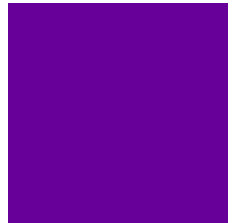
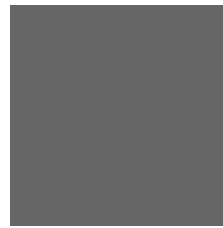


# PROPOSED OPERATING AND CAPITAL BUDGET

JULY 1, 2018 — JUNE 30, 2019



CENTRAL MARIN SANITATION AGENCY

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



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

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PLACEHOLDER FOR BUDGET MESSAGE FROM THE GENERAL  
MANAGER <aka TRANSMITTAL LETTER>  
To be published in the June agenda

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**PLACEHOLDER FOR:**

Section 1. Organization

Section 2. Location and Service Area, Local Demographics and Economy

Section 3. Facilities, Wastewater Treatment Process, Workload and Performance Indicators

Section 4. Strategic Business Plan

Section 5. Financial Reporting and Financial Policies Summary

Section 6. Budget Development: Balanced Budget, Basis of Budgeting, Accounting, Development and Administration

Section 7. FY 2018-19 Budget - Discussion and Analysis





**Operating Budget Account Information**

PROPOSED



## 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)
<i>Operating: (SCHED 2)</i>						
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	311,200	(39,300)	-11.2%
Insurance	210,950	261,200	229,035	250,800	(10,400)	-4.0%
General & Administrative	697,499	868,800	604,115	879,600	10,800	1.2%
Operating before debt and capital	10,975,827	11,462,600	10,637,528	11,795,000	332,400	2.9%
Debt Service (SCHED 1)	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	15,768,206	343,700	2.2%
Capital Improvements	\$ 2,389,382	\$ 3,817,600	\$ 2,449,176	\$ 2,962,200	(855,400)	-22.4%
Total requirements	<u>\$ 17,474,953</u>	<u>\$ 19,242,106</u>	<u>\$ 17,048,610</u>	<u>\$ 18,730,406</u>	<u>\$ (511,700)</u>	-2.7%
Funding Sources (SCHED 1)	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	330,000	30,091	791	2.7%
Contract Service Revenues	1,442,550	1,228,950	920,752	1,198,948	(30,002)	-2.4%
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	17,557,481	18,232,421	625,674	3.6%
Reserve (Increase) Usage	(229,485)	1,635,359	(508,871)	497,985	(1,137,374)	-69.5%
Total funding sources	<u>\$ 17,474,953</u>	<u>\$ 19,242,106</u>	<u>\$ 17,048,610</u>	<u>\$ 18,730,406</u>	<u>\$ (511,700)</u>	-2.7%



**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)
<u>Service Charges to Members<sup>1</sup></u>						
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		<u>\$ 9,865,358</u>	<u>\$ 10,263,165</u>	<u>\$ 10,622,377</u>	<u>\$ 359,212</u>	3.5%
<u>Capital Fee to Members<sup>1</sup></u>						
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		<u>\$ 530,000</u>	<u>\$ 630,000</u>	<u>\$ 811,258</u>	<u>\$ 181,258</u>	28.8%
<u>Debt Service Cost to Members<sup>2</sup></u>						
4011-000-00	SRSD	\$ 1,852,642	\$ 1,859,855	\$ 1,865,160	\$ 5,305	0.3%
	RVSD	2,152,400	2,131,911	2,137,992	6,081	0.3%
	SD #2	575,641	579,510	581,163	1,653	0.3%
	SQSP	379,434	381,106	382,193	1,087	0.3%
Totals		<u>\$ 4,960,117</u>	<u>\$ 4,952,382</u>	<u>\$ 4,966,508</u>	<u>\$ 14,126</u>	0.3%
<u>Capacity Charges</u>						
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		<u>\$ 330,079</u>	<u>\$ 29,300</u>	<u>\$ 30,091</u>	<u>\$ 791</u>	2.7%

Note 1: See flow-strength tables in appendix A

Note 2: See EDU allocation table in appendix A

**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)	Notes
<u>Contract Service Revenues</u>							
4601-000-00	San Quentin State Prison Wastewater Services	\$ 813,946	\$ 589,690	\$ 569,745	\$ (19,945)	-3.4%	O&M plus capital * 3.89% (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	16,500	-	0.0%	Source control service estimate
4033-000-00	RVSD - FOG	13,659	21,500	21,500	-	0.0%	Source control service estimate
4034-000-00	SRSD - FOG	15,519	25,600	25,600	-	0.0%	Source control service estimate
4035-000-00	TCSD - FOG	1,587	2,200	2,200	-	0.0%	Source control service estimate
4036-000-00	SD #2 - FOG	5,558	7,500	7,500	-	0.0%	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	3,000	-	0.0%	Source control service estimate
	Total contract service revenues	<u>\$ 1,498,882</u>	<u>\$ 1,228,950</u>	<u>\$ 1,198,948</u>	<u>\$ (30,002)</u>	<u>-2.4%</u>	
<u>Program Revenues</u>							
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	<u>\$ 134,324</u>	<u>\$ 143,200</u>	<u>\$ 146,030</u>	<u>\$ 2,830</u>	<u>2.0%</u>	
<u>Haulers, Permits &amp; Inspection</u>							
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	<u>\$ 246,588</u>	<u>\$ 226,250</u>	<u>\$ 221,450</u>	<u>\$ (4,800)</u>	<u>-2.1%</u>	
<u>Interest Income</u>							
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	<u>\$ 113,085</u>	<u>\$ 113,500</u>	<u>\$ 215,760</u>	<u>\$ 102,260</u>	<u>90.1%</u>	
<u>Other Revenues</u>							
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	<u>\$ 21,758</u>	<u>\$ 20,000</u>	<u>\$ 20,000</u>	<u>\$ -</u>	<u>0.0%</u>	

**Central Marin Sanitation Agency  
Proposed FY 2018-19 Operating Budget**

Summary of Expenditures by Departments and Category

Operating Expenditures by Department	FY 17-18	FY 17-18	FY 18-19	% Change	
	Adopted Budget	Projected Year End Expenditures	Proposed Budget	FY19 Proposed Budget from FY18 Adopted Budget	
ADMINISTRATION	4,554,500	4,257,915	4,714,000	3.5%	
MAINTENANCE	2,008,700	1,929,078	1,918,900	-4.5%	
OPERATIONS	3,150,600	2,902,183	3,236,500	2.7%	
TECHNICAL SERVICES	1,748,800	1,548,352	1,925,600	10.1%	
<b>TOTAL</b>	<b>11,462,600</b>	<b>10,637,528</b>	<b>11,795,000</b>	<b>2.9%</b>	

Operating Expenditures by Category	FY 17-18	FY 17-18	FY 18-19	% Change	
	Adopted Budget	Projected Year End Expenditures	Proposed Budget	FY19 Proposed Budget from FY18 Adopted Budget	Proposed % of Budget
SALARIES	5,401,800	5,102,952	5,555,200	2.8%	47.1%
BENEFITS	2,561,100	2,469,085	2,758,700	7.7%	23.4%
<b>SUB-TOTAL</b>	<b>7,962,900</b>	<b>7,572,037</b>	<b>8,313,900</b>	<b>4.4%</b>	<b>70.49%</b>
CHEMICALS & FUELS	1,069,500	1,025,627	1,126,900	5.4%	9.6%
BIOSOLIDS MANAGEMENT	387,700	379,908	400,300	3.2%	3.4%
PERMIT TESTING & MONITORING	179,500	165,751	148,800	-17.1%	1.3%
MAINTENANCE & REPAIRS	382,500	383,565	363,500	-5.0%	3.1%
UTILITIES	350,500	277,490	311,200	-11.2%	2.6%
INSURANCE	261,200	229,035	250,800	-4.0%	2.1%
GENERAL & ADMINISTRATIVE	868,800	604,115	879,600	1.2%	7.5%
<b>SUB-TOTAL</b>	<b>3,499,700</b>	<b>3,065,491</b>	<b>3,481,100</b>	<b>-0.5%</b>	<b>29.51%</b>
<b>TOTAL</b>	<b>11,462,600</b>	<b>10,637,528</b>	<b>11,795,000</b>	<b>2.9%</b>	<b>100.00%</b>

Benefit Expenditures	FY 17-18	FY 18-19	Change	% Change	
	Adopted Budget	Proposed Budget		FY19 Proposed Budget from FY18 Adopted Budget	Benefits as a Percent of Total Revenue
					<b>\$ 18,730,406</b>
RETIREMENT (CALPERS CLASSIC, PEPRA, UAL)	1,030,600	1,195,000	164,400	16.0%	6.38%
RETIREMENT - CALPERS CLASSIC	493,498	523,151	29,653		2.79%
RETIREMENT - CALPERS PEPRA	55,400	74,100	18,700		0.40%
RETIREMENT - CALPERS UNFUNDED ACCRUED LIABILITY	481,702	597,749	116,047		3.19%
RETIREMENT - CALPERS SURVIVORS	2,700	2,700	-	0.0%	0.01%
RETIREMENT - SOCIAL SECURITY/MEDICARE	84,000	84,300	300	0.4%	0.45%
CALPERS MEDICAL - ACTIVE EMPLOYEES	908,500	983,600	75,100	8.3%	5.25%
DENTAL - ACTIVE EMPLOYEES	117,000	123,100	6,100	5.2%	0.66%
LIFE INSURANCE, AD&D, LTD - ACTIVE EMPLOYEES	25,100	28,700	3,600	14.3%	0.15%
VISION - ACTIVE EMPLOYEES	11,600	12,500	900	7.8%	0.07%
MARA - ACTIVE EMPLOYEES	34,600	46,300	11,700	33.8%	0.25%
CALPERS MEDICAL - RETIRED EMPLOYEES	198,200	204,500	6,300	3.2%	1.09%
ANNUAL OPEB CONTRIBUTION	107,400	43,100	(64,300)	-59.9%	0.23%
BENEFIT ADMINISTRATION FEES	6,400	7,900	1,500	23.4%	0.04%
<b>TOTAL *</b>	<b>2,526,100</b>	<b>2,731,700</b>	<b>205,600</b>	<b>8.1%</b>	<b>14.58%</b>

\* 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 Proposed 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.
- 1 open Health and Safety Manager position budgeted at a higher salary than the previous year, 1 new Laboratory Analyst position and 1 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, 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 are not scheduled to be replaced 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 a nominal 1% and is generally consistent between years with only minor variations. 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.

**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 California Sanitation Risk Management Authority (CSRMA)
- Provides oversight for the Health & Safety Program
- Maintains the Agency’s communication and information technology systems

<b>Administration Expenditures by Category</b>	<b>FY 16-17 Adopted Budget</b>	<b>FY 17-18 Adopted Budget</b>	<b>FY 18-19 Proposed Budget</b>
<b>SALARIES</b>	\$1,081,100	\$1,222,000	\$1,233,000
<b>BENEFITS</b>	2,575,700	2,561,100	2,758,700
<b>SUBTOTAL</b>	<b>\$3,656,800</b>	<b>\$3,783,100</b>	<b>\$3,991,700</b>
<b>INSURANCE</b>	275,900	261,200	250,800
<b>GENERAL &amp; ADMINISTRATIVE</b>	551,600	510,200	471,500
<b>SUBTOTAL</b>	<b>\$ 827,500</b>	<b>\$ 771,400</b>	<b>\$ 722,300</b>
<b>TOTAL</b>	<b>\$4,484,300</b>	<b>\$4,554,500</b>	<b>\$4,714,000</b>

<b>Authorized Positions</b>	<b>FY 16-17</b>	<b>FY 17-18</b>	<b>FY 18-19</b>
General Manager	1	1	1
Administrative Assistant	1	1	1
Treatment Plant Manager	1	1	1
Administrative Services Manager	1	1	1
Financial Analyst	1	1	1
Personnel and Accounting Technician	1	1	1
Information Systems Analyst*	-	1	1
Health and Safety Manager	-	1	1
Safety Director	1	-	-
<b>TOTAL</b>	<b>7</b>	<b>8</b>	<b>8</b>

\*Transferred from Technical Services



**Central Marin Sanitation Agency**  
**Proposed FY 2018-19 Operating Budget**

Line Item Accounts

**\*Position Code**

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

**ADMINISTRATION**

Account #	Account Name	*By	FY 17-18 Adopted Budget	FY 17-18 Projected Year End Expenditures	FY 18-19 Proposed Budget Change	FY 18-19 Proposed Budget	% Change FY19 Proposed Budget from FY18 Adopted Budget	% Change FY19 Proposed Budget From FY18 Projected Year- End	Budget Account Description
<b>SALARIES &amp; BENEFITS</b>									
5010-010-01	Salaries, Wages & Compensation	ASM	1,214,500	1,183,631	9,900	1,224,400	0.82%	3.44%	Salaries for 8 full-time employees and CMSA's 60.25% share of the Health & Safety Manager salary. FY19 increases are for a 3% COLA salary increase, one step adjustment, and leave balance cash-outs.
5010-020-01	Overtime	GM	7,500	10,764	1,100	8,600	14.67%	-20.10%	Authorized overtime to complete special activities or assignments, and employee compensatory time leave balance cash-outs.
<b>Subtotal Salaries &amp; Wages</b>			<b>1,222,000</b>	<b>1,194,395</b>	<b>11,000</b>	<b>1,233,000</b>	<b>0.90%</b>	<b>3.23%</b>	
5020-020-01	Retirement CalPERS - Classic	ASM	975,200	894,179	145,700	1,120,900	14.94%	25.36%	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	55,400	54,183	18,700	74,100	33.75%	36.76%	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	2,700	2,700	-	2,700	0.00%	0.00%	Annual Survivors Benefit premium.
5020-030-01	Retirement - SS / Medicare	ASM	84,000	78,949	300	84,300	0.36%	6.78%	Employer's 1.45% share of Medicare for all employees.
5030-010-01	Benefits-CalPERS Medical	ASM	908,500	938,035	75,100	983,600	8.27%	4.86%	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	117,000	107,831	6,100	123,100	5.21%	14.16%	Employer paid dental benefits.
5030-003-01	Benefits-Life Insurance, AD&D, LTD	ASM	25,100	27,541	3,600	28,700	14.34%	4.21%	Employer paid life, accidental death & dismemberment, and long-term disability insurances.
5030-004-01	Benefits-Vision	ASM	11,600	11,783	900	12,500	7.76%	6.09%	Employer paid vision benefits.
5030-015-01	Benefits-PEHP	ASM	34,600	33,516	11,700	46,300	33.82%	38.14%	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	198,200	191,823	6,300	204,500	3.18%	6.61%	Medical benefits for retired employees at the SF-Bay Area PERS Kaiser single rate. The spouses of four former SRSD employees who transferred to CMSA also receive medical benefits. In FY 18 there is one new and four anticipated retirees. The increase is offset by two additional retirees turning age 65 with a consequent enrollment in the lower cost Medicare supplement plans.
5030-025-01	Annual OPEB Contribution	ASM	107,400	107,314	(64,300)	43,100	-59.87%	-59.84%	Prefunding of the Agency's post-employment health benefit obligations for current retirees and employees. The prefunding amount is the annual FY 18 estimated OPEB expense in the Agency's January 1, 2015 GASB actuarial report minus retiree medical premiums.

**Central Marin Sanitation Agency**  
**Proposed FY 2018-19 Operating Budget**

Line Item Accounts

**\*Position Code**

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

**ADMINISTRATION**

Account #	Account Name	*By	FY 17-18 Adopted Budget	FY 17-18 Projected Year End Expenditures	FY 18-19 Proposed Budget Change	FY 18-19 Proposed Budget	% Change FY19 Proposed Budget from FY18 Adopted Budget	% Change FY19 Proposed Budget From FY18 Projected Year- End	Budget Account Description
5050-000-01	Unemployment Benefits Claimed	ASM	10,000	-	-	10,000	0.00%	0.00%	An allowance for unemployment benefits paid to State Employment Development Department (EDD) for claims filed by separated employees.
5050-001-01	Benefit Administration Fees	ASM	6,400	4,671	1,500	7,900	23.44%	69.11%	Administrative fees charged for medical, MARA, and NAVIA Flex 125 plans.
5060-000-01	Uniforms	AE	25,000	16,560	(8,000)	17,000	-32.00%	2.66%	Contracted service to provide uniforms, jackets, fire resistant clothing and miscellaneous related work clothing for staff, and towel and floor mat cleaning services.
<b>Subtotal Benefits</b>			<b>2,561,100</b>	<b>2,469,085</b>	<b>197,600</b>	<b>2,758,700</b>	<b>7.72%</b>	<b>11.73%</b>	
<b>Total Salaries &amp; Benefits</b>			<b>3,783,100</b>	<b>3,663,480</b>	<b>208,600</b>	<b>3,991,700</b>	<b>5.51%</b>	<b>8.96%</b>	
<b>INSURANCE</b>									
6800-010-01	Property Insurance	ASM	58,400	49,921	(3,400)	55,000	-5.82%	10.17%	Annual property insurance coverage from the California Sanitation Risk Management Authority (CSRMA) for all Agency buildings and structures. The decrease is based on FY 18 actual plus 10% per CSRMA's recommendation.
6800-020-01	General Liability & Auto Insurance	ASM	48,700	41,108	(5,500)	43,200	-11.29%	5.09%	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	1,100	1,843	-	1,100	0.00%	-40.32%	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	2,200	1,944	-	2,200	0.00%	13.14%	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	625	-	800	0.00%	28.00%	This insurance covers instances of public employee dishonesty. It is intended to cover all employees not covered under the employee/public official bonds.
5040-000-01	Workers' Compensation Insurance	ASM	150,000	133,593	(1,500)	148,500	-1.00%	11.16%	CSRMA workers' compensation (WC) insurance for Agency employees.
<b>Subtotal Insurance</b>			<b>261,200</b>	<b>229,035</b>	<b>(10,400)</b>	<b>250,800</b>	<b>-3.98%</b>	<b>9.50%</b>	
<b>GENERAL ADMINISTRATIVE</b>									
6700-010-01	Meetings/Training	GM	5,200	3,115	-	5,200	0.00%	66.94%	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	25,000	14,008	-	25,000	0.00%	78.47%	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	11,600	6,100	(1,600)	10,000	-13.79%	63.93%	Pursuant to Commission compensation policy, CMSA Commissioners receive \$100 per day of service. There is an allowance for Commissioners conference attendance.

**Central Marin Sanitation Agency**  
**Proposed FY 2018-19 Operating Budget**

Line Item Accounts

**\*Position Code**

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

**ADMINISTRATION**

Account #	Account Name	*By	FY 17-18 Adopted Budget	FY 17-18 Projected Year End Expenditures	FY 18-19 Proposed Budget Change	FY 18-19 Proposed Budget	% Change FY19 Proposed Budget from FY18 Adopted Budget	% Change FY19 Proposed Budget From FY18 Projected Year- End	Budget Account Description
6805-000-01	Professional Affiliation Memberships	ASM	4,400	2,950	-	4,400	0.00%	49.15%	Professional memberships, license and registration requirements for department staff.
6805-001-01	BACWA Membership	GM	8,000	8,040	100	8,100	1.25%	0.75%	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%	0.00%	Agency sponsorship for the Bay Area Consortium for Water & Wastewater Education Program. The consortium is comprised of 20 partnering agencies.
6805-002-01	NBWA Membership	GM	6,000	8,436	-	6,000	0.00%	-28.88%	Annual membership dues to the North Bay Watershed Association (NBWA), which is comprised of 16 governmental agencies from the North San Pablo Bay watershed.
6805-003-01	CASA Membership	GM	16,000	16,068	100	16,100	0.63%	0.20%	Annual membership dues to the California Association of Sanitation Agencies (CASA).
6805-004-01	NACWA Membership	GM	12,500	10,400	(1,500)	11,000	-12.00%	5.77%	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	12,500	3,250	(1,500)	11,000	-12.00%	238.46%	Agency membership for SF Bay Area Biosolids-to-Energy coalition, which is comprised of 19 regional wastewater agencies.
6815-000-01	Office Expenses	AA	29,500	33,769	5,500	35,000	18.64%	3.65%	Costs associated with the Agency's administrative operations, including office supplies, copier lease, office furniture, office equipment service and repairs, and other related expenses.
6815-001-01	Safety Supplies	OS	37,300	12,447	(9,500)	27,800	-25.47%	123.35%	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	26,400	23,382	10,800	37,200	40.91%	59.10%	Expenses related to Information Technology equipment and software licenses and upgrades. Account 6815-003-05 Software License & Support has been transferred from Technical Services into Administration.
6820-000-01	Printing & Publications	AA	3,000	992	(1,000)	2,000	-33.33%	101.64%	Expenses associated with newspaper subscriptions, publication of notices, and copy services at local print shops.
6830-001-01	General Professional Services	GM	51,000	42,904	-	51,000	0.00%	18.87%	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	51,000	43,000	(41,000)	10,000	-80.39%	-76.74%	Consultation and advice on regulatory compliance and permit issues.
6830-005-01	Finance & Audit Services	ASM	25,300	25,350	2,700	28,000	10.67%	10.46%	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	9,400	9,384	400	9,800	4.26%	4.43%	IDEA annual fee for labor relations and negotiations services. Budget adjusted to align with actual anticipated expense.

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Line Item Accounts

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**ADMINISTRATION**

Account #	Account Name	*By	FY 17-18 Adopted Budget	FY 17-18 Projected Year End Expenditures	FY 18-19 Proposed Budget Change	FY 18-19 Proposed Budget	% Change FY19 Proposed Budget from FY18 Adopted Budget	% Change FY19 Proposed Budget From FY18 Projected Year- End	Budget Account Description
6830-015-01	Legal Services	GM	30,000	25,793	-	30,000	0.00%	16.31%	Expenses for general, employment law, and construction/contract legal services.
6830-016-01	Health & Safety Program, CMSA Share	ASM	36,300	19,665	1,700	38,000	4.68%	93.23%	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 Non-Agency 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	13,100	13,886	(7,500)	5,600	-57.25%	-59.67%	Training expenses for required safety programs that include hearing tests, first-aid/CPR, incident command training, traffic control, defensive driving, and many other Cal/OSHA programs that facilitate a safe work environment. Budget increase is for ARC Flash and Qualified Employee Electrical trainings.
6830-025-01	Employee Assistance Services	AA	2,000	2,250	2,500	4,500	125.00%	100.00%	Confidential professional counseling benefit provided to employees. The fee is increased annually.
6830-060-01	Employee Health Maintenance Services	AA	2,500	1,820	500	3,000	20.00%	64.85%	Expense for workplace safety related physicals, pre-employment exams, and urgent care at Kentfield Medical Clinic.
6840-010-01	Internet & Telephone Service	ISA	23,900	24,500	4,800	28,700	20.08%	17.14%	Expenses associated with telephone, internet and email services, including cell phones, portable radios, and data plan expenses for Agency staff.
6855-000-01	Postage/Shipping	AA	5,900	1,823	(3,400)	2,500	-57.63%	37.11%	Postage, postage meter rental, and overnight shipping expense.
6859-000-01	Bank Fees & Analysis Charges	ASM	2,300	1,036	(800)	1,500	-34.78%	44.74%	Bank fees and investment expenses for California Asset Management Program and Westamerica Bank accounts. Finance charges and late payment fees.
6859-000-10	Bank Fees - Revenue Bond	ASM	2,100	2,118	-	2,100	0.00%	-0.84%	Bank fees for the Refunding Revenue Bonds Series 2015.
6860-000-01	Trade Discounts	ASM	-	916	-	-	0.00%	-100.00%	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%	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	-	-	-	-	0.00%	0.00%	No budget. Account used for accounting adjustments such as general ledger account reconciliations, prior year audit adjustments, and expenditures associated with prior year activities such as unexpected bills received for prior fiscal year goods and services as well as service charge refunds.
<b>Subtotal General &amp; Administrative</b>			<b>510,200</b>	<b>365,400</b>	<b>(38,700)</b>	<b>471,500</b>	<b>-7.59%</b>	<b>29.04%</b>	
<b>Subtotal (excluding Salary and Benefits)</b>			<b>771,400</b>	<b>594,435</b>	<b>(49,100)</b>	<b>722,300</b>	<b>-6.37%</b>	<b>21.51%</b>	
<b>Total Administration</b>			<b>4,554,500</b>	<b>4,257,915</b>	<b>159,500</b>	<b>4,714,000</b>	<b>3.50%</b>	<b>10.71%</b>	



**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.

<b>Maintenance Expenditures by Category</b>	<b>FY 16-17 Adopted Budget</b>	<b>FY 17-18 Adopted Budget</b>	<b>FY 18-19 Proposed Budget</b>
<b>SALARIES</b>	\$1,482,900	\$1,609,500	\$1,534,300
<b>SUBTOTAL</b>	<b>\$1,482,900</b>	<b>\$1,609,500</b>	<b>\$1,534,300</b>
<b>LUBRICANTS, PROPANE, OTHER</b>	6,000	6,000	6,000
<b>MAINTENANCE &amp; REPAIRS</b>	376,500	376,500	357,500
<b>GENERAL &amp; ADMINISTRATIVE</b>	15,700	16,700	21,100
<b>SUBTOTAL</b>	<b>\$ 398,200</b>	<b>\$ 399,200</b>	<b>\$ 384,600</b>
<b>TOTAL</b>	<b>\$1,881,100</b>	<b>\$2,008,700</b>	<b>\$1,918,900</b>

<b>Authorized Positions</b>	<b>FY 16-17</b>	<b>FY 17-18</b>	<b>FY 18-19</b>
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
<b>TOTAL</b>	<b>14</b>	<b>14</b>	<b>14</b>

\* 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



**Central Marin Sanitation Agency**  
**Proposed FY 2018-19 Operating Budget**

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 17-18 Adopted Budget	FY 17-18 Projected Year End Expenditures	FY 18-19 Proposed Budget Change	FY 18-19 Proposed Budget	% Change FY19 Proposed Budget from FY18 Adopted Budget	% Change FY19 Proposed Budget From FY18 Projected Year- End	Budget Account Description
<b>SALARIES &amp; WAGES</b>									
5010-010-03	Salaries, Wages & Compensation	ASM	1,554,300	1,459,254	(78,000)	1,476,300	-5.02%	1.17%	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 and elimination of the merit program.
5010-103-10	Transfer to CIP	ASM	(33,300)	(19,324)	-	(33,300)	0.00%	72.32%	Transfer of salary expenses for staff assigned to CIP funded projects (.32 FTE).
5010-020-03	Overtime	TPM	33,300	33,300	1,100	34,400	3.30%	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	55,200	55,149	1,700	56,900	3.08%	3.17%	24/7 Stand-by duty for qualified maintenance staff to respond to emergency repair work and equipment failures. Pursuant to MOU and personnel policies, employees are paid to remain fit for duty and to respond within 1 hour when called. Sanitary District #2 funds one half of this expense. FY 19 increase is function of salary and step increases.
<b>Subtotal Salaries &amp; Wages</b>			<b>1,609,500</b>	<b>1,528,379</b>	<b>(75,200)</b>	<b>1,534,300</b>	<b>-4.67%</b>	<b>0.39%</b>	
<b>MAINTENANCE &amp; REPAIRS (M&amp;R)</b>									
6400-030-03	Lubricants, Propane, Other	MS	6,000	6,005	-	6,000	0.00%	-0.09%	Lubricants used for facility assets and equipment (cogeneration and stand-by power systems excluded), propane for the forklift, and welding and calibration gases.
6500-000-03	Utility Supplies	MS	7,000	6,889	-	7,000	0.00%	1.61%	Janitorial and general facility maintenance cleaning supplies.
6510-001-03	Outside Services & Parts	TPM	30,000	29,772	-	30,000	0.00%	0.77%	Service repair costs performed by outside providers for machining, fabrication, vacuum services, specialty repair work, and related parts, equipment, and supplies.
6510-004-03	Fleet Maintenance	MS	20,000	19,982	(5,000)	15,000	-25.00%	-24.93%	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	25,000	24,490	-	25,000	0.00%	2.08%	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	20,000	19,855	2,000	22,000	10.00%	10.80%	Planned preventive and corrective repairs to maintain non-process specific facility structures such as roof and gutter systems, doors and door hardware, flooring, and painted surfaces (outside contractors if specialty work is required). This budget also includes funds for facility pest control services.

**Central Marin Sanitation Agency**  
**Proposed FY 2018-19 Operating Budget**

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 17-18 Adopted Budget	FY 17-18 Projected Year End Expenditures	FY 18-19 Proposed Budget Change	FY 18-19 Proposed Budget	% Change FY19 Proposed Budget from FY18 Adopted Budget	% Change FY19 Proposed Budget From FY18 Projected Year-End	Budget Account Description
6510-009-03	Electrical Equipment	EIT	23,000	22,775	-	23,000	0.00%	0.99%	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	18,000	17,915	7,000	25,000	38.89%	39.55%	Allowance for routine consumable parts and equipment such as impellers, gasket material, and volutes.
6510-011-03	Process Tank Maintenance	MS	20,000	19,980	-	20,000	0.00%	0.10%	Allowance for routine consumable parts and equipment for facility process tanks and the primary heat exchange (excludes heat exchangers utilized by the cogeneration system).
6510-012-03	Centrifuge Maintenance	MS	20,000	19,957	(10,000)	10,000	-50.00%	-49.89%	Consumable items for annual preventive and corrective maintenance for three centrifuges and their system components.
6510-013-03	Process (Filter) Media Replacement	MS	25,000	24,379	-	25,000	0.00%	2.55%	Biogas and air purification media for facility equipment. Budget is for the purchase of media for one sulfatreat vessel, one siloxane filter, and one activated carbon odor scrubber replacement per year.
6510-014-03	Organic Waste Receiving Facility	MS	45,000	55,824	(5,000)	40,000	-11.11%	-28.35%	Allowance for consumable items required for maintaining the Organic Waste Receiving Station. 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	8,000	8,217	-	8,000	0.00%	-2.63%	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	8,000	4,825	(3,000)	5,000	-37.50%	3.63%	Allowance for parts and consumable items within the Effluent Pump Station and its above ground diesel tank. Includes pump and engine parts, driveshafts, fuel conveyance, diesel storage tanks, motor controls, and fire protection systems.
6510-020-03	Cogen/Emergency Generator Maintenance	MS	50,000	49,829	-	50,000	0.00%	0.34%	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	45,000	40,480	(5,000)	40,000	-11.11%	-1.19%	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	12,500	12,392	-	12,500	0.00%	0.87%	Purchase and repair of hand, power, and pneumatic tools utilized in the day-to-day maintenance of assets and equipment.

**Central Marin Sanitation Agency**  
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Line Item Accounts

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 EIT Electrical Instrumentation Technician

**MAINTENANCE**

Account #	Account Name	*By	FY 17-18 Adopted Budget	FY 17-18 Projected Year End Expenditures	FY 18-19 Proposed Budget Change	FY 18-19 Proposed Budget	% Change FY19 Proposed Budget from FY18 Adopted Budget	% Change FY19 Proposed Budget From FY18 Projected Year- End	Budget Account Description
<b>Subtotal Maintenance &amp; Repairs</b>			<b>382,500</b>	<b>383,565</b>	<b>(19,000)</b>	<b>363,500</b>	<b>-4.97%</b>	<b>-5.23%</b>	
<b>GENERAL &amp; ADMINISTRATIVE</b>									
6700-010-03	Meetings/Training	TPM	4,000	3,999	-	4,000	0.00%	0.02%	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	8,000	9,002	4,500	12,500	56.25%	38.86%	Expenses associated with multi-day professional conferences, seminars, and training events outlined in the Agency's travel and expense reimbursement policy. The increase in this line accounts for one person attending WEFTEC 2018, two technicians attending a two-day Nexgen Systems training course, and one technician attending a multi-day Leadership academy. One E/I Technician will also attend specialized classification training this year.
6805-000-03	Professional Affiliation Memberships	TPM	4,400	4,052	-	4,400	0.00%	8.59%	Professional memberships and annual certification renewal fees for 14 maintenance and electrical / instrumentation technicians.
6830-030-03	Underground Service Alert (USA)	MS	300	81	(100)	200	-33.33%	146.91%	Annual Underground Service Alerts fee to identify utility locations prior to any type of digging or excavation work.
<b>Subtotal General &amp; Administrative</b>			<b>16,700</b>	<b>17,134</b>	<b>4,400</b>	<b>21,100</b>	<b>26.35%</b>	<b>23.15%</b>	
<b>Subtotal (excluding Salary and Benefits)</b>			<b>399,200</b>	<b>400,699</b>	<b>(14,600)</b>	<b>384,600</b>	<b>-3.66%</b>	<b>-4.02%</b>	
<b>Total Maintenance</b>			<b>2,008,700</b>	<b>1,929,078</b>	<b>(89,800)</b>	<b>1,918,900</b>	<b>-4.47%</b>	<b>-0.53%</b>	



**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 facility

<b>Operations Expenditures by Category</b>	<b>FY 16-17 Adopted Budget</b>	<b>FY 17-18 Adopted Budget</b>	<b>FY 18-19 Proposed Budget</b>
<b>SALARIES</b>	\$1,577,400	\$1,678,600	\$1,734,400
<b>SUBTOTAL</b>	<b>\$1,577,400</b>	<b>\$1,678,600</b>	<b>\$1,734,400</b>
<b>CHEMICALS &amp; FUELS</b>	1,146,800	1,069,500	1,126,900
<b>UTILITIES</b>	372,600	350,500	311,200
<b>GENERAL &amp; ADMINISTRATIVE</b>	77,000	52,000	64,000
<b>SUBTOTAL</b>	<b>\$1,596,400</b>	<b>\$1,472,000</b>	<b>\$1,502,100</b>
<b>TOTAL</b>	<b>\$3,173,800</b>	<b>\$3,150,600</b>	<b>\$3,236,500</b>

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

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





**Central Marin Sanitation Agency**  
**Proposed FY 2018-19 Operating Budget**

Line Item Accounts

**\*Position Code**

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

**OPERATIONS**

Account #	Account Name	*By	FY 17-18 Adopted Budget	FY 17-18 Projected Year End Expenditures	FY 18-19 Proposed Budget Change	FY 18-19 Proposed Budget (INPUT Annual Budget)	FY 18-19 Proposed Budget	% Change FY19 Proposed Budget from FY18 Adopted Budget	% Change FY19 Proposed Budget From FY18 Projected Year-End	Budget Account Description
<b>SALARIES &amp; WAGES</b>										
5010-010-04	Salaries, Wages & Compensation	ASM	1,554,300	1,442,358	59,300	1,613,562	1,613,600	3.82%	11.87%	Salaries for 13 full-time employees. Includes a COLA increase of 3% for represented and unrepresented employees, two 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)	(16,700)	0.00%	0.00%	Transfer of salary expenses for staff assigned to CIP funded projects (.14 FTE).
5010-020-04	Overtime	OS	122,200	108,470	3,800	125,900	126,000	3.11%	16.16%	Authorized overtime to ensure facilities are properly staffed 24 hours/day and to complete specified activities or assignments. Budget increase includes comp-time taken or cashed-out converted to overtime.
5010-022-04	OPS Wet Weather Stand-by Duty	TPM	18,800	1,662	(7,300)	11,500	11,500	-38.83%	592.04%	24/7 Stand-by duty provided by qualified operations staff during the wet weather season (November-April). Pursuant to MOU and personnel policies, employees are paid to remain fit for duty and must respond within 1 hour after being called in for emergency situations.
<b>Subtotal Salaries &amp; Wages</b>			<b>1,678,600</b>	<b>1,552,489</b>	<b>55,800</b>	<b>1,734,262</b>	<b>1,734,400</b>	<b>3.32%</b>	<b>11.72%</b>	
<b>CHEMICALS &amp; FUEL</b>										
6100-010-04	Ferric Chloride	OS	65,800	87,402	15,700	81,500	81,500	23.86%	-6.75%	Ferric chloride is used to improve settling in the primary clarifiers during storm related flow events, inhibits hydrogen sulfide production in the digesters, reduces struvite formations in pipelines, and is used as a coagulant in the biosolids dewatering process. This budget is based upon annual usage over the past four years, which averaged 135 dry tons. Increased expense due to higher ferric chloride unit cost for FY19.
6100-020-04	Polymer-Cationic	OS	104,800	108,488	5,200	110,000	110,000	4.96%	1.39%	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	19,000	9,435	(4,000)	15,000	15,000	-21.05%	58.98%	A chemical agent used to mask odorous compounds produced by some wastewater processes. Odorants are delivered in 55 gallon barrels. The FY19 budget is based on a four year average use of 10 barrels.
6100-040-04	Calcium Nitrate	OS	294,900	227,119	(18,900)	276,000	276,000	-6.41%	21.52%	Calcium nitrate salts are the first of a two-phase odor control system used in the collection system upstream of the wastewater treatment plant. Nitrate injection in strategic locations inhibits hydrogen sulfide formation. Use is projected at 120K gallons for FY19.
6100-050-04	Hydrogen Peroxide	OS	220,000	240,447	10,000	230,000	230,000	4.55%	-4.34%	Hydrogen peroxide is the second phase of the odor control system. It is injected into the system interceptors upstream of the headworks. The budget is based on the amount of hydrogen peroxide solution used in the recent four years and is projected at 105K gallons for FY19.

**Central Marin Sanitation Agency**  
**Proposed FY 2018-19 Operating Budget**

Line Item Accounts

**\*Position Code**

ASM Administrative Services Manager  
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TPM Treatment Plant Manager

**OPERATIONS**

Account #	Account Name	*By	FY 17-18 Adopted Budget	FY 17-18 Projected Year End Expenditures	FY 18-19 Proposed Budget Change	FY 18-19 Proposed Budget (INPUT Annual Budget)	FY 18-19 Proposed Budget	% Change FY19 Proposed Budget from FY18 Adopted Budget	% Change FY19 Proposed Budget From FY18 Projected Year-End	Budget Account Description
6100-060-04	Sodium Hypochlorite	OS	168,000	161,934	36,400	204,400	204,400	21.67%	26.22%	Sodium hypochlorite is used for effluent and recycled water disinfection, and in three treatment plant odor control scrubbers. The budget is based on the 4-year average use, and the increased expense is due to higher FY19 bid opening unit costs. It should be noted that the price per gallon for hypochlorite has increased 54.6% in past two BACC bid cycles.
6100-070-04	Sodium Bisulfite	OS	180,200	177,667	14,800	195,000	195,000	8.21%	9.76%	Sodium bisulfite is used to neutralize the chlorine residual in the effluent prior to its discharge into the San Francisco Bay. The budget is based upon continued increased usage over recent years to ensure the Agency's NPDES permit limits are met. The budget estimate is for 170K gallons during FY19. It should be noted that the price per gallon for bi-sulfite solution has increased 24.0% in past two BACC bid cycles.
6400-020-04	Gasoline, Diesel, Oil, & Fuel	OS	16,800	13,134	(1,800)	15,000	15,000	-10.71%	14.21%	Gasoline for vehicles and landscaping equipment, and diesel for emergency diesel fueled generators, and the effluent pump station pumps. This budget accounts for 2,000 gallons of gasoline and 3,000 gallons of diesel. The decrease in price is based on projected 2018-2019 fuel prices.
<b>Subtotal Chemicals &amp; Fuel</b>			<b>1,069,500</b>	<b>1,025,627</b>	<b>57,400</b>	<b>1,126,900</b>	<b>1,126,900</b>	<b>5.37%</b>	<b>9.87%</b>	
<b>UTILITIES</b>										
6835-010-04	Natural Gas	OS	40,000	35,027	(2,700)	37,224	37,300	-6.75%	6.49%	Supplemental fuel for the cogeneration system, and fuel for the boilers when the cogen system is offline. This budget is based on purchasing 6,600 therms per month at an estimated cost of \$0.47/therm delivered. This line also accounts for the expected increase in biogas consumption, cogeneration system power factor adjustment, to comply with local utility requirements in order to export unused power to the electricity grid. Taking into account the above requirement, CMSA expects an overall reduction in purchasing NG from the spot market this fiscal year as the cogeneration system typically operates at approximately 22+ hours a day on Agency produced biogas.
6835-020-04	Electricity	OS	204,000	186,235	(9,600)	194,400	194,400	-4.71%	4.38%	Electricity to supplement the cogeneration system output and to supply power when the cogenerator is offline for maintenance. The decrease in this budget line is based on 24K Kwh/month, the average amount of electricity purchased in FY18. This line also takes into consideration an anticipated 2.0% increase in the current rate schedule. Assumes 94.0% cogeneration system uptime per month.
6835-030-04	Water	AOS	9,000	9,530	500	9,450	9,500	5.56%	-0.31%	Potable water for CMSA and the San Quentin junction box odor control facility. The Marin Municipal Water District doubled its service charge and implemented a new watershed management fee in January 2017, and has also announced a series of 5% rate increases over the next several years.

**Central Marin Sanitation Agency**  
**Proposed FY 2018-19 Operating Budget**

Line Item Accounts

**\*Position Code**

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

**OPERATIONS**

Account #	Account Name	*By	FY 17-18 Adopted Budget	FY 17-18 Projected Year End Expenditures	FY 18-19 Proposed Budget Change	FY 18-19 Proposed Budget (INPUT Annual Budget)	FY 18-19 Proposed Budget	% Change FY19 Proposed Budget from FY18 Adopted Budget	% Change FY19 Proposed Budget From FY18 Projected Year-End	Budget Account Description
6835-040-04	Garbage	AOS	97,500	46,697	(27,500)	70,000	70,000	-28.21%	49.90%	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.
<b>Subtotal Utilities</b>			<b>350,500</b>	<b>277,490</b>	<b>(39,300)</b>	<b>311,074</b>	<b>311,200</b>	<b>-11.21%</b>	<b>12.15%</b>	
<b>GENERAL &amp; ADMINISTRATIVE</b>										
6210-000-04	Operations - General	TPM	6,000	5,850	-	6,000	6,000	0.00%	2.56%	Small tools, equipment, parts, and other miscellaneous supplies.
6215-000-04	Process Control Consumable Supplies	AOS			10,000	10,000	10,000	0.00%	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	5,000	4,453	-	5,000	5,000	0.00%	12.29%	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	4,500	7,043	-	4,500	4,500	0.00%	-36.11%	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	6,500	2,217	(1,500)	5,000	5,000	-23.08%	125.53%	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	20,000	16,505	(1,500)	18,500	18,500	-7.50%	12.09%	Bay Area Air Quality Management District (BAAQMD) permit fees for the cogeneration engine, emergency engine, five effluent pump station engines, and fuel dispensers. The decrease in this line reflects the actual fees paid in FY18, but also takes into account proposed fee increases of 15% scheduled to take affect July 1, 2018.
6830-001-04	Professional Services: Process Control	TPM	10,000	10,508	5,000	15,000	15,000	50.00%	42.74%	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.
<b>Subtotal General &amp; Administrative</b>			<b>52,000</b>	<b>46,577</b>	<b>12,000</b>	<b>64,000</b>	<b>64,000</b>	<b>23.08%</b>	<b>37.41%</b>	
<b>Subtotal (excluding Salary and Benefits)</b>			<b>1,472,000</b>	<b>1,349,694</b>	<b>30,100</b>	<b>1,501,974</b>	<b>1,502,100</b>	<b>2.04%</b>	<b>11.29%</b>	
<b>Total Operations</b>			<b>3,150,600</b>	<b>2,902,183</b>	<b>85,900</b>	<b>3,236,236</b>	<b>3,236,500</b>	<b>2.73%</b>	<b>11.52%</b>	



**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:

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

<b>Technical Services Expenditures by Category</b>	<b>FY 16-17 Adopted Budget</b>	<b>FY 17-18 Adopted Budget</b>	<b>FY 18-19 Proposed Budget</b>
<b>SALARIES</b>	\$1,142,200	\$ 891,700	\$1,053,500
<b>SUBTOTAL</b>	<b>\$1,142,200</b>	<b>\$ 891,700</b>	<b>\$1,053,500</b>
<b>BIOSOLIDS DISPOSAL</b>	373,920	387,700	400,300
<b>PERMIT TESTING &amp; MONITORING</b>	168,800	179,500	148,800
<b>GENERAL &amp; ADMINISTRATIVE</b>	356,360	289,900	823,000
<b>SUBTOTAL</b>	<b>\$ 899,080</b>	<b>\$ 857,100</b>	<b>\$ 872,100</b>
<b>TOTAL</b>	<b>\$2,041,280</b>	<b>\$1,748,800</b>	<b>\$1,925,600</b>

<b>Authorized Positions</b>	<b>FY 16-17</b>	<b>FY 17-18</b>	<b>FY 18-19</b>
Technical Services Manager	1	1	1
Associate Engineer*	-	-	-
Assistant Engineer	2	2	2
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
<b>TOTAL</b>	<b>9</b>	<b>8</b>	<b>9</b>

\* The Associate and Assistant Engineer positions are flexibly staffed and an employee could be promoted to the associate position if the employee meets the job classification requirements.

\*\* 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.

**Central Marin Sanitation Agency**  
**Proposed FY 2018-19 Operating Budget**

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 17-18 Adopted Budget	FY 17-18 Projected Year End Expenditures	FY 18-19 Proposed Budget Change	FY 18-19 Proposed Budget	% Change FY19 Proposed Budget from FY18 Adopted Budget	% Change FY19 Proposed Budget From FY18 Projected Year- End	Budget Account Description
<b><u>SALARY &amp; WAGES</u></b>									
5010-010-05	Salaries, Wages & Compensation	ASM	1,010,000	862,512	168,700	1,178,700	16.70%	36.66%	Salaries for 9 full-time employees and includes a 3% COLA salary increase of for employees, 3 step adjustments, 1 potential promotion, 1 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	(135,200)	(43,360)	-	(135,200)	0.00%	211.81%	Transfer of salary expenses for staff assigned to CIP funded projects (.61 FTE).
5010-020-05	Overtime	TSM	9,700	7,527	(2,200)	7,500	-22.68%	-0.35%	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	7,200	1,010	(4,700)	2,500	-65.28%	147.47%	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.
<b>Subtotal Salary &amp; Wages</b>			<b>891,700</b>	<b>827,689</b>	<b>161,800</b>	<b>1,053,500</b>	<b>18.15%</b>	<b>27.28%</b>	
<b><u>BIOSOLIDS MANAGEMENT</u></b>									
6200-010-02	Biosolid Reuse Fees	TSM	275,000	274,850	8,900	283,900	3.24%	3.29%	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	112,700	105,058	3,700	116,400	3.28%	10.80%	Approximately one load per day of biosolids is hauled from CMSA to one of the biosolids reuse sites.
<b>Subtotal Biosolids Management</b>			<b>387,700</b>	<b>379,908</b>	<b>12,600</b>	<b>400,300</b>	<b>3.25%</b>	<b>5.37%</b>	
<b><u>PERMIT TESTING &amp; MONITORING</u></b>									
6300-000-02	Lab Supplies	LD	74,700	80,890	(17,700)	57,000	-23.69%	-29.53%	Laboratory and source control program supplies including all chemicals, glassware, reagents, consumables, containers and filters, bioassay. The budget is higher than normal for FY 18 and FY 19 due to one time equipment purchased as new COD chemicals, dishwasher chemicals, disposable sample containers, and other supplies.
6310-030-02	Biosolids Monitoring: Contract Lab Services	LD	10,100	8,636	(601)	9,500	-5.95%	10.00%	Laboratory analysis cost associated with biosolids monthly and semiannual regulatory monitoring requirements. Decreased based upon aligning the budget to actual expenditures.
6320-010-02	NPDES Permit Sampling & Testing	LD	65,200	64,368	-	65,200	0.00%	1.29%	Outsourced laboratory analysis cost associated with NPDES permit compliance orders. Includes monthly, quarterly, semiannual, annual and permit period monitoring requirements.

**Central Marin Sanitation Agency**  
**Proposed FY 2018-19 Operating Budget**

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 17-18 Adopted Budget	FY 17-18 Projected Year End Expenditures	FY 18-19 Proposed Budget Change	FY 18-19 Proposed Budget	% Change FY19 Proposed Budget from FY18 Adopted Budget	% Change FY19 Proposed Budget From FY18 Projected Year- End	Budget Account Description
6320-020-02	Pretreatment Sampling	TSM	14,300	7,705	-	14,300	0.00%	85.60%	Contract for lab analysis of pretreatment samples and monitoring industrial waste.
6330-010-02	Underground Tank Testing: Overfill Containment	TSM	6,900	2,833	(4,100)	2,800	-59.42%	-1.15%	Annual testing and monitoring of underground gasoline and diesel tank overfill 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	1,320	(8,300)	-	-100.00%	-100.00%	Testing of underground tank secondary containment every three years as required by state regulation. Testing will be scheduled during FY 218, the last testing occurred in FY 18.
<b>Subtotal Permit Testing &amp; Monitoring</b>			<b>179,500</b>	<b>165,751</b>	<b>(30,701)</b>	<b>148,800</b>	<b>-17.10%</b>	<b>-10.23%</b>	
<b>GENERAL &amp; ADMINISTRATIVE</b>									
6510-008-05	Facilities Maintenance				-		0.00%	0.00%	Expenses for service contracts to maintain laboratory equipment including the deionized water system, vacuum pump, and bioassay pH pump control.
6700-010-05	Meetings/Training	TSM	4,500	4,399	-	4,500	0.00%	2.30%	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	15,800	6,214	-	15,800	0.00%	154.26%	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	4,000	3,163	(300)	3,700	-7.50%	16.98%	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	55,000	48,522	-	55,000	0.00%	13.35%	Annual renewal fee for SWRCB administration of the NPDES permit and pretreatment program fee. The State Water Board has not reported its FY 19 NPDES permit fee structure.
6810-040-02	ELAP Certification	TSM	6,700	6,996	4,300	11,000	64.18%	57.23%	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	30,000	27,996	-	30,000	0.00%	7.16%	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	25,500	24,555	-	25,500	0.00%	3.85%	SF Bay NPDES dischargers are required to perform regional monitoring tests and perform studies to determine impacts to the bay. Organization participants conduct studies and tests related to TMDL development, nutrients, mercury, and PCB permit work that focus on Bay Area Clean Water Agencies (BACWA) priorities to protect the SF Bay.
6810-060-02	CUPA Fees	TSM	4,200	4,697	700	4,900	16.67%	4.32%	Certified Unified Program Agency fees are paid to the County of Marin for the Agency's underground storage tanks and hazardous materials storage.
6810-070-02	Stormwater Annual	TSM	1,800	1,400	-	1,800	0.00%	28.57%	SWRCB permit for the Agency's industrial site stormwater permit.



**Central Marin Sanitation Agency**  
**Proposed FY 2018-19 Operating Budget**

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 17-18 Adopted Budget	FY 17-18 Projected Year End Expenditures	FY 18-19 Proposed Budget Change	FY 18-19 Proposed Budget	% Change FY19 Proposed Budget from FY18 Adopted Budget	% Change FY19 Proposed Budget From FY18 Projected Year- End	Budget Account Description
6810-080-02	BAPPG Membership	TSM	1,800	838	-	1,800	0.00%	114.80%	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	-	(1,300)	-	-100.00%	0.00%	Annual electronic reporting software maintenance fee that includes support and filing updates required by the State Water Board and EPA.
6815-002-02	Source Control	TSM	12,000	12,000	28,000	40,000	233.33%	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	32,500	5,103	2,500	35,000	7.69%	585.89%	CMSA's share of the Countywide Public Education Program for expenses associated with participating in public outreach events, hosting school programs, and educational materials for the program.
6815-000-05	Office Expenses	TSM	500	177	-	500	0.00%	182.49%	Office supplies: ink cartridges, paper for large-format printer/plotter, and other miscellaneous office expense.
6815-002-05	Information Systems	TSM	700	-	1,300	2,000	185.71%	0.00%	Allowance for engineering productivity and project management software.
6815-003-05	Software License & Support	TSM	-	-	-	-	100.00%	0.00%	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	1,000	215	-	1,000	0.00%	365.12%	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	21,600	-	45,000	0.00%	108.33%	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.
6830-002-05	Cathodic Protection	TSM	7,600	7,130	(2,100)	5,500	-27.63%	-22.86%	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	40,000	-	-	40,000	0.00%	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.
<b>Subtotal General &amp; Administrative</b>			<b>289,900</b>	<b>175,004</b>	<b>33,100</b>	<b>323,000</b>	<b>11.42%</b>	<b>84.57%</b>	
<b>Subtotal (excluding Salary and Benefits)</b>			<b>857,100</b>	<b>720,663</b>	<b>14,999</b>	<b>872,100</b>	<b>1.75%</b>	<b>21.01%</b>	
<b>Total Engineering</b>			<b>1,748,800</b>	<b>1,548,352</b>	<b>176,799</b>	<b>1,925,600</b>	<b>10.11%</b>	<b>24.36%</b>	



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

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

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

The tables below illustrate the relationship between the amount of projected revenues from each contracting agency in FY 18-19 and estimated expenses incurred by CMSA for its services.

Cooperative Agreement Services	FY 16-17 Adopted Budget	FY 17-18 Adopted Budget	FY 18-19 Proposed Budget
<b>CONTRACT SERVICE REVENUES</b>			
San Quentin State Prison Wastewater Services	\$ 813,946	\$ 589,690	\$ 569,745
San Quentin State Prison Pump Station Maintenance	105,473	108,110	111,570
San Quentin Village Wastewater Services	33,056	49,950	45,297
SD#2 Pump Stations	394,063	403,400	394,536
LGVSD - FOG & Pollution Prevention	20,000	16,500	16,500
SD #1 – FOG	19,000	21,500	21,500
SRSD – FOG	23,000	25,600	25,600
TCSD – FOG	2,100	2,200	2,200
SD #2 – FOG	9,500	7,500	7,500
Almonte SD – FOG	3,500	1,500	1,500
Novato SD - Dental Amalgam	1,500	3,000	3,000
<b>SUBTOTAL CONTRACT SERVICE REVENUES</b>	<b>\$1,425,138</b>	<b>\$1,228,950</b>	<b>\$1,198,948</b>
Health and Safety Program	85,000	91,500	86,600
County-wide Education Program	43,990	51,700	59,430
<b>SUBTOTAL PROGRAM REVENUES</b>	<b>\$ 128,990</b>	<b>\$ 143,200</b>	<b>\$ 146,030</b>
<b>TOTAL CONTRACT SERVICE REVENUES</b>	<b>\$ 1,554,128</b>	<b>\$1,372,150</b>	<b>\$1,344,978</b>

<b>COOPERATIVE AGREEMENT SERVICE EXPENDITURES (EXCLUDING ADMINISTRATIVE OVERHEAD CHARGES)</b>			
San Quentin State Prison Wastewater Services	\$ 816,946	\$ 589,690	\$ 569,745
San Quentin State Prison Pump Station Maintenance	93,952	96,110	98,747
San Quentin Village Wastewater Services	28,792	45,473	40,820
SD#2 Pump Stations	348,520	356,946	348,082
LGVSD - FOG & Pollution Prevention	16,393	13,525	13,525
SD #1 - FOG	17,273	19,545	19,545
SRSD - FOG	20,909	23,273	23,273
TCSD - FOG	1,721	1,803	1,803
SD #2 - FOG	8,636	6,818	6,818
Almonte SD – FOG	3,182	1,364	1,364
Novato SD - Dental Amalgam	1,230	2,459	2,459
<b>SUB-TOTAL COOPERATIVE AGREEMENT EXPENDITURES</b>	<b>\$1,354,554</b>	<b>\$1,157,006</b>	<b>\$1,126,181</b>
Health & Safety Program	82,372	89,271	84,200
County-wide Education Program	38,252	44,957	51,678
<b>SUB-TOTAL PROGRAM EXPENDITURES</b>	<b>\$ 120,624</b>	<b>\$ 134,228</b>	<b>\$ 135,878</b>
<b>TOTAL COOPERATIVE AGREEMENT EXPENDITURES</b>	<b>\$1,475,178</b>	<b>\$1,291,233</b>	<b>\$1,262,059</b>



**Central Marin Sanitation Agency**  
**Proposed FY 2018-19 Operating Budget**

Line Item Accounts

**\*Position Code**

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

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

Account #	Account Name	*By	FY 17-18 Adopted Budget	FY 17-18 Projected Year End Expenditures	FY 18-19 Proposed Budget Change	FY 18-19 Proposed Budget	% Change FY19 Proposed Budget from FY18 Adopted Budget	% Change FY19 Proposed Budget From FY18 Projected Year- End	Budget Account Description
<b>ADMINISTRATION - HEALTH &amp; SAFETY PROGRAM</b>									
5010-010-06	Salaries, Wages & Compensation	ASM	46,600	15,254	2,300	48,900	4.94%	220.56%	Novato Sanitary District's (NSD) share of the Health & Safety 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	10,239	2,909	1,461	11,700	14.27%	302.25%	Employer and employer-paid employee contributions for CalPERS 2.7% @ 55 retirement program. The increase is function of step increase and COLA.
5020-030-06	SS / Medicare	ASM	700	361	100	800	14.28%	121.45%	Employer's 1.45% share of Medicare.
5030-010-06	Employee Health Benefits	ASM	4,600	2,552	7,100	11,700	154.33%	358.46%	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	700	399	-	700	0.00%	75.61%	PEHP: Is a post employment health plan employer paid contribution totaling 1.5% of base salary and \$180 per year administration fee (formerly .1% of base salary).
5030-020-06	Retiree Health Benefits	ASM	2,700	1,510	(100)	2,600	-3.70%	72.16%	Medical benefits for one retired employee and one surviving spouse.
5065-000-06	Shoes	ASM	100	-	(100)	-	-99.58%	0.00%	Shoes are now included in program expenses account 6830-016-06.
6830-016-06	Health & Safety Manager Program Expenses	HSM	8,500	2,455	(300)	8,200	-3.53%	234.03%	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	650	(6,600)	4,600	-58.93%	607.70%	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.
<b>Subtotal Administration</b>			<b>85,339</b>	<b>26,090</b>	<b>3,861</b>	<b>89,200</b>	<b>4.52%</b>	<b>241.89%</b>	
<b>TECHNICAL SERVICES</b>									
6821-000-06	Countywide Public Education Program	GM	45,000	37,214	7,000	52,000	15.56%	39.73%	Program expenditures to administer the County Wide Education Program for 5 participating agencies such as promotional materials, booth registration fees, public outreach program costs, sponsorships, supplies and memberships. CMSA's 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.
<b>Subtotal Technical Services</b>			<b>45,000</b>	<b>37,214</b>	<b>7,000</b>	<b>52,000</b>	<b>15.56%</b>	<b>39.73%</b>	

**Central Marin Sanitation Agency**  
**Proposed FY 2018-19 Operating Budget**

Line Item Accounts

**\*Position Code**

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

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

Account #	Account Name	*By	FY 17-18 Adopted Budget	FY 17-18 Projected Year End Expenditures	FY 18-19 Proposed Budget Change	FY 18-19 Proposed Budget	% Change FY19 Proposed Budget from FY18 Adopted Budget	% Change FY19 Proposed Budget From FY18 Projected Year- End	Budget Account Description
<b>MAINTENANCE</b>									
6600-000-06	SD-2 Pump Stations	MS	117,200	99,547	3,700	120,900	3.16%	21.45%	SD#2 pump station maintenance costs repair services, parts, supplies, equipment and recommended maintenance and capital expenditures. The decrease is attributable to fewer planned maintenance projects.
6600-001-06	SQP Pump Station Maintenance	TPM	44,300	44,300	65,700	110,000	148.31%	148.31%	SQP pump station maintenance costs include labor, mileage, repair services, parts, supplies, equipment and recommended maintenance and capital expenditures. The increase is due to a contractual CPI price adjustment.
6600-002-06	SQ Village WW System Maintenance	TPM	25,700	17,554	(5,400)	20,300	-21.01%	15.64%	SQV wastewater maintenance costs include labor, mileage, repair services, parts, supplies, equipment and recommended maintenance and capital expenditures. The increase is due to a contractual increase and anticipated higher maintenance costs.
<b>Subtotal Maintenance</b>			<b>187,200</b>	<b>161,401</b>	<b>64,000</b>	<b>251,200</b>	<b>34.19%</b>	<b>55.64%</b>	
<b>Total Cooperative Agreement Expenses</b>			<b>317,539</b>	<b>224,704</b>	<b>74,861</b>	<b>392,400</b>	<b>23.58%</b>	<b>74.63%</b>	

**10 Year Capital Improvement Program – Summary of Changes  
Capital Improvement Program Budget  
Capital Improvement Project Descriptions by Budget Account  
Detailed Project Descriptions for Selected Capital Projects**

PROPOSED





**Proposed FY 18-19 Capital Improvement Program – Summary of Changes**

<b>Category</b>	<b>FY 17-18 Adopted Budget</b>	<b>FY 17-18 Projected Actuals</b>	<b>FY 18-19 Proposed Budget</b>	<b># of Activities</b>
Facility Improvements	\$ 1,740,600	\$ 1,084,768	\$ 532,500	6
General Equipment	584,300	488,213	429,600	7
Liquid Treatment Equipment and Systems	635,700	487,977	1,370,900	11
Solids Treatment and Energy Generation	671,800	203,000	445,000	7
Staff Costs	185,200	185,200	184,200	2.0 FTE
<b>Total</b>	<b>\$3,817,600</b>	<b>\$2,449,176</b>	<b>\$2,962,200</b>	<b>31</b>

**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 differed 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 FY19 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.

PROPOSED

**Central Marin Sanitation Agency  
Capital Improvement Program  
FY 19 Proposed Budget and 10-Year Forecast**

GL Account Number	PM*	Delivery Method	Prior FYs' Costs	Adopted Budget For FY 18	Projected FY 18 Actuals	10-year CIP											Project Totals	
						1 Proposed 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		
<b>Facility Improvements</b>																		
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	43,200	767,100	
7400-103-10	TSM	Maintenance Facility Modifications (3)	FB	161,740	800,000	701,548	-	-	-	-	-	-	-	-	-	-	-	863,288
7400-???-??	TSM	Facility Improvements	IB	-	-	44,000	-	-	-	-	35,000	-	-	-	40,300	-	119,300	
7400-956-00	TSM	Facility Paving/Site Work	IB/MC	148,400	-	175,000	135,900	11,200	11,500	145,100	12,100	12,400	167,800	13,000	13,400	-	697,400	
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-???-??	TSM	SHB Elevator Control Replacement	IB	-	-	-	-	-	-	103,500	-	-	-	-	-	-	103,500	103,500
7400-???-??	TSM	Facility Structures Seismic Study	PSA	-	-	-	207,000	-	-	-	-	-	-	-	-	-	207,000	207,000
<b>Subtotal - Facility Improvements</b>				<b>1,740,600</b>	<b>1,084,786</b>	<b>532,500</b>	<b>649,100</b>	<b>1,487,200</b>	<b>107,300</b>	<b>1,565,000</b>	<b>109,900</b>	<b>77,000</b>	<b>234,400</b>	<b>195,200</b>	<b>124,400</b>	<b>5,185,500</b>		
<b>General Equipment</b>																		
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	13,900	-	4,100	-	4,300	-	4,600	-	4,900	-	5,200	-	23,100	
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
<b>Subtotal - General Equipment</b>				<b>584,300</b>	<b>488,213</b>	<b>429,600</b>	<b>384,600</b>	<b>1,657,700</b>	<b>285,800</b>	<b>540,900</b>	<b>295,800</b>	<b>485,800</b>	<b>539,200</b>	<b>523,600</b>	<b>321,800</b>	<b>5,464,800</b>		
<b>Liquids Treatment Equipment and Systems</b>																		
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	325,700	331,400	401,800	227,800	-	-	-	-	-	-	-	1,286,700	1,319,852
7300-???-??	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-???-??	TSM	CCT Valve Rehabilitation	TSM	-	-	-	-	-	-	-	-	-	-	335,300	-	-	335,300	
7450-104-10	TSM	Influent Flow Meter Improvement	PSA	25,000	25,000	-	207,000	-	-	-	-	-	-	-	-	-	207,000	
<b>Subtotal - Liquids Treatment Equipment and Systems</b>				<b>635,700</b>	<b>487,977</b>	<b>1,370,900</b>	<b>985,800</b>	<b>1,789,100</b>	<b>1,939,700</b>	<b>1,883,500</b>	<b>4,173,200</b>	<b>2,146,700</b>	<b>3,857,900</b>	<b>2,675,300</b>	<b>651,000</b>	<b>21,473,100</b>		

**Central Marin Sanitation Agency  
Capital Improvement Program  
FY 19 Proposed Budget and 10-Year Forecast**

GL Account Number	PM*	Delivery Method	Prior FYs' Costs	Adopted Budget For FY 18	Projected FY 18 Actuals	10-year CIP											Project Totals
						1 Proposed 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	
<b>Solids Treatment and Energy Generation Equipment and Systems</b>																	
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
<b>7300-715-00</b>	<b>TSM/MS</b>	<b>Centrifuge Maintenance</b>	<b>PSA/FB</b>	<b>3,139</b>	-	<b>40,000</b>	-	<b>500,000</b>	<b>2,703,000</b>	-	-	-	-	-	-	-	<b>3,243,000</b>
<b>7300-722-00</b>	<b>MS</b>	<b>Cogeneration Maintenance (3)</b>	<b>M/IB/FB</b>	<b>86,300</b>	<b>50,000</b>	<b>145,000</b>	<b>449,600</b>	<b>2,011,000</b>	<b>1,694,700</b>	<b>64,900</b>	<b>66,300</b>	<b>68,000</b>	<b>77,300</b>	<b>80,400</b>	<b>83,200</b>	<b>83,200</b>	<b>4,740,400</b>
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	18,700	165,600
7300-??-??	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	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-??-??	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	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	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Subtotal - Solids Treatment and Energy Generation Equipment and Systems</b>				<b>671,800</b>	<b>203,000</b>	<b>445,000</b>	<b>648,000</b>	<b>2,602,200</b>	<b>5,387,300</b>	<b>1,066,800</b>	<b>174,300</b>	<b>787,800</b>	<b>691,000</b>	<b>1,686,200</b>	<b>205,100</b>	<b>13,693,700</b>	
<b>CMSA Staff Costs for CIP (2)</b>				<b>185,200</b>	<b>185,200</b>	<b>185,200</b>	<b>190,800</b>	<b>196,600</b>	<b>202,600</b>	<b>208,700</b>	<b>215,000</b>	<b>221,600</b>	<b>228,300</b>	<b>235,200</b>	<b>242,300</b>	<b>242,300</b>	<b>2,126,300</b>
<b>(Continued on next page) Annual CIP Totals</b>				<b>3,817,600</b>	<b>2,449,176</b>	<b>2,963,200</b>	<b>2,858,300</b>	<b>7,732,800</b>	<b>7,922,700</b>	<b>5,264,900</b>	<b>4,968,200</b>	<b>3,718,900</b>	<b>5,550,800</b>	<b>5,315,500</b>	<b>1,544,600</b>	<b>47,943,400</b>	

\* 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.

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(1,368,424)      978000 -0.714690768

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

<b>2016 to 2017 CCI % Change</b>	<b>3.49%</b> 1.0349
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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

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

<b>Facility Improvements</b>		
<b>ACCOUNT NUMBER</b>	<b>ACCOUNT / PROJECT TITLE</b>	<b>ACCOUNT / PROJECT DESCRIPTION</b>
7300-103-10	Effluent Storage Pond Rehabilitation	See Full Page Description
7300-700-10	Agency Facilities Master Plan	This project will be completed in FY 19 and several projects have been added to this 10-Year Projection based on the condition assessment task.
7300-956-00	Industrial Coatings & Concrete Rehabilitation	<p>Scheduled industrial coating rehabilitation program for process structures and metal equipment, and treatment plant deck traffic coatings. Coating rehabilitation will be included as part of a larger project when appropriate. The condition of concrete structures will be periodically assessed and projects will be added as needed.</p> <p>FY 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 &amp; 6 piping and repair the concrete cold joints.</p> <p>FY 20 - Replace headworks structural metal (skylights, pipe supports, etc.) and apply new epoxy coating on the new metal and the grit tank handrails.</p> <p>FY 21 - Repair wear coating on the Headworks deck and install wear coating on CCTs 1-4.</p> <p>FY 22 - Allowance for industrial coatings as needed.</p> <p>FY 23 – Repair the saw cut floor area in the digester basement (Master Plan Project 13-2)</p> <p>FY 24-26 – Allowance for industrial coating as needed.</p> <p>FY 27 – Repair cracked concrete in the ferric storage room and recoat the floor (Master Plan Project 04-5)</p> <p>FY 28 – Allowance for industrial coating as needed.</p>

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

<b>Facility Improvements</b>		
<b>ACCOUNT NUMBER</b>	<b>ACCOUNT / PROJECT TITLE</b>	<b>ACCOUNT / PROJECT DESCRIPTION</b>
7300-987-00	Outfall Inspection & Repairs	<p>Ongoing underwater inspection and maintenance of the marine outfall diffuser section. Activities include diver inspections of diffusers and risers, survey of diffuser check valve levels above shifting bay floor sediments, extending or replacing risers and diffuser check valves as needed, and periodic monitoring and removal of solids deposition inside outfall pipe.</p> <p>FY 19 - Inspect the diffuser section of the outfall, and includes an allowance to replace up to 5 broken diffusers if found during the inspection.</p> <p>FY 20 - Routine inspection and riser extension or replacement (assumed 5 total), as needed.</p> <p>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.</p> <p>FY 22 – FY 28 - Routine inspection and riser extension or replacement (assumed 5 per year), as needed.</p>
	Facility Improvements	<p>This new account is for various building improvements that are not incorporated into other capital projects.</p> <p>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.</p> <p>FY 24 - Allowance for building improvements</p> <p>FY 28 – Allowance for building improvements</p>
7400-956-00	Facility Paving/Site Work	<p>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.</p> <p>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.</p> <p>FY 20 - Allowance for a major plant slurry seal and striping project (plant road from gate to FOG/F2E station).</p> <p>FY 23 - Allowance for a major plant paving project (employee parking area).</p> <p>FY 26 - Allowance for a major plant paving project (plant road from primary clarifiers to solids handling building).</p>
7400-600-00	Hillside Slope Stabilization	<p>Several significant landslides occurred on the hillside adjacent to Andersen Drive this past winter. These slope failures will require geotechnical design to recommend the appropriate construction measures required to stabilize the hillside. The budget allowance is based on a previous geotechnical report for a similar, but smaller, slope failure that occurred several years ago. CMSA submitted a request for FEMA funding to repair the slope failures 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.</p>

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

<b>Facility Improvements</b>		
<b>ACCOUNT NUMBER</b>	<b>ACCOUNT / PROJECT TITLE</b>	<b>ACCOUNT / PROJECT DESCRIPTION</b>
7400-960-00	Facility Roofs Rehabilitation	See Full Page Description
7400-???-??	SHB Elevator Control Replacement	See Full Page Description
7400-???-??	Facility Structures Seismic Study	See Full Page Description

<b>General Equipment</b>		
<b>ACCOUNT NUMBER</b>	<b>ACCOUNT / PROJECT TITLE</b>	<b>ACCOUNT / PROJECT DESCRIPTION</b>
7300-672-00	Process Control	<p>Allowances for ongoing 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.</p> <p>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.</p>
7300-672-10	Security / Fire Systems	This is for projects related to the Agency's physical security and fire protections systems, and includes a biannual allowance to purchase replacement equipment as needed.
7300-683-00	Fuel Storage Tanks	Allowance to replace the existing underground fuel storage tanks with an 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.

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

General Equipment		
ACCOUNT NUMBER	ACCOUNT / PROJECT TITLE	ACCOUNT / PROJECT DESCRIPTION
7410-851-00	IT Hardware and Communication Equip	<p>Routine repair and regular replacement of Information Technology hardware and software, such as office computers, printers, scanners, and digital telephone equipment and its supporting servers, and voice radio equipment used by Agency staff.</p> <p>FY 19 – Allowance for equipment listed above and upgrade 21 business computers hardware, purchase 4 new desktops, 5 laptops, and upgrade software on remaining 18 business workstations.</p> <p>FY 20 Allowance for equipment listed above and upgrade/replacement of plant fiber runs</p> <p>FY 21 - Allowance for equipment listed above.</p> <p>FY 22 - Allowance for equipment listed above and replacement of the data servers on which all Agency business and SCADA virtual servers run.</p> <p>FY 23 – 28 - Allowance for equipment listed above.</p>
7420-701-00	Agency Vehicle Replacement	<p>Purchase new vehicles or equipment for passenger vehicles, trucks, forklift, bicycles and electric carts as they reach or exceed their expected useful lives.</p> <p>FY 19 - Replace daily round pump station truck, Toyota Highlander and two electric carts.</p> <p>FY 20 - Replace one carpool vehicle and one electric cart.</p> <p>FY 21 - Replace one carpool vehicle, one forklift and one electric cart.</p> <p>FY 22 - Replace tires on all-terrain forklift, and environmental services tri-cycle.</p> <p>FY 23 - Replace F150 environmental services truck</p> <p>FY 24 - Replace skid steer loader and replace batteries for administration Prius.</p> <p>FY 25 - Replace Ford E250 van.</p> <p>FY 26 - Replace F450 flatbed with a mechanic’s truck, and one electric cart.</p> <p>FY 27 - Replace a maintenance vehicle and one electric cart.</p>
7430-958-00	Laboratory Equipment	<p>This account includes allowances for scheduled replacement of laboratory equipment such as autoclaves, pumps, collection/sampler systems, washers, incubators, bioassay system, etc.</p> <p>FY 19 - Replace BOD incubator, centrifuge, sample refrigerator, primary and secondary process samplers and an automated BOD testing system.</p> <p>FY 20 – Replace and potentially relocate the bioassay system to the final effluent vault or end residual room, and replace temperature monitors.</p> <p>FY 21 - Replace ammonia distillation system, chlorine titrators, biotower sampler, and microscope.</p> <p>FY 22 - Replace the SD2 vault sampler and microbiological incubators.</p> <p>FY 23 - Purchase a FIA-IC system to measure ammonia, nutrients, and other constituents.</p> <p>FY 24 – 28 Allowance to replace equipment as need or purchase new equipment.</p>



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

General Equipment		
ACCOUNT NUMBER	ACCOUNT / PROJECT TITLE	ACCOUNT / PROJECT DESCRIPTION
7450-002-00	Electrical Equipment	<p>This account includes allowances for planned maintenance, upgrading, and replacement of Agency electrical components: individual motor controls and equipment panels, electric sluice gate operators, variable frequency drives, and electrical equipment to support process equipment.</p> <p>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.</p>
7450-002-10	Plant Lighting	<p>This account includes allowances to replace low efficiency lights with LED lighting that consumes less power and reduces light pollution. Each project is grouped by lighting fixture type and will be completed by staff or an electrical contractor.</p> <p>FY 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 the primary clarifiers 6 &amp; 7, chlorine contact tanks 5 &amp; 6 and polymer station.  FY 23 – Allowance to replace any remaining HPS lighting.</p>
7450-102-00	Process Instrumentation	<p>This account includes allowances for ongoing repair, replacement or upgrading of 4 to 6 obsolete meters, sensors, and transmitters per year, and to provide local process status information and transmit it to the treatment plant’s SCADA system. Annual allowance is based on equipment costs from previous years and has been escalated to current and future dollars.</p> <p>FY 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.</p>

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

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

<b>Liquid Treatment Processes and Equipment</b>		
<b>ACCOUNT NUMBER</b>	<b>ACCOUNT / PROJECT TITLE</b>	<b>ACCOUNT / PROJECT DESCRIPTION</b>
7300-685-00	Bio-Tower Rotary Distributor Replacement	See Full Page Description
7300-700-00	Plant Pumps	<p>Scheduled replacement of centrifugal, positive displacement and chopper pumps. These pumps transport primary sludge, waste activated sludge, contact tank scum, and other liquids throughout the Agency facilities. This account includes the digester mixing pumps.</p> <p>FY 19 - Replace two digester basement chopper pumps, four primary sludge pumps, and trays.</p> <p>FY 20 - Replace three carrier water pumps..</p> <p>FY 21 - Refurbish one biotower pump. Replace two primary scum pumps and two plant sump pumps.</p> <p>FY 22 - Refurbish three recycled water pumps and one scum pump. Replace one headworks sample pump and two sump pumps.</p> <p>FY 23 - Replace two sump pumps and two secondary scum pumps. Allowance to replace additional pumps identified by condition assessments.</p> <p>FY 24 - Refurbish two digester mix pumps. Allowance to replace additional pumps identified by condition assessments.</p> <p>FY 25 -28 - Allowance to replace pumps identified by condition assessments.</p>

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

<b>Liquid Treatment Processes and Equipment</b>		
<b>ACCOUNT NUMBER</b>	<b>ACCOUNT / PROJECT TITLE</b>	<b>ACCOUNT / PROJECT DESCRIPTION</b>
7300-719-00	Chemical Pumps	<p>This account includes an allowance for regular refurbishment or replacement, based on a condition assessment, of pumps and related equipment for the delivery of specific chemicals at various treatment unit processes. Chemical pumps include those for ferric chloride, hydrogen peroxide, calcium nitrate, sodium hypochlorite, emulsion polymer, and sodium bisulfite.</p> <p>FY 19 - Above allowances plus, replace one sodium bisulfite metering pump, one solids handling polymer activation unit, and one chemical induction mixer.</p> <p>FY 20 - Replace eight nitrate solution metering pumps, and replace one chemical induction mixer.</p> <p>FY 21 - Replace five disinfection (chlorine solution) metering pumps and one chemical induction mixer.</p> <p>FY 22 - Replace five sodium bisulfite metering pumps, two chemical transfer pumps, and one chemical induction mixer.</p> <p>FY 23 - Refurbish one polymer feed pump and one chemical induction mixer. Replace two headworks ferric chloride metering pumps.</p> <p>FY 24 -28 - Above allowances to replace chemical pumps based on condition assessment.</p>
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	<p>Refurbishment and replacement of mechanical equipment such as drive mechanisms, media vessels, and blowers in all process tanks and systems throughout the treatment facility.</p> <p>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 &amp; #7.</p> <p>FY 20 - Allowance for above equipment, plus refurbish or repair reclaimed water piping which supports tank wash down equipment.</p> <p>FY 21 - Replace original blowers and associated diffusers in the aerated grit tanks (Master Plan Project 04-3)</p> <p>FY 22 - Allowance for above equipment, plus perform a condition assessment siloxane media vessels, hydrogen sulfide media vessels, and appurtenances.</p> <p>FY 23 - 28 - General tank related replacement of equipment as determined by condition assessment.</p>
7400-965-00	Primary Clarifiers Rehabilitation	See Full Page Description

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

<b>Liquid Treatment Processes and Equipment</b>		
<b>ACCOUNT NUMBER</b>	<b>ACCOUNT / PROJECT TITLE</b>	<b>ACCOUNT / PROJECT DESCRIPTION</b>
7300-990-00	Secondary Clarifiers Rehabilitation	See Full Page Description
7300-???-??	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	Critical Buried Pipe Inspection / Repairs	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 their service life. Tanks include five sodium hypochlorite, two sodium bisulfite, two hydrogen peroxide, two polymer, four calcium nitrate, and three ferric chloride tanks. The replacement schedule is subject to change based on annual condition assessment inspection results.  FY 19 - Replace the Greenbrae nitrate tank. FY 20 - Replace one sodium hypochlorite tank and the West Railroad 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.
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 ongoing condition assessments are completed.  FY 19 - Replace fourteen 6-inch and four 4-inch expansion joints in Agency gallery B system small diameter process piping. FY 20 - Replace six 4-inch Gallery A and nine 6-inch in Gallery C 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.

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

**Liquid Treatment Processes and Equipment**

ACCOUNT NUMBER	ACCOUNT / PROJECT TITLE	ACCOUNT / PROJECT DESCRIPTION
7430-???-??	CCT Valve Rehabilitation	<p>The telescoping valves in the Chlorine Contact Tanks (CCT) 1 thru 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.</p> <p>FY 27 - The 2018 Facilities Master Plan recommends replacing the telescoping valves in Chlorine Contact Tanks (CCT) 1 thru 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.</p>
7450-104-10	Influent Flow Meter Improvement	<p>Both the 45" San Rafael Interceptor and the 54" Ross Valley Interceptor were fitted with insertion magnetic-type meters in FY 11. Having both the original ultrasonic meters plus the magnetic meters can improve their accuracy in measuring large flow variations.</p> <p>FY 12 - Allowance to install new flow meter technology pending the results of the flow meter technology survey.</p>

**Solids Treatment And Energy Generation Processes and Equipment**

ACCOUNT NUMBER	ACCOUNT / PROJECT TITLE	ACCOUNT / PROJECT DESCRIPTION
7300-678-00	Emergency Generator Assessment & Improvement	<p>The emergency generator provides power to Agency Facilities when utility power is not available and the cogeneration system is offline. The emergency generator system was installed in 1985 and consists of an electrical generator connected to a diesel fueled reciprocating engine. While the equipment is relative old, it has had minimal usage and is maintained per manufacturer's recommendations.</p> <p>FY 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 the cost to rehabilitate or replace the equipment.</p> <p>FY 26 - 27 - Allowance to fund design and installation of a replacement emergency generator based on findings of the assessment and preliminary design report.</p>

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

<b>Solids Treatment And Energy Generation Processes and Equipment</b>		
<b>ACCOUNT NUMBER</b>	<b>ACCOUNT / PROJECT TITLE</b>	<b>ACCOUNT / PROJECT DESCRIPTION</b>
7300-691-00	Digester Inspection, Cleaning and Cover Replacement	This account includes allowance for periodic cleaning and inspection of each anaerobic digester every 10 years based on conservative estimates of their membrane covers' service life. Agency staff will drain the tanks to allow a contractor to remove material that has accumulated inside of the tanks. A specialty contractor will replace the membrane covers after the cleaning is complete and then staff will return each digester to service.  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-???-??	Digester Mixing Pump Study	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.
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 19 -28- Allowance for minor maintenance of mechanical equipment every other year.

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

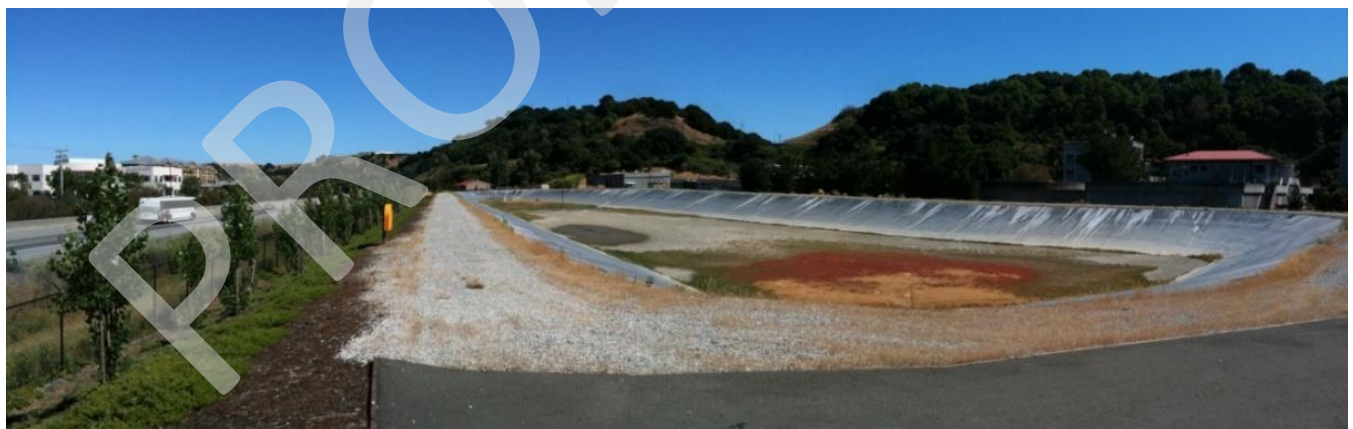
<b>Solids Treatment And Energy Generation Processes and Equipment</b>		
<b>ACCOUNT NUMBER</b>	<b>ACCOUNT / PROJECT TITLE</b>	<b>ACCOUNT / PROJECT DESCRIPTION</b>
7300-???-??	Organic Waste Receiving Facility Equipment	New account for repairs and replacement of pumps, valves, monitors, and other equipment 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	<p>The PG&amp;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.</p> <p>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.</p>
No Account Number	CMSA Staff Costs for CIP Projects	<p>Capitalization of compensation and benefits for CMSA staff time to manage design of, contracting for, and construction of CIP projects, as listed below. Costs for FY 18 are based on actual estimated staff time, totaling 2 Full Time Equivalencies (FTE's). Costs for future years are based on a one FTE allowance, and will be modified for each current fiscal year in that year's CIP budget. The projects identified for staff cost capitalization in FY 18 are:</p> <ul style="list-style-type: none"> <li>7300-720-10 Gates Rehabilitation</li> <li>7300-990-00 Secondary Clarifiers Rehabilitation</li> <li>7400-966-00 Process Piping Inspection/Repairs/Replacement</li> <li>7300-715-00 Centrifuge Maintenance</li> <li>7300-660-00 PG&amp;E Interconnection Agreement Modification</li> </ul>





<b>Effluent Storage Pond Rehabilitation (GL 7300-103-10)</b>			
<b>Type of Project</b>	Design and Capital Construction	<b>Lead Department</b>	Engineering
<b>Project Delivery</b>	Formally bid construction		
<b>Description and Justification</b>	The effluent storage pond was constructed over a deep layer of Young Bay Mud that settles unevenly under the Pond. This causes loss of capacity due to berm settling, and small areas of shallow standing water after the Pond is emptied due to bottom settling. The berm was reconstructed and raised in 2007, including a new geotextile liner and new sections of intake and outlet piping. There is an allowance for surveying in FY 22 and potential renovation of berms and bottom in FY 23.		
<b>Elements</b>	FY 22 - Survey entire berm, top road, and pond bottom for excessive or uneven settlement; FY 23 - Based on survey results, allowance for re-grading the pond bottom and / or raising the berm, including extending and re-anchoring the buried extra liner material and rebuilding the service road on top of the berm.		
<b>Risk Assessment</b>	This is a low risk project because berm settlement does not occur rapidly. Berm condition will be regularly monitored and the survey timing can be adjusted if necessary.		
<b>Projected Expenditures FY 19 - 28</b>			
		FY 22	\$38,700
		FY 23	1,225,700
		<b>FY 19 – 28 Total</b>	<b>\$1,264,000</b>
<b>Implementation Schedule</b>			
<b>Schedule</b>	<b>Activity Description</b>		<b>Cost</b>
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.		<b>1,264,000</b>
	<b>Project Total</b>		<b>\$1,354,454</b>

#### Project Photo



#### Effluent Storage Pond

<b>Agency Facilities Master Plan (GL 7300-700-10)</b>			
<b>Type of Project</b>	Planning Study	<b>Lead Department</b>	Engineering
<b>Project Delivery</b>	Request for Proposals		
<b>Description and Justification</b>	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.	
<b>Elements</b>	<ul style="list-style-type: none"> <li>- Recommendations for if and when aging infrastructure should be replaced in-kind or retrofitted with a newer technology that reduces electrical consumption or GHG emissions.</li> <li>- Agency specific options for additional biogas use including energy generation, natural gas pipeline injection, and a vehicle fueling station</li> <li>- Evaluation of potential regulatory changes including nutrient limits</li> <li>- Evaluation of biosolids management practices and identification of future alternatives</li> <li>- Potential facility and/or equipment improvements to address sea level rise.</li> <li>- Identify feasible locations and sizes for solar power facilities</li> <li>- A calibrated treatment plant model that can be used to simulate changes in operational strategy and for training of new operations staff.</li> </ul>	
<b>Risk Assessment</b>	The Agency should regularly conduct master planning activities to assess potential risks associated with infrastructure management, regulatory changes, and capacity restrictions. Because there are no immediate drivers to alter the facility, this project is considered low risk.	
<b>Projected Expenditures FY 19 - 28</b>		
	FY 19	\$40,000
	<b>FY 19 – 28 Total</b>	<b>\$40,000</b>
<b>Implementation Schedule</b>		
<b>Schedule</b>	<b>Activity Description</b>	<b>Cost</b>
FY 17	Develop and issue an RFP to select a consultant and begin preparation of the Master Plan.	\$230,000
FY 18	Continue working on the Master Plan.	260,000
FY 19	Complete the Master Plan.	40,000
	Project Total	<b>\$530,000</b>

**Project Photos:**



**Agency Facilities**



**Organic Waste Receiving Facility**



**Effluent Pumps**

**Project Photos**



**Maintenance Building and Covered Portico**



**Area to be enclosed for additional storage**

PROPOSED

<b>Facility Roofs Rehabilitation (GL 7400-960-00)</b>			
<b>Type of Project</b>	Design and Capital Construction	<b>Lead Department</b>	Engineering
<b>Project Delivery</b>	Formally bid		
<b>Description and Justification</b>	In FY 2015, the Agency had a roofing expert survey all its building roofs. The assessment indicated that the original standing seam metal roofs are in good condition. Therefore, planned replacement of the roofs has been postponed. This item contains allowances to rehabilitate the standing seam metal roofs on the Administration, Maintenance, Aeration and Secondary Clarifier control buildings and the Maintenance Annex, and to perform minor repairs on their supporting structures, if required.		
<b>Elements</b>	FY 18 - (Completed) Replace gutters on the aeration system and secondary clarifier control buildings; FY 20 - Prepare construction documents to bid and perform a contract for roof system replacement, structural repairs, and/or seismic upgrades; FY 21 - Construct upgrades to the structures; FY 23 - Construct roof repairs on the headworks, bio-tower control room, and switchgear.		
<b>Risk Assessment</b>	This is a medium risk project. A recent roof inspection indicated that the roof system for the Administration building is in good condition but that it will require rehabilitation in the future.		
<b>Projected Expenditures FY 19 – 28</b>			
		FY 20	78,100
		FY 21	953,600
		FY 23	9,900
		<b>FY 19 – 28 Total</b>	<b>\$1,041,600</b>
<b>Implementation Schedule</b>			
<b>Schedule</b>	<b>Activity Description</b>	<b>Cost</b>	
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	
		<b>Project Total</b>	<b>\$1,041,800</b>

**Project Photo**



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

<b>Solids Handling Building Elevator Control Replacement (GL 7400-??-??)</b>			
<b>Type of Project</b>	Design and Capital Construction	<b>Lead Department</b>	Engineering
<b>Project Delivery</b>	Formally bid		
<b>Description and Justification</b>	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.		
<b>Elements</b>	FY 23 - Replace the Solids Handling Building elevator control system in the system.		
<b>Risk Assessment</b>	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.		
<b>Projected Expenditures FY 19 – 28</b>			
		FY 23	103,500
		<b>FY 19 – 28 Total</b>	<b>\$103,500</b>
<b>Implementation Schedule</b>			
<b>Schedule</b>	<b>Activity Description</b>	<b>Cost</b>	
FY 23	Replace elevator control system	103,500	
	<b>Project Total</b>	<b>\$103,500</b>	

<b>Facility Structures Seismic Study (GL 7400-??-??)</b>			
<b>Type of Project</b>	Design and Capital Construction	<b>Lead Department</b>	Engineering
<b>Project Delivery</b>	Formally bid		
<b>Description and Justification</b>	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.		
<b>Elements</b>	FY 20 – Conduct a study to quantify the risk of structural damage due to soil settlement and identify future structural improvement projects, if necessary.		
<b>Risk Assessment</b>	This is a medium risk project due to the unknown risk posed to facility structures resulting from soil settlement.		
<b>Projected Expenditures FY 19 – 28</b>			
		FY 20	207,000
		<b>FY 19 – 28 Total</b>	<b>\$207,000</b>
<b>Implementation Schedule</b>			
<b>Schedule</b>	<b>Activity Description</b>		<b>Cost</b>
FY 20	Conduct seismic study		207,000
	<b>Project Total</b>		<b>\$207,000</b>

<b>Electrical Distribution System Rehabilitation (GL 7450-105-00)</b>			
<b>Type of Project</b>	Design and Capital Construction	<b>Lead Department</b>	Engineering
<b>Project Delivery</b>	Formally bid		
<b>Description and Justification</b>	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.		
<b>Elements</b>	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.		
<b>Risk Assessment</b>	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.		
<b>Projected Expenditures FY 19 – 28</b>			
		FY 21	1,204,800
		FY 23	194,500
		FY 25	203,800
		FY 27	216,200
		<b>FY 19 – 28 Total</b>	<b>\$1,819,300</b>
<b>Implementation Schedule</b>			
<b>Schedule</b>	<b>Activity Description</b>		<b>Cost</b>
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
		<b>Project Total</b>	<b>\$1,819,300</b>

<b>Biotower Rotary Distributor Replacement (GL 7300-685-00)</b>			
<b>Type of Project</b>	Design and Capital Construction	<b>Lead Department</b>	Engineering
<b>Project Delivery</b>	Informally bid		
<b>Description and Justification</b>	The biotowers are the first of two secondary treatment processes, and remove some of the biochemical oxygen demand (BOD) from the primary effluent before treatment in the aeration tanks. The rotary distributor is the critical moving part, spreading wastewater evenly on the filter media. These critical components operate in a harsh environment and they have about a 25 to 30-year life expectancy. The rotary distributor and top level of filter media in Biotower No. 1 were replaced in 2010. The 2018 Facility Master Plan recommends replacing the rotating mechanism and media in Biotower No. 2 (Master Plan Project 06-2).		
<b>Elements</b>	<ul style="list-style-type: none"> <li>- Replace galvanized-steel distributor mechanism and plastic spreader nozzles with a motor –operated mechanism;</li> <li>- Replace distributor bearing;</li> <li>- Replace or recoat the cast iron turntable on which the mechanism turns; and</li> <li>- Replace the top tier of media that is subject to weather damage.</li> </ul>		
<b>Risk Assessment</b>	This is a medium risk project. The rotary distributor is operating but has significant corrosion. The upper media bed needs to be replaced due to weather damage. The project description and timing may change based on the Facilities Master Plan findings.		
<b>Projected Expenditures FY 19 – 28</b>			
			FY 24
			\$988,000
			<b>FY 19 – 28 Total</b>
			<b>\$988,000</b>
<b>Implementation Schedule</b>			
<b>Schedule</b>	<b>Activity Description</b>		<b>Cost</b>
FY19	Media, rotary distributor and bearing replacement		\$988,000
<b>Project Total</b>			<b>\$988,000</b>

**Project Photos:**



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



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



<b>Gates Rehabilitation (GL 7300-720-00)</b>			
<b>Type of Project</b>	Design and Capital Construction	<b>Lead Department</b>	Engineering
<b>Project Delivery</b>	Formally bid		
<b>Description and Justification</b>	There are several large gates that control flow into, through, 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 thru 4 (Master Plan Project 09-1).		
<b>Elements</b>	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 thru 4 influent gates. FY 25 – 28 – Allowance to replace gates as needed based on condition assessment.		
<b>Risk Assessment</b>	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.		
<b>Projected Expenditures FY 19 – 28</b>			
		FY 19	436,400
		FY 20	77,500
		FY 21-23 (Total)	244,100
		FY 24	437,700
		FY 25 – 28 (Total)	362,300
		<b>FY 19 – 28 Total</b>	<b>\$1,558,000</b>
<b>Implementation Schedule</b>			
<b>Schedule</b>	<b>Activity Description</b>		<b>Cost</b>
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 thru 4 influent gates		437,700
FY 25-28	General allowance for gate replacement		362,300
		<b>Project Total</b>	<b>\$1,558,000</b>

<b>Headworks Equipment (GL 7300-727-00)</b>			
<b>Type of Project</b>	Design and Capital Construction	<b>Lead Department</b>	Engineering
<b>Project Delivery</b>	Formally bid		
<b>Description and Justification</b>	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).		
<b>Elements</b>	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 classifiers systems including associated pumps, piping and controls. FY 27 – 28 – Allowance to replace equipment as needed based on condition assessment.		
<b>Risk Assessment</b>	This is a low risk project because most of the headworks equipment has redundant equipment that allows the plant to operate with one piece of equipment is out of service for maintenance.		
<b>Projected Expenditures FY 19 – 28</b>			
		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
		<b>FY 19 – 28 Total</b>	<b>\$1,894,300</b>
<b>Implementation Schedule</b>			
<b>Schedule</b>	<b>Activity Description</b>	<b>Cost</b>	
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 thru 4	1,311,800	
FY 27 – 28 (Total)	General allowance for equipment replacement	70,500	
	<b>Project Total</b>	<b>\$1,894,300</b>	

<b>Odor Control System Improvements (GL 7300-981-00)</b>		
<b>Type of Project</b>	Design and Capital Construction	<b>Lead Department</b> Engineering
<b>Project Delivery</b>	Formally bid	
<b>Description and Justification</b>	Some wastewater treatment processes produce odorous and/or corrosive gasses. The existing odor control scrubbers serve as one component of the Agency's overall odor control management program. Odor control scrubbers located in the Headworks, Biotower basement, and Solids Handling Building (SHB) are approaching the end of their service life. A consulting firm prepared a conceptual design report with limited sampling to evaluate the overall scrubber performance and cost estimates to replace each unit with activated carbon media 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.	
<b>Elements</b>	FY 24 – Remove the Headworks odor scrubber replacement with an activated carbon scrubber FYI 26 - Remove the Biotower basement odor scrubbers replacement with a single activated carbon scrubber FY 27 – Allowance to design and construct scrubber replacement in the SHB.	
<b>Risk Assessment</b>	This is a low risk project because the odor scrubbers are operating with minor issues.	
<b>Projected Expenditures FY 19 - 28</b>		
	FY 24	2,003,600
	FY 26	2,276,800
	FY 27	1,546,800
	<b>FY 19 – 28 Total</b>	<b>\$5,827,200</b>
<b>Implementation Schedule</b>		
<b>Schedule</b>	<b>Activity Description</b>	<b>Cost</b>
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
	<b>Project Total</b>	<b>\$5,827,200</b>

**Project Photos:**



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

<b>Primary Clarifiers Rehabilitation (GL 7400-965-00)</b>			
<b>Type of Project</b>	Design and Capital Construction	<b>Lead Department</b>	Engineering
<b>Project Delivery</b>	Formally bid		
<b>Description and Justification</b>	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 Plans recommends a project to address work noted above plus repairing concrete damage and replacing metal piping with PVC pipe (Master Plan Project 05-1).		
<b>Elements</b>	FY 19 – Replace primary drive units for Primary Clarifiers No. 1 thru 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.		
<b>Risk Assessment</b>	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.		
<b>Projected Expenditures FY 19 – 28</b>			
		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
		<b>FY 19 – 28 Total</b>	<b>\$2,205,100</b>
<b>Implementation Schedule</b>			
<b>Schedule</b>	<b>Activity Description</b>		<b>Cost</b>
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
		<b>Project Total</b>	<b>\$2,205,100</b>

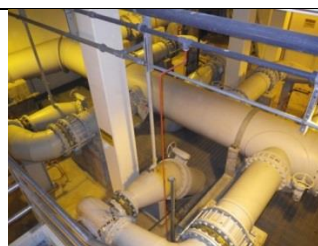
<b>Secondary Clarifiers Rehabilitation (GL 7300-990-00)</b>			
<b>Type of Project</b>	Design and Capital Construction	<b>Lead Department</b>	Engineering
<b>Project Delivery</b>	Formally bid		
<b>Description and Justification</b>	There are four secondary clarifiers in the treatment plant. The 2018 Facilities Master Plans 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.		
<b>Elements</b>	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.		
<b>Risk Assessment</b>	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.		
<b>Projected Expenditures FY 19 – 28</b>			
		FY 19	325,700
		FY 20	331,400
		FY 21	401,800
		FY 22	227,800
		<b>FY 19 – 28 Total</b>	<b>\$1,286,700</b>
<b>Implementation Schedule</b>			
<b>Schedule</b>	<b>Activity Description</b>		<b>Cost</b>
FY 19	Secondary Clarifier No. 3 refurbishment and turntable drive		325,700
FY 20	Secondary Clarifier No. 4 refurbishment and turntable drive		331,400
FY 21	Secondary Clarifier No. 1 refurbishment and turntable drive		401,800
FY 22	Secondary Clarifier No. 2 refurbishment		227,800
		<b>Project Total</b>	<b>\$1,286,700</b>

<b>RAS/WAS Pump Replacement (GL 7300-??-??)</b>			
<b>Type of Project</b>	Design and Capital Construction	<b>Lead Department</b>	Engineering
<b>Project Delivery</b>	Formally bid		
<b>Description and Justification</b>	The 2018 Facilities Master Plans 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 RAS pump only with diversion valves to split WAS and RAS.		
<b>Elements</b>	FY 21 – Determine if WAS pumps can be eliminated and prepare design documents FY 22 -23 – Construction of pump system improvements.		
<b>Risk Assessment</b>	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.		
<b>Projected Expenditures FY 19 – 28</b>			
		FY 21	389,700
		FY 22 – 23 (Total)	1,559,000
		<b>FY 19 – 28 Total</b>	<b>\$1,948,700</b>
<b>Implementation Schedule</b>			
<b>Schedule</b>	<b>Activity Description</b>	<b>Cost</b>	
FY 21	Project design phase	389,700	
FY 22-23 (Total)	Construct RAS & WAS pump system improvements	1,559,000	
	<b>Project Total</b>	<b>\$1,948,700</b>	

<b>Process Piping Inspection/Repairs/Replacement (GL 7400-966-00)</b>			
<b>Type of Project</b>	Inspection and Capital Construction	<b>Lead Department</b>	Engineering
<b>Project Delivery</b>	Inspection – Request for Proposals; Repairs - Formally bid		
<b>Description and Justification</b>	The San Rafael and Ross Valley Interceptors are large diameter buried force mains and are the only pipelines that convey wastewater from the satellite collection agency service areas to the treatment plant. 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 repair 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.		
<b>Elements</b>	<p>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.</p> <p>FY 25 – Repair corrosion on the 54-inch storage pond discharge pipe by installing a plug or bypass.</p> <p>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.</p> <p>FY 27 – Allowance to inspect the San Rafael and Ross Valley Interceptors.</p>		
<b>Risk Assessment</b>	This is a medium risk project because the condition of the pipelines and flexible joints is unknown. However, the pipelines have not leaked or shown signs of corrosion.		
<b>Projected Expenditures FY 19 - 28</b>			
		FY 19	190,000
		FY 25	799,300
		FY 26	113,800
		FY 27	163,400
		<b>FY 19 – 28 Total</b>	<b>\$1,266,500</b>
<b>Implementation Schedule</b>			
<b>Schedule</b>	<b>Activity Description</b>	<b>Cost</b>	
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	
		<b>Project Total</b>	<b>\$1,266,500</b>



Biotower effluent pipe



Primary Effluent pipe manifold

<b>Centrifuge Maintenance (GL 7300-964-10)</b>			
<b>Type of Project</b>	Design and Capital Construction	<b>Lead Department</b>	Engineering
<b>Project Delivery</b>	Informally and formally bid		
<b>Description and Justification</b>	The Agency dewateres digested sludge with three high speed centrifuges. The centrifuges rotate at high speeds to remove water and produce biosolids. The high speed rotation and corrosive operating environment necessitate a significant amount of routine maintenance for optimum performance. A manufacturer performed a condition assessment of the centrifuges in 2016 and found the centrifuges 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.		
<b>Elements</b>	FY 19 - Allowance to refurbish one centrifuge ; FY 21 – Begin design of centrifuge replacement; FY 22 - Construct the centrifuge replacement.		
<b>Risk Assessment</b>	This is a low risk project because the existing centrifuges with proper maintenance are expected to operate and meet the Agency’s needs.		
<b>Projected Expenditures FY 18 – 27</b>			
		FY 19	40,000
		FY 21	500,000
		FY 22	2,703,000
		<b>FY 18 – 27 Total</b>	<b>\$3,243,000</b>
<b>Implementation Schedule</b>			
<b>Schedule</b>	<b>Activity Description</b>	<b>Cost</b>	
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	
	<b>Project Total</b>	<b>\$3,243,000</b>	

**Project Photos:**



**Existing Centrifuges**



**Biosolids Hoppers**



<b>Cogeneration Maintenance (GL 7300-722-00)</b>			
<b>Type of Project</b>	Design and Capital Construction	<b>Lead Department</b>	Engineering
<b>Project Delivery</b>	Formally bid		
<b>Description and Justification</b>	<p>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 onsite, upper and lower end rebuilds involving the cylinder heads and liners, valves and pistons; or off-site overhaul work that includes a complete disassembly and reassembly with machining to restore the engine and generator to original factory specifications. Although the engine 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 19 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&amp;E Interconnection Agreement and power sale agreement with Marin Clean Energy. The existing cogeneration engine will remain available as a backup unit after the new cogeneration system is installed.</p>		
<b>Elements</b>	<p>FY 19 - Onsite 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 offsite 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</p>		
<b>Risk Assessment</b>	<p>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.</p>		
<b>Projected Expenditures FY 19 – 28</b>			
		FY 19	181,600
		FY 20	449,600
		FY 21	2,011,000
		FY 22	1,694,700
		FY 23 – 28 (Total)	440,100
		<b>FY 19 – 28 Total</b>	<b>\$4,702,000</b>
<b>Implementation Schedule</b>			
<b>Schedule</b>	<b>Activity Description</b>		<b>Cost</b>
FY 19	Existing engine upper end rebuild and technology survey		181,600
FY 20	Existing engine offsite 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
		<b>Project Total</b>	<b>\$4,702,000</b>



**Ten-Year Financial Forecast**

PROPOSED



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

Line No.	Description	Assump	Adopted Budget FY 17-18	Revenue Program Period				Service Charges / Cap Fee at Last Authorized					
				Proposed 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	
<b>PRELIMINARY ASSUMPTIONS</b>			<b>EDU CMSA</b>	<b>47,724</b>									
<b>Funding Requirements:</b>													
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	311,200	314,272	317,440	320,603	323,762	327,017	330,267	333,613	336,954	
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	879,600	897,168	915,133	933,396	952,056	971,113	990,567	1,010,419	1,030,667	
l	Operating before debt and capital		11,462,600	11,795,000	12,085,514	12,437,373	12,841,317	13,315,604	13,890,308	14,646,626	14,957,348	15,276,091	
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	15,768,206	16,052,845	17,040,379	17,453,323	17,927,310	19,196,689	19,955,132	20,260,729	20,628,847	
o	Capital program		3,817,600	2,962,200	2,857,300	7,731,700	7,921,600	5,263,800	4,967,100	3,717,700	5,549,500	5,314,200	
p	Total funding requirements		<b>\$ 19,242,106</b>	<b>\$ 18,730,406</b>	<b>\$ 18,910,145</b>	<b>\$ 24,772,079</b>	<b>\$ 25,374,923</b>	<b>\$ 23,191,110</b>	<b>\$ 24,163,789</b>	<b>\$ 23,672,832</b>	<b>\$ 25,810,229</b>	<b>\$ 25,943,047</b>	
<b>Funding Sources: (Note 3)</b>				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	1,802,188	1,856,254	1,911,941	1,969,299	2,028,378	2,086,373	2,146,307	2,217,103	2,221,897	
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	18,232,421	18,861,304	19,511,921	20,185,025	20,881,393	20,943,148	21,006,668	21,072,010	21,139,502	
x	Reserve (Increase) Usage (Note 6)		<b>1,635,359</b>	<b>497,985</b>	<b>48,842</b>	<b>5,260,158</b>	<b>5,189,899</b>	<b>2,309,717</b>	<b>3,220,641</b>	<b>2,666,164</b>	<b>4,738,219</b>	<b>4,803,545</b>	
y	Total funding sources		<b>\$ 19,242,106</b>	<b>\$ 18,730,406</b>	<b>\$ 18,910,145</b>	<b>\$ 24,772,079</b>	<b>\$ 25,374,923</b>	<b>\$ 23,191,110</b>	<b>\$ 24,163,789</b>	<b>\$ 23,672,832</b>	<b>\$ 25,810,229</b>	<b>\$ 25,943,047</b>	
z	Control total		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	

**NOTES ON FORECAST:**

- 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
- Annual increases per CalPERS Circular Letter 200-004-17 dated January 19, 2017
- Funding from JPA agencies increases 3.5% per 5-year revenue plan
- Capital fee becomes zero (0) in outer years beyond revenue program period
- Assume new debt issue for \$9M in FY20 and \$10M in FY23
- Use of reserves through FY20 for capital and debt proceeds for capital thereafter
- 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
- Beginning reserve balances for Section III are per the Treasurer's Report
- Transfer operating surpluses to unrestricted capital reserve as necessary to maintain Board established 25% unrestricted operating reserve
- Transfer unrestricted capital reserves to fully fund CIP Section II until depleted for forecast purposes
- Capacity charges, the debt service coverage fee, the capital fee, and unrestricted capital reserve usage fund the capital program
- Unrestricted operating reserve beginning balance contains amount per treasurer's report plus \$100,000 insurance reserve plus \$250,000 contingency reserve

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

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

Line No.	Description	Assump	Adopted Budget FY 17-18	Revenue Program Period				Service Charges / Cap Fee at Last Authorized				
				Proposed 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
<b>FUNDING FOR PROGRAMS - DETAIL</b>												
<b>OPERATING PROGRAM</b>												
1	Total operating costs before debt and capital		\$ 11,462,600	\$ 11,795,000	\$ 12,085,514	\$ 12,437,373	\$ 12,841,317	\$ 13,315,604	\$ 13,890,308	\$ 14,646,626	\$ 14,957,348	\$ 15,276,091
2	Service charges and other revenues		11,995,065	12,424,564	12,850,413	13,290,896	13,746,517	14,217,799	14,275,793	14,335,728	14,406,524	14,411,318
3	Total operating surplus (shortfall)		\$ 532,465	\$ 629,564	\$ 764,898	\$ 853,523	\$ 905,200	\$ 902,195	\$ 385,485	\$ (310,898)	\$ (550,824)	\$ (864,774)
<b>CAPITAL IMPROVEMENT PROGRAM</b>												
4	Total Annual CIP to Fund (10-Year CIP)		\$ 3,817,600	\$ 2,962,200	\$ 2,857,300	\$ 7,731,700	\$ 7,921,600	\$ 5,263,800	\$ 4,967,100	\$ 3,717,700	\$ 5,549,500	\$ 5,314,200
5	Restricted - other financing sources (e.g., bonds, loans, grants)		\$ -	\$ -	\$ 812,271	\$ 6,272,600	\$ 1,915,129	\$ 3,211,837	\$ 3,782,651	\$ 2,361,312	\$ 644,200	\$ -
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	1,130,373	-	-	4,182,220	-	-	-	3,541,019	1,026,178
10	Total Available Funding		\$ 3,817,601	\$ 2,962,200	\$ 2,857,300	\$ 7,731,700	\$ 7,921,600	\$ 5,263,800	\$ 4,969,957	\$ 3,723,214	\$ 5,548,607	\$ 2,389,263
11	Control Total / (Unfunded Capital)	\$ (2,917,459)	\$ 1	\$ (0)	\$ (0)	\$ (0)	\$ 0	\$ 0	\$ 2,857	\$ 5,514	\$ (893)	\$ (2,924,937)
<b>RESERVE RECONCILIATION</b>												
12	Restricted capital reserve balance - beg (Treas Report)		\$ 992,024	\$ 990,477	\$ 993,301	\$ 9,179,562	\$ 3,065,881	\$ 1,153,002	\$ 7,941,090	\$ 4,332,107	\$ 1,971,327	\$ 1,325,845
13	Other financing sources balance - beg		-	-	-	8,187,729	1,915,129	-	6,788,163	3,005,512	644,200	-
14	New debt issuance proceeds		-	-	9,000,000	-	-	10,000,000	-	-	-	-
15	Project requisition draws (neg number) (use 1st, then reserve)		-	-	(812,271)	(6,272,600)	(1,915,129)	(3,211,837)	(3,782,651)	(2,361,312)	(644,200)	-
16	Other financing sources balance - end		-	-	8,187,729	1,915,129	-	6,788,163	3,005,512	644,200	-	-
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	8,186,261	(6,113,681)	(1,912,879)	6,788,088	(3,608,983)	(2,360,780)	(645,482)	12,344
22	Restricted capital reserve balance - end		\$ 990,477	\$ 993,301	\$ 9,179,562	\$ 3,065,881	\$ 1,153,002	\$ 7,941,090	\$ 4,332,107	\$ 1,971,327	\$ 1,325,845	\$ 1,338,189
<b>Unrestricted capital reserve balance - beg (Treas Report)</b>												
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	546,464	692,269	765,559	804,214	783,623	244,666	-	-	-
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)	(1,130,373)	-	-	(4,182,220)	-	-	-	(3,541,019)	(1,026,178)
27	Net change		(1,755,018)	(583,909)	692,269	765,559	(3,378,006)	783,623	244,666	-	(3,541,019)	(1,026,178)
28	Unrestricted capital reserve balance - end		\$ 6,042,995	\$ 5,459,086	\$ 6,151,355	\$ 6,916,914	\$ 3,538,908	\$ 4,322,531	\$ 4,567,197	\$ 4,567,197	\$ 1,026,178	\$ -
<b>Unrestricted operating reserve balance - beg (Treas Report) (Note 12)</b>												
29	Service charges and other revenues		\$ 11,995,065	\$ 12,424,564	\$ 12,850,413	\$ 13,290,896	\$ 13,746,517	\$ 14,217,799	\$ 14,275,793	\$ 14,335,728	\$ 14,406,524	\$ 14,411,318
30	Operating expenses		(11,462,600)	(11,795,000)	(12,085,514)	(12,437,373)	(12,841,317)	(13,315,604)	(13,890,308)	(14,646,626)	(14,957,348)	(15,276,091)
31	Unrestricted operating reserve transfer-out (excess or draw) (step 1)		(411,259)	(546,464)	(692,269)	(765,559)	(804,214)	(783,623)	(244,666)	-	-	-
32	Net change		121,206	83,100	72,629	87,964	100,986	118,572	140,819	(310,898)	(550,824)	(864,774)
33	Unrestricted operating reserve balance - end		\$ 2,865,650	\$ 2,948,750	\$ 3,021,379	\$ 3,109,343	\$ 3,210,329	\$ 3,328,901	\$ 3,469,720	\$ 3,158,822	\$ 2,607,998	\$ 1,743,224
34	(25% of operating costs before debt and capital)		25%	25%	25%	25%	25%	25%	25%	22%	17%	11%
35	Net change		(1,635,359)	(497,985)	8,951,159	(5,260,158)	(5,189,899)	7,690,283	(3,223,498)	(2,671,678)	(4,737,325)	(1,878,608)
36	Reserve balance total - beg		\$ 11,534,481	\$ 9,899,122	\$ 9,401,137	\$ 18,352,296	\$ 13,092,138	\$ 7,902,239	\$ 15,592,522	\$ 12,369,024	\$ 9,697,346	\$ 4,960,021
37	Reserve balance total - end		\$ 9,899,122	\$ 9,401,137	\$ 18,352,296	\$ 13,092,138	\$ 7,902,239	\$ 15,592,522	\$ 12,369,024	\$ 9,697,346	\$ 4,960,021	\$ 3,081,413

PLACEHOLDER FOR:  
Section 10. Debt Obligations  
Section 11. Key Terms and Financial Glossary with Acronym Listing

PROPOSED





## Appendix

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PROPOSED



**CENTRAL MARIN SANITATION AGENCY**  
Preliminary 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 <u>36M Strength</u>	36M Flow <u>36M Strength</u>		
SRSD	41.41%	40.86%		
RVSD	50.30%	50.49%		
SD #2	8.29%	8.65%		
Totals	<u>100.00%</u>	<u>100.00%</u>		
<hr/>				
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	<u>\$ 10,263,165</u>	<u>\$ 10,622,377</u>	<u>\$ 359,212</u>	3.5%
<hr/>				
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	<u>\$ 630,000</u>	<u>\$ 811,258</u>	<u>181,258</u>	28.8%
<hr/>				
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	<u>\$ 4,952,383</u>	<u>\$ 4,966,508</u>	<u>\$ 14,125</u>	0.3%
<hr/>				
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	<u>52,044</u>	<u>52,044</u>	<u>-</u>	0.0%
<hr/>				
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	<u>\$ 4,952,383</u>	<u>\$ 4,966,508</u>	<u>\$ 14,125</u>	0.3%
<hr/>				
Total billed charges to JPA members	<u>15,845,549</u>	<u>16,400,142</u>	<u>\$ 554,593</u>	3.5%

**CENTRAL MARIN SANITATION AGENCY**  
Proposed 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%
<b>Total Distribution</b>	<b>100.0%</b>

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

	<b>SRSD</b>	<b>RVSD</b>	<b>SD #2</b>	<b>Total CMSA Plant Influent Flow</b>
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
<b>Total 48 month Flow</b>	<b>4,690.85</b>	<b>6,423.76</b>	<b>1,252.35</b>	<b>12,366.96</b>
<b>% of Flow</b>	<b>37.93%</b>	<b>51.94%</b>	<b>10.13%</b>	<b>100.0%</b>

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

	<b>SRSD</b>	<b>RVSD</b>	<b>SD #2</b>	<b>Total CMSA Plant Influent BOD</b>
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
<b>Total 48 month BOD</b>	<b>11,789,636</b>	<b>12,952,384</b>	<b>1,845,752</b>	<b>26,587,772</b>
<b>% of Total BOD</b>	<b>44.34%</b>	<b>48.72%</b>	<b>6.94%</b>	<b>100.0%</b>

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

	<b>SRSD</b>	<b>RVSD</b>	<b>SD #2</b>	<b>Total CMSA Plant Influent TSS</b>
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
<b>Total 48 month TSS</b>	<b>15,770,333</b>	<b>17,892,357</b>	<b>2,654,521</b>	<b>36,317,211</b>
<b>% of Total TSS</b>	<b>43.42%</b>	<b>49.27%</b>	<b>7.31%</b>	<b>100.0%</b>

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

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

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

**CENTRAL MARIN SANITATION AGENCY**  
Proposed 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%
<b>Total Distribution</b>	<b>100.0%</b>

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

	SRSD	SD #1	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
<b>Total 48 month Flow</b>	<b>4,690.85</b>	<b>6,423.76</b>	<b>1,252.35</b>	<b>12,366.96</b>
<b>% of Flow</b>	<b>37.93%</b>	<b>51.94%</b>	<b>10.13%</b>	<b>100.0%</b>

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

	SRSD	SD #1	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
<b>Total 48 month BOD</b>	<b>11,789,636</b>	<b>12,952,384</b>	<b>1,845,752</b>	<b>26,587,772</b>
<b>% of Total BOD</b>	<b>44.34%</b>	<b>48.72%</b>	<b>6.94%</b>	<b>100.0%</b>

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

	SRSD	SD #1	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
<b>Total 48 month TSS</b>	<b>15,770,333</b>	<b>17,892,357</b>	<b>2,654,521</b>	<b>36,317,211</b>
<b>% of Total TSS</b>	<b>43.42%</b>	<b>49.27%</b>	<b>7.31%</b>	<b>100.0%</b>

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

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

	SRSD	SD #1	SD #2	Total Allocation
FY 2018-19 Budget	40.86%	50.49%	8.65%	100.00%

**CENTRAL MARIN SANITATION AGENCY**  
Proposed 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%
<b>Total Distribution</b>	<b>100.0%</b>

**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
<b>Total 48 month Flow</b>	<b>4,690.85</b>	<b>6,423.76</b>	<b>1,252.35</b>	<b>432.50</b>	<b>12,799.46</b>
<b>% of Flow</b>	<b>36.65%</b>	<b>50.19%</b>	<b>9.78%</b>	<b>3.38%</b>	<b>100.0%</b>

**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
<b>Total 48 month BOD</b>	<b>11,789,636</b>	<b>12,952,384</b>	<b>1,845,752</b>	<b>1,065,986</b>	<b>27,653,757</b>
<b>% of Total BOD</b>	<b>42.63%</b>	<b>46.84%</b>	<b>6.67%</b>	<b>3.85%</b>	<b>100.0%</b>

**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
<b>Total 48 month TSS</b>	<b>15,770,333</b>	<b>17,892,357</b>	<b>2,654,521</b>	<b>1,342,499</b>	<b>37,659,709</b>
<b>% of Total TSS</b>	<b>41.88%</b>	<b>47.51%</b>	<b>7.05%</b>	<b>3.56%</b>	<b>100.0%</b>

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

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

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

**CENTRAL MARIN SANITATION AGENCY**

Member Agencies and San Quentin Prison Equivalent Dwelling Units (EDU's)

Status	Fiscal Year	San Rafael	Total	Ross Valley		San Quentin	Sanitary	Total EDU	Change	% Change
		Sanitation District (SRSD)		Sanitary District (RVSD)	City of Larkspur	State Prison (SQSP)				
Actual	2008-09	19,685	30,347	19,295	3,116	7,936	6,196	56,228	(30)	-0.1%
Actual	2009-10	19,575	30,288	19,709	3,050	7,529	6,078	55,941	(287)	-0.5%
Actual	2010-11	19,401	29,491	19,261	3,021	7,209	5,975	54,867	(1,074)	-1.9%
Actual	2011-12	19,409	25,161	18,835	3,079	3,247	5,955	50,525	(4,342)	-7.9%
Actual	2012-13	19,482	22,508	19,511	2,997	4,005	6,116	52,111	1,586	3.1%
Actual	2013-14	19,703	22,447	19,498	2,949	4,005	6,006	52,161	50	0.1%
Actual	2014-15	19,643	22,648	19,666	2,982	4,005	6,216	52,512	351	0.7%
Actual	2015-16	19,555	22,719	19,700	3,019	4,005	6,076	52,355	(157)	-0.3%
Actual	2016-17	19,332	22,337	19,298	3,039	4,005	6,055	51,729	(626)	-1.2%
Actual	2017-18	19,565	22,508	19,448	3,060	4,005	6,008	52,086	357	0.7%

The EDU table above shows actual reported EDUs for each fiscal year. The total EDU count is used to establish the annual EDU rate which is used to establish the annual waste facilities use charge each July 1st. (see Ordinance No. 2016-1 Section 6). Effective FY 18, member EDU counts had been fixed for debt service allocation purposes.

	SRSD	SD#1	Larkspur	SD#2	SQP	TOTAL
<b>FY 19</b>	<b>19,565</b>	<b>19,448</b>	<b>3,060</b>	<b>6,008</b>	<b>4,005</b>	<b>52,086</b>
<b>% of Total</b>	<b>37.6%</b>	<b>37.3%</b>	<b>5.9%</b>	<b>11.5%</b>	<b>7.7%</b>	<b>100.0%</b>

**EDU's by Member Agencies and San Quentin Prison as a Percentage of Total EDU's for FY 19**

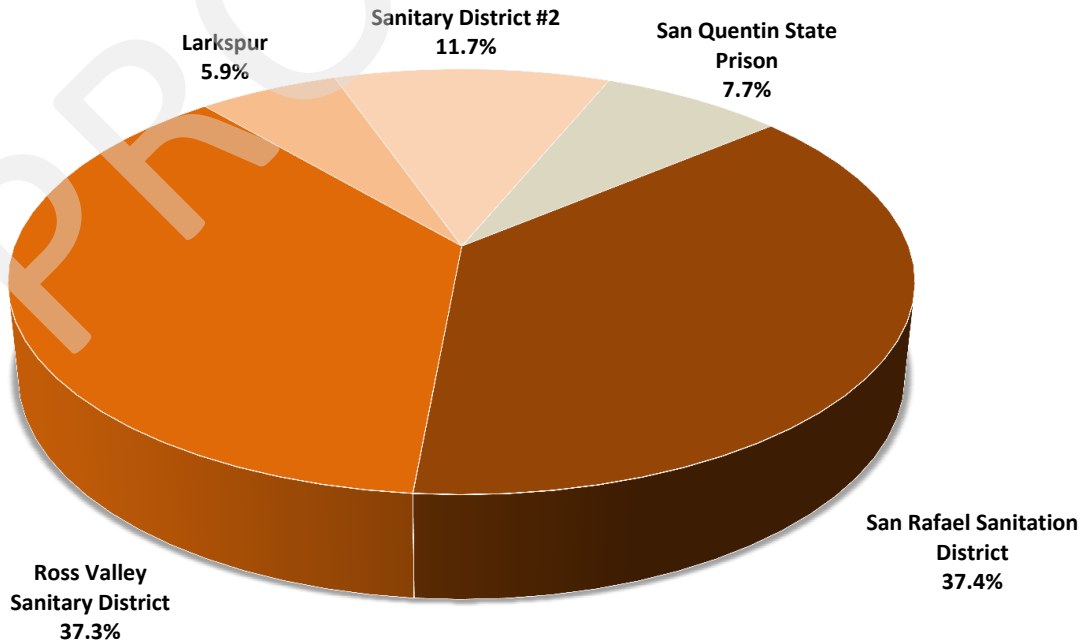


TABLE 1 - HEALTH & SAFETY CORE PROGRAM	Adopted FY 17	Adopted FY 18	Projected FY 18	Proposed FY 19	NSD Share	CMSA Share	Comments
<b>Fixed Expenses</b>							
Salary - Health & Safety Manager (1 FTE)	137,105	111,839	73,747	118,000	46,910	71,090	3% Increase effective 07/01/17. Step C. CMSA 60.25% & NSD 39.75%.
Car Allowance - Health & Safety Manager (1 FTE)	4,800	4,800	3,785	4,800	1,908	2,892	\$400/month
Benefits - CalPERS Retirement	61,392	24,574	19,376	29,400	11,688	17,712	CMSA 60.25% & NSD 39.75%. Classic CalPERS status.
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	62,100
<b>Total Salaries &amp; Benefits</b>	<b>209,185</b>	<b>162,095</b>	<b>113,372</b>	<b>191,300</b>	<b>76,050</b>	<b>115,250</b>	
<b>Variable Expenses</b>							
Professional Services	6,000	6,000	-	6,000	2,385	3,615	Contract services to assist in completing program development.
Publications	1,300	1,300	341	1,600	636	964	Mancomm, CalOSHA Reporter, ANSI/NFPA standards
Memberships	750	750	542	750	298	452	NSC, CWEA, American Society Safety Engineers
Office Supplies	450	450	-	450	179	271	
Safety Shoes	200	200	-	200	80	120	
Training Materials	2,000	2,000	697	2,000	795	1,205	Training Supplies, DVDs
Computer Software/Supply	3,600	3,600	3,395	4,000	1,590	2,410	Keller On-Line, MSDS Online
Seminars/Conferences	-	6,200	-	5,500	2,186	3,314	CASA Conference. (KT) CWEA Classes, Fall Protection Training, Forklift Training and Workers Compensation training .
<b>Subtotal Variable Expenses</b>	<b>14,300</b>	<b>20,500</b>	<b>4,975</b>	<b>20,500</b>	<b>8,150</b>	<b>12,350</b>	
<b>Total Health &amp; Safety Program Expenses</b>	<b>223,485</b>	<b>182,595</b>	<b>118,347</b>	<b>211,800</b>	<b>84,199</b>	<b>127,601</b>	
<b>Testing/Training Expenses 6830-017-01 &amp; 06</b>							
Testing and Training-CMSA	15,616	13,100	13,886	5,560	-	5,560	Scheduled Hearing tests, Incident Command, Underground Utility Locator (6830-017-01)
Testing and Training-NSD	10,096	11,200	4,600	4,560	4,560		(6830-017-06)
<b>Subtotal Testing and Training</b>	<b>25,712</b>	<b>24,300</b>	<b>18,486</b>	<b>10,120</b>	<b>4,560</b>	<b>5,560</b>	
<b>Total Program Expenses</b>	<b>249,197</b>	<b>206,895</b>	<b>136,833</b>	<b>221,920</b>	<b>88,759</b>	<b>133,161</b>	
	40.00%	41.67%		39.75%			NSD Allocation
	60.00%	58.33%		60.25%			CMSA Allocation
Salary - ARS&SO (.25 FTE)		35,842	35,842	38,800	19,400	19,400	.25 FTE cost shared equally (NSD not budgeted)
Benefits - ARS&SO (FY18: .25 FTE)		11,593	11,593	12,400	6,200	6,200	.25 FTE cost shared equally (NSD not budgeted)
Car Allowance - ARS&SO Salary (.25 FTE)		1,200	-	-	-	-	NSD's ARS&SO does not receive car allowance
<b>Total Salaries &amp; Benefits - ARS&amp;SO</b>		<b>48,635</b>		<b>51,200</b>	<b>25,600</b>	<b>25,600</b>	Administrative, Risk Services & Safety Officer (ARS&SO)
					<b>86,600</b>	<b>N/A</b>	<b>FY 19 Budget (rounded)</b>
						<b>38,000</b>	<b>4070-000-00 Health &amp; Safety Revenue Budget (Excludes ARS&amp;SO)</b>
					<b>4,600</b>	<b>5,600</b>	<b>6830-016-01 Health &amp; Safety Program, CMSA Share</b>
					<b>91,200</b>	<b>43,600</b>	<b>6830-017-06 (NSD) &amp; 01 (CMSA) Outside Safety Training Services</b>
					<b>(2,400)</b>		<b>SUBTOTAL</b>
					<b>400</b>		less 5% Admin Fee
					<b>89,200</b>		Cooperative Agreement Expenses department adjustments
							<b>TOTAL FY 19 Budget Health &amp; Safety Program</b>



**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 Safety Director (costs shared equally) & 5% Admin Fee  
**50% of Total Expense**                    \$    105,900

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

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

**CENTRAL MARIN SANITATION AGENCY**  
Public Education Committee Annual Budget FY 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		-	
Promotional 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		-
<b>Totals</b>	<b>\$ 86,700</b>	<b>\$ 75,700</b>	<b>\$ 37,214</b>	<b>\$ 87,000</b>

Program Cost Allocation to Participating Members					Member Revenue to CMSA (Cost Plus 15% Program Mngt Fee)		
Agency	Percent Share	Annual Total Program Costs			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
<b>Totals</b>	<b>100.0%</b>	<b>\$ 86,700</b>	<b>\$ 75,700</b>	<b>\$ 87,000</b>	<b>\$ 59,225</b>	<b>\$ 51,711</b>	<b>\$ 59,430</b>

**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.