

PROPOSED
OPERATING
AND
CAPITAL BUDGET

JULY 1, 2017 — JUNE 30, 2018

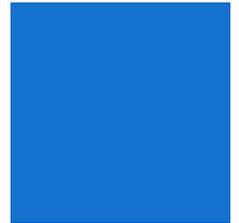
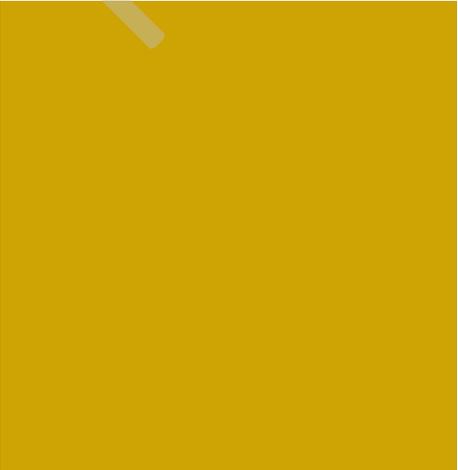
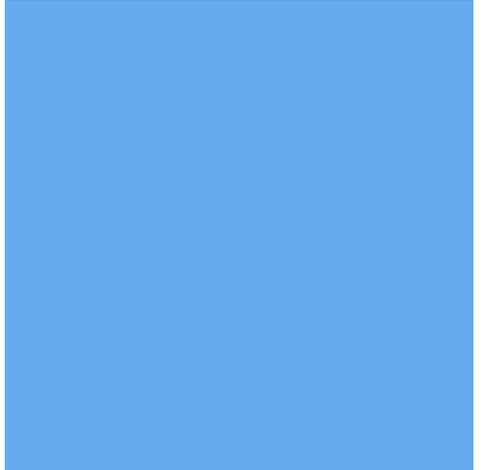
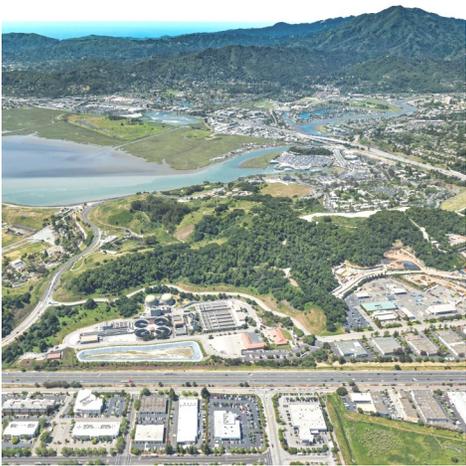
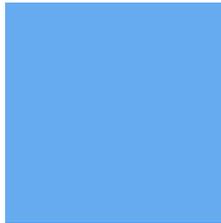


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PLACEHOLDER FOR TRANSMITTAL LETTER

To be published in the June agenda

PROPOSED

Operating Budget Account Information

PROPOSED

FUNDING REQUIREMENTS AND SOURCES SUMMARY

Funding Requirements	Fiscal Year 2016-17	Year-End Projection 2016-17	Fiscal Year 2017-18	Amount Increase (Decrease)	Percent Increase (Decrease)
<i>Operating:</i>					
Salaries and Wages	\$ 5,283,599	\$ 5,117,065	\$ 5,278,850	\$ (4,749)	-0.1%
Employee Benefits	2,575,700	2,399,918	2,553,620	(22,080)	-0.9%
Chemicals & Fuels	1,146,800	1,073,227	1,069,450	(77,350)	-6.7%
Biosolids Management	373,920	334,887	387,670	13,750	3.7%
Permit Testing & Monitoring	168,800	127,322	179,500	10,700	6.3%
Maintenance & Repairs	382,500	387,910	382,500	-	0.0%
Utilities	372,600	303,053	350,600	(22,000)	-5.9%
Insurance	275,900	203,553	261,200	(14,700)	-5.3%
General & Administrative	1,000,660	736,759	866,450	(134,210)	-13.4%
Operating before debt and capital	<u>11,580,479</u>	<u>10,683,694</u>	<u>11,329,840</u>	<u>(250,639)</u>	<u>-2.2%</u>
Debt Service	3,968,094	3,968,094	3,961,906	(6,188)	-0.2%
Operating before capital	<u>15,548,573</u>	<u>14,651,788</u>	<u>15,291,746</u>	<u>(256,827)</u>	<u>-1.7%</u>
Capital Improvements	\$ 4,193,000	\$ 2,586,138	\$ 3,829,400	(363,600)	-8.7%
Total requirements	<u>\$ 19,741,573</u>	<u>\$ 17,237,926</u>	<u>\$ 19,121,146</u>	<u>\$ (620,427)</u>	<u>-3.1%</u>
Funding Sources	Fiscal Year 2016-17	Year-End Projection 2016-17	Fiscal Year 2017-18	Amount Increase (Decrease)	Percent Increase (Decrease)
Service Charges	\$ 9,865,358	\$ 9,865,358	\$ 10,263,165	\$ 397,807	4.0%
Capital Fee	530,000	530,000	630,000	100,000	18.9%
Debt Service Charge	4,960,118	4,960,118	4,952,382	(7,736)	-0.2%
Capacity Charges	-	185,000	29,315	29,315	-
Contract Service Revenues	1,425,138	1,450,151	1,228,921	(196,217)	-13.8%
Program Revenues	128,990	132,949	122,234	(6,756)	-5.2%
Haulers, Permits & Inspections	211,250	244,100	226,250	15,000	7.1%
Other Revenues	20,000	28,470	20,000	-	0.0%
Interest Income	56,500	66,024	113,500	57,000	100.9%
Other Financing Sources	-	-	-	-	-
Subtotal funding sources	<u>17,197,354</u>	<u>17,462,170</u>	<u>17,585,767</u>	<u>388,413</u>	<u>2.3%</u>
Reserve (Increase) Usage	2,544,219	(224,244)	1,535,379	(1,008,840)	-39.7%
Total funding sources	<u>\$ 19,741,573</u>	<u>\$ 17,237,926</u>	<u>\$ 19,121,146</u>	<u>\$ (620,427)</u>	<u>-3.1%</u>

SCHEDULE OF REVENUES AND OTHER FINANCING SOURCES

Account #	Description	Fiscal Year 2016-17	Fiscal Year 2017-18	Amount Increase (Decrease)	Percent Increase (Decrease)
<u>Service Charges to Members¹</u>					
4010-000-00	SRSD	\$ 4,231,633	\$ 4,249,977	\$ 18,344	0.4%
4010-000-00	SD #1	4,762,416	5,162,372	399,956	8.4%
4010-000-00	SD #2	871,309	850,816	(20,493)	-2.4%
Totals		<u>\$ 9,865,358</u>	<u>\$ 10,263,165</u>	<u>\$ 397,807</u>	4.0%
<u>Capital Fee to Members¹</u>					
4010-000-00	SRSD	\$ 227,337	\$ 260,883	\$ 33,546	14.8%
4010-000-00	SD #1	255,853	316,890	61,037	23.9%
4010-000-00	SD #2	46,810	52,227	5,417	11.6%
Totals		<u>\$ 530,000</u>	<u>\$ 630,000</u>	<u>\$ 100,000</u>	18.9%
<u>Debt Service Cost to Members²</u>					
4011-000-00	SRSD	\$ 1,852,642	\$ 1,859,855	\$ 7,213	0.4%
	SD #1	2,152,400	2,131,911	(20,489)	-1.0%
	SD #2	575,641	579,510	3,869	0.7%
	SQSP	379,434	381,106	1,672	0.4%
Totals		<u>\$ 4,960,117</u>	<u>\$ 4,952,382</u>	<u>\$ (7,735)</u>	-0.2%
<u>Capacity Charges</u>					
4020-010-00	SRSD	\$ -	\$ 11,726	\$ 11,726	
4020-020-00	SD #1	-	11,726	11,726	
4020-030-00	SD #2	-	5,863	5,863	
Totals		<u>\$ -</u>	<u>\$ 29,315</u>	<u>\$ 29,315</u>	

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

Note 2: See EDU allocation table in appendix to budget

SCHEDULE OF REVENUES AND OTHER FINANCING SOURCES

Account #	Description	Fiscal Year 2016-17	Fiscal Year 2017-18	Amount Increase (Decrease)	Percent Increase (Decrease)	Notes
<u>Contract Service Revenues</u>						
4601-000-00	San Quentin State Prison Wastewater Services	\$ 813,946	\$ 589,690	\$ (224,256)	-27.6%	O&M plus capital * 3.89% (see appendix)
4601-001-00	San Quentin State Prison Pump Station Maintenance	105,473	108,110	2,637	2.5%	Bay Area CPI Jan-Jan at 3.0%
4602-000-00	San Quentin Village Wastewater Services	33,056	49,942	16,886	51.1%	FY18 budget to Marin County PW
4600-000-00	SD#2 Pump Stations	394,063	403,379	9,316	2.4%	FY18 Corte Madera PS Budget
4031-000-00	LGVSD - FOG & pollution prevention	20,000	16,500	(3,500)	-17.5%	Source control service estimate
4033-000-00	SD #1 - FOG	19,000	21,500	2,500	13.2%	Source control service estimate
4034-000-00	SRSD - FOG	23,000	25,600	2,600	11.3%	Source control service estimate
4035-000-00	TCSD - FOG	2,100	2,200	100	4.8%	Source control service estimate
4036-000-00	SD #2 - FOG	9,500	7,500	(2,000)	-21.1%	Source control service estimate
4037-000-00	Novato SD - Dental Amalgam	3,500	3,000	(500)	-14.3%	Source control service estimate
4038-000-00	Almonte SD - FOG	1,500	1,500	-	0.0%	Source control service estimate
	Total contract service revenues	<u>\$ 1,425,138</u>	<u>\$ 1,228,921</u>	<u>\$ (196,217)</u>	<u>-13.8%</u>	
<u>Program Revenues</u>						
4070-000-00	Health & Safety Program	\$ 85,000	\$ 91,500	\$ 6,500	7.6%	Shared program with Novato Sanitary
4080-001-00	County-wide Public Education Program	43,990	30,734	(13,256)	-30.1%	Multi-agency program budget
4080-002-00	Outside Safety Training	-	-	-	-	
	Total program revenues	<u>\$ 128,990</u>	<u>\$ 122,234</u>	<u>\$ (6,756)</u>	<u>-5.2%</u>	
<u>Haulers, Permits & Inspection</u>						
4030-000-00	Permit and Inspection Fees	\$ 20,000	\$ 24,000	\$ 4,000	20.0%	Permitting of subject businesses
4050-010-00	Revenue from Haulers - Septic	65,000	70,000	5,000	7.7%	\$83.30 per 1,000 gal plus sampling fee
4050-020-00	Revenue from Haulers - RV	250	250	-	0.0%	\$10 per load
4050-030-00	Revenue from Haulers - FOG	85,000	90,000	5,000	5.9%	Tiered pricing per fee ordinance
4050-035-00	Revenue from Haulers - Liquid Waste	5,000	2,000	(3,000)	-60.0%	Price negotiated per truckload
4050-040-00	Revenue from Foodwaste Disposal	36,000	40,000	4,000	11.1%	Tipping fee from Marin Sanitary Service
	Total haulers, permits & inspection	<u>\$ 211,250</u>	<u>\$ 226,250</u>	<u>\$ 15,000</u>	<u>7.1%</u>	
<u>Interest Income</u>						
4910-002-00	Interest Income - LAIF	\$ 55,000	\$ 112,000	\$ 57,000	103.6%	LAIF yield rose from 27 to 43 basis points
4910-011-00	Investment Interest - CAMP	1,500	1,500	-	0.0%	CAMP yield rose from 11 to 46 basis pts
	Total interest income	<u>\$ 56,500</u>	<u>\$ 113,500</u>	<u>\$ 57,000</u>	<u>100.9%</u>	
<u>Other Revenues</u>						
4990-000-00	Other non-operating revenue	\$ 20,000	\$ 20,000	\$ -	0.0%	Miscellaneous infrequent items
4990-011-00	CAMP non-operating revenue	-	-	-	-	
	Total other revenues	<u>\$ 20,000</u>	<u>\$ 20,000</u>	<u>\$ -</u>	<u>0.0%</u>	

SUMMARY OF EXPENDITURES BY DEPARTMENTS AND CATEGORY

Operating Expenditures by Department	FY 16-17	FY 16-17	FY 17-18	% Change FY18	
	Adopted Budget	Projected Year End Expenditures	Proposed Budget	Proposed Budget from FY17 Adopted Budget	Adopted % of Budget
Administration	4,484,300	4,081,781	4,547,020	1.4%	
Maintenance	1,881,100	1,875,249	1,933,500	2.8%	
Operations	3,173,800	3,023,689	3,102,800	-2.2%	
Technical Services (formerly Engineering and Environmental Services)	2,041,279	1,702,974	1,746,370	-14.4%	
TOTAL	\$ 11,580,479	\$ 10,683,694	\$ 11,329,690	-2.2%	

Operating Expenditures by Category	FY 16-17	FY 16-17	FY 17-18	% Change FY18	
	Adopted Budget	Projected Year End Expenditures	Proposed Budget	Proposed Budget from FY17 Adopted Budget	Adopted % of Budget
SALARIES	5,283,599	5,117,065	5,278,850	-0.1%	46.6%
BENEFITS *	2,575,700	2,399,918	2,553,620	-0.9%	22.5%
SUB-TOTAL	7,859,299	7,516,983	7,832,470	-0.3%	69.13%
CHEMICALS & FUELS	1,146,800	1,073,227	1,069,450	-6.7%	9.4%
BIOSOLIDS MANAGEMENT	373,920	334,887	387,670	3.7%	3.4%
PERMIT TESTING & MONITORING	168,800	127,322	179,500	6.3%	1.6%
MAINTENANCE & REPAIRS	382,500	387,910	382,500	0.0%	3.4%
UTILITIES	372,600	303,053	350,450	-5.9%	3.1%
INSURANCE	275,900	203,553	261,200	-5.3%	2.3%
GENERAL & ADMINISTRATIVE	1,000,660	736,759	866,450	-13.4%	7.6%
SUB-TOTAL	3,721,180	3,166,711	3,497,220	-6.0%	30.87%
TOTAL	11,580,479	10,683,694	\$ 11,329,690	-2.2%	100.00%

Benefit Expenditures	FY 16-17	FY 17-18	Change	% Change FY18
	Adopted Budget	Proposed Budget		Proposed Budget from FY17 Adopted Budget
RETIREMENT (CALPERS CLASSIC, PEPRA, UAL)	1,011,900	1,032,900	21,000	2.1%
<i>RETIREMENT - CALPERS CLASSIC</i>	526,503	503,128	(23,375)	
<i>RETIREMENT - CALPERS PEPRA</i>	81,700	48,700	(33,000)	
<i>RETIREMENT - CALPERS UNFUNDED ACCRUED LIABILITY</i>	403,697	481,072	77,375	
RETIREMENT - CALPERS SURVIVORS	2,600	2,600	-	0.0%
RETIREMENT - SOCIAL SECURITY/MEDICARE	78,200	79,400	1,200	1.5%
CALPERS MEDICAL - ACTIVE EMPLOYEES	967,500	905,700	(61,800)	-6.4%
DENTAL - ACTIVE EMPLOYEES	115,700	115,700	-	0.0%
LIFE INSURANCE, AD&D, LTD - ACTIVE EMPLOYEES	24,400	24,900	500	2.0%
VISION - ACTIVE EMPLOYEES	11,300	11,250	(50)	-0.4%
MARA - ACTIVE EMPLOYEES	31,000	33,100	2,100	6.8%
CALPERS MEDICAL - RETIRED EMPLOYEES	177,700	198,200	20,500	11.5%
ANNUAL OPEB CONTRIBUTION	116,500	107,350	(9,150)	-7.9%
BENEFIT ADMINISTRATION FEES	-	7,520	7,520	100.0%
TOTAL *	2,536,800	2,518,620	(18,180)	-0.7%

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

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

Salaries

- Salary increase of 2% for represented per MOU and 2% for unrepresented employees per compensation/benefit agreement.
- 21 Employees eligible to receive step advancements.
- 1 new Health and Safety Manager position with lower salary than the Safety Director and 1 new Laboratory Director position with lower salary than the Environmental Services Manager.
- Eliminated Safety Director and Environmental Services Manager positions.
- Compensatory, vacation, and holiday time cash-outs included.

Benefits

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

Chemicals

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

Biosolids Management:

- Biosolids management costs expected to increase 3.5% which includes a 1.5% increase in Lystec Facility fee for a full year of deliveries and biosolids production. (FY 16-17 was a partial year.)
- Hauling costs expected to increase a total of 4% using the annual San Francisco Bay Area Consumer Price Index and increased deliveries to the Lystec and Solano County land sites.

Permit Testing and Monitoring:

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

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

Utilities

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

Maintenance and Repairs

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

Insurance

- Property and general liability insurance are estimated to be 5% lower.
- Workers' Compensation insurance is budgeted 12% lower based on audited actuals.

General & Administrative

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

Administration

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

The Department is responsible for the following functions:

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

Administration Expenditures by Category	FY 15-16 Adopted Budget	FY 16-17 Adopted Budget	FY 17-18 Proposed Budget
SALARIES	\$ 996,400	\$1,081,100	\$1,222,000
BENEFITS	2,571,600	2,575,700	2,553,620
SUBTOTAL	3,568,000	3,656,800	3,775,620
INSURANCE	274,900	275,900	261,085
GENERAL & ADMINISTRATIVE	387,800	551,600	510,200
SUBTOTAL	662,699	827,500	771,285
TOTAL	\$4,230,699	\$4,484,300	\$4,546,905

Authorized Positions	FY 15-16	FY 16-17	FY 17-18
General Manager	1	1	1
Administrative Assistant	1	1	1
Treatment Plant Manager	1	1	1
Administrative Services Manager	1	1	1
Financial Analyst	1	1	1
Personnel and Accounting Technician	1	1	1
Information Systems Analyst*	-	-	1
Health and Safety Manager	-	-	1
Safety Director	1	1	-
TOTAL	7	7	8

*Transferred from Technical Services

Central Marin Sanitation Agency									*Position Code
Proposed FY 2017-18 Operating Budget									
Line Item Accounts									GM General Manager
									ASM Administrative Services Manager
									OS Operations Supervisor
									ISA Information Systems Analyst
									AE Assistant Engineer
									AA Administrative Assistant
Administration									
Account #	Account Name	*By	FY 16-17 Adopted Budget	FY 16-17 Projected Year End Expenditures	FY 17-18 Proposed Budget Adjustments	FY 17-18 Proposed Budget	% Change FY18 Proposed Budget from FY17 Adopted Budget	% Change FY18 Proposed Budget From FY17 PROJECTED Year-End	Budget Account Description
SALARIES & BENEFITS									
5010-010-01	Salaries, Wages & Compensation	ASM	1,071,000	1,060,780	143,500	1,214,500	13.40%	14.49%	Salaries for 8 full-time employees and CMSA's 58.33% share of the Health & Safety Manager salary. FY 18 increases are for transferring the Information Systems Analyst position to Administration, a 2% COLA salary increase for employees, two step adjustments, and leave balance cash-outs.
5010-020-01	Overtime	GM	10,100	1,267	(2,600)	7,500	-25.74%	491.80%	Authorized overtime to complete special activities or assignments, and employee compensatory time leave balance cash-outs.
Subtotal Salaries & Wages			1,081,100	1,062,048	140,900	1,222,000	13.03%	15.06%	
5020-020-01	Retirement CalPERS - Classic	ASM	930,200	907,866	54,000	984,200	5.81%	8.41%	Employer contributions for CalPERS 2.7% @ 55 for Classic employee retirement program. The FY 18 employer contribution rate is 11.675% for Classic employees and FY 18 includes a \$481K UAL (unfunded accrued liability) payment. Beginning FY 17 employees fully reimbursed the Agency for the EPMC (employer-paid member contributions). The 8% Employer Paid Member Contribution (EPMC) has been eliminated from the FY 18 Budget.
5020-021-01	Retirement CalPERS-PEPRA	ASM	81,700	47,552	(33,000)	48,700	-40.39%	2.42%	Employer contributions for CalPERS 2% @ 62 retirement program for PEPRA employees hired after January 1, 2013. The FY 18 employer PEPRA contribution rate is 6.533%. The decrease is due to using the correct PEPRA rate.
5020-022-01	Retirement CalPERS-Survivors	ASM	2,600	2,219	-	2,600	0.00%	17.18%	Annual Survivors Benefit premium.
5020-030-01	Retirement - SS / Medicare	ASM	78,200	76,754	1,200	79,400	1.54%	3.45%	Employer's 1.45% share of Medicare for all employees. Increase is function of salary and step increases in all departments.
5030-010-01	Benefits-CalPERS Medical	ASM	967,500	889,844	(61,800)	905,700	-6.39%	1.78%	Budget based upon current CalPERS Kaiser family rate effective January through December 2017, and an estimated 4.5% premium increase for January through June 2018.
5030-001-01	Benefits-Dental	ASM	115,700	98,969	-	115,700	0.00%	16.91%	Employer paid dental benefits.
5030-003-01	Benefits-Life Insurance, AD&D, LTD	ASM	24,400	22,796	500	24,900	2.05%	9.23%	Employer paid life, accidental death & dismemberment, and long-term disability insurances.
5030-004-01	Benefits-Vision	ASM	11,300	10,898	(50)	11,250	-0.44%	3.23%	Employer paid vision benefits.
5030-015-01	Benefits-MARA	ASM	31,000	30,542	2,100	33,100	6.77%	8.38%	MARA: Medical-After-Retirement-Account. Employer contribution of 1.5% of base salary for 20 employees (FY 17 was 19 employees). Budget increase is a function of salary adjustments, and is offset by the administrative fee being included in the new Benefit Administrative Fees account 5050-001-01.

Central Marin Sanitation Agency								*Position Code	
Proposed FY 2017-18 Operating Budget									
Line Item Accounts								GM General Manager	
								ASM Administrative Services Manager	
								OS Operations Supervisor	
								ISA Information Systems Analyst	
								AE Assistant Engineer	
								AA Administrative Assistant	
Administration									
Account #	Account Name	*By	FY 16-17 Adopted Budget	FY 16-17 Projected Year End Expenditures	FY 17-18 Proposed Budget Adjustments	FY 17-18 Proposed Budget	% Change FY18 Proposed Budget from FY17 Adopted Budget	% Change FY18 Proposed Budget From FY17 PROJECTED Year-End	Budget Account Description
5030-020-01	Retired Employees Medical Benefits	ASM	177,700	168,579	20,500	198,200	11.54%	17.57%	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	116,500	116,500	(9,150)	107,350	-7.85%	-7.85%	Prefunding of the Agency's post-employment health benefit obligations for current retirees and employees. The prefunding amount is the annual FY 18 estimated OPEB expense in the Agency's January 1, 2015 GASB actuarial report minus retiree medical premiums.
5050-000-01	Unemployment Benefits Claimed	ASM	10,000	-		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		6,541	7,520	7,520	0.00%	14.97%	New account: Administrative fees charged for medical, MARA, and NAVIA Flex 125 plans.
5060-000-01	Uniforms	AE	28,900	20,859	(3,900)	25,000	-13.49%	19.85%	Contracted service to provide uniforms, jackets, fire resistant clothing and miscellaneous related work clothing for staff, and towel and floor mat cleaning services.
Subtotal Benefits			2,575,700	2,399,918	(22,080)	2,553,620	-0.86%	6.40%	
Total Salaries & Benefits			3,656,800	3,461,965	118,820	3,775,620	3.25%	9.06%	
INSURANCE									
6800-010-01	Property Insurance	ASM	55,600	52,023	2,800	58,400	5.04%	12.26%	Annual property insurance coverage from the California Sanitation Risk Management Authority (CSRMA) for all Agency buildings and structures. The increase is based on FY 17 Adopted Budget plus 5% per CSRMA's recommendation.
6800-020-01	General Liability & Auto Insurance	ASM	46,300	42,767	2,400	48,700	5.18%	13.87%	CSRMA pooled insurance coverage for general, automobile, and error and omission liability premiums. FY 18 increase is based on FY 17 Adopted Budget plus a 5% increase recommended by CSRMA.
6800-030-01	Pollution Liability Insurance	ASM	1,000	988	100	1,100	10.00%	11.34%	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	1,339		2,200	0.00%	64.32%	CSRMA public official bonds for four Agency employees who are authorized to sign Agency checks, and includes employees who handle agency funds such as petty cash.
6800-050-01	Commercial Crime Insurance	ASM	800	-		800	0.00%	0.00%	This insurance covers instances of public employee dishonesty. It is intended to cover all employees not covered under the employee/public official bonds.

Central Marin Sanitation Agency									
Proposed FY 2017-18 Operating Budget									
Line Item Accounts									
									*Position Code
									GM General Manager
									ASM Administrative Services Manager
									OS Operations Supervisor
									ISA Information Systems Analyst
									AE Assistant Engineer
									AA Administrative Assistant
Administration									
Account #	Account Name	*By	FY 16-17 Adopted Budget	FY 16-17 Projected Year End Expenditures	FY 17-18 Proposed Budget Adjustments	FY 17-18 Proposed Budget	% Change FY18 Proposed Budget from FY17 Adopted Budget	% Change FY18 Proposed Budget From FY17 PROJECTED Year-End	Budget Account Description
5040-000-01	Workers' Compensation Insurance	ASM	170,000	106,436	(20,000)	150,000	-11.76%	40.93%	CSRMA workers' compensation (WC) insurance for Agency employees.
Subtotal Insurance			275,900	203,553	(14,700)	261,200	-5.33%	28.32%	
GENERAL ADMINISTRATIVE									
6700-010-01	Meetings/Training	GM	5,200	1,979		5,200	0.00%	162.69%	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	23,600	21,957	1,400	25,000	5.93%	13.86%	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	5,880		11,600	0.00%	97.28%	Pursuant to Commission compensation policy, CMSA Commissioners receive \$100 per day of service. There is an allowance for Commissioners conference attendance.
6805-000-01	Professional Affiliation Memberships	ASM	3,550	3,561	850	4,400	23.94%	23.56%	Professional memberships, license and registration requirements for department staff.
6805-001-01	BACWA Membership	GM	8,000	7,960		8,000	0.00%	0.50%	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	5,936		6,000	0.00%	1.08%	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	15,834		16,000	0.00%	1.05%	Annual membership dues to the California Association of Sanitation Agencies (CASA).
6805-004-01	NACWA Membership	GM	9,400	12,333	3,100	12,500	32.98%	1.36%	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	Biosolids-to-Energy Membership	GM	25,000	6,500	(12,500)	12,500	-50.00%	92.31%	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	30,046		29,500	0.00%	-1.82%	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	47,350	15,005	(10,050)	37,300	-21.22%	148.59%	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.

Central Marin Sanitation Agency										*Position Code
Proposed FY 2017-18 Operating Budget										
Line Item Accounts										GM General Manager
										ASM Administrative Services Manager
										OS Operations Supervisor
										ISA Information Systems Analyst
										AE Assistant Engineer
										AA Administrative Assistant
Administration										
Account #	Account Name	*By	FY 16-17 Adopted Budget	FY 16-17 Projected Year End Expenditures	FY 17-18 Proposed Budget Adjustments	FY 17-18 Proposed Budget	% Change FY18 Proposed Budget from FY17 Adopted Budget	% Change FY18 Proposed Budget From FY17 PROJECTED Year-End	Budget Account Description	
6815-002-01	Information Technology Equipment & Software	ISA	1,800	1,998	24,550	26,350	1364.12%	1218.57%	Expenses related to Information Technology equipment and software licenses and upgrades. Account 6815-003-05 Software License & Support has been transferred from Technical Services into Administration. Budget includes security camera for front entrance of the administration building.	
6820-000-01	Printing & Publications	AA	4,500	2,372	(1,500)	3,000	-33.33%	26.46%	Expenses associated with newspaper subscriptions, publication of notices, and copy services at local print shops.	
6830-001-01	General Professional Services	GM	51,000	114,191		51,000	0.00%	-55.34%	Expenses for general governmental and human resource services such as recruitments, background reference checks, and employment law staff training and development.	
6830-002-01	Regulatory Services	GM	125,000	65,000	(74,000)	51,000	-59.20%	-21.54%	Consultation and advice on regulatory compliance and permit issues.	
6830-005-01	Finance & Audit Services	ASM	25,250	25,064		25,250	0.00%	0.74%	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	9,200	9,060	350	9,550	3.80%	5.41%	IDEA annual fee for labor relations and negotiations services. Budget adjusted to align with actual anticipated expense.	
6830-015-01	Legal Services	GM	30,000	24,050		30,000	0.00%	24.74%	Expenses for general, employment law, and construction/contract legal services.	
6830-016-01	Health & Safety Program, CMSA Share	ASM	10,100	5,695	26,200	36,300	259.41%	537.40%	This account represents the Agency's share (58.33%) of the Health & Safety Program non-salary costs. The remaining 41.7% of the Health & Safety Program budget is included in Non-Agency Expenses. New in FY 18, the budget also includes CMSA's equally shared cost of the .25 FTE equivalent Safety Director.	
6830-017-01	Outside Safety Training Services	ASM	15,600	2,215	(2,500)	13,100	-16.03%	491.36%	Training expenses for required safety programs that include hearing tests, first-aid/CPR, incident command training, traffic control, defensive driving, and many other Cal/OSHA programs that facilitate a safe work environment. Budget increase is for ARC Flash and Qualified Employee Electrical trainings.	
6830-025-01	Employee Assistance Services	AA	1,850	1,861	100	1,950	5.40%	4.79%	Confidential professional counseling benefit provided to employees. The fee is increased annually.	
6830-060-01	Employee Health Maintenance Services	AA	2,500	1,281		2,500	0.00%	95.17%	Expense for safety related physicals, pre-employment exams, and urgent care at Kentfield Medical Clinic.	
6840-010-01	Internet & Telephone Service	ISA	23,400	22,240	500	23,900	2.14%	7.46%	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	2,790		5,900	0.00%	111.47%	Postage, postage meter rental, and overnight shipping expense.	
6859-000-01	Bank Fees & Analysis Charges	ASM	2,300	1,434		2,300	0.00%	60.39%	Bank fees and investment expenses for California Asset Management Program and Westamerica Bank accounts. Finance charges and late payment fees.	

Central Marin Sanitation Agency								*Position Code	
Proposed FY 2017-18 Operating Budget									
Line Item Accounts								GM General Manager	
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								AE Assistant Engineer	
								AA Administrative Assistant	
Administration									
Account #	Account Name	*By	FY 16-17 Adopted Budget	FY 16-17 Projected Year End Expenditures	FY 17-18 Proposed Budget Adjustments	FY 17-18 Proposed Budget	% Change FY18 Proposed Budget from FY17 Adopted Budget	% Change FY18 Proposed Budget From FY17 PROJECTED Year-End	Budget Account Description
6859-000-10	Bank Fees - Revenue Bond	ASM	-	2,021	2,100	2,100	0.00%	3.93%	Bank fees for the Refunding Revenue Bonds Series 2015 refinance of Series 2006 Revenue Bonds.
6860-000-01	Trade Discounts	ASM	-	-		-	0.00%	0.00%	Account used to record vendor payment discounts received and taken for paying bills within payment terms.
6890-010-01	Contingency	GM	50,000	-		50,000	0.00%	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.
Subtotal General & Administrative			551,600	416,263	(41,400)	510,200	-7.51%	22.57%	
Subtotal (excluding Salary and Benefits)			827,500	619,815	(56,100)	771,400	-6.78%	24.46%	
Total Administration			4,484,300	4,081,781	62,720	4,547,020	1.40%	11.40%	

Maintenance

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

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

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

Maintenance Expenditures by Category	FY 15-16 Adopted Budget	FY 16-17 Adopted Budget	FY 17-18 Adopted Budget
SALARIES	\$1,382,100	\$1,482,900	\$1,534,300
SUBTOTAL	\$1,382,100	\$1,482,900	\$1,534,300
LUBRICANTS, PROPANE, OTHER MAINTENANCE & REPAIRS	5,000	6,000	6,000
GENERAL & ADMINISTRATIVE	386,000	376,500	376,500
SUBTOTAL	\$ 407,700	\$ 398,200	\$ 399,200
TOTAL	\$1,789,800	\$1,881,100	\$1,933,500

Authorized Positions	FY 15-16	FY 16-17	FY 17-18
Maintenance Supervisor	1	1	1
Assistant Maintenance Supervisor	1	1	1
Maintenance Lead	1	1	1
Maintenance Repair	1	1	1
Mechanical Technician	4	4	4
Utility Worker	3	3	3
Assistant Maintenance Supervisor-(E/I)	1	1	1
Electrical/Instrumentation Tech	2	2	2
TOTAL	14	14	14

Central Marin Sanitation Agency									*Position Code
Proposed FY 2017-18 Operating Budget									
Line Item Accounts									
									ASM Administrative Services Manager
									TPM Treatment Plant Manager
									MS Maintenance Supervisor
									EIAMS Electrical Instrumentation Assistant Maintenance Supervisor
Maintenance									
Account #	Account Name	*By	FY 16-17 Adopted Budget	FY 16-17 Projected Year End Expenditures	FY 17-18 Proposed Budget Adjustments	FY 17-18 Proposed Budget	% Change FY18 Proposed Budget from FY17 Adopted Budget	% Change FY18 Proposed Budget From FY17 PROJECTED Year-End	Budget Account Description
SALARIES & WAGES									
5010-010-03	Salaries, Wages & Compensation	ASM	1,426,000	1,411,001	53,200	1,479,200	3.73%	4.83%	Salaries for 14 full-time employees. FY 18 includes a 2% COLA salary increase for represented and unrepresented employees, seven step adjustments and leave balance cash-outs.
5010-103-10	Transfer to CIP	ASM	(20,600)	(18,310)	(12,750)	(33,350)	61.89%	82.14%	Transfer of salary expenses for staff assigned to CIP funded projects (.36 FTE).
5010-020-03	Overtime	TPM	28,000	26,489	5,300	33,300	18.93%	25.71%	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	49,500	51,102	5,650	55,150	11.41%	7.92%	24/7 Stand-by duty for qualified maintenance staff to respond to emergency repair work and equipment failures. Pursuant to MOU and personnel policies, employees are paid to remain fit for duty and to respond within 1 hour when called. Sanitary District #2 funds one half of this expense. FY 18 increase is function of salary and step increases.
Subtotal Salaries & Wages			1,482,900	1,470,282	51,400	1,534,300	3.47%	4.35%	
MAINTENANCE & REPAIRS (M&R)									
6400-030-03	Lubricants, Propane, Other	MS	6,000	5,831		6,000	0.00%	2.90%	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	8,000	7,990	(1,000)	7,000	-12.50%	-12.39%	Janitorial and general facility maintenance and cleaning supplies.
6510-001-03	Outside Services & Parts	TPM	30,000	30,000	-	30,000	0.00%	0.00%	Service repair costs performed by outside providers for machining, fabrication, vacuum services, specialty repair work, and related parts, equipment, and supplies.
6510-004-03	Fleet Maintenance	MS	20,000	19,938		20,000	0.00%	0.31%	This account is for preventative, predictive, and corrective maintenance on the Agency's fleet vehicles, and includes purchases of batteries, oil, tires, and other consumables. The Agency's fleet consists of 10 vehicles, two forklifts, a skid steer loader, 14 electric carts, and 6 bicycles.
6510-007-03	Hazardous Waste Disposal Service	MS	20,000	19,891	5,000	25,000	25.00%	25.68%	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	19,931		20,000	0.00%	0.34%	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									*Position Code
Proposed FY 2017-18 Operating Budget									
Line Item Accounts									
									ASM Administrative Services Manager
									TPM Treatment Plant Manager
									MS Maintenance Supervisor
									EIAMS Electrical Instrumentation Assistant Maintenance Supervisor
Maintenance									
Account #	Account Name	*By	FY 16-17 Adopted Budget	FY 16-17 Projected Year End Expenditures	FY 17-18 Proposed Budget Adjustments	FY 17-18 Proposed Budget	% Change FY18 Proposed Budget from FY17 Adopted Budget	% Change FY18 Proposed Budget From FY17 PROJECTED Year-End	Budget Account Description
6510-009-03	Electrical Equipment	EIAMS	23,000	22,054		23,000	0.00%	4.29%	Allowance for procurement of routine electrical equipment such as conduit, wiring, electrical connectors, fitting, consumable electrical supplies, and facility lighting (light bulbs, tubes, LED lights).
6510-010-03	Plant Pumps	MS	20,000	19,946	(2,000)	18,000	-10.00%	-9.76%	Allowance for routine consumable parts and equipment such as impellers, gasket material, and volutes.
6510-011-03	Process Tank Maintenance	MS	25,000	24,916	(5,000)	20,000	-20.00%	-19.73%	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	19,986		20,000	0.00%	0.07%	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	24,915		25,000	0.00%	0.34%	Biogas and air purification media for facility equipment. Budget is for the purchase of media for one sulfatreat tank, one siloxane tank, and one odor scrubbing filter replacement per year.
6510-014-03	Organic Waste Receiving Facility	MS	40,000	49,089	5,000	45,000	12.50%	-8.33%	Allowance for consumable items required for maintaining the Organic Waste Receiving Station. The FY 18 budget assumes performing two complete mixing pump impellor/cutter bar changeouts, purchasing one set of paddle finisher screens, spare hoses, glycerin, rock trap grinder parts, and other critical spare inventory items.
6510-015-03	Boilers and Hot-water Systems	MS	10,000	7,907	(2,000)	8,000	-20.00%	1.18%	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	7,978		8,000	0.00%	0.28%	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	49,983		50,000	0.00%	0.03%	Routine parts and equipment for scheduled cogeneration system and standby diesel generator maintenance. The budget assumes three 2,000 hour maintenance procedures on the cogeneration system and one annual maintenance procedure on the emergency standby diesel generator.
6520-000-03	Groundskeeping	MS	45,000	45,020		45,000	0.00%	-0.04%	Facility landscaping services and supplies to maintain the Agency's property. Services include fire-defensible space maintenance, weed abatement, and clean-up project work.
6530-000-03	Small Tools & Equipment	MS	12,500	12,536		12,500	0.00%	-0.28%	Purchase and repair of hand, power, and pneumatic tools utilized in the day-to-day maintenance of assets and equipment.
Subtotal Maintenance & Repairs			382,500	387,910	-	382,500	0.00%	-1.39%	

Central Marin Sanitation Agency									*Position Code
Proposed FY 2017-18 Operating Budget									
Line Item Accounts									
								ASM Administrative Services Manager	
								TPM Treatment Plant Manager	
								MS Maintenance Supervisor	
								EIAMS Electrical Instrumentation Assistant Maintenance Supervisor	
Maintenance									
Account #	Account Name	*By	FY 16-17 Adopted Budget	FY 16-17 Projected Year End Expenditures	FY 17-18 Proposed Budget Adjustments	FY 17-18 Proposed Budget	% Change FY18 Proposed Budget from FY17 Adopted Budget	% Change FY18 Proposed Budget From FY17 PROJECTED Year-End	Budget Account Description
GENERAL & ADMINISTRATIVE									
6700-010-03	Meetings/Training	TPM	4,000	4,362		4,000	0.00%	-8.30%	Expenses associated with attendance at single-day meetings, seminars, technical certification courses, and professional development. Includes allowed expenses pursuant to the Agency's expense reimbursement policy.
6700-020-03	Conferences	TPM	7,000	9,750	1,000	8,000	14.29%	-17.95%	Expenses associated with multi-day professional conferences, seminars, and training events outlined in the Agency's travel and expense reimbursement policy.
6805-000-03	Professional Affiliation Memberships	TPM	4,400	2,666		4,400	0.00%	65.04%	Professional memberships and annual certification renewal fees for 14 maintenance and electrical / instrumentation technicians.
6830-030-03	Underground Service Alert (USA)	MS	300	279		300	0.00%	7.46%	Annual Underground Service Alerts fee to identify utility locations prior to any type of digging or excavation work.
Subtotal General & Administrative			15,700	17,057	1,000	16,700	6.37%	-2.10%	
Subtotal (excluding Salary and Benefits)			398,200	404,968	1,000	399,200	0.25%	-1.42%	
Total Maintenance			1,881,100	1,875,249	52,400	1,933,500	2.79%	3.11%	

Operations

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

The department is responsible for the following functions:

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

Operations Expenditures by Category	FY 15-16 Adopted Budget	FY 16-17 Adopted Budget	FY 17-18 Adopted Budget
SALARIES	\$1,520,600	\$1,577,400	\$1,630,900
SUBTOTAL	\$1,520,600	\$1,577,400	\$1,630,900
CHEMICALS & FUELS	1,207,500	1,146,800	1,069,450
UTILITIES	395,300	372,600	350,600
GENERAL & ADMINISTRATIVE	70,500	77,000	52,000
SUBTOTAL	\$1,673,300	\$1,596,400	\$1,472,050
TOTAL	\$3,193,900	\$3,173,800	\$3,102,950

Authorized Positions	FY 15-16	FY 16-17	FY 17-18
Operations Supervisors	2	2	2
Lead Operators	4	4	4
Operators (Trainee, I-III)	7	7	7
TOTAL	13	13	13

Central Marin Sanitation Agency									*Position Code
Proposed FY 2017-18 Operating Budget									
Line Item Accounts									
									ASM Administrative Services Manager
									OS Operations Supervisor
									TPM Treatment Plant Manager
<u>Operations</u>									
Account #	Account Name	*By	FY 16-17 Adopted Budget	FY 16-17 Projected Year End Expenditures	FY 17-18 Proposed Budget Adjustments	FY 17-18 Proposed Budget	% Change FY18 Proposed Budget from FY17 Adopted Budget	% Change FY18 Proposed Budget From FY17 PROJECTED Year-End	Budget Account Description
SALARIES & WAGES									
5010-010-04	Salaries, Wages & Compensation	ASM	1,461,200	1,502,021	45,400	1,506,600	3.11%	0.30%	Salaries for 13 full-time employees. Includes a COLA increase of 2% for represented and unrepresented employees, six step adjustments, and leave balance cash-outs.
5010-104-10	Transfer to CIP	ASM	(10,200)	-	(6,500)	(16,700)	63.73%	0.00%	Transfer of salary expenses for staff assigned to CIP funded projects (.36 FTE).
5010-020-04	Overtime	OS	107,900	84,817	14,300	122,200	13.25%	44.07%	Authorized overtime to ensure facilities are properly staffed 24 hours/day and to complete specified activities or assignments. Budget increase adjusted FY 17 Adopted by 5% (2% salary increase plus 3% for step adjustments) and includes comp-time cashed-out.
5010-022-04	OPS Wet Weather Stand-by Duty	TPM	18,500	16,197	300	18,800	1.62%	16.07%	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.
Subtotal Salaries & Wages			1,577,400	1,603,035	53,500	1,630,900	3.39%	1.74%	
CHEMICALS & FUEL									
6100-010-04	Ferric Chloride	OS	60,100	69,081	5,700	65,800	9.48%	-4.75%	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 three years, which averaged 126 dry tons. Increased expense due to higher ferric chloride unit cost for FY 18.
6100-020-04	Polymer-Cationic	OS	174,700	127,685	(69,900)	104,800	-40.01%	-17.92%	Polymer is added to centrifuge feed sludge to enhance the efficiency of solids removal, and is also injected into the flow stream for sludge thickening units to increase solids capture which reduces hydraulic loading in the digesters. The decrease is attributed to the actual usage of polymer which has been less than the manufacturer's recommendations.
6100-030-04	Odor Control	OS	21,500	14,995	(2,500)	19,000	-11.63%	26.70%	A chemical agent used to mask odorous compounds produced by some wastewater processes. Odorants are delivered in 55 gallon barrels. The FY 18 budget is based on a 3-year average use of 13 barrels.
6100-040-04	Calcium Nitrate	OS	362,500	280,247	(67,650)	294,850	-18.66%	5.21%	Calcium nitrate salts are the first of a two-phase odor control system used in the collection system upstream of the wastewater treatment plant. Nitrate injection in strategic locations inhibits hydrogen sulfide formation. Use is projected at 133K gallons for FY 18. Reduced expense due to lower bid opening unit costs.

Central Marin Sanitation Agency										*Position Code
Proposed FY 2017-18 Operating Budget										
Line Item Accounts										
										ASM Administrative Services Manager
										OS Operations Supervisor
										TPM Treatment Plant Manager
<u>Operations</u>										
Account #	Account Name	*By	FY 16-17 Adopted Budget	FY 16-17 Projected Year End Expenditures	FY 17-18 Proposed Budget Adjustments	FY 17-18 Proposed Budget	% Change FY18 Proposed Budget from FY17 Adopted Budget	% Change FY18 Proposed Budget From FY17 PROJECTED Year-End	Budget Account Description	
6100-050-04	Hydrogen Peroxide	OS	226,100	209,170	(6,100)	220,000	-2.70%	5.18%	Hydrogen peroxide is the second phase of the odor control system. It is injected into the system interceptors upstream of the headworks. The budget is based on the amount of hydrogen peroxide solution used in the recent three years and is projected at 100K gallons for FY 18.	
6100-060-04	Sodium Hypochlorite	OS	129,200	130,844	38,800	168,000	30.03%	28.40%	Sodium hypochlorite is used for effluent and recycled water disinfection, and in three treatment plant odor control scrubbers. The budget is based on the 3-year average use, and the increased expense is due to higher FY 18 bid opening unit costs.	
6100-070-04	Sodium Bisulfite	OS	156,700	234,730	23,500	180,200	15.00%	-23.23%	Sodium bisulfite is used to neutralize the chlorine residual in the effluent prior to its discharge into the San Francisco Bay. The budget is based upon continued increased usage over recent years to ensure the Agency's NPDES permit limits are met. The budget estimate is for 170K gallons during FY 18.	
6400-020-04	Gasoline, Diesel, Oil, & Fuel	OS	16,000	6,474	800	16,800	5.00%	159.50%	Gasoline for vehicles and landscaping equipment, and diesel for emergency engine generators, and the effluent pump station pumps. The budget is for 2,000 gallons of gasoline and 3,500 gallons of diesel. The increase in price is based on projected 2017-2018 fuel prices.	
Subtotal Chemicals & Fuel			1,146,800	1,073,227	(77,350)	1,069,450	-6.74%	-0.35%		
<u>UTILITIES</u>										
6835-010-04	Natural Gas	OS	80,100	23,007	(40,100)	40,000	-50.06%	73.86%	Supplemental fuel for the cogeneration system, and fuel for the boilers when the cogen system is offline. This budget is based on purchasing 7,000 therms per month at an estimated cost of \$0.48/therm delivered. The reduction this fiscal year is due to the Agency's cogeneration system operating at approximately 22+ hours a day on Agency produced biogas.	
6835-020-04	Electricity	OS	221,500	179,928	(17,500)	204,000	-7.90%	13.38%	Electricity to supplement the cogeneration system output and to supply power when the cogenerator is offline for maintenance.	
6835-030-04	Water	OS	8,500	7,847	450	8,950	5.29%	14.05%	Potable water for CMSA and the San Quentin junction box odor control facility. The Marin Municipal Water District doubled its service charge and implemented a new watershed management fee in January 2017, and has also announced a 5% rate increase beginning FY 18.	
6835-040-04	Garbage	OS	62,500	92,272	35,000	97,500	56.00%	5.67%	Solid waste disposal for garbage, green waste, recycling, and debris box disposal of headworks screenings, grit, non-recyclable wastes, and Organic Waste Receiving Station debris. The increase is for projected additional waste bins and debris boxes, and a 6.21% garbage rate increase.	
Subtotal Utilities			372,600	303,053	(22,150)	350,450	-5.94%	15.64%		

Central Marin Sanitation Agency								*Position Code	
Proposed FY 2017-18 Operating Budget									
Line Item Accounts									
								ASM Administrative Services Manager	
								OS Operations Supervisor	
								TPM Treatment Plant Manager	
<u>Operations</u>									
Account #	Account Name	*By	FY 16-17 Adopted Budget	FY 16-17 Projected Year End Expenditures	FY 17-18 Proposed Budget Adjustments	FY 17-18 Proposed Budget	% Change FY18 Proposed Budget from FY17 Adopted Budget	% Change FY18 Proposed Budget From FY17 PROJECTED Year-End	Budget Account Description
GENERAL & ADMINISTRATIVE									
6210-000-04	Operations - General	TPM	6,000	5,886		6,000	0.00%	1.94%	Small tools, equipment, parts, and other miscellaneous supplies.
6700-010-04	Meetings/Training	TPM	5,000	4,829		5,000	0.00%	3.54%	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	4,236		4,500	0.00%	6.22%	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	6,157		6,500	0.00%	5.57%	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	25,000	15,418	(5,000)	20,000	-20.00%	29.72%	Bay Area Air Quality Management District (BAAQMD) permit fees for the cogeneration engine, emergency engine, five effluent pump station engines, and fuel dispensers. Budget decreased because FY 17 equipment fees were less than anticipated.
6830-001-04	Professional Services: Process Control	TPM	30,000	7,847	(20,000)	10,000	-66.67%	27.43%	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.
Subtotal General & Administrative			77,000	44,374	(25,000)	52,000	-32.47%	17.19%	
Subtotal (excluding Salary and Benefits)			1,596,400	1,420,654	(124,500)	1,471,900	-7.80%	3.61%	
Total Operations			3,173,800	3,023,689	(71,000)	3,102,800	-2.24%	2.62%	

Technical Services (formerly Engineering and Environmental Services)

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

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

Technical Services Expenditures by Category	FY 15-16 Adopted Budget	FY 16-17 Adopted Budget	FY 17-18 Proposed Budget
SALARIES	\$ 975,100	\$1,142,200	\$ 891,650
SUBTOTAL	\$ 975,100	\$1,142,200	\$ 891,650
BIOSOLIDS DISPOSAL	275,900	373,920	387,670
PERMIT TESTING & MONITORING	149,000	168,800	179,500
GENERAL & ADMINISTRATIVE	282,100	356,360	287,550
SUBTOTAL	\$ 707,000	\$ 899,080	\$ 854,720
TOTAL	\$1,682,100	\$2,041,280	\$1,746,370

Authorized Positions	FY 15-16	FY 16-17	FY 17-18
Engineering Manager	1	1	1
Associate Engineer*	1	-	-
Assistant Engineer	1	2	2
Information Systems Analyst**	1	1	-
Environmental Services Manager	1	1	-
Laboratory Director***	-	-	1
Environmental Laboratory Administrator****	1	1	1
Environmental Services Analyst (I-II)****	3	3	3
TOTAL	9	9	8

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

** Transferred to Administration department.

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

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

Central Marin Sanitation Agency										*Position Code
Proposed FY 2017-18 Operating Budget										
Line Item Accounts										
										GM General Manager
										ASM Administrative Services Manager
										TSM Technical Services Manager
										LD Lab Director
Technical Services (formerly Engineering and Environmental Services)										
Account #	Account Name	*By	FY 16-17 Adopted Budget Adjustments	FY 16-17 Adopted Budget	FY 16-17 Projected Year End Expenditures	FY 17-18 Proposed Budget Adjustments	FY 17-18 Proposed Budget	% Change FY18 Proposed Budget from FY17 Adopted Budget	% Change FY18 Proposed Budget From FY17 PROJECTED Year-End	Budget Account Description
SALARY & WAGES										
5010-010-05	Salaries, Wages & Compensation	ASM	165,500	1,201,899	1,012,798	(191,900)	1,010,000	-15.97%	-0.28%	Salaries for 8 full-time employees and includes a 2% COLO salary increase of for employees, 5 step adjustments, and leave balance cash-outs.
5010-105-10	Transfer to CIP	GM	-	(85,900)	(48,943)	(49,300)	(135,200)	57.39%	176.24%	Transfer of salary expenses for staff assigned to CIP funded projects (1.46 FTE).
5010-020-05	Overtime	TSM	1,000	12,000	15,214	(2,350)	9,650	-19.59%	-36.57%	Authorized overtime to complete special activities or assignments, and employee compensatory time leave balance cash-outs.
5010-022-02	Wet Weather Stand-by Duty	TSM	600	14,200	2,632	(7,001)	7,200	-49.30%	173.59%	24/7 Stand-by duty provided by qualified operations staff during the wet weather season (November-April). Pursuant to MOU and personnel policies, employees are paid to remain fit for duty and must respond within 1 hour after being called in for emergency situations. Beginning FY 18 standby duty will be scheduled based upon forecasted storm weather events which accounts for the decrease.
Subtotal Salary & Wages			167,100	1,142,199	981,700	(250,551)	891,650	-21.94%	-9.17%	
BIOSOLIDS MANAGEMENT										
6200-010-02	Biosolid Reuse Fees	TSM	57,000	265,600	235,244	9,400	275,000	3.54%	16.90%	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	41,020	108,320	99,642	4,350	112,670	4.02%	13.07%	Approximately one load per day of biosolids is hauled from CMSA to one of the biosolids reuse sites.
Subtotal Biosolids Management			98,020	373,920	334,887	13,750	387,670	3.68%	15.76%	
PERMIT TESTING & MONITORING										
6300-000-02	Lab Supplies	LD	1,650	46,750	43,265	27,950	74,700	59.79%	72.66%	Laboratory and source control program supplies including all chemicals, glassware, reagents, consumables, containers, filters, bioassay, de-ionized water system, sampling, and inspection equipment. This budget includes several one time replacement equipment purchases that will not occur again for several years.
6310-030-02	Biosolids Monitoring: Contract Lab Services	LD	10,700	20,100	9,190	(10,000)	10,100	-49.75%	9.89%	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	7,200	80,200	58,898	(15,000)	65,200	-18.70%	10.70%	Outsourced laboratory analysis cost associated with NPDES permit compliance orders. Includes monthly, quarterly, semiannual, annual and permit period monitoring requirements. Budget has been reduced to align with actual costs incurred during FY 17.

Central Marin Sanitation Agency										*Position Code
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										TSM Technical Services Manager
										LD Lab Director
Technical Services (formerly Engineering and Environmental Services)										
Account #	Account Name	*By	FY 16-17 Adopted Budget Adjustments	FY 16-17 Adopted Budget	FY 16-17 Projected Year End Expenditures	FY 17-18 Proposed Budget Adjustments	FY 17-18 Proposed Budget	% Change FY18 Proposed Budget from FY17 Adopted Budget	% Change FY18 Proposed Budget From FY17 PROJECTED Year-End	Budget Account Description
6320-020-02	Pretreatment Sampling	TSM	250	16,350	10,745	(2,000)	14,350	-12.23%	33.55%	Contract for lab analysis of pretreatment samples and monitoring industrial waste.
6330-010-02	Underground Tank Testing: Overfill Containment	TSM	-	5,400	5,224	1,500	6,900	27.78%	32.07%	Annual testing and monitoring of underground gasoline and diesel tank overfill and secondary. The Agency previously conducted these inspections in-house, and rather than train the new Laboratory Director, has determined it is more time efficient and cost effective to outsource this regulatory requirement.
6330-020-02	Underground Tank Testing: Secondary Containment	TSM	-	-	-	8,250	8,250	100.00%	0.00%	Testing of underground tank secondary containment every three years as required by state regulation. Testing will be scheduled during FY 18, the last testing occurred in FY 15.
Subtotal Permit Testing & Monitoring			19,800	168,800	127,322	10,700	179,500	6.34%	40.98%	
GENERAL & ADMINISTRATIVE										
6700-010-05	Meetings/Training	TSM	-	7,000	1,167	(2,500)	4,500	-35.71%	285.68%	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	(2,100)	13,200	8,739	2,600	15,800	19.70%	80.80%	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	800	4,100	2,568	(150)	3,950	-3.66%	53.82%	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 18 NPDES permit fee structure.
6810-040-02	ELAP Certification	TSM	560	3,560	-	890	4,450	25.00%	0.00%	Fees for annual renewal of the laboratory certification, inspections, certificates, and ELAP operating costs.
6810-050-02	Regional Monitoring Program SFEI	TSM	6,400	33,000	14,288	(3,000)	30,000	-9.09%	109.97%	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	8,600	25,500	24,140	-	25,500	0.00%	5.63%	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	200	6,400	4,240	(2,200)	4,200	-34.38%	-0.96%	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	1,741	-	1,800	0.00%	3.39%	SWRCB permit for the Agency's industrial site stormwater permit.

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										ASM Administrative Services Manager
										TSM Technical Services Manager
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Technical Services (formerly Engineering and Environmental Services)										
Account #	Account Name	*By	FY 16-17 Adopted Budget Adjustments	FY 16-17 Adopted Budget	FY 16-17 Projected Year End Expenditures	FY 17-18 Proposed Budget Adjustments	FY 17-18 Proposed Budget	% Change FY18 Proposed Budget from FY17 Adopted Budget	% Change FY18 Proposed Budget From FY17 PROJECTED Year-End	Budget Account Description
6810-080-02	BAPPG Membership	TSM	-	1,500	838	250	1,750	16.67%	108.83%	CMSA Agency's Storm Water Permit fee.
6810-090-02	eNPDES Software	TSM	-	1,300	-	-	1,300	0.00%	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	3,518	-	12,000	0.00%	241.12%	Development, hosting, and upgrades for the software database used to manage the Agency's Pretreatment and Pollution Prevention Programs.
6821-000-02	Public Education Program: CMSA portion	GM	(1,700)	37,200	37,009	(4,700)	32,500	-12.63%	-12.18%	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	381	-	500	0.00%	31.14%	Office supplies: ink cartridges, paper for large-format printer/plotter, and other miscellaneous office expense.
6815-002-05	Information Systems	TSM	(600)	700	-	-	700	0.00%	0.00%	Allowance for engineering productivity and project management software.
6815-003-05	Software License & Support	TSM	7,100	18,100	16,981	(18,100)	-	-100.00%	-100.00%	No Budget: Licensing fees for Nexgen (CMMS), Ignition(SCADA), AutoCAD (drafting), and virtual server maintenance software have been moved to Administrative Services.
6820-000-05	Printing & Publications	TSM	-	1,000	1,131	-	1,000	0.00%	-11.59%	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	25,000	45,000	-	-	45,000	0.00%	0.00%	A consultant will prepare a gap analysis of the current CMMS system and provide basic asset management training engineering and maintenance staff. An allowance is included for other unplanned studies.
6830-002-05	Cathodic Protection	TSM	-	9,500	-	(1,900)	7,600	-20.00%	0.00%	Periodic cathodic protection monitoring of the land portion of the Marine Outfall, sections of the Ross Valley Interceptor, the San Rafael interceptor, various buried pipelines on Agency property, San Rafael Sanitation District Simms Force Main, and the South Francisco casing. Annual costs will vary from year to year due to monitoring frequencies for different facilities.
6830-019-05	Professional Svcs - Engineering Support	GM	30,000	80,000	93,802	(40,000)	40,000	-50.00%	-57.36%	This account is used to fund engineering consultant services.
Subtotal General & Administrative			74,260	356,360	259,065	(68,810)	287,550	-19.31%	11.00%	
Subtotal (excluding Salary and Benefits)			192,080	899,079	721,274	(44,360)	854,720	-4.93%	18.50%	
Total Engineering			359,180	2,041,279	1,702,974	(294,911)	1,746,370	-14.45%	2.55%	

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 Health & Safety Program and the County-wide Public Education Programs.

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

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

Cooperative Agreement Services	FY 15-16 Adopted Budget	FY 16-17 Adopted Budget	FY 17-18 Proposed Budget
CONTRACT SERVICE REVENUES			
San Quentin State Prison Wastewater Services	\$ 890,716	\$ 813,946	\$ 580,595
San Quentin State Prison Pump Station Maintenance	102,800	105,473	108,110
San Quentin Village Wastewater Services	34,383	33,056	49,942
SD#2 Pump Stations	389,242	394,063	403,379
LGVSD - FOG & Pollution Prevention	20,000	20,000	20,000
SD #1 – FOG	18,000	19,000	20,000
SRSD – FOG	22,000	23,000	25,000
TCSO – FOG	2,400	2,100	22,000
SD #2 – FOG	9,500	9,500	8,000
Almonte SD – FOG	2,000	3,500	3,000
Novato SD - Dental Amalgam (new)	4,000	1,500	1,500
SUBTOTAL CONTRACT SERVICE REVENUES	\$1,495,041	\$1,425,138	\$1,241,526
Health and Safety Program	83,387	85,000	91,500
County-wide Education Program	51,156	43,990	30,734
SUBTOTAL Program Revenues	\$134,543	\$128,990	\$122,234
TOTAL CONTRACT SERVICE REVENUES	\$ 1,629,584	\$ 1,554,128	\$1,363,760
CONTRACT SERVICE EXPENDITURES (EXCLUDING ADMINISTRATIVE OVERHEAD CHARGES)			
San Quentin State Prison Wastewater Services	\$ 890,716	\$ 816,946	\$ 580,595
San Quentin State Prison Pump Station Maintenance	91,000	104,076	96,110
San Quentin Village Wastewater Services	30,334	28,792	45,465
SD#2 Pump Stations	342,427	348,520	356,925
LGVSD - FOG & Pollution Prevention	16,393	16,393	16,393
SD #1 - FOG	16,364	17,273	18,182
SRSD - FOG	20,000	20,909	22,727
TCSO - FOG	1,967	1,721	18,033
SD #2 - FOG	8,636	8,636	7,273
Almonte SD – FOG	1,818	3,182	2,727
Novato SD - Dental Amalgam	3,279	1,230	1,230
SUB-TOTAL CONTRACT SERVICE EXPENDITURES	\$1,422,934	\$1,364,678	\$1,165,660
Health & Safety Program	80,750	82,372	89,271
County-wide Education Program	44,483	38,252	26,725
SUB-TOTAL PROGRAM EXPENDITURES	\$125,233	\$120,624	\$115,996
TOTAL CONTRACT SERVICE & PROGRAM EXPENDITURES	\$ 1,548,167	\$ 1,485,302	\$1,281,656

Central Marin Sanitation Agency										*Position Code	
Proposed FY 2017-18 Operating Budget											
Line Item Accounts											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											
This budget center is for accounting purposes only. The Agency is reimbursed (revenues) for costs that are incurred. Does not include CMSA labor expense for contract services provided.											
Account #	Account Name	*By	FY 16-17 Adopted Budget	FY 16-17 Projected Year End Expenditures	FY 17-18 Proposed Budget Adjustments	FY 17-18 Proposed Budget	% Change FY18 Proposed Budget from FY17 Adopted Budget	% Change FY18 Proposed Budget From FY17 PROJECTED Year-End	Budget Account Description		
ADMINISTRATION - HEALTH & SAFETY PROGRAM											
5010-010-06	Salaries, Wages & Compensation	ASM	56,800	52,658	(10,249)	46,550	-18.04%	-11.60%	Novato Sanitary District's (NSD) share of the new Health & Safety Manager position salary is 41.67% and includes car allowance and leave cash-outs. The decrease is due to a reduction in salary for the new position. The Agency's share is 58.33% and is allocated to the Administration Budget.		
5020-020-06	CalPERS Retirement	ASM	11,600	10,662	(1,555)	10,045	-13.41%	-5.78%	Employer and employer-paid employee contributions for CalPERS 2.7% @ 55 retirement program. The decrease is due to savings from creating the Health & Safety Manager and eliminating the Safety Director position.		
5020-030-06	SS / Medicare	ASM	800	725	(125)	675	-15.60%	-6.83%	Employer's 1.45% share of Medicare.		
5030-010-06	Employee Health Benefits	ASM	11,400	9,953	(6,790)	4,611	-59.56%	-53.68%	Employer paid contributions for employee benefits includes insurance coverage for health, dental, vision, life, accident and disability. Budget decrease is due to employee only health benefit coverage (FY 17 was family coverage).		
5030-015-06	Employee Benefits-MARA	ASM	850	773	(131)	720	-15.39%	-6.87%	MARA: Is a medical after retirement employer paid contribution totaling 1.5% of base salary and \$180 per year administration fee (formerly .1% of base salary). The decrease is due to savings from new Health & Safety Manager position and eliminating the Safety Director position.		
5030-020-06	Retiree Health Benefits	ASM	2,650	2,640	-	2,650	0.00%	0.36%	Medical benefits for one retired employee and one surviving spouse. No significant increase is anticipated for retired Safety Director medicare Kaiser benefits.		
5065-000-06	Shoes	ASM	100	-		100	0.00%	0.00%	Safety shoes are part of the safety clothing provided for employees per CMSA safety policies.		
6830-016-06	Health & Safety Manager Program Expenses	HSM	6,700	3,791	1,750	8,450	26.11%	122.90%	Professional services, materials, supplies and memberships, to administer the Safety Program for two participating agencies. NSD's program share is 41.7% of program costs. CMSA's 58.33% share is budgeted to 6830-016-01.		

Central Marin Sanitation Agency									*Position Code
Proposed FY 2017-18 Operating Budget									
Line Item Accounts									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									
This budget center is for accounting purposes only. The Agency is reimbursed (revenues) for costs that are incurred. Does not include CMSA labor expense for contract services provided.									
Account #	Account Name	*By	FY 16-17 Adopted Budget	FY 16-17 Projected Year End Expenditures	FY 17-18 Proposed Budget Adjustments	FY 17-18 Proposed Budget	% Change FY18 Proposed Budget from FY17 Adopted Budget	% Change FY18 Proposed Budget From FY17 PROJECTED Year-End	Budget Account Description
6830-017-06	Prof'l Service: Outside Safety	HSM	-	702	11,215	11,215	0.00%	1498.15%	Training expenses for required safety programs that include hearing tests, first-aid/CPR, incident command training, traffic control, defensive driving, and many other Cal/OSHA programs that facilitate a safe work environment. Budget increase is for addomg this line which had been omitted from previous budgets.
Subtotal Administration			90,900	81,904	(5,885)	85,016	-6.47%	3.80%	
TECHNICAL SERVICES									
6821-000-06	Countywide Public Education Program	GM	42,500	32,521	2,500	45,000	5.88%	38.37%	Program expenditures to administer the County Wide Education Program for 5 participating agencies such as promotional materials, booth registration fees, public outreach program costs, sponsorships, supplies and memberships. CMSA's 58.3% share of the program cost is budgeted to Technical Services account 6821-000-02. Increase is due to adding \$10K to produce a new educational video.
Subtotal Environmental Services			42,500	32,521	2,500	45,000	5.88%	38.37%	

Central Marin Sanitation Agency																	*Position Code			
Proposed FY 2017-18 Operating Budget																				
Line Item Accounts																			ASM	Administrative Services Manager
																			GM	General Manager
																			HSM	Health & Safety Manager
																			LD	Lab Director
																			MS	Maintenance Supervisor
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Cooperative Agreement Expenses: CMSA Services Provided Under Contract to Other Local Agencies																				
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Account #	Account Name	*By	FY 16-17 Adopted Budget	FY 16-17 Projected Year End Expenditures	FY 17-18 Proposed Budget Adjustments	FY 17-18 Proposed Budget	% Change FY18 Proposed Budget from FY17 Adopted Budget	% Change FY18 Proposed Budget From FY17 PROJECTED Year-End	Budget Account Description											
MAINTENANCE			(excludes labor)			(includes labor)														
5010-023-03	Overtime SD#2 Contract		-	-		-	0.00%	0.00%												
6600-000-06	SD-2 Pump Stations	MS	120,050	105,562	(150)	119,900	-0.12%	13.58%	SD#2 pump station maintenance costs include labor, mileage, 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	106,893		44,300	0.00%	-58.56%	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	33,050	45,537	(7,350)	25,700	-22.24%	-43.56%	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.											
Subtotal Maintenance			197,400	257,993	(7,500)	189,900	-3.80%	-26.39%												
TOTAL Cooperative Agreements Expenses			330,800	372,418	(10,885)	319,916	-3.29%	-14.10%												

**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 17-18 Capital Improvement Program – Summary of Changes

Category	FY 16-17 Adopted Budget	FY 16-17 Projected Actuals	FY 17-18 Proposed Budget	# of Activities
Facility Improvements	\$ 1,335,500	\$ 850,097	\$ 1,824,600	7
General Equipment	368,400	243,107	527,100	10
Liquid Treatment Equipment and Systems	1,283,800	849,888	620,700	11
Solids Treatment and Energy Generation	1,023,500	466,573	671,800	5
Staff Costs	178,200	178,200	185,200	2.0 FTE
Total	\$ 4,189,400	\$2,587,865	\$3,829,400	33

FY 16-17 Projected Actuals

Projected total spending is expected to be 62% of the adopted budget amount. Of the \$1.6 million in unexpended budgeted funds, the following delayed and completed projects account for \$1.3 million:

- Several Agency Facilities Master Plan tasks associated with the State Revolving Fund Green Project Reserve grant fund have been delayed until the grant is approved. (\$78k)
- The Maintenance Facility Modifications project was rebid resulting in a delayed project schedule where construction costs planned in FY 17 have been shifted to FY 18. (\$292k)
- The Facility Paving/Site Work is delayed due to unplanned work associated with the wet weather flows and to avoid conflicts with the Maintenance Facilities Modifications. (\$125k)
- The Bio-Tower Rotary Distributer Replacement are postponed until the results of the Agency Facilities Master Plan condition assessment results are approved. (\$127k)
- Replacement of Return Activated Sludge (RAS) pumps, secondary clarifier turntable drive gear box, and metal structures are postponed until the Agency Facilities Master Plan secondary treatment process analysis and condition assessment results are approved. (\$208k)
- Centrifuge maintenance is postponed until the results of the Agency Facilities Master Plan dewatering task recommendation is evaluated by staff. (\$235k)
- The cogeneration system maintenance project contract work was completed at a cost significantly lower than the estimated amount. (\$131k)
- The hot water system piping was found to be in good condition and did not require replacement. (\$110k)

FY 17-18 Priority Projects

- 1) Maintenance Facility Modifications (\$967K): Construct improvements to add office and storage space in the maintenance building, and to build a second building by the maintenance annex.
- 2) PG&E Interconnection Agreement Modification (\$525K): Complete the PG&E interconnection agreement modification process and install electrical equipment to allow for power export.
- 3) Hillside Slope Stabilization (\$400K): This is a new project related to the design and construction of soil stabilization measures to repair the landslides on the Andersen Drive hillside. CMSA submitted a request for FEMA funding to repair the slope failures. However, the total estimated project amount is budgeted since it is uncertain if the repair activities are eligible for FEMA funding.
- 4) Agency Facilities Master Plan (\$195k): Finish the study to provide planning guidance for infrastructure management, regulatory changes, renewable resource recovery, sea level rise, biosolids management alternatives, and treatment process optimization.
- 5) Laboratory Equipment (\$151K): Purchase and implementation of a Water Information Management System (WIMS) and a Laboratory Information Management System (LIMS). Implementation of WIMS will allow staff to better manage, share, and report data to internal and external stakeholders. The LIMS system will improve operational efficiency in the laboratory and is a necessary system that will be needed if proposed laboratory accreditation standards are implemented. Also includes an allowance of \$21,000 for laboratory equipment.
- 6) Facility Paving / Site Work (\$148k): Construction activities to improve drainage and repair damaged paving adjacent to the solids handling building and digesters.
- 7) Piping, Valves, & Operators (\$130K): Contractor replacement of existing expansion joints on large diameter piping that are showing signs of deterioration.
- 8) Chemical Pumps (\$113K): Replacement of polymer, peroxide, and hypochlorite chemical metering pumps that have reached the end of their lifecycle.

CIP Notes

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

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

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

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

GL Account Number	PM*	Proposed Delivery Method	Prior FYs' Costs	Adopted Budget For FY 17	Projected FY 17 Actuals	10-year CIP											Project Totals
						1 Adopted FY 18	2 FY 19	3 FY 20	4 FY 21	5 FY 22	6 FY 23	7 FY 24	8 FY 25	9 FY 26	10 FY 27	Total FY 18 - FY 27	
Facility Improvements																	
7300-103-10	TSM	Effluent Storage Pond Rehabilitation	FB	-	-	-	-	-	-	37,400	1,184,400	-	-	-	-	1,221,800	1,221,800
7300-700-10	TSM	Agency Facilities Master Plan (3)	PSA	360,800	283,045	195,000	-	-	-	-	-	-	-	-	-	195,000	478,045
7300-956-00	TSM	Industrial Coatings & Concrete Rehabilitation	IB/MC	16,900	839	47,500	55,000	187,600	95,900	20,300	23,100	23,700	24,300	25,000	25,600	-	528,000
7300-987-00	TSM	Outfall Inspection & Repairs	IB/MC	30,900	30,900	32,200	33,000	408,900	34,800	35,700	36,700	37,600	38,600	39,600	40,700	-	737,800
7400-103-10	TSM	Maintenance Facility Modifications (3)	FB	161,740	786,300	494,000	-	-	-	-	-	-	-	-	-	966,500	1,622,240
7400-956-00	TSM	Facility Paving/Site Work	IB/MC	130,600	5,000	148,400	10,300	131,300	10,800	11,100	140,200	11,700	12,000	162,100	12,600	-	650,500
7400-600-00	TSM	Hillside Slope Stabilization	FB	-	32,321	400,000	-	-	-	-	-	-	-	-	-	-	400,000
7400-960-00	TSM	Facility Roofs Rehabilitation	MC/IB/FB	10,000	3,992	35,000	-	75,500	921,400	-	-	-	-	-	-	-	1,031,900
Subtotal - Facility Improvements				1,335,500	850,097	1,824,600	98,300	803,300	1,062,900	104,500	1,384,400	73,000	74,900	226,700	78,900	5,731,500	
General Equipment																	
7300-672-00	ISA	Process Control	M/MC	35,500	8,824	37,900	29,000	30,500	31,300	47,200	33,000	33,900	34,800	35,700	36,600	-	349,900
7300-672-10	TSM/ISA	Security / Fire Systems	MC	-	1,121	3,900	-	4,000	-	4,200	-	4,400	-	4,700	-	-	21,200
7300-683-00	MS/TSM	Fuel Storage Tanks	IB/MC	10,000	491	35,000	-	112,400	-	-	-	-	-	-	-	-	147,400
7410-851-00	ISA	IT Hardware and Communication Equip	M	54,400	48,231	42,900	13,700	14,400	14,800	15,200	45,000	16,000	16,400	16,900	17,300	-	212,600
7420-701-00	MS	Agency Vehicle Replacement	IB/PO	59,000	36,260	51,000	43,000	72,000	73,000	67,300	40,000	70,600	52,600	175,400	79,300	-	724,200
7430-958-00	LD	Laboratory Equipment	PO	14,300	10,006	151,100	31,100	61,600	16,600	6,600	6,600	19,100	37,100	6,600	6,600	-	343,000
7450-002-00	MS	Electrical Equipment	M/IB	83,700	59,151	102,400	74,100	64,200	65,800	79,500	81,400	57,700	59,000	68,800	71,600	-	724,500
7450-002-10	MS	Plant Lighting	IB	26,000	25,336	26,000	18,800	19,300	19,700	20,200	20,600	21,100	-	-	-	-	145,700
7450-102-00	MS	Process Instrumentation	M	60,000	52,000	51,900	51,200	43,800	44,800	45,700	46,800	47,800	48,400	50,100	52,100	-	482,600
7450-105-00	MS	Electrical Distribution System Rehabilitation	PSA/FB	25,500	1,687	25,000	-	-	1,164,200	-	187,900	-	196,900	-	-	-	1,574,000
Subtotal - General Equipment				368,400	243,107	527,100	260,900	422,200	1,430,200	285,900	461,300	270,600	445,200	358,200	263,500	4,725,100	
Liquids Treatment Equipment and Systems																	
7300-685-00	TSM	Bio-Tower Rotary Distributor Replacement	IB	-	126,700	-	-	131,900	-	-	-	-	-	-	-	-	131,900
7300-700-00	MS	Plant Pumps	MC/M	160,000	27,421	59,800	61,200	62,500	63,900	65,300	66,800	68,300	69,100	71,400	74,300	-	662,600
7300-719-00	MS	Chemical Pumps	M	40,000	35,125	113,000	48,900	75,000	150,000	65,000	175,000	54,500	55,300	57,200	59,500	-	853,400
7300-720-00	MS	Gates Rehabilitation	M/IB	87,900	111,110	35,000	73,400	74,900	76,700	78,400	10,000	81,900	82,900	85,700	89,200	-	688,100
7300-727-00	MS	Headworks Equipment	M	70,000	13,022	50,000	26,500	27,900	900,000	29,400	105,200	31,000	31,800	32,600	33,500	-	1,267,900
7300-981-00	TSM	Odor Control System Improvements (3)	PSA/FB	112,420	370,000	319,200	-	1,183,300	-	-	1,347,200	-	-	-	1,494,600	-	4,485,220
7300-983-00	MS	Process Tank Maintenance	M/IB	35,000	30,000	85,000	79,800	81,800	59,700	61,200	62,700	64,100	65,700	68,400	71,200	-	699,600
7400-965-00	TSM/MS	Primary Clarifiers Rehabilitation	MC/M	10,000	10,000	33,400	20,800	-	-	130,600	133,600	136,400	138,400	155,800	162,100	-	911,100
7300-990-00	MS	Secondary Clarifiers Rehabilitation	PSA/IB	75,000	-	-	252,200	257,700	325,700	157,600	-	-	-	-	-	-	993,200
7300-995-00	TPM	Aeration System Rehabilitation	M/IB	51,000	47,004	20,100	15,000	-	-	-	-	26,000	-	-	-	-	61,100
7400-966-00	TSM	Critical Buried Pipe Inspection/Repairs	PSA	97	100,000	121,552	-	183,600	-	-	-	-	-	-	157,900	-	341,500
7430-855-00	MS	Chemical Tanks	M/IB	40,000	40,000	40,000	87,200	27,900	57,100	58,500	35,900	42,900	2,500	45,000	54,200	-	451,200
7430-857-00	MS	Piping, Valves & Operators	M	95,700	86,454	130,900	70,100	56,300	57,600	58,800	60,100	61,500	62,200	68,700	71,500	-	697,700
7450-104-10	TSM	Influent Flow Meter Improvement	PSA	22,500	9,000	25,000	-	-	-	-	-	-	-	-	-	-	25,000
Subtotal - Liquids Treatment Equipment and Systems				1,283,800	849,888	620,700	1,050,600	1,847,300	1,690,700	704,800	1,996,500	566,600	507,900	584,800	2,268,000	11,837,900	
Solids Treatment and Energy Generation Equipment and Systems																	
7300-678-00	TSM	Emergency Generator Assessment & Improvement	PSA/FB	-	-	-	-	-	77,600	1,931,500	-	-	-	-	-	-	2,009,100
7300-691-00	TSM	Digester Inspection, Cleaning & Cover Replacement	FB	-	-	-	-	-	856,600	875,600	-	-	-	-	-	-	1,732,200
7300-715-00	TSM/MS	Centrifuge Maintenance	PSA/FB	3,139	235,300	-	-	150,000	-	250,000	1,700,000	-	-	-	-	-	2,100,000
7300-722-00	MS	Cogeneration Maintenance (3)	M/IB/FB	359,600	228,328	86,300	100,500	362,000	1,943,200	1,637,500	62,700	64,100	65,700	74,700	77,700	-	4,474,400
7300-724-00	MS	Hot Water Systems	M/PSA	110,200	-	34,000	14,400	14,700	15,000	15,300	15,600	15,900	16,800	16,800	17,500	-	176,000
7300-725-00	MS	Boilers Rehabilitation or Replacement	IB	-	-	-	72,000	-	-	-	-	-	520,400	-	-	-	592,400
7300-977-00	MS	Sludge Recirculating Pump Grinders	M	16,900	10,000	18,000	18,300	18,700	19,100	19,600	20,000	20,400	20,700	21,400	22,300	-	198,500
7300-978-00	MS	Biosolids Hoppers Maintenance	M	-	-	8,500	-	9,000	-	9,300	-	9,700	-	10,500	-	-	47,000
7300-660-00	TSM	PG&E Interconnection Agreement Modification	PSA/IB	130,000	130,000	525,000	-	-	-	-	-	-	-	-	-	-	525,000
Subtotal - Solids Treatment and Energy Generation Equipment and Systems				977,000	464,846	671,800	355,200	404,400	3,161,500	6,188,800	98,300	110,100	623,600	123,400	117,500	11,854,600	
CMSA Staff Costs for CIP (2)				178,200	178,200	185,200	190,100	195,100	200,200	205,500	210,900	216,400	222,100	227,900	233,900	2,087,300	
(Continued on next page) Annual CIP Totals				4,142,900	2,586,138	3,829,400	1,955,100	3,672,300	7,545,500	7,489,500	4,151,400	1,236,700	1,873,700	1,521,000	2,961,800	36,236,400	

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

* PM indicates the project manager for the account.

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

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

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

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

2015 to 2016 CCI % Change	4.07%
	1.0407

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

PROPOSED

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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 21 - A consultant will conduct an assessment of the generator for condition, air emissions and reliability. The budget includes an allowance for a preliminary design report that will include an estimate to rehabilitate or replace the equipment.</p> <p>FY 22 - Allowance to fund design and installation of a replacement emergency generator based on findings of the assessment and preliminary design report.</p>
7300-691-00	Digester Inspection, Cleaning and Cover Replacement	<p>This account includes allowance for periodic cleaning and inspection of each anaerobic digester every 7 years based on conservative estimates of their membrane covers’ service life. Agency staff will drain the tanks to allow a contractor to remove material that has accumulated inside of the tanks. A specialty contractor will replace the membrane covers after the cleaning is complete and then staff will return each digester to service.</p> <p>FY 19 - Engage the cover manufacturer to perform a condition assessment of the covers to estimate their remaining useful life. Allowances in FY 20 and 21 may be differed to later years based on the assessment findings.</p> <p>FY 20 - Allowance to clean and inspect the interior of Digester No. 1 and replace its dual membrane cover.</p> <p>FY 21 - Allowance to clean and inspect the interior of Digester No. 2 and replace its dual membrane cover.</p>
7300-715-00	Centrifuge Maintenance	See Full Page Description

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

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

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

Solids Treatment And Energy Generation Processes and Equipment		
ACCOUNT NUMBER	ACCOUNT / PROJECT TITLE	ACCOUNT / PROJECT DESCRIPTION
7300-978-00	Biosolids Hoppers - Maintenance	An allowance for monitoring and minor repairs to biosolids hoppers, gates, and hydraulic actuators. When centrifuges are scheduled for replacement, improvements to the hoppers will be coordinated with that project. FY 18 -27 - Allowance for minor maintenance of mechanical equipment every other year.
7300-660-00	PG&E Interconnection Agreement Modification	It is expected that PG&E will issue a new Interconnection Agreement (IA) by the end of FY 17 that will allow the Agency to deliver power to the electrical grid. Per the terms of the new IA, the Agency will need to design and construct approximately \$100,000 of onsite engine control and electrical equipment improvements to meet PG&E standards. CMSA is also required to fund the cost for PG&E to install a new electrical disconnect at an estimated cost of \$75,000. CMSA submitted a State Revolving Fund (SRF) Green Project Reserve grant application with a Plan of Study that includes consultant tasks to define operational limits for biogas and power generation, OWRF expansion, IA modification, CEQA/NEPA environmental review, air quality permitting, financial funding review and project management activities. The total estimated cost for the Plan of Study is \$666,859, of which \$500,000 is available for reimbursement. Because CMSA is required to contribute \$166,859 and will only be reimbursed for expenses incurred, an allowance of \$350,000 has been included in this account to cover costs while waiting for reimbursement.
No Account Number	CMSA Staff Costs for CIP Projects	Capitalization of compensation and benefits for CMSA staff time to manage design of, contracting for, and construction of CIP projects, as listed below. Costs for FY 18 are based on actual estimated staff time, totaling 2 Full Time Equivalencies (FTE's). Costs for future years are based on a one FTE allowance, and will be modified for each current fiscal year in that year's CIP budget. The projects identified for staff cost capitalization in FY 18 are: 7300-700-10 Agency Facilities Master Plan 7400-103-10 Maintenance Facility Modifications 7300-981-00 Odor Control System Improvements 7300-715-00 Centrifuge Maintenance 7300-660-00 PG&E Interconnection Agreement Modification

Effluent Storage Pond Rehabilitation (GL 7300-103-10)			
Type of Project	Design and Capital Construction	Lead Department	Engineering
Project Delivery	Formally bid construction		
Description and Justification	The effluent storage pond was constructed over a deep layer of Young Bay Mud that settles unevenly under the Pond. This causes loss of capacity due to berm settling, and small areas of shallow standing water after the Pond is emptied due to bottom settling. The berm was reconstructed and raised in 2007, including a new geotextile liner and new sections of intake and outlet piping. There is an allowance for surveying in FY 22 and potential renovation of berms and bottom in FY 23; these activities were originally scheduled for FY 18 and have been deferred based on very little observed new subsidence in the reconstructed berm.		
Elements	FY 22 - Survey entire berm, top road, and pond bottom for excessive or uneven settlement; FY 23 - Based on survey results, allowance for re-grading the pond bottom and / or raising the berm, including extending and re-anchoring the buried extra liner material and rebuilding the service road on top of the berm.		
Risk Assessment	This is a low risk project because berm settlement does not occur rapidly. Berm condition will be regularly monitored and the survey timing can be adjusted if necessary.		
Projected Expenditures FY 18 - 27			
		FY 22	\$37,400
		FY 23	1,184,000
		FY 18 – 27 Total	\$1,221,800
Implementation Schedule			
Schedule	Activity Description		Cost
Prior FYs	Maintenance work to regrade the pond bottom for improved drainage and vegetation control.		\$90,054
FY 22	Allowance to survey and design improvements to berm, road, and/or pond bottom.		37,400
FY 23	Allowance to raise pond berm and extend and re-anchor cover.		1,184,000
		Project Total	\$1,311,854

Project Photo



Effluent Storage Pond

Agency Facilities Master Plan (GL 7300-700-10)			
Type of Project	Planning Study	Lead Department	Engineering
Project Delivery	Request for Proposals		
Description and Justification	This Master Plan will include several elements to guide the Agency in planning future projects. A traditional master plan primarily considers the impacts related to growth. Because there is limited potential for growth in the Agency's service area, this study will focus on the condition of the Agency's aging facilities, impacts associated with potential regulatory changes, reduction in energy usage and GHG emissions, operational improvements, and climate change. The Master Plan recommendations will be presented to the Board and selected activities and projects will be incorporated into the FY 19 10-Year CIP and Revenue Program.		
Elements	<ul style="list-style-type: none"> - Recommendations for if and when aging infrastructure should be replaced in-kind or retrofitted with a newer technology that reduces electrical consumption or GHG emissions. - Agency specific options for additional biogas use including energy generation, natural gas pipeline injection, and a vehicle fueling station - Evaluation of potential regulatory changes including nutrient limits - Evaluation of biosolids management practices and identification of future alternatives - Potential facility and/or equipment improvements to address sea level rise. - Identify feasible locations and sizes for solar power facilities - A calibrated treatment plant model that can be used to simulate changes in operational strategy and for training of new operations staff. 		
Risk Assessment	The Agency should regularly conduct master planning activities to assess potential risks associated with infrastructure management, regulatory changes, and capacity restrictions. Because there are no immediate drivers to alter the facility, this project is considered low risk.		
Projected Expenditures FY 18 - 27			
			FY 18
			\$195,000
			FY 18 – 27 Total
			\$195,000
Implementation Schedule			
Schedule	Activity Description	Cost	
FY 17	Develop and issue an RFP to select a consultant and begin preparation of the Master Plan.	\$283,045	
FY 18	Complete the Master Plan.	195,000	
Project Total			\$478,045

Project Photos:



Agency Facilities



Organic Waste Receiving Facility



Effluent Pumps

Maintenance Facility Modifications (GL 7400-103-10)			
Type of Project	Design and Capital Construction	Lead Department	Engineering
Project Delivery	Formally bid		
Description and Justification	Since the Maintenance Building and Maintenance Annex were constructed (1985 and 1995, respectively), the Agency's inventory and work space needs have changed. This multi-year project includes expansion and remodeling of the original Maintenance Building and construction of a new storage structure to better meet current Agency needs.		
Elements	<p>FY 15 - (Completed) Selected a designer for the identified modifications, prepared a needs assessment, initiated the design phase, and modified final effluent sample vault drain system to eliminate flow restrictions.</p> <p>FY 16 - (Completed) Completed the maintenance building improvement design, including permitting by the San Rafael Planning and Building Departments.</p> <p>FY 17 – Bid the project and initiated construction of maintenance building modifications to create an office space, enclose open side of the maintenance building for storage and construct a new structure adjacent to the maintenance annex.</p> <p>FY 18 – Complete construction activities.</p>		
Risk Assessment	This low risk project will increase the operational efficiency by improving work spaces and materials storage areas.		
Projected Expenditures FY 18 - 27			
			FY 18
			\$966,500
			FY 18 – 27 Total
			\$966,500
Implementation Schedule			
Schedule	Activity Description	Cost	
Prior FYs (Completed)	Structural assessment, needs assessment by design architect, and developed scope of design work	\$58,785	
FY 16 (Completed)	Design of maintenance building modifications and new structure	102,955	
FY 17 (Projected Actual)	Publicly bid the project and initiate construction.	494,000	
FY 18	Allowance to complete construction including, construction management services, architectural services during construction, and a 10% construction contingency.	966,500	
Project Total			\$1,622,240

Project Photos



Maintenance Building and Covered Portico



Area to be enclosed for additional storage

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

Project Photo



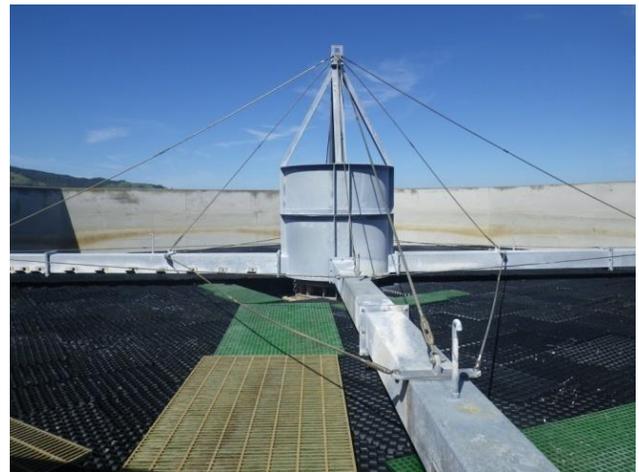
Maintenance Building with standing seam metal roofs.

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

Project Photos:



Original base & turntable, Biotower No. 2



New rotary distributor, Biotower No. 2

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

Project Photos:



Odor control scrubbers, with air handlers, two views.

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

Project Photos:



Biotower effluent pipe



Primary Effluent pipe manifold

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

Project Photos:



Existing Centrifuges



Biosolids Hoppers

Ten-Year Financial Forecast

See Handout delivered at the May 9, 2017 Board Meeting

PROPOSED

Appendix

PROPOSED

CENTRAL MARIN SANITATION AGENCY

Proposed Budget for the Fiscal Year 2017-18

SCHEDULE OF REVENUE ALLOCATION TABLES

Description	Fiscal Year 2016-17	Fiscal Year 2017-18	Amount Increase (Decrease)	Percent Increase (Decrease)
Flow-Strength Allocation Table (for service charges and capital fee)				
	<u>36M Flow 36M Strength</u>	<u>36M Flow 36M Strength</u>		
SRSD	42.89%	41.41%		
SD #1	48.27%	50.30%		
SD #2	8.83%	8.29%		
Totals	<u>100.00%</u>	<u>100.00%</u>		
Allocation of Service Charges to Members	<u>\$ 9,865,358</u>	<u>\$ 10,263,166</u>	<u>\$ 397,808</u>	4.0%
SRSD	4,231,633	4,249,977	18,345	0.4%
SD #1	4,762,416	5,162,372	399,956	8.4%
SD #2	871,309	850,816	(20,493)	-2.4%
Totals	<u>\$ 9,865,358</u>	<u>\$ 10,263,166</u>	<u>\$ 397,808</u>	4.0%
Allocation of Capital Fee to Members	<u>\$ 530,000</u>	<u>\$ 630,000</u>	<u>\$ 100,000</u>	18.9%
SRSD	227,337	260,883	33,546	14.8%
SD #1	255,853	316,890	61,037	23.9%
SD #2	46,810	52,227	5,417	11.6%
Totals	<u>\$ 530,000</u>	<u>\$ 630,000</u>	<u>100,000</u>	18.9%
Debt Service Cost - '15 Ref Rev Bonds				
Service charges-debt service principal	\$ 2,195,000	\$ 2,250,000	\$ 55,000	2.5%
Service charges-debt service interest	1,773,094	1,711,906	(61,188)	-3.5%
Service charges-debt service coverage	992,024	990,477	(1,547)	-0.2%
Total debt service cost	<u>\$ 4,960,118</u>	<u>\$ 4,952,383</u>	<u>\$ (7,735)</u>	-0.2%
EDU Count (for debt service allocation)				
SRSD (Eff FY 2017-18 fixed at 19,545)	19,555	19,545	(10)	-0.1%
SD #1 (Eff FY 2017-18 fixed at 22,404)	22,719	22,404	(315)	-1.4%
SD #2 (Eff FY 2017-18 fixed at 6,090)	6,076	6,090	14	0.2%
SQSP (Eff FY 2017-18 fixed at 4,005)	4,005	4,005	-	0.0%
Total EDU's	<u>52,355</u>	<u>52,044</u>	<u>4</u>	0.0%
Allocation of Debt Service Costs to Members				
SRSD	\$ 1,852,642	\$ 1,859,855	\$ 7,213	0.4%
SD #1	2,152,400	2,131,911	(20,489)	-1.0%
SD #2	575,641	579,510	3,869	0.7%
SQSP	379,434	381,106	1,672	0.4%
Totals	<u>\$ 4,960,118</u>	<u>\$ 4,952,383</u>	<u>\$ (7,735)</u>	-0.2%

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

I. Allocation of treatment costs by Flow and Strength

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

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

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

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

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

II. Allocation of Sewer Service Charges to JPA Members

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

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

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

I. Allocation of treatment costs by Flow and Strength

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

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

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

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

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

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

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

II. Allocation of Sewer Service Charges to JPA Members

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

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

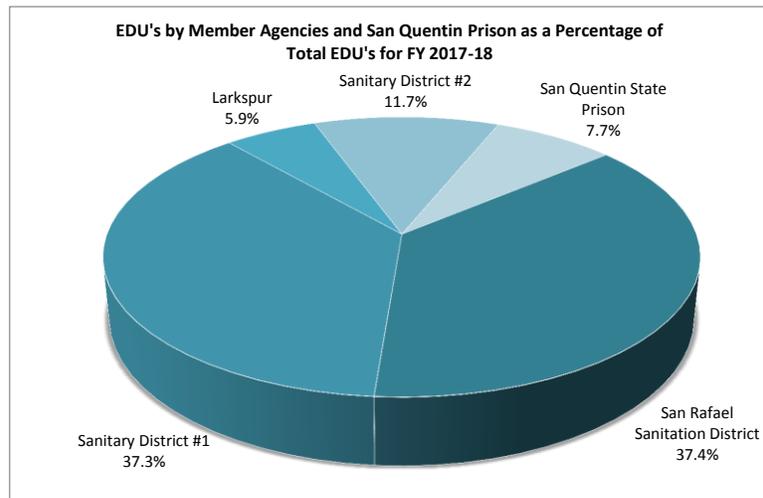
CENTRAL MARIN SANITATION AGENCY
Member Agencies and San Quentin Prison Equivalent Dwelling Units (EDU's)

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

Note 1: Effective FY 2012-13, the State of California contracted directly with CMSA for the provision of wastewater treatment services for SQSP. SQSP has been assigned an EDU count of 4,005 units for the purpose of calculating its share of debt service charges.

Note 2: Additionally and effective for the FY 2017-18, the EDU table shown above showing actual reported EDU is for informational purposes only. Accordingly, EDU counts have been established by fixed agreement for all member for debt service allocation purposes.

	SRSD	SD#1	Larkspur	SD#2	SQP	TOTAL
FY 2017-18	19,332	19,298	3,039	6,055	4,005	51,729
% of Total	37.4%	37.3%	5.9%	11.7%	7.7%	100.0%



Fiscal Year 2017-2018 Health & Safety Program Budget

FY 17-18 Proposed Budget - Health & Safety Program

TABLE 1 - CORE PROGRAM	Adopted FY 17	Projected FY 17	Proposed FY 18	Comments
<u>Line-Items</u>				
<u>Fixed Expenses</u>				
Salary - Health & Safety Manager (1 FTE)	137,105	137,105	106,923	2% Increase effective 07/01/17 + Merit. CMSA 58.3% & NSD 41.7%.
Benefits - Health & Safety Manager (1 FTE)	61,392	61,392	38,361	CMSA 58.3% & NSD 41.7%.
Benefits - Retiree Health (2)	5,888	5,888	6,360	
Admin (5% of Health & Safety Manager salary)	6,855	6,855	5,346	FY15 reduced from 15% to 5% - applies to NSD Share
Car Allowance - Health & Safety Manager (1 FTE)	4,800	4,800	4,800	\$400/month
Subtotal Salaries & Benefits - Health & Safety Manager	216,040	216,040	161,791	
Salary - Safety Director (.25 FTE)			35,842	.25 FTE cost shared equally
Benefits - Safety Director (FY18: .25 FTE)			11,593	.25 FTE cost shared equally
Car Allowance - Safety Director Salary (.25 FTE)			1,200	\$400/month @ .25 FTE cost shared equally
Subtotal Salaries & Benefits - Safety Director			48,635	
Subtotal Salaries & Benefits less Admin (5% of salary)	209,185	209,185	205,080	Direct S&B expenses
<u>Variable Expenses</u>				
Safety Shoes	200	200	200	
Professional Services	6,000	1,000	6,000	Laboratory analysis for sampling. Rent Industrial Hygiene equipment, Hire IH consultant to conduct hazards analysis.
Publications	1,300	648	1,300	Mancomm, CalOSHA Reporter, ANSI/NFPA standards
Memberships	750	712	750	NSC, CWEA, American Society Safety Engineers
Office Supplies	450	375	450	
Training Materials	2,000	1,355	2,000	Training Supplies, DVDs
Computer Software/Supply	3,600	3,345	3,600	Keller On-Line, MSDS Online
Pump Station Safety Assessment	-	-	-	
Seminars/Conferences	-	-	6,200	(DT) CASA Conference. (KT) CWEA Classes, Fall Protection Training, Forklift Training and Workers Compensation training .
Subtotal Variable Expenses	14,300	7,635	20,500	
Total Health & Safety Director Program Expenses	230,340	223,675	230,926	
Total H&S Director Program Expenses to be allocated:			182,291	Core Program less .25 FTE Safety Director (cost shared equally)
<u>Testing/Training Expenses</u>				
Testing and Training-CMSA	15,616	7,300	13,080	Hearing tests, Incident Command, Arc Flash, Qualified EE Electrical, Defensive driving, CPR, Rigging training, Traffic Control
Testing and Training-NSD	10,096	4,600	11,215	
Subtotal Testing and Training	25,712	11,900	24,295	
Total Program Expenses	256,052	235,575	255,221	

FY 17-18 Distribution of Safety Director Expenses to Participating Districts - Proposed 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 **182,291** Excludes .25 FTE Safety Director (costs shared equally)
50% of Total Expense \$ 91,145

Agency	Distribution on 50% of Program Cost	Number of Authorized Positions*	Percentage of Total Number of Employees	Distribution on remaining 50% of Program Cost	Total Annual Payment	Total Percentage
CMSA*	45,573	42	66.7%	60,764	106,336	58.3%
NSD*	45,573	21	33.3%	30,382	75,955	41.7%
Total	91,145	63	100.0%	91,145	182,291	100.0%
Participating Districts Total:					75,955	41.7%

*Excludes CMSA Health & Safety Manager and NSD Safety Director positions

PUBLIC EDUCATION PROGRAM ANNUAL BUDGET FY 2017-2018

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

Note: We dropped Financial support for STRAW per GM, our support for the pharmaceutical take back program came to end this year, and MCSTOPPP wont be publishing an annual county wide calendar. This trimmed \$21,000 but we added one line item. At the last several public education meetings we have been brainstorming on ways to freshen up our outreach efforts. One of the ways is to develop a new video. With updated facts images, new interviews and testimonials we could stay relevant and incorporate some of the new technologies and issues in our sewer system today. We have earmarked \$10,000 for the development of the new video.