

**PURPOSE**

The Capital Improvement Program (CIP) describes and explains the Agency’s capital projects, delineated by type of capital project and funding source, over ten fiscal years (including the upcoming fiscal year). The CIP is a planning document that provides the Agency with an opportunity to evaluate and assess its capital needs from financial, engineering, operational, and planning perspectives. The CIP that is adopted by the Board of Commissioners reflects the capital project priorities for the Agency. It is a generally accepted accounting and budgeting practice for governmental agencies, particularly for capital-intensive enterprises such as wastewater treatment operations, to develop a long-term capital plan.

**POLICY**

The Agency’s CIP Committee will prepare an updated 10-year CIP during the budget development process for each fiscal year. A 10-year CIP provides the Board, JPA member agencies, customers, public financing institutions, and other stakeholder groups with a sufficient long-term perspective on CMSA’s infrastructure improvements and capital financial needs. The 10-Year CIP is a planning document that provides a projection of future project costs on a reasonable escalated basis for the fiscal years in which the costs are planned to be expended. The Board shall review the 10-Year CIP as part of annual budget process, and the first year of the 10-Year CIP shall be incorporated into the Agency’s Annual Budget for adoption. The later years of the 10-Year CIP will be incorporated into the Agency’s 10-Year Financial Forecast. (See Policies #550, *Annual Budget*, and #552, *10-Year Financial Forecast*).

**I. CIP Schedules, Project Descriptions, and Reporting**

The CIP Committee shall prepare a CIP schedule which will include a description of each capital activity, an explanation of the need for the project, estimated project costs, and proposed project delivery method. During the fiscal year, Agency staff shall track and monitor actual capital expenditures against the appropriate budgeted projects to assist in managing the individual capital accounts. Agency staff shall provide periodic CIP status reports to the Board for its information, review, and possible management direction.

The projects and initiatives in the CIP are grouped into the following four categories:

- A. Facilities Improvements: roofing, paving, coating/sealing, etc.
- B. General Equipment: vehicles, lab and communications equipment, etc.
- C. Treatment of Liquids: flow meters, turntable drives, pumps, etc.





- D. Treatment of Solids: digesters, sludge pumps, heat exchangers, cogeneration engine, etc.

The determination of the types of projects, initiatives and activities that are included in the CIP can be based on the following characteristics:

- A. Procurement of equipment, vehicles or fixed assets
- B. Replacement of existing equipment/infrastructure with similar items
- C. Engineering study, pre-design work, and design of new processes or facilities
- D. New modifications to existing facilities



<b>POLICY #:</b>	<b>552</b>
<b>SECTION:</b>	<b>FINANCIAL - FINANCIAL PLANNING</b>
<b>SUBJECT:</b>	<b>10-Year Financial Forecast</b>
<b>DATE:</b>	<b>07/22/2015</b>

**PURPOSE**

The 10-Year Financial Forecast is a long-term examination of the Agency’s projected operating status. It provides a strategic perspective and direction for the budget process and serves as a long-term financial planning document.

**POLICY**

Agency staff shall prepare a ten-year forecast of the Agency’s financial resources that includes a status and projection of revenues by source, expenditures, capital requirements, and accumulation and use of reserves. The forecast is a multi-year comparison of actual revenues and expenditures from prior previous fiscal years, a projection of the current fiscal year revenues and expenditures, and a ten-year projection of future resources and expenditures. Agency staff shall present the forecast for Board review as part of the annual budget process and the forecast shall also be included in the Agency’s annual budget. (See Policy #550, *Annual Budget*).

**I. Guidance**

The forecast will delineate revenues by source, and operating and capital expenditures by categories. Projections and analytical assumptions that are used in the forecast will be guided by Board directives, analyses of anticipated operational changes, Agency contract obligations, economic trends and indices, and financial data from prior fiscal years, along with other relevant financial and analytical perspectives. Balances of revenue and expenditures will be evaluated to determine application and availability of unrestricted cash reserves in the forecast as well as to meet Board directives regarding the reserve fund balance.

The forecast will assist the Board in determining the required current and future sewer service charge revenues to meet the Agency’s financial and operational needs and objectives.

The Board may request periodic revisions to the forecast apart from the annual budget process to assist it with decisions on the future direction of the Agency.





<b>POLICY #:</b>	<b>553</b>
<b>SECTION:</b>	<b>FINANCIAL – FINANCIAL PLANNING</b>
<b>SUBJECT:</b>	<b>Debt Financing and Management</b>
<b>DATE:</b>	<b>07/22/2015</b>

## **PURPOSE**

The purpose of the Debt Financing and Management Policy is to ensure that when the Agency issues debt, or borrows from governmental sources, that the debt load is managed prudently to maintain the Agency’s sound fiscal condition and protect its credit quality.

## **POLICY**

### **I. General**

The General Manager shall make recommendations to the Board of Commissioners concerning debt financing. Generally, recommendations shall be presented during the Agency’s annual budget development process. Recommendations may be made at other times during the fiscal year to meet immediate Agency capital improvement needs and/or as relevant debt financings are made available to the Agency.

The Administrative Services Manager shall be responsible for managing, implementing, and overseeing debt management for the Agency. These duties shall include, but are not limited to, developing an effective debt management program, accounting and analyzing debt, and coordinating with the General Manager and department managers to determine and recommend the need for debt financing to meet the Agency’s capital improvement needs. Agency staff shall ensure that the Agency’s debt financing and issuances are consistent with the Agency’s Joint Powers Agreement, and applicable federal and state financing and tax laws.

### **II. Conditions for Debt Financing**

Based on the recommendation of the General Manager, the Board shall approve borrowing or debt issuance to finance major capitalized expenditures (see Policy #571, *Assets Accounting*). The Board shall consider long-term and short-term debt financing mechanisms as appropriate to meet the objectives of the Agency’s capital needs. The Board shall limit debt to financing the costs of planning, design, engineering, regulatory permit requirements, land acquisition, infrastructure, equipment, debt issuance, and any other costs permitted by the Agency’s Joint Powers Agreement and state or local laws for wastewater facilities and special districts.

When making a determination to proceed with debt structuring and financing, the Board shall consider the Agency’s financial condition, sources of funding for the annual debt payment, the Agency’s ability to repay the debt without fiscal disruption to its effective operations and maintenance, economic trends affecting the Agency, financial



benchmarks of other similar public agencies, and any existing and overlapping Agency debt. The Board shall consider the least costly financing mechanisms available (such as federal and state loan programs) when planning debt issuances and financing opportunities to take advantage of financial market conditions when possible.

The Board shall approve the issuance of revenue bonds as the debt instrument per the Agency's Joint Powers Agreement. The Board will approve debt financing for capitalized expenditures based on the economic value and useful life of an asset. The term or the maturity of the debt financing should be consistent with the useful life of the asset to be financed. The Board shall not approve debt financing for routine or ongoing operating and maintenance costs, and non-capital furnishings and supplies with useful lives of less than one year.

The Board shall consider and approve cost-effective credit enhancements such as debt insurance or letters of credit as mechanisms to improve credit ratings and guarantees for principal and interest payments.

The Board shall approve a debt issuance process on a competitive or negotiated basis after making a determination that the appropriate process is in the best interests of the Agency.

The Board shall consider debt refunding to refinance outstanding debt that would reduce interest costs to the Agency, and/or remove any burdensome, restrictive, or irrelevant debt covenants. When approving debt refunding, the Board shall consider present value savings and other benefits to the Agency of restructuring the debt.

### **III. Investment of Debt Proceeds**

Agency staff shall explicitly follow Policy #531, *Investments*, and any indenture documents or debt issuance agreements that are part of the debt financing program when investing debt proceeds.

### **IV. Commingling of Debt Proceeds with Operating Funds**

Debt proceeds shall not be commingled with operating funds.



<b>POLICY #:</b>	<b>554</b>
<b>SECTION:</b>	<b>FINANCIAL – FINANCIAL PLANNING</b>
<b>SUBJECT:</b>	<b>Risk Management and Insurance</b>
<b>DATE:</b>	<b>07/22/2015</b>

### **PURPOSE**

The purpose of Risk Management and Insurance Policy is to provide direction to Agency staff on managing the Agency’s liability, property, fixed assets, vehicles, and employee-related risks in a reliable, economical, and beneficial manner.

### **POLICY**

The General Manager shall be responsible for managing all aspects of risks encountered by the Agency. As such, Agency staff shall coordinate and obtain appropriate levels of insurance coverage and implement other risk management and mitigating strategies and safety management approaches, as recommended by the California Sanitation Risk Management Authority (CSRMA). Acceptable risk management strategies need to be in compliance with applicable Federal and State laws and California Occupational Safety and Health Administration (CalOSHA) regulations. Insurance coverage and risk management strategies shall include, but are not limited to, liability, property, vehicles, Workers’ Compensation, hazards, general safety, and loss control, and may consist of self-insurance programs when economical and cost-effective.





<b>POLICY #:</b>	<b>560</b>
<b>SECTION:</b>	<b>FINANCIAL – PROCUREMENT MANAGEMENT</b>
<b>SUBJECT:</b>	<b>Signature Authority</b>
<b>DATE:</b>	<b>07/22/2015</b>

**PURPOSE**

The purpose of the Signature Authority Policy is to define the signature approval levels within the Agency for the following types of procurement transactions:

- Purchase Orders
- Professional Services Agreements
- Maintenance Service Contracts
- Equipment Procurement
- Materials & Supply Contracts
- Construction Contracts (Administrative, Informally Bid, Formally Bid) and Change Orders

**POLICY**

**I. Procurement Transactions**

The General Manager shall approve procurement transactions equal to the amount specified by the California Uniform Construction Cost Accounting Commission (CUCCAC) for utilizing alternative bidding procedures for public project work. Approval and authority limits for Change Orders are shown separately.

The table below shows each procurement transaction type with its governing CUCCAC Tier and the General Manager’s signature authority for each transaction type. Agency Ordinance No. 2013-03 allows the Agency to establish bid cost thresholds and procedures in accordance with CUCCAC. Dollar amounts indicated are the CUCCAC limits as of the effective date of this policy, and will be adjusted over time as the CUCCAC limits are updated.

<b>Transaction Type</b>	<b>CUCCAC Tier</b>	<b>General Manager Authority</b>
Purchase Orders	Tier I	Less than \$45,000
Professional Services Agreements	Tier I	Less than \$45,000
Maintenance Service Contracts	Tier I	Less than \$45,000
Equipment Procurement	Tier I	Less than \$45,000
Material & Supply Contracts	Tier I	Less than \$45,000
Construction Contracts – Administrative	Tier I	Less than \$45,000
Construction Contracts – Informally Bid	Tier II	Between \$45,001 and \$175,000
Construction Contracts – Formally Bid	Tier III	Must be approved by CMSA Board





The Board of Commissioners shall approve procurement transactions greater than the current CUCCAC Tier amounts and shall approve all formally bid construction contracts. The General Manager shall establish the signature authority amount limits for Agency staff. See Administrative Policy and Procedure #31, *Management Signature Authority*.

**II. Construction Change Order Limits**

The construction change order (CCO) approval and signatory authority limits shall be as indicated in the table below:

<b>Construction Amount Tier</b>	<b>General Manager Change Order Limits</b>
1) <u>Less Than \$300,000</u> a) Change Order Limit b) CCO limit if schedule impacted	\$30,000 \$55,000
2) <u>\$300,000 to \$1,000,000</u> a) CCO limit b) CCO limit if schedule impacted	10% of construction contract amount 20% of construction contract amount
3) <u>Greater Than \$1,000,000</u> a) CCO limit b) CCO limit if schedule impacted	\$100,000 \$200,000
4) Emergency situations for any size project	CMSA Board Chair approval if schedule impacted, with subsequent ratification by CMSA Board

**A. Reporting to the Board**

The Board shall receive the following change order reports from the General Manager, as appropriate:

- 1) CCO aggregate amount if it approaches the specified limit;
- 2) Periodic change order and contract update; and
- 3) An economic analysis of the project costs at the construction contract's completion.

**III. Payment Transactions**

The General Manager or designee shall approve payments up to the signature authority limits under Procurement Transactions, above. The General Manager shall approve all professional services and contractual progress payments regardless of amount after the contract(s) is approved and awarded by the Board.

Agency staff designated as responsible for specific line-items and/or categories in the adopted Agency's annual budget shall be responsible for reviewing single payments, which are related to the transactions covered by this Policy, other Procurement Management policies (#561 and 562), and related procedures. These Agency staff shall



approve single payments up to the signature authority established by the General Manager. Approval shall be based on justifying and verifying that the related work, services, and/or materials and supplies are completed per the scope of the procurement document.





<b>POLICY #:</b>	<b>561</b>
<b>SECTION:</b>	<b>FINANCIAL – PROCUREMENT MANAGEMENT</b>
<b>SUBJECT:</b>	<b>Contracting</b>
<b>DATE:</b>	<b>10/12/2016</b>

## **PURPOSE**

The purpose of the Contracting policy is to provide direction regarding how contracts and purchase orders should be awarded, processed, and approved to ensure integrity and consistency with established Agency policies and legal requirements. It also ensures that the most efficient, cost-effective, transparent, and accountable processes are used to select the most qualified service provider, and the most cost-effective materials and supplies vendor.

## **POLICY**

### **I. Approval**

This Contracting policy is used in conjunction with Policy #560, *Signature Authority*, which defines the signature responsibility and approval levels within the Agency for specific types of procurement transactions.

### **II. General Procedures and Processes**

The General Manager shall establish the contracting procedures for the Agency. The Agency will standardize the contract development and engagement process to ensure selection of a responsive and responsible contractor and/or supplier to meet the purpose of this Policy and that comply with relevant state laws.

These procedures will ensure competitive and evaluative contract awards, and negotiated and sole source procurements, which include, but are not limited to, scope of work, quotations, proposals, bids, determining contractor and vendor qualifications, selecting proprietary sources, and emergency procurement.

The General Manager shall ensure that the contracting and purchase order processes are conducted in an efficient and cost-effective manner. In doing so, effective and appropriate planning, timing, specifications, terms and conditions, pricing strategies, risk management, consolidating, and multiple quoting of contracts and purchases shall be considered. At the General Manager’s discretion, the contract terms and conditions and form may be reviewed by legal counsel before the contract is executed.

### **III. Contracting and Procurement Processes**

#### **A. Public Construction Projects**

Agency staff shall follow contracting processes, according to the Uniform Public Construction Cost Accounting Act (UPCCAA) and California Public Contract Code



20800, et seq. for Sanitary Districts. Construction projects performed under contract shall be evaluated under the following bidding parameters.

- 1) If the estimated cost of a project is less than the Tier I amount (refer to Policy #560, *Signature Authority*) the General Manager will execute a Maintenance Contractor Service Agreement for the defined services.
- 2) If the estimated cost of a project is within the Tier II amount, the project will be informally bid and the General Manager has the authority to execute a construction contract agreement.
- 3) If the estimated cost of a project exceeds the Tier III amount, the project will be formally bid and the construction contract is subject to Board approval.

#### **IV. Professional Services Agreements**

Agency staff shall follow the following parameters for evaluating professional services contracts. The processes shall consider and evaluate the consultant's suggested approach, scope of work, proposed fees, relevant experience, and other qualifications that are in the best interests of the Agency.

- A. For those services within the General Manager's signature authority, the General Manager has the discretion to negotiate an agreement directly with a consultant unless he/she determines that it is in the best interests of the Agency to conduct a formal request for proposal (RFP) process.
- B. For those services that exceed the General Manager's signature authority, the consultant shall be selected by an RFP process. The contract shall be awarded to the most qualified service provider by the CMSA board.

#### **V. Maintenance Services Contracts**

Agency staff shall follow the following parameters for evaluating maintenance services contracts. Maintenance services are those activities defined by UPCCAA as, 1) routine, recurring and usual work for the preservation or protection of a publicly owned or operated facility for its intended purposes, 2) minor repainting, 3) landscape maintenance, or 4) work performed to keep, operate, and maintain publicly owned waste disposal systems.

- A. For those California Uniform Construction Cost Accounting Commission (CUCCAC) Tier I maintenance services within the General Manager's signatory authority, the General Manager has the discretion to negotiate an agreement directly with a service provider unless he/she determines that it is in the best interests of the Agency to conduct a formal request for quotes from multiple service providers.



- B. For those maintenance services that exceed the General Manager's signature authority, the service provider shall be selected by a request for quotes or bidding process. The maintenance contract shall be awarded by the CMSA Board to the service provider with the lowest cost that can provide the defined scope of services.

## **VI. Equipment, Materials, and Supplies Procurement**

Agency staff shall conduct the following processes for procuring equipment, materials and supplies.

- A. For the purchase of equipment, materials, and/or supplies whose costs are within the General Manager's signatory authority, such procurements shall be performed under Policy #562, *Purchasing*.
- B. For the purchase of equipment, materials, and/or supplies that require the Board's approval, contracts or purchase orders shall be awarded to a vendor/supplier using the Agency's procurement procedures (see Administrative Policy and Procedure #75, *Equipment Procurement* and #76, *Material Procurement*), unless sole source procurement is justified and approved by the Board.

## **VII. Cooperative Agreements**

The General Manager shall determine when the Agency may enter into intergovernmental cooperative agreements to achieve economies of scale, promote Agency goals and objectives, or where it is financially advantageous.

Cooperative agreements may be used when the Agency can join contractually with other governmental agencies to meet mutual contractual needs. Such agreements may be bid or negotiated together with the cooperating agencies, or utilize new or existing contracts that allow for cooperative arrangements. Approval of these agreements shall be consistent with Policy #560, *Signature Authority*.





<b>POLICY #:</b>	<b>562</b>
<b>SECTION:</b>	<b>Financial – Procurement Management</b>
<b>SUBJECT:</b>	<b>Purchasing</b>
<b>DATE:</b>	<b>06/13/2017</b>

**PURPOSE**

The purpose of the Purchasing policy is to provide Agency staff with the direction to ensure continuity and uniformity in its purchasing operation for non-contract procured goods and services.

**PROCUREMENT METHODS**

This Purchasing Policy is associated with Policy #560, *Signature Authority*, which defines the signature responsibility and approval levels within the Agency for specific types of procurement transactions. The process for complying with each method of procurement is explained below.

**I. Blanket Purchase Order**

At the beginning of each fiscal year, finance staff shall establish and distribute a list of blanket purchase order (open account) numbers, based on requests by department managers, to be used for purchases less than \$500. Agency staff shall communicate to the vendor the specific assigned purchase order (PO) number when making purchases to ensure the number is on all vendor invoices and related documents.

In lieu of creating an open account, vendors may provide business credit cards to the Agency. With discretion, the General Manager shall approve applications for these types of cards after review by the Administrative Services Manager. The cards shall be used for purchases of less than \$500, and may only be used at the business where the card was issued. Department managers shall designate the employees who are allowed to use these types of cards when purchases need to be made. Until an invoice is received, the designated employees or the Personnel and Accounting Technician shall keep a record of the purchase (i.e., receipt, packing slip) to provide supporting documentation for invoice or statement payment processing. These cards shall be governed by the Use of Card policies stated under the Purchase Card section below.

**II. Purchase Order**

Agency staff shall use a purchase order for purchases for, 1) vendors with open accounts in amounts greater than or equal to \$500, or, 2) vendors without open accounts. All purchase orders shall be in writing using the appropriate form and documentation, have the appropriate approvals, and be submitted to the vendor for processing.





### III. Petty Cash

Agency staff may use petty cash for purchases of \$50 or less with vendors unable to establish an open account with the Agency and for necessary small infrequent expenses. These expenses may include supplies, parts, bridge tolls, attendance at offsite meetings and trainings, multi-Agency meetings, etc. All requests for petty cash disbursements shall be in writing using the appropriate form and approved by the department manager. The General Manager may authorize a petty cash disbursement greater than \$50 if it is determined to be a prudent and appropriate payment or reimbursement method, and in the best interest of the Agency. Petty cash disbursements are made by the Administrative Assistant, Administrative Services Manager, or other employees designated by the General Manager.

### IV. State of California Purchase Card Program

The Board of Commissioners shall approve the number and type of management, supervisory, and administrative positions that are authorized to use purchase cards (credit cards). The General Manager shall issue the cards to the specific employees (cardholders) and establish procedures for the appropriate use for making Agency-specific purchases when the above purchasing methods are impractical, inefficient, or not applicable. Monthly credit limits shall be set at \$3,000 for supervisors/designated staff and \$5,000 for department managers.

The Administrative Services Manager will serve as the administrator of the Agency's purchase cards. He/she will manage the Agency's account in accordance with the requirements of the Purchase Card Program and the Agency's policies, including, but not limited to, assigning purchase cards and purchase limits to authorized employee card holders, collecting and cancelling cards as needed, and reviewing purchase card transactions.

#### A. Use of Card

The cardholder shall be the only person authorized to sign for purchased items and shall be the only person to authorize telephone and online transactions using the purchase card. Cardholders shall not give or authorize use of their card to another employee without the General Manager's approval. The employee who is assigned a purchase card is responsible for safeguarding the card as well as ensuring proper use of the card.

Department managers ensure that purchase card use in their respective departments is consistent with this Policy and other related procedures. Each cardholder is responsible for keeping a record of the purchase (i.e., receipt, packing slip) to document purchases on the purchase card's account statement. An approved purchase order is required before using the purchase card for any



transactions over \$500, except for employee-related travel where a “Pre-Authorization for Employee Travel” form is required. An approved travel preauthorization is required when using the purchase card for transactions related to training or travel on Agency business. Department managers are ultimately responsible for monitoring and approving all purchase card transactions within their department.

The Purchase Card shall not be used for the following purchases:

- 1) Professional services (labor costs)
- 2) Contract services
- 3) Capital/construction costs
- 4) Cash advances/personal use
- 5) Purchase of firearms, liquor, or cigarettes
- 6) Per diem meal allowance
- 7) Items for personal, non-Agency use

B. Lost or Stolen Card

If an Agency purchase card is lost or stolen, the cardholder shall immediately report this to the Administrative Services Manager so that he/she can notify the Purchase Card Program.

C. Misuse of the Card

Any misuse of the purchase card or violations of the Purchase Card Program guidelines or this Policy, including, but not limited to, personal use of the purchase card, shall result in the loss of purchase card privileges. All cardholders are subject to disciplinary actions for misuse and misappropriations of Agency funds. Cardholders who use or allow use of the card for personal purposes shall reimburse the Agency for all incurred charges.



**ATTACHMENT A**

**Positions Authorized to Have Purchase Card**  
**(Board Approved as of 10/11/2016)**

<b><u>Department</u></b>	<b><u>Position</u></b>	<b><u>Limit</u></b>
Administration	General Manager	\$10,000
Administration	Administrative Services Manager	\$5,000
Administration	Treatment Plant Manager	\$5,000
Administration	Health and Safety Manager	\$3,000
Technical Services	Technical Services Manager	\$5,000
	Laboratory Director	\$3,000
Maintenance	Maintenance Supervisor	\$3,000
Maintenance	Assistant Maintenance Supervisor	\$3,000
Maintenance	Assistant Maintenance Supervisor-Electrical	\$3,000
Maintenance	E/I Technician (1)	\$3,000
Operations	Operations Supervisors (2)	\$3,000



<b>POLICY #:</b>	<b>570</b>
<b>SECTION:</b>	<b>FINANCIAL - ASSET MANAGEMENT</b>
<b>SUBJECT:</b>	<b>General</b>
<b>DATE:</b>	<b>07/22/2015</b>

## **PURPOSE**

The purpose of the Asset Management Policy is to provide Agency staff with direction regarding asset planning and condition assessment to be used in the Agency’s annual budget and capital improvement program development.

## **POLICY**

### **I. General**

The General Manager or designee shall ensure that Agency staff are utilizing the established asset management systems and asset management procedures in an effective and efficient manner.

### **II. Asset Plans**

Agency staff shall develop asset plans for Agency’s infrastructure assets and equipment for the cost-effective operation, maintenance, and management of these assets. Asset plans shall be developed and maintained for all assets with an original cost equal to or greater than the capitalization threshold (See Policy #571, *Assets Accounting*). An asset plan shall include asset age, service history, optimum preventive maintenance and rehabilitation/renewal during its lifecycle, standard maintenance/operations procedures, cost of operating, and other salient asset attributes. The asset plans shall be used as the basis to develop and implement specific operations and maintenance, and capital improvement plans, and to analyze long-term funding and prepare condition assessments.

For new assets that are procured or constructed, Agency staff shall retain all relevant asset plan data (i.e., cost, manufacturer, type, size, operations and maintenance manuals, and standard operating/maintenance procedures). Agency staff shall ensure that contractors provide necessary asset management information prior to the filing of Notice of Completion and approving final payment to the contractor.

### **III. Capital Asset Condition**

Agency staff shall periodically assess the condition of capital assets. The assessment shall provide physical and financial information concerning the condition of assets, estimated remaining useful life, estimated operations and maintenance costs, and projected replacement costs (if applicable). The data shall be used when developing the Agency’s Capital Improvement Plan (see Policy #551, Capital Improvement Plan), and



other financial models for analyzing and determining future funding of capital assets.

**IV. Asset Inventory Control**

The Administrative Services Manager, along with department managers, shall develop and implement effective procedures and systems to inventory and track the Agency's capitalized assets (refer to Financial Policy #571, *Assets Accounting*).

**V. Facilities Maintenance**

Agency staff shall perform effective planning and maintenance of capital assets, which shall include preventive and corrective maintenance and repair of facilities and infrastructure to protect the Agency's capital investments and minimize future maintenance and replacement costs.

**VI. Materials Management**

Agency staff shall maintain inventories of parts, materials, and supplies to effectively meet its maintenance and repair needs. The Agency will develop and implement inventory management procedures. Procurement of parts and supplies that are placed into inventory shall conform to Policy #562, *Purchasing*, Policy #540, *Expenditure Management*, and related procedures.

**VII. Disposal of Surplus Assets**

Agency staff shall recommend to the General Manager the disposal of assets when they have exceeded their service life, are obsolete, where the value of replacement is less than rehabilitation costs, and/or they no longer serve the Agency's operational needs (e.g., surplus assets). The General Manager shall approve disposal of a surplus asset valued at \$5,000 or less. The Board shall approve disposal for a surplus asset valued at greater than \$5,000.



<b>POLICY #:</b>	<b>571</b>
<b>SECTION:</b>	<b>FINANCIAL – ASSET MANAGEMENT</b>
<b>SUBJECT:</b>	<b>Assets Accounting</b>
<b>DATE:</b>	<b>07/22/2015</b>

## **PURPOSE**

The purpose of the Assets Accounting Policy is to provide Agency staff with direction on financial accounting, reporting, and control of the Agency’s capital assets.

## **POLICY**

### **I. General**

The General Manager and Administrative Services Manager shall ensure that capital assets are appropriately accounted for by funding source and asset category and that appropriate procedures are developed and implemented to meet the requirements of this policy. Department Managers and Agency staff shall ensure proper budgeting and purchasing guidelines are followed for capital assets, and that these assets are adequately controlled, secured, and used for appropriate Agency purposes.

### **II. Capitalization Threshold**

For financial accounting and reporting purposes, the capitalization threshold shall be \$5,000 for each asset with an expected life of at least two years following the date of acquisition.

### **III. Assets**

Agency staff shall account and report all assets with an original cost equal to or greater than the capitalization threshold. Such assets include those newly constructed, installed, or acquired items or significant additions, improvements, or replacements to existing assets which would significantly prolong the asset’s useful life (e.g., plant infrastructure, land, buildings, furniture and fixtures, machinery, and equipment). All costs associated with purchase, construction, installation, and acquisition shall be considered including, but not limited to, direct labor, materials and supplies, design, engineering, other professional fees, contractor charges, legal fees, site preparation, installation, associated overhead and administrative costs, taxes, freight and transportation, and other expenditures and charges directly attributable to asset acquisition. For assets acquired through debt financing methods, expenses associated with costs of issuance and capitalized interest shall be considered. Capital assets donated to the Agency shall be capitalized at their estimated fair market value plus any associated costs (as described above) at the date of receipt.

Expenditures related to routine repairs that maintain the existing condition of the asset or restores it to normal operating efficiency should not be capitalized, regardless of the amount, and shall be recorded as repair and maintenance expenses in that fiscal year.

