
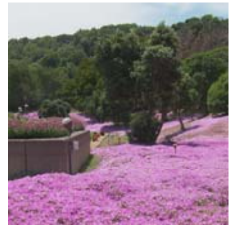



ADOPTED OPERATING AND CAPITAL BUDGET

JULY 1, 2018 — JUNE 30, 2019



CENTRAL MARIN SANITATION AGENCY

1301 Andersen Drive ▪ San Rafael, CA 94901 ▪ 415.459.1455 ▪ www.cmsa.us

CMSA ADOPTED BUDGET
FISCAL YEAR 2018-2019: JULY 1, 2018 – JUNE 30, 2019

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Central Marin Sanitation Agency

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Dean DiGiovanni, Commissioner, appointed, January 2018
Albert Boro, Alternate, appointed January 2018
Katie Rice, Alternate, appointed January 2018

Ross Valley Sanitary District

Thomas Gaffney, Vice-Chair, appointed July 2016
Michael Boorstein, Commissioner, appointed July 2016
Doug Kelly, Alternate, appointed July 2016
Mary Sylla, Alternate, appointed July 2016
Pamela Meigs, Alternate, appointed July 2016

Sanitary District No. 2

Diane Furst, Chair, appointed December 2014
Sloan Bailey, Alternate, appointed March 2017

City of Larkspur

Dan Hillmer, Commissioner, appointed October 2010

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

GOVERNMENT FINANCE OFFICERS ASSOCIATION

Distinguished Budget Presentation Award

PRESENTED TO

Central Marin Sanitation Agency

California

For the Fiscal Year Beginning

July 1, 2017

Christopher P. Morrill

Executive Director

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CENTRAL MARIN SANITATION AGENCY

Jason R. Dow P.E.
General Manager

1301 Andersen Drive, San Rafael, CA 94901-5339 Phone (415) 459-1455 Fax (415) 459-3971 www.cmsa.us

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 2018-19 (FY 19) Budget. This budget serves as the financial plan for FY 19, 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.

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 compliance with the Environmental Protection Agency's National Pollutant Discharge Elimination System (NPDES) permit requirements for the calendar year 2017.
- Received recognition from the GFOA for Excellence in Financial Reporting for the Agency's Comprehensive Annual Financial Report (sixteen consecutive years), Outstanding Achievement in Popular Annual Financial Reporting (eight consecutive years) and the Distinguished Budget Presentation Award (seven consecutive years).
- Garnered state-level recognition of first place from the California Water Environment Association (CWEA) for outstanding Mechanical Technician Person of the Year.
- Recognized by the regional CWEA Redwood Empire Section for Engineering Achievement of the Year, 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 19

- Exceed all NPDES permit requirements.
- Update existing and develop new procedures to comply with ELAP TNI standards for the laboratory.
- Deliver excess generated power to the local electrical utility grid.
- Operate the treatment facilities to minimize odors and public complaints.
- Implement an Agency-wide facilities master plan.
- Consistency of asset management and inventory system with accounting system
- Implement the Agency's upcoming FY 19 Business Plan.
- New financial software assessment
- Launch and maintain an Agency Facebook presence
- 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 2018-19 Budget

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

The FY 19 Budget includes an expected operating surplus of approximately $533,000. The budget includes an operating revenue increase of 3.5%, and an expenditure increase of approximately 3% from the fiscal year 2018. Debt service revenues total nearly $5.0 million, of which approximately $993,000 comprises debt service coverage used for CIP funding. The Agency plans to expend approximately $2.9 million on 33 capital improvement activities using dedicated capital funding sources accumulated in the restricted capital reserve accounts and amounts from unrestricted capital reserve accounts to balance. Detailed discussions of the FY 19 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 19 Budget are:

- Total Operating Revenues of approximately $12.3 million, and dedicated capital related fees in the amount of approximately $1.8 million consisting of capital fee, $800,000, debt service coverage fee, $993,000, and capacity charges in the amount of $30,000
- 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 12,799 million gallons of wastewater treated by CMSA during the April 1, 2015 to March 31, 2018 period, along with 27.7 million pounds of Biological Oxygen Demand (BOD) and 37.7 million pounds of Total Suspended Solids (TSS) during the April 1, 2015 to March 31, 2018 period. The FY 19 regional sewer service and capital charges CMSA will receive from its JPA member agencies is approximately $540,000 more than FY 18, 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 $0.68 million from the state of California for providing wastewater and pump station services to San Quentin State Prison.
- Debt Service of $4.97 million, or $95.43 per Equivalent Dwelling Units (EDU), in the combined service area.
- Total Operating Expenditures of approximately $11.8 million, an overall increase of 2.9% from FY 18. The main changes to the FY 19 budget are due to scheduled salary and benefit increases of approximately 4%, increases in chemicals and fuels of 5.4%, and decreases in permit testing and monitoring of (17.1%) and utilities of (9.3%).

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 CIP and Budget.

In FY 18, the Agency completed a multi-year project to modify the maintenance building and construct a new material storage building totaling approximately $701,000. Additionally, the Agency continued work on the PG&E Interconnection Agreement Modification, Hillside Slope

Stabilization, and Facility Paving projects. These three projects are expected to be completed in FY 19. Also the Agency Facilities Master Plan is mostly complete and projects identified as part of the condition assessment task have been incorporated into the FY 19 10-year CIP. Budgeted capital improvements for FY 19 amount to approximately $2.9 million.

The total cost of the planned CIP over the next ten years is approximately $48 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 19 the Agency will have accumulated approximately $5.5 million in capital reserves to finance higher priority projects in the current 10-Year CIP.

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 adopt 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 annual fluctuations. CMSA locked-in a five-year, $8.7 million contract with the State of California to provide wastewater services to San Quentin Prison. Lastly, to smooth potential rate increases, the Agency is anticipating debt issues in each of the fiscal years 2019-20 and 2022-23 to finance major capital improvements.

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 one year 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 FY 19 will be on delivering renewable energy generated by the Agency cogeneration system, and to begin projects identified in the Agency's Facility Master Plan.

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 19 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,

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, Ross Valley Sanitary District (RVSD) 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 RVSD 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.

<u>Agency Officials as of July 1, 2018</u>

<u>Board of Commissioners (year appointed):</u>

Diane Furst, Chair, Sanitary District No. 2 (December 2014)
Thomas Gaffney, Vice-Chair, Ross Valley Sanitary District (July 2016)
Michael Boorstein, Commissioner, Ross Valley Sanitary District (July 2016)
Maribeth Bushey, Commissioner, San Rafael Sanitation District (January 2018)
Dean DiGiovanni, Commissioner, San Rafael Sanitation District (January 2018)
Dan Hillmer, Alternate, City of Larkspur (October 2010)
Sloan Bailey, Alternate, Sanitary District No. 2 (March 2017)
Al Boro, Alternate, San Rafael Sanitation District (January 2018)
Doug Kelly, Alternate, Ross Valley Sanitary District (July 2016)
Pamela Meigs, Alternate, Ross Valley Sanitary District (July 2016)
Katie Rice, Alternate, San Rafael Sanitation District (January 2018)
Mary Sylla, Alternate, Ross Valley Sanitary District (July 2016)

<u>Agency Managers (tenure):</u>

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 44 full-time positions, including a safety professional position whose salary and benefit costs are shared with one other wastewater agency in Marin County. Characteristics of the workforce:

- 44 authorized positions
- Average age 44.9 years old
- Average length of service is 7.7 years
- 10 employees with over 10 years of service
- 26.8% 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 Silver Peak Performance Award (2017). The award recognizes the achievement of obtaining compliance with the National Pollutant Discharge Elimination System (NPDES) permit requirements over the calendar year, with less than five violations. NACWA annually recognizes excellent performance at wastewater utilities through its Peak Performance Awards program.

- **Certificate of Achievement for Excellence in Financial Reporting**: Recognition from the Government Finance Officers Association (GFOA) for the Agency's FY 2016-17 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 sixteenth 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, audited 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.

- **Award for Outstanding Achievement in Popular Annual Financial Reporting**: Recognition from the GFOA for the Agency's FY 2016-17 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 eighth 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 the GFOA for the Agency's FY 2017-18 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 seventh 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 2018, the Agency was recognized by CWEA at the state level for the following achievements:

    - Third Place – Abel Villarreal for Mechanical Technician of the Year

- **Redwood Empire Section CWEA Awards:** In November 2017, Redwood Empire Section of the California Water Environment Association (CWEA) recognized the Agency for outstanding work in the disciplines listed below.

    - Abel Villarreal for Mechanical Technician of the Year
    - Russ Turnbull for Electrical Instrumentation Person of the Year
    - Jose Gutierrez for Community Engagement and Outreach Person of the Year
    - Community Engagement and Outreach Project of the Year – Large Budget
    - Engineering Achievement of the Year – PG&E Interconnection Agreement Modification Project
    - Mark Koekemoer for Supervisor of the Year

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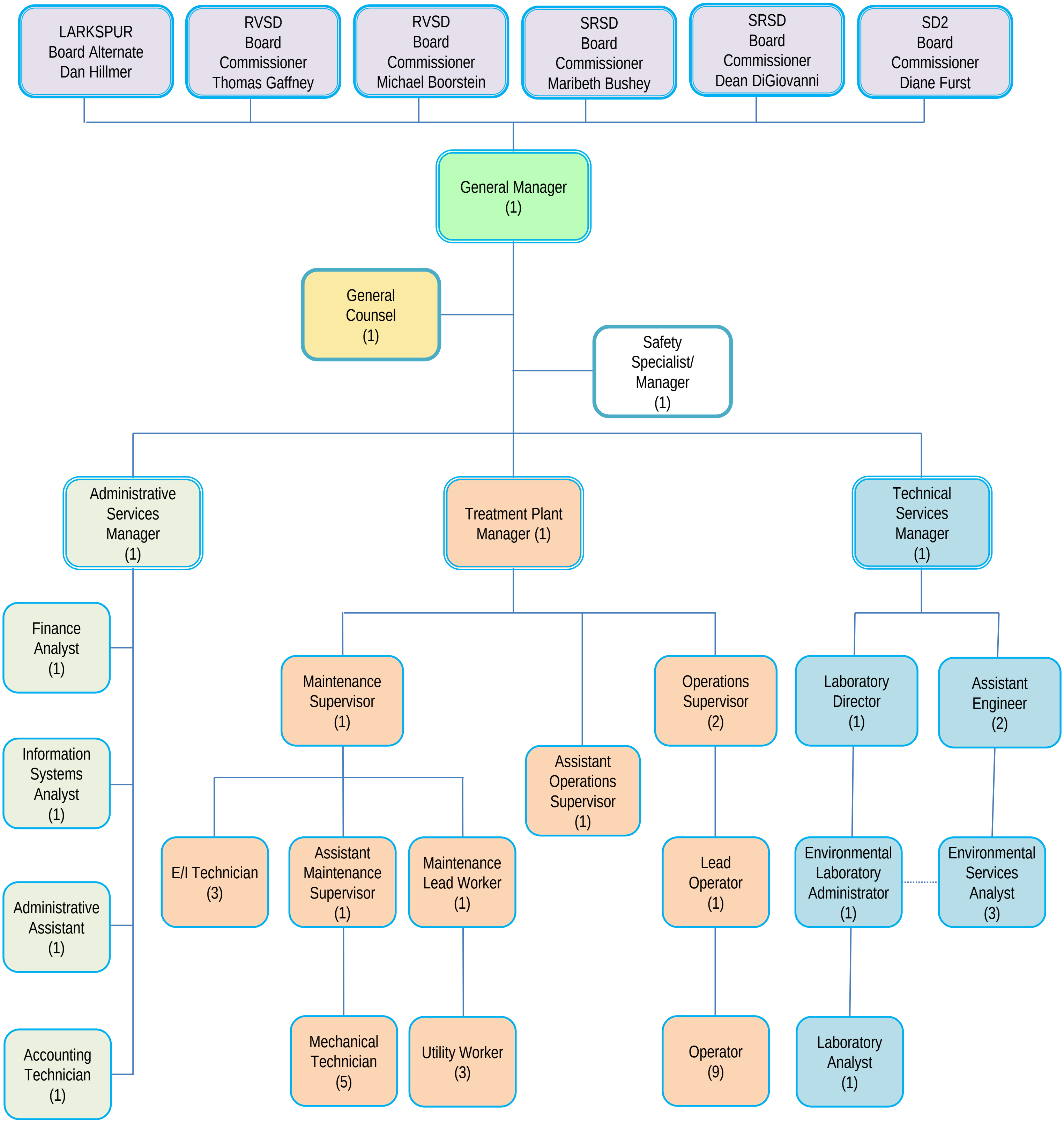

44 Full Time Equivalent Employees (FTE)
July 1, 2018

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CMSA Authorized Staff Positions	FY 17	FY 18	FY 19
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	-	1	1
Total Administration	**6**	**7**	**7**
COOPERATIVE AGREEMENTS			
Safety Specialist/Manager (Replaced Health and Safety Manager)	-	-	1
Health and Safety Manager (Replaced Safety Director)	-	1	-
Safety Director	1	-	-
Total Cooperative Agreements	**1**	**1**	**1**
MAINTENANCE			
Maintenance Supervisor	1	1	1
Assistant Maintenance Supervisor	1	1	1
Maintenance Lead	1	1	1
Maintenance Repair (Eliminated Maintenance Repair position replaced with Mechanical Technician)	1	1	-
Mechanical Technician	4	4	5
Utility Worker	3	3	3
Electrical/Instrumentation Assistant Maintenance Supervisor	1	1	-
Electrical/Instrumentation Tech	2	2	3
Total Maintenance	**14**	**14**	**14**
OPERATIONS			
Operations Supervisor	2	2	2
Assistant Operations Supervisor (new position: promoted Lead Operator)	-	-	1
Lead Operator	2	2	1
Operator (Trainee, I-III)	9	9	9
Total Operations	**13**	**13**	**13**
TECHNICAL SERVICES			
Technical Services Manager (Combined Environmental Services and Engineering Manager positions)	-	1	1
Assistant Engineer	-	2	2
Laboratory Director	-	1	1
Environmental Laboratory Administrator	-	1	1
Laboratory Analyst (New FY 19 to comply with laboratory accreditation standards)	-	-	1
Environmental Services Analyst (I-II)	-	3	3
Total Technical Services	**-**	**8**	**9**
ENVIRONMENTAL SERVICES (Reorganized into Technical Services)			
Environmental Services Manager	1	-	-
Environmental Laboratory Administrator	1	-	-
Environmental Services Analyst (I-II)	3	-	-
Total Environmental Services	**5**	**-**	**-**
ENGINEERING (Reorganized into Technical Services)			
Engineering Manager	1	-	-
Assistant Engineer	2	-	-
Information Systems Analyst (Transferred to Administration)	1	-	-
Total Engineering	**4**	**-**	**-**
TOTAL AUTHORIZED STAFFED POSITIONS	**43**	**43**	**44**

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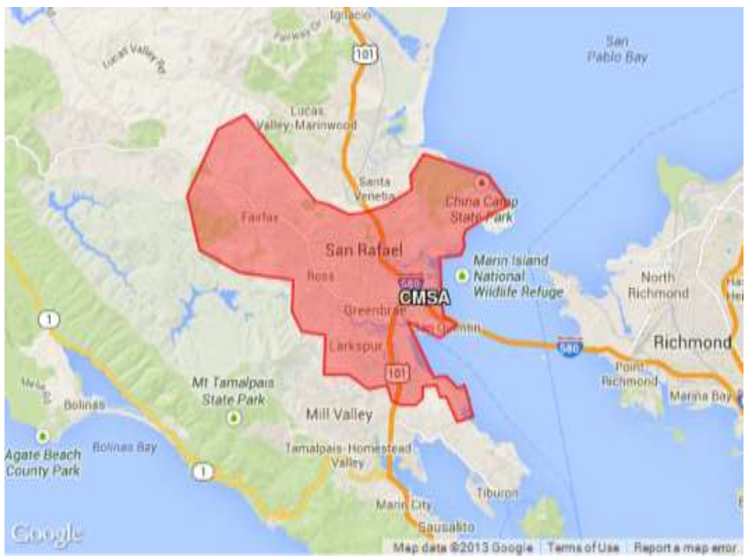
SECTION 2. LOCATION AND SERVICE AREA, LOCAL DEMOGRAPHICS AND ECONOMY

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 and San Quentin Village, and San Quentin State Prison (SQSP). The population served within this area is approximately 104,500.

The shaded area shows the location of CMSA service area.



Local Demographics and Economy

Marin County has a total population 260,651 with a growth rate of less than one percent annually. The county's residents continue to have the highest California per capita income of $63,608, and a median per household income of $100,310.

<u>Population of Cities, Towns, and Correctional Facilities in the CMSA Service Area</u>

City of San Rafael (Approximately 2/3 of the city's population)	39,500
City of Larkspur	12,382
Town of Corte Madera	9,858
Town of San Anselmo	12,599
Town of Fairfax	7,598
Town of Ross	2,467
San Quentin State Prison	4,004
Unincorporated CMSA Service Area (San Quentin Village, Greenbrae, Kentfield, Sleepy Hollow, Tiburon Peninsula)	16,092

Sources: United States Census Bureau State and County Quick Facts (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 2.3% remains among the lowest in California and remains below the national level of 4.1% as of March 2018. Six 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 between 1-250 employees, and approximately 90% of these business enterprises include goods and services occupations.

Ten Largest Employers and Number of Employees in CMSA Service Area

BioMarin	1,700
San Quentin State Prison	1,662
Marin General Hospital	1,650
Dominican University	1,000
Golden Gate Transit	810
College of Marin	507
Restoration Hardware	500
City of San Rafael	401
San Rafael City Schools	355
Kentfield Rehabilitation & Hospital	345

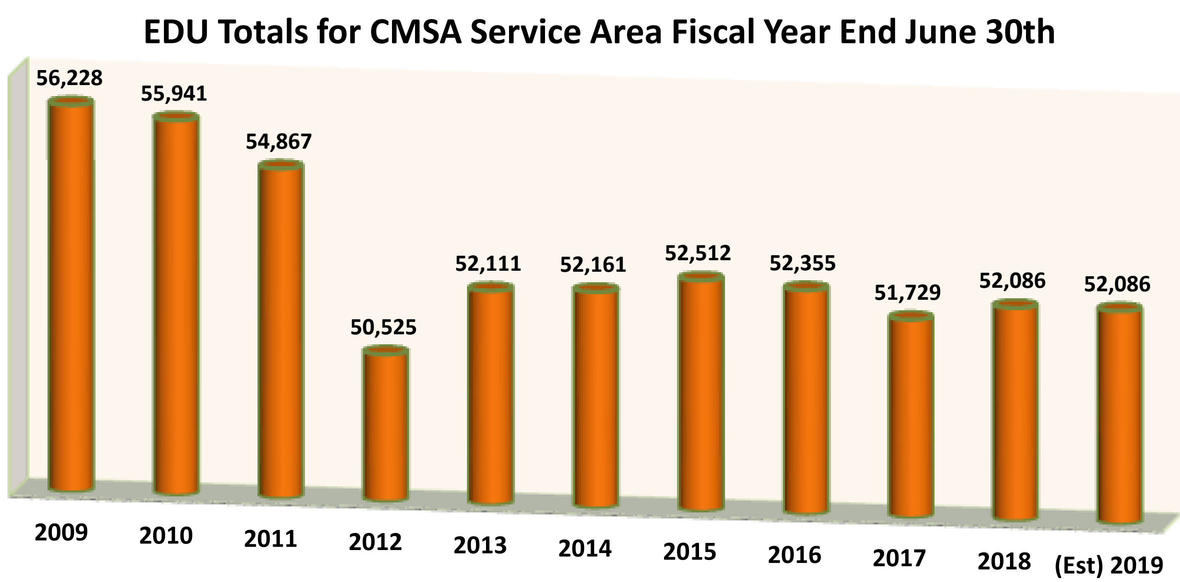
The local real estate and housing market continued to improve during FY 18. The annual mean/median home sale price for a home in Marin was $1,338,367/$1,000,000 as reported by the Marin County assessor's office website for the calendar year ending December 2017, compared to $1,271,060/$975,000 reported at end of December 2016. The upward trend continued January through April 2018 where the county reported at April 30th a mean/median $1,469,385/$1,200,000 sales data statistic for a mean home living area of 2,027 square feet.
Source: www.marincounty.org/depts/ar/divisions/assessor/sales

Equivalent Dwelling Units (EDU's)
In past fiscal years, 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 website.

The Agency utilizes 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 36-month period April 1 to March 31 for strength and 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 19 to be the same as FY 18. 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 a change in the number of EDUs assigned to SQSP. There were three consecutive years (FY 09-FY 11) of decreases in the total number of reported EDUs, with another 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.



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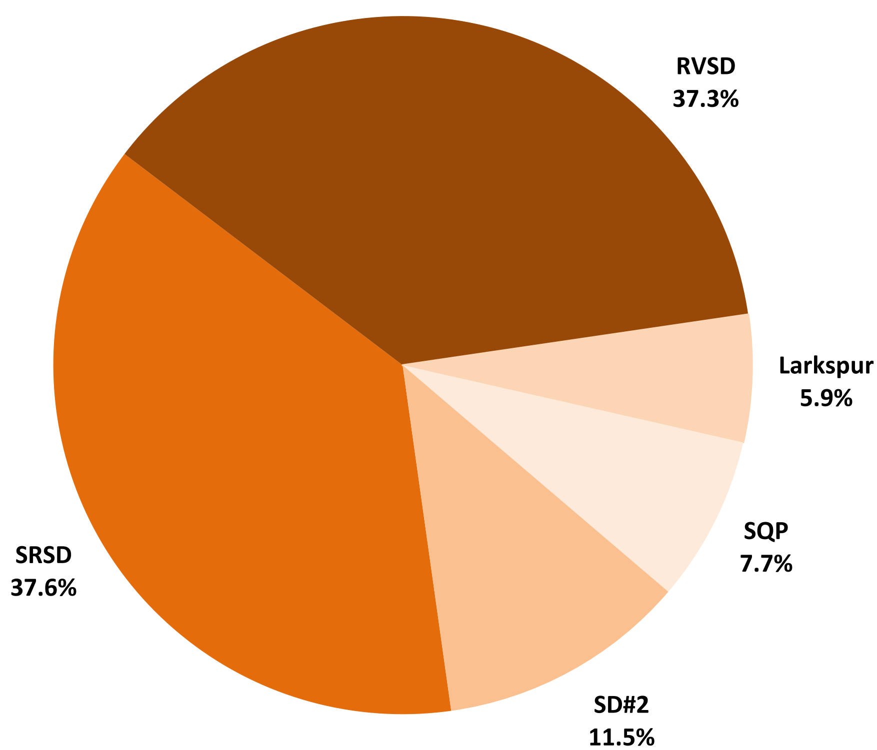
EDU Count by JPA Member Agency and San Quentin State Prison FY 2009 to FY 2019

Fiscal Year Actual	San Rafael Sanitation District (SRSD)	Ross Valley Sanitary District (RVSD)	City of Larkspur (SD #1)	San Quentin State Prison (SQSP)	Sanitary District #2 (SD #2)	Total EDU Count
(EST) 2019	19,565	19,448	3,060	4,005	6,008	**52,086**
2018	19,565	19,448	3,060	4,005	6,008	**52,086**
2017	19,332	19,298	3,039	4,005	6,055	**51,729**
2016	19,555	19,700	3,019	4,005	6,076	**52,355**
2015	19,643	19,666	2,982	4,005	6,216	**52,512**
2014	19,703	19,498	2,949	4,005	6,006	**52,161**
2013	19,482	19,511	2,997	4,005	6,116	**52,111**
2012	19,409	18,835	3,079	3,247	5,955	**50,525**
2011	19,401	19,261	3,021	7,209	5,975	**54,867**
2010	19,575	19,709	3,050	7,529	6,078	**55,941**
2009	19,685	19,295	3,116	7,936	6,196	**56,228**

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 2018-19



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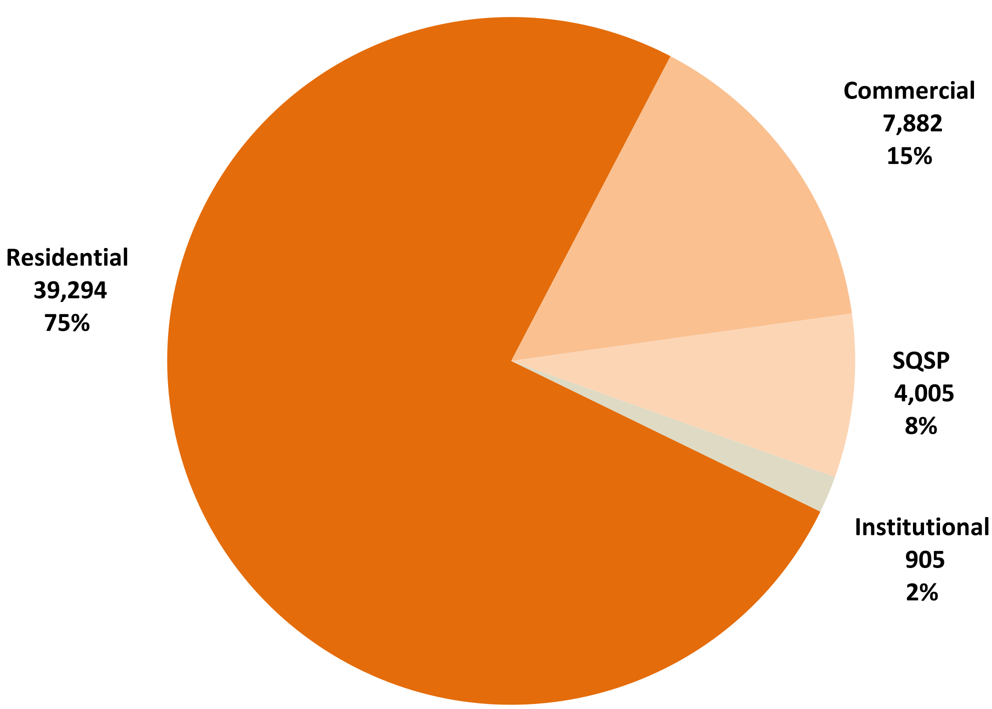
The table and chart below show the EDU count presented by connection type reported by participating JPA members. There are three types of connections: residential, commercial, and institutional. Institutional connections represent property tax exempt governmental entities (federal, state, county, city, 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 2018-19 EDU Count by Connection Types

	San Rafael Sanitation District (SRSD)	Ross Valley Sanitary District (RVSD)	City of Larkspur (SD #1)	San Quentin State Prison (SQSP)	Sanitary District #2 (SD #2)	Total by Type
Residential	15,747	16,467	2,631	-	4,449	**39,294**
Commercial	3,610	2,485	402	-	1,385	**7,882**
Institutional	208	496	27	4,005	174	**4,910**
Total	**19,565**	**19,448**	**3,060**	**4,005**	**6,008**	**52,086**

Source: Property Tax Reports, County of Marin

FY 19 EDU by Connection Type and San Quentin State Prison as a Percentage of Total EDUs



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, Organic Waste Receiving Facility, Solids Handling Building, Digesters and Digester Building, Aeration Tanks, Biotowers, Primary Clarifiers and Blending Channel, 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.

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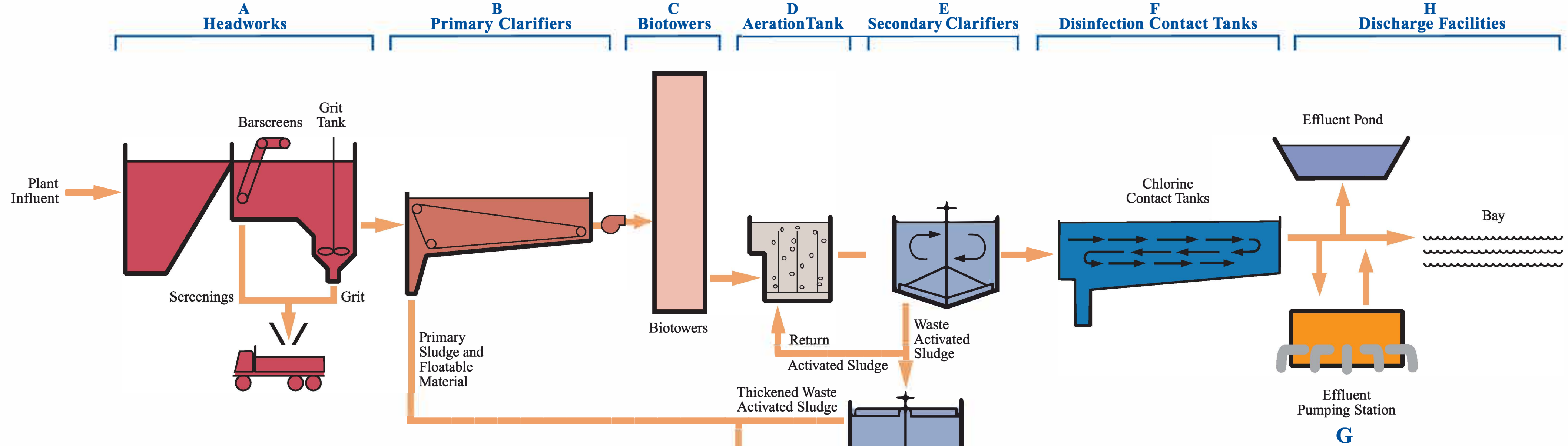
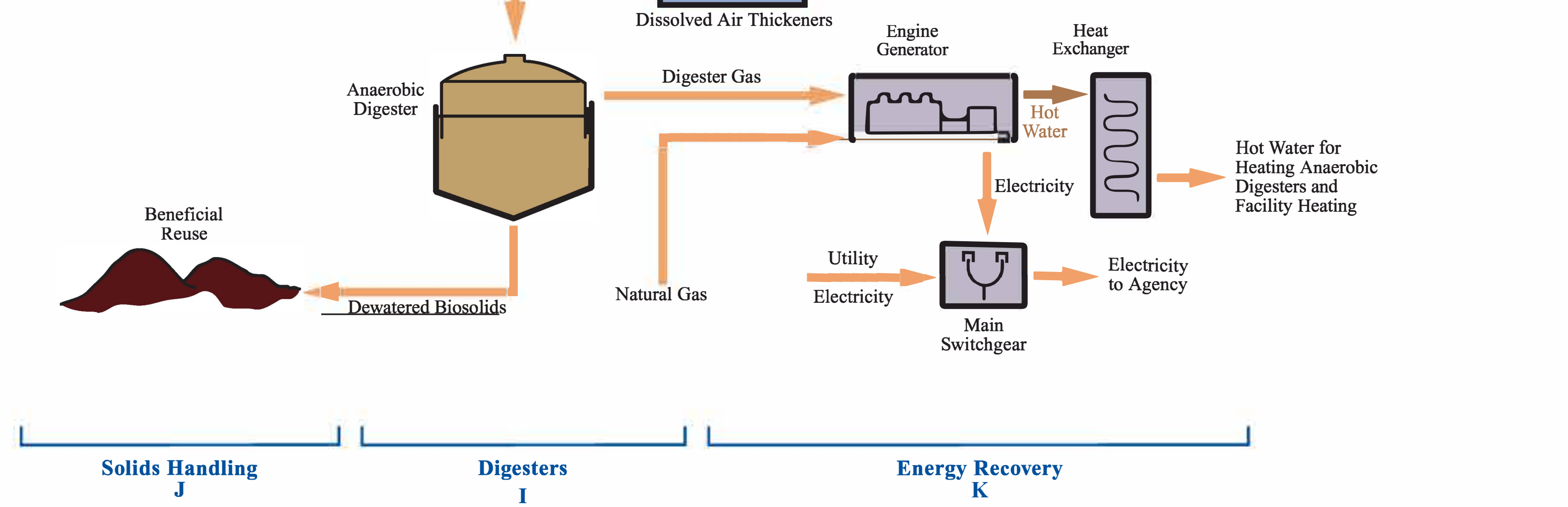




Process Schematic

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.

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:

K Energy Recovery

The biogas is produced in the digesters is used to heat plant process water and to generate electricity which supplies up to 95% of the Agency's power needs. When digester biogas is not available, the engine generator switches to natural gas.

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.

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

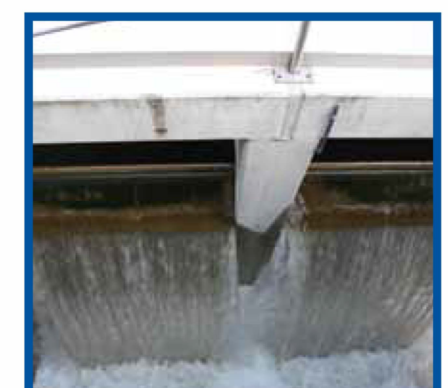
The secondary clarifiers settle out the activated sludge from the aeration tanks. Some of this secondary sludge is reused in the dual biological process for continual reseeding, and the rest is sent to the digesters, where it is treated and used in the production of biogas.

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.

Key Workload and Performance Indicators for FY 2017-18 and FY 2018-19 Projections

The following section summarizes the Agency's key workload and performance indicators for the July 1, 2017-June 30, 2018 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. These 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 physical and biological processes. 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 facilities. 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 twelve consecutive years through 2016. In February 2017, CMSA experienced its first NPDES permit exceedance, which was due to extremely high influent flows related to major winter storms making it essentially impossible to remove 85% of biochemical oxygen demand particulates from the highly diluted flows.

A. **Volume of Wastewater Treated (FY 19 Total Operating Expenditures $11,822,000):** The Agency received and treated approximately 3,792.7 million gallons of wastewater during FY 18. The table below shows the monthly wastewater volume, in million gallons, received as influent flow from each satellite collection entity: SRSD, RVSD, SQSP, SD #2. The total treated flow volume was significantly lower in FY 18 due to milder 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 19. 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 in compliance with the Agency's NPDES permit requirements.

	SRSD			RVSD			SQSP			SD #2			TOTAL		
	FY 16	FY 17	FY 18	FY 16	FY 17	FY 18	FY 16	FY 17	FY 18	FY 16	FY 17	FY 18	FY 16	FY 17	FY 18
Jul	88.6	89.5	95.2	107.7	113.6	124.3	10.2	11.0	10.1	27.9	25.8	22.8	234.4	239.8	252.4
Aug	92.3	92.4	95.8	107.2	118.2	127.4	9.7	10.4	12.8	27.9	26.1	17.5	237.1	247.2	253.5
Sep	89.9	86.4	95.0	103.8	108.9	133.5	8.9	9.7	14.6	27.5	25.7	9.9	230.1	230.7	253.0
Oct	88.3	114.3	89.4	109.2	141.4	111.2	9.5	10.1	15.2	28.5	33.0	25.4	235.5	298.9	241.1
Nov	90.7	133.2	110.2	107.7	183.6	137.4	8.5	10.3	16.6	26.7	36.6	33.7	233.6	363.7	297.8
Dec	117.7	200.7	92.3	170.2	296.4	130.7	10.4	11.1	15.0	45.4	48.9	27.8	343.7	557.1	265.7
Jan	229.3	338.8	154.5	331.4	524.3	209.0	13.8	15.5	18.9	68.5	74.0	44.6	643.0	952.7	427.1
Feb	111.5	312.5	99.0	168.0	462.8	133.2	9.4	14.1	13.1	32.4	74.1	24.4	321.3	863.5	269.7
Mar	225.5	176.4	214.6	337.6	252.1	297.5	14.0	11.6	19.0	54.1	44.4	54.3	631.2	484.3	585.4
Apr	112.6	162.4	145.5	152.4	230.4	205.4	10.4	11.2	15.5	31.3	39.1	39.2	306.7	443.1	405.6
May	100.8	107.5	102.1	129.1	152.3	138.4	10.9	9.8	12.9	28.4	30.8	28.5	269.2	300.4	281.9
Jun	86.5	95.6	102.2	115.4	126.2	116.3	10.8	9.8	13.9	24.6	27.4	27.1	237.3	259.1	259.5
Total	**1433.7**	**1909.7**	**1395.8**	**1939.7**	**2710.2**	**1864.2**	**126.5**	**134.6**	**177.6**	**423.2**	**485.9**	**355.2**	**3923.1**	**5240.5**	**3792.7**
% Total Flow	**36.5%**	**36.4%**	**36.8%**	**49.4%**	**51.7%**	**49.2%**	**3.2%**	**2.6%**	**4.7%**	**10.8%**	**9.3%**	**9.4%**	**100%**	**100%**	**100%**

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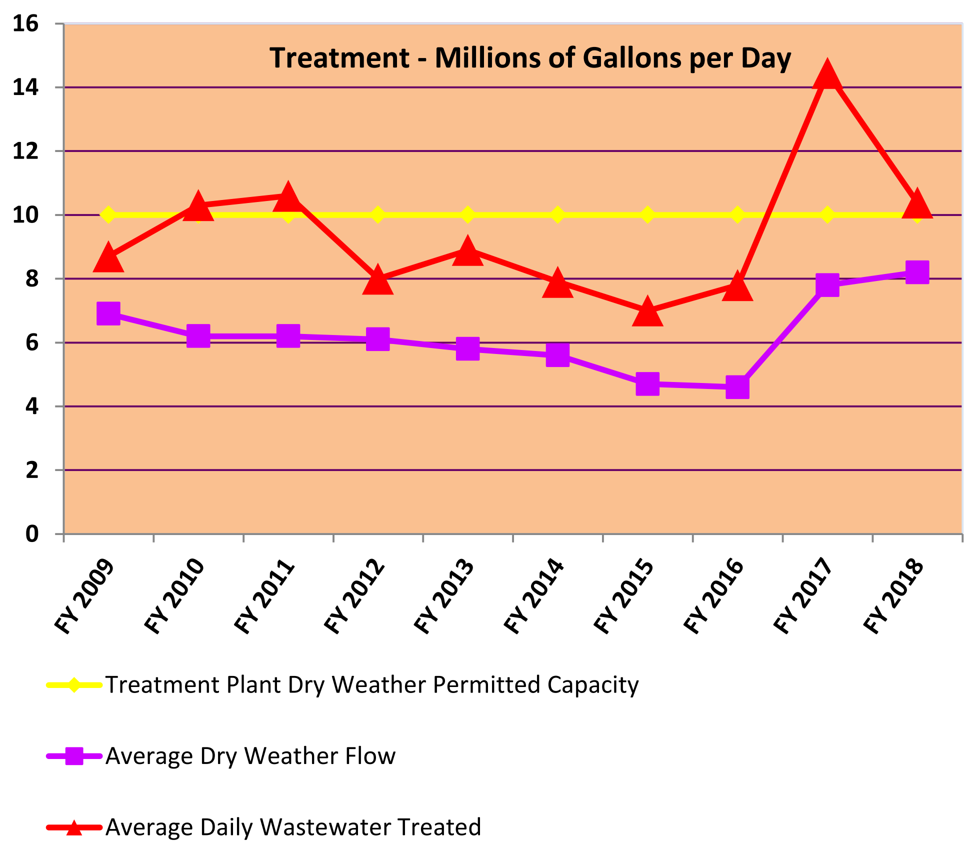
Average Daily Effluent Flow. The Agency's permitted dry weather capacity is 10 million gallons per day. Below are the average daily dry weather flow, daily wastewater treated, and annual flows for the past six years.

MILLIONS GALLONS PER DAY	FY 13	FY 14	FY 15	FY 16	FY 17	FY 18	FY 19*
Dry Weather Flow (July-Sept)	5.8	5.6	4.7	4.6	7.8	8.2	8.2
Wastewater Treated	8.9	7.9	7.0	7.8	14.5	10.4	10.4
Total Annual Influent Flow Treated	3,988.4	3,738.7	3,929.7	3,923.1	5,240.5	3,792.7	3,792.7
TOTAL OPERATING BUDGET	$9.5M	$10.08M	$10.1M	$10.8M	$11.6M	$11.5M	$11.8M

**FY 19 has been projected to equal FY 18 annual flows*

The graph below presents the average volume of wastewater treated and discharged into San Francisco Bay from FY 09 through FY 18.

- 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, cogeneration engine cooling, 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.

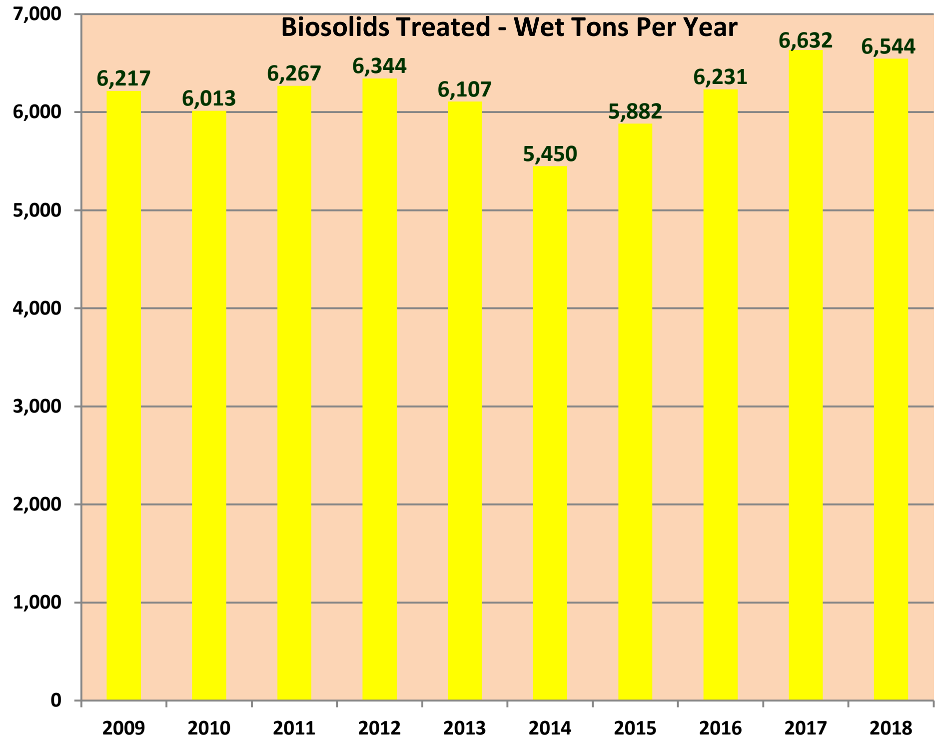
During FY 16, the Agency built a recycled water truck filling station. Our member agencies occassionally use the recycled water for sewer flushing within our service area.

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 has partnered with 16 wastewater agencies within the San Francisco Bay Area region to evaluate the feasibility of using biosolids as an alternative energy source or to produce a marketable product. The quantity in wet tons of biosolids reused is the performance measure for this budget.

REPORTED WET TONS:	FY 14	FY 15	FY 16	FY 17	FY 18	FY 19
Total Biosolids Management Budget*	$266K	$273K	$276K	$374K	$388K	$400K
Total Biosolids Reuse	5,450	5,882	6,231	6,645	6,544	6,544
Landfill Alternative Daily Cover	3,582	3,740	4,131	3,676	3,271	3,271
Lystek Bio-fertilizer**				1,306	1,366	1,366
Fertilizer/Soil Amendment	1,868	2,142	2,100	1,663	1,907	1,907

**Reference: Technical Services Department Biosolids Management Budget*

The FY 17 Total Biosolids Management budget increase was attributed to delivery of two loads per week to the Lystek bio-fertilizer production facility. The FY 19 budget increase includes cost index adjustments in the biosolids hauling and disposal contracts.



The bar chart above shows the annual volume of biosolids produced. High flows during wet weather can transport solids that had settled in the collection system to the treament 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 13 required CMSA to operate with only one digester instead of two for several months which decreased biosolids production. The FY 14 reduction was due to drought conditions which resulted in more solid material settling in the sewer system pipes and therefore was not transported to the treatment plant.

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 14	FY15	FY16	FY 17	FY 18	FY 19
Total Odor Control Budget*	$518K	$474K	$614K	$610K	$534K	$521K
Number of Odor Alerts Issued	43	45	44	64	50	40+/-
Number of Odor Complaints Received	2	1	0	2	3	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 conventional pollutants, 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	FY14	FY15	FY 16	FY 17	FY 18	FY 19
Total Suspended Solids (TSS) Removed	9,009	7,353	6,872	5,937	6,248	6,300
Organics (Biological Oxygen Demand – BOD) Removed	5,294	4,949	4,638	5,651	4,413	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 Countywide Public Education Program budget supports programs that educate the public on ways they can contribute to the removal of mercury and copper.

MONTHLY AVERAGE	FY 14	FY15	FY 16	FY 17	FY 18	FY 19
Mercury	97%	99%	99%	96%	97%	99%
Copper	96%	95%	96%	93%	84%	98%

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 purchased from outside suppliers is reduced in proportion to the amount of biogas that is generated. 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 19. The estimated quantity of biogas and electrical energy produced and the economic value of natural gas savings is shown in the table below.

	FY 14	FY 15	FY 16	FY 17	FY18	FY19
Total Natural Gas Budget*	$187K	$121K	$109K	$80K	$40K	$37K
Biogas – million cubic feet	73	79	92	106	102	104
Energy Produced - kilowatts	4,367	4,998	5,534	4,781	5,324	6,000
Value of Biogas Produced	$256,464	$255,791	$242,271	$291,022	$296,147	$313,291

**Reference: Operations Department line item budget.*

G. Work Orders Completed: The Agency has over 4,000 assets that include the treatment 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 maintenance 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	FY14	FY 15	FY 16	FY 17	FY 18	FY 19
Maintenance Department	$1.48M	$1.66M	$1.78M	$1.88M	$2.01M	$1.91M
Operations Department	$2.91M	$2.87M	$3.19M	$3.17M	$3.15M	$3.24M
TOTAL	**$4.40M**	**$4.53M**	**$4.98M**	**$5.05M**	**$5.16M**	**$5.15M**

COMPLETED WORK ORDERS*	FY14	FY 15	FY 16	FY 17	FY 18	FY 19
Preventative & Corrective- # work orders	1,225	1,830	1,694	1,747	1,742	1,750
Preventative & Corrective – total hours	11,446	10,576	10,848	11,384	10,863	11,500
Operational (Facilities, Safety, Housekeeping - # work orders	257	451	446	371	388	400
Operational (Facilities, Safety, Housekeeping – total hours	3,345	8,039	22,038	24,376	23,506	24,500
TOTAL # WORK ORDERS	**1,482**	**2,281**	**2,140**	**2,118**	**2,130**	**2,150**
TOTAL WORK ORDER HOURS	**14,791**	**18,615**	**32,885**	**35,760**	**34,369**	**36,000**

**Source: July Agenda consent item 4.h "FY 2018 Asset Management Program – Annual Report" available* http://www.cmsa.us/board/agendas-and-minutes

The increasing number of work orders completed since FY 14 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 14	FY 15	FY 16	FY 17	FY 18	FY 19
Total Meetings/Training Budget	$72K	$82K	$79K	$85K	$85K	$82K
Internal Hours	807	575	1800	1432	1638	1600
External Hours	870	668	726	1160	945	925

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 19.

	FY 14	FY 15	FY 16	FY 17	FY 18	FY 19
Total Permit Testing & Monitoring Budget*	$123K	$125K	$128K	$147K	$150K	$132K
NPDES Compliance Analyses	5,482	5,661	6,187	2,852	3,874	3,485
Process Control Analyses	12,643	16,661	16,317	7,639	8,302	7,500
Contract Laboratory Analyes (New January 2018)					183	370
Quality Control Testing	5,697	5,650	5,771	2,154	2,604	2,800

**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 Programs 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 14 through the FY 19 budget.

	FY 14	FY 15	FY 16	FY 17**	FY 18	FY 19
Total FOG, Permit & Inspections, and Mercury Source Revenue	$94K	$95K	$98K	$99K	$102K	$59K
Pretreatment and Pollution Prevention Inspections*	332	333	374	224	121	100
FOG Program Food Service Establishment Inspections*	606	602	659	383	122	100
Permits Issued and Renewed*	77	198	50	106	65	50

**Reference: Schedule of Revenues and Other Financing Sources budget accounts 4030/4031/4033/4034/4035/4036/4037/4038-000-00.*
***In FY 17, inspections decreased due to limited staff resources.*

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.

	FY 14	FY 15	FY 16	FY 17	FY 18	FY 19
Total Public Education Program Budget*	$36K	$36K	$38K	$37K	$33K	$35K
Public Education Event Visitors	3,197	3,401	2,430	3,682	4,302	3,500
School Education Events Student Attendance	6,314	4,330	2,538	3,688	4,450	4,300

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

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SECTION 4. STRATEGIC BUSINESS PLAN

The Strategic Business Plan (SBP) is a model to chart a strategic path to effectively maintain and improve Agency 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 organization into the future.

In September 2015, the Board of Commissioners approved development of the Agency's current SBP, conceptual format, and schedule for the five fiscal years from 2016-17 to 2020-21. Commissioners participated in the strategic planning workshops and collaborated with Agency staff to review and revise the Agency Mission, Vision, and Goals statements, and prepare new Value statements. High-level strategic statements and a SBP template were approved by the Board at its June 2016 meeting. Using these Board actions and guidance, the Agency Strategic Planning Committee (ASPC) developed the FY 2018-19 Business Plan consisting of Objectives and Actions to achieve the Board adopted Goals and to align with the SBP Mission, Vision, and Values statements.

The Agency's budget is closely aligned with the SBP, as the majority of the SBP strategic actions were considered in the budget development process. The focus of the Business Plan for the FY 2018-19 will tentatively be on the activities listed below:

- Maintain high performance of treatment facility operations
- Manage the Agency's assets
- Research financial software for significant system upgrade
- Increase the Agency's energy efficiency
- Collaborate with Bay Area agencies to evaluate biosolids management alternatives
- Promote a culture of leadership and professional growth
- Improve Agency documents and file management
- Prepare for bond issuances in connection with the capital improvement program
- Improve methods of communication, e.g., Facebook presence, website upgrade

The Board reviews and accepts the Agency Strategic Business Plan for the following fiscal year, in this case the FY 2018-19, in July of each year and it 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.

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 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 performed a thorough review of its financial policies making revisions as necessary. The policies that are included in the appendix were adopted by the Board in July 2015, are currently under review, and a revised policy manual is planned for presentation to the Board in July 2018.

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.

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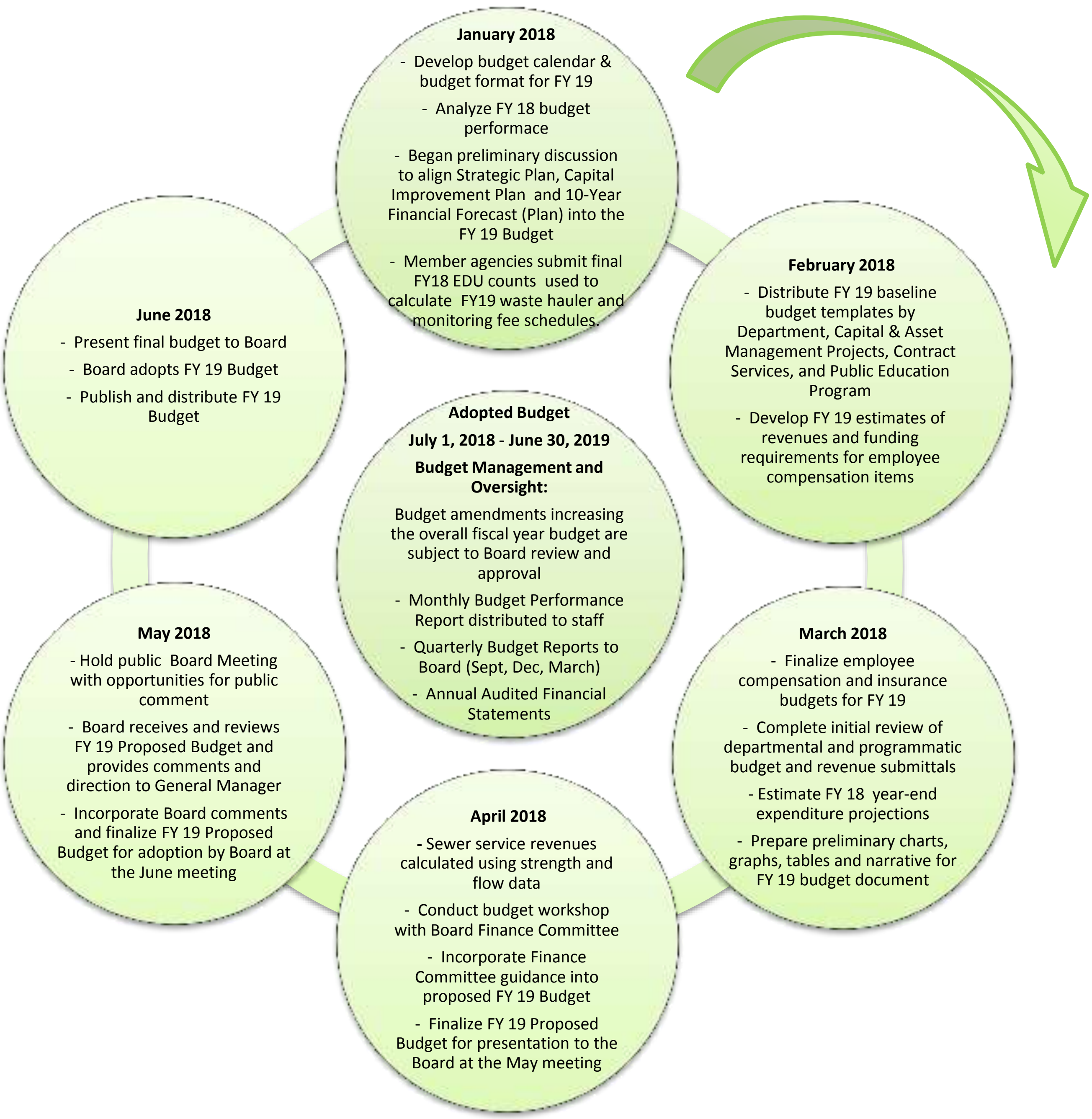
SECTION 6. BUDGET DEVELOPMENT: BALANCED BUDGET, BASIS OF BUDGETING, ACCOUNTING, DEVELOPMENT AND ADMINISTRATION

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 2018-19 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.

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SECTION 7. FY 2018-19 BUDGET - DISCUSSION AND ANALYSIS

Budget development for the FY 2018-19 began in January 2018. 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 2018-19 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).

The FY 2018-19 Budget is a balanced budget (revenues less expenditures and any balance transferred to/from reserves) and includes any changes made from the preliminary budget. The FY 2018-19 Budget incorporates 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 Budget for both revenues and expenditures. Section 8 presents the third component of the Budget for capital expenditures.

CMSA's primary source of revenue in the FY 2018-19 Adopted 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 six 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 19 sewer service charges.

Table 1 shows the FY 17, FY 18, and FY 19 operating revenues and expenses, with surplus funds being transferred to the operating and unrestricted capital reserves. Major changes to FY 19 revenues and expenditures from FY 18 are discussed in the narrative following Table 1.

Table 1: Overview of Operating Revenues and Expenditures for FY 17, 18 and 19

	FY 17 Adopted Budget	**FY 18 Adopted Budget**		**FY 19 Adopted Budget**	**% Difference FY 19 to FY 18 Budget**
Total Operating Revenues	$12,237,236	$12,654,365		$13,175,773	4.1%
Total Operating Expenditures	11,580,480	11,462,600		11,822,000	10.1%
Surplus/(Deficit)	**$ 656,756**	**$ 1,191,765**		**$ 1,353,773**	

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

Total Operating Revenues increase by 4.1% and Total Operating Expenditures increase by 3%, and the expected surplus of $1.37M includes $811,258 designated for future capital projects.

Adopted FY 19 Revenues: Table 2 summarizes revenues by source for FY 17, FY 18, and FY 19. A brief analysis that describes the difference between FY 18 and FY 19 revenue categories follows the pie chart below.

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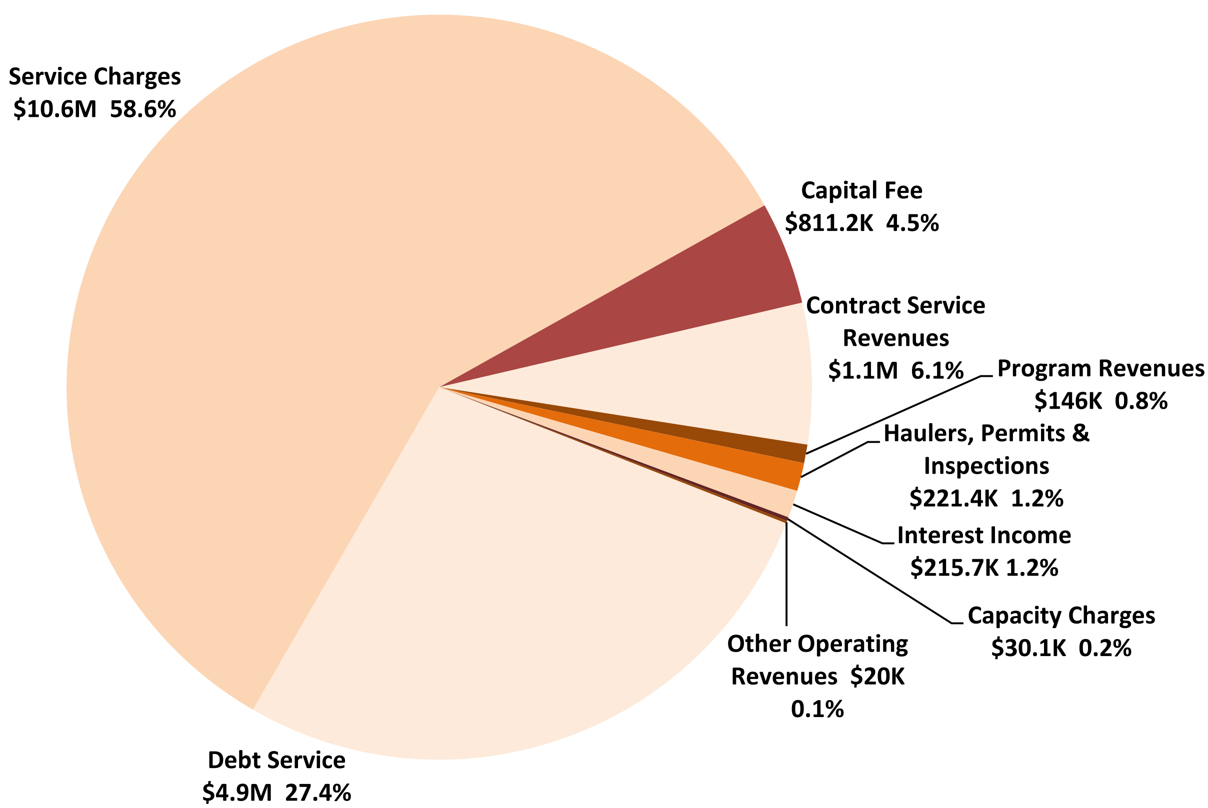
Table 2: Revenues by Source for FY 17, FY 18 , and FY 19 Adopted Budgets

Revenue Sources by Category	FY 17 Adopted Budget	FY 18 Adopted Budget		FY 19 Adopted Budget	% Difference FY 19 to FY 18 Operating Budget	% Total Revenues
Operating Revenues						
Service Charges	$ 9,865,358	$10,263,165		$10,622,376	3.5%	58.6%
Service Charge Capital Fee	530,000	630,000		811,258	28.8%	4.5%
Contract Service Revenues	1,425,138	1,228,950		1,108,808	-9.8%	6.1%
Program Revenues	128,990	143,200		146,030	2.0%	0.8%
Haulers, Permits & Inspection	211,250	226,250		221,450	-2.1%	1.2%
Interest Income	56,500	113,500		215,760	90.1%	1.2%
Capacity Charges	-0-	29,300		30,091	2.7%	0.2%
Other Operating Revenues	20,000	20,000		20,000	0.0%	0.1%
Total Operating Revenues	**$12,237,236**	**$12,654,365**		**$13,175,773**	**4.1%**	**72.6%**
Debt Service	**4,960,117**	**4,952,382**		**4,966,508**	**0.3%**	**27.4%**
TOTAL REVENUES	**$17,197,353**	**$17,606,747**		**$18,142,281**	**3.0%**	**100.0%**

FY 19 Budget Revenues by Source (Where the Money Comes From)



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(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, 2015 to March 31, 2018. 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 3.5% 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 9.8%.

- $522,405 for SQSP wastewater services: 11.4% decrease in accordance with contract terms.
- $111,570 for SQSP pump station maintenance: 3.2% increase for Bay Area CPI.
- $45,297 for SQ Village: 9.3% decrease in accordance with planned projects and contract terms.
- $394,536 for SD 2 Pump Station Maintenance: 2.2% decrease in accordance with contract terms and scheduled maintenance.
- $10,000 for LGVSD FOG and Pollution Control Programs: 39.4% decrease due to services that will not be performed during FY 19.
- $8,000 for RVSD FOG Program: 62.8% decrease from FY 18 decrease due to services that will not be performed during FY 19.
- $10,000 for SRSD FOG Program: 60.9% decrease from FY 18 decrease due to services that will not be performed during FY 19.
- $1,500 for TCSD FOG Program: 31.8% decrease from FY 18 decrease due to services that will not be performed during FY 19.
- $2,500 for SD 2 FOG Program: 66.7% decrease due to services that will not be performed during FY 18.
- $1,500 for Almonte SD FOG Program: No change from FY 18.
- $1,500 for Novato SD Dental Amalgam Program: 50% decrease due to services that will not be performed during FY 19.

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 2%. The Health & Safety Program decreased by 5.4% due to NSD's decreased share of total program costs, while the Public Education program was increased by 15% to fund development of an educational video outreach program and to support the Marin Science and Environmental Leadership 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 decrease by 2.1% due to fewer loads received from FOG haulers. The Organic Waste Receiving Facility (OWRF) 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 90.1%. The Agency has recognized that interest rates are generally higher, and has assumed a 1.5% interest rate for FY 19, 87.5% higher than FY 18.

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. Due to little or no activity, the Agency has budgeted a nominal amount to serve as a placeholder.

The capacity charge fee for a single-family dwelling unit will increase 2.72% from $5,932.85 to $6,094.28 for the fiscal year 2018-19 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.

Adopted FY 19 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 professional affiliations, memberships, professional development, and general and administrative expenses that include a varying degree of funds available for discretionary use.

The Agency's FY 19 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.

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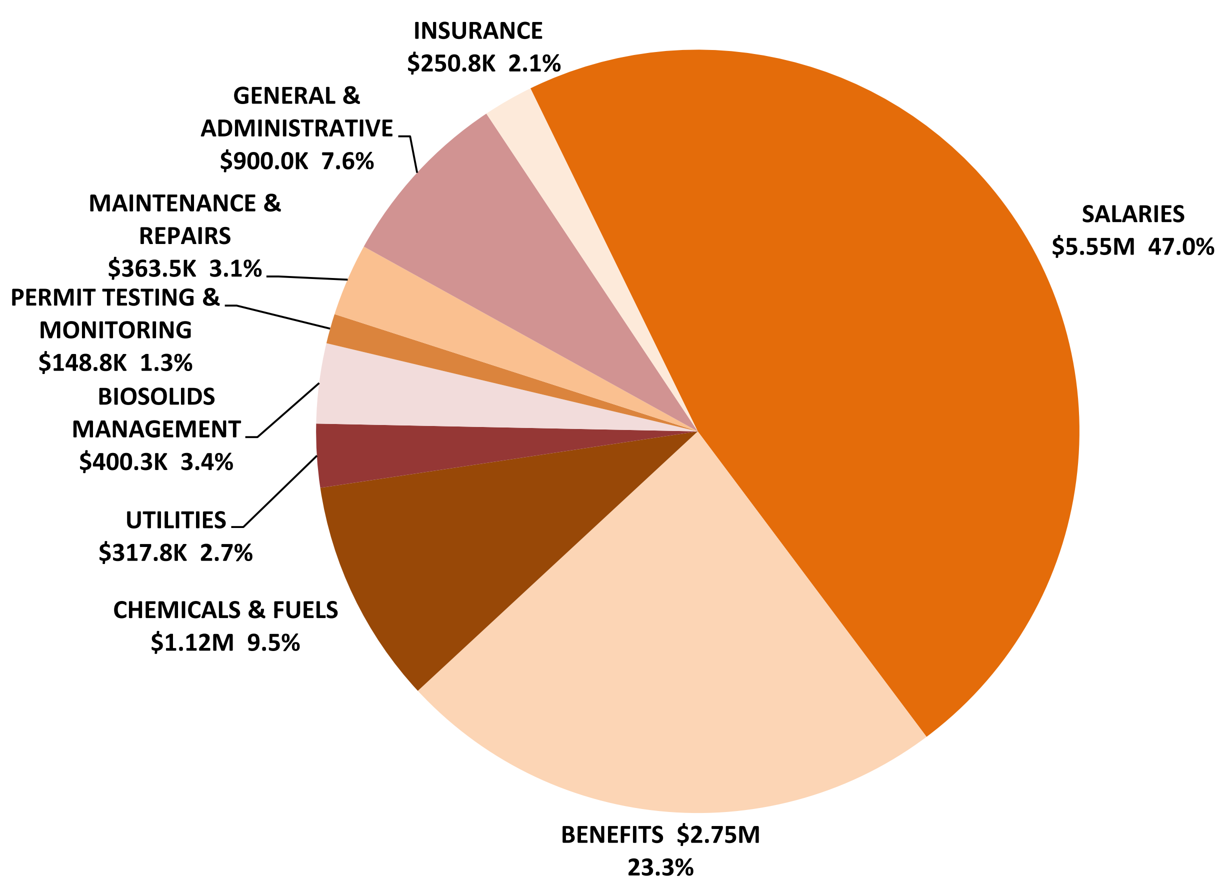
Table 3: Budget by Category of Expenditures for FY 17, FY 18, and FY 19 Adopted Budgets

Expenditures by Category	FY 17 Adopted Budget	FY 18 Adopted Budget		FY 19 Adopted Budget	% of FY 19 Budget	% Difference FY 19 to FY 18 Budget
Salaries	$ 5,283,600	$ 5,401,800		$ 5,555,200	47.1%	2.8%
Benefits	2,575,700	2,561,100		2,758,700	23.4%	7.7%
Chemicals & Fuel	1,146,800	1,069,500		1,126,900	9.5%	5.4%
Utilities	372,600	350,500		317,800	2.7%	-9.3%
Biosolids Management	373,920	387,700		400,300	3.4%	-17.1%
Permit Testing & Monitoring	168,800	179,500		148,800	1.3%	-5.0%
Maintenance & Repairs	382,500	382,500		363,500	3.1%	3.2%
General & Administrative	1,000,660	868,800		900,000	7.6%	3.6%
Insurance	275,900	261,200		250,800	2.1%	-4.0%
Total Expenditures	**$11,580,480**	**$11,462,600**		**$11,822,000**	**100.0%**	**3.1%**

FY 19 Budget by Category of Expenditure (Where the Money is Spent)



<u>Salaries</u>: Salaries are budgeted to increase by 2.8% due to a 3% COLA salary adjustment for Agency employees effective July 1, 2018, and other anticipated compensation 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.

<u>Benefits</u>: Total employee benefit costs increase 7.7%. Employee benefits include costs for retirement pensions, medical, retiree medical, and other benefits. For retiree medical, the Agency contributes the full amount of the GASB 75 actuarially determined contribution of $247,600 for direct medical costs and to fund the OPEB Trust. Retiree medical costs include Agency paid minimum insurance premiums to CalPERS medical for eligible 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 Agency is funding the trust in the amount of approximately $50K for full funding in approximately ten years near or at which time benefits will be paid from the trust. The OPEB funding plan may be subject to change conditioned upon establishing a second 115 prefunding trust for future transfer of excess OPEP contributions, if any. Earnings of the trust will be self-supporting to pay benefit obligations from the trust.

<u>Chemicals & Fuel</u>: This category is budgeted to increase by 5.4% due to planned increased usage and increased 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 19, the Agency continues to benefit from reduced bid prices from the cooperative 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.

<u>Utilities</u>: This category for electricity, natural gas, and other utilities is budgeted to decrease 9.3%. The Agency has achieved significant savings through the production of its own biogas. Prior to the OWRF being placed into service, CMSA produced enough biogas to power the Agency for approximately seven hours per day. Over the past few years, deliveries of food waste and organic liquid waste has increased, resulting in increased biogas production and power generation. In FY 19, we anticipate generating over 23 hours of reusable power per day. Garbage costs decreased 28% because Marin Sanitary Service is now responsible for cleaning the OWRF, saving the Agency $27,500.

<u>Biosolids Management</u>: This category is budgeted to increase by 3.2 % due to contractual rate increases.

<u>Permit Testing and Monitoring</u>: This category is budgeted to decrease by a net 17%. There is a 100% decrease for testing the underground tank secondary containment to be performed every three years. The last test was during FY 18 and is not required by state regulation to be tested again until FY 21. There are also decreases in lab supplies and underground tank overfill containment test costs.

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Maintenance & Repairs: This category is budgeted to decrease by a net 5%. Groundskeeping decreased 11% for landscape cost savings achieved through participation in the County of Marin Probation Department's Adult Offender Work Program (AOWP). California law allows an individual to receive one day jail credit for every 8 hours of manual labor performed for a nonprofit agency. Other savings are for reduced expenditures on fleet, centrifuge, ORWF, and Effluent Pump Station scheduled maintenance activities.

General & Administrative: This category is budgeted to increase 3.6% primarily due to anticipated recruitment costs.

Insurance: This category is budgeted to decrease 4% primarily due to reduced property insurance and general liability premiums and offset by recommendations received from California Sanitation Risk Management Authority (CSRMA) for potential premium increases for workers' compensation insurance premiums.

Adopted Operating & Capital Budget for Fiscal Year July 1, 2018 – June 30, 2019 and Overview

The following section is the FY 19 budget document in its entirety that will be submitted for adoption at the June 12, 2018 meeting of the Central Marin Sanitation Agency Board of Commissioners. 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
Funding requirements and Sources Summary Section 7	A snapshot summary.	Displays total expenditures and total revenues and summarizes anticipated reserve increases and uses, to estimate ending funding sources.
Schedule of Revenues and Other Financing Sources Section 7	Revenue budget requirements	A detailed revenue budget by category for all line items in each revenue category, including the use of reserves as a revenue source.

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
Summary of Expenditures by Departments and Category Section 7	Summarizes total operating budget expenditures by departments and by category.	The summary compares the Budgets for FY 18 and FY 19. FY 17 audited actuals are presented next to the FY 18 Adopted Budget.
Departmental Operating Budgets Section 7	The departmental budget documents show in greater detail how each department expects to spend their budgeted dollars during FY 19. *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 functions and responsibilities, including a summary of Expenditures by Category, an Authorized Positions head count for three fiscal years, and FY 19 Department Initiatives. Operating Budget detailed by line items account for three fiscal years for each department. The 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.

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DOCUMENT TITLE	BUDGET PURPOSE	EXPLANATION
Capital Improvement Program (Section 8)	The FY 18-19 Capital Improvement Program provides a summary of changes, the CIP FY 19 Adopted Budget and 10-Year Forecast, detailed information by account number, and descriptions and elements involved for planned projects.	The FY 18-19 Capital Improvement Program - Summary of Changes compares the FY 18-19 Adopted Budget to the FY 17-18 Projected Actuals, and FY 19 Adopted Budget, and provides a narrative about significant changes in the budget. Capital Improvement Program FY 19 Budget and 10-Year Forecast. This schedule shows the FY 18 Adopted Budget and the FY 19 Adopted Budget, and presents a projected 10-year forecast for planned activities by budget line item account. 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.
10-Year Financial Forecast (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.
Debt Obligation (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.

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FUNDING REQUIREMENTS AND SOURCES SUMMARY

Funding Requirements	Actual 2016-17	Fiscal Year 2017-18	Year-End Projection 2017-18	Fiscal Year 2018-19	Amount Increase (Decrease)	Percent Increase (Decrease)
Operating:						
Salaries and Wages	$ 5,347,208	$ 5,401,800	$ 5,102,952	$ 5,555,200	$ 153,400	2.8%
Employee Benefits	2,443,406	2,561,100	2,469,085	2,758,700	197,600	7.7%
Chemicals & Fuels	1,113,251	1,069,500	1,025,627	1,126,900	57,400	5.4%
Biosolids Management	353,400	387,700	379,908	400,300	12,600	3.2%
Permit Testing & Monitoring	110,973	179,500	165,751	148,800	(30,700)	-17.1%
Maintenance & Repairs	380,240	382,500	383,565	363,500	(19,000)	-5.0%
Utilities	318,900	350,500	277,490	317,800	(32,700)	-9.3%
Insurance	210,950	261,200	229,035	250,800	(10,400)	-4.0%
General & Administrative	697,499	868,800	604,115	900,000	31,200	3.6%
Operating before debt and capital	10,975,827	11,462,600	10,637,528	11,822,000	359,400	3.1%
Debt Service	4,109,744	3,961,906	3,961,906	3,973,206	11,300	0.3%
Operating before capital	15,085,571	15,424,506	14,599,434	15,795,206	370,700	2.4%
Capital Improvements	$ 2,389,382	$ 3,817,600	$ 2,449,176	$ 2,862,500	(955,100)	-25.0%
Total requirements	$ 17,474,953	$ 19,242,106	$ 17,048,610	$ 18,657,706	$ (584,400)	-3.0%

Funding Sources	Actual 2016-17	Fiscal Year 2017-18	Year-End Projection 2017-18	Fiscal Year 2018-19	Amount Increase (Decrease)	Percent Increase (Decrease)
Service Charges	$ 9,865,358	$ 10,263,165	$ 10,263,165	$ 10,622,376	$ 359,211	3.5%
Capital Fee	530,000	630,000	630,000	811,258	181,258	28.8%
Debt Service Charge	4,960,117	4,952,382	4,952,382	4,966,508	14,126	0.3%
Capacity Charges	330,079	29,300	141,000	30,091	791	2.7%
Contract Service Revenues	1,442,550	1,228,950	920,752	1,108,808	(120,142)	-9.8%
Program Revenues	134,324	143,200	79,235	146,030	2,830	2.0%
Haulers, Permits & Inspections	302,922	226,250	231,368	221,450	(4,800)	-2.1%
Other Revenues	26,003	20,000	28,470	20,000	-	0.0%
Interest Income	113,085	113,500	122,109	215,760	102,260	90.1%
Other Financing Sources	-	-	-	-	-	
Subtotal funding sources	17,704,438	17,606,747	17,368,481	18,142,281	535,534	3.0%
Reserve (Increase) Usage	(229,485)	1,635,359	(319,871)	515,425	(1,119,934)	-68.5%
Total funding sources	$ 17,474,953	$ 19,242,106	$ 17,048,610	$ 18,657,706	$ (584,400)	-3.0%

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SCHEDULE OF REVENUES AND OTHER FINANCING SOURCES

Account #	Description	Actual 2016-17	Fiscal Year 2017-18	Fiscal Year 2018-19	Amount Increase (Decrease)	Percent Increase (Decrease)
	Service Charges to Members[1]					
4010-000-00	SRSD	$ 4,231,633	$ 4,249,977	$ 4,340,303	$ 90,326	2.1%
4010-000-00	RVSD	4,762,416	5,162,372	5,363,238	200,866	3.9%
4010-000-00	SD #2	871,309	850,816	918,836	68,020	8.0%
	Totals	$ 9,865,358	$ 10,263,165	$ 10,622,377	$ 359,212	3.5%
	Capital Fee to Members[1]					
4010-000-00	SRSD	$ 227,337	$ 260,883	$ 331,480	$ 70,597	27.1%
4010-000-00	RVSD	255,853	316,890	409,604	92,714	29.3%
4010-000-00	SD #2	46,810	52,227	70,174	17,947	34.4%
	Totals	$ 530,000	$ 630,000	$ 811,258	$ 181,258	28.8%
	Debt Service Cost to Members[2]					
4011-000-00	SRSD	$ 1,852,642	$ 1,859,855	$ 1,865,160	$ 5,305	0.3%
4011-000-00	RVSD	2,152,400	2,131,911	2,137,992	6,081	0.3%
4011-000-00	SD #2	575,641	579,510	581,163	1,653	0.3%
4011-000-00	SQSP	379,434	381,106	382,193	1,087	0.3%
	Totals	$ 4,960,117	$ 4,952,382	$ 4,966,508	$ 14,126	0.3%
	Capacity Charges					
4020-010-00	SRSD	$ 168,677	$ 11,720	$ 12,036	$ 316	2.7%
4020-020-00	RVSD	52,769	11,720	12,036	316	2.7%
4020-030-00	SD #2	108,633	5,860	6,018	158	2.7%
	Totals	$ 330,079	$ 29,300	$ 30,091	$ 791	2.7%

Note 1: See flow-strength tables in appendix A

Note 2: See EDU allocation table in appendix A

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SCHEDULE OF REVENUES AND OTHER FINANCING SOURCES
(Continued)

Account #	Description	Actual 2016-17	Fiscal Year 2017-18	Fiscal Year 2018-19	Amount Increase (Decrease)	Percent Increase (Decrease)	Notes
	Contract Service Revenues						
4601-000-00	San Quentin State Prison Wastewater Services	$ 813,946	$ 589,690	$ 522,405	$ (67,285)	-11.4%	O&M plus capital * 3.54% (see appendix)
4601-001-00	San Quentin State Prison Pump Station Maint	139,616	108,110	111,570	3,460	3.2%	Bay Area CPI Jan-Jan at 3.0%
4602-000-00	San Quentin Village Wastewater Services	68,500	49,950	45,297	(4,653)	-9.3%	FY18 budget to Marin County PW
4600-000-00	SD#2 Pump Stations	420,488	403,400	394,536	(8,864)	-2.2%	FY18 Corte Madera PS Budget
4031-000-00	LGVSD - FOG & pollution prevention	16,163	16,500	10,000	(6,500)	-39.4%	Source control service estimate
4033-000-00	RVSD - FOG	13,659	21,500	8,000	(13,500)	-62.8%	Source control service estimate
4034-000-00	SRSD - FOG	15,519	25,600	10,000	(15,600)	-60.9%	Source control service estimate
4035-000-00	TCSD - FOG	1,587	2,200	1,500	(700)	-31.8%	Source control service estimate
4036-000-00	SD #2 - FOG	5,558	7,500	2,500	(5,000)	-66.7%	Source control service estimate
4038-000-00	Almonte SD - FOG	1,270	1,500	1,500	-	0.0%	Source control service estimate
4037-000-00	Novato SD - Dental Amalgam	2,576	3,000	1,500	(1,500)	-50.0%	Source control service estimate
	Total contract service revenues	$ 1,498,882	$ 1,228,950	$ 1,108,808	$ (120,142)	-9.8%	
	Program Revenues						
4070-000-00	Health & Safety Program	$ 89,953	$ 91,500	$ 86,600	$ (4,900)	-5.4%	Shared program with Novato Sanitary
4080-001-00	County-wide Public Education Program	44,371	51,700	59,430	7,730	15.0%	Multi-agency program budget
4080-002-00	Outside Safety Training	-	-	-	-	-	
	Total program revenues	$ 134,324	$ 143,200	$ 146,030	$ 2,830	2.0%	
	Haulers, Permits & Inspection						
4030-000-00	Permit and Inspection Fees	$ 18,246	$ 24,000	$ 24,000	$ -	0.0%	Permitting of regulated businesses
4050-010-00	Revenue from Haulers - Septic	84,762	70,000	75,000	5,000	7.1%	$83.30 per 1,000 gal plus sampling fee
4050-020-00	Revenue from Haulers - RV	510	250	250	-	0.0%	$10 per load
4050-030-00	Revenue from Haulers - FOG	94,889	90,000	75,000	(15,000)	-16.7%	Tiered pricing per fee ordinance
4050-035-00	Revenue from Haulers - Liquid Waste	506	2,000	4,200	2,200	110.0%	Price negotiated per truckload
4050-040-00	Revenue from Foodwaste Disposal	47,675	40,000	43,000	3,000	7.5%	Tipping fee from Marin Sanitary Service
	Total haulers, permits & inspection	$ 246,588	$ 226,250	$ 221,450	$ (4,800)	-2.1%	
	Interest Income						
4910-002-00	Interest Income - LAIF	$ 110,275	$ 112,000	$ 210,000	$ 98,000	87.5%	LAIF yield at 1.5%
4910-011-00	Investment Interest - CAMP	2,810	1,500	5,760	4,260	284.0%	CAMP yield at 1.6%
	Total interest income	$ 113,085	$ 113,500	$ 215,760	$ 102,260	90.1%	
	Other Revenues						
4990-000-00	Other non-operating revenue	$ 21,758	$ 20,000	$ 20,000	$ -	0.0%	Miscellaneous infrequent items
4990-011-00	CAMP non-operating revenue	-	-	-	-	-	
	Total other revenues	$ 21,758	$ 20,000	$ 20,000	$ -	0.0%	

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Central Marin Sanitation Agency
Adopted FY 2018-19 Operating Budget

Summary of Expenditures by Departments and Category

Operating Expenditures by Department	FY 16-17 Audited Actuals	FY 17-18 Adopted Budget	FY 18-19 Adopted Budget	% Change FY19 Adopted Budget from FY18 Adopted Budget
ADMINISTRATION	4,083,893	4,554,500	4,734,400	3.9%
MAINTENANCE	1,898,518	2,008,700	1,918,900	-4.5%
OPERATIONS	3,014,720	3,150,600	3,243,100	2.9%
TECHNICAL SERVICES	1,801,732	1,748,800	1,925,600	10.1%
TOTAL	**$ 10,798,862**	**11,462,600**	**11,822,000**	**3.1%**

Operating Expenditures by Category	FY 16-17 Audited Actuals	FY 17-18 Adopted Budget	FY 18-19 Adopted Budget	% Change FY19 Adopted Budget from FY18 Adopted Budget	Proposed % of Budget
SALARIES	5,252,732	5,401,800	5,555,200	2.8%	47.0%
BENEFITS	2,405,934	2,561,100	2,758,700	7.7%	23.3%
SUB-TOTAL	**7,658,667**	**7,962,900**	**8,313,900**	**4.4%**	**70.33%**
CHEMICALS & FUELS	1,113,251	1,069,500	1,126,900	5.4%	9.5%
UTILITIES	292,642	350,500	317,800	-9.3%	2.7%
BIOSOLIDS MANAGEMENT	353,400	387,700	400,300	3.2%	3.4%
PERMIT TESTING & MONITORING	110,973	179,500	148,800	-17.1%	1.3%
MAINTENANCE & REPAIRS	355,653	382,500	363,500	-5.0%	3.1%
GENERAL & ADMINISTRATIVE	703,327	868,800	900,000	3.6%	7.6%
INSURANCE	210,950	261,200	250,800	-4.0%	2.1%
SUB-TOTAL	**3,140,195**	**3,499,700**	**3,508,100**	**0.2%**	**29.67%**
TOTAL	**10,798,862**	**11,462,600**	**11,822,000**	**3.1%**	**100.00%**

Benefit Expenditures	FY 16-17 Audited Actuals	FY 17-18 Adopted Budget	FY 18-19 Adopted Budget	% Change FY19 Adopted Budget from FY18 Adopted Budget	Benefits as a Percent of Total Revenue
					$ 18,657,706
RETIREMENT (CALPERS CLASSIC, PEPRA, UAL)	947,873	1,030,600	1,195,000	16.0%	6.40%
RETIREMENT - CALPERS CLASSIC	*496,917*	*493,498*	*523,151*		*2.80%*
RETIREMENT - CALPERS PEPRA	*47,258*	*55,400*	*74,100*		*0.40%*
RETIREMENT - CALPERS UNFUNDED ACCRUED LIABILITY	*403,697*	*481,702*	*597,749*		*3.20%*
RETIREMENT - CALPERS SURVIVORS	2,219	2,700	2,700	0.0%	0.01%
RETIREMENT - SOCIAL SECURITY/MEDICARE	77,576	84,000	84,300	0.4%	0.45%
CALPERS MEDICAL - ACTIVE EMPLOYEES	886,849	908,500	983,600	8.3%	5.27%
DENTAL - ACTIVE EMPLOYEES	103,890	117,000	123,100	5.2%	0.66%
LIFE INSURANCE, AD&D, LTD - ACTIVE EMPLOYEES	23,322	25,100	28,700	14.3%	0.15%
VISION - ACTIVE EMPLOYEES	10,826	11,600	12,500	7.8%	0.07%
MARA - ACTIVE EMPLOYEES	29,035	34,600	46,300	33.8%	0.25%
CALPERS MEDICAL - RETIRED EMPLOYEES	167,958	198,200	204,500	3.2%	1.10%
ANNUAL OPEB CONTRIBUTION	116,455	107,400	43,100	-59.9%	0.23%
BENEFIT ADMINISTRATION FEES	5,508	6,400	7,900	23.4%	0.04%
TOTAL *	**2,371,510**	**2,526,100**	**2,731,700**	**8.1%**	**14.64%**

* Benefit line items for administration fees, uniforms and unemployment benefits are excluded from the Benefit Expenditures FY 18-19 table.

Discussion: Comparison between FY 17-18 Adopted to FY 18-19 Adopted Budget

Salaries

- Salary increase of 3% for represented and unrepresented employees in accordance with the 2014 Memorandum of Understanding and the Compensation and Benefits for Unrepresented Employees.
- 11 Employees eligible to receive step advancement.
- One open Safety Specialist/Manager position budgeted at a higher salary than the previous year, one new Laboratory Analyst position and one new Assistant Operations Supervisor position.
- Eliminated E/I Assistant Maintenance Supervisor position and replaced with entry level Electrical/Instrumentation Tech I position.
- Compensatory time, vacation, and holiday time cash-outs included in the budget.

Benefits

- Employer retirement contributions increased for both Classic (12.212%) and PEPRA (6.842%) employees. The Classic employer rate also includes $597K for the required unfunded accrued liability (UAL) contribution.
- PEHP (Post-Employment Health Plan) benefits increased with new hire position replacements and the creation of the new Laboratory Analyst position.
- Agency Other Post Employee Benefit (OPEB) annual required contribution is $50K lower as a result of new calculation requirements in the most recent GASB 75 Actuarial Valuation as of January 1, 2018. GASB 75 replaced GASB 45 which had more complicated calculation requirements.
- CalPERS medical costs are budgeted at the applicable family rate for all employees and are budgeted to increase 4.5% in 2019.

Chemicals

- Increase in chemical procurement costs (ferric chloride, hydrogen peroxide, sodium hypochlorite, sodium bisulfate) due to increased unit costs established by the Bay Area Chemical Consortium, and projected increased usage for some chemicals.

Biosolids Management

- Biosolids management costs expected to increase by a 3.2% San Francisco Bay Area CPI adjustment.
- Hauling costs expected to increase a total of 3.2% using the annual San Francisco Bay Area Consumer Price Index.

Permit Testing and Monitoring

- 24% decrease for laboratory supplies for several one-time purchases in FY 18 and an allocation adjustment for good laboratory practice requirements.
- County requirements for the monthly inspection of the underground tank overfill containment will decrease 59%. The reduction from the previous year is due to removing CUPA costs from this account.

- Secondary containment testing for the Agency's two underground fuel tanks takes place every three years and took place in FY 18 and is not budgeted for FY 19. The next test is scheduled for FY 21.

Utilities

- Reduction in natural gas procurement due to increased biogas production from organic waste program expecting 94% uptime running the cogeneration system.
- 28% decrease due to Marin Sanitary Service absorbing the quarterly cleaning costs for the organic waste receiving facility.

Maintenance and Repairs

- Fleet maintenance costs decrease with the expectation less maintenance will be required on newer vehicles and electric carts purchased over the past few years.
- Plant pumps increase 39% to refurbish two TWAS pumps and two septage receiving station pumps.
- Centrifuge maintenance decreases 50% due to the three centrifuge units not being scheduled for replacement until FY 21.

Insurance

- Property and general liability insurance are estimated to be 5%-11% lower by applying the CSRMA recommended increase to the current year's actual premium.
- Workers' Compensation insurance decreased due to a reduction in the experience modification factor, known as the X-mod factor, from a previous factor of 1.03 to 0.82, for a 20% drop. This is due to no lost-time accidents over the previous year.

General & Administrative

- This category has increased 3.6% due to recruitment costs related to anticipated retirements. Agency staff negotiated an upgrade to the internet and telephone services for an overall price increase of approximately $60 per month and a speed increase from 15mbs to 100mbs.

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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 administrative official responsible for the overall operations and management 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 CSRMA
- Administers the Health & Safety Program
- Maintains the Agency's communication and information technology systems

Administration Expenditures by Category	FY 16-17 Audited Actuals	FY 17-18 Adopted Budget	FY 18-19 Adopted Budget
SALARIES	$1,065,511	$1,222,000	$1,233,000
BENEFITS	2,405,934	2,561,100	2,758,700
SUBTOTAL	**$3,471,446**	**$3,783,100**	**$3,991,700**
INSURANCE	210,950	261,200	250,800
GENERAL & ADMINISTRATIVE	401,496	510,200	491,900
SUBTOTAL	**$ 612,447**	**$ 771,400**	**$ 742,700**
TOTAL	**$4,083,893**	**$4,554,500**	**$4,734,400**

Authorized Positions	FY 16-17	FY 17-18	FY 18-19
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	1
Safety Specialist/Manager	-	-	1
Health and Safety Manager	-	1	
Safety Director	1	-	-
TOTAL	**7**	**8**	**8**

*Transferred from Technical Services

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***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 16-17 Audited Actuals	FY 17-18 Adopted Budget	FY 18-19 Adopted Budget	% Change FY19 Adopted Budget from FY18 Adopted Budget	Budget Account Description
SALARIES & BENEFITS							
5010-010-01	Salaries, Wages & Compensation	ASM	1,059,297	1,214,500	1,224,400	0.82%	Salaries for eight full-time employees and CMSA's 60.25% share of the Safety Specialist/Manager salary. FY19 increases are for a 3% COLA salary increase, one step adjustment, and leave balance cash-outs.
5010-020-01	Overtime	GM	6,214	7,500	8,600	14.67%	Authorized overtime to complete special activities or assignments, and employee compensatory time leave balance cash-outs.
Subtotal Salaries & Wages			**1,065,511**	**1,222,000**	**1,233,000**	**0.90%**	
5020-020-01	Retirement CalPERS - Classic	ASM	900,614	975,200	1,120,900	14.94%	Employer contributions for CalPERS 2.7% @ 55 for Classic employee retirement program. The FY 19 employer contribution rate is 12.212% for Classic employees and FY 19 includes a $598K UAL (unfunded accrued liability) payment. The 8% Employer Paid Member Contribution (EPMC) was eliminated from the FY 18 Budget.
5020-021-01	Retirement CalPERS-PEPRA	ASM	47,258	55,400	74,100	33.75%	Employer contributions for CalPERS 2% @ 62 retirement program for PEPRA employees hired after January 1, 2013. The FY 19 employer PEPRA contribution rate is 6.842%.
5020-022-01	Retirement CalPERS-Survivors	ASM	2,219	2,700	2,700	0.00%	Annual Survivors Benefit premium.
5020-030-01	Retirement - SS / Medicare	ASM	77,576	84,000	84,300	0.36%	Employer's 1.45% share of Medicare for all employees.
5030-010-01	Benefits-CalPERS Medical	ASM	886,849	908,500	983,600	8.27%	Budget based upon current CalPERS Kaiser family rate effective January through December 2018, and an estimated 4.5% premium increase for January through June 2019.
5030-001-01	Benefits-Dental	ASM	103,890	117,000	123,100	5.21%	Employer paid dental benefits.
5030-003-01	Benefits-Life Insurance, AD&D, LTD	ASM	23,322	25,100	28,700	14.34%	Employer paid life, accidental death & dismemberment, and long-term disability insurances.
5030-004-01	Benefits-Vision	ASM	10,826	11,600	12,500	7.76%	Employer paid vision benefits.

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ADMINISTRATION

Account #	Account Name	*By	FY 16-17 Audited Actuals	FY 17-18 Adopted Budget	FY 18-19 Adopted Budget	% Change FY19 Adopted Budget from FY18 Adopted Budget	Budget Account Description
5030-015-01	Benefits-PEHP	ASM	29,035	34,600	46,300	33.82%	PEHP: Post Employment Health Plan. Employer contribution of 1.5% of base salary for 24 employees (FY 18 was 20 employees). Budget increase is a function of salary adjustments, and is offset by the administrative fee being included in the Benefit Administrative Fees account 5050-001-01.
5030-020-01	Retired Employees Medical Benefits	ASM	167,958	198,200	204,500	3.18%	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 was 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	116,455	107,400	43,100	-59.87%	Prefunding of the Agency's post-employment health benefit obligations for current retirees and employees. The prefunding amount is the annual FY 19 estimated OPEB expense in the Agency's January 1, 2018 GASB 75 actuarial report minus retiree medical premiums.
5050-000-01	Unemployment Benefits Claimed	ASM	17,527	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 Adminstration Fees	ASM	5,508	6,400	7,900	23.44%	Administrative fees charged for medical, MARA, and NAVIA Flex 125 plans.
5060-000-01	Uniforms	AE	16,897	25,000	17,000	-32.00%	Contracted service to provide uniforms, jackets, fire resistant clothing, and miscellaneous related work clothing for staff, and towel and floor mat cleaning services.
Subtotal Benefits			**2,405,934**	**2,561,100**	**2,758,700**	**7.72%**	
Total Salaries & Benefits			**3,471,446**	**3,783,100**	**3,991,700**	**5.51%**	
INSURANCE							
6800-010-01	Property Insurance	ASM	52,023	58,400	55,000	-5.82%	Annual property insurance coverage from the CSRMA for all Agency buildings and structures. The decrease is based on FY 18 actual plus 10% per CSRMA's recommendation.

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ADMINISTRATION

Account #	Account Name	*By	FY 16-17 Audited Actuals	FY 17-18 Adopted Budget	FY 18-19 Adopted Budget	% Change FY19 Adopted Budget from FY18 Adopted Budget	Budget Account Description
6800-020-01	General Liability & Auto Insurance	ASM	42,767	48,700	43,200	-11.29%	CSRMA pooled insurance coverage for general, automobile, and error and omission liability premiums. FY 19 decrease is based on FY 18 actual plus a 5% increase recommended by CRSMA.
6800-030-01	Pollution Liability Insurance	ASM	967	1,100	1,100	0.00%	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	1,339	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.
6800-050-01	Commercial Crime Insurance	ASM	-	800	800	0.00%	This insurance provides coverage for dishonest public employees, loss of money orders, depositor's forgery, or counterfeit currency. It is intended to cover all employees not covered under the employee/public official bonds.
5040-000-01	Workers' Compensation Insurance	ASM	113,855	150,000	148,500	-1.00%	CSRMA workers’ compensation (WC) insurance for Agency employees.
Subtotal Insurance			**210,950**	**261,200**	**250,800**	**-3.98%**	
GENERAL ADMINISTRATIVE							
6700-010-01	Meetings/Training	GM	3,388	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	21,716	25,000	25,000	0.00%	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	6,200	11,600	10,000	-13.79%	Pursuant to Commission compensation policy, CMSA Commissioners receive $100 per day of service. There is an allowance for Commissioners conference attendance.

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ADMINISTRATION

Account #	Account Name	*By	FY 16-17 Audited Actuals	FY 17-18 Adopted Budget	FY 18-19 Adopted Budget	% Change FY19 Adopted Budget from FY18 Adopted Budget	Budget Account Description
6805-000-01	Professional Affiliation Memberships	ASM	4,071	4,400	4,400	0.00%	Professional memberships, license, and registration requirements for department staff.
6805-001-01	BACWA Membership	GM	7,960	8,000	8,100	1.25%	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	8,000	0.00%	Agency sponsorship for the Bay Area Consortium for Water & Wastewater Education Program. The consortium is comprised of 20 partner agencies.
6805-002-01	NBWA Membership	GM	5,936	6,000	6,000	0.00%	Annual membership dues to the North Bay Watershed Association (NBWA), which is comprised of 23 governmental agencies from the North San Pablo Bay watershed.
6805-003-01	CASA Membership	GM	15,834	16,000	16,100	0.63%	Annual membership dues to the California Association of Sanitation Agencies (CASA).
6805-004-01	NACWA Membership	GM	12,333	12,500	11,000	-12.00%	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	6,500	12,500	11,000	-12.00%	Agency membership for Bay Area Biosolids-to-Energy Coalition, which is comprised of 19 regional wastewater agencies.
6815-000-01	Office Expenses	AA	31,184	29,500	35,000	18.64%	Costs associated with the Agency's administrative operations, including office supplies, copier leases, office furniture, office equipment service and repairs, and other related expenses.
6815-001-01	Safety Supplies	OS	20,639	37,300	27,800	-25.47%	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	99	26,400	37,200	40.91%	Expenses related to Information Technology equipment and software licenses and upgrades.

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ADMINISTRATION

Account #	Account Name	*By	FY 16-17 Audited Actuals	FY 17-18 Adopted Budget	FY 18-19 Adopted Budget	% Change FY19 Adopted Budget from FY18 Adopted Budget	Budget Account Description
6820-000-01	Printing & Publications	AA	2,770	3,000	2,000	-33.33%	Expenses associated with newspaper subscriptions, publication of notices, and copy services at local print shops.
6830-001-01	General Professional Services	GM	107,128	51,000	71,000	39.22%	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	52,734	51,000	10,000	-80.39%	Consultation and advice on regulatory compliance and permit issues.
6830-005-01	Finance & Audit Services	ASM	25,626	25,300	28,000	10.67%	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	9,068	9,400	9,800	4.26%	IDEA annual fee for labor relations and negotiations services. Budget adjusted to align with actual anticipated expenses.
6830-015-01	Legal Services	GM	13,369	30,000	30,000	0.00%	Expenses for general, employment law, and contruction/contract legal services.
6830-016-01	Health & Safety Program, CMSA Share	ASM	7,847	36,300	38,000	4.68%	This account represents the Agency’s share (60.25%) of the Health & Safety Program non-salary costs. The remaining 39.75% of the Health & Safety Program budget is included in Cooperative Agreements Expenses. The budget also includes CMSA's equally shared cost of the NSD's .25 FTE equivalent Administrative/Risk Services & Safety Officer.
6830-017-01	Outside Safety Training Services	ASM	4,869	13,100	5,600	-57.25%	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 decrease is for fewer planned trainings during FY 19.
6830-025-01	Employee Assistance Services	AA	908	2,000	4,500	125.00%	Confidential professional counseling benefit provided to employees. The fee is increased annually.
6830-060-01	Employee Health Maintenance Services	AA	1,316	2,500	3,000	20.00%	Expense for workplace safety related physicals, pre-employment exams, and urgent care at Medical Center of Marin.

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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 16-17 Audited Actuals	FY 17-18 Adopted Budget	FY 18-19 Adopted Budget	% Change FY19 Adopted Budget from FY18 Adopted Budget	Budget Account Description
6840-010-01	Internet & Telephone Service	ISA	26,259	23,900	28,700	20.08%	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	3,692	5,900	2,500	-57.63%	Postage, delivery, and overnight shipping expense.
6859-000-01	Bank Fees & Analysis Charges	ASM	1,459	2,300	1,500	-34.78%	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	2,425	2,100	2,500	19.04%	Bank fees for the Refunding Revenue Bonds Series 2015.
6860-000-01	Trade Discounts	ASM	(1,896)	-	-	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	64	-	-	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.
Subtotal General & Administrative			**401,496**	**510,200**	**491,900**	**-3.59%**	
Subtotal (excluding Salary and Benefits)			**612,447**	**771,400**	**742,700**	**-3.72%**	
Total Administration			**4,083,893**	**4,554,500**	**4,734,400**	**3.95%**	

Maintenance

The Maintenance Department is responsible for maintaining Agency facility assets which include buildings, grounds, vehicles, and treatment plant specific facilities and associated equipment. Certified mechanical technicians and utility workers perform a wide variety of preventative and corrective maintenance and repair work on all Agency assets. 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. The department utilizes an enterprise asset management system for scheduling corrective and preventive maintenance, to manage its fixed assets, and to track repairs and maintenance activities with their associated costs.

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

Maintenance Expenditures by Category	FY 16-17 Audited Actuals	FY 17-18 Adopted Budget	FY 18-19 Adopted Budget
SALARIES	$1,525,598	$1,609,500	$1,534,300
SUBTOTAL	**$1,525,598**	**$1,609,500**	**$1,534,300**
LUBRICANTS, PROPANE, OTHER	5,536	6,000	6,000
MAINTENANCE & REPAIRS	350,117	376,500	357,500
GENERAL & ADMINISTRATIVE	17,267	16,700	21,100
SUBTOTAL	**$ 372,920**	**$ 399,200**	**$ 384,600**
TOTAL	**$1,898,518**	**$2,008,700**	**$1,918,900**

Authorized Positions	FY 16-17	FY 17-18	FY 18-19
Maintenance Supervisor	1	1	1
Assistant Maintenance Supervisor	1	1	1
Maintenance Lead	1	1	1
Maintenance Repair	1	1	-
Mechanical Technician	4	4	5
Utility Worker	3	3	3
Assistant Maintenance Supervisor-(E/I)**	1	1	-
Electrical/Instrumentation Tech	2	2	3
TOTAL	**14**	**14**	**14**

* The Maintenance Repair position was replaced with an additional Mechanical Technician position

** The Assistant Maintenance Supervisor-(E/I) retired in FY 18 and the position is being replaced by an additional Electrical/Instrumentation Tech

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Central Marin Sanitation Agency
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Line Item Accounts

***Position Code**

ASM Administrative Services Manager
TPM Treatment Plant Manager
MS Maintenance Supervisor
EIT Electrical Instrumentation Technician

MAINTENANCE

Account #	Account Name	*By	FY 16-17 Audited Actuals	FY 17-18 Adopted Budget	FY 18-19 Adopted Budget	% Change FY19 Adopted Budget from FY18 Adopted Budget	Budget Account Description
SALARIES & WAGES							
5010-010-03	Salaries, Wages & Compensation	ASM	1,461,866	1,554,300	1,476,300	-5.02%	Salaries for 14 full-time employees. FY19 includes a 3% COLA salary increase for represented and unrepresented employees, seven step adjustments and leave balance cash-outs. Decrease due to one retirement replaced with entry level position.
5010-103-10	Transfer to CIP	ASM	(26,014)	(33,300)	(33,300)	0.00%	Transfer of salary expenses for staff assigned to CIP funded projects (.32 FTE).
5010-020-03	Overtime	TPM	39,066	33,300	34,400	3.30%	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	50,681	55,200	56,900	3.08%	24/7 Stand-by duty for qualified maintenance staff to respond to emergency repair work and equipment failures. Employees are paid to remain fit for duty and to respond within one hour when called. Sanitary District #2 funds one half of this expense. FY 19 increase is function of salary and step increases.
Subtotal Salaries & Wages			**1,525,598**	**1,609,500**	**1,534,300**	**-4.67%**	
MAINTENANCE & REPAIRS (M&R)							
6400-030-03	Lubricants, Propane, Other	MS	5,536	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	6,598	7,000	7,000	0.00%	Janitorial and general facility maintenance cleaning supplies.
6510-001-03	Outside Services & Parts	TPM	30,672	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.

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***Position Code**

ASM Administrative Services Manager
TPM Treatment Plant Manager
MS Maintenance Supervisor
EIT Electrical Instrumentation Technician

MAINTENANCE

Account #	Account Name	*By	FY 16-17 Audited Actuals	FY 17-18 Adopted Budget	FY 18-19 Adopted Budget	% Change FY19 Adopted Budget from FY18 Adopted Budget	Budget Account Description
6510-004-03	Fleet Maintenance	MS	20,996	20,000	15,000	-25.00%	This account is for preventative, predictive, and corrective maintenance on the Agency's fleet vehicles, and includes purchases of batteries, oil, tires, and other consummables. The Agency's fleet consists of 10 vehicles, two forklifts, a skid steer loader, 15 electric carts, and 7 bicycles.
6510-007-03	Hazardous Waste Disposal Service	MS	21,394	25,000	25,000	0.00%	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).
6510-008-03	Facilities Maintenance	MS	19,575	20,000	22,000	10.00%	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. This budget also includes funds for facility pest control services.
6510-009-03	Electrical Equipment	EIT	26,252	23,000	23,000	0.00%	Allowance for procurement of routine electrical equipment such as conduit, wiring, electrical connectors, fittings, consumable electrical supplies, and facility lighting (light bulbs, tubes, LED lights).
6510-010-03	Plant Pumps	MS	15,144	18,000	25,000	38.89%	Allowance for routine consumable parts and equipment such as impellors, gasket material, and volutes.
6510-011-03	Process Tank Maintenance	MS	8,387	20,000	20,000	0.00%	Allowance for routine consumable parts and equipment for facility process tanks and the primary heat exchanger (excludes heat exchangers utilized by the cogeneration system).
6510-012-03	Centrifuge Maintenance	MS	19,924	20,000	10,000	-50.00%	Consumable items for annual preventive and corrective maintenance for three centrifuges and their system components.
6510-013-03	Process (Filter) Media Replacement	MS	23,200	25,000	25,000	0.00%	Biogas and air purification media for facility equipment. Budget is for the purchase of media for one sulftreat vessel, one siloxane filter, and one activated carbon odor scrubber replacement per year.

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***Position Code**

ASM Administrative Services Manager
TPM Treatment Plant Manager
MS Maintenance Supervisor
EIT Electrical Instrumentation Technician

MAINTENANCE

Account #	Account Name	*By	FY 16-17 Audited Actuals	FY 17-18 Adopted Budget	FY 18-19 Adopted Budget	% Change FY19 Adopted Budget from FY18 Adopted Budget	Budget Account Description
6510-014-03	Organic Waste Receiving Facility (OWRF)	MS	46,408	45,000	40,000	-11.11%	Allowance for consumable items required for maintaining the (OWRF). The FY 19 budget assumes performing two complete mixing pump impellor/cutter bar changeouts, purchasing one set of paddle finisher screens, six spare hoses, glycerin, rock trap grinder parts, and other critical spare inventory items.
6510-015-03	Boilers and Hot-water Systems	MS	5,524	8,000	8,000	0.00%	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	7,929	8,000	5,000	-37.50%	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	51,062	50,000	50,000	0.00%	Routine parts and equipment for scheduled cogeneration system and standby diesel generator maintenance. The budget assumes four 2,000 hour maintenance procedures on the cogeneration system and one annual maintenance procedure on the emergency standby diesel generator.
6520-000-03	Groundskeeping	MS	34,517	45,000	40,000	-11.11%	Facility landscaping services and supplies to maintain the Agency's property. Services include fire-defensible space maintenance, weed abatement, and clean-up project work. In FY18, CMSA began participating in the CoM AOWP. This line has been reduced in FY19 as services that normally would be completed by contractors will now be performed by program participants.
6530-000-03	Small Tools & Equipment	MS	12,536	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.
Subtotal Maintenance & Repairs			**355,653**	**382,500**	**363,500**	**-4.97%**	

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Central Marin Sanitation Agency
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***Position Code**

ASM Administrative Services Manager
TPM Treatment Plant Manager
MS Maintenance Supervisor
EIT Electrical Instrumentation Technician

MAINTENANCE

Account #	Account Name	*By	FY 16-17 Audited Actuals	FY 17-18 Adopted Budget	FY 18-19 Adopted Budget	% Change FY19 Adopted Budget from FY18 Adopted Budget	Budget Account Description
GENERAL & ADMINISTRATIVE							
6700-010-03	Meetings/Training	TPM	3,837	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	9,380	8,000	12,500	56.25%	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	3,771	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	279	300	200	-33.33%	Annual Underground Service Alerts fee to identify utility locations prior to any type of digging or excavation work.
Subtotal General & Administrative			**17,267**	**16,700**	**21,100**	**26.35%**	
Subtotal (excluding Salary and Benefits)			**372,920**	**399,200**	**384,600**	**-3.66%**	
Total Maintenance			**1,898,518**	**2,008,700**	**1,918,900**	**-4.47%**	

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Operations

The Operations Department performs various activities essential to the day-to-day operation and process control of the Agency's National Clean Water Agency (NACWA) recognized Class V regional wastewater treatment facility. The treatment, reuse, and disposal of wastewater is in full compliance with state and federal National Pollutant Discharge Elimination System (NPDES) permit requirements.

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 station

Operations Expenditures by Category	FY 16-17 Audited Actuals	FY 17-18 Adopted Budget	FY 18-19 Adopted Budget
SALARIES	$1,572,245	S1,678,600	S1,734,400
SUBTOTAL	**$1,572,245**	**S1,678,600**	**S1,734,400**
CHEMICALS & FUELS	1,113,251	1,069,500	1,126,900
UTILITIES	292,642	350,500	317,800
GENERAL & ADMINISTRATIVE	36,582	52,000	64,000
SUBTOTAL	**$1,862,963**	**S1,472,000**	**S1,508,700**
TOTAL	**$3,435,209**	**S3,150,600**	**S3,243,100**

Authorized Positions	FY 16-17	FY 17-18	FY 18-19
Operations Supervisors	2	2	2
Assistant Operations Supervisor*	-	-	1
Lead Operators	2	2	1
Operators (Trainee, I-III)	9	9	9
TOTAL	**13**	**13**	**13**

* The Board approved the Assistant Operations Supervisor position in FY 17-18 to allow implementation of the Operations Department's succession plan.

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Central Marin Sanitation Agency
Adopted FY 2018-19 Operating Budget
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***Position Code**

ASM Administrative Services Manager
AOS Assistant Operations Supervisor
OS Operations Supervisor
TPM Treatment Plant Manager

OPERATIONS

Account #	Account Name	*By	FY 16-17 Audited Actuals	FY 17-18 Adopted Budget	FY 18-19 Adopted Budget	% Change FY19 Adopted Budget from FY18 Adopted Budget	Budget Account Description
SALARIES & WAGES							
5010-010-04	Salaries, Wages & Compensation	ASM	1,439,975	1,554,300	1,613,600	3.82%	Salaries for 13 full-time employees. Includes a COLA increase of 3% for represented and unrepresented employees, six step adjustments, and leave balance cash-outs. Increase due to adding Assistant Operations Supervisor and step adjustments.
5010-104-10	Transfer to CIP	ASM	-	(16,700)	(16,700)	0.00%	Transfer of salary expenses for staff assigned to CIP funded projects (.14 FTE).
5010-020-04	Overtime	OS	118,998	122,200	126,000	3.11%	Authorized overtime to ensure facilities are properly staffed 24 hours/day and to complete specified activities or assignments.
5010-022-04	OPS Wet Weather Stand-by Duty	TPM	13,273	18,800	11,500	-38.83%	24/7 stand-by duty provided by qualified operations staff during the wet weather season (November-April). Employees are paid to remain fit for duty and must respond within one hour after being called in for emergency situations.
Subtotal Salaries & Wages			**1,572,245**	**1,678,600**	**1,734,400**	**3.32%**	
CHEMICALS & FUEL							
6100-010-04	Ferric Chloride	OS	69,673	65,800	81,500	23.86%	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.
6100-020-04	Polymer-Cationic	OS	99,131	104,800	110,000	4.96%	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 increase in this line is attributed to the actual usage of polymer which has increased to three deliveries per year.
6100-030-04	Odor Control	OS	19,160	19,000	15,000	-21.05%	A chemical agent used to mask odorous compounds produced by some wastewater processes. Odorants are delivered in 55 gallon barrels.

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***Position Code**

ASM Administrative Services Manager
AOS Assistant Operations Supervisor
OS Operations Supervisor
TPM Treatment Plant Manager

OPERATIONS

Account #	Account Name	*By	FY 16-17 Audited Actuals	FY 17-18 Adopted Budget	FY 18-19 Adopted Budget	% Change FY19 Adopted Budget from FY18 Adopted Budget	Budget Account Description
6100-040-04	Calcium Nitrate	OS	264,766	294,900	200,000	-32.18%	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.
6100-050-04	Hydrogen Peroxide	OS	210,517	220,000	306,000	39.09%	Hydrogen peroxide is the second phase of the odor control system. It is injected into the system interceptors upstream of the headworks.
6100-060-04	Sodium Hypochlorite	OS	159,030	168,000	204,400	21.67%	Sodium hypochlorite is is used for effluent and recycled water disinfection, and in three treatment plant odor control scrubbers.
6100-070-04	Sodium Bisulfite	OS	277,521	180,200	195,000	8.21%	Sodium bisulfite is used to neutralize the chlorine residual in the effluent prior to its discharge into the San Francisco Bay.
6400-020-04	Gasoline, Diesel, Oil, & Fuel	OS	13,453	16,800	15,000	-10.71%	Gasoline for vehicles and landscaping equipment, diesel for emergency diesel-fueled generators and the effluent pump station pumps.
Subtotal Chemicals & Fuel			**1,113,251**	**1,069,500**	**1,126,900**	**5.37%**	
UTILITIES							
6835-010-04	Natural Gas	OS	23,312	40,000	37,300	-6.75%	Supplemental fuel for the cogeneration system, and fuel for the boilers when the cogen system is offline, typically 2 hours a day. The cogeneration system typically operates at approximately 22+ hours a day on Agency produced biogas.
6835-020-04	Electricity	OS	189,859	204,000	201,000	-1.47%	Electricity to supplement the cogeneration system output and to supply power when the cogenerator is offline for maintenance a few days each month.
6835-030-04	Water	AOS	8,827	9,000	9,500	5.56%	Potable water for CMSA and the San Quentin junction box odor control facility. The Marin Municipal Water District has announced a series of 5% rate increases over the next several years.

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***Position Code**

ASM Administrative Services Manager
AOS Assistant Operations Supervisor
OS Operations Supervisor
TPM Treatment Plant Manager

OPERATIONS

Account #	Account Name	*By	FY 16-17 Audited Actuals	FY 17-18 Adopted Budget	FY 18-19 Adopted Budget	% Change FY19 Adopted Budget from FY18 Adopted Budget	Budget Account Description
6835-040-04	Garbage	AOS	70,645	97,500	70,000	-28.21%	Solid waste disposal for garbage, green waste, recycling, and debris box disposal of headworks screenings, grit, and non-recyclable wastes. Expenses associated with the quarterly cleaning, debris removal, of the OWRF were absorbed by MSS this past calendar year. The adjusted budget line reflects that change and also accounts for a 5.57% rate increase as of January 1, 2018.
Subtotal Utilities			**292,642**	**350,500**	**317,800**	**-9.33%**	
GENERAL & ADMINISTRATIVE							
6210-000-04	Operations - General	TPM	3,948	6,000	6,000	0.00%	Small tools, equipment, parts, and other miscellaneous supplies.
6215-000-04	Process Control Consumable Supplies	AOS			10,000	0.00%	Chemical reagents are substances used in a chemical reaction to detect, measure, examine, or produce other substances. CMSA uses chemical reagents to verify and/or determine the concentration of chlorine in treated wastewater. These chemicals are also use to assist in field instrument calibration, determine peroxide concentrations in wastewater, measure pH, and measure sulfide levels in biogas.
6700-010-04	Meetings/Training	TPM	5,984	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	2,413	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	5,990	6,500	5,000	-23.08%	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	15,418	20,000	18,500	-7.50%	Bay Area Air Quality Management District (BAAQMD) permit fees for the cogeneration engine, emergency engine, five effluent pump station engines, and fuel dispensers.

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***Position Code**

ASM Administrative Services Manager
AOS Assistant Operations Supervisor
OS Operations Supervisor
TPM Treatment Plant Manager

OPERATIONS

Account #	Account Name	*By	FY 16-17 Audited Actuals	FY 17-18 Adopted Budget	FY 18-19 Adopted Budget	% Change FY19 Adopted Budget from FY18 Adopted Budget	Budget Account Description
6830-001-04	Professional Services: Process Control	TPM	2,829	10,000	15,000	50.00%	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. The increase in this budget line is for specialized Secondary System (Activated Sludge) Training. Assumes two full training days.
Subtotal General & Administrative			**36,582**	**52,000**	**64,000**	**23.08%**	
Subtotal (excluding Salary and Benefits)			**1,442,475**	**1,472,000**	**1,508,700**	**2.49%**	
Total Operations			**3,014,720**	**3,150,600**	**3,243,100**	**2.94%**	

Technical 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:

- Design small maintenance and capital projects and oversee the design of larger projects outsourced to engineering consulting firms.
- Manage construction contracts and projects and associated engineering construction records.
- Assist with operational studies, and energy efficiency and greenhouse gas emission evaluations.
- Negotiate and administer 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 the 10-year forecast.
- Assist with Underground Service Alert (U.S.A) utility locating services.
- Regulate 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.
- Provides regulatory enforcement and program administration services under contract with wastewater and other local agencies in Marin County for source control programs; and storm water enforcement.
- Lead the Wastewater Treatment Agencies of Marin County Public Education Program.

Technical Services Expenditures by Category	FY 16-17 Audited Actuals	FY 17-18 Adopted Budget	FY 18-19 Adopted Budget
SALARIES	$1,089,378	$ 891,700	$1,053,500
SUBTOTAL	**$1,089,378**	**$ 891,700**	**$1,053,500**
BIOSOLIDS DISPOSAL	353,400	387,700	400,300
PERMIT TESTING & MONITORING	110,973	179,500	148,800
GENERAL & ADMINISTRATIVE	247,981	289,900	823,000
SUBTOTAL	**$ 712,354**	**$ 857,100**	**$ 872,100**
TOTAL	**$1,801,732**	**$1,748,800**	**$1,925,600**

Authorized Positions	FY 16-17	FY 17-18	FY 18-19
Technical Services Manager	1	1	1
Associate Engineer	-	-	1
Assistant Engineer	2	2	1
Information Systems Analyst*	1	-	-
Environmental Services Manager**	1	-	-
Laboratory Director**	-	1	1
Environmental Laboratory Administrator	1	1	1
Laboratory Analyst***	-	-	1
Environmental Services Analyst (I-II)	3	3	3
TOTAL	**9**	**8**	**9**

* Transferred to Administration department.

** 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.

*** To comply with the new environmental laboratory accreditation standards, the Board authorized creating a new Laboratory Analyst position in FY 17-18.

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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

Account #	Account Name	*By	FY 16-17 Audited Actuals	FY 17-18 Adopted Budget	FY 18-19 Adopted Budget	% Change FY19 Adopted Budget from FY18 Adopted Budget	Budget Account Description
SALARY & WAGES							
5010-010-05	Salaries, Wages & Compensation	ASM	1,025,041	1,010,000	1,178,700	16.70%	Salaries for nine full-time employees and includes a 3% COLA salary increase of for employees, 3-step adjustments, one potential promotion, one new laboratory analyst, and leave balance cash-outs. FY 18 under budget due to extended medical leave for two employees.
5010-105-10	Transfer to CIP	GM	47,898	(135,200)	(135,200)	0.00%	Transfer of salary expenses for staff assigned to CIP funded projects (.61 FTE).
5010-020-05	Overtime	TSM	13,808	9,700	7,500	-22.68%	Authorized overtime to complete special activities or assignments including activities supporting the public education program, and employee compensatory time leave balance cash-outs.
5010-022-02	Wet Weather Stand-by Duty	TSM	2,632	7,200	2,500	-65.28%	Stand-by duty is assigned to a laboratory analyst during wet weather events when there is a reasonable potential that a blending event may occur during the weekend. This account balance has been reduced significantly from previous fiscal years because past practice was to authorize stand-by duty for the entire wet weather season.
Subtotal Salary & Wages			**1,089,378**	**891,700**	**1,053,500**	**18.15%**	
BIOSOLIDS MANAGEMENT							
6200-010-02	Biosolid Reuse Fees	TSM	256,077	275,000	283,900	3.24%	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	97,323	112,700	116,400	3.28%	Approximately one load per day of biosolids is hauled from CMSA to one of the biosolids reuse sites.
Subtotal Biosolids Management			**353,400**	**387,700**	**400,300**	**3.25%**	

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***Position Code**

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

TECHNICAL SERVICES

Account #	Account Name	*By	FY 16-17 Audited Actuals	FY 17-18 Adopted Budget	FY 18-19 Adopted Budget	% Change FY19 Adopted Budget from FY18 Adopted Budget	Budget Account Description
PERMIT TESTING & MONITORING							
6300-000-02	Lab Supplies	LD	44,356	74,700	57,000	-23.69%	Laboratory and source control program supplies including all chemicals, glassware, reagents, consumables, disposable containers, filters, bioassay, and other supplies. The budget is higher than normal for FY 18 and FY 19 due to one-time equipment purchase.
6310-030-02	Biosolids Monitoring: Contract Lab Services	LD	5,336	10,100	9,500	-5.95%	Laboratory analysis cost associated with biosolids monthly and semiannual regulatory monitoring requirements. Decrease based upon aligning the budget to past actual expenditures.
6320-010-02	NPDES Permit Sampling & Testing	LD	46,913	65,200	65,200	0.00%	Outsourced laboratory analysis cost associated with NPDES permit compliance orders. Includes monthly, quarterly, semiannual, annual, and permit period monitoring requirements.
6320-020-02	Pretreatment Sampling	TSM	12,484	14,300	14,300	0.00%	Contract for lab analysis of pretreatment samples and monitoring industrial waste.
6330-010-02	Underground Tank Testing: Overfill Containment	TSM	1,884	6,900	2,800	-59.42%	Annual testing and monitoring of underground gasoline and diesel tank over-fill and secondary. The Agency 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 21, the last testing occurred in FY 18.
Subtotal Permit Testing & Monitoring			**110,973**	**179,500**	**148,800**	**-17.10%**	
GENERAL & ADMINISTRATIVE							
6510-008-05	Facilities Maintenance					0.00%	Expenses for service contracts to maintain laboratory equipment including the deionized water system, vacuum pump, and bioassay pH pump control.

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TECHNICAL SERVICES

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6700-010-05	Meetings/Training	TSM	1,326	4,500	4,500	0.00%	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	8,605	15,800	15,800	0.00%	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	3,600	4,000	3,700	-7.50%	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	48,522	55,000	55,000	0.00%	Annual renewal fee for SWRCB administration of the NPDES permit and pre-treatment program fee. The State Water Board has not reported its FY 19 NPDES permit fee structure.
6810-040-02	ELAP Certification	TSM	2,170	6,700	11,000	64.18%	Fees for annual renewal of the laboratory certification, inspections, required testing, certificates, and ELAP operating costs. DMRQA testing, previously expended from other accounts, is now included in this line item as it is a certification requirement.
6810-050-02	Regional Monitoring Program SFEI	TSM	26,216	30,000	30,000	0.00%	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	24,140	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	2,120	4,200	4,900	16.67%	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	641	1,800	1,800	0.00%	SWRCB permit for the Agency's industrial site stormwater permit.

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TECHNICAL SERVICES

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6810-080-02	BAPPG Membership	TSM	838	1,800	1,800	0.00%	Bay Area Pollution Prevention Group pollution prevention and pretreatment program sponsorship as required in the Agency's NPDES permit.
6810-090-02	eNPDES Software	TSM	-	1,300	-	-100.00%	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	12,000	12,000	40,000	233.33%	The existing software database used to manage the Agency's Pretreatment and Pollution Prevention Programs will be replaced with a software program that is better suited for source control program management with lower annual maintenance fees and better support.
6821-000-02	Public Education Program: CMSA portion	GM	27,464	32,500	35,000	7.69%	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	381	500	500	0.00%	Office supplies: ink cartridges, paper for large-format printer/plotter, and other miscellaneous office expenses.
6815-002-05	Information Systems	TSM	-	700	2,000	185.71%	Allowance for engineering productivity and project management software. One-time allowance to purchase a program to replace the software used for bioassay results. The current software requires Excel 2003 that is unsupported.
6815-003-05	Software License & Support	TSM	17,045	-	-	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	267	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 continue the gap analysis of the current CMMS system and provide basic asset management training engineering and maintenance staff. An allowance is included for the pilot scale digester testing program.

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TECHNICAL SERVICES

Account #	Account Name	*By	FY 16-17 Audited Actuals	FY 17-18 Adopted Budget	FY 18-19 Adopted Budget	% Change FY19 Adopted Budget from FY18 Adopted Budget	Budget Account Description
6830-002-05	Cathodic Protection	TSM	6,220	7,600	5,500	-27.63%	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	66,426	40,000	40,000	0.00%	This account is used to fund engineering consultant services including a study to determine the necessary analyzers to automate control of various treatment processes.
Subtotal General & Administrative			**247,981**	**289,900**	**323,000**	**11.42%**	
Subtotal (excluding Salary and Benefits)			**712,354**	**857,100**	**872,100**	**1.75%**	
Total Engineering			**1,801,732**	**1,748,800**	**1,925,600**	**10.11%**	

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

The Agency provides contract services 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 tracks 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 18-19 and estimated expenses incurred by CMSA for its services.

Cooperative Agreement Services	FY 16-17 Audited Actuals	FY 17-18 Adopted Budget	FY 18-19 Adopted Budget
CONTRACT SERVICE REVENUES			
San Quentin State Prison Wastewater Services	$ 813,946	$ 589,690	$ 522,405
San Quentin State Prison Pump Station Maintenance	139,616	108,110	111,570
San Quentin Village Wastewater Services	68,500	49,950	45,297
SD#2 Pump Stations	420,488	403,400	394,536
LGVSD - FOG & Pollution Prevention	16,163	16,500	10,000
SD #1 – FOG	13,659	21,500	8,000
SRSD – FOG	15,519	25,600	10,000
TCSD – FOG	1,587	2,200	1,500
SD #2 – FOG	5,558	7,500	2,500
Almonte SD – FOG	2,576	1,500	1,500
Novato SD - Dental Amalgam	1,270	3,000	1,500
SUBTOTAL CONTRACT SERVICE REVENUES	**$1,498,883**	**$1,228,950**	**$1,108,808**
Health & Safety Program	89,953	91,500	86,600
County-wide Education Program	44,371	51,700	59,430
SUBTOTAL PROGRAM REVENUES	**$ 134,324**	**$ 143,200**	**$ 146,030**
TOTAL CONTRACT SERVICE REVENUES	**$1,633,207**	**$1,372,150**	**$1,254,838**

COOPERATIVE AGREEMENT SERVICE EXPENDITURES (EXCLUDING ADMINISTRATIVE OVERHEAD CHARGES)			
San Quentin State Prison Wastewater Services	$ 816,946	$ 589,690	$ 522,405
San Quentin State Prison Pump Station Maintenance	128,095	96,110	98,747
San Quentin Village Wastewater Services	64,406	45,473	40,820
SD#2 Pump Stations	372,657	356,946	348,082
LGVSD - FOG & Pollution Prevention	13,249	13,525	8,197
SD #1 - FOG	12,417	19,545	7,273
SRSD - FOG	14,108	23,273	9,091
TCSD - FOG	1,301	1,803	1,230
SD #2 - FOG	5,053	6,818	2,273
Almonte SD – FOG	2,342	1,364	1,364
Novato SD - Dental Amalgam	1,041	2,459	1,230
SUB-TOTAL COOPERATIVE AGREEMENT EXPENDITURES	**$1,428,615**	**$1,157,006**	**$1,040,710**
Health & Safety Program	83,625	89,271	84,200
County-wide Education Program	38,584	44,957	51,678
SUB-TOTAL PROGRAM EXPENDITURES	**$ 122,208**	**$ 134,228**	**$ 135,878**
TOTAL COOPERATIVE AGREEMENT EXPENDITURES	**$1,550,823**	**$1,291,233**	**$1,176,588**

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GM General Manager
SS/M Safety Specialist/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 16-17 Audited Actuals	FY 17-18 Adopted Budget	FY 18-19 Adopted Budget	% Change FY19 Adopted Budget from FY18 Adopted Budget	Budget Account Description
ADMINISTRATION - HEALTH & SAFETY PROGRAM							
5010-010-06	Salaries, Wages & Compensation	ASM	68,461	46,600	48,900	4.94%	Novato Sanitary Distict's (NSD) share of the Safety Specialist/Manager position salary is 39.75% and includes car allowance and leave cash-outs. The increase is due to budgeting the mid-salary range. The Agency's share is 60.25% and is allocated to the Administration Budget.
5020-020-06	CalPERS Retirement	ASM	7,312	10,239	11,700	14.27%	Employer and employer-paid employee contributions for CalPERS 2.7% @ 55 retirement program.
5020-030-06	SS / Medicare	ASM	806	700	800	14.28%	Employer's 1.45% share of Medicare.
5030-010-06	Employee Health Benefits	ASM	10,083	4,600	11,700	154.33%	Employer-paid contributions for employee benefits includes insurance coverage for health, dental, vision, life, accident and disability. Budget increase is due to family health benefit coverage (FY 18 was employee only coverage).
5030-015-06	Employee Benefits-PEHP	ASM	850	700	700	0.00%	PEHP is a post employment health plan employer-paid contribution totaling 1.5% of base salary and $180 per year administration fee.
5030-020-06	Retiree Health Benefits	ASM	2,461	2,700	2,600	-3.70%	Medical benefits for one retired employee and one surviving spouse.
5065-000-06	Shoes	ASM	-	100	-	-99.58%	Shoes are now included in program expenses account 6830-016-06.
6830-016-06	Health & Safety Manager Program Expenses	HSM	2,894	8,500	8,200	-3.53%	Professional services, materials, supplies, and memberships to administer the Safety Program for two participating agencies. NSD's program share is 39.75% of program costs. CMSA's 60.25% share is budgeted to 6830-016-01.
6830-017-06	Prof'l Service: Outside Safety	HSM	-	11,200	4,600	-58.93%	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.
Subtotal Administration			**92,867**	**85,339**	**89,200**	**4.52%**	

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

Account #	Account Name	*By	FY 16-17 Audited Actuals	FY 17-18 Adopted Budget	FY 18-19 Adopted Budget	% Change FY19 Adopted Budget from FY18 Adopted Budget	Budget Account Description
TECHNICAL SERVICES							
6821-000-06	Countywide Public Education Program	GM	42,188	45,000	52,000	15.56%	Program expenditures to administer the County Wide Education Program for five participating agencies such as promotional materials, booth registration fees, public outreach program costs, sponsorships, supplies, and memberships. CMSA's 40.6% share of the program cost is budgeted to Technical Services account 6821-000-02. Increase is due to funding RxSafe Marin and Marin Science and Environmental Leadership programs.
Subtotal Technical Services			**42,188**	**45,000**	**52,000**	**15.56%**	
MAINTENANCE							
6600-000-06	SD-2 Pump Stations	MS	115,660	117,200	120,900	3.16%	SD#2 pump station maintenance costs for repair services, parts, supplies, equipment and recommended maintenance and capital expenditures. The decrease is attributable to fewer planned maintenance projects.
6600-001-06	SQP Pump Station Maintenance	TPM	107,517	44,300	110,000	148.31%	SQP pump station maintenance costs include labor, mileage, repair services, parts, supplies, equipment, and recommended maintenance and capital expenditures.
6600-002-06	SQ Village WW System Maintenance	TPM	48,420	25,700	20,300	-21.01%	SQV wastewater maintenance costs include labor, mileage, repair services, parts, supplies, equipment, and recommended maintenance and capital expenditures.
Subtotal Maintenance			**271,597**	**187,200**	**251,200**	**34.19%**	
Total Cooperative Agreement Expenses			**406,651**	**317,539**	**392,400**	**23.58%**	

SECTION 8. CAPITAL IMPROVEMENT PROGRAM

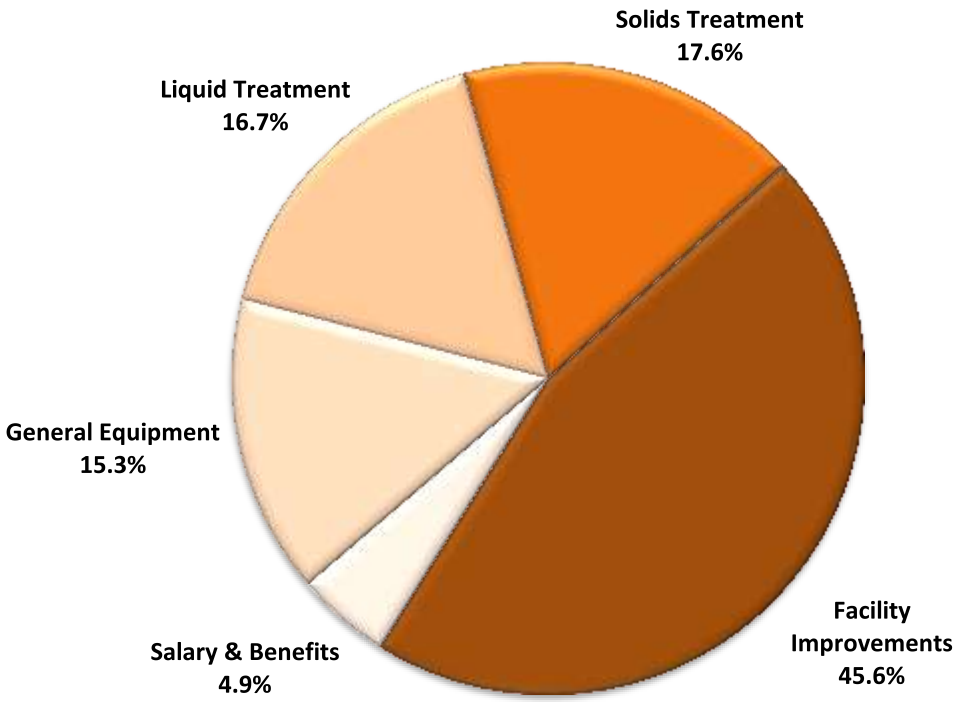
The treatment and disposal of wastewater and its beneficial reuse of by-products is a highly regulated enterprise that requires significant capital infrastructure. CMSA operates an around-the-clock wastewater facility, and the various assets and equipment necessary for the treatment processes are subjected 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 19 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 five years. Examples include land, buildings, machinery, vehicles, and equipment. All capital assets that the Agency plans to acquire or construct are included in the FY 19 CIP.

	FY 16-17 Adopted Budget	FY 17-18 Adopted Budget	FY 18-19 Adopted Budget	FY 19 Projects
CIP Categories:				
1. Salary & Benefits for CIP Management	$ 181,800	$ 185,200	$ 185,200	
2. Facility Improvements	1,335,500	1,740,600	557,500	6
3. General Equipment	368,400	584,300	454,600	7
4. Liquid Treatment Equipment and Systems	1,283,800	635,700	1,220,200	11
5. Solids Treatment and Energy Generation Equipment and Systems	1,023,500	671,800	445,000	7
TOTAL CIP PROJECTS	**$4,193,000**	**$3,817,600**	**$2,862,500**	**31**

FY 18-19 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 19 are:

- Primary Clarifier Gates Actuator System: The five original primary clarifiers have several large gates that control flow into the tanks from the headworks. Plant operations staff uses hydraulic system to open and close primary clarifier gates. The hydraulic system was installed when the plant was constructed in 1985 and can only be operated with levers located at each gate. This project will replace the hydraulic gate operators with an electronic actuator system that can be operated through CMSA's Supervisory control and data acquisition (SCADA). This will increase reliability and will allow plant operations staff to remotely open and close the gates.

- Secondary Clarifiers Rehabiliation: There are four secondary clarifiers in the treatment plant. The 2018 Facilities Master Plan recommends a project for each clarifier to repair corrosion on mechanical equipment, metal structural components, and pipes inside the clarifier, resurfacing the effluent trough concrete, retrofitting the catwalk with FRP grating, and repairing corrosion on piping in the sumps in the pump room (Master Plan Project 08-1). While each clarifier is out of service, the large drive turntables in Clarifiers 1, 3, and 4 will be replaced. The turntable drive for Clarifier No. 2 was replaced in 2011. This a multi-year project that includes the design of the improvements in FY 19 with construction of the improvements occurring in the FY 20, FY 21, and FY 22 summers.

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 19 CIP Budget and 10-year CIP schedule were prepared by an interdisciplinary CIP team comprising managers and supervisors from the Technical Services and 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 Manager and Administrative Services Manager 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 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 California 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 $48 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 19 the Agency will have accumulated approximately $5.5 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 projects from the Facilities Master Plan in the development of the Agency's next Five-Year Revenue Plan for the period from the fiscal year 2019-20 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 to the extent possible.

Fiscal Year 19 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 19 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 19 may have a direct impact on the FY 19 operating budget.

Adopted FY 18-19 Capital Improvement Program – Summary of Changes

Category	FY 17-18 Adopted Budget	FY 17-18 Projected Actuals	FY 18-19 Adopted Budget	# of Activities
Facility Improvements	$ 1,740,600	$ 1,084,786	$ 557,500	6
General Equipment	584,300	474,313	454,600	7
Liquid Treatment Equipment and Systems	635,700	462,977	1,220,200	11
Solids Treatment and Energy Generation	671,800	203,000	445,000	7
Staff Costs	185,200	185,200	185,200	2.0 FTE
Total	***$3,817,600***	*$2,410,276*	***$2,862,500***	*31*

FY 17-18 Projected Actuals

Projected total spending is expected to be 64% of the adopted budget amount. Of the $1.37 million in unexpended budgeted funds, most is associated with the Hillside Slope Stabilization project delay caused by the retirement of the FEMA project manager ($350K), PG&E Interconnection Agreement Modification study reimbursement allowance not needing to be fully utilized ($425K), and the Facility Paving ($148K) and Industrial Coating ($55K) projects being deferred to summer projects in FY19.

FY 18-19 Priority Projects

1) Industrial Coatings ($215K): Rehabilitate epoxy coatings in the SBS chemical storage room and SBS and hypochlorite spill vaults. Also in a separate contracts, seal cracks in the underground gallery walls and apply new epoxy paint in chlorine contact tanks 5 & 6.

2) PG&E Interconnection Agreement Modifications ($100K): Complete the PG&E interconnection agreement modification process and install electrical equipment to allow for power export.

3) Hillside Slope Stabilization ($35K): Design and construction of retaining walls to repair the landslides in the hillside adjacent to Andersen Drive. FEMA has approved funding to repair the slope failures, and is currently evaluating the pre-design geotechnical report. The FY 19 budget is net of the anticipated FEMA reimbursement.

4) Pavement Rehabilitation Project ($175K): Bid, award, and construction of pavement repair and rehabilitation in the vicinity of the solids handling building, maintenance covered parking area, and new maintenance storage building.

5) Gates Rehabilitation ($436K): Replace the hydraulic system used to open and close primary clarifier gates with an electronic actuator system that will be operated with CMSA's SCADA system.

6) Secondary Clarifier Rehabilitation ($325K): Repair corrosion on mechanical equipment, metal structural components and pipes inside a clarifier, and replace the turntable drive. This is the first year of a four year program to rehabilitate all four secondary clarifiers.

7) Process Piping ($190K): Perform an interior inspection of large diameter buried pipelines in the treatment plant. The project potentially includes internal sealing of some or all of the elastomeric joints and other external pipe repairs, based on inspection results.

8) Cogeneration System Maintenance ($145K): Onsite cogeneration engine upper end rebuild and replacement of turbo chargers, and an allowance to survey potential cogeneration technologies for the planned design of a new cogeneration system.

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GL Account Number	PM*		Delivery Method	Prior FYs' Costs	Adopted Budget For FY 18	Projected FY 18 Actuals	10-year CIP 1 Adopted FY 19	2 FY 20	3 FY 21	4 FY 22	5 FY 23	6 FY 24	7 FY 25	8 FY 26	9 FY 27	10 FY 28	Total FY 19 - FY 28	Project Totals
Facility Improvements																		
7300-103-10	**TSM**	**Effluent Storage Pond Rehabilitation**	**FB**		-	-	-	-	-	38,700	1,225,700	-	-	-	-	-	1,264,400	1,264,400
7300-700-10	**TSM**	**Agency Facilities Master Plan (3)**	**PSA**		260,000	250,000	30,000	-	-	-	-	-	-	-	-	-	30,000	280,000
7300-956-00	TSM	Industrial Coatings & Concrete Rehabilitation	IB/MC		65,000	10,000	215,000	194,100	99,200	21,000	147,100	24,500	25,100	25,900	140,300	27,500	919,700	
7300-987-00	TSM	Outfall Inspection & Repairs	IB/MC		32,200	32,000	33,000	34,000	423,200	36,100	37,200	38,300	39,500	40,700	41,900	43,200	767,100	
7400-103-10	**TSM**	**Maintenance Facility Modifications (3)**	**FB**	161,740	800,000	701,548	-	-	-	-	-		-	-	-	-	-	863,288
7400-945-00	TSM	Facility Improvements	IB				44,000	-	-	-	-	35,000	-	-	-	40,300	119,300	
7400-956-00	TSM	Facility Paving/Site Work	IB/MC		148,400	-	200,000	135,900	11,200	11,500	145,100	12,100	12,400	167,800	13,000	13,400	722,400	
7400-600-00	TSM	Hillside Slope Stabilization	FB		400,000	50,000	35,500	-	-	-	-	-	-	-	-	-	35,500	
7400-960-00	**TSM**	**Facility Roofs Rehabilitation**	**MC/IB/FB**		35,000	41,238	-	78,100	953,600	-	9,900	-	-	-	-	-	1,041,600	1,082,838
7400-967-00	**TSM**	**SHB Elevator Control Replacement**	**IB**			-	-	-	-	-	103,500	-	-	-	-	-	103,500	103,500
7400-963-00	**TSM**	**Facility Structures Seismic Study**	**PSA**			-	-	207,000	-	-	-	-	-	-	-	-	207,000	207,000
		Subtotal - Facility Improvements			1,740,600	1,084,786	557,500	649,100	1,487,200	107,300	1,565,000	109,900	77,000	234,400	195,200	124,400	5,210,500	
General Equipment																		
7300-672-00	ISA	Process Control	M/MC		37,900	20,000	30,000	31,600	48,800	34,000	34,200	35,100	51,000	36,900	37,900	39,000	378,500	
7300-672-10	TSM/ISA	Security / Fire Systems	MC		13,900	-	25,000	4,100	-	4,300	-	4,600	-	4,900	-	5,200	48,100	
7300-683-00	MS/TSM	Fuel Storage Tanks	IB/MC		35,000	12,140			116,300	-	-	-	-	133,900	-	-	250,200	
7410-851-00	ISA	IT Hardware and Communication Equip	M		56,900	43,000	66,200	44,900	15,300	50,700	16,200	16,600	17,000	17,500	17,900	18,400	280,700	
7420-701-00	MS	Agency Vehicle Replacement	IB/PO		51,000	41,573	95,400	40,000	70,000	6,000	41,400	73,100	54,400	181,500	82,100	84,600	728,500	
7430-958-00	LD	Laboratory Equipment	PO		166,600	166,600	85,000	90,000	62,500	40,000	120,000	45,000	46,400	47,800	49,200	50,700	636,600	
7450-002-00	MS	Electrical Equipment	M/IB		120,100	95,000	100,000	120,000	100,000	109,000	98,000	94,000	85,000	87,600	90,300	93,000	976,900	
7450-002-10	MS	Plant Lighting	IB		26,000	26,000	22,000	14,000	15,000	16,000	10,000		-	-	-	-	77,000	
7450-102-00	MS	Process Instrumentation	M		51,900	45,000	31,000	40,000	25,000	25,800	26,600	27,400	28,200	29,100	30,000	30,900	294,000	
7450-105-00	**MS**	**Electrical Distribution System Rehabilitation**	**PSA/FB**		25,000	25,000	-	-	1,204,800	-	194,500	-	203,800	-	216,200	-	1,819,300	1,844,300
		Subtotal - General Equipment			584,300	474,313	454,600	384,600	1,657,700	285,800	540,900	295,800	485,800	539,200	523,600	321,800	5,489,800	
Liquids Treatment Equipment and Systems																		
7300-685-00	**TSM**	**Bio-Tower Rotary Distributor Replacement**	**IB**	-	-	-	-	-	-	-	-	988,000	-	-	-	-	988,000	988,000
7300-700-00	MS	Plant Pumps	MC/M		74,800	70,000	63,300	80,000	66,100	67,600	69,100	70,700	71,500	73,900	76,100	78,400	716,700	
7300-719-00	MS	Chemical Pumps	M		113,000	65,000	80,600	77,600	155,200	181,000	67,000	56,400	57,200	59,200	61,600	62,800	858,600	
7300-720-00	**MS**	**Gates Rehabilitation**	**M/IB**		35,000	32,000	436,400	77,500	79,400	81,100	83,600	437,700	85,800	88,700	92,300	95,500	1,558,000	1,590,000
7300-727-00	**MS**	**Headworks Equipment**	**M**		50,000	65,000	27,400	28,900	32,100	30,400	361,100	32,100	255,600	1,056,200	34,700	35,800	1,894,300	1,959,300
7300-981-00	**TSM**	**Odor Control System Improvements (3)**	**PSA/FB**	112,420	28,500	2,825	-	-	-	-	-	2,003,600	-	2,276,800	1,546,800	-	5,827,200	5,942,445
7300-983-00	MS	Process Tank Maintenance	M/IB		85,000	30,000	70,000	60,000	535,800	63,600	65,500	67,500	69,500	71,600	73,800	76,000	1,153,300	
7400-965-00	**TSM/MS**	**Primary Clarifiers Rehabilitation**	**MC/M**		33,400	25,000	40,000	-	-	347,800	358,300	369,200	760,800	-	161,200	167,800	2,205,100	2,230,100
7300-990-00	**MS**	**Secondary Clarifiers Rehabilitation**	**PSA/IB**		-	33,152	150,000	507,100	401,800	227,800		-	-	-	-	-	1,286,700	1,319,852
7300-991-00	**TSM**	**RAS/WAS Pump Replacement**	**TSM**			-	-	-	389,700	779,500	779,500	-	-	-	-	-	1,948,700	1,948,700
7300-995-00	TPM	Aeration System Rehabilitation	M/IB		20,100	20,000	20,000	-	-	-	-	40,000	-	-	-	-	60,000	
7400-966-00	**TSM**	**Process Piping Inspection/Repairs/Replacement**	**PSA**	97	-	-	190,000	-	-	-	-	-	779,300	113,800	163,400	-	1,246,500	1,246,597
7430-855-00	MS	Chemical Tanks	M/IB		40,000	40,000	45,000	65,100	69,400	100,000	37,200	44,400	2,600	46,600	56,100	58,100	524,500	
7430-857-00	MS	Piping, Valves & Operators	M		130,900	80,000	72,500	58,300	59,600	60,900	62,200	63,600	64,400	71,100	74,000	76,600	663,200	
7430-859-00	TSM	CCT Valve Rehabiliation	TSM				-	-	-	-	-	-	-	-	335,300	-	335,300	
7450-104-10	TSM	Influent Flow Meter Improvement	PSA		25,000	-	25,000	207,000	-	-	-	-	-	-	-	-	232,000	
		Subtotal - Liquids Treatment Equipment and Systems			635,700	462,977	1,220,200	1,161,500	1,789,100	1,939,700	1,883,500	4,173,200	2,146,700	3,857,900	2,675,300	651,000	21,498,100	

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GL Account Number	PM*		Delivery Method	Prior FYs' Costs	Adopted Budget For FY 18	Projected FY 18 Actuals	10-year CIP 1 Adopted FY 19	2 FY 20	3 FY 21	4 FY 22	5 FY 23	6 FY 24	7 FY 25	8 FY 26	9 FY 27	10 FY 28	Total FY 19 - FY 28	Project Totals
Solids Treatment and Energy Generation Equipment and Systems																		
7300-678-00	TSM	Emergency Generator Assessment & Improvement	PSA/FB		-	-	-	-	-	-	-	-	80,300	499,700	1,499,200	-	2,079,200	
7300-691-00	TSM	Digester Inspection, Cleaning & Cover Replacement	FB		-	-	-	-	-	886,500	906,200	-	-	-	-	-	1,792,700	
7300-715-00	**TSM/MS**	**Centrifuge Maintenance**	**PSA/FB**	**3,139**	**-**	**-**	**40,000**	**-**	**500,000**	**2,703,000**	**-**	**-**	**-**	**-**	**-**	**-**	**3,243,000**	**3,246,139**
7300-722-00	**MS**	**Cogeneration Maintenance (3)**	**M/IB/FB**		**86,300**	**50,000**	**145,000**	**449,600**	**2,011,000**	**1,694,700**	**64,900**	**66,300**	**68,000**	**77,300**	**80,400**	**83,200**	**4,740,400**	
7300-724-00	MS	Hot Water Systems	M/PSA		34,000	**32,000**	14,900	15,200	15,500	15,800	16,100	16,500	17,400	17,400	18,100	18,700	165,600	
7300-728-00	TSM	Digester Mixing Pump Study	PSA			-		100,000	-	-	-	-	-	-	-	-	100,000	
7300-725-00	MS	Boilers and Gas Processing Equipment	IB		-	-	74,500	-	-	-	-	-	538,600	-	-	-	613,100	
7300-977-00	MS	Sludge Recirculating Pump Grinders	M		18,000	**18,000**	18,900	19,400	19,800	20,300	20,700	21,100	21,400	22,100	23,100	23,900	210,700	
7300-978-00	MS	Biosolids Hoppers Maintenance	M		8,500	**3,000**	-	9,300	-	9,600	-	10,000	-	10,900	-	11,600	51,400	
7300-980-00	MS	Organic Waste Receiving Facility Equipment				-	51,700	54,500	55,900	57,400	58,900	60,400	62,100	63,600	65,400	67,700	597,600	
7300-660-00	TSM	PG&E Interconnection Agreement Modification	PSA/IB		525,000	**100,000**	100,000	-	-	-	-	-	-	-	-	-	100,000	
7300-661-00	TSM	FOG/F2E Vault Relining	M/MC		-	-	-	-	-	-	-	-	-	-	-	-	-	
		Subtotal - Solids Treatment and Energy Generation Equipment and Systems			**671,800**	**203,000**	**445,000**	**648,000**	**2,602,200**	**5,387,300**	**1,066,800**	**174,300**	**787,800**	**691,000**	**1,686,200**	**205,100**	**13,693,700**	
		CMSA Staff Costs for CIP (2)			185,200	185,200	185,200	190,800	196,600	202,600	208,700	215,000	221,600	228,300	235,200	242,300	2,126,300	
		Annual CIP Totals			3,817,600	2,410,276	2,862,500	3,034,000	7,732,800	7,922,700	5,264,900	4,968,200	3,718,900	5,550,800	5,315,500	1,544,600	48,018,400	

* 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.

Projected Annual Escalation Rate:	**3.03%**	(rolling 5-year average of ENR San Francisco Construction Cost Index (CCI) annual changes 12/2013-07/2017).								
Escalation Factors	1.0303	1.0616	1.0938	1.1269	1.1611	1.1963	1.2326	1.2700	1.3085	

2016 to 2017 CCI % Change	**3.49%**
	1.0349

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

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Facility Improvements		
ACCOUNT NUMBER	**ACCOUNT / PROJECT TITLE**	**ACCOUNT / PROJECT DESCRIPTION**
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	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. FY 19 – Complete construction projects to seal cracks in the gallery system with epoxy injection (Master Plan Project 00-4) and to repair failing epoxy coating the Sodium Bisulfite (SBS) Room and SBS and hypochlorite drain vaults. Apply new epoxy paint on the chlorine contact tanks 5 & 6 piping and repair the concrete cold joints. FY 20 – Replace headworks structural metal (skylights, pipe supports, etc.) and apply new epoxy coating on the new metal and the grit tank handrails. FY 21 – Repair wear coating on the Headworks deck and install wear coating on CCTs 1-4. FY 22 – Allowance for industrial coatings as needed. FY 23 – Repair the saw cut floor area in the digester basement (Master Plan Project 13-2). FY 24-26 –Allowance for industrial coating as needed. FY 27 – Repair cracked concrete in the ferric storage room and recoat the floor (Master Plan Project 04-5). FY 28 – Allowance for industrial coating as needed.
7300-987-00	Outfall Inspection & Repairs	On-going 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. FY 19 – Inspect the diffuser section of the outfall, and includes an allowance to replace up to five broken diffusers if found during the inspection. FY 20 – Routine inspection and riser extension or replacement (assumed 5 total), as needed. FY 21 – 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 20. Cost estimate based on escalating the $300,000 costs from FY 09. FY 22-28 – Routine inspection and riser extension or replacement (assumed 5 per year), as needed.

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CAPITAL IMPROVEMENT PROGRAM - ACCOUNT / PROJECT DESCRIPTIONS
ADOPTED FY 19 BUDGET AND 10-YEAR PROJECTION

Facility Improvements		
ACCOUNT NUMBER	**ACCOUNT / PROJECT TITLE**	**ACCOUNT / PROJECT DESCRIPTION**
	Facility Improvements	This new account is for various building improvements that are not incorporated into other capital projects. FY 19 – Relocate the operations control room and create new work spaces in the Administration Building, install roll-up doors on the new annex building, and install new secondary containment system for the hazardous materials storage. FY 24 – Allowance for building improvements. FY 28 – Allowance for building improvements.
7400-956-00	Facility Paving/ Site Work	This account is for minor paving repairs and associated site work on internal facility roads, walkways, parking lots, and other pavement, and for re-grading, cleaning, and replacing gravel in drainage ditches. FY 19 – Complete construction of a major plant paving project around the solids handling building, maintenance building canopy, and the new annex building concrete approach pad. FY 20 – Allowance for a major plant slurry seal and striping project (plant road from gate to OWRF). FY 23 – Allowance for a major plant paving project (employee parking area). FY 26 – Allowance for a major plant paving project (plant road from primary clarifiers to solids handling building).
7400-600-00	Hillside Slope Stabilization	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 and received approval of our Request for Public Assistance. FEMA funds are limited to 75% of the total eligible costs for the permanent repairs. Cal OES will also provide funding for up to 18.75% of the total cost, leaving CMSA's share at 6.25%. While the total estimated budget to construct the hillside improvements is $568,000, only CMSA's share is in the budget.
7400-960-00	Facility Roofs Rehabilitation	See Full Page Description.
7400-967-00	SHB Elevator Control Replacement	See Full Page Description.
7400-963-00	Facility Structures Seismic Study	See Full Page Description.

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CAPITAL IMPROVEMENT PROGRAM - ACCOUNT / PROJECT DESCRIPTIONS
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General Equipment		
ACCOUNT NUMBER	**ACCOUNT / PROJECT TITLE**	**ACCOUNT / PROJECT DESCRIPTION**
7300-672-00	Process Control	Allowances for on-going replacement, upgrades, and improvements to the Agency's process control system including new instruments, servers, and computers; and Programmable Logic Controllers (PLCs) 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. FY 19-20 – Routine PLC and HMI hardware replacement. Identify and purchase critical spares. FY 21 – Routine PLC and HMI hardware replacement. Identify and purchase critical spares. Battery replacement at hilltop repeater. FY 22 – Routine PLC and HMI hardware replacement and replace SCADA workstations. Identify and purchase critical spares. FY 23-24 – Routine PLC and HMI hardware replacement. Identify and purchase critical spares. FY 25 – SCADA system software review and potential upgrades. FY 26-28 – Routine PLC and HMI hardware replacement.
7300-672-10	Security/ Fire Systems	Allowance for projects related to the Agency's physical security and fire protections systems, and includes a biannual allowance to purchase replacement equipment as needed. FY 19 – Inspect existing fire protection systems and address deficiencies as needed.
7300-683-00	Fuel Storage Tanks	Allowance to replace the existing underground fuel storage tanks with above ground storage tanks. 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.
7410-851-00	IT Hardware and Communication Equip	Routine repair and regular replacement of Information Technology hardware and software, such as office computers, printers, scanners, digital telephone equipment and its supporting servers, and voice radio equipment used by Agency staff. FY 19 – Allowance for equipment listed above and upgrade 21 business computers hardware, purchase four new desktops, five laptops, and upgrade software on remaining 18 business workstations. FY 20 – Allowance for equipment listed above and upgrade/replacement of plant fiber runs. FY 21 – Allowance for equipment listed above. FY 22 – Allowance for equipment listed above and replacement of the data servers on which all Agency business and SCADA virtual servers run. FY 23-28 – Allowance for equipment listed above.

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General Equipment		
ACCOUNT NUMBER	**ACCOUNT / PROJECT TITLE**	**ACCOUNT / PROJECT DESCRIPTION**
7420-701-00	Agency Vehicle Replacement	Purchase new vehicles or equipment for passenger vehicles, trucks, forklift, bicycles, and electric carts as they reach or exceed their expected useful lives. FY 19 – Replace daily round pump station truck, Toyota Highlander, and two electric carts. FY 20 – Replace one carpool vehicle and one electric cart. FY 21 – Replace one carpool vehicle, one forklift, and one electric cart. FY 22 – Replace tires on all-terrain forklift and environmental services tri-cycle. FY 23 – Replace F150 environmental services truck. FY 24 – Replace skid steer loader and 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.
7430-958-00	Laboratory Equipment	This account includes allowances for scheduled replacement of laboratory equipment such as autoclaves, pumps, collection/sampler systems, washers, incubators, bioassay system, etc. FY 19 – Replace BOD incubator, centrifuge, sample refrigerator, primary and secondary process samplers and an automated BOD testing system. FY 20 – Replace and potentially relocate the bioassay system to the final effluent vault or end residual room, and replace temperature monitors. FY 21 – Replace ammonia distillation system, chlorine titrators, biotower sampler, and microscope. FY 22 – Replace the SD2 vault sampler and microbiological incubators. FY 23 – Purchase a FIA-IC system to measure ammonia, nutrients, and other constituents. FY 24-28 – Allowance to replace equipment as need or purchase new equipment.

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General Equipment		
ACCOUNT NUMBER	**ACCOUNT / PROJECT TITLE**	**ACCOUNT / PROJECT DESCRIPTION**
7450-002-00	Electrical Equipment	This account includes allowances for planned maintenance, upgrading, and replacement of Agency electrical components: individual motor controls and equipment panels, electric sluice gate operators, variable frequency drives, and electrical equipment to support process equipment. FY 19 – Replace two valve actuators on the SBS tank piping system. FY 20 – Replace five valve actuators on the hypochlorite tank piping system. FY 21 – Purchase a spare actuator for the 66-inch effluent valve. FY 22 – Replace Control Room uninterruptible power source and purchase a spare actuator for the 72-inch gate. FY 23 – Purchase a spare actuator for the 84-inch gate. FY 24 – Purchase spare actuators for 4-inch to 8-inch valves. FY 25-28 – Allowance for replacement of equipment as determined by condition assessment.
7450-002-10	Plant Lighting	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. FY 19 – Replace HPS lighting in Galleries C, L, and M, the headworks, solids handling building, and the digester pump mixing room. FY 20 – Replace HPS lighting in the grit loading bay, solids loading bay, and the secondary clarifier and effluent pump station wall packs. FY 21 – Replace HPS lighting in the bollards around the administration building and on light poles by the above ground diesel storage tank, 66-inch valve vault, OWRF, and sulfatreat vessels. FY 22 – Replace HPS lighting on primary clarifiers 6 & 7, chlorine contact tanks 5 & 6, and polymer station. FY 23 – Allowance to replace any remaining HPS lighting.
7450-102-00	Process Instrumentation	This account includes allowances for on-going 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. FY 19 – Allowance for above equipment, plus replace two pressure transmitters on chlorine contact tanks 5 and 6. Purchase a spare laser level for the digester covers. FY 20 – Allowance for above equipment, plus replace portable gas monitors and install a new radar level measurement system in the OWRF. FY 21-28 – Allowance for above equipment.

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General Equipment		
ACCOUNT NUMBER	**ACCOUNT / PROJECT TITLE**	**ACCOUNT / PROJECT DESCRIPTION**
7450-105-00	Electrical Distribution System Rehabilitation	See Full Page Description.

Liquid Treatment Processes and Equipment		
ACCOUNT NUMBER	**ACCOUNT / PROJECT TITLE**	**ACCOUNT / PROJECT DESCRIPTION**
7300-685-00	Bio-Tower Rotary Distributor Replacement	See Full Page Description.
7300-700-00	Plant Pumps	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. FY 19 – Replace two digester basement chopper pumps, four primary sludge pumps, and trays. FY 20 – Replace three carrier water pumps. FY 21 – Refurbish one biotower pump. Replace two primary scum pumps and two plant sump pumps. FY 22 – Refurbish three recycled water pumps and one scum pump. Replace one headworks sample pump and two sump pumps. FY 23 – Replace two sump pumps and two secondary scum pumps. Allowance to replace additional pumps identified by condition assessments. FY 24 – Refurbish two digester mix pumps. Allowance to replace additional pumps identified by condition assessments. FY 25-28 – Allowance to replace pumps identified by condition assessments.

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Liquid Treatment Processes and Equipment		
ACCOUNT NUMBER	**ACCOUNT / PROJECT TITLE**	**ACCOUNT / PROJECT DESCRIPTION**
7300-719-00	Chemical Pumps	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. FY 19 – Above allowances, plus add one high flow sodium bisulfite metering pump, one solids handling polymer activation unit, and one chemical induction mixer. FY 20 – Replace eight nitrate solution metering pumps and replace one chemical induction mixer. FY 21 – Replace five disinfection (chlorine solution) metering pumps and one chemical induction mixer. FY 22 – Replace five sodium bisulfite metering pumps, two chemical transfer pumps, and one chemical induction mixer. FY 23 – Refurbish one polymer feed pump and one chemical induction mixer. Replace two headworks ferric chloride metering pumps. FY 24-28 – Above allowances to replace chemical pumps based on condition assessment.
7300-720-00	Gates Rehabilitation	See Full Page Description.
7300-727-00	Headworks Equipment	See Full Page Description.
7300-981-00	Odor Control System Improvements	See Full Page Description.
7300-983-00	Process Tank Maintenance	Refurbishment and replacement of mechanical equipment such as drive mechanisms, media vessels, and blowers in all process tanks and systems throughout the treatment facility. FY 19 – Allowance for above equipment, plus install safe access gates onto four secondary clarifiers, two chlorine contact tanks, six headworks locations, and four in Primary Clarifiers #6 & #7. FY 20 – Allowance for above equipment, plus refurbish or repair reclaimed water piping which supports tank wash down equipment. FY 21 – Replace original blowers and associated diffusers in the aerated grit tanks (Master Plan Project 04-3). FY 22 – Allowance for above equipment, plus perform a condition assessment of siloxane media vessels, hydrogen sulfide media vessels, and appurtenances. FY 23-28 – General tank related replacement of equipment as determined by condition assessment.
7400-965-00	Primary Clarifiers Rehabilitation	See Full Page Description.

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Liquid Treatment Processes and Equipment		
ACCOUNT NUMBER	**ACCOUNT / PROJECT TITLE**	**ACCOUNT / PROJECT DESCRIPTION**
7300-990-00	Secondary Clarifiers Rehabilitation	See Full Page Description.
7300-991-00	RAS/WAS Pump Replacement	See Full Page Description.
7300-995-00	Aeration System Rehabilitation	This new account includes replacement and rehabilitation of aeration system equipment. FY 19 - Replace aeration channel air diffusers. FY 24 - Replace aeration diffuser membranes in all four tanks.
7400-966-00	Process Piping Inspection/Repairs/ Replacement	See Full Page Description.
7430-855-00	Chemical Tanks	Replacement of chemical storage tanks used throughout the treatment plant and in the collection system as they approach the end of their service lives. 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. FY 19 – Replace the West Railroad nitrate tank. FY 20 – Replace one sodium hypochlorite tank and the Greenbrea nitrate tank. FY 21 – Replace one sodium hypochlorite tank and the Paradise nitrate tank. FY 22 – Replace the North Francisco nitrate tank and assess the headworks bulk ferric chloride storage tanks. FY 23 -24 – Allowance for an unspecified tank replacement. FY 24 – Replace a sodium bisulfite tank. FY 25 – Perform an assessment on the effluent pump station’s convault diesel storage tank. FY 26-28 – Allowance for an unspecified tank replacement.

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Liquid Treatment Processes and Equipment

ACCOUNT NUMBER	ACCOUNT / PROJECT TITLE	ACCOUNT / PROJECT DESCRIPTION
7430-857-00	Piping, Valves & Operators	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 on-going condition assessments are completed. FY 19 – Replace fourteen 6-inch and four 4-inch expansion joints in Gallery B process piping system. FY 20 – Replace six 4-inch Gallery A and nine 6-inch in Gallery C expansion joints. FY 21 – Fire protection pipeline and valve system replacement in selected location in the galleries. FY 22 – Replace valves associated with Digester #1. FY 23 – Replace valves associated with Digester #2. FY 24 – Replace the hot water pipe system into the Administration Building. FY 25-28 – Allowance for repairs as determined by future condition assessments.
7430-859-00	CCT Valve Rehabilitation	The telescoping valves in the Chlorine Contact Tanks (CCT) 1 through 4 are used to remove debris floating on the water surface. There is also a motor operated bar screen that removes debris from effluent that is diverted for recycled water usage. FY 27 – The 2018 Facilities Master Plan recommends replacing the telescoping valves in Chlorine Contact Tanks (CCT) 1 through 4. An option that will be explored is to replace the telescoping valves with rotating pipe skimmers with motorized actuators. This project also includes replacing the recycled water screen.
7450-104-10	Influent Flow Meter Improvement	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. FY 19 – Conduct a flow meter technology study to improve large diameter pipeline flow measurement accuracy. FY 20 – Allowance to install new flow meter technology pending the results of the flow meter technology survey.

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Solids Treatment and Energy Generation Processes and Equipment		
ACCOUNT NUMBER	**ACCOUNT / PROJECT TITLE**	**ACCOUNT / PROJECT DESCRIPTION**
7300-678-00	Emergency Generator Assessment & Improvement	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 relatively old, it has had minimal usage and is maintained per manufacturer's recommendations. FY 25 – 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 of the cost to rehabilitate or replace the equipment. FY 26-27 – Allowance to fund design and installation of a replacement emergency generator based on findings of the assessment and preliminary design report.
7300-691-00	Digester Inspection, Cleaning and Cover Replacement	This account includes allowance for periodic cleaning and inspection of each anaerobic digester every ten years based on conservative estimates of their membrane covers' service lives. Agency staff will drain the tanks to allow a contractor to remove material that has accumulated inside the tanks. A specialty contractor will replace the membrane covers after the cleaning is complete and then staff will return each digester to service. FY 22 – Allowance to clean and inspect the interior of Digester No. 1 and replace its dual membrane cover. FY 23 – Allowance to clean and inspect the interior of Digester No. 2 and replace its dual membrane cover.
7300-715-00	Centrifuge Maintenance	See Full Page Description.
7300-722-00	Cogeneration Maintenance	See Full Page Description.
7300-724-00	Hot Water Systems	Repairs and replacement of hot water system pumps, valves, flex fittings, and piping as needed to maintain the system that supplies hot water to the digesters, other Agency facilities, and the administration building. FY 19 – Replace hot water pipe system insulation. FY 20-28 – Allowance for system repairs as needed.
7300-728-00	Digester Mixing Pump Study	The 2018 Facilities Master Plan noted that the digester mixing pumps have significant vibration and there are cracks in the pump room walls. FY 20 – Conduct a study to investigate the cause of the digester mixing pump vibration, any potential relationship to cracks in the pump room walls, and the need for an additional support system for the suction and discharge pipes.

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Solids Treatment and Energy Generation Processes and Equipment		
ACCOUNT NUMBER	**ACCOUNT / PROJECT TITLE**	**ACCOUNT / PROJECT DESCRIPTION**
7300-725-00	Boilers and Gas Processing	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. FY 19 – Allowance for major maintenance of boilers and gas compression system. FY 25 – Replacement of two existing boilers, upgraded to meet future Bay Area Air Quality Management District requirements.
7300-977-00	Sludge Recirculating Pump Grinders	An annual allowance for replacement of two sludge grinders' high-wear cutter cassettes.
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 20-28 – Allowance for minor maintenance of mechanical equipment every other year.
7300-980-00	Organic Waste Receiving Facility Equipment	New account for repairs and replacement of pumps, valves, monitors, and other equipment in the Organic Waste Receiving Facility (OWRF). Due to the high solids content and low pH of the organic slurry, equipment in the OWRF requires frequent repairs and/or replacement. The annual allowance is based on the cost of equipment typically consumed in a year.
7300-660-00	PG&E Interconnection Agreement Modification	The PG&E offsite and CMSA onsite improvements were completed in FY 18. However, it is possible that additional testing may be required in FY 19 to finalize the Interconnection Agreement (IA) terms. The budget includes an allowance for unexpected expenses related to completing the IA. 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 will only be reimbursed for expenses incurred, an allowance of $100,000 has been included in this account to cover costs while waiting for reimbursement.

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CENTRAL MARIN SANITATION AGENCY
CAPITAL IMPROVEMENT PROGRAM - ACCOUNT / PROJECT DESCRIPTIONS
ADOPTED FY 19 BUDGET AND 10-YEAR PROJECTION

Solids Treatment and Energy Generation Processes and Equipment		
ACCOUNT NUMBER	**ACCOUNT / PROJECT TITLE**	**ACCOUNT / PROJECT DESCRIPTION**
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 two 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: 7300-720-10 Gates Rehabilitation 7300-990-00 Secondary Clarifiers Rehabilitation 7400-966-00 Process Piping Inspection/Repairs/Replacement 7300-715-00 Centrifuge Maintenance 7300-660-00 PG&E Interconnection Agreement Modification

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Effluent Storage Pond Rehabilitation (GL 7300-103-10)			
Type of Project	Design and Capital Construction	**Lead Department**	Technical Services
Project Delivery	Formally bid construction		
Description and Justification	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.		
Elements	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.		
Risk Assessment	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 19 - 28	
FY 22	$38,700
FY 23	1,225,700
FY 19 -28 Total	**$1,264,000**

Schedule	Activity Description	Cost
FY 22	Allowance to survey and design improvements to berm, road, and/or pond bottom	38,700
FY 23	Allowance to raise pond berm and extend and re-anchor cover	**1,264,000**
	Project Total	**$1,354,454**

Project Photo:

Effluent Storage Pond

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Agency Facilities Master Plan (GL 7300-700-10)			
Type of Project	Planning Study	**Lead Department**	Technical Services
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	- 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. - Agency specific options for additional biogas use including energy generation, natural gas pipeline injection, and a vehicle fueling station. - Evaluation of potential regulatory changes including nutrient limits. - Evaluation of biosolids management practices and identification of future alternatives. - Potential facility and/or equipment improvements to address sea level rise. - Identify feasible locations and sizes for solar power facilities. - A calibrated treatment plant model that can be used to simulate changes in operational strategy and for training of new operations staff.		
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.		

Projected Expenditures FY 19 - 28	
FY 19	$40,000
FY 19 - 28 Total	**$40,000**

Implementation Schedule		
Schedule	**Activity Description**	**Cost**
FY 17	Develop and issue an RFP to select a consultant and begin preparation of the Master Plan	$230,000
FY 18	Continue working on the Master Plan	260,000
FY 19	Complete the Master Plan	40,000
	Project Total	**$530,000**

Project Photos:


Agency Facilities


Organic Waste Receiving Facility


Effluent Pumps

Return to TOC

Facility Roofs Rehabilitation (GL 7400-960-00)			
Type of Project	Design and Capital Construction	**Lead Department**	Technical Services
Project Delivery	Formally bid		
Description and Justification	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.		
Elements	FY 18 – Replace gutters on the aeration system and secondary clarifier control buildings. (Completed) 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. FY 23 – Construct roof repairs on the headworks, bio-tower control room, and switchgear.		
Risk Assessment	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.		

Projected Expenditures FY 19 - 28	
FY 20	78,100
FY 21	953,600
FY 23	9,900
FY 19 - 28 Total	**$1,041,600**

Implementation Schedule		
Schedule	**Activity Description**	**Cost**
FY 18 (Completed)	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	921,400
FY 23	Roof repairs recommended in Master Plan Project	9,900
	Project Total	**$1,041,800**

Project Photo:

Maintenance Building with standing seam metal roofs.

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Solids Handling Building Elevator Control Replacement (GL 7400-967-00)			
Type of Project	Design and Capital Construction	**Lead Department**	Technical Services
Project Delivery	Formally bid		
Description and Justification	The 2018 Facility Master Plan condition assessment initially recommended replacing the entire elevator (Master Plan Project 12-5). After further discussions with staff and reviewing inspection reports it was determined that the mechanical components of the elevator still have several years of remaining life. However, the control system will need to be replaced due to age and issues that have required increased maintenance in recent years.		
Elements	FY 23 – Replace the Solids Handling Building elevator control system.		
Risk Assessment	This is a medium risk project. The control system has required increased maintenance and will potentially not pass an annual inspection in the near future if it is not replaced.		

Projected Expenditures FY 19 - 28	
FY 23	103,500
FY 19 - 28 Total	**$103,500**

Implementation Schedule		
Schedule	**Activity Description**	**Cost**
FY 23	Replace elevator control system	103,500
	Project Total	**$103,500**

Project Photos:

Solids Handling Building Elevator

Elevator Control Panel

Return to TOC

Facility Structures Seismic Study (GL 7400-963-00)			
Type of Project	Design and Capital Construction	**Lead Department**	Technical Services
Project Delivery	Formally bid		
Description and Justification	The 2018 Facility Master Plan recommends conducting a study to evaluate seismic impacts due to soil settlement (Master Plan Project 99-1). Subsidence of the ground has been observed in multiple locations throughout the facility, including in the immediate areas round process tanks. Because structures were constructed on pile foundations, the settlement has produced gaps under the bottom of the structures. It is possible that the original seismic design was dependent on the tops of the piles being at grade and fully supported. With the tops of the piles currently above grade and exposed, the unsupported pile length may be overstressed during an earthquake resulting in structural damage. Ground settlement may have also affected the stresses on buried piping between process areas.		
Elements	FY 20 – Conduct a study to quantify the risk of structural damage due to soil settlement and identify future structural improvement projects, if necessary.		
Risk Assessment	This is a medium risk project due to the unknown risk posed to facility structures resulting from soil settlement.		

Projected Expenditures FY 19 - 28	
FY 20	207,000
FY 19 - 28 Total	**$207,000**

Implementation Schedule		
Schedule	**Activity Description**	**Cost**
FY 20	Conduct seismic study	207,000
	Project Total	**$207,000**

Project Photos:

Stair modifications to account for settlement

Exposed bottom of process tank

Return to TOC

Electrical Distribution System Rehabilitation (GL 7450-105-00)			
Type of Project	Design and Capital Construction	**Lead Department**	Technical Services
Project Delivery	Formally bid		
Description and Justification	The 2018 Facility Master Plan recommends replacing the main electrical switchgear components that distribute power throughout the facility (Master Plan Project 14-1). The existing switchgear electrical components are mostly comprised of equipment that was installed when the facility was constructed in 1985. While most of the equipment continues to operate, it is difficult to locate functional replacement equipment because manufacturers no longer provide technical support. This project also includes allowances in later years to replace motor control centers (MCCs) located in several treatment process areas when condition assessment findings warrant replacement.		
Elements	FY 21 – Replace electrical equipment and the HVAC system in the existing switchgear building. FY 23 – Allowance to refurbish or replace a MCC based on condition assessment findings. FY 25 – Allowance to refurbish or replace a MCC based on condition assessment findings. FY 27 – Allowance to refurbish or replace a MCC based on condition assessment findings.		
Risk Assessment	This is a high risk project because a failure of the switchgear would result in a significant process disruption potentially resulting in shutdowns or significant downtime that could result in discharge of untreated effluent.		

Projected Expenditures FY 19 - 28	
FY 21	1,204,800
FY 23	194,500
FY 25	203,800
FY 27	216,200
FY 19 - 28 Total	**$1,819,300**

Implementation Schedule		
Schedule	**Activity Description**	**Cost**
FY 20	Replace switchgear	1,204,800
FY 21	Replace a MCC	194,500
FY 23	Replace a MCC	203,800
FY 25	Replace a MCC	216,200
	Project Total	**$1,819,300**

Project Photos:

Switchgear building and transformer

Switchgear equipment

Return to TOC

Biotower Rotary Distributor Replacement (GL 7300-685-00)			
Type of Project	Design and Capital Construction	**Lead Department**	Technical Services
Project Delivery	Informally bid		
Description and Justification	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. The 2018 Facility Master Plan recommends replacing the rotating mechanism and media in Biotower No. 2 (Master Plan Project 06-2).		
Elements	- Replace galvanized-steel distributor mechanism and plastic spreader nozzles with a motor-operated mechanism. - Replace distributor bearing. - Replace or recoat the cast iron turntable on which the mechanism turns. - Replace the top tier of media that is subject to weather damage.		
Risk Assessment	This is a medium risk project. The rotary distributer 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.		

Projected Expenditures FY 19 - 28	
FY 24	$988,000
FY 19 - 28 Total	**$988,000**

Implementation Schedule		
Schedule	**Activity Description**	**Cost**
FY 19	Media, rotary distributor, and bearing replacement	$988,000
	Project Total	**$988,000**

Project Photos:

Original base & turntable, Biotower No. 2

New rotary distributor, Biotower No. 2

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Gates Rehabilitation (GL 7300-720-00)			
Type of Project	Design and Capital Construction	**Lead Department**	Technical Services
Project Delivery	Formally bid		
Description and Justification	There are several large gates that control flow into, though, and between processes. The gates are also used to isolate process tanks for repair or maintenance. When condition assessments warrant, these gates will be replaced with stainless steel gates, which have a longer service life due to being more corrosion resistant and having sealing surfaces that can be refurbished. This account includes two projects recommended in the 2018 Facility Master Plan. The first project replaces the hydraulic system used to open and close primary clarifier gates with an electronic actuator system that will be operated in SCADA (Master Plan Project 04-1). The second project is the replacement of the three influent gates of Chlorine Contact Tanks (CCT) 1 through 4 (Master Plan Project 09-1).		
Elements	FY 19 – Replace primary clarifier gates hydraulic actuator system with an electric system. FY 20 – Replace Ross Valley and San Rafael influent gates in the headworks building and other gates as needed. FY 21-23 – Allowance to replace gates as needed based on condition assessment. FY 24 – Replace CCT 1 through 4 influent gates. FY 25-28 – Allowance to replace gates as needed based on condition assessment.		
Risk Assessment	This is a medium risk project provided the gates are replaced according to condition assessment findings. The most risk is if a gate fails in a position that it is not normally in which could lead to a process interruption or overflow.		

Projected Expenditures FY 19 - 28	
FY 19	436,400
FY 20	77,500
FY 21 - 23 (Total)	244,100
FY 24	437,700
FY 25 - 28 (Total)	362,300
FY 19 - 28 Total	**$1,558,000**

Implementation Schedule

Schedule	Activity Description	Cost
FY 19	Replace primary clarifier hydraulic system	436,400
FY 20	Replace San Rafael and Ross Valley influent gates	77,500
FY 21-23	General allowance for gate replacement	244,100
FY 24	Replace CCT 1 through 4 influent gates	437,700
FY 25-28	General allowance for gate replacement	362,300
	Project Total	**$1,558,000**

Project Photos:

Hydraulic gate actuator

San Rafael and Ross Valley influent gates

Return to TOC

Headworks Equipment (GL 7300-727-00)			
Type of Project	Design and Capital Construction	**Lead Department**	Technical Services
Project Delivery	Formally bid		
Description and Justification	Equipment in the headworks building is used to collect, transport, dewater, and store screenings and grit from plant influent. Headworks equipment includes screens, hydraulic systems, grit hoppers, grit classifier, grit pumps, and augers. This equipment operates in a very corrosive and erosive environment and requires ongoing maintenance and refurbishment or replacement. This account includes two projects recommended in the 2018 Facility Master Plan. The first project replaces the hydraulic pumps and control system used to open and close headworks gates (Master Plan Project 04-1). The second project is the replacement of the four original grit classifier systems with new grit classifiers (Master Plan Project 04-2).		
Elements	FY 19-22 – Allowance to replace equipment as needed based on condition assessment. FY 23 – Remove the hydraulic control system and install a new hydraulic unit with associated pumps and controls. FY 24 – Allowance to replace equipment as needed based on condition assessment. FY 25-26 – Replace four grit classifier systems including associated pumps, piping, and controls. FY 27-28 – Allowance to replace equipment as needed based on condition assessment.		
Risk Assessment	This is a low risk project because most of the Headworks has redundant equipment that allows the plant to operate when one piece of equipment is out of service for maintenance.		

Projected Expenditures FY 19 - 28	
FY 19 - 22 (Total)	118,800
FY 23	361,100
FY 24	32,100
FY 25 - 26 (Total)	1,311,800
FY 27 - 28 (Total)	70,500
FY 19 - 28 Total	**$1,894,300**

Implementation Schedule

Schedule	Activity Description	Cost
FY 19 - 22 (Total)	General allowance for equipment replacement	118,800
FY 23	Replace hydraulic control system	361,100
FY 24	General allowance for equipment replacement	32,100
FY 25 - 26 (Total)	Replace grit classifier units 1 through 4	1,311,800
FY 27 - 28 (Total)	General allowance for equipment replacement	70,500
	Project Total	**$1,894,300**

Project Photos:

Hydraulic control system

Grit classifier

Return to TOC

Odor Control System Improvements (GL 7300-981-00)			
Type of Project	Design and Capital Construction	**Lead Department**	Technical Services
Project Delivery	Formally bid		
Description and Justification	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 lives. 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 systems. 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 2018 Facilities Master Plan considered the conceptual design report findings and recommends replacing the Headworks and Biotower odor scrubbers. An allowance has been added to replace the odor scrubber in the SHB if performance significantly degrades.		
Elements	FY 24 – Remove the Headworks odor scrubber and replace with an activated carbon scrubber. FY 26 – Remove the Biotower basement odor scrubbers and replace with a single activated carbon scrubber. FY 27 – Allowance to design and construct scrubber replacement in the SHB.		
Risk Assessment	This is a low risk project because the odor scrubbers are operating with minor issues.		

Projected Expenditures FY 19 - 28	
FY 24	2,003,600
FY 26	2,276,800
FY 27	1,546,800
FY 19 - 28 Total	**$5,827,200**

Implementation Schedule

Schedule	Activity Description	Cost
FY 24	Design and construct Headworks scrubber replacement	2,003,600
FY 26	Design and construct Biotower scrubber replacement	2,276,800
FY 27	Design and construct SHB scrubber replacement	1,546,800
	Project Total	**$5,827,200**

Project Photos:

Headworks odor control scrubber

Solids Handling Building odor control scrubber

Return to TOC

Primary Clarifiers Rehabilitation (GL 7400-965-00)			
Type of Project	Design and Capital Construction	**Lead Department**	Technical Services
Project Delivery	Formally bid		
Description and Justification	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, other metal surfaces in the tanks require periodic industrial coating. Additionally, the mechanical equipment also requires periodic replacement. The 2018 Facilities Master Plan recommends a project to address work noted above plus repairing concrete damage and replacing metal piping with PVC pipe (Master Plan Project 05-1).		
Elements	FY 19 – Replace primary drive units for Primary Clarifiers No. 1 through 5. FY 22 – Recoat Clarifier No. 1 interior concrete, repair concrete, replace scum skimmer drive and motor, replace metal launders with FRP, and replace metal pipes. FY 23 – Repeat elements above for Clarifier No. 2. FY 24 – Repeat elements above for Clarifier No. 3. FY 25 – Repeat elements above for Clarifiers No. 4 and 5. FY 27-28 – Allowance for industrial coatings in Clarifier No. 6 and 7.		
Risk Assessment	This is a low risk project because the planned work will be conducted in the summer when primary clarifiers can be out of service for extended periods of time.		

Projected Expenditures FY 19 - 28	
FY 19	40,000
FY 22	347,800
FY 23	358,300
FY 24	369,200
FY 25	760,800
FY 27 - 28 (Total)	329,000
FY 19 - 28 Total	**$2,205,100**

Implementation Schedule		
Schedule	**Activity Description**	**Cost**
FY 19	Replace primary drive units	40,000
FY 22	Primary Clarifier No. 1 coating and equipment	347,800
FY 23	Primary Clarifier No. 2 coating and equipment	358,300
FY 24	Primary Clarifier No. 3 coating and equipment	369,200
FY 25	Primary Clarifiers No. 4 and 5 coating	760,800
FY 27 - 28 (Total)	Primary Clarifiers No. 6 and 7 coating	329,000
	Project Total	**$2,205,100**

Project Photos:

Primary Clarifiers

Primary Drive Unit

Return to TOC

Secondary Clarifiers Rehabilitation (GL 7300-990-00)			
Type of Project	Design and Capital Construction	**Lead Department**	Technical Services
Project Delivery	Formally bid		
Description and Justification	There are four secondary clarifiers in the treatment plant. The 2018 Facilities Master Plan recommends a project for each clarifier to repair corrosion on mechanical equipment, metal structural components, and pipes inside the clarifier, resurfacing the effluent trough concrete, retrofitting the catwalk with FRP grating, and repairing corrosion on piping in the sumps in the pump room (Master Plan Project 08-1). While each clarifier is out of service, the large drive turntables in Clarifiers 1, 3, and 4 will be replaced. The turntable drive for Clarifier No. 2 was replaced in 2011.		
Elements	FY 19 – Refurbish Clarifier No. 3 as noted above and replace the turntable drive. FY 20 – Refurbish Clarifier No. 4 as noted above and replace the turntable drive. FY 21 – Refurbish Clarifier No. 1 as noted above and replace the turntable drive. FY 22 – Refurbish Clarifier No. 2 as noted above.		
Risk Assessment	This is a high risk project because failure of a secondary clarifier could lead to treatment plant process disruptions and possible discharge of effluent that does not meet NPDES treatment limits.		

Projected Expenditures FY 19 - 28	
FY 19	150,000
FY 20	507,100
FY 21	401,800
FY 22	227,800
FY 19 - 28 Total	**$1,286,700**

Implementation Schedule

Schedule	Activity Description	Cost
FY 19	Secondary Clarifier No. 3 refurbishment and turntable drive	150,000
FY 20	Secondary Clarifier No. 4 refurbishment and turntable drive	507,100
FY 21	Secondary Clarifier No. 1 refurbishment and turntable drive	401,800
FY 22	Secondary Clarifier No. 2 refurbishment	227,800
	Project Total	**$1,286,700**

Project Photos:


Secondary clarifier internal equipment


Secondary clarifier in operation

Return to TOC

RAS/WAS Pump Replacement (GL 7300-991-00)			
Type of Project	Design and Capital Construction	**Lead Department**	Technical Services
Project Delivery	Formally bid		
Description and Justification	The 2018 Facilities Master Plan recommends a project to replace the Return Activated Sludge (RAS) and Waste Activated Sludge (WAS) pump systems (Master Plan Project 08-2). These pumping systems are an integral part of the activated sludge treatment process and are mostly original equipment. While the systems are currently operating without major issues, many of the pumps have moderate corrosion and leaks. This project will replace the pump systems and install valving as needed to provide increased ability to isolate pumps for maintenance in the future. The design phase will investigate if it is possible to utilize the RAS pump only with diversion valves to split WAS and RAS.		
Elements	FY 21 – Determine if WAS pumps can be eliminated and prepare design documents. FY 22-23 – Construction of pump system improvements.		
Risk Assessment	This is a high risk project because failure of the activated sludge system could lead to treatment plant process disruptions and possible discharge of effluent that does not meet NPDES treatment limits.		

Projected Expenditures FY 19 - 28	
FY 21	389,700
FY 22 - 23 (Total)	1,559,000
FY 19 - 28 Total	**$1,948,700**

Implementation Schedule		
Schedule	**Activity Description**	**Cost**
FY 21	Project design phase	389,700
FY 22 - 23 (Total)	Construct RAS & WAS pump system improvements	1,559,000
	Project Total	**$1,948,700**

Project Photos:

RAS and WAS pumps

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Process Piping Inspection/Repairs/Replacement (GL 7400-966-00)			
Type of Project	Inspection and Capital Construction	**Lead Department**	Technical Services
Project Delivery	Inspection – Request for Proposals; Repairs - Formally bid		
Description and Justification	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. 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. The 2018 Facilities Master Plan recommends two pipe repair projects in the galleries. The first project addresses corrosion on the 54-inch effluent pipe in Gallery L and the second project addresses repairs to chemical containment lines that are routed throughout the gallery system.		
Elements	FY 19 – 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 25 – Repair corrosion on the 54-inch storage pond discharge pipe by installing a plug or bypass. FY 26 – Replace chemical lines located along gallery walls with double contained PVC pipe and explore opportunities to relocate chemical piping to the bottom of the pipe rack. FY 27 – Allowance to inspect the San Rafael and Ross Valley Interceptors.		
Risk Assessment	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.		

Projected Expenditures FY 19 - 28	
FY 19	190,000
FY 25	799,300
FY 26	113,800
FY 27	163,400
FY 19 - 28 Total	**$1,266,500**

Implementation Schedule		
Schedule	**Activity Description**	**Cost**
FY 19	Inspect buried pipelines	190,000
FY 25	Repair 54-inch storage pond pipe	799,300
FY 26	Replace and relocate gallery chemical pipeline	113,800
FY 27	Inspect the San Rafael and Ross Valley Interceptors	163,400
	Project Total	**$1,266,500**

Project Photos:

Biotower effluent pipe

Primary Effluent pipe manifold

Return to TOC

Centrifuge Maintenance (GL 7300-715-00)			
Type of Project	Design and Capital Construction	**Lead Department**	Technical Services
Project Delivery	Informally and formally bid		
Description and Justification	The Agency dewaters digested sludge with three high-speed centrifuges that 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. A manufacturer performed a condition assessment of the centrifuges in 2016 and found they were in relatively good condition. The 2018 Facilities Master Plan recommends replacing the existing centrifuges with new centrifuges that have larger capacity to handle the potential increase in biosolids related to increased delivery of organic waste.		
Elements	FY 19 – Allowance to refurbish one centrifuge. FY 21 – Begin design of centrifuge replacement. FY 22 – Construct the centrifuge replacement.		
Risk Assessment	This is a low risk project because with proper maintenance the existing centrifuges are expected to operate and meet the Agency’s needs.		

Projected Expenditures FY 18 - 27	
FY 19	40,000
FY 21	500,000
FY 22	2,703,000
FY 18 - 27 Total	**$3,243,000**

Implementation Schedule		
Schedule	**Activity Description**	**Cost**
FY 19	Allowance for refurbishment of one centrifuge	40,000
FY 21	Design centrifuge replacement	500,000
FY 22	Construct centrifuge replacement	2,703,000
	Project Total	**$3,243,000**

Project Photos:

Existing Centrifuges

Biosolids Hoppers

Return to TOC

Cogeneration Maintenance (GL 7300-722-00)			
Type of Project	Design and Capital Construction	**Lead Department**	Technical Services
Project Delivery	Formally bid		
Description and Justification	The cogeneration system runs continuously, utilizing 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 purchasing critical spare parts and to perform larger maintenance activities for the engine and generator. Larger maintenance activities include on-site, 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 and generator 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 planned to begin in FY 20 and end in FY 22. This schedule coincides with the expansion of the OWRF program and the Agency's ability to sell excess power through a new PG&E Interconnection Agreement and power sale agreement with Marin Clean Energy. The existing cogeneration engine will remain available as a backup unit.		
Elements	FY 19 – On-site engine upper-end rebuild and replace turbo chargers, plus allowance for cogeneration technology survey. FY 20 – Design of replacement cogeneration technology. Because current engine will be kept as a reliable backup system, conduct major off-site overhaul for engine, five-year generator preventive maintenance, and replace turbo chargers. FY 21 – Procurement and begin installation of a replacement cogeneration technology. FY 22 – Completion of the installation of a replacement cogeneration technology. FY 23-28 – Allowances for major maintenance of the cogeneration facility		
Risk Assessment	This is a low risk project because the existing engine can remain in service for an extended period of time if properly maintained. However, the Agency would lose the opportunity to generate additional revenue from a more efficient system.		

Projected Expenditures FY 19 - 28	
FY 19	181,600
FY 20	449,600
FY 21	2,011,000
FY 22	1,694,700
FY 23 - 28 (Total)	440,100
FY 19 -6y6 28 Total	**$4,702,000**

Implementation Schedule

Schedule	Activity Description	Cost
FY 19	Existing engine upper-end rebuild and technology survey	181,600
FY 20	Existing engine off-site overhaul and new system design	374,600
FY 21	Procure and begin installation of the new system	2,011,000
FY 22	Complete installation of the new system	1,694,700
FY 23 - 28 (Total)	Allowance for major maintenance	440,100
	Project Total	**$4,702,000**

Project Photo:

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SECTION 9. FY 2018-19 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 sections for Preliminary Assumptions, Operating Surplus (Shortfall), Capital Improvement Program, and Reserve Reconciliation.

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. The base year of the forecast is the adopted budget for the given fiscal year. 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.

The Operating Surplus (Shortfall) section 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.

The next section is the Capital Improvement Program funding. 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.

The last section 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.

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CENTRAL MARIN SANITATION AGENCY
10-YEAR FINANCIAL FORECAST

Line No.	Description	Assumption	Adopted Budget FY 17-18	Adopted Budget FY 18-19	Year 1 FY 19-20	Year 2 FY 20-21	Year 3 FY 21-22	Year 4 FY 22-23	Year 5 FY 23-24	Year 6 FY 24-25	Year 7 FY 25-26	Year 8 FY 26-27
				Revenue Program Period					Service Charges / Capital Fee as Last Authorized			
					10-Year CIP Program - Base Year Plus 9 Additional Forecast Years							
	ADOPTED ASSUMPTIONS **EDU CMSA**	**47,724**										
	Funding Requirements:											
a	Salaries and wages	3.0%	$ 5,401,800	$ 5,555,200	$ 5,721,856	$ 5,893,512	$ 6,070,317	$ 6,252,427	$ 6,439,999	$ 6,633,199	$ 6,832,195	$ 7,037,161
b	Retirement - CalPERS normal cost (Note 2)	Various	549,528	597,251	603,224	615,288	627,594	640,146	652,949	666,007	679,328	692,914
c	Retirement - CalPERS UAL (Note 2)	Various	481,072	597,749	627,636	706,091	829,657	1,016,330	1,295,820	1,749,358	1,749,358	1,749,358
d	All other employee benefits	2.0%	1,530,500	1,563,700	1,594,952	1,626,805	1,659,359	1,692,514	1,726,371	1,760,928	1,796,187	1,832,146
e	Chemicals and fuels	1.5%	1,069,500	1,126,900	1,143,822	1,160,952	1,178,392	1,196,041	1,214,001	1,232,169	1,250,648	1,269,438
f	Biosolids management	1.5%	387,700	400,300	406,303	412,406	418,611	424,918	431,326	437,836	444,447	451,161
g	Permit testing and monitoring	1.0%	179,500	148,800	150,275	151,747	153,215	154,780	156,342	157,901	159,456	161,007
h	Maintenance and repairs - net of contract maint	1.5%	382,500	363,500	368,931	374,454	380,072	385,784	391,591	397,493	403,487	409,577
i	Utilities	1.0%	350,500	317,800	320,938	324,172	327,403	330,630	333,953	337,273	340,689	344,101
j	Insurance premiums	2.5%	261,200	250,800	257,077	263,545	270,101	276,846	283,779	290,901	298,211	305,708
k	General and administrative (operating)	2.0%	868,800	900,000	917,976	936,358	955,045	974,138	993,636	1,013,541	1,033,852	1,054,569
l	Operating before debt and capital		11,462,600	11,822,000	12,112,988	12,465,330	12,869,766	13,344,554	13,919,768	14,676,605	14,987,857	15,307,140
m	Debt service actual plus estimated		3,961,906	3,973,206	3,967,331	4,603,006	4,612,006	4,611,706	5,306,381	5,308,506	5,303,381	5,352,756
n	Operating before capital		15,424,506	15,795,206	16,080,319	17,068,336	17,481,772	17,956,260	19,226,149	19,985,111	20,291,238	20,659,896
o	Capital program		3,817,600	2,862,500	3,034,000	7,732,800	7,922,700	5,368,400	4,968,200	3,718,900	5,550,800	5,315,500
p	Total funding requirements		**$ 19,242,106**	**$ 18,657,706**	**$ 19,114,319**	**$ 24,801,136**	**$ 25,404,472**	**$ 23,324,660**	**$ 24,194,349**	**$ 23,704,011**	**$ 25,842,038**	**$ 25,975,396**
	Funding Sources: (Note 3)			3.5%	3.5%	3.5%	3.5%	3.5%	0.0%	0.0%	0.0%	0.0%
q	Unrestricted - Regional sewer service charges	0.0%	$ 10,263,165	$ 10,622,376	$ 10,994,159	$ 11,378,954	$ 11,777,218	$ 12,189,421	$ 12,189,421	$ 12,189,421	$ 12,189,421	$ 12,189,421
r	Unrestricted - Capital fee (Note 4)	0.0%	630,000	811,259	1,020,824	435,529	640,904	865,486	0	0	0	0
s	Unrestricted - All other revenues	3.0%	1,731,900	1,712,048	1,763,409	1,816,312	1,870,801	1,926,925	1,981,876	2,038,675	2,106,242	2,107,711
t	Restricted capital - Debt service charge (Note 5)		3,961,906	3,973,206	3,967,331	4,603,006	4,612,006	4,611,706	5,306,381	5,308,506	5,303,381	5,352,756
u	Restricted capital - Debt service coverage		990,477	993,301	991,833	1,150,752	1,153,002	1,152,927	1,326,595	1,327,127	1,325,845	1,338,189
v	Restricted capital - Capacity charges	2.7%	29,300	30,091	30,904	31,738	32,595	33,475	34,379	35,307	36,260	37,239
w	Subtotal funding sources before reserve (increase) usage		17,606,748	18,142,281	18,768,460	19,416,291	20,086,526	20,779,940	20,838,651	20,899,036	20,961,149	21,025,316
x	Reserve (Increase) Usage (Note 6)		1,635,359	515,425	345,860	5,384,844	5,317,946	2,544,720	3,355,697	2,804,975	4,880,889	4,950,080
y	**Total funding sources**		**$ 19,242,106**	**$ 18,657,706**	**$ 19,114,319**	**$ 24,801,136**	**$ 25,404,472**	**$ 23,324,660**	**$ 24,194,349**	**$ 23,704,011**	**$ 25,842,038**	**$ 25,975,396**
z	Control total		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -

NOTES ON FORECAST:

Red: Indicates reserve usage. Brackets: Indicates reserve increases.

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. Annual increases per CalPERS Circular Letter 200-004-17 dated January 19, 2017
3. Funding from JPA agencies increases 3.5% per 5-year revenue plan
4. Capital fee becomes zero (0) in outer years beyond revenue program period
5. Assume new debt issue for $9M in FY20 and $10M in FY23
6. Use of reserves through FY20 for capital and debt proceeds for capital thereafter
7. 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
8. Beginning reserve balances for Section III are per the Treasurer's Report
9. Transfer operating surpluses to unrestricted capital reserve as necessary to maintain Board established 25% unrestricted operating reserve
10. Transfer unrestricted capital reserves to fully fund CIP Section II until depleted for forecast purposes
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

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CENTRAL MARIN SANITATION AGENCY
10-YEAR FINANCIAL FORECAST

Line No.	Description	Assumption	Adopted Budget FY 17-18	Adopted Budget FY 18-19	Year 1 FY 19-20	Year 2 FY 20-21	Year 3 FY 21-22	Year 4 FY 22-23	Year 5 FY 23-24	Year 6 FY 24-25	Year 7 FY 25-26	Year 8 FY 26-27
				Revenue Program Period					Service Charges / Capital Fee as Last Authorized			
					10-Year CIP Program - Base Year Plus 9 Additional Forecast Years							
	FUNDING FOR PROGRAMS - DETAIL											
	OPERATING PROGRAM											
1	Total operating costs before debt and capital		$ 11,462,600	$ 11,822,000	$ 12,112,988	$ 12,465,330	$ 12,869,766	$ 13,344,554	$ 13,919,768	$ 14,676,605	$ 14,987,857	$ 15,307,140
2	Service charges and other revenues		11,995,065	12,334,424	12,757,568	13,195,266	13,648,019	14,116,346	14,171,296	14,228,096	14,295,663	14,297,131
3	Total operating surplus (shortfall)		$ 532,465	$ 512,424	$ 644,580	$ 729,937	$ 778,253	$ 771,792	$ 251,529	$ (448,510)	$ (692,195)	$ (1,010,009)
	CAPITAL IMPROVEMENT PROGRAM											
4	**Total Annual CIP to Fund (10-Year CIP)**		$ 3,817,600	$ 2,862,500	$ 3,034,000	$ 7,732,800	$ 7,922,700	$ 5,368,400	$ 4,968,200	$ 3,718,900	$ 5,550,800	$ 5,315,500
5	Restricted - other financing sources (e.g., bonds, loans, grants)		$ -	$ -	$ 988,971	$ 6,273,700	$ 1,737,329	$ 3,316,437	$ 3,780,894	$ 2,356,998	$ 545,671	$ -
6	Restricted - Capacity charges		29,300	30,091	30,904	31,738	32,595	33,475	34,379	35,307	36,260	37,239
7	Restricted - Debt Service Coverage (i.e., covenant req)		992,024	990,477	993,301	991,833	1,150,752	1,153,002	1,152,927	1,326,595	1,327,127	1,325,845
8	Unrestricted - Capital Fee		630,000	811,259	1,020,824	435,529	640,904	865,486	0	0	0	0
9	Unrestricted - General Cap Rsv (Inc) Draw (step 2)		2,166,277	1,030,673	-	-	4,361,120	-	-	-	3,641,741	83,683
10	Total Available Funding		$ 3,817,601	$ 2,862,500	$ 3,034,000	$ 7,732,800	$ 7,922,700	$ 5,368,400	$ 4,968,200	$ 3,718,900	$ 5,550,800	$ 1,446,768
11	**Control Total / (Unfunded Capital)**	$ (3,868,732)	$ 1	$ (0)	$ (0)	$ (0)	$ 0	$ 0	$ 0	$ 0	$ (0)	$ (3,868,732)
	RESERVE RECONCILIATION											
12	**Restricted capital reserve balance - beg (Treas Report)**		$ 992,024	$ 990,477	$ 993,301	$ 9,002,862	$ 2,888,081	$ 1,153,002	$ 7,836,490	$ 4,229,264	$ 1,872,798	$ 1,325,845
13	Other financing sources balance - beg		-	-	-	8,011,029	1,737,329	-	6,683,563	2,902,669	545,671	-
14	New debt issuance proceeds		-	-	9,000,000	-	-	10,000,000	-	-	-	-
15	Project requisition draws (neg number) (use 1st, then reserve)		-	-	(988,971)	(6,273,700)	(1,737,329)	(3,316,437)	(3,780,894)	(2,356,998)	(545,671)	
16	Other financing sources balance - end		-	-	8,011,029	1,737,329	-	6,683,563	2,902,669	545,671	-	-
17	Capacity charges revenue		29,300	30,091	30,904	31,738	32,595	33,475	34,379	35,307	36,260	37,239
18	Capacity charges usage for capital		(29,300)	(30,091)	(30,904)	(31,738)	(32,595)	(33,475)	(34,379)	(35,307)	(36,260)	(37,239)
19	Debt coverage collection - current year		990,477	993,301	991,833	1,150,752	1,153,002	1,152,927	1,326,595	1,327,127	1,325,845	1,338,189
20	Debt coverage usage - prior year		(992,024)	(990,477)	(993,301)	(991,833)	(1,150,752)	(1,153,002)	(1,152,927)	(1,326,595)	(1,327,127)	(1,325,845)
21	Net change		(1,547)	2,825	8,009,561	(6,114,781)	(1,735,079)	6,683,488	(3,607,226)	(2,356,466)	(546,953)	12,344
22	**Restricted capital reserve balance - end**		$ 990,477	$ 993,301	$ 9,002,862	$ 2,888,081	$ 1,153,002	$ 7,836,490	$ 4,229,264	$ 1,872,798	$ 1,325,845	$ 1,338,189
	Unrestricted capital reserve balance - beg (Treas Report)		$ 7,798,013	$ 6,042,995	$ 5,434,896	$ 6,006,729	$ 6,648,580	$ 2,964,604	$ 3,617,699	$ 3,725,424	$ 3,725,424	$ 83,683
23	Capital fee revenue		630,000	811,259	1,020,824	435,529	640,904	865,486	0	0	0	0
24	Unrestricted operating reserve transfer-in (step 1)		411,259	422,574	571,833	641,851	677,144	653,095	107,725	-	-	-
25	Capital fee usage to fund CIP		(630,000)	(811,259)	(1,020,824)	(435,529)	(640,904)	(865,486)	(0)	(0)	(0)	(0)
26	Unrestricted capital reserve draw (enter CIP control total) (step 2)		(2,166,277)	(1,030,673)	-	-	(4,361,120)	-	-	-	(3,641,741)	(83,683)
27	Net change		(1,755,018)	(608,099)	571,833	641,851	(3,683,976)	653,095	107,725	-	(3,641,741)	(83,683)
28	**Unrestricted capital reserve balance - end**		$ 6,042,995	$ 5,434,896	$ 6,006,729	$ 6,648,580	$ 2,964,604	$ 3,617,699	$ 3,725,424	$ 3,725,424	$ 83,683	$ -
	Unrestricted operating reserve balance - beg (Treas Report) (Note 12)		$ 2,744,444	$ 2,865,650	$ 2,955,500	$ 3,028,247	$ 3,116,332	$ 3,217,441	$ 3,336,138	$ 3,479,942	$ 3,031,432	$ 2,339,237
29	Service charges and other revenues		11,995,065	12,334,424	12,757,568	13,195,266	13,648,019	14,116,346	14,171,296	14,228,096	14,295,663	14,297,131
30	Operating expenses		(11,462,600)	(11,822,000)	(12,112,988)	(12,465,330)	(12,869,766)	(13,344,554)	(13,919,768)	(14,676,605)	(14,987,857)	(15,307,140)
31	Unrestricted operating reserve transfer-out (excess or draw) (step 1)		(411,259)	(422,574)	(571,833)	(641,851)	(677,144)	(653,095)	(107,725)	-	-	-
32	Net change		121,206	89,850	72,747	88,086	101,109	118,697	143,804	(448,510)	(692,195)	(1,010,009)
33	**Unrestricted operating reserve balance - end**		$ 2,865,650	$ 2,955,500	$ 3,028,247	$ 3,116,332	$ 3,217,441	$ 3,336,138	$ 3,479,942	$ 3,031,432	$ 2,339,237	$ 1,329,228
34	**(25% of operating costs before debt and capital)**		25%	25%	25%	25%	25%	25%	25%	21%	16%	9%
35	Net change		(1,635,359)	(515,425)	8,654,140	(5,384,844)	(5,317,946)	7,455,280	(3,355,697)	(2,804,976)	(4,880,889)	(1,081,348)
36	**Reserve balance total - beg**		$ 11,534,481	$ 9,899,122	$ 9,383,697	$ 18,037,837	$ 12,652,993	$ 7,335,048	$ 14,790,327	$ 11,434,630	$ 8,629,654	$ 3,748,766
37	**Reserve balance total - end**		$ 9,899,122	$ 9,383,697	$ 18,037,837	$ 12,652,993	$ 7,335,048	$ 14,790,327	$ 11,434,630	$ 8,629,654	$ 3,748,766	$ 2,667,418

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CENTRAL MARIN SANITATION AGENCY
10-YEAR FINANCIAL FORECAST

Line No.	Description		Assumption	Adopted Budget FY 17-18	Adopted Budget FY 18-19	Year 1 FY 19-20	Year 2 FY 20-21	Year 3 FY 21-22	Year 4 FY 22-23	Year 5 FY 23-24	Year 6 FY 24-25	Year 7 FY 25-26	Year 8 FY 26-27
					Revenue Program Period					Service Charges / Capital Fee as Last Authorized			
						10-Year CIP Program - Base Year Plus 9 Additional Forecast Years							
	FUNDING FOR PROGRAMS - SUMMARY (ALTERNATIVE 2d - DEBT FINANCED SCHEDULED PROJECTS PLUS CAPITAL AMOUNT TO BALANCE)												
	OPERATING PROGRAM SUMMARY												
1	**Annual operating costs for funding**		Various	$ 11,462,600	$ 11,822,000	$ 12,112,988	$ 12,465,330	$ 12,869,766	$ 13,344,554	$ 13,919,768	$ 14,676,605	$ 14,987,857	$ 15,307,140
					3.5%	3.5%	3.5%	3.5%	3.5%				
2	Regional service charges			10,263,165	10,622,376	10,994,159	11,378,954	11,777,218	12,189,421	12,189,421	12,189,421	12,189,421	12,189,421
3	Other revenues		3.0%	1,731,900	1,712,048	1,763,409	1,816,312	1,870,801	1,926,925	1,981,876	2,038,675	2,106,242	2,107,711
4	Total revenues			11,995,065	12,334,424	12,757,568	13,195,266	13,648,019	14,116,346	14,171,296	14,228,096	14,295,663	14,297,131
5	Operating surplus (shortfall)			$ 532,465	$ 512,424	$ 644,580	$ 729,937	$ 778,253	$ 771,792	$ 251,529	$ (448,510)	$ (692,195)	$ (1,010,009)
6	**(Operating reserves at 25% of operating costs - amount)**			$ 2,865,650	$ 2,955,500	$ 3,028,247	$ 3,116,332	$ 3,217,441	$ 3,336,138	$ 3,479,942	$ 3,669,151	$ 3,746,964	$ 3,826,785
7	**(Operating reserves at 25% of operating costs - percent)**			25%	25%	25%	25%	25%	25%	25%	21%	16%	9%
	CAPITAL IMPROVEMENT PROGRAM SUMMARY												
	Annual CIP costs for funding	**$ 50,291,400**		$ 3,817,600	$ 2,862,500	$ 3,034,000	$ 7,732,800	$ 7,922,700	$ 5,368,400	$ 4,968,200	$ 3,718,900	$ 5,550,800	$ 5,315,500
9	Capacity Charges		2.7%	29,300	30,091	30,904	31,738	32,595	33,475	34,379	35,307	36,260	37,239
10	Debt Service Coverage (i.e., covenant req)			992,024	990,477	993,301	991,833	1,150,752	1,153,002	1,152,927	1,326,595	1,327,127	1,325,845
11	Capital Fee		0	630,000	811,259	1,020,824	435,529	640,904	865,486	0	0	0	0
12	Reserve Funding			2,166,277	1,030,673	-	-	4,361,120	-	-	-	3,641,741	83,683
13	Total Available Funding			$ 3,817,601	$ 2,862,500	$ 3,034,000	$ 7,732,800	$ 7,922,700	$ 5,368,400	$ 4,968,200	$ 3,718,900	$ 5,550,800	$ 1,446,768
14	**Control Total / (Unfunded Capital)**	**$ (3,868,732)**		$ 1	$ (0)	$ (0)	$ (0)	$ 0	$ 0	$ 0	$ 0	$ (0)	$ (3,868,732)
15	**(Capital funding ratio - target 70%)**	**Actual AVE**	**92.7%**	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	27.2%
	ANNUAL UNIT COSTS SUMMARY												
16	**EDU unit count to CMSA w/o SQSP (budget)**		**47,724**	**47,724**	**47,724**	**47,724**	**47,724**	**47,724**	**47,724**	**47,724**	**47,724**	**47,724**	**47,724**
17	**Regional service charge per unit**			$ 215.05	$ 222.58	$ 230.37	$ 238.43	$ 246.78	$ 255.41	$ 255.41	$ 255.41	$ 255.41	$ 255.41
18	**Capital fee per unit**			13.20	17.00	21.39	9.13	13.43	18.14	0.00	0.00	0.00	0.00
19	**Debt service charge per EDU count fixed per 9-21-16 memo**		**48,039**	103.09	103.38	103.23	119.77	120.01	120.00	138.07	138.13	138.00	139.28
	Debt service rate stabilization				10.36	(12.35)	(5.18)	0.94	6.23				
				103.09	113.74	90.88	114.59	120.95	126.23	138.07	138.13	138.00	139.28
	Total annual CMSA charges per unit			$ 331.34	$ 353.32	$ 342.64	$ 362.15	$ 381.15	$ 399.78	$ 393.49	$ 393.55	$ 393.41	$ 394.70
	Percent increase from prior year				6.63%	-3.02%	5.69%	5.25%	4.89%	-1.57%	0.01%	-0.03%	0.33%
	Control total debt plus coverage to collect	**27,209,070**			$ 4,966,507	$ 4,959,164	$ 5,753,758	$ 5,765,008	$ 5,764,633				
	Actual debt plus coverage collected	**27,209,070**			5,464,191	4,365,882	5,504,916	5,810,165	6,063,916				
	Difference over (under)	**-**			$ 497,684	$ (593,282)	$ (248,842)	$ 45,157	$ 299,283				

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CENTRAL MARIN SANITATION AGENCY
10-YEAR FINANCIAL FORECAST

Line No.	Description	Assumption	Adopted Budget FY 17-18	Revenue Program Period					Service Charges / Capital Fee as Last Authorized				
				Adopted Budget FY 18-19	10-Year CIP Program - Base Year Plus 9 Additional Forecast Years								
					Year 1 FY 19-20	Year 2 FY 20-21	Year 3 FY 21-22	Year 4 FY 22-23	Year 5 FY 23-24	Year 6 FY 24-25	Year 7 FY 25-26	Year 8 FY 26-27

DEBT FINANCED SCHEDULED PROJECTS TO ACCOMPANY ALTERNATIVE 2d

PROJECT DESCRIPTION	TOTALS	PROJECT AMOUNTS FY 18-19	FY 19-20	FY 20-21	FY 21-22	FY 22-23	FY 23-24	FY 24-25
Cogeneration maintenance (3)	$ 3,580,700	$ -	$ -	$ 1,943,200	$ 1,637,500	$ -	$ -	$ -
Centrifuge maintenance	1,950,000			250,000	1,700,000			
Facility roofs rehabilitation	921,400			921,400				
Fuel storage tanks	112,400		112,400					
Electrical distribution system rehabilitation	1,164,200			1,164,200				
Bio-Tower rotary distributer replacement	988,000					988,000		
Gates rehabilitation	421,635	421,635						
Headworks equipment	348,965					348,965		
Process tank maintenance	517,700			517,700				
Primary clarifiers rehabilitation	1,739,000				430,600	433,600	436,400	438,400
Secondary clarifiers rehabilitation	1,243,200	314,700	320,200	388,200	220,100			
RAS/WAS pump replacement	1,883,000			376,600	753,200	753,200		
Digester inspect, cleaning, cover replace	1,732,200				856,600	875,600		
Total projects	$ 16,602,400	$ 736,335	$ 432,600	$ 5,561,300	$ 5,598,000	$ 3,399,365	$ 436,400	$ 438,400

Issue #1, Closing '20, Pmt strt '21, Loan type	Rev Bd or SRF
Close of transaction	FY 2020
Repayment begins	FY 2021
Principal plus estimated 2% cost of issuance	$ 9,180,000
Interest rate	3.50%
Years amortization	20
Estimated payment	$ 645,915
Budgeted amount	$ 646,000
Issue #2, Closing '23, Pmt strt '24, Loan type	Rev Bd or SRF
Close of transaction	FY 2023
Repayment begins	FY 2024
Principal plus estimated 2% cost of issuance	$ 10,200,000
Interest rate	3.50%
Years amortization	20
Estimated payment	$ 717,683
Budgeted amount	$ 718,000

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
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
Total Refunding Revenue Bond Series 2015 Debt Outstanding as of July 1, 2018	**$42,770,000**	**$12,719,260**	**$55,489,260**

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.

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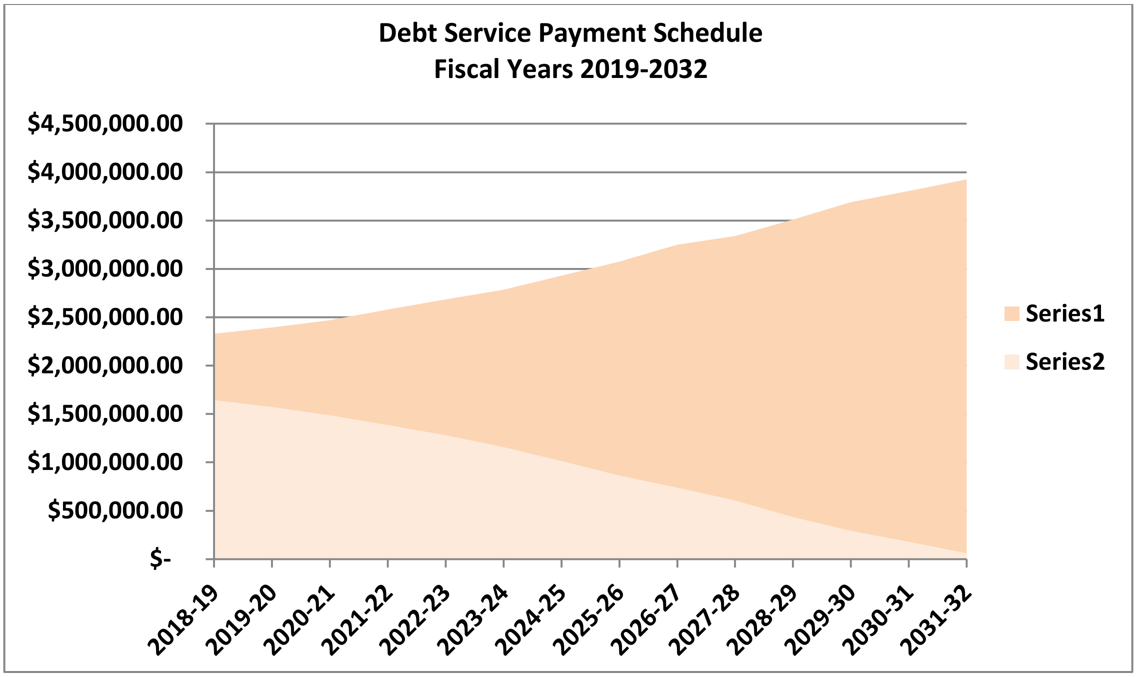

In accordance with the Agency's Financial Policy on Reserves, debt service coverage funds are restricted for capital project use with the limitation that the amount collected during each fiscal period cannot be expended in the same period. The annual budget appropriates funds from Restricted Reserves for Capital Projects to fund current year Capital Improvement Program (CIP) activities. The FY 19 Budget appropriates approximately $993,000 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 19 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.

Debt Service Charges per Equivalent Dwelling Unit

Fiscal Year	Debt Service Charges/EDU	Principal	Interest	25% Coverage Collected
Series 2015 Revenue Bonds				
2018-19	$95.43	$2,330,000	$1,643,206	$993,301
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
Series 2006 Revenue Bonds				
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.
- **POST-EMPLOYEMENT HEALTH PLAN (PEHP)**: An employer paid contribution to participating employee's PEHP account has replaced the MARA. The accumulated funds, owned by the individual, can be spent on qualified medical expenses during retirement.
- **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.

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ACRONYM LISTING

AM	Asset Management
AOWP	Adult Offender Work Program
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
CCI	Construction Cost Index and/or City Cost Index (ENR.com)
CIP	Capital Improvement Program
CMMS	Computerized Maintenance Management System
CMSA	Central Marin Sanitation Agency
COLA	Cost of Living Adjustment
CoM	County of Marin
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
ENR	Engineering News-Record
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
MSS	Marin Sanitary Service
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)
OWRF	Organic Waste Receiving Facility
PAFR	Popular Annual Financial Report
PEHP	Post-Employment Health Plan (employee benefit)
RVSD	Ross Valley Sanitary District, JPA Member
SBP	Strategic Business Plan
SD #2	Sanitary District #2, JPA Member

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SDI	State Disability Insurance
SQSP	San Quentin State Prison
SQ Village	San Quentin Village
SQVSMD	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
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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 2018-19

SCHEDULE OF REVENUE ALLOCATION TABLES

Description	Fiscal Year 2017-18	Fiscal Year 2018-19	Amount Increase (Decrease)	Percent Increase (Decrease)
Flow-Strength Allocation Table (for service charges and capital fee)	36M Flow 36M Strength	36M Flow 36M Strength		
SRSD	41.41%	40.86%		
RVSD	50.30%	50.49%		
SD #2	8.29%	8.65%		
Totals	100.00%	100.00%		
Allocation of Service Charges to Members	$ 10,263,166	$ 10,622,376	$ 359,210	3.5%
SRSD	4,249,977	4,340,303	90,326	2.1%
RVSD	5,162,372	5,363,238	200,866	3.9%
SD #2	850,816	918,836	68,020	8.0%
Totals	$ 10,263,165	$ 10,622,377	$ 359,212	3.5%
Allocation of Capital Fee to Members	$ 630,000	$ 811,258	$ 181,258	28.8%
SRSD	260,883	331,480	70,597	27.1%
RVSD	316,890	409,604	92,714	29.3%
SD #2	52,227	70,174	17,947	34.4%
Totals	$ 630,000	$ 811,258	181,258	28.8%
Debt Service Cost - Refunding Revenue Bonds Series 2015				
Service charges-debt service principal	$ 2,250,000	$ 2,330,000	$ 80,000	3.6%
Service charges-debt service interest	1,711,906	1,643,206	(68,700)	-4.0%
Subtotal debt service	3,961,906	3,973,206	11,300	0.3%
Service charges-debt service coverage	990,477	993,302	2,825	0.3%
Total debt service cost	$ 4,952,383	$ 4,966,508	$ 14,125	0.3%
EDU Count (for debt service allocation)				
SRSD (Effective FY 2017-18 fixed at 19,545)	19,545	19,545	-	0.0%
RVSD (Effective FY 2017-18 fixed at 22,404)	22,404	22,404	-	0.0%
SD #2 (Effective FY 2017-18 fixed at 6,090)	6,090	6,090	-	0.0%
SQSP (Effective FY 2017-18 fixed at 4,005)	4,005	4,005	-	0.0%
Total EDU's	52,044	52,044	-	0.0%
Allocation of Debt Service Costs to Members				
SRSD	$ 1,859,855	$ 1,865,160	$ 5,305	0.3%
RVSD	2,131,911	2,137,992	6,081	0.3%
SD #2	579,510	581,163	1,653	0.3%
SQSP	381,106	382,193	1,087	0.3%
Totals	$ 4,952,383	$ 4,966,508	$ 14,125	0.3%
Total debt service charge per EDU	$ 95.16	$ 95.43		
Total billed charges to JPA members	15,845,549	16,400,142	$ 554,593	3.5%

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CENTRAL MARIN SANITATION AGENCY
Adopted Budget for the Fiscal Year 2018-19
FY 2018-19 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%
Total Distribution	**100.0%**

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

	SRSD	RVSD	SD #2	SQSP	Total CMSA Plant Influent Flow
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
April 1, 2017 to March 31, 2018	1,411.51	1,913.07	357.66	166.12	3,848.36
Total 48 month Flow	**4,690.85**	**6,423.76**	**1,252.35**	**432.50**	**12,799.46**
% of Flow	**36.65%**	**50.19%**	**9.78%**	**3.38%**	**100.0%**

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

	SRSD	RVSD	SD #2	SQSP	Total CMSA Plant Influent BOD
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
April 1, 2017 to March 31, 2018	3,603,210	4,142,759	578,870	403,835	8,728,674
Total 48 month BOD	**11,789,636**	**12,952,384**	**1,845,752**	**1,065,986**	**27,653,757**
% of Total BOD	**42.63%**	**46.84%**	**6.67%**	**3.85%**	**100.0%**

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

	SRSD	RVSD	SD #2	SQSP	Total CMSA Plant Influent TSS
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
April 1, 2017 to March 31, 2018	4,656,989	5,435,656	814,651	486,679	11,393,975
Total 48 month TSS	**15,770,333**	**17,892,357**	**2,654,521**	**1,342,499**	**37,659,709**
% of Total TSS	**41.88%**	**47.51%**	**7.05%**	**3.56%**	**100.0%**

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)

	SRSD	RVSD	SD #2	SQSP	Total Allocation
FY 2018-19 Budget	39.42%	48.70%	8.34%	3.54%	100.00%

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CENTRAL MARIN SANITATION AGENCY
Adopted Budget for the Fiscal Year 2018-19
FY 2018-19 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%
Total Distribution	**100.0%**

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

	SRSD	RVSD	SD #2	Total CMSA Plant Influent Flow
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
April 1, 2017 to March 31, 2018	1,411.51	1,913.07	357.66	3,682.24
Total 48 month Flow	**4,690.85**	**6,423.76**	**1,252.35**	**12,366.96**
% of Flow	**37.93%**	**51.94%**	**10.13%**	**100.0%**

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

	SRSD	RVSD	SD #2	Total CMSA Plant Influent BOD
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
April 1, 2017 to March 31, 2018	3,603,210	4,142,759	578,870	8,324,839
Total 48 month BOD	**11,789,636**	**12,952,384**	**1,845,752**	**26,587,772**
% of Total BOD	**44.34%**	**48.72%**	**6.94%**	**100.0%**

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

	SRSD	RVSD	SD #2	Total CMSA Plant Influent TSS
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
April 1, 2017 to March 31, 2018	4,656,989	5,435,656	814,651	10,907,296
Total 48 month TSS	**15,770,333**	**17,892,357**	**2,654,521**	**36,317,211**
% of Total TSS	**43.42%**	**49.27%**	**7.31%**	**100.0%**

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)

	SRSD	RVSD	SD #2	Total Allocation
FY 2018-19 Budget	40.86%	50.49%	8.65%	100.00%

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FY 18-19 Adopted Budget - Health & Safety Program

FY 19 Agency Allocation	39.75%	60.25%

TABLE 1 - HEALTH & SAFETY CORE PROGRAM	Adopted FY 17	Adopted FY 18	Projected FY 18	Adopted FY 19	Comments	NSD Share	CMSA Share
Fixed Expenses							
Salary - Safety Specialist/Manager (1 FTE)	137,105	111,839	73,747	118,000	3% Increase effective 07/01/17. Step C. CMSA 60.25% & NSD 39.75%.	46,910	71,090
Car Allowance - Safety Specialist/Manager (1 FTE)	4,800	4,800	3,785	4,800	$400/month	1,908	2,892
Benefits - CalPERS Retirement	61,392	24,574	19,376	29,400	CMSA 60.25% & NSD 39.75%. Classic CalPERS status.	11,688	17,712
Benefits - SS/Medicare		1,681	1,325	1,800		716	1,084
Benefits - Health		11,040	8,704	29,200		11,608	17,592
Benefits - PEHP		1,680	1,325	1,700		676	1,024
Benefits - Retiree Health (2)	5,888	6,481	5,110	6,400		2,544	3,856
Total Salaries & Benefits	**209,185**	**162,095**	**113,372**	**191,300**		**76,050**	**115,250**
Variable Expenses							
Professional Services	6,000	6,000	-	6,000	Contract services to assist in completing program development.	2,385	3,615
Publications	1,300	1,300	341	1,600	Mancomm, CalOSHA Reporter, ANSI/NFPA standards	636	964
Memberships	750	750	542	750	NSC, CWEA, American Society Safety Engineers	298	452
Office Supplies	450	450	-	450		179	271
Safety Shoes	200	200	-	200		80	120
Training Materials	2,000	2,000	697	2,000	Training Supplies, DVDs	795	1,205
Computer Software/Supply	3,600	3,600	3,395	4,000	Keller On-Line, MSDS Online	1,590	2,410
Seminars/Conferences	-	6,200	-	5,500	CASA Conference. (KT) CWEA Classes, Fall Protection Training, Forklift Training and Workers Compensation training .	2,186	3,314
Subtotal Variable Expenses	**14,300**	**20,500**	**4,975**	**20,500**		**8,150**	**12,350**
Total Health & Safety Program Expenses	**223,485**	**182,595**	**118,347**	**211,800**		**84,199**	**127,601**
Administrative Fee (5% of NSD's share Safety Specialist/Manager Salary)	6,855	5,592	3,865	2,400	5% - (rounded) applies to NSD Share	2,400	-
Testing/Training Expenses 6830-017-01 & 06							
Testing and Training-CMSA	15,616	13,100	13,886	5,560	Scheduled Hearing tests, Incident Command, Underground Utility Locator **(6830-017-01)**	-	5,560
Testing and Training-NSD	10,096	11,200	4,600	4,560	**(6830-017-06)**	4,560	-
Subtotal Testing and Training	**25,712**	**24,300**	**18,486**	**10,120**		**4,560**	**5,560**
Total Program Expenses	**249,197**	**206,895**	**136,833**	**221,920**		**88,759**	**133,161**
	40.00%	41.67%		39.75%	NSD Allocation		
	60.00%	58.33%		60.25%	CMSA Allocation		
Salary - ASRS&SO (.25 FTE)		35,842	35,842	38,800	.25 FTE cost shared equally (NSD not budgeted)	19,400	19,400
Benefits - ARS&SO (FY18: .25 FTE)		11,593	11,593	12,400	.25 FTE cost shared equally (NSD not budgeted)	6,200	6,200
Car Allowance - ARS&SO Salary (.25 FTE)		1,200	-	-	NSD's ARS&SO does not receive car allowance	-	-
Total Salaries & Benefits - ARS&SO		**48,635**		**51,200**	Administrative, Risk Services & Safety Officer (ARS&SO)	**25,600**	**25,600**
					FY 19 Budget (rounded)		
					4070-000-00 Health & Safety Revenue Budget (Excludes ARS&SO)	**86,600**	**N/A**
					6830-016-01 Health & Safety Program, CMSA Share		**38,000**
					6830-017-06 (NSD) & 01 (CMSA) Outside Safety Training Services	**4,600**	**5,600**
					SUBTOTAL	**91,200**	**43,600**
					less 5% Admin Fee	**(2,400)**	
					Cooperative Agreement Expenses department adjustments	**400**	
					TOTAL FY 19 Budget Health & Safety Program	**89,200**	

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FY 19 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	**211,800**	Excludes .25 FTE ARS&SO (costs shared equally) & 5% Admin Fee
50% of Total Expense	$ 105,900	

Agency	Distribution on 50% of Program Cost	Number of Authorized Positions*	Percentage of Total Number of Employees	Distribution on remaining 50% of Program Cost	Total Annual Payment	Total Percentage
CMSA*	52,950	43	70.5%	74,651	127,601	60.25%
NSD*	52,950	18	29.5%	31,249	84,199	39.75%
Total	**105,900**	**61**	**100.0%**	**105,900**	**211,800**	**100.00%**
				Participating Districts Total:	84,199	39.75%

*Authorized positions excludes CMSA Safety Specialist/Manager and NSD Administrative, Risk Services & Safety Officer (ARS&RSO) positions

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CENTRAL MARIN SANITATION AGENCY

Public Education Committee Annual Budget FY 2018-2019

Program Costs	Fiscal Year 2016-17	Fiscal Year 2017-18	Expenses YTD 2017-18	Fiscal Year 2018-19
Event Enrollment (Booth costs and event support)	$ 15,000	$ 15,000	$ 1,860	$ 7,000
Juggler Show (20 shows per year annual cost)	10,000	10,000	10,000	10,000
RxSafe Marin	14,000	-	14,000	14,000
Fast Forward/Kidspeak Publication (110,000 copies)	4,000	4,000	4,000	4,000
Logo Development (for Marin County Fair 2018)	3,000	3,000	200	3,000
Awards (6 plaques - purchase plaques local and state)	1,000	1,000	800	-
Meeting Expenses (copies, demo promo/brochure items)	500	500	100	500
Educational Video reproduction/updating		10,000	-	18,000
Booth Set Up Supplies (numerous events throughout year)	2,000	2,000	254	1,000
Brochures (printing/updates/ development)	1,200	1,200	-	3,000
MCSTOPPP Calendar Support	3,000		-	
Promontional Items (FY 18-19)	24,000	24,000	6,000	24,000
STRAW - Students and Teachers Restoring A Watershed	4,000			
Marin Science and Environmental Leadership Prgm at Terra Linda HS				2,500
Contingency	5,000	5,000		-
Totals	$ 86,700	$ 75,700	$ 37,214	$ 87,000

Program Cost Allocation to Participating Members					Member Revenue to CMSA (Cost Plus 15% Program Mngt Fee)		
	Percent	Annual Total Program Costs					
Agency	Share	2016-17	2017-18	2018-19	2016-17	2017-18	2018-19
CMSA	40.6%	$ 35,200	$ 30,734	$ 35,322			
LGVSD	13.2%	11,444	9,992	11,484	$ 13,161	$ 11,491	$ 13,207
NSD	24.8%	21,502	18,774	21,576	24,727	21,590	24,812
SASM	11.6%	10,057	8,781	10,092	11,566	10,098	11,606
SMCSD	6.8%	5,896	5,148	5,916	6,780	5,920	6,803
SD5	3.0%	2,601	2,271	2,610	2,991	2,612	3,002
Totals	100.0%	$ 86,700	$ 75,700	$ 87,000	$ 59,225	$ 51,711	$ 59,430

Notes:

Event Enrollment - committee decreased amount needed due to several events being discontinued (Salmon Festival, BAEER Faire) in 2018.

Educational Video reproduction/updating - committee increased the amount needed after discussions with a video production company, Green Planet Films, who quoted $16,000. The committee thought an added $2,000 for possible change orders might be prudent.

Booth Set Up Supplies (numerous events throughout year) - committee lowered this amount needed after reviewing the amount historically spent on this line item.

Brochures (printing/updates/development) - committee would like to develop brochures which are bi-lingual, deliver a clear message of what to flush and a brochure directed toward Senior Citizens. Julie Hoover and Liz Falejczyk are the committee leads on this project.

MCSTOPPP Calendar Support - MCSTOPP is no longer publishing an annual county wide calendar. If this organization starts up again, the committee will discuss funding.

STRAW - this program was only funded in FY16-17.

MSEL - Student Outreach Research Projects - LGVSD currently works with MSEL students and suggested this would be a great addition to the Public Education Program. This year the student project researched the effects of microbeads from beauty products, on the environment and the difficulty removing them from wastewater. The students made alternative beauty products using natural ingredients and have printed up the recipes for people to make at home. They will be presenting their project at the Downtown San Rafael Farmer's Market, Thursday, April 26th and San Rafael, Civic Center Farmer's Market, Sunday, April 29th in hopes to bring attention to this problem. The requested $2,500 would be seed money to assist the MSEL program at Terra Linda HighSchool.

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Central Marin Sanitation Agency

Financial Policies Manual

Issue Date
March 13, 2018

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Central Marin Sanitation Agency

FINANCIAL POLICIES MANUAL

TABLE OF CONTENTS

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

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.

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

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.

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

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 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.

POLICY #:	**510**
SECTION:	**FINANCIAL – FINANCIAL REPORTING**
SUBJECT:	**General**
DATE:	**07/22/2015**

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 31st 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.

Report Category/Report	Frequency
Financial Reporting:	
CAFR with audited financial statements	Annual
State Controller's Special Districts Financial Transactions Report	Annual
Payroll Reporting:	
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
Debt Reporting (see Policy #511):	
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
Other Reporting:	
Diesel fuel taxes (State)	Annual
Forms 1099 (Federal) / 1096 (Federal)	Annual

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

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. <u>CONTINUING DISCLOSURE FILINGS</u>

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.

Return to TOC

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

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.

<u>PROCEDURES</u>

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:

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

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

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

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:

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

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

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

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

$$\begin{aligned} Regional\ Charge\ Allocation_{Agency} \\ &= Unit\ Cost_{Flow}\ x\ Flow_{Agency} + Unit\ Cost_{BOD}\ x\ BOD_{Agency} \\ &+ Unit\ Cost\ x\ TSS_{Agency} \end{aligned}$$

4) <u>Collection of regional charge.</u>

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.

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

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.

Return to TOC

POLICY #:	**530**
SECTION:	**FINANCIAL – TREASURY**
SUBJECT:	**General**
DATE:	**07/22/2015**

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.

Return to TOC

POLICY #:	**531**
SECTION:	**FINANCIAL – TREASURY**
SUBJECT:	**Investments**
DATE:	**03/13/2018**

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.

Investment Type	Authorized for the Investment Advisor	Authorized for the Agency Treasurer
United States Treasury Issues	X	X
Federal Agency Obligations	X	X
Medium-Term Notes	X	
Municipal Securities	X	X(1)
Negotiable Certificates of Deposit	X	X(2)
Banker's Acceptances	X	
Commercial Paper	X	
Repurchase Agreements	X	
Time Certificates of Deposit	X	X
Passbook Savings Accounts	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 must have a minimum AA rating for long-term notes and AA-1 for short term notes.

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.

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POLICY #:	**532**
SECTION:	**FINANCIAL – TREASURY**
SUBJECT:	**Reserve**
DATE:	**07/22/2015**

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.

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

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*.

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

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:

TRAVEL PERIOD	FEBRUARY 1, 2015 PER DIEM	MAXIMUM PER DIEM RATE (120% of FEB. 2015)
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.

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POLICY #:	**550**
SECTION:	**FINANCIAL – FINANCIAL PLANNING**
SUBJECT:	**Annual Budget**
DATE:	**12/13/2017**

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.

PROCEDURE

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;
- Funding for the Agency's annual OPEB (retiree medical expenses) contribution
- 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.

Included in the Expenditure Budget is the annual Actuarially Determined Contribution (ADC) for Other Post-Employment Benefits (OPEB) pursuant to the most recent GASB 75 actuarial valuation report.

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.

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

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

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

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.

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

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.

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

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.

POLICY #:	**555**
SECTION:	**FINANCIAL - FINANCIAL PLANNING**
SUBJECT:	**Multi-Year Revenue Plan**
DATE:	**03/13/2018**

POLICY

CMSA will develop and adopt a multi-year revenue plan to provide adequate funding for Agency operations, capital activities, and debt service, as well as maintaining Board designated reserve levels.

PROCEDURE

I. Beginning in the last year of the current Board adopted revenue plan, staff and the Board's Finance Committee will prepare a revenue plan development schedule that is designed so that a new revenue plan will be adopted prior to each JPA agency Board's consideration of their next fiscal year's draft budget.

II. The Committee will consider using the following revenue plan guiding principles when developing the Agency's revenue plan alternatives.

- Use a 5-year revenue planning period based on a 10-year rolling financial forecast
- Balance the operating budget over the planning period
- Maintain the operating reserve at 25% of the annual operating expenses
- Ensure adequate funding for the capital improvement program during the planning period
- Maintain a CIP reserve at an amount equal to the annual average value of the 10-year CIP
- When feasible, use current revenues to fund CIP projects
- Secure low-interest State Revolving Fund loans or issue debt to fund the balance of CIP projects
- Target a CMSA average EDU rate increase of less than 4% per year
- Keep the CMSA Board and JPA managers briefed on the Finance Committee's work

III. Revenue plan alternatives, considering the above guiding principles or Board amended principles, will be developed by the Committee and presented to the Board for review and discussion, and ultimately, selection of a preferred alternative.

IV. The Board adopted revenue plan will be communicated to the JPA member agencies, and incorporated into the Agency's upcoming fiscal year's budget and revised 10-year financial forecast.

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

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.

Transaction Type	CUCCAC Tier	General Manager Authority
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:

Construction Amount Tier	General Manager Change Order Limits
1) Less Than $300,000 a) Change Order Limit b) CCO limit if schedule impacted	 $30,000 $55,000
2) $300,000 to $1,000,000 a) CCO limit b) CCO limit if schedule impacted	 10% of construction contract amount 20% of construction contract amount
3) Greater Than $1,000,000 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.

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

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

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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*.

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

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. <u>Use of Card</u>

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.

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ATTACHMENT A

Positions Authorized to Have Purchase Card
(Board Approved as of 10/11/2016)

Department	Position	Limit
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

POLICY #:	**570**
SECTION:	**FINANCIAL - ASSET MANAGEMENT**
SUBJECT:	**General**
DATE:	**07/22/2015**

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.

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POLICY #:	**571**
SECTION:	**FINANCIAL – ASSET MANAGEMENT**
SUBJECT:	**Assets Accounting**
DATE:	**07/22/2015**

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.