

**ADOPTED
BIENNIAL
OPERATING AND CAPITAL
BUDGET**
➔ **FY21 SUPPLEMENTAL**



CENTRAL MARIN SANITATION AGENCY

**CENTRAL MARIN SANITATION AGENCY
ADOPTED BIENNIAL OPERATING AND CAPITAL BUDGET**

**FY21 SUPPLEMENTAL
Operating Budget Revisions Adopted June 11, 2020
Capital Program Revisions Adopted July 14, 2020**

FY21: JULY 1, 2020 – JUNE 30, 2021

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CENTRAL MARIN SANITATION AGENCY
FUNDING REQUIREMENTS AND SOURCES SUMMARY

Funding Requirements	Adopted FY20	FY20 Change vs FY19	Adopted FY21	Mid-Cycle Adjustments	Adjusted FY21	FY21 Change vs FY20
<i>Operating:</i>						
Salaries and Wages	\$ 5,693,800	2.5%	\$ 5,999,600		\$ 5,999,600	5.4%
Employee Benefits	2,872,800	4.1%	3,137,700	18,200	3,155,900	9.9%
Chemicals & Fuels	1,289,800	14.5%	1,261,800	37,280	1,299,080	0.7%
Biosolids Management	418,500	4.5%	435,300	7,700	443,000	5.9%
Permit Testing & Monitoring	143,800	-3.4%	142,500	19,797	162,297	12.9%
Maintenance & Repairs	364,700	0.3%	377,200	10,000	387,200	6.2%
Utilities	486,600	53.1%	390,400	(107,400)	283,000	-41.8%
Insurance	384,500	53.3%	405,900	1,377	407,277	5.9%
General & Administrative	915,400	1.7%	879,700	51,764	931,464	1.8%
Operating before debt and capital	12,569,900	6.3%	13,030,100	38,718	13,068,818	4.0%
Debt Service	3,967,331	-0.1%	3,957,006		3,957,006	-0.3%
Operating before capital	16,537,231	4.7%	16,987,106	38,718	17,025,824	3.0%
Capital Improvements	3,900,626	36.3%	8,484,664		8,484,664	117.5%
Total requirements	\$ 20,437,857	9.5%	\$ 25,471,770	\$ 38,718	\$ 25,510,488	24.8%
Funding Sources	Adopted FY20	FY20 Change vs FY19	Adopted FY21	Mid-Cycle Adjustments	Adjusted FY21	FY21 Change vs FY20
Service Charges	\$ 10,994,000	3.5%	\$ 11,379,001		\$ 11,379,001	3.5%
Capital Fee	1,021,000	25.9%	1,252,000		1,252,000	22.6%
Debt Service Charge	4,959,164	-0.1%	4,946,258		4,946,258	-0.3%
Capacity Charges	30,872	2.6%	31,675	104,000	135,675	339.5%
Contract Service Revenues	1,322,478	19.3%	1,550,934		1,550,934	17.3%
Program Revenues	107,348	-26.5%	122,139		122,139	13.8%
Haulers, Permits & Inspections	274,550	24.0%	274,550		274,550	0.0%
Other Revenues	20,000	0.0%	20,000		20,000	0.0%
Interest Income	409,750	89.9%	442,780		442,780	8.1%
Other Financing Sources (Notes 1, 2)	450,000		9,000,000		9,000,000	
Subtotal funding sources	19,589,162	8.0%	29,019,337	104,000	29,123,337	48.7%
Reserve (Increase) Usage	848,695	64.7%	(3,547,567)	(65,282)	(3,612,849)	-525.7%
Total funding sources	\$ 20,437,857	9.5%	\$ 25,471,770	\$ 38,718	\$ 25,510,488	24.8%

Note 1: FEMA reimbursement for Andersen Drive hillside as other financing source in FY20

Note 2: Assumed revenue bond issuance as other financing source in FY21

FY21 Operating Budget Adopted Revised Adjustments

Administration Department

Central Marin Sanitation Agency
FY21 Operating Budget Adopted Revised Adjustments

Line Item Accounts

ADMINISTRATION

Account #	Account Name	*By	Actual FY19	Budget FY20	Adopted Budget FY21	FY21 Change from FY20
SALARIES & BENEFITS						
100-0110-440-7001	Salaries wages- regular	ASM	1,294,493	1,300,500	1,359,300	4.52%
100-0110-440-7002	Salaries wages-part time	ASM				0.00%
100-0110-440-7003	Salaries wages - temp	ASM	-	45,000	45,000	0.00%
100-0110-440-7005	Salaries wages- overtime	GM	7,491	5,400	5,700	5.56%
Subtotal Salaries & Wages			1,301,984	1,350,900	1,410,000	0.00%
100-0110-440-7021	Er ret- CalPERS classic	ASM	434,018	546,800	604,000	10.46%
100-0110-440-7022	Er ret- CalPERS PEPR A	ASM	94,151	105,700	118,100	11.73%
100-0110-440-7023	Er ret- CalPERS survivors	ASM	2,374	3,600	3,800	5.56%
100-0110-440-7024	Er ret- CalPERS Classic UAL	ASM	597,749	723,300	849,000	17.38%
100-0110-440-7025	Er ret- CalPERS PEPR A UAL	ASM	482	1,100	1,300	18.18%
100-0110-440-7028	Er ret- medicare	ASM	81,025	89,000	92,600	4.04%
100-0110-440-7027	Er ret- PARS benefit	ASM				0.00%
100-0110-440-7041	Benefits- medical active	ASM	670,269	968,300	999,800	3.25%
100-0110-440-7043	Benefits- dental	ASM	90,993	40,500	41,800	3.21%
100-0110-440-7044	Benefits- life-AD&D-LTD Ins	ASM	25,905	29,400	30,600	4.08%
100-0110-440-7045	Benefits- vision	ASM	10,792	11,900	12,700	6.72%
100-0110-440-7046	Benefits- employer paid MARA	ASM	38,804	47,500	49,400	4.00%

***Position Code**

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

FY21 Budget Adjustment	Revised FY21 Budget	FY21 Revised Change from FY21 Adopted	Budget Account Description
(77,900)	1,281,400	-5.73%	Salaries for six full-time employees. Budget adjustment transfers CMSA's 60.25% share of the Senior Safety Specialist salary and car allowance to the new Incode accounting software department 0120. FY20 and FY21 increases are for a 3% & 4% COLA and leave balance cash-outs.
	-	0.00%	New account
	45,000	0.00%	New account established for an Agency internship program employing the equivalent of 1.75 full time employees.
	5,700	0.00%	Authorized overtime to complete special activities or assignments.
(77,900)	1,332,100	-5.52%	
	604,000	0.00%	Employer contributions for CalPERS 2.7% @ 55 for Classic employee retirement program. The FY20 employer contribution rate is 13.182% for Classic employees and CalPERS estimates 14% for FY21.
(5,300)	112,800	-4.49%	Employer contributions for CalPERS 2% @ 62 retirement program for PEPRAs employees hired after January 1, 2013. The FY20 employer PEPRAs contribution rate is 6.985% and CalPERS estimates FY21 to be 7.5%. Budget adjustment transfers CMSA's 60.25% share of the Senior Safety Specialist PEPRAs to Incode accounting department 0120.
	3,800	0.00%	Annual Survivors Benefit premium.
	849,000	0.00%	The Classic unfunded accrued liability is the total minimum required employer contribution established in the CalPERS Actuarial Valuation Report dated June 30, 2017. The Agency selects the annual lump sum prepayment option.
	1,300	0.00%	The PEPRAs unfunded accrued liability is the total minimum required employer contribution. The Agency selects the annual lump sum prepayment option.
(1,200)	91,400	-1.30%	Employer's 1.45% share of Medicare for all employees. Adjustment transfers CMSA's share Health & Safety (H&S) to department 0120.
	-	0.00%	New account
(7,000)	992,800	-0.70%	Budget based upon current CalPERS Kaiser family rate effective January through December 2019, and an estimated 4% premium increase for January through June 2020 and 4% increase for FY21. Adjustment transfers CMSA's share H&S to department 0120.
18,200	60,000	43.54%	Increase in this new self-insured program is based on the projected FY20 actual expense.
	30,600	0.00%	Employer paid life, accidental death & dismemberment, and long-term disability insurances.
	12,700	0.00%	Employer paid vision benefits.
(1,100)	48,300	-2.23%	PEHP: Post Employment Health Plan (also known as MARA: medical after retirement account). Employer contribution of 1.5% of base salary for 30 employees. Budget increases are a function of salary adjustments. Adjustment transfers CMSA's share H&S to department 0120.

Central Marin Sanitation Agency
FY21 Operating Budget Adopted Revised Adjustments

Line Item Accounts

ADMINISTRATION

Account #	Account Name	*By	Actual FY19	Budget FY20	Adopted Budget FY21	FY21 Change from FY20
100-0110-440-7047	Benefits- retiree medical prem	ASM	178,949	216,200	244,700	13.18%
100-0110-440-7048	Benefits- retiree medical reimb	ASM				0.00%
100-0110-440-7049	Benefits- retiree medical prefund	ASM	43,082	43,000	43,000	0.00%
100-0110-440-7061	Unemployment benefits	ASM	1	10,000	10,000	0.00%
100-0110-440-7062	Benefit administration fees	ASM	4,647	18,100	18,500	2.21%
100-0230-440-7063	Uniforms	AE	16,574	18,400	18,400	0.00%
Subtotal Benefits			2,289,814	2,872,800	3,137,700	9.22%
Total Salaries & Benefits			3,591,798	4,223,700	4,547,700	7.67%
INSURANCE						
100-0110-440-7406	Ins- property	ASM	60,464	67,800	73,900	9.00%
100-0110-440-7401	Ins- general liability & auto	ASM	47,867	51,000	53,000	3.92%
100-0110-440-7402	Ins- pollution liability	ASM	1,107	1,200	1,300	8.33%
100-0110-440-7403	Ins- employees comm bond	ASM	1,482	3,700	3,900	5.41%
100-0110-440-7404	Ins- commercial crime	ASM	625	800	800	0.00%
100-0110-440-7405	Ins- workers compensation	ASM	135,302	260,000	273,000	5.00%
Subtotal Insurance			246,847	384,500	405,900	5.57%

***Position Code**

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

FY21 Budget Adjustment	Revised FY21 Budget	FY21 Revised Change from FY21 Adopted	Budget Account Description
(4,100)	240,600	-1.68%	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 FY20, one anticipated retirement and FY21 two potential retirements. The increase is offset by two additional retirees turning age 65 with a consequent enrollment in the lower cost Medicare supplement plans. Adjustment transfers CMSA's share H&S to department 0120.
	-	0.00%	New account
	43,000	0.00%	Prefunding of the Agency's post-employment health benefit obligations for current retirees and employees. The prefunding amount is the annual FY19 estimated OPEB expense in the Agency's January 1, 2018 GASB 75 actuarial report minus retiree medical premiums.
	10,000	0.00%	An allowance for unemployment benefits paid to State Employment Development Department (EDD) for claims filed by separated employees.
	18,500	0.00%	Administrative fees charged for EDIS dental, CalPERS medical, PEHP post employment health, and NAVIA Flex 125 plans.
	18,400	0.00%	Contracted service to provide uniforms, jackets, and miscellaneous related work clothing for staff, and towel and floor mat cleaning services.
(500)	3,137,200	-0.02%	
(78,400)	4,469,300	-1.72%	
16,846	90,746	22.80%	Annual property insurance coverage from the CSRMA for all Agency buildings and structures. CSRMA provided a conservative estimate for FY21 budgeting.
7,625	60,625	14.39%	CSRMA pooled insurance coverage for general, automobile, and error and omission liability premiums. CSRMA recommended increased premium.
	1,300	0.00%	CSRMA pollution liability insurance for cleanup costs resulting from underground fuel storage tank system leaks and releases and other pollution caused losses.
	3,900	0.00%	CSRMA public official bonds for four Agency employees and one commissioner who are authorized to sign Agency checks, and includes employees who handle agency funds such as petty cash.
696	1,496	87.00%	Coverage for dishonest public employees, loss of money orders, depositor's forgery, or counterfeit currency. It is intended to cover all employees not covered under the employee/public official bonds. Aligns with actual FY20 expenses with a 5% recommended increase from CSRMA.
(23,790)	249,210	-8.71%	CSRMA workers' compensation (WC) insurance for Agency employees. CMSA's FY21 EMR is 1.29, a 0.21 reduction from FY20 that reduces the originally budgeted insurance cost.
1,377	407,277	0.34%	

Central Marin Sanitation Agency
FY21 Operating Budget Adopted Revised Adjustments

Line Item Accounts

ADMINISTRATION

Account #	Account Name	*By	Actual FY19	Budget FY20	Adopted Budget FY21	FY21 Change from FY20
GENERAL ADMINISTRATIVE						
100-0110-440-7601	Meetings/training	GM	3,030	4,000	4,000	0.00%
100-0110-440-7602	Conferences	GM	23,249	25,000	25,000	0.00%
100-0110-440-7603	Commissioners- mtgs/conf	GM	15,750	18,900	18,900	0.00%
100-0110-440-7610	Prof affiliation memberships	ASM	5,320	6,000	6,000	0.00%
100-0110-440-7611	Membership- BACWA	GM	8,200	8,400	8,600	2.38%
100-0110-440-7616	Ed program- BACWWE	GM	8,000	8,000	8,000	0.00%
100-0110-440-7612	Membership- NBWA	GM	5,560	5,600	5,600	0.00%
100-0110-440-7613	Membership- CASA	GM	16,390	16,600	16,600	0.00%
100-0110-440-7614	Membership- NACWA	GM	10,815	11,000	11,000	0.00%
100-0110-440-7615	Biosolids-to-energy	GM	6,500	7,000	7,000	0.00%
100-0110-440-7650	Office expense	AA	35,006	35,000	36,600	4.57%
100-0110-440-7651	Safety supplies	OS	27,278	27,800	27,800	0.00%
100-0110-440-7652	Information technology software	ISA	29,035	37,200	38,700	4.03%
100-0110-440-7670	Printing & publications	AA	3,924	4,000	2,500	-37.50%
100-0110-440-7701	Prof svcs- general	GM	72,381	71,000	71,000	0.00%
100-0110-440-7702	Prof svcs- regulatory	GM	1,063	10,000	10,000	0.00%

***Position Code**

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

FY21 Budget Adjustment	Revised FY21 Budget	FY21 Revised Change from FY21 Adopted	Budget Account Description
	4,000	0.00%	Expenses associated with staff travel, training, and attendance at single-day professional meetings and seminars. Includes allowed expenses pursuant to the Agency's travel expense reimbursement policy.
	25,000	0.00%	Expenses associated with staff attendance at multi-day professional conferences, seminars, and training events outlined in the Agency's travel expense reimbursement policy.
	18,900	0.00%	Pursuant to Commission compensation policy, CMSA Commissioners receive \$225 per day of service.
	6,000	0.00%	Professional memberships, license, and registration requirements for department staff.
	8,600	0.00%	Annual membership dues to the Bay Area Clean Water Agencies (BACWA). BACWA is comprised of 5 members and over 25 associate members, such as CMSA.
	8,000	0.00%	Agency sponsorship for the Bay Area Consortium for Water & Wastewater Education Program. The consortium is comprised of 20 partner agencies.
	5,600	0.00%	Annual membership dues to the North Bay Watershed Association (NBWA), which is comprised of 23 governmental agencies from the North San Pablo Bay watershed.
	16,600	0.00%	Annual membership dues to the California Association of Sanitation Agencies (CASA).
	11,000	0.00%	Annual membership dues to the National Association of Clean Water Agencies (NACWA). NACWA represents the wastewater industry nationwide on regulatory and legislative issues.
	7,000	0.00%	Agency membership for Bay Area Biosolids-to-Energy Coalition, which is comprised of 19 regional wastewater agencies.
	36,600	0.00%	Costs associated with the Agency's administrative operations, including office supplies, copier leases, office furniture, office equipment service and repairs, and other related expenses.
6,400	34,200	23.02%	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. New expenditures for a Welding Fume Exposure Assessment and purchase of safety nets for two sumps.
9,466	48,166	24.46%	Expenses related to Information Technology equipment and software licenses and upgrades. New source control software module maintenance fee and purchase of additional tablets for field operations.
	2,500	0.00%	Expenses associated with newspaper subscriptions, publication of notices, and copy services at local print shops.
	71,000	0.00%	Expenses for general governmental and human resource services such as recruitments, background reference checks, and employment law staff training and development.
	10,000	0.00%	Consultation and advice on regulatory compliance and permit issues.

Central Marin Sanitation Agency
FY21 Operating Budget Adopted Revised Adjustments

Line Item Accounts

ADMINISTRATION

Account #	Account Name	*By	Actual FY19	Budget FY20	Adopted Budget FY21	FY21 Change from FY20
100-0110-440-7703	Prof svcs- finance/audit	ASM	31,224	28,700	51,700	80.14%
100-0110-440-7704	Prof svcs- labor negotiations	GM	9,708	10,100	10,500	3.96%
100-0110-440-7705	Prof svcs- legal	GM	21,064	30,000	30,000	0.00%
100-0120-440-7738	Health saf prog- training materials	ASM	33,375	38,500	39,400	2.34%
100-0120-440-7739	Outside safety training	ASM	3,931	9,100	5,200	-42.86%
100-0110-440-7730	Employee assistance program	AA	4,500	4,700	4,900	4.26%
100-0110-440-7731	Employee health maintenance	AA	3,138	3,500	3,500	0.00%
100-0110-440-7501	Internet & telephone	ISA	24,643	38,500	39,300	2.08%
100-0110-440-7762	Postage & shipping	AA	3,087	2,500	2,500	0.00%
100-0110-440-7751	Bank fees- general	ASM	1,483	1,500	1,500	0.00%
100-0110-440-7752	Bank fees- debt service	ASM	2,535	2,600	2,700	3.85%
100-0110-440-7763	Trade discounts	ASM	-	-	-	0.00%
100-0110-440-7769	Contingency	GM	-	25,000	50,000	100.00%
	Other Non-Operating Expenses	ASM	1,353	-	-	0.00%
100-0110-440-7630	Permits & lic- fuel taxes					0.00%
100-0110-440-7760	Fines and penalties					0.00%
100-0110-440-7761	Sales tax					0.00%
Subtotal General & Administrative			411,542	490,200	538,500	9.85%
Subtotal (excluding Salary and Benefits)			658,389	874,700	944,400	7.97%
Total Administration			4,250,187	5,098,400	5,492,100	7.72%

***Position Code**

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

FY21 Budget Adjustment	Revised FY21 Budget	FY21 Revised Change from FY21 Adopted	Budget Account Description
	51,700	0.00%	Expenses for professional services related to the financial operations of the Agency: annual audit of financial statements; annual maintenance fee for new financial software license renewal and financial software support; GFOA Award program fees; actuarial, financial and operational analyses.
	10,500	0.00%	IDEA annual fee for labor relations and negotiations services.
	30,000	0.00%	Expenses for general, employment law, and construction/contract legal services.
(39,400)	-	-100.00%	Adjustment transfers CMSA's share H&S to department 0120.
(5,200)	-	-100.00%	Adjustment transfers CMSA's share H&S to department 0120.
	4,900	0.00%	Confidential professional counseling provided to employees. The fee is increased annually.
	3,500	0.00%	Expense for workplace safety related physicals, pre-employment exams, and urgent care at Kaiser Hospital and Medical Center of Marin.
1,500	40,800	3.82%	Expenses associated with telephone, internet and email services, cell phones, portable radios, and data plan expenses.
	2,500	0.00%	Postage, delivery, and overnight shipping expense.
	1,500	0.00%	Bank fees and investment expenses for California Asset Management Program and Westamerica Bank accounts, and includes finance charges and late payment fees.
	2,700	0.00%	Bank fees for the Refunding Revenue Bonds Series 2015.
	-	0.00%	Account used to record vendor payment discounts received and taken for paying bills within payment terms.
	50,000	0.00%	Funds available for transfer to other operating budget accounts for unplanned and unanticipated activities. Transfers from this account require GM approval.
	-	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.
	-	0.00%	New account
	-	0.00%	New account
	-	0.00%	New account
(27,234)	511,266	-5.06%	
(25,857)	918,543	-2.74%	
(104,257)	5,387,843	-1.90%	

FY21 Operating Budget Adopted Revised Adjustments

Maintenance Department

Central Marin Sanitation Agency
FY21 Operating Budget Adopted Revised Adjustments

Line Item Accounts

MAINTENANCE

Account #	Account Name	*By	Actual FY19	Budget FY20	Adopted Budget FY21	FY21 Change from FY20
SALARIES & WAGES						
100-0350-440-7001	Salaries wages- regular	ASM	1,422,655	1,556,000	1,636,100	5.15%
	Transfer to CIP	ASM	-	(34,300)	(35,700)	4.08%
100-0350-440-7003	Salaries wages-temp	TSM				0.00%
100-0350-440-7002	Salaries wages-part time	TSM				0.00%
100-0350-440-7005	Salaries wages- overtime	TPM	43,178	36,400	37,900	4.12%
100-0350-440-7009	Salaries wages- on call	TPM	51,204	53,300	55,400	3.94%
Subtotal Salaries & Wages			1,517,037	1,611,400	1,693,700	5.11%
MAINTENANCE & REPAIRS (M&R)						
100-0350-440-7215	Lubricants-propane-other	MS	4,558	6,000	6,000	0.00%
100-0350-440-7212	Utility supplies	MS	7,027	7,500	7,900	5.33%
100-0350-440-7201	Outside services & parts	TPM	30,408	30,000	31,400	4.67%
100-0350-440-7203	Fleet maintenance	MS	16,124	15,000	15,700	4.67%
100-0350-440-7210	Hazardous waste disposal	MS	29,828	30,000	31,400	4.67%
100-0350-440-7202	Facilities Maintenance	MS	24,354	24,000	25,100	4.58%
100-0350-440-7213	Electrical equipment	EIT	23,085	28,000	29,300	4.64%
100-0350-440-7230	Plant pumps	MS	23,556	25,000	26,200	4.80%

***Position Code**

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

FY21 Budget Adjustment	FY21 Revised Budget	FY21 Revised Change from FY21 Adopted	Budget Account Description
	1,636,100	0.00%	Salaries for 14 full-time employees. The increase in wages in FY20 includes a 3% COLA salary increase for represented and unrepresented employees, a 2.5% salary adjustment for 6 represented employees, eight step or in-class promotion adjustments and leave balance cash-outs. FY21 includes a 4% COLA increase and six step or in-class adjustments.
	(35,700)	0.00%	Transfer of salary expenses for staff assigned to CIP funded projects.
	-	0.00%	New account
	-	0.00%	New account
	37,900	0.00%	Authorized overtime to complete unexpected maintenance activities or assignments that require work after an employee's regularly scheduled shift. Budget increase due to COLA salary adjustments.
	55,400	0.00%	24/7 Stand-by duty for qualified maintenance staff to respond to emergency repair work and equipment failures. Employees are paid to remain fit for duty and to respond within one hour. Sanitary District #2 funds one half of this expense. FY20 & FY21 increase is function of salary and step increases.
-	1,693,700	0.00%	
	6,000	0.00%	Lubricants used for facility assets and equipment (cogeneration and stand-by power systems excluded), propane for the forklift, and welding and calibration gases.
	7,900	0.00%	Janitorial and general facility maintenance cleaning supplies.
	31,400	0.00%	Service repair costs performed by outside providers for machining, fabrication, vacuum services, specialty repair work, and related parts, equipment, and supplies.
	15,700	0.00%	This account is for preventative, predictive, and corrective maintenance on the Agency's fleet vehicles, and includes purchases of batteries, oil, tires, and other consumables. The Agency's fleet consists of 10 vehicles, two forklifts, a skid steer loader, 15 electric carts, and 7 bicycles.
	31,400	0.00%	Safe disposal of wastes such as oils, greases, oil and air filters, coolants, paints, solvents, light bulbs, batteries, air purification medias (siloxane, hydrogen sulfide, and activated carbon), and for the disposal of laboratory generated hazardous wastes.
	25,100	0.00%	Planned preventive and corrective repairs to maintain non-process specific facility structures such as roof and gutter systems, doors and door hardware, flooring, and painted surfaces. This account also includes funds for facility pest control services.
	29,300	0.00%	Allowance for procurement of routine electrical equipment such as conduit, wiring, electrical connectors, fittings, consumable electrical supplies, and facility lighting (light bulbs, tubes, LED lights).
	26,200	0.00%	Allowance for routine consumable parts and equipment such as impellers, gasket material, and volutes.

Central Marin Sanitation Agency
FY21 Operating Budget Adopted Revised Adjustments

Line Item Accounts

MAINTENANCE

Account #	Account Name	*By	Actual FY19	Budget FY20	Adopted Budget FY21	FY21 Change from FY20
100-0350-440-7231	Process tank maintenance	MS	23,513	20,000	20,900	4.50%
100-0350-440-7232	Centrifuge maintenance	MS	4,806	10,000	10,500	5.00%
100-0350-440-7233	Process filter media rplcmnt	MS	17,943	26,200	27,300	4.20%
100-0350-440-7234	Organic waste receiving fcilty	MS	40,237	40,000	41,800	4.50%
100-0350-440-7235	Boilers hot wtr systems	MS	4,869	8,000	8,400	5.00%
100-0350-440-7236	Effluent PS & diesel tank	MS	3,556	5,000	5,300	6.00%
100-0350-440-7237	Cogen emer gen maint	MS	38,154	45,000	45,000	0.00%
100-0350-440-7211	Groundskeeping	MS	33,889	32,000	32,000	0.00%
100-0350-440-7214	Small tools & equipment	MS	12,253	13,000	13,000	0.00%
Subtotal Maintenance & Repairs			338,158	364,700	377,200	3.43%
GENERAL & ADMINISTRATIVE						
100-0350-440-7063	Uniforms	AE				0.00%
100-0350-440-7601	Meetings/training	TPM	6,143	4,500	4,500	0.00%
100-0350-440-7602	Conferences	TPM	9,799	12,500	13,000	4.00%
100-0350-440-7610	Prof affiliation memberships	TPM	3,050	5,000	5,000	0.00%
100-0350-440-7710	Prof svcs- Underground srcv alert	MS	134	200	200	0.00%

***Position Code**

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

FY21 Budget Adjustment	FY21 Revised Budget	Revised Change from FY21 Adopted	Budget Account Description
	20,900	0.00%	Allowance for routine consumable parts and equipment for facility process tanks and the primary heat exchanger (excludes heat exchangers utilized by the cogeneration system).
	10,500	0.00%	Consumable items for annual preventive and corrective maintenance for three centrifuges and their system components.
10,000	37,300	36.63%	Biogas and air purification media for facility equipment. Budget is for the purchase of media for one sulfatreat vessel, one siloxane filter, and one activated carbon odor scrubber (OWRF or RDT's) replacement per year. New air permit limits will require additional media replacement for H2S removal.
	41,800	0.00%	Allowance for consumable items required for maintaining the OWRF. This budget assumes performing two complete mixing pump impellor/cutter bar changeouts, purchasing one set of paddle finisher screens, six spare hoses, glycerin, rock trap grinder parts, and other critical spare inventory items.
	8,400	0.00%	Consumable items required for maintaining two dual fueled hot water boilers and the hot water recirculation systems. Budget includes annual specialized boiler system inspection work to examine the brick and burner assemblies, the fuel regulating systems, and associated pumps and piping.
	5,300	0.00%	Allowance for parts and consumable items within the Effluent Pump Station and its above ground diesel tank. Includes pump and engine parts, driveshafts, fuel conveyance, diesel storage tanks, motor controls, and fire protection systems.
	45,000	0.00%	Routine parts and equipment for scheduled cogeneration system and standby diesel generator maintenance. The budget assumes four 2,000 hour maintenance procedures on the cogeneration system and one annual maintenance procedure on the emergency standby diesel generator.
	32,000	0.00%	Facility landscaping services and supplies to maintain the Agency's property. Services include fire-defensible space maintenance, weed abatement, and clean-up project work.
	13,000	0.00%	Purchase and repair of hand, power, and pneumatic tools utilized in the day-to-day maintenance of assets and equipment.
10,000	387,200	2.65%	
	-	0.00%	New account
	4,500	0.00%	Expenses associated with attendance at single-day meetings, seminars, technical certification courses, and professional development. Includes allowed expenses pursuant to the Agency's expense reimbursement policy.
	13,000	0.00%	Expenses associated with multi-day professional conferences, seminars, and training events outlined in the Agency's travel and expense reimbursement policy.
	5,000	0.00%	Professional memberships and annual certification renewal fees for 14 department employees.
	200	0.00%	Annual Underground Service Alerts fee to identify utility locations prior to any type of digging or excavation work.

Central Marin Sanitation Agency
FY21 Operating Budget Adopted Revised Adjustments

Line Item Accounts

MAINTENANCE

Account #	Account Name	*By	Actual FY19	Budget FY20	Adopted Budget FY21	FY21 Change from FY20
100-0350-440-7650	Office expense					0.00%
100-0350-440-7670	Printing & publications					0.00%
100-0350-440-7730	Employee assistance program	ASM				0.00%
100-0350-440-7731	Employee health maintenance	ASM				0.00%
100-0350-440-7769	Contingency	GM				0.00%
Subtotal General & Administrative			19,125	22,200	22,700	2.25%
Subtotal (excluding Salary and Benefits)			357,284	386,900	399,900	3.36%
Total Maintenance			1,874,321	1,998,300	2,093,600	4.77%

***Position Code**

ASM Administrative Services Manager

TPM Treatment Plant Manager

MS Maintenance Supervisor

EIT Electrical Instrumentation Technician

FY21 Budget Adjustment	Revised FY21 Budget	FY21 Revised Change from FY21 Adopted	Budget Account Description
	-	0.00%	New account
	-	0.00%	New account
	-	0.00%	New account
	-	0.00%	New account
	-	0.00%	New account
-	22,700	0.00%	
10,000	409,900	2.50%	
10,000	2,103,600	0.48%	

FY21 Operating Budget Adopted Revised Adjustments

Operations Department

Central Marin Sanitation Agency
FY21 Operating Budget Adopted Revised Adjustments

Line Item Accounts

OPERATIONS

Account #	Account Name	*By	Actual FY19	Budget FY20	Adopted Budget FY21	FY21 Change from FY20
SALARIES & WAGES						
100-0340-440-7001	Salaries wages- regular	ASM	1,472,199	1,531,200	1,605,800	4.87%
	Transfer to CIP	ASM	-	(17,300)	(18,000)	4.05%
100-0340-440-7002	Salaries wages-part time	TSM				0.00%
100-0340-440-7003	Salaries wages-temp	TSM				0.00%
100-0340-440-7005	Salaries wages- overtime	OS	86,373	129,200	137,700	6.58%
100-0340-440-7009	Salaries wages- on call	TPM	230	2,100	2,200	4.76%
Subtotal Salaries & Wages			1,558,802	1,645,200	1,727,700	5.01%
CHEMICALS & FUEL						
100-0340-440-7130	Chemicals- ferric chloride	OS	101,581	131,600	131,600	0.00%
100-0340-440-7131	Chemicals- polymer cationic	OS	106,928	167,700	115,000	-31.43%
100-0340-440-7132	Chemicals- odor control	OS	12,545	18,000	18,000	0.00%
100-0340-440-7133	Chemicals- calcium nitrate	OS	131,527	220,500	220,500	0.00%
100-0340-440-7134	Chemicals- hydrogen peroxide	OS	217,273	266,000	279,300	5.00%
100-0340-440-7135	Chemicals- sodium hypochlor	OS	219,876	229,000	240,400	4.98%
100-0340-440-7136	Chemicals- sodium bisulphite	OS	236,031	242,000	242,000	0.00%
100-0340-440-7120	GOF- Gasoline-diesel-oil-fuel	OS	7,730	15,000	15,000	0.00%
Subtotal Chemicals & Fuel			1,033,491	1,289,800	1,261,800	-2.17%

***Position Code**

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

FY21 Budget Adjustment	Revised FY21 Budget	FY21 Revised Change from FY21 Adopted	Budget Account Description
	1,605,800	0.00%	Salaries for 13 full-time employees. Includes a FY20 COLA increase of 3% for represented and unrepresented employees, a 2.5% compensation adjustment for represented staff, four step adjustments, and leave balance cash-outs. FY21 increase for 4% COLA and four step adjustments.
	(18,000)	0.00%	Transfer of salary expenses for staff assigned to CIP funded projects
	-	0.00%	New account
	-	0.00%	New account
	137,700	0.00%	Authorized overtime to ensure facilities are properly staffed 24 hours/day and to complete specified activities or assignments.
	2,200	0.00%	24/7 stand-by duty provided by qualified operations staff during the wet weather season (November-April). Employees are paid to remain fit for duty and must respond within one hour after being called in for emergency situations.
-	1,727,700	0.00%	
3,100	134,700	2.36%	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. FY21 increased cost and increase usage in digesters for H2S control.
47,000	162,000	40.87%	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. CMSA has used approximately 2.5 loads of polymer per year for sludge thickening dewatering operations. Usage in FY20 higher than expected for sludge thickening and will need to procure three loads instead of two in FY21.
	18,000	0.00%	A chemical agent used to mask odorous compounds produced by some wastewater processes. Odorants are delivered in 55 gallon barrels.
(10,500)	210,000	-4.76%	Calcium nitrate solution is 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. Higher concentration will result in a reduced amount needed for odor control.
(5,320)	273,980	-1.90%	Hydrogen peroxide is the second phase of the odor control system. It is injected into the Ross Valley and San Rafael interceptors upstream of the headworks. Anticipate a reduction in usage during FY21.
	240,400	0.00%	Sodium hypochlorite is used for effluent and recycled water disinfection, and in three treatment plant odor control scrubbers.
	242,000	0.00%	Sodium bisulfite is used to neutralize the chlorine residual in the effluent prior to its discharge into the San Francisco Bay.
3,000	18,000	20.00%	Gasoline for vehicles and landscaping equipment, and diesel for emergency generator and the effluent pump station pumps. Increased diesel use due to anticipated PSPS by PG&E this fall.
37,280	1,299,080	2.95%	

Central Marin Sanitation Agency
FY21 Operating Budget Adopted Revised Adjustments

Line Item Accounts

OPERATIONS

Account #	Account Name	*By	Actual FY19	Budget FY20	Adopted Budget FY21	FY21 Change from FY20
UTILITIES						
100-0340-440-7502	Utilities- natural gas	OS	27,750	40,400	40,400	0.00%
100-0340-440-7503	Utilities- electricity	OS	314,518	329,300	229,300	-30.37%
100-0340-440-7504	Utilities- water	AOS	9,641	40,300	40,700	0.99%
100-0340-440-7505	Utilities- garbage	AOS	77,123	76,600	80,000	4.44%
Subtotal Utilities			429,033	486,600	390,400	-19.77%
GENERAL & ADMINISTRATIVE						
100-0340-440-7063	Uniforms	AE				0.00%
100-0340-440-7110	Operations- general	TPM	3,262	6,000	6,000	0.00%
100-0340-440-7111	Process Control Consum Supp	AOS	10,376	10,000	10,500	5.00%
100-0340-440-7601	Meetings/training	TPM	2,445	4,500	4,500	0.00%
100-0340-440-7602	Conferences	TPM	3,128	5,000	5,000	0.00%
100-0340-440-7610	Prof affiliation memberships	TPM	3,419	4,800	4,800	0.00%
100-0340-440-7638	Permits & lic- BAAQMD	TPM	15,222	18,500	18,500	0.00%
100-0340-440-7709	Prof svcs- process control	TPM	9,075	20,000	21,000	5.00%
100-0340-440-7650	Office expense	TPM				0.00%
100-0340-440-7670	Printing & publications	TPM				0.00%
100-0340-440-7730	Employee assistance program	ASM				0.00%
100-0340-440-7731	Employee health maintenance	ASM				0.00%
100-0340-440-7769	Contingency	GM				0.00%
Subtotal General & Administrative			46,927	68,800	70,300	2.18%
Subtotal (excluding Salary and Benefits)			1,509,450	1,845,200	1,722,500	-6.65%
Total Operations			3,068,252	3,490,400	3,450,200	-1.15%

***Position Code**

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

FY21 Budget Adjustment	Revised FY21 Budget	FY21 Revised Change from FY21 Adopted	Budget Account Description
(2,400)	38,000	-5.94%	Supplemental fuel for the cogeneration system, and fuel for the boilers when the cogen system is offline. Reduction due to expected increasing cogeneration system operation on biogas.
(79,300)	150,000	-34.58%	Electricity to supplement the cogeneration system output and to supply power when the cogenerator is offline for maintenance. New PG&E standby tariff has lower annual costs assuming procurement of long-term average amount of electricity.
(15,700)	25,000	-38.57%	Potable water for CMSA and the San Quentin junction box odor control facility. The MMWD capital fee for FY21 was much less than previously budgeted.
(10,000)	70,000	-12.50%	Solid waste disposal for garbage, green waste, recycling, and debris box disposal of headworks screenings, grit, and non-recyclable wastes. Projected decrease based on waste generation patterns.
(107,400)	283,000	-27.51%	
	-	0.00%	New account
	6,000	0.00%	Small tools, equipment, parts, and other miscellaneous supplies.
	10,500	0.00%	Chemical reagents to verify and/or determine the concentration of chlorine in treated wastewater, assist in field instrument calibration, determine peroxide concentrations in wastewater, measure pH, and measure sulfide levels in biogas.
	4,500	0.00%	Expenses associated with attendance at single-day professional meetings, seminars, and certification trainings. Includes allowed expenses pursuant to the Agency's expense reimbursement policy.
	5,000	0.00%	Expenses associated with multi-day professional conferences, seminars, and training events outlined in the Agency's travel and expense reimbursement policy.
	4,800	0.00%	Professional memberships and certification renewal requirements for licensed operators. The budget includes 13 annual CWEA membership renewals and 17 operator certification renewals (13 Operators and 3 additional licensed staff members).
1,500	20,000	8.11%	Bay Area Air Quality Management District (BAAQMD) permit fees for the cogeneration engine, emergency engine, five effluent pump station engines, and fuel dispensers. Fee increase due to the organic waste facility being added to the permit as a new source.
	21,000	0.00%	Professional wastewater consulting services for evaluation of process control options, advice on process control issues, training staff on process analysis, and conducting special studies.
	-	0.00%	New account
	-	0.00%	New account
	-	0.00%	New account
	-	0.00%	New account
	-	0.00%	New account
1,500	71,800	2.13%	
(68,620)	1,653,880	-3.98%	
(68,620)	3,381,580	-1.99%	

FY21 Operating Budget Adopted Revised Adjustments

Technical Services Department

Central Marin Sanitation Agency
FY21 Operating Budget Adopted Revised Adjustments

Line Item Accounts

TECHNICAL SERVICES

Account #	Account Name	*By	Actual FY19	Budget FY20	Adopted Budget FY21	FY21 Change from FY20
SALARY & WAGES						
100-0230-440-7001	Salaries wages- regular	ASM	1,078,000	1,209,600	1,293,800	6.96%
100-0230-440-7001	Transfer to CIP	GM	(14,833)	(138,000)	(141,000)	2.17%
100-0230-440-7002	Salaries wages-part time	TSM				0.00%
100-0230-440-7003	Salaries wages-temp	TSM				0.00%
100-0230-440-7005	Salaries wages- overtime	TSM	-	8,200	8,600	4.88%
100-0230-440-7009	Salaries wages- on call	TSM	5,400	6,500	6,800	4.62%
Subtotal Salary & Wages			1,068,567	1,086,300	1,168,200	7.54%
BIOSOLIDS MANAGEMENT						
100-0230-440-7102	Biosolids reuse fees	TSM	277,016	296,000	307,900	4.02%
100-0230-440-7101	Biosolids hauling	TSM	112,751	122,500	127,400	4.00%
Subtotal Biosolids Management			389,766	418,500	435,300	4.01%
PERMIT TESTING & MONITORING						
100-0230-440-7301	Lab supplies	RCM	73,794	69,400	65,100	-6.20%
100-0230-440-7310	Biosolids monitoring/cont lab srvc	RCM	12,053	11,000	11,400	3.64%
100-0230-440-7311	NPDES permit sampling	RCM	44,781	45,800	47,200	3.06%
100-0230-440-7313	Digester gas sampling	RCM	-	-	-	0.00%
100-0230-440-7312	pretreatment sampling	TSM	11,576	14,300	14,800	3.50%

***Position Code**

GM General Manager
 ASM Administrative Services Manager
 TSM Technical Services Manager
 RCM Regulatory Compliance Manager
 AE Assistant Engineer

FY21 Budget Adjustment	Revised FY21 Budget	FY21 Revised Change from FY21 Adopted	Budget Account Description
	1,293,800	0.00%	Salaries for nine full-time employees and includes a 3% COLA salary increase of for employees, 5-step adjustments, and leave balance cash-outs. FY21 4% COLA and 5 step adjustments.
	(141,000)	0.00%	Transfer of salary expenses for staff assigned to CIP funded projects (.61 FTE).
	-	0.00%	New account
	-	0.00%	New account
	8,600	0.00%	Authorized overtime to complete special activities or assignments including activities supporting the public education program.
	6,800	0.00%	Stand-by duty is assigned to a laboratory analyst during the wet weather event season November through April 30th when there is a reasonable potential that a blending event may occur during the weekend.
-	1,168,200	0.00%	
11,100	319,000	3.61%	Biosolids tipping fees for beneficial reuse at Redwood Landfill for alternative daily cover, land application sites in Solano county for soil augmentation, and at the Lystek facility for further processing into a fertilizer. Synagro land application reuse fees will be higher than previously budgeted for FY21.
(3,400)	124,000	-2.67%	Approximately one load per day of biosolids is hauled from CMSA to one of the biosolids reuse sites. The biosolids hauling contract for FY21 has a lower fee structure than originally budgeted.
7,700	443,000	1.77%	
4,300	69,400	6.61%	Laboratory and source control program supplies including all chemicals, glassware, reagents, consumables, disposable containers, filters, bioassay, and other supplies. Increased lab supplies for FY21 pilot digester study.
4,270	15,670	37.46%	Laboratory analysis cost associated with biosolids monthly and semiannual regulatory monitoring requirements. AB 901 requires increased biosolids sampling for regulatory reporting.
(4,023)	43,177	-8.52%	Outsourced laboratory analysis cost associated with NPDES permit compliance orders. Includes monthly, quarterly, semiannual, annual, and permit period monitoring requirements, including new nutrient monitoring requirements in the 2019 Nutrient Watershed permit. Some sampling analysis costs have moved to the biosolids monitoring account and others to the new digester gas sampling account.
10,908	10,908	0.00%	New organic waste facility permit requires additional biogas sampling and analysis.
3,802	18,602	25.69%	Cost of outsourced laboratory analysis of source control samples and monitoring industrial waste. Increased sample analysis for regulated dischargers. These funds are reimbursed.

Central Marin Sanitation Agency

FY21 Operating Budget Adopted Revised Adjustments

Line Item Accounts

TECHNICAL SERVICES

Account #	Account Name	*By	Actual FY19	Budget FY20	Adopted Budget FY21	FY21 Change from FY20
100-0230-440-7320	UST test- overfill	TSM	2,764	3,300	2,800	-15.15%
100-0230-440-7321	UST test- secondary	TSM	-	-	1,200	0.00%
Subtotal Permit Testing & Monitoring			144,968	143,800	142,500	-0.90%
GENERAL & ADMINISTRATIVE						
100-0230-440-7302	Lab equipment rental	RCM	4,293	5,500	4,300	-21.82%
100-0230-440-7601	Meetings/training	TSM	1,238	3,000	3,000	0.00%
100-0230-440-7602	Conferences	TSM	12,300	21,000	21,000	0.00%
100-0230-440-7610	Prof affiliation memberships	TSM	3,117	3,700	3,700	0.00%
100-0230-440-7631	Permits & lic- NPDES	TSM	52,378	55,000	55,000	0.00%
100-0230-440-7632	Permits & lic- ELAP	TSM	11,221	13,000	13,000	0.00%
100-0230-440-7633	Permits & lic- reg mon	TSM	40,219	46,000	39,000	-15.22%
100-0230-440-7634	Permits & lic- water quality	TSM	24,852	25,500	25,500	0.00%
100-0230-440-7635	Permits & lic- CUPA	TSM	5,154	5,400	5,400	0.00%
100-0230-440-7636	Permits & lic- stormwater	TSM	1,400	1,500	1,500	0.00%
100-0230-440-7637	Permits & lic- BAPPG	TSM	-	-	-	0.00%
100-0230-440-7653	Software license & support	TSM	32,689	40,000	-	-100.00%
100-0230-440-7737	Public Education Prog-CMSA	GM	26,386	21,000	28,200	34.29%

***Position Code**

GM General Manager
 ASM Administrative Services Manager
 TSM Technical Services Manager
 RCM Regulatory Compliance Manager
 AE Assistant Engineer

FY21 Budget Adjustment	Revised FY21 Budget	FY21 Revised Change from FY21 Adopted	Budget Account Description
244	3,044	8.71%	Annual contractor testing and monitoring of underground gasoline and diesel tank over-fill and secondary containment. Increase based on vendor quote.
296	1,496	24.67%	Testing of underground tank secondary containment every three years as required by state regulation. FY21 increase based on vendor quote.
19,797	162,297	13.89%	
5,610	9,910	130.47%	Expenses for service contracts to maintain laboratory equipment including the deionized water system and certification of analytical balance and pipette/titrator equipment. New lab equipment monthly maintenance fee effective FY21.
	3,000	0.00%	Expenses associated with single-day professional meetings and training seminars. Includes allowed expenses pursuant to the Agency's expense reimbursement policy.
	21,000	0.00%	Expenses associated with multi-day professional conferences, seminars, and training events per the Agency's expense reimbursement policy.
	3,700	0.00%	Professional memberships and registration fees for the Water Environment Association (WEF) and California Water Environment Association (CWEA).
9,612	64,612	17.48%	Annual renewal fee for SWRCB administration of the NPDES permit and pre-treatment program fee. Anticipated FY21 increase based upon information provided by the SWRCB.
	13,000	0.00%	Fees for annual renewal of the laboratory certification, inspections, required testing, certificates, ELAP operating costs, and annual DMRQA/WP testing.
521	39,521	1.34%	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. Cost based upon Cu, Ni, Cr, and Se facility loading to SF bay. FY21 increase to align with FY20 expenditures.
15,190	40,690	59.57%	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. The BACWA nutrient permit increases substantially in FY21.
	5,400	0.00%	Certified Unified Program Agency fees are paid to the County of Marin for the Agency's underground storage tanks and hazardous materials storage.
	1,500	0.00%	SWRCB permit for the Agency's industrial site stormwater permit.
	-	0.00%	New account
	-	0.00%	The existing software database used to manage the Agency's Pretreatment and Pollution Prevention Programs was replaced in FY 19 with an improved software program (LINKO).
1,965	30,165	6.97%	CMSA's share of the Countywide Public Education Program will increase in FY21 for expenses associated with participating in public outreach events, hosting school programs, and educational materials for the program.

Central Marin Sanitation Agency

FY21 Operating Budget Adopted Revised Adjustments

Line Item Accounts

TECHNICAL SERVICES

Account #	Account Name	*By	Actual FY19	Budget FY20	Adopted Budget FY21	FY21 Change from FY20
100-0230-440-7650	Office expense	TSM	125	500	500	0.00%
	Information Systems	TSM	-	2,000	2,000	0.00%
100-0230-440-7653	Software license & support	TSM	1,725	-	-	0.00%
100-0230-440-7670	Printing & publications	TSM	142	600	600	0.00%
100-0230-440-7707	Prof svcs- special studies	GM	77,827	45,000	-	-100.00%
100-0230-440-7708	Prof svcs- cathodic protection	TSM	4,795	5,500	5,500	0.00%
100-0230-440-7706	Prof svcs- eng support	GM	-	40,000	40,000	0.00%
100-0230-440-7730	Employee assistance program	ASM				0.00%
100-0230-440-7731	Employee health maintenance	ASM				0.00%
100-0230-440-7769	Contingency	GM				0.00%
Subtotal General & Administrative			299,860	334,200	248,200	-25.73%
Subtotal (excluding Salary and Benefits)			834,594	896,500	826,000	-7.86%
Total Technical Services			1,903,161	1,982,800	1,994,200	0.57%

***Position Code**

- GM General Manager
- ASM Administrative Services Manager
- TSM Technical Services Manager
- RCM Regulatory Compliance Manager
- AE Assistant Engineer

FY21 Budget Adjustment	Revised FY21 Budget	FY21 Revised Change from FY21 Adopted	Budget Account Description
	500	0.00%	Office supplies: sample labels, ink cartridges, paper for large-format printer/plotter, and other miscellaneous office expenses.
	2,000	0.00%	Allowance for engineering productivity and project management software. One-time allowance to purchase a program to replace the software used for bioassay results.
	-	0.00%	Licensing fees for Nexgen (CMMS), Ignition(SCADA), AutoCAD (drafting), and virtual server maintenance software have been moved to Administration account 6815-002-01.
	600	0.00%	Allowance for printing/shipping/advertising expenses for documents not assigned to specific CIP project contracts and for mailing expenses related to maintaining CMSA's list of prequalified contractors.
	-	0.00%	Funding to implement tasks from the FY19 Asset Management Assessment Project.
	5,500	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.
	40,000	0.00%	This account is used to fund engineering consultant services as needed.
	-	0.00%	New account
	-	0.00%	New account
	-	0.00%	New account
32,898	281,098	13.25%	
60,395	886,395	7.31%	
60,395	2,054,595	3.03%	

FY21 Operating Budget Adopted Revised Adjustments

CMSA Health and Safety Department

Central Marin Sanitation Agency

FY21 Operating Budget Adopted Revised Adjustments

Line Item Accounts

CMSA Health & Safety Department

Account #	Account Name	*By	Actual FY19	Budget FY20	Adopted Budget FY21	FY21 Change from FY20
SALARIES & BENEFITS						
100-0120-440-7001	Salaries wages- regular	ASM				0.00%
100-0120-440-7002	Salaries wages-part time	ASM				0.00%
100-0120-440-7003	Salaries wages-temp	ASM				0.00%
100-0120-440-7005	Salaries wages- overtime	ASM				0.00%
100-0120-440-7015	Salaries wages- car allow	ASM				0.00%
Subtotal Salaries Wages			-	-	-	0.00%
100-0120-440-7021	Er ret- CalPERS classic	ASM				0.00%
100-0120-440-7022	Er ret- CalPERS PEPRA	ASM				0.00%
100-0120-440-7023	Er ret- CalPERS survivors	ASM				0.00%
100-0120-440-7024	Er ret- CalPERS Classic UAL	ASM				0.00%
100-0120-440-7025	Er ret- CalPERS PEPRA UAL	ASM				0.00%
100-0120-440-7026	Er ret- pension accrual	ASM				0.00%
100-0120-440-7027	Er ret- PARS benefit	ASM				0.00%
100-0120-440-7028	Er ret- medicare	ASM				0.00%
100-0120-440-7041	Benefits- medical active	ASM				0.00%
100-0120-440-7042	Benefits- flex\$	ASM				0.00%
100-0120-440-7043	Benefits- dental	ASM				0.00%
100-0120-440-7044	Benefits- life-AD&D-LTD Ins	ASM				0.00%
100-0120-440-7045	Benefits- vision	ASM				0.00%
100-0120-440-7046	Benefits- employer paid MARA	ASM				0.00%
100-0120-440-7047	Benefits- retiree medical prem	ASM				0.00%
100-0120-440-7048	Benefits- retiree medical reimb	ASM				0.00%
100-0120-440-7049	Benefits- retiree medical prefund	ASM				0.00%
100-0120-440-7050	Benefits- OPEB accrual	ASM				0.00%
100-0120-440-7061	Unemployment benefits	ASM				0.00%
100-0120-440-7062	Benefit administration fees	ASM				0.00%
Subtotal Benefits			-	-	-	0.00%
Total Salaries & Benefits			-	-	-	0.00%

***Position Code**

ASM Administrative Services Manager
 GM General Manager
 SSS Senior Safety Specialist
 MS Maintenance Supervisor
 TPM Treatment Plant Manager

FY21 Budget Adjustment	Revised FY21 Budget	FY21 Revised Change from FY21 Adopted	Budget Account Description
75,000	75,000	0.00%	New account and department for CMSA's 60.25% share of the Senior Safety Specialist (SSS) position which was previously allocated to the Administration Budget. FY21 includes 4% COLA, one step adjustment and leave balance cash-out.
	-	0.00%	New account
	-	0.00%	New account
	-	0.00%	New account
2,900	2,900	0.00%	New account for CMSA's 60.25% share of the SSS car allowance. Adjustment transferred from Administration.
77,900	77,900	0.00%	
	-	0.00%	New account
5,300	5,300	0.00%	New account for CMSA's 60.25% share of the Health & Safety (H&S) employer paid contributions for CalPERS PEPRA 2% @ age 62 retirement program. Adjustment transferred from Administration.
	-	0.00%	New account
	-	0.00%	New account
	-	0.00%	New account
	-	0.00%	New account
	-	0.00%	New account
1,200	1,200	0.00%	New account for CMSA's 60.25% share of the H&S employer's 1.45% share of Medicare. Adjustment transferred from Administration.
7,000	7,000	0.00%	New account for CMSA's 60.25% H&S share of employer-paid contributions for employee benefits includes insurance coverage for health, dental, vision, life, accident and disability. Adjustment transferred from Administration.
	-	0.00%	New account
	-	0.00%	New account
	-	0.00%	New account
	-	0.00%	New account
1,100	1,100	0.00%	New account. PEHP is a post employment health plan employer-paid contribution totaling 1.5% of base salary and \$180 per year administration fee. Adjustment transferred from Administration.
4,100	4,100	0.00%	New account. Medical benefits for one retired employee and one surviving spouse. Adjustment transferred from Administration.
	-	0.00%	New account
	-	0.00%	New account
	-	0.00%	New account
	-	0.00%	New account
	-	0.00%	New account
18,700	18,700	0.00%	
96,600	96,600	0.00%	

Central Marin Sanitation Agency
FY21 Operating Budget Adopted Revised Adjustments

Line Item Accounts

CMSA Health & Safety Department

Account #	Account Name	*By	Actual FY19	Budget FY20	Adopted Budget FY21	FY21 Change from FY20
GENERAL ADMINISTRATIVE						
100-0120-440-7601	Meetings/training	SSS				0.00%
100-0120-440-7602	Conferences	SSS				0.00%
100-0120-440-7610	Prof affiliation memberships	SSS				0.00%
100-0120-440-7650	Office expense	SSS				0.00%
100-0120-440-7651	Safety supplies	SSS				0.00%
100-0120-440-7652	Information technology software	SSS				0.00%
100-0120-440-7670	Printing & publications	SSS				0.00%
100-0120-440-7701	Prof svcs- general	SSS				0.00%
100-0120-440-7730	Employee assistance program	SSS				0.00%
100-0120-440-7731	Employee health maintenance	SSS				0.00%
100-0120-440-7738	Health saf prog- training materials	SSS				0.00%
100-0120-440-7739	Outside safety training	SSS				0.00%
100-0120-440-7769	Contingency	GM	-	-	-	0.00%
Subtotal Administrative			-	-	-	0.00%
Total Health & Safety			-	-	-	0.00%

***Position Code**

ASM Administrative Services Manager
 GM General Manager
 SSS Senior Safety Specialist
 MS Maintenance Supervisor
 TPM Treatment Plant Manager

FY21 Budget Adjustment	Revised FY21 Budget	FY21 Revised Change from FY21 Adopted	Budget Account Description
1,200	1,200	0.00%	New account (see Appendix for program details)
3,500	3,500	0.00%	New account (see Appendix for program details)
500	500	0.00%	New account (see Appendix for program details)
300	300	0.00%	New account (see Appendix for program details)
200	200	0.00%	New account (see Appendix for program details)
2,500	2,500	0.00%	New account (see Appendix for program details)
1,000	1,000	0.00%	New account (see Appendix for program details)
3,600	3,600	0.00%	New account (see Appendix for program details)
	-	0.00%	
	-	0.00%	
26,600	26,600	0.00%	Adjustment transfers CMSA's share H&S from Administration to department 0120. This account represents the Agency's share (60.25%) of the Health & Safety Program non-salary costs. The budget also includes CMSA's equally shared cost of the NSD's .25 FTE equivalent Administrative/Risk Services & Safety Officer.
5,200	5,200	0.00%	Adjustment transfers CMSA's share H&S from Administration to department 0120. Training expenses for required safety programs that include hearing tests, CPR/first aid, fire extinguisher, incident command, traffic control, defensive driving, and many other Cal/OSHA programs that facilitate a safe work environment.
	-	0.00%	
44,600	44,600	0.00%	
141,200	141,200	0.00%	

FY21 Operating Budget Adopted Revised Adjustments

Non-Agency Agreement Expenses
(Formerly Cooperative Agreement Expenses)

Non-Agency Health & Safety
Non-Agency Technical Services – Countywide Education
Non-Agency Maintenance

Central Marin Sanitation Agency
FY21 Operating Budget Adopted Revised Adjustments

Line Item Accounts

Non-Agency Health & Safety
CMSA Services Provided Under Contract to Other Local Agencies

Account #	Account Name	*By	Actual FY19	Budget FY20	Adopted Budget FY21	FY21 Change from FY20
SALARIES & BENEFITS						
100-0121-440-7001	Salaries wages- regular	ASM	52,045	49,500	51,400	3.84%
100-0121-440-7002	Salaries wages-part time	ASM				0.00%
100-0121-440-7003	Salaries wages-temp	ASM				0.00%
100-0121-440-7005	Salaries wages- overtime	ASM				0.00%
100-0121-440-7015	Salaries wages- car allow	ASM				0.00%
Subtotal Salaries Wages			52,045	49,500	51,400	3.84%
100-0121-440-7021	Er ret- CalPERS classic	ASM				0.00%
100-0121-440-7022	Er ret- CalPERS PEPRA	ASM	2,622	3,300	3,500	6.06%
100-0121-440-7023	Er ret- CalPERS survivors	ASM				0.00%
100-0121-440-7024	Er ret- CalPERS Classic UAL	ASM				0.00%
100-0121-440-7025	Er ret- CalPERS PEPRA UAL	ASM				0.00%
100-0121-440-7026	Er ret- pension accrual	ASM				0.00%
100-0121-440-7027	Er ret- PARS benefit	ASM				0.00%
100-0121-440-7028	Er ret- medicare	ASM	556	700	800	14.29%
100-0121-440-7041	Benefits- medical active	ASM	3,637	4,400	4,600	4.55%
100-0121-440-7042	Benefits- flex\$	ASM				0.00%
100-0121-440-7043	Benefits- dental	ASM				0.00%
100-0121-440-7044	Benefits- life-AD&D-LTD Ins	ASM				0.00%
100-0121-440-7045	Benefits- vision	ASM				0.00%
100-0121-440-7046	Benefits- employer paid MARA	ASM	575	700	800	14.29%
100-0121-440-7047	Benefits- retiree medical prem	ASM	2,495	2,600	2,700	3.85%
100-0121-440-7048	Benefits- retiree medical reimb	ASM				0.00%
100-0121-440-7049	Benefits- retiree medical prefund	ASM				0.00%
100-0121-440-7050	Benefits- OPEB accrual	ASM				0.00%
100-0121-440-7061	Unemployment benefits	ASM				0.00%
100-0121-440-7062	Benefit administration fees	ASM				0.00%
Subtotal Benefits			9,884	11,700	12,400	5.98%
Total Salaries & Benefits			61,930	61,200	63,800	4.25%
GENERAL ADMINISTRATIVE						
100-0121-440-7601	Meetings/training	SSS				0.00%
100-0121-440-7602	Conferences	SSS				0.00%
100-0121-440-7610	Prof affiliation memberships	SSS				0.00%

***Position Code**

ASM Administrative Services Manager
 GM General Manager
 SSS Senior Safety Specialist

FY21 Budget Adjustment	Revised FY21 Budget	FY21 Revised Change from FY21 Adopted	Budget Account Description
	51,400	0.00%	Novato Sanitary District's (NSD) share of the Senior Safety Specialist position salary is 39.75% and includes car allowance and leave cash-outs. The Agency's share is 60.25% and is allocated to the Health & Safety Budget.
	-	0.00%	New account
	-	0.00%	New account
	-	0.00%	New account
	-	0.00%	New account
-	51,400	0.00%	
	-	0.00%	New account
	3,500	0.00%	Employer and employer-paid employee contributions for CalPERS PEPPRA 2% @ age 62 retirement program.
	-	0.00%	New account
	-	0.00%	New account
	-	0.00%	New account
	-	0.00%	New account
	-	0.00%	New account
	800	0.00%	Employer's 1.45% share of Medicare.
	4,600	0.00%	Employer-paid contributions for employee benefits includes insurance coverage for health, dental, vision, life, accident and disability.
	-	0.00%	New account
	-	0.00%	New account
	-	0.00%	New account
	-	0.00%	New account
	800	0.00%	PEHP is a post employment health plan employer-paid contribution totaling 1.5% of base salary and \$180 per year administration fee.
	2,700	0.00%	Medical benefits for one retired employee and one surviving spouse.
	-	0.00%	New account
	-	0.00%	New account
	-	0.00%	New account
	-	0.00%	New account
	-	0.00%	New account
-	12,400	0.00%	
-	63,800	0.00%	
800	800	0.00%	New account (see Appendix for program details)
2,300	2,300	0.00%	New account (see Appendix for program details)
300	300	0.00%	New account (see Appendix for program details)

Central Marin Sanitation Agency
FY21 Operating Budget Adopted Revised Adjustments

Line Item Accounts

Non-Agency Health & Safety
CMSA Services Provided Under Contract to Other Local Agencies

Account #	Account Name	*By	Actual FY19	Budget FY20	Adopted Budget FY21	FY21 Change from FY20
100-0121-440-7650	Office expense	SSS				0.00%
Not assigned	Safety supplies	SSS				0.00%
Not assigned	Information technology software	SSS				0.00%
100-0121-440-7670	Printing & publications	SSS				0.00%
Not assigned	Prof svcs- general	SSS				0.00%
100-0121-440-7730	Employee assistance program	SSS				0.00%
100-0121-440-7731	Employee health maintenance	SSS				0.00%
100-0121-440-7738	Health saf prog- training materials	SSS	3,832	8,500	8,500	0.00%
100-0121-440-7739	Outside safety training	SSS	59	4,800	5,200	8.33%
100-0121-440-7769	Contingency	GM	-	-	-	0.00%
Subtotal Administrative			3,890	13,300	13,700	3.01%
Total Non-Agency Health & Safety			65,820	74,500	77,500	4.03%

***Position Code**

ASM Administrative Services Manager
 GM General Manager
 SSS Senior Safety Specialist

FY21 Budget Adjustment	Revised FY21 Budget	FY21 Revised Change from FY21 Adopted	Budget Account Description
200	200	0.00%	New account (see Appendix for program details)
100	100	0.00%	New account (see Appendix for program details)
1,700	1,700	0.00%	New account (see Appendix for program details)
700	700	0.00%	New account (see Appendix for program details)
2,400	2,400	0.00%	New account (see Appendix for program details)
	-	0.00%	New account
	-	0.00%	New account
(8,500)	-	-100.00%	Professional services, materials, supplies, and memberships to administer the Safety Program for two participating agencies. NSD's program share is 39.75% of program costs. CMSA's 60.25% share is budgeted to 6830-016-01.
	5,200	0.00%	Training expenses for required safety programs that include hearing tests, first-aid/CPR, incident command training, traffic control, defensive driving, and many other Cal/OSHA programs that facilitate a safe work environment.
	-	0.00%	New account
-	13,700	0.00%	
-	77,500	0.00%	

Central Marin Sanitation Agency
FY21 Operating Budget Adopted Revised Adjustments

Line Item Accounts

Non-Agency Technical Services

CMSA Services Provided Under Contract to Other Local Agencies

Account #	Account Name	*By	Actual FY19	Budget FY20	Adopted Budget FY21	FY21 Change from FY20
SALARIES & BENEFITS						
100-0231-440-7001	Salaries wages- regular	ASM				0.00%
100-0231-440-7002	Salaries wages-part time	ASM				0.00%
100-0231-440-7003	Salaries wages-temp	ASM				0.00%
100-0231-440-7005	Salaries wages- overtime	ASM				0.00%
Subtotal Salaries Wages			-	-	-	0.00%
100-0231-440-7021	Er ret- CalPERS classic	ASM				0.00%
100-0231-440-7022	Er ret- CalPERS PEPRA	ASM				0.00%
100-0231-440-7023	Er ret- CalPERS survivors	ASM				0.00%
100-0231-440-7024	Er ret- CalPERS Classic UAL	ASM				0.00%
100-0231-440-7025	Er ret- CalPERS PEPRA UAL	ASM				0.00%
100-0231-440-7026	Er ret- pension accrual	ASM				0.00%
100-0231-440-7027	Er ret- PARS benefit	ASM				0.00%
100-0231-440-7028	Er ret- medicare	ASM				0.00%
100-0231-440-7041	Benefits- medical active	ASM				0.00%
100-0231-440-7043	Benefits- dental	ASM				0.00%
100-0231-440-7044	Benefits- life-AD&D-LTD Ins	ASM				0.00%
100-0231-440-7045	Benefits- vision	ASM				0.00%
100-0231-440-7046	Benefits- employer paid MARA	ASM				0.00%
100-0231-440-7047	Benefits- retiree medical prem	ASM				0.00%
100-0231-440-7048	Benefits- retiree medical reimb	ASM				0.00%
100-0231-440-7049	Benefits- retiree medical prefund	ASM				0.00%
100-0231-440-7050	Benefits- OPEB accrual	ASM				0.00%
100-0231-440-7061	Unemployment benefits	ASM				0.00%
100-0231-440-7062	Benefit administration fees	ASM				0.00%
100-0231-440-7063	Uniforms	ASM				0.00%
Subtotal Benefits			-	-	-	0.00%
Total Salaries & Benefits			-	-	-	0.00%
GENERAL ADMINISTRATIVE						
100-0231-440-7601	Meetings/training	MS				0.00%
100-0231-440-7602	Conferences	MS				0.00%
100-0231-440-7610	Prof affiliation memberships	MS				0.00%
100-0231-440-7650	Office expense	MS				0.00%
100-0231-440-7670	Printing & publications	MS				0.00%
100-0231-440-7730	Employee assistance program	MS				0.00%
100-0231-440-7731	Employee health maintenance	SS/M				0.00%
100-0231-440-7737	Countywide public ed program	SS/M	36,641	30,700	41,200	34.20%
100-0231-440-7769	Contingency	GM				0.00%
Subtotal Administrative			36,641	30,700	41,200	34.20%
Total Non-Agency Technical Services			36,641	30,700	41,200	34.20%

***Position Code**

ASM Administrative Services Manager
 GM General Manager
 SS/M Safety Specialist/Manager
 MS Maintenance Supervisor
 TPM Treatment Plant Manager

FY21 Budget Adjustment	Revised FY21 Budget	FY21 Revised Change from FY21 Adopted	Budget Account Description
	-	0.00%	New account
	-	0.00%	New account
	-	0.00%	New account
	-	0.00%	New account
-	-	0.00%	
	-	0.00%	New account
	-	0.00%	New account
	-	0.00%	New account
	-	0.00%	New account
	-	0.00%	New account
	-	0.00%	New account
	-	0.00%	New account
	-	0.00%	New account
	-	0.00%	New account
	-	0.00%	New account
	-	0.00%	New account
	-	0.00%	New account
	-	0.00%	New account
	-	0.00%	New account
	-	0.00%	New account
	-	0.00%	New account
	-	0.00%	New account
	-	0.00%	New account
	-	0.00%	New account
	-	0.00%	New account
	-	0.00%	New account
	-	0.00%	New account
	-	0.00%	New account
	-	0.00%	New account
-	-	0.00%	
-	-	0.00%	
	-	0.00%	New account
	-	0.00%	New account
	-	0.00%	New account
	-	0.00%	New account
	-	0.00%	New account
	-	0.00%	New account
	-	0.00%	New account
2,934	44,134	7.12%	Program expenditures to administer the County Wide Education Program for promotional materials, booth registration fees, public outreach program costs, sponsorships, supplies, and memberships. Budget adjustment is to carry over FY20 unspent funds for the Sav-R-Bay website. CMSA's 40.6% share is budgeted to CMSA Health & Safety Department.
		0.00%	
2,934	44,134	7.12%	
2,934	44,134	7.12%	

Central Marin Sanitation Agency

FY21 Operating Budget Adopted Revised Adjustments

Line Item Accounts

Non-Agency Maintenance

CMSA Services Provided Under Contract to Other Local Agencies

Account #	Account Name	*By	Actual FY19	Budget FY20	Adopted Budget FY21	FY21 Change from FY20
SALARIES & BENEFITS						
100-0351-440-7001	Salaries wages- regular	ASM				0.00%
100-0351-440-7002	Salaries wages-part time	ASM				0.00%
100-0351-440-7003	Salaries wages-temp	ASM				0.00%
100-0351-440-7005	Salaries wages- overtime	ASM				0.00%
Subtotal Salaries Wages			-	-	-	0.00%
100-0351-440-7021	Er ret- CalPERS classic	ASM				0.00%
100-0351-440-7022	Er ret- CalPERS PEPRA	ASM				0.00%
100-0351-440-7023	Er ret- CalPERS survivors	ASM				0.00%
100-0351-440-7024	Er ret- CalPERS Classic UAL	ASM				0.00%
100-0351-440-7025	Er ret- CalPERS PEPRA UAL	ASM				0.00%
100-0351-440-7026	Er ret- pension accrual	ASM				0.00%
100-0351-440-7027	Er ret- PARS benefit	ASM				0.00%
100-0351-440-7028	Er ret- medicare	ASM				0.00%
100-0351-440-7041	Benefits- medical active	ASM				0.00%
100-0351-440-7043	Benefits- dental	ASM				0.00%
100-0351-440-7044	Benefits- life-AD&D-LTD Ins	ASM				0.00%
100-0351-440-7045	Benefits- vision	ASM				0.00%
100-0351-440-7046	Benefits- employer paid MARA	ASM				0.00%
100-0351-440-7047	Benefits- retiree medical prem	ASM				0.00%
100-0351-440-7048	Benefits- retiree medical reimb	ASM				0.00%
100-0351-440-7049	Benefits- retiree medical prefund	ASM				0.00%
100-0351-440-7050	Benefits- OPEB accrual	ASM				0.00%
100-0351-440-7061	Unemployment benefits	ASM				0.00%
100-0351-440-7062	Benefit administration fees	ASM				0.00%
100-0351-440-7063	Uniforms	AE				0.00%
Subtotal Benefits			-	-	-	0.00%
Total Salaries & Benefits			-	-	-	0.00%
GENERAL ADMINISTRATIVE						
100-0351-440-7290	SD#2 pump stations	MS	91,699	164,600	188,000	14.22%
100-0351-440-7291	SQSP pump station maintenance	TPM	103,137	115,900	120,400	3.88%
100-0351-440-7292	SQ village WW system maint	TPM	10,229	45,900	25,300	-44.88%
100-0351-440-7601	Meetings/training	MS				0.00%
100-0351-440-7602	Conferences	MS				0.00%
100-0351-440-7610	Prof affiliation memberships	MS				0.00%
100-0351-440-7650	Office expense	MS				0.00%
100-0351-440-7670	Printing & publications	MS				0.00%
100-0351-440-7730	Employee assistance program	MS				0.00%
100-0351-440-7731	Employee health maintenance	MS				0.00%
100-0351-440-7769	Contingency	GM				0.00%
Subtotal Administrative			205,065	326,400	333,700	2.24%
Total Non-Agency Maintenance			205,065	326,400	333,700	2.24%

***Position Code**

ASM Administrative Services Manager
 GM General Manager
 MS Maintenance Supervisor
 TPM Treatment Plant Manager

FY21 Budget Adjustment	Revised FY21 Budget	FY21 Revised Change from FY21 Adopted	Budget Account Description
	-	0.00%	New account
	-	0.00%	New account
	-	0.00%	New account
	-	0.00%	New account
-	-	0.00%	
	-	0.00%	New account
	-	0.00%	New account
	-	0.00%	New account
	-	0.00%	New account
	-	0.00%	New account
	-	0.00%	New account
	-	0.00%	New account
	-	0.00%	New account
	-	0.00%	New account
	-	0.00%	New account
	-	0.00%	New account
	-	0.00%	New account
	-	0.00%	New account
	-	0.00%	New account
	-	0.00%	New account
	-	0.00%	New account
	-	0.00%	New account
	-	0.00%	New account
	-	0.00%	New account
	-	0.00%	New account
-	-	0.00%	
-	-	0.00%	
	188,000	0.00%	New account
	120,400	0.00%	New account
	25,300	0.00%	New account
	-	0.00%	New account
	-	0.00%	New account
	-	0.00%	New account
	-	0.00%	New account
	-	0.00%	New account
	-	0.00%	New account
	-	0.00%	New account
	-	0.00%	New account
	-	0.00%	New account
	-	0.00%	New account
	-	0.00%	New account
	-	0.00%	New account
	-	0.00%	New account
-	333,700	0.00%	
-	333,700	0.00%	

FY21 Capital Improvement Program

Central Marin Sanitation Agency
Capital Improvement Program
FY21 Adopted Budget Revisions and 10-Year Forecast

GL Account Number	PM*	Delivery Method	10-year CIP											Accounts with Changes >\$50,000 from FY20 CIP			
			Adopted Budget FY20	1 Projected Actual FY20	2 Adopted Revisions FY21	3 FY22	4 FY23	5 FY24	6 FY25	7 FY26	8 FY27	9 FY28	10 FY29		11 FY30	Total FY21 - FY30	
Facility Improvements																	
100-0230-550-8201	TSM	Effluent Storage Pond Rehabilitation	FB	-	-	-	-	-	-	42,600	1,346,800	-	-	-	-	1,389,400	-
100-0230-550-8202	TSM	Agency Facilities Master Plan	PSA	-	-	-	-	-	-	-	-	500,000	-	-	-	500,000	500,000
100-0230-550-8203	TSM	Industrial Coatings & Concrete Rehabilitation	IB/MC	209,100	53,600	25,000	21,000	150,200	417,000	23,100	23,900	149,300	25,400	26,200	27,000	888,100	-
100-0230-550-8204	TSM	Outfall Inspection & Repairs	IB/MC	80,000	62,000	34,000	35,100	36,300	465,100	38,600	39,800	41,100	42,400	43,800	45,200	821,400	-
100-0230-550-8205	TSM	Facility Improvements	IB	35,000	35,000	35,000	-	35,000	36,200	-	-	-	43,400	40,000	50,000	239,600	94,300
100-0230-550-8206	TSM	Facility Paving/Site Work	IB/MC	45,000	35,000	11,200	102,500	12,000	12,400	159,500	176,800	13,600	14,000	14,400	14,900	531,300	-
100-0230-550-8207	TSM	Hillside Slope Stabilization	FB	25,000	336,337	-	-	-	-	-	-	-	-	-	-	-	-
100-0230-550-8208	TSM	Facility Roofs Rehabilitation (3)	MC/IB/FB	68,500	5,000	30,000	889,200	25,000	25,800	26,700	-	50,000	346,700	30,200	31,200	1,454,800	854,600
100-0230-550-8209	TSM	SHB Elevator Control Replacement	IB	15,000	-	30,000	-	350,000	-	-	-	-	-	-	-	380,000	261,500
100-0230-550-8210	TSM	Facility Structures Seismic Study	PSA	-	-	-	-	-	-	234,800	-	-	-	-	-	234,800	-
Subtotal - Facility Improvements				477,600	526,937	165,200	1,047,800	608,500	956,500	525,300	1,587,300	754,000	471,900	154,600	168,300	6,439,400	1,750,900
General Equipment																	
100-0110-550-8301	ISA	Process Control	M/MC	44,600	44,600	77,800	34,000	35,100	36,300	53,200	38,600	39,800	41,100	42,400	43,800	442,100	-
100-0110-550-8302	TSM/ISA	Security / Fire Systems	MC	10,500	8,500	15,100	11,200	11,700	12,000	17,100	12,700	18,200	13,500	19,400	14,400	145,300	-
100-0350-550-8303	MS/TSM	Fuel Storage Tanks	IB/MC	-	-	-	-	123,900	-	-	136,200	-	-	-	-	260,100	-
100-0110-550-8304	ISA	IT Hardware and Communication Equip	M	209,900	213,000	81,300	53,100	32,800	67,900	17,400	36,100	62,100	38,400	79,400	20,300	488,800	(118,900)
100-0350-550-8305	MS	Agency Vehicle Replacement	IB/PO	40,000	44,000	76,000	32,900	42,300	75,500	56,700	191,200	87,400	90,200	93,100	99,200	844,500	108,000
100-0230-550-8306	RCM	Laboratory Equipment	PO	108,000	12,500	155,000	151,600	79,700	-	-	144,900	12,500	32,200	66,400	117,800	760,100	119,200
100-0350-550-8307	MS	Electrical Equipment	M/IB	120,000	120,000	107,000	110,200	100,100	97,000	88,600	91,500	94,400	97,400	100,500	103,700	990,400	-
100-0350-550-8308	MS	Plant Lighting	IB	14,000	14,000	15,000	16,000	10,000	10,000	-	-	-	-	-	-	51,000	-
100-0350-550-8309	MS	Process Instrumentation	M	79,000	50,000	46,000	25,000	25,800	26,700	27,500	28,400	29,300	30,200	31,200	32,200	302,300	-
100-0350-550-8310	MS	Electrical Distribution System Rehabilitation (3)	PSA/FB	110,000	80,000	105,000	-	489,352	2,457,100	207,200	-	220,600	-	-	242,400	3,721,652	281,368
Subtotal - General Equipment				736,000	586,600	678,200	434,000	950,752	2,782,500	467,700	679,600	564,300	343,000	432,400	673,800	8,006,252	438,168
Liquids Treatment Equipment and Systems																	
100-0230-550-8401	TSM	Biotower Rotary Distributor Replacement	IB	-	-	-	-	-	-	1,019,600	-	-	-	-	-	1,019,600	-
100-0350-550-8402	MS	Plant Pumps	MC/M	80,000	10,000	136,100	68,300	70,400	72,700	75,000	77,400	79,900	82,400	85,000	87,700	834,900	105,800
100-0350-550-8403	MS	Chemical Pumps	M	77,600	75,000	160,200	152,600	68,500	58,200	60,100	62,000	64,000	66,000	68,100	70,300	830,000	-
100-0350-550-8404	MS	Gates Rehabilitation (3)	M/IB	474,500	425,000	79,400	132,000	84,600	451,600	90,100	417,900	95,900	99,000	102,100	105,400	1,658,000	50,700
100-0350-550-8405	MS	Headworks Equipment	M	28,900	28,000	70,900	230,800	122,600	32,800	266,500	1,683,100	36,100	37,200	38,400	39,600	2,558,000	662,000
100-0230-550-8406	TSM	Odor Control System Improvements	PSA/FB	20,000	20,000	-	-	-	-	-	-	2,271,000	-	2,662,100	1,827,500	6,760,600	913,400
100-0350-550-8407	MS	Process Tank Maintenance (3)	M/IB	60,000	50,000	30,000	63,900	86,800	89,600	92,500	95,400	98,500	101,600	79,600	82,200	820,100	(449,600)
100-0350-550-8408	TSM/MS	Primary Clarifiers Rehabilitation	M/FB	35,000	35,000	-	-	-	393,800	406,400	838,600	432,700	177,100	182,800	-	2,431,400	56,200
100-0350-550-8409	MS	Secondary Clarifiers Rehabilitation (3)	PSA/FB	185,000	137,184	-	450,000	464,400	479,200	494,500	-	-	-	-	-	1,888,100	639,000
100-0230-550-8410	TSM	RAS/WAS Pump Replacement (3)	FB	-	-	383,000	494,300	-	-	-	-	-	-	-	-	877,300	(1,071,400)
100-0340-550-8411	TPM	Aeration System Rehabilitation	M/IB	20,000	20,000	-	-	-	41,700	-	-	-	47,300	-	28,300	117,300	57,300
100-0230-550-8412	TSM	Process Piping Inspection/Repairs/Replacement	PSA	220,000	45,000	175,000	-	-	-	-	119,900	173,900	-	-	-	468,800	(78,400)
100-0350-550-8413	MS	Chemical Tanks	M/IB	65,100	50,000	69,400	101,100	38,000	45,900	10,600	49,600	60,400	62,400	64,400	66,400	568,200	-
100-0350-550-8414	MS	Piping, Valves & Operators	M	58,300	58,300	60,200	62,100	64,100	66,200	68,300	70,400	72,700	75,000	77,400	79,900	696,300	53,000
100-0230-550-8415	TSM	CCT Valve Rehabilitation	TSM	-	-	-	-	-	-	-	-	364,300	-	-	-	364,300	-
100-0230-550-8416	TSM	Influent Flow Meter Improvement	PSA	25,000	-	25,000	-	220,500	-	-	-	-	-	-	-	245,500	-
100-0230-550-8417	TSM	Nutrient Removal	TSM	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal - Liquids Treatment Equipment and Systems				1,349,400	953,484	1,189,200	1,755,100	1,219,900	1,731,700	2,583,600	3,414,300	3,749,400	748,000	3,359,900	2,387,300	22,138,400	1,005,900

**Central Marin Sanitation Agency
Capital Improvement Program
FY21 Adopted Budget Revisions and 10-Year Forecast**

GL Account Number	PM*	Delivery Method	10-year CIP													Accounts with Changes >\$50,000 from FY20 CIP	
			Adopted Budget FY20	1 Projected Actual FY20	2 Adopted Revisions FY21	3 FY22	4 FY23	5 FY24	6 FY25	7 FY26	8 FY27	9 FY28	10 FY29	11 FY30	Total FY21 - FY30		
Solids Treatment and Energy Generation Equipment and Systems																	
100-0230-550-8501	TSM	Emergency Generator Assessment & Improvement	PSA/FB	-	-	-	96,000	-	-	83,700	526,300	1,595,300	-	-	-	2,301,300	127,100
100-0230-550-8502	TSM	Digester Inspection, Cleaning & Cover Replacement	FB	-	-	20,000	-	-	-	974,100	995,800	-	-	-	-	1,989,900	78,900
100-0350-550-8503	TSM/MS	Centrifuge Maintenance (3)	PSA/FB	-	-	50,000	-	532,500	2,878,300	-	-	-	-	-	-	3,460,800	68,500
100-0350-550-8504	MS	Cogeneration Maintenance	M/IB/FB	400,000	319,004	60,000	63,900	153,200	68,100	70,300	72,500	74,800	77,200	79,600	82,200	801,800	(284,900)
100-0230-550-8505	TSM	New Cogeneration System (3)	FB	598,226	1,361,244	5,781,001	2,552,000	-	-	-	-	-	-	-	-	8,333,001	(689,810)
100-0350-550-8506	MS	Hot Water Systems	M/PSA	29,000	25,000	38,200	26,700	31,900	32,900	34,000	39,900	6,300	6,500	6,700	6,900	230,000	-
100-0350-550-8508	MS	Boilers and Gas Processing Equipment	IB	13,000	13,000	-	-	-	-	567,000	-	-	-	-	-	567,000	-
100-0350-550-8509	MS	Sludge Recirculating Pump Grinders	M	19,400	18,000	20,100	20,700	21,400	22,000	22,700	23,500	24,200	25,000	25,800	26,600	232,000	-
100-0350-550-8510	MS	Biosolids Hoppers Maintenance	M	9,300	5,000	-	10,000	-	10,600	-	11,300	-	12,000	-	12,800	56,700	-
100-0350-550-8511	MS	Organic Waste Receiving Facility	PO	54,500	54,500	206,300	208,100	59,900	61,800	63,800	65,900	67,900	70,100	72,400	74,700	950,900	-
100-0230-550-8512	TSM	PG&E Interconnection Agreement Modification	PSA/IB	25,000	58,000	150,000	-	-	-	-	-	-	-	-	-	150,000	-
Subtotal - Solids Treatment and Energy Generation Equipment and Systems				1,148,426	1,853,748	6,325,601	2,977,400	798,900	3,073,700	1,815,600	1,735,200	1,768,500	190,800	184,500	203,200	19,073,401	(692,710)
CMSA Staff Costs for CIP (2)				189,200	78,227	201,500	207,900	214,600	221,400	228,500	235,800	243,300	251,000	259,100	267,300	2,330,400	240,000
Annual CIP Totals				3,900,626	3,998,996	8,559,701	6,422,200	3,792,652	8,765,800	5,620,700	7,652,200	7,079,500	2,004,700	4,390,500	3,699,900	57,987,853	2,742,258

Projected Annual Escalation Rate:		3.19% (rolling 5-year average of ENR San Francisco Construction Cost Index (CCI) annual changes)															
Escalation Factors:		1.0319	1.0648	1.0988	1.1339	1.1700	1.2074	1.2459	1.2856	1.3266	1.3690	1.4126					
Delivery Methods																	
	Maintenance project, self performed																
	Maintenance Contract	FY20 to FY21 Escalation Change:		1.04%													
	Purchase Order, equipment only	Escalation Change Factors:		1.0104	1.0209	1.0315	1.0423	1.0531	1.0641	1.0751	1.0863	1.0976	1.1091	1.1206			
	Professional Services Agreement																
	Informally Bid																
	Formally Bid																

**Central Marin Sanitation Agency
Capital Improvement Program
Description of CIP Account Changes for FY21**

GL Account Number	PM*		Description of Change(s) from FY20 CIP (All Accounts were adjusted for inflation. Most Accounts included budget estimates for newly added FY30 based on escalation of FY29 costs unless expressly noted below.)
Facility Improvements			
100-0230-550-8201	TSM	Effluent Storage Pond Rehabilitation	
100-0230-550-8202	TSM	Agency Facilities Master Plan	Added \$500k placeholder for Master Plan in FY27.
100-0230-550-8203	TSM	Industrial Coatings & Concrete Rehabilitation	Coating/repair work not completed in FY20 due to staff shortage, as well as headworks and CCT deck coating work originally scheduled for FY21 was all moved into FY24 as coating condition in FY20 was deemed satisfactory.
100-0230-550-8204	TSM	Outfall Inspection & Repairs	Moved FY22 allowance for major outfall diffuser section interior cleaning to FY24. Added routine annual inspection and riser extension placeholder in FY22.
100-0230-550-8205	TSM	Facility Improvements	Added \$35k in FY23 for metal flashing replacement at biotower air handler. Added \$40k in FY29 for Gallery A air handler replacement. Added \$50k in FY30 for biotower control room air handler replacement.
100-0230-550-8206	TSM	Facility Paving/Site Work	Moved employee parking area paving project from FY23 to FY25. Moved routine annual pavement allowance from FY25 to FY23.
100-0230-550-8207	TSM	Hillside Slope Stabilization	FY20 project actuals increased due to actual spent through project completion, including \$35k for additional new slide repair next to Site 1.
100-0230-550-8208	TSM	Facility Roofs Rehabilitation (3)	Reduced FY20 costs due to limited work completed this year. Increased FY21 and 22 costs for design and full replacement of Admin Bldg roof (\$654k) due to deteriorating condition. Added costs in FY28 for full replacement of Maintenance Building roof (\$346k) which is expected to reach the end of its useful life by then. Deleted FY20 Condition Assessment and FY27 Repair Allowance for Agency roofs as both Admin Bldg and Maint. Bldg roofs already budgeted for full replacement. Added FY27 50k allowance for "as needed" roof repairs on other Agency roofs.
100-0230-550-8209	TSM	SHB Elevator Control Replacement	Added allowance for specialized elevator consultant to prepare design in FY21 and placeholder allowance for replacement of elevator controls and other potential code upgrades in FY23.
100-0230-550-8210	TSM	Facility Structures Seismic Study	Moved proposed FY21 facility seismic study to FY25.
General Equipment			
100-0110-550-8301	ISA	Process Control	Added \$8k for two 4-channel controllers in FY21. Added \$22k for retired annuitant labor hours to FY21 only.
100-0110-550-8302	TSM/ISA	Security / Fire Systems	
100-0350-550-8303	MS/TSM	Fuel Storage Tanks	
100-0110-550-8304	ISA	IT Hardware and Communication Equip	Updated FY20 cost to reflect Tyler project implementation and higher costs for fiber installation and network parts. Added costs to FY21 to reflect updated Tyler project implementation timing and extra cost. Added \$20k for retired annuitant labor hours to FY21 only.
100-0350-550-8305	MS	Agency Vehicle Replacement	Added \$6k to FY21 based on updated quote received for new Ford Transit. Added \$10k for FY22 for bobcat sweeper attachment.
100-0230-550-8306	RCM	Laboratory Equipment	Decreased FY20 because the expected equipment purchases tied to regional lab services are not justified until assessment is completed and bioassay room improvements were moved to FY21. Also increased FY21 cost based on updated quote for VA analyzer; moved new SQ composite sampler in FY25 from CIP to operating budget.
100-0350-550-8307	MS	Electrical Equipment	Added \$7k for new power monitoring equipment in FY21 per Power Delivery Committee recommendation.
100-0350-550-8308	MS	Plant Lighting	
100-0350-550-8309	MS	Process Instrumentation	Added \$5k to FY21 for submarine outfall high level alarm.
100-0350-550-8310	MS	Electrical Distribution System Rehabilitation (3)	Added FY23 allowance for another round of as needed MCC upgrades because much of the plant electrical equipment will be 40 yrs old then.
Liquids Treatment Equipment and Systems			
100-0230-550-8401	TSM	Biotower Rotary Distributor Replacement	
100-0350-550-8402	MS	Plant Pumps	Moved proposed FY20 carrier water pump expenditure to FY21 due to delayed project timing.
100-0350-550-8403	MS	Chemical Pumps	Added \$5k to FY21 for updated chlorine solution number of pumps needed and updated vendor quotes. Deleted \$30k from FY22 because not as many SBS drives are needed as originally envisioned.
100-0350-550-8404	MS	Gates Rehabilitation (3)	Added \$50k to FY22 as allowance for blasting/coating and hydraulic unit repair of influent gates, and added \$325k allowance to FY26 for full replacement of both gates per recent gate quote and contractor estimate.
100-0350-550-8405	MS	Headworks Equipment	Added \$41k to FY21 for design of new screening system at septage/vactor station and added \$200k for procurement and installation of said equipment in FY22. Moved FY21 proposed replacement of blowers and diffusers in grit tank to FY26 Headworks Equipment budget to align with grit classifier project timing. Reduced FY23 budget for headworks hydraulic unit replacement down to \$120k per updated quote and cost estimate.

**Central Marin Sanitation Agency
Capital Improvement Program
Description of CIP Account Changes for FY21**

GL Account Number	PM*		Description of Change(s) from FY20 CIP (All Accounts were adjusted for inflation. Most Accounts included budget estimates for newly added FY30 based on escalation of FY29 costs unless expressly noted below.)
100-0230-550-8406	TSM	Odor Control System Improvements	Moved FY24, 26, and 27 odor control system improvements to FY27, 29, and 30, respectively.
100-0350-550-8407	MS	Process Tank Maintenance (3)	FY21 added \$30k for vactoring of influent channel and repair of broken diffusers (if any). Moved FY21 proposed replacement of blowers and diffusers in grit tank to FY26 Headworks Equipment budget to align with grit classifier project timing.
100-0350-550-8408	TSM/MS	Primary Clarifiers Rehabilitation	Moved FY22 through 25 clarifier sequence to FY24 through 27 for clarifiers 1 through 5. Moved clarifier 6&7 from FY27/28 to 28/29.
100-0350-550-8409	MS	Secondary Clarifiers Rehabilitation (3)	Moved clarifier rehabilitation sequence out by one year as June 2020 bid was rejected due to high costs. Adjusted costs for all four proposed secondary clarifier rehabilitation projects in FY22 through 25 based on additional contingency added to original engineer's estimate to account for pricing uncertainty.
100-0230-550-8410	TSM	RAS/WAS Pump Replacement (3)	Streamlined project work scope to reflect refinement from high-level master plan estimate to more detailed staff developed scope, reflecting all in-house work completed since master plan estimate and focusing on in-kind replacement of aging systems as opposed to broader secondary system pumping evaluation/study that was considered in master plan. Also, WAS pumping work was eliminated as recent in-house improvements addressed these pumps.
100-0340-550-8411	TPM	Aeration System Rehabilitation	Added additional 10 year cycle of blower core replacement to FY30.
100-0230-550-8412	TSM	Process Piping Inspection/Repairs/Replacement	Moved corrosion assessment/repairs of 54" pond drain from FY25 to FY20; Process piping inspection work not completed in FY20 due to staff shortage was moved to FY21.
100-0350-550-8413	MS	Chemical Tanks	
100-0350-550-8414	MS	Piping, Valves & Operators	
100-0230-550-8415	TSM	CCT Valve Rehabilitation	
100-0230-550-8416	TSM	Influent Flow Meter Improvement	Moved proposed FY20 influent flow meter study to FY21 and added one year delay to construction of recommended study improvements by moving them from FY21 to FY23.
100-0230-550-8417	TSM	Nutrient Removal	
Solids Treatment and Energy Generation Equipment and Systems			
100-0230-550-8501	TSM	Emergency Generator Assessment & Improvement	
100-0230-550-8502	TSM	Digester Inspection, Cleaning & Cover Replacement	Added \$20k to FY21 to complete digester membrane cover inspection by specialized vendor. Timing was delayed due to Covid-related travel restrictions.
100-0350-550-8503	TSM/MS	Centrifuge Maintenance (3)	
100-0350-550-8504	MS	Cogeneration Maintenance	
100-0230-550-8505	TSM	New Cogeneration System (3)	Updated project costs based on latest Carollo design contract amendment and project timing, including actual new costs for updated biogas PLC design as well as construction allowance (\$150k). Moved gas treatment improvements design up in time to FY21 and construction to FY22 to minimize runtime on old gas treatment equipment.
100-0350-550-8506	MS	Hot Water Systems	
100-0230-550-8507	TSM	Digester Mixing Pump Study	Account deleted as in-house digester mixing pump study in FY20 indicated vibration can be resolved by lowering pump speed.
100-0350-550-8508	MS	Boilers and Gas Processing Equipment	
100-0350-550-8509	MS	Sludge Recirculating Pump Grinders	
100-0350-550-8510	MS	Biosolids Hoppers Maintenance	
100-0350-550-8511	MS	Organic Waste Receiving Facility	Moved new aboveground FOG storage facility from FY23 to FY21 and FY22 as it appears CMSA can use the added storage capacity sooner to maximize power delivery to MCE.
100-0230-550-8512	TSM	PG&E Interconnection Agreement Modification	Added \$25k in FY20 for Islanding related PGE coordination/design change (Carollo) and added \$100k allowance in FY21 to construct any additional relays that may be necessary.

* PM indicates the project manager for the account.

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

**CENTRAL MARIN SANITATION AGENCY
CAPITAL IMPROVEMENT PROGRAM - ACCOUNT / PROJECT DESCRIPTIONS
FY21 ADOPTED BUDGET REVISIONS AND 10-YEAR PROJECTION**

Facility Improvements		
ACCOUNT NUMBER	ACCOUNT / PROJECT TITLE	ACCOUNT / PROJECT DESCRIPTION
100-0230-550-8201	Effluent Storage Pond Rehabilitation	See Full Page Description.
100-0230-550-8202	Agency Facilities Master Plan	Scheduled Master Plan to guide the Agency in planning future projects. FY27 – Allowance to retain a consultant to develop Master Plan.
100-0230-550-8203	Industrial Coatings & Concrete Rehabilitation	Scheduled industrial coating rehabilitation program for process structures, 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. FY21 – Repair the CCTs 1-4 concrete cold joints. FY22 – Allowance for industrial coatings as needed. FY23 – Repair the saw cut floor area in the digester basement (Master Plan Project 13-2). FY24 – Replace headworks structural metal (skylights, pipe supports, etc.) and apply new epoxy coating on the new metal and the grit tank handrails. Inspect spalled concrete below the water line in CCTs 1-4. Repair wear coating on the headworks deck and install wear coating on CCTs 1-4. Apply coating above water lines in CCTs 1-4, including repair of exposed rebar below the water lines. FY 25-26 – Allowance for industrial coating as needed. FY27 – Repair cracked concrete in the ferric storage room and recoat the floor (Master Plan Project 04-5). FY28-30 – Allowance for industrial coating as needed.
100-0230-550-8204	Outfall Inspection & Repairs	On-going underwater inspection and maintenance of the marine outfall diffuser section. Activities include diver inspections of diffusers and risers, survey of diffuser check valve levels above shifting bay floor sediments, extending or replacing risers and diffuser check valves as needed, and periodic monitoring and removal of solids deposition inside outfall pipe. FY21-23 – Routine inspection and riser extension or replacement (assumed 5 per year), as needed. FY24 – 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 FY14 to FY20. FY25-30 – Routine inspection and riser extension or replacement (assumed 5 per year), as needed.

**CENTRAL MARIN SANITATION AGENCY
CAPITAL IMPROVEMENT PROGRAM - ACCOUNT / PROJECT DESCRIPTIONS
FY21 ADOPTED BUDGET REVISIONS AND 10-YEAR PROJECTION**

Facility Improvements		
ACCOUNT NUMBER	ACCOUNT / PROJECT TITLE	ACCOUNT / PROJECT DESCRIPTION
100-0230-550-8205	Facility Improvements	<p>This account is for various building improvements that are not incorporated into other capital projects.</p> <p>FY21 – Allowance for replacement of six personnel access doors throughout the facility (four at headworks and two at solids load bay). Also replace two roll-up doors at maintenance annex.</p> <p>FY23 – Replace sheet metal flashing on Biotower Air Handler on roof.</p> <p>FY24 – Allowance for building improvements.</p> <p>FY28 – Allowance for building improvements.</p> <p>FY29 – Replace Gallery A Air Handling unit.</p> <p>FY30 – Replace Control Room Air Handling unit in Biotower.</p>
100-0230-550-8206	Facility Paving/ Site Work	<p>This account is for minor paving repairs and associated site work on internal facility roads, walkways, parking lots, and other pavement, and for re-grading, cleaning, and replacing gravel in drainage ditches.</p> <p>FY21 – Allowance for miscellaneous paving improvements.</p> <p>FY22 – Allowance for a major plant slurry seal and striping project (plant road from gate to OWRF).</p> <p>FY23-24 – Allowance for miscellaneous paving improvements.</p> <p>FY25 – Allowance for a major plant paving project (employee parking area).</p> <p>FY26 – Allowance for a major plant paving project (plant road from primary clarifiers to SHB).</p> <p>FY27-30 – Allowance for miscellaneous paving improvements.</p>
100-0230-550-8208	Facility Roofs Rehabilitation	See Full Page Description.
100-0230-550-8209	SHB Elevator Control Replacement	See Full Page Description.
100-0230-550-8210	Facility Structures Seismic Study	See Full Page Description.

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FY21 ADOPTED BUDGET REVISIONS AND 10-YEAR PROJECTION**

General Equipment		
ACCOUNT NUMBER	ACCOUNT / PROJECT TITLE	ACCOUNT / PROJECT DESCRIPTION
100-0110-550-8301	Process Control	<p>Allowances for on-going replacement, upgrades, and improvements to the Agency's process control system including new instruments, servers, and computers; and Programmable Logic Controllers (PLCs) and Human Machine Interface (HMI) hardware and software. Annual allowance is based on escalated costs from previous years. Actual cost estimates are used for specifically identified equipment.</p> <p>FY21 – Routine PLC and HMI hardware replacement, including two 4-channel controllers.</p> <p>FY22-24 – Routine PLC and HMI hardware replacement. Identify and purchase critical spares.</p> <p>FY25 – SCADA system software review and potential upgrades.</p> <p>FY26-30 – Routine PLC and HMI hardware replacement.</p>
100-0110-550-8302	Security/ Fire Systems	<p>Allowance for projects related to the Agency's physical security and fire protections systems, including a biannual allowance to purchase replacement equipment as needed.</p> <p>FY21-30 – Allowance for annual and quarterly inspections of alarms and sprinklers.</p> <p>FY23 – Complete 5-year inspection for sprinkler system. The annual sprinkler inspection would not be required during this Fiscal Year.</p> <p>Note: allowance for alarm and sprinkler related spare parts is included every other year.</p>
100-0350-550-8303	Fuel Storage Tanks	<p>Allowance to replace the existing underground fuel storage tanks with above ground storage tanks. This replacement would be triggered by one of the underground tanks failing or by a change in regulatory requirements. It is expected that any regulatory change would provide sufficient time for the replacement to occur in the fiscal year following the change.</p> <p>During the design and construction of the new cogeneration ancillary and biogas treatment systems, synergies will be evaluated regarding moving the diesel storage tank in the area to an above ground location.</p>

**CENTRAL MARIN SANITATION AGENCY
CAPITAL IMPROVEMENT PROGRAM - ACCOUNT / PROJECT DESCRIPTIONS
FY21 ADOPTED BUDGET REVISIONS AND 10-YEAR PROJECTION**

General Equipment		
ACCOUNT NUMBER	ACCOUNT / PROJECT TITLE	ACCOUNT / PROJECT DESCRIPTION
100-0110-550-8304	IT Hardware and Communication Equip	<p>Routine repair and regular replacement of IT hardware and software, such as office computers, printers, scanners, digital telephone equipment and its supporting servers, and voice radio equipment used by Agency staff.</p> <p>FY21 – Allowance for equipment listed above and replacement of 15 SCADA workstations plus allowance for remaining Tyler project implementation costs and costs of fiber installation and network parts.</p> <p>FY22 – Allowance for equipment listed above and replacement of the data servers on which all Agency business and SCADA virtual servers run.</p> <p>FY23 – Allowance for equipment listed above and replacement of backup repository.</p> <p>FY24 – Allowance for equipment listed above and upgrade of 45 business computers and 5 laptops.</p> <p>FY25 – Allowance for equipment listed above.</p> <p>FY26 – Allowance for equipment listed above and replacement of 15 SCADA workstations.</p> <p>FY27 – Allowance for equipment listed above and replacement of the CMSA data servers on which all agency business and SCADA virtual servers run.</p> <p>FY28 – Allowance for equipment listed above and replacement of backup repository.</p> <p>FY29 – Allowance for equipment listed above and upgrade of 45 business computers and 5 laptops.</p> <p>FY30 – Allowance for equipment listed above.</p>
100-0350-550-8305	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>FY21 – Replace one carpool vehicle, one forklift, and one electric cart.</p> <p>FY22 – Replace tires on all-terrain forklift electric cart and five bicycles, and purchase bobcat sweeper attachment.</p> <p>FY23 – Replace F150 environmental services truck.</p> <p>FY24 – Replace skid steer loader and replace batteries for administration Prius.</p> <p>FY25 – Replace Ford E250 van.</p> <p>FY26 – Replace F450 flatbed with a mechanic’s truck, and one electric cart.</p> <p>FY27 – Replace F150 Utility truck vehicle and one electric cart.</p> <p>FY28 – Replace pump station rounds truck, GM vehicle, and two electric carts.</p> <p>FY29 – Replace Technical Services Transit.</p> <p>FY30 – Allowance for new vehicles or equipment.</p>

**CENTRAL MARIN SANITATION AGENCY
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FY21 ADOPTED BUDGET REVISIONS AND 10-YEAR PROJECTION**

General Equipment		
ACCOUNT NUMBER	ACCOUNT / PROJECT TITLE	ACCOUNT / PROJECT DESCRIPTION
100-0230-550-8306	Laboratory Equipment	<p>This account includes allowances for scheduled replacement of laboratory equipment such as autoclaves, spectrophotometers, collection/sampler systems, washers, incubators, bioassay system, etc.</p> <p>FY21 – Replace and relocate the bioassay system to the end analyzer room and complete minor room modifications (walls, lighting, electrical etc.) to accommodate the system at the new location. Purchase and install an Ion Chromatography (IC) System for cations and anions with Volatile Acids analyzer adder.</p> <p>FY22 – Purchase and install an ICP-OES for metals analysis.</p> <p>FY23 – Purchase a microscope, microbiological incubator replacement, and a reagent refrigerator.</p> <p>FY26 – Purchase FIA system (ammonia, total P, cyanide).</p> <p>FY27 – Replace chlorine titrators.</p> <p>FY28 – Replace Ovens and muffle furnace.</p> <p>FY29 – Purchase/replace influent and effluent samplers, analytical balance, and UV spectrophotometer.</p> <p>FY30 – Allowance for above equipment.</p>
100-0350-550-8307	Electrical Equipment	<p>This account includes allowances for planned maintenance, upgrading, and replacement of Agency electrical components: individual motor controls and equipment panels, electric sluice gate operators, variable frequency drives, and electrical equipment to support process equipment.</p> <p>FY21 – Purchase a spare actuator for the 66-inch effluent valve and purchase new power monitoring equipment per Power Delivery Committee recommendation.</p> <p>FY22 – Replace Control Room uninterruptible power source and purchase a spare actuator for the 72-inch gate.</p> <p>FY23 – Purchase a spare actuator for the 84-inch gate.</p> <p>FY24 – Purchase spare actuators for 4-inch to 8-inch valves.</p> <p>FY25-30 – Annual Allowance for replacement of equipment as determined by condition assessment as needed, including actuators, MCC buckets, conduit replacement, etc.</p>
100-0350-550-8308	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>FY21 – Replace HPS lighting in the bollards around the Administration Building and on light poles by the above ground diesel storage tank, 66-inch valve vault, OWRF, and sulfatreat vessels.</p> <p>FY22 – Replace HPS lighting on Primary Clarifiers No. 6 & 7, CCTs 5 & 6, and polymer station.</p> <p>FY23 – Allowance to replace any remaining HPS lighting.</p> <p>FY24 – Allowance for replacement of fixtures as needed.</p>

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General Equipment		
ACCOUNT NUMBER	ACCOUNT / PROJECT TITLE	ACCOUNT / PROJECT DESCRIPTION
100-0350-550-8309	Process Instrumentation	<p>This account includes allowances for on-going repair, replacement, or upgrading of 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>FY21 – Install flow meters for centrifuge ferric chloride addition, two DO probes, two CL2 probes, two SBS probes, and two aeration basin analyzer controllers. Replace Operations Microscope in Aeration Basin. Install sump level indicating equipment into Submarine Outfall vault.</p> <p>FY22 – Level sensor for site sump, replace headworks atmospheric monitoring equipment and control panel.</p> <p>FY23 – Procure two analyzers controllers (CL2/SBS) and digester laser level indicator.</p> <p>FY24 – Flow meters, WAS and primary sludge meters in solids handling area.</p> <p>FY25 – Differential PSI (biogas and digester membranes) transmitters, and two analyzer controllers.</p> <p>FY26 – Replace Rosemount digester PSI/liquid level transmitters if not completed with digester inspection, cleaning, and rehabilitation project work.</p> <p>FY27 – Replace RAS flow meter and two analyzer controllers.</p> <p>FY28 – Allowance for above equipment, plus replace the OWRF atmospheric monitoring equipment.</p> <p>FY29-30 – Allowance for above equipment.</p>
100-0350-550-8310	Electrical Distribution System Rehabilitation	See Full Page Description.

**CENTRAL MARIN SANITATION AGENCY
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Liquid Treatment Processes and Equipment		
ACCOUNT NUMBER	ACCOUNT / PROJECT TITLE	ACCOUNT / PROJECT DESCRIPTION
100-0230-550-8401	Biotower Rotary Distributor Replacement	See Full Page Description.
100-0350-550-8402	Plant Pumps	<p>Scheduled replacement of centrifugal, positive displacement, and chopper pumps. These pumps transport primary sludge, WAS, contact tank scum, and other liquids throughout the facility. This account also includes digester mixing pumps.</p> <p>FY21 – Replace three carrier water pumps. Refurbish one biotower pump. Replace two primary scum pumps, two plant sump pumps, and one bioassay staged pump.</p> <p>FY22 – Refurbish three recycled water pumps and one scum pump. Replace two headworks sample pump, two sump pumps, and two bioassay staged pumps.</p> <p>FY23 – Replace two sump pumps and two secondary scum pumps. Allowance to replace additional pumps identified by condition assessments.</p> <p>FY24 – Refurbish two digester mixing pumps. Allowance to replace additional pumps identified by condition assessments.</p> <p>FY25 – Replace CCT scum pumps with centrifugal style pump.</p> <p>FY26 – Centrifuge feed pumps, if not included in Centrifuge Replacement Project.</p> <p>FY27 – Replace two TWAS pumps at RDTs.</p> <p>FY28-30 – Allowance to replace pumps identified by condition assessments.</p>
100-0350-550-8403	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>FY21 – Replace seven disinfection (chlorine solution) metering pump drives and one chemical induction mixer.</p> <p>FY22 – Replace four sodium bisulfite metering pump drives, and one chemical induction mixer.</p> <p>FY23 – Refurbish one polymer feed pump and one chemical induction mixer. Replace two headworks ferric chloride metering pumps.</p> <p>FY24 – Replace two polymer activation units in SHB.</p> <p>FY25 – Replace polymer blend unit (skid) at RDTs.</p> <p>FY26 -30 – Above allowances to replace chemical pumps based on condition assessment (same budget each year).</p>
100-0350-550-8404	Gates Rehabilitation	See Full Page Description.
100-0350-550-8405	Headworks Equipment	See Full Page Description.

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Liquid Treatment Processes and Equipment		
ACCOUNT NUMBER	ACCOUNT / PROJECT TITLE	ACCOUNT / PROJECT DESCRIPTION
100-0230-550-8406	Odor Control System Improvements	See Full Page Description.
100-0350-550-8407	Process Tank Maintenance	<p>Refurbishment and replacement of mechanical equipment such as drive mechanisms, media vessels, and blowers in all process tanks and systems throughout the treatment facility.</p> <p>FY21 – Allowance to vector out all primary influent channels for deposition study. Maintenance to perform minor pipe repairs to influent channel piping and diffusers as needed.</p> <p>FY22 – Allowance for above equipment.</p> <p>FY23-28 – Allowance for flights/chain/sprockets/wear strips for one primary clarifier each year.</p> <p>FY29-30 – General tank related replacement of equipment as determined by condition assessment.</p>
100-0350-550-8408	Primary Clarifiers Rehabilitation	See Full Page Description.
100-0350-550-8409	Secondary Clarifiers Rehabilitation	See Full Page Description.
100-0230-550-8410	RAS/WAS Pump Replacement	See Full Page Description.
100-0340-550-8411	Aeration System Rehabilitation	<p>This new account includes replacement and rehabilitation of aeration system equipment.</p> <p>FY24 – Replace aeration diffuser membranes in all four tanks.</p> <p>FY28 – Replace aeration diffuser membranes in all four tanks every 4 years.</p> <p>FY30 – Blower core refurbishment every 10 years.</p>
100-0230-550-8412	Process Piping Inspection/Repairs/Replacement	See Full Page Description.

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Liquid Treatment Processes and Equipment		
ACCOUNT NUMBER	ACCOUNT / PROJECT TITLE	ACCOUNT / PROJECT DESCRIPTION
100-0350-550-8413	Chemical Tanks	<p>Replacement of chemical storage tanks used throughout the treatment plant and in the collection system as they approach the end of their service lives. There are 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>FY21 – Replace one sodium hypochlorite tank and the Greenbrae nitrate tank.</p> <p>FY22 – Replace the North Francisco nitrate tank (evaluate permanent roof removal) and assess (corrosion inspection) the headworks bulk ferric chloride storage tanks.</p> <p>FY23 – Consultant to assess the SHB polymer bulk storage tank.</p> <p>FY24 – Allowance for an unspecified tank replacement.</p> <p>FY25 – Replace a sodium bisulfite tank. Perform an assessment on the effluent pump station’s Convault diesel storage tank.</p> <p>FY26-30 – Allowance for an unspecified tank replacement.</p>
100-0350-550-8414	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 on-going condition assessments are completed.</p> <p>FY21 – Replace fire protection pipeline and valve system in selected location in the galleries.</p> <p>FY22-23 – Allowance for repairs of the above.</p> <p>FY24 – Replace the hot water pipe system into the Administration Building.</p> <p>FY25 – Replace valves associated with Digester No. 1. Include 18” MOVs and actuators based on assessment.</p> <p>FY26 – Replace valves associated with Digester No. 2. Include 18” MOVs and actuators based on assessment.</p> <p>FY27-30 – Allowance for repairs as determined by future condition assessments.</p>
100-0230-550-8415	CCT Valve Rehabilitation	<p>The telescoping valves in the CCTs 1 through 4 are used to remove debris floating on the water surface. There is also a motor operated bar screen that removes debris from effluent that is diverted for recycled water usage.</p> <p>FY27 – The 2018 Facilities Master Plan recommends replacing the telescoping valves in CCTs 1 through 4 (Master Plan Project 09-2). An option that will be explored is to replace the telescoping valves with rotating pipe skimmers with motorized actuators. This project also includes replacing the recycled water screen.</p>

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Liquid Treatment Processes and Equipment		
ACCOUNT NUMBER	ACCOUNT / PROJECT TITLE	ACCOUNT / PROJECT DESCRIPTION
100-0230-550-8416	Influent Flow Meter Improvement	<p>Both the 45” San Rafael Interceptor and the 54” Ross Valley Interceptor are fitted with ultrasonic meters manufactured by Manning. These flow meters are near the end of their useful life and the original manufacturer no longer makes these units. A study will be performed to identify a suitable flow meter for replacement within the existing infrastructure and to also improve the accuracy in measuring large flow variations.</p> <p>FY21 – Conduct a flow meter technology study to improve large diameter pipeline flow measurement accuracy.</p> <p>FY23 – Allowance to install new flow meter technology pending the results of the flow meter technology survey.</p>
100-0230-550-8417	Nutrient Removal	See Full Page Description.

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Solids Treatment and Energy Generation Equipment and Systems		
ACCOUNT NUMBER	ACCOUNT / PROJECT TITLE	ACCOUNT / PROJECT DESCRIPTION
100-0230-550-8501	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 relatively old, it has had minimal usage and is maintained per manufacturer’s recommendations.</p> <p>FY22 – Complete an inspection and major preventive maintenance of the emergency generator and heat exchanger (only complete after temporary emergency generator connection is in place)</p> <p>FY25 – A consultant will conduct an assessment of the generator for condition, air emissions, and reliability. The budget includes an allowance for a preliminary design report that will include an estimate of the cost to rehabilitate or replace the equipment.</p> <p>FY26-27 – Allowance to fund design and installation of a replacement emergency generator based on findings of the assessment and preliminary design report.</p>
100-0230-550-8502	Digester Inspection, Cleaning and Cover Replacement	<p>This account includes allowance for periodic cleaning and inspection of each anaerobic digester every 10 years based on conservative estimates of their membrane covers’ service lives. Agency staff will drain the tanks to allow a contractor to remove material that has accumulated inside the tanks. A specialty contractor will replace the membrane covers after the cleaning is complete and then staff will return each digester to service. Project timing may also be adjusted based on actual digester process performance.</p> <p>FY21 – Allowance for original manufacturer to inspect the membrane covers.</p> <p>FY25 – Allowance to clean and inspect the interior of Digester No. 1 and replace its dual membrane cover.</p> <p>FY26 – Allowance to clean and inspect the interior of Digester No. 2 and replace its dual membrane cover.</p>
100-0350-550-8503	Centrifuge Maintenance	See Full Page Description.
100-0350-550-8504	Cogeneration Maintenance	See Full Page Description.
100-0230-550-8505	New Cogeneration System	See Full Page Description.
100-0350-550-8506	Hot Water Systems	<p>Repair and replacement of hot water system pumps, valves, flex fittings, insulation, and piping as needed to maintain the system that supplies hot water to the digesters, other Agency facilities, and the Administration Building.</p> <p>FY21-26 – Replace aging insulation and/or install PVC jacketing on hot water pipes in Galleries A, B, C, and F and the Carport Area according to insulation replacement schedule.</p> <p>FY21-30 – Annual allowance for system repairs as needed, failing valves, piping leaks, booster pumps, and seals.</p>

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Solids Treatment and Energy Generation Equipment and Systems		
ACCOUNT NUMBER	ACCOUNT / PROJECT TITLE	ACCOUNT / PROJECT DESCRIPTION
100-0350-550-8508	Boilers and Gas Processing	Scheduled inspection, repair, and/or replacement of boiler tubes that are used to heat water for the Agency's hot water systems when the cogeneration engine is offline. FY25 – Replacement of two existing boilers, upgraded to meet future Bay Area Air Quality Management District requirements.
100-0350-550-8509	Sludge Recirculating Pump Grinders	An annual allowance for replacement of one to two sludge grinders' high-wear cutter cassettes.
100-0350-550-8510	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. FY21-30 – Allowance for minor maintenance of mechanical equipment every other year.
100-0350-550-8511	Organic Waste Receiving Facility	Account for repairs and replacement of pumps, valves, monitors, and other equipment in the Organic Waste Receiving Facility (OWRF). Due to the high solids content and low pH of the organic slurry, equipment in the OWRF requires frequent repairs and/or replacement. The annual allowance is based on the cost of equipment typically consumed in a year. FY20 – Allowance to replace one hose pump and two mixing pumps. FY21 – Allowance for two mixing pumps or technology transition to propeller or other mixers. Recoat facility piping, valves, and operators per facility color palette. FY21-22 – Install above ground FOG storage tank in order to provide additional FOG storage capacity to maximize the generation of tipping fee revenues and maximize the export of renewable power to the grid at all times of the day. FY22 – Replace mixing pump check valves, two mixing pumps, and paddle finisher paddles and screen. FY23 – New FOG/OW 4" receiving and 6" sludge recirculation MOVs and new hot water cleaning system (stationary steam cleaning system). Two mixing pumps if still utilizing this technology. FY24 – MCC AC unit and PLC upgrade. FY25-30 – Annual allowance for equipment replacements.
100-0230-550-8512	PG&E Interconnection Agreement Modification	Based on the actual cost for the previous PG&E Interconnection Agreement Modification, an allowance is included for a new PG&E Interconnection Agreement Modification associated with the design and construction of the new cogeneration system. FY21 – Allowance for any modifications during the new cogeneration system design and construction.

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Solids Treatment and Energy Generation Equipment and Systems		
ACCOUNT NUMBER	ACCOUNT / PROJECT TITLE	ACCOUNT / PROJECT DESCRIPTION
No Account Number	CMSA Staff Costs for CIP Projects	<p>Capitalization of compensation and benefits for CMSA staff time to manage design of, contracting for, and construction of CIP projects, as listed below. Costs are based on estimated staff time totaling two Full Time Equivalencies (FTEs). Costs for future years will be modified for each current fiscal year in that year's CIP budget. The projects identified for staff cost capitalization in FY21 are:</p> <ul style="list-style-type: none"> 7300-720-00 Gates Rehabilitation 7300-983-00 Process Tank Maintenance 7300-990-00 Secondary Clarifiers Rehabilitation 7400-960-00 Facility Roofs Rehabilitation 7450-105-00 Electrical Distribution System Rehabilitation 7300-715-00 Centrifuge Maintenance 7300-991-00 RAS/WAS Pump Replacement 7300-729-00 New Cogeneration System 7300-660-00 Organic Waste Receiving Facility

Effluent Storage Pond Rehabilitation (GL 100-0230-550-8201)			
Type of Project	Design and Capital Construction	Lead Department	Technical Services
Project Delivery	Formally Bid		
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 FY25 and potential renovation of berms and bottom in FY26, depending on the survey results.		
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.		
Schedule	Activity Description	Cost	
FY25	Survey and design improvements to entire berm, top road, and pond bottom for excessive or uneven settlement	\$42,600	
FY26	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	\$1,346,800	
		Project Total	\$1,389,400

Project Photo:



Effluent Storage Pond

Facility Roofs Rehabilitation (GL 100-0230-550-8208)			
Type of Project	Design and Capital Construction	Lead Department	Technical Services
Project Delivery	Maintenance Contract/Informally Bid/Formally Bid		
Description and Justification	The FY15 roof expert assessment indicated that the original standing seam metal roofs are in good condition. This item contains allowances to rehabilitate portions of the standing seam metal and built-up roofs as needed, and to perform minor repairs on their supporting structures, if required. The various agency built-up roofs were mostly re-done around 2007 and are not expected to require full replacement until after 2030 except the Administration Building and Maintenance Building Roofs. Allowances are included below for minor repairs on the built-up and standing seam roofs until their complete replacement.		
Risk Assessment	This is a medium risk project as the fall 2018 roof inspection indicated that the roof systems are generally in good condition, with the exception of the items described above.		
Schedule	Activity Description	Cost	
FY21	Due to the deteriorating conditions and additional leaks observed in FY20 around the skylight and seams of the Administration Building roof, the entire metal roof will be replaced in-kind. Prepare design and construction documents for formal bidding, which includes structural engineering analysis for the new skylight and infill as well as plans and technical specifications for the metal roof replacement.	\$30,000	
FY22	Construction phase for the Administration Building Metal Roof Replacement Project	\$654,000	
FY22	Allowance to repair aging portions of the Maintenance building.	\$68,500	
FY22	Repair Solids Handling Building roof in conjunction with cogeneration project.	\$166,700	
FY23-25	Annual allowance to patch repair facility standing seam and built-up roof areas as needed before full replacement around 2030.	\$77,500	
FY27	Allowance for patch repairs to facility standing seam and built-up roof areas as needed before full replacement after 2030.	\$50,000	
FY28	Cost for replacement of the Maintenance Building metal roof.	\$346,700	
FY29-30	Annual allowance to patch repair facility built-up roof areas as needed before full replacement after 2030.	\$61,400	
Project Total			\$1,454,800

Project Photo:



Maintenance Building with standing seam metal roofs

Solids Handling Building Elevator Control Replacement (GL 100-0230-550-8209)			
Type of Project	Design and Capital Construction	Lead Department	Technical Services
Project Delivery	Professional Services Agreement and Formal Bid		
Description and Justification	The 2018 Facility Master Plan condition assessment initially recommended replacing the entire elevator (Master Plan Project 12-5) of the Solids Handling Building (SHB). After further discussions with staff and reviewing inspection reports, it was determined that the mechanical components of the elevator still have several years of remaining life. However, the control system will need to be replaced due to age and issues that have required increased maintenance in recent years.		
Risk Assessment	This is a medium risk project. The control system has required increased maintenance and will potentially not pass an annual inspection in the near future if it is not replaced.		
Schedule	Activity Description	Cost	
FY21	Retain specialized elevator consultant to review site conditions and prepare scope of work for formal bidding from specialized elevator companies.	\$30,000	
FY23	Major elevator maintenance to ensure compliance with permit, including replacing the SHB elevator control system.	\$350,000	
Project Total			\$380,000

Project Photos:



Solids Handling Building Elevator



Elevator Control Panel

Facility Structures Seismic Study (GL 100-0230-550-8210)		
Type of Project	Design and Capital Construction	Lead Department Technical Services
Project Delivery	Professional Services Agreement	
Description and Justification	The 2018 Facility Master Plan recommends conducting a study to evaluate seismic impacts due to soil settlement (Master Plan Project 99-1). Subsidence of the ground has been observed in multiple locations throughout the facility, including in the immediate areas around process tanks. Because structures were constructed on pile foundations, the settlement has produced gaps under the bottom of the structures. It is possible that the original seismic design was dependent on the tops of the piles being at grade and fully supported. With the tops of the piles currently above grade and exposed, the unsupported pile length may be overstressed during an earthquake resulting in structural damage. Ground settlement may have also affected the stresses on buried piping between process areas.	
Risk Assessment	This is a medium risk project due to the unknown risk posed to facility structures resulting from soil settlement.	
Schedule	Activity Description	Cost
FY25	Conduct a study to quantify the risk of structural damage due to soil settlement and identify future structural improvement projects, if necessary.	\$234,800
Project Total		\$234,800

Project Photos:



Stair modifications to account for settlement



Exposed bottom of process tank

Electrical Distribution System Rehabilitation (GL 100-0350-550-8310)			
Type of Project	Design and Capital Construction	Lead Department	Technical Services
Project Delivery	Professional Services Agreement/Formally Bid		
Description and Justification	<p>The 2018 Facility Master Plan recommends replacing the main electrical switchgear components that distribute power throughout the facility (Master Plan Project 14-1). The existing switchgear electrical components are mostly comprised of equipment from 1985. While most of the equipment is operational, it is increasingly difficult to locate replacements because manufacturers no longer provide full technical support. A detailed assessment of the equipment is proposed to evaluate the cost, siting impacts, and construction sequencing and timing considerations for full equipment replacement, while also factoring in potential future load increases for the facility. In parallel, an inspection and in-place refurbishment of existing equipment will be completed, and minor improvements will be constructed including HVAC improvements and provisions for the connection of a temporary emergency generator. This project also includes allowances to replace motor control centers (MCCs) located in several treatment process areas when condition assessment findings warrant replacement.</p>		
Risk Assessment	<p>This is a high risk project because a failure of the switchgear would result in a significant process disruption, potentially resulting in shutdowns or significant downtime that could result in discharge of untreated effluent.</p>		
Schedule	Activity Description	Cost	
FY21	Design and construction of HVAC and emergency generator interconnection improvements.	\$105,000	
FY23	Allowance to refurbish or replace a MCC based on condition assessment findings. Design of main switchgear replacement.	\$489,352	
FY24	Main switchgear replacement.	\$2,457,100	
FY25	Allowance to refurbish or replace a MCC based on condition assessment findings.	\$207,200	
FY27	Allowance to refurbish or replace a MCC based on condition assessment findings.	\$220,600	
FY30	Allowance to refurbish or replace a MCC based on condition assessment findings.	\$242,400	
Project Total			\$3,721,652

Project Photos:



Switchgear building and transformer



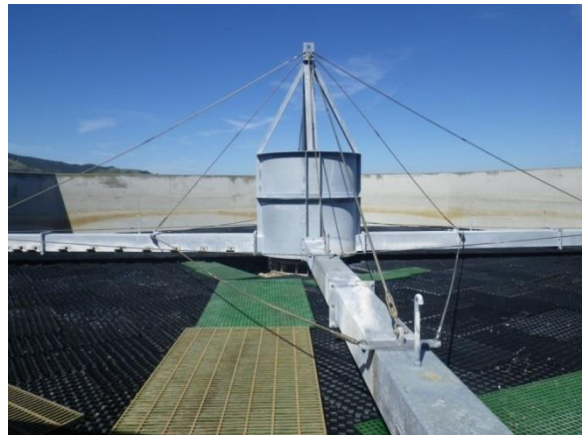
Switchgear equipment

Biotower Rotary Distributor Replacement (GL 100-0230-550-8401)			
Type of Project	Design and Capital Construction	Lead Department	Technical Services
Project Delivery	Formally Bid		
Description and Justification	The biotowers are the first of two secondary treatment processes, and remove some of the biochemical oxygen demand 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 with a 25- to 30-year life expectancy. The rotary distributor and top level of filter media in Biotower No. 1 were replaced in 2010. The 2018 Facility Master Plan recommends replacing the rotating mechanism and media in Biotower No. 2 (Master Plan Project 06-2).		
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 has changed based on the Facilities Master Plan findings.		
Schedule	Activity Description	Cost	
FY25	Replace galvanized-steel distributor mechanism and plastic spreader nozzles with a motor-operated mechanism. Replace distributor bearing. Replace or recoat the cast iron turntable on which the mechanism turns. Replace the top tier of media that is subject to weather damage.	\$1,019,600	
			Project Total
			\$1,019,600

Project Photos:



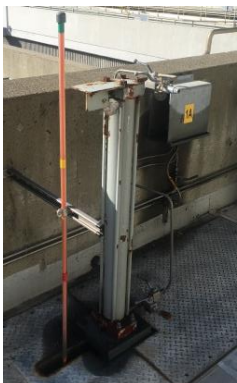
Original base & turntable, Biotower No. 2



New rotary distributor, Biotower No. 2

Gates Rehabilitation (GL 100-0350-550-8404)		
Type of Project	Design and Capital Construction	Lead Department Technical Services
Project Delivery	Maintenance Project/Informally Bid/ Formally Bid	
Description and Justification	There are several large gates that control flow into, through, and between processes. The gates are also used to isolate process tanks for repair or maintenance. When condition assessments warrant, these gates will be replaced with stainless steel gates, which have a longer service life because they have better corrosion resistance and sealing surfaces that can be refurbished. This account includes two projects recommended in the 2018 Facility Master Plan. The first project is the replacement of the hydraulic system used to open and close primary clarifier gates with an electronic actuator system that will be operated in SCADA (Master Plan Project 04-1). The second project is the replacement of the three influent gates of Chlorine Contact Tanks (CCTs) 1 through 4 (Master Plan Project 09-1).	
Risk Assessment	This is a medium risk project, provided the gates are replaced according to condition assessment findings. However, the risk could be higher if a gate fails in a closed position, which could lead to a process interruption or overflows.	
Schedule	Activity Description	Cost
FY21	Allowance to replace gates as needed based on condition assessment.	\$79,400
FY22	Maintenance contract to blast and recoat the corroded area above the water line for the influent gates and keep them working until FY26 for complete replacement.	\$50,000
FY22-23	Allowance to replace gates as needed based on condition assessment.	\$166,600
FY24	Replace CCTs 1 through 4 influent gates.	\$451,600
FY25-26	Allowance to replace gates as needed based on condition assessment.	\$183,000
FY26	Replace headworks influent gates with stainless steel gates.	\$325,000
FY27-30	Allowance to replace gates as needed based on condition assessment.	\$402,400
Project Total		\$1,658,000

Project Photos:



Hydraulic gate actuator



San Rafael and Ross Valley influent gates

Headworks Equipment (GL 100-0350-550-8405)			
Type of Project	Design and Capital Construction	Lead Department	Technical Services
Project Delivery	Maintenance Project/ Professional Services Agreement/ Informally Bid		
Description and Justification	Equipment in the headworks building is used to collect, transport, dewater, and store screenings and grit from plant influent. Headworks equipment includes screens, hydraulic systems, grit hoppers, grit classifier, grit pumps, and augers and operates in a very corrosive and erosive environment requiring ongoing maintenance and refurbishment or replacement. This account includes two projects recommended in the 2018 Facility Master Plan, the replacement of the hydraulic pumps and control system used to open and close headworks gates (Master Plan Project 04-1), and the replacement of the four original grit classifier systems with new grit classifiers (Master Plan Project 04-2).		
Risk Assessment	This is a low risk project because most of the Headworks equipment has redundant equipment.		
Schedule	Activity Description	Cost	
FY21	Assess and design septic vector screening system.	\$41,000	
FY21-22	Allowance to replace equipment as needed based on condition assessment.	\$60,700	
FY22	Construct septic vector screening system	\$200,000	
FY23	Remove the hydraulic control system and install a new hydraulic unit with associated pumps and controls.	\$122,600	
FY24	Allowance to replace equipment as needed based on condition assessment.	\$32,800	
FY25-26	Replace four grit classifier systems including associated pumps, piping, and controls.	\$1,322,700	
FY26	Replacement of blowers and diffusers in aerated grit (Master Plan Project 04-3)	\$626,900	
FY27-30	Allowance to replace equipment as needed based on condition assessment.	\$151,300	
		Project Total	\$2,558,000

Project Photos:



Hydraulic control system



Grit classifier

Odor Control System Improvements (GL 100-0230-550-8406)			
Type of Project	Design and Capital Construction	Lead Department	Technical Services
Project Delivery	Professional Services Agreement/Formally Bid		
Description and Justification	Some wastewater treatment processes produce odorous and/or corrosive gases. The existing odor control scrubbers serve as one component of the Agency's overall odor control management program. Odor control scrubbers located in the Headworks, Biotower basement, and Solids Handling Building (SHB) are approaching the end of their service lives. A consulting firm prepared a conceptual design report with limited sampling to evaluate the overall scrubber performance and cost estimates to replace each unit with activated carbon media systems. While sampling showed existing scrubbers were not overly efficient, they are capable of removing odors to a level that did not impact the Agency's surrounding neighbors. The 2018 Facilities Master Plan considered the conceptual design report findings and recommends replacing the Headworks and Biotower odor scrubbers (Master Plan Project 06-3). An allowance for this replacement as well as the SHB odor scrubber replacement has been included in the CIP and will be evaluated in future years depending on actual system performance.		
Risk Assessment	This is a low risk project because the odor scrubbers are operating with minor issues.		
Schedule	Activity Description	Cost	
FY27	Placeholder for removing the Headworks odor scrubber and replace with an activated carbon scrubber.	\$2,271,000	
FY29	Remove the Biotower basement odor scrubbers and replace with a single activated carbon scrubber.	\$2,662,100	
FY30	Allowance to design and construct scrubber replacement in the SHB.	\$1,827,500	
		Project Total	\$6,760,600

Project Photos:



Headworks odor control scrubber



Solids Handling Building odor control scrubber

Primary Clarifiers Rehabilitation (GL 100-0350-550-8408)			
Type of Project	Design and Capital Construction	Lead Department	Technical Services
Project Delivery	Maintenance Project/Formally Bid		
Description and Justification	<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, other metal surfaces in the tanks require periodic industrial coating. Additionally, the mechanical equipment also requires periodic replacement. The 2018 Facilities Master Plan recommends a project to address work noted above plus repairing concrete damage and replacing metal piping with PVC piping (Master Plan Project 05-1). As each primary clarifier is taken down, the north walls, which have been found to be leaking into Gallery A at times, will be prepared and coated with a waterproofing product. Note: Additional allowance for flights/chains/sprockets/wear strips is included under the Process Tank Maintenance account and work may be combined with the work in this account if synergies are found during design.</p>		
Risk Assessment	This is a low risk project because the planned work will be conducted in the summer when primary clarifiers can be out of service for extended periods of time.		
Schedule	Activity Description	Cost	
FY24	Repair concrete, waterproof, and recoat the north wall of Clarifier No. 1, replace metal launders with FRP, and replace metal pipes.	\$393,800	
FY25	Repeat elements above for Clarifier No. 2.	\$406,400	
FY26	Repeat elements above for Clarifier No. 3.	\$838,600	
FY27	Repeat elements above for Clarifiers No. 4 and 5.	\$432,700	
FY28-29	Allowance for industrial coatings in Clarifier No. 6 and 7.	\$359,900	
		Project Total	\$2,431,400

Project Photos:



Primary Clarifiers



Primary Drive Unit

Secondary Clarifiers Rehabilitation (GL 100-0350-550-8409)			
Type of Project	Design and Capital Construction	Lead Department	Technical Services
Project Delivery	Professional Services Agreement/Formally Bid		
Description and Justification	There are four secondary clarifiers in the treatment plant. The 2018 Facilities Master Plan recommends a project to repair corrosion on mechanical equipment, metal structural components, and internal pipes, resurface the effluent trough concrete, and retrofit the catwalk with FRP grating, and repair corrosion on piping in the sumps in the pump room for each clarifier as needed (Master Plan Project 08-1). While each clarifier is out of service, the large drive turntables in Clarifiers No. 1, 3, and 4 will be replaced. The turntable drive for Clarifier No. 2 was replaced in 2011.		
Risk Assessment	This is a high risk project because failure of a secondary clarifier could lead to treatment plant process disruptions and possible discharge of effluent that does not meet NPDES treatment limits.		
Schedule	Activity Description	Cost	
FY22	Secondary Clarifier No. 3 construction.	\$450,000	
FY23	Secondary Clarifier No. 4 construction.	\$464,400	
FY24	Secondary Clarifier No. 1 construction.	\$479,200	
FY25	Complete Clarifier No. 2 construction.	\$494,500	
		Project Total	\$1,888,100

Project Photos:



Secondary clarifier internal equipment



Secondary clarifier in operation

RAS/WAS Pump Replacement (GL 100-0230-550-8410)			
Type of Project	Design and Capital Construction	Lead Department	Technical Services
Project Delivery	Professional Services Agreement/ Formally Bid		
Description and Justification	The 2018 Facilities Master Plan recommends a project to replace the Return Activated Sludge (RAS) and Waste Activated Sludge (WAS) pump systems (Master Plan Project 08-2). These pumping systems are an integral part of the activated sludge treatment process and are often original equipment. While the systems are currently operating without major issues, many of the pumps have moderate corrosion and leaks. Recently, maintenance work for the WAS pumps was performed in-house and as a result this project will only replace the RAS pumping system and install valving as needed to provide increased ability to isolate pumps for maintenance in the future.		
Risk Assessment	This is a high risk project because failure of the activated sludge system could lead to treatment plant process disruptions and possible discharge of effluent that does not meet NPDES treatment limits.		
Schedule	Activity Description	Cost	
FY21	The RAS pumping system, including pumps, valves, and VFDs will be replaced in-kind and a Professional Services Agreement will be executed for design assistance in developing the construction documents. Materials that require a long lead time will be pre-purchased to ensure construction completion during dry season in FY22.	\$383,000	
FY22	Construction of RAS pump system improvements.	\$494,300	
		Project Total	\$877,300

Project Photos:



RAS and WAS pumps

Process Piping Inspection/Repairs/Replacement (GL 100-0230-550-8412)			
Type of Project	Design and Capital Construction	Lead Department	Technical Services
Project Delivery	Professional Services Agreement		
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 CMSA. There are also several large diameter pipelines within the facility that transfer water between treatment processes, including the Primary Effluent and the RAS 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 a diver inspection or robotic inspection technology because the pipelines are difficult to keep dewatered. The 2018 Facilities Master Plan recommends two pipe repair projects in the galleries. The first project addresses corrosion on the 54-inch effluent pipe in Gallery C (Master Plan Project 10-1). The second project addresses repairs to chemical containment lines that are routed throughout the gallery system (Master Plan Project 00-2).		
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.		
Schedule	Activity Description	Cost	
FY21	Interior inspection of the pipelines and elastomeric joints, with possible uncovering of the exterior of some buried joints throughout the facility. Includes possible internal sealing of some or all of the elastomeric joints and external pipe repairs. Steel plates will also be added to both ends of the 54-inch storage pond effluent line and the small drain line into the 54-inch will be relocated and the damaged concrete near the 54-inch valve will be repaired.	\$175,000	
FY26	Replace chemical lines located along gallery walls with double contained PVC pipe and explore opportunities to relocate chemical piping to the bottom of the pipe rack.	\$119,900	
FY27	Allowance to inspect the San Rafael and Ross Valley Interceptors.	\$173,900	
		Project Total	\$468,800

Project Photos:



Biotower effluent pipe



Primary Effluent pipe manifold

Centrifuge Maintenance (GL 100-0350-550-8503)			
Type of Project	Design and Capital Construction	Lead Department	Technical Services
Project Delivery	Professional Services Agreement/Formally Bid		
Description and Justification	<p>The Agency dewateres digested sludge with three centrifuges that rotate at high speeds to remove water and produce biosolids. The high-speed rotation and corrosive operating environment necessitate a significant amount of routine maintenance for optimum performance. A manufacturer performed condition assessment of the three centrifuges in 2016 found they were all in relatively good condition. The 2018 Facilities Master Plan recommends replacing the existing centrifuges with new centrifuges that have larger capacity to handle the potential increase in biosolids related to increased delivery of organic waste. However, the timing of those increased biosolids loads is still uncertain and may take many years to materialize (if ever). Therefore, routine maintenance and refurbishment of the existing centrifuges will continue on a regular schedule until FY23, at which point the centrifuge system will be re-evaluated in its entirety in combination with the confirmed biosolids loadings at that time. The biosolids hoppers underneath the centrifuges have corrosion and operators are unable to switch between hoppers, resulting in unforeseen hopper overflows at times and imperfect truck filling. Options for the biosolids hoppers will be evaluated at the same time that the entire centrifuge system replacement is being evaluated.</p>		
Risk Assessment	<p>This is a medium risk project because the centrifuges would be over 25 years old before being fully replaced, however with proper maintenance the existing centrifuges are expected to operate and meet the Agency's needs. Project timing will be revisited with each annual CIP update based on the latest centrifuge system performance and condition.</p>		
Schedule	Activity Description	Cost	
FY21	Evaluate hopper system condition, identify options for improvements, and develop estimates of associated costs.	\$50,000	
FY23	Begin design of centrifuge replacement.	\$532,500	
FY24	Construct the centrifuge replacement.	\$2,878,300	
		Project Total	\$3,460,800

Project Photos:



Existing Centrifuges



Biosolids Hoppers

Cogeneration Maintenance (GL 100-0350-550-8504)		
Type of Project	Larger Maintenance Activities	Lead Department Maintenance
Project Delivery	Maintenance Project/Informally Bid/Formally Bid	
Description and Justification	<p>The cogeneration system runs continuously, utilizing biogas and natural gas to generate most of the Agency's electrical power and to supply the Agency's hot water needs. This account includes allowances for purchasing critical spare parts and to perform larger maintenance activities for the existing engine and generator. Larger maintenance activities include on-site upper- and lower-end rebuilds involving the cylinder heads and liners, valves, and pistons; or off-site overhaul work that includes a complete disassembly and reassembly with machining to restore the engine and generator to original factory specifications. The design and construction of a new cogeneration engine is covered in a separate CIP project and scheduled for completion in FY22. After the new engine is operational, the existing engine will rotate into a backup position and run-hour based routine maintenance cost should decrease accordingly, while new cost for the maintenance of the new engine will be added. Due to uncertainty about timing and actual costs, the maintenance costs for the new cogeneration system are currently not included in the CIP and will be updated with actual costs and included in the CIP once the construction of the new cogeneration system nears completion.</p>	
Risk Assessment	This is a high risk project because the existing engine has experience catastrophic failure and CMSA will be incurring significant costs to purchase power from PG&E.	
Schedule	Activity Description	Cost
FY21	Complete routine maintenance of the existing engine.	\$60,000
FY22	Allowances for routine maintenance of the existing cogeneration facilities, assuming the existing engine will see only limited run-hours while in the backup position after the new cogeneration engine is operational.	\$63,900
FY23	Scheduled top-end overhaul of existing cogeneration engine.	\$153,200
FY24-30	Allowances for routine maintenance of the existing cogeneration facilities, assuming the existing engine will see only limited run-hours while in the backup position after the new cogeneration engine is operational.	\$524,700
Project Total		\$801,800

New Cogeneration System (GL 100-0230-550-8505)		
Type of Project	Design and Capital Construction	Lead Department Technical Services
Project Delivery	Formally Bid	
Description and Justification	<p>This account includes allowances for designing and constructing a new cogeneration engine as recommended in the 2017 Master Plan and 2018 Cogeneration Predesign. On-going major maintenance activities on the existing and new (once constructed) cogeneration engines are covered in a separate CIP project. The design of the new cogeneration system began in FY20 and construction would occur in FY21 and FY22. This schedule coincides with the expansion of the OWRP program and the Agency's ability to sell excess power through a new PG&E Interconnection Agreement and power sale agreement with Marin Clean Energy. The existing cogeneration engine will remain available as a backup unit. Design of additional improvements to the cogeneration and gas treatment system will also occur in FY21 to improve operations and maintenance of the system and to minimize runtime on old gas treatment equipment. Construction of said improvements would occur in FY22. These additional improvements include a new lubrication oil system and waste coolant system, addition of biogas flow meters, controlled biogas recycle lines, redundant biogas chillers, and modifications to the biogas condensate removal systems.</p>	
Risk Assessment	<p>This is a low risk project because the existing engine can remain in service for an extended period of time if properly maintained. However, the Agency would lose the opportunity to generate additional revenue from a more efficient system.</p>	
Schedule	Activity Description	Cost
FY21	Procure and install replacement cogeneration technology and begin biogas treatment design.	\$5,781,001
FY22	Complete installation of a replacement cogeneration technology and construction of biogas treatment system.	\$2,552,000
Project Total		\$8,333,001

Project Photo:



Existing cogeneration system

Nutrient Removal (GL 100-0230-550-8417)		
Type of Project	Planning and Design	Lead Department Technical Services
Project Delivery	Formally Bid	
Description and Justification	<p>The 2019 Bay Area Watershed Permit includes a proposed nitrogen discharge cap for CMSA beginning in 2024 which is approximately 15 to 20 percent above CMSA's typical 2018 nitrogen discharge levels. Depending on CMSA's service area growth and future increases of the organic waste program, CMSA may be close to or above its nitrogen cap by 2024. Significant uncertainty exists at this time about the exact nature of the Regional Water Board's enforcement of the nitrogen caps in 2024, and specifically if, when, and how it would be enforced. Therefore there is a non-trivial probability that CMSA would not be impacted at all by this cap until 2029 or even much later permit cycles.</p> <p>However, in the event that it becomes evident that CMSA is impacted by a load cap, staff would propose to study and plan for potential compliance pathways in a thoughtful and systematic manner as soon as more specific information about potential compliance timelines is known. There are several promising process-related optimization measures that may facilitate CMSA comfortably meeting compliance at potentially relatively low cost. These measures may potentially have additional side benefits like decreased plant power consumption, increased biogas production, and more stable overall treatment plant or process performance.</p> <p>Due to the uncertain nature of this subject, funds for the planning, design and construction of nutrient removal facilities at CMSA are not included in the CIP at this time.</p> <p>However, CMSA staff will be closely monitoring nutrient related permitting developments on a continuous basis. If indications arise that CMSA may be impacted by nutrient load targets, staff will update the CIP accordingly.</p>	
Risk Assessment	This is a low risk project because there is still adequate time to prepare for potential future compliance targets if they materialize.	
Schedule	Activity Description	Cost
	None included at this time.	\$0
	Project Total	\$ 0

**CENTRAL MARIN SANITATION AGENCY
CAPITAL PROGRAM FUNDING MODEL**

Description	Revenue Program Period (FY21 - FY23)				Capital Fee with assumed 3.5% annual increase							
	Projected Actual Year 1 FY20	Adopted Year 2 FY21	Year 3 FY22	Year 4 FY23	Year 5 FY24	Year 6 FY25	Forecast Year 7 FY26	Year 8 FY27 (1)	Year 9 FY28	Year 10 FY29	Year 11 FY30	
CAPITAL PROGRAM FUNDING MODEL												
Capital reserve - beg bal	(FY20 at 5/1/20)	\$ 10,314,421	\$ 9,238,215	\$ 12,049,052	\$ 7,463,633	\$ 15,882,914	\$ 8,772,299	\$ 5,203,112	\$ 12,858,857	\$ 7,221,271	\$ 7,203,140	\$ 5,069,506
Debt issue proceeds	(Budgeted)		9,000,000		10,000,000			13,000,000				
SRF/FEMA cost reimbursement proceeds	(Act Recvd) (2)	319,306										
Capacity charges (1st)	(Act / Bud) (2) (6)	58,054	135,676	136,500	137,345	138,212	139,101	140,014	140,950	141,911	145,601	149,387
Debt coverage charges (2nd)	(Budgeted) (2)	-	991,833	989,252	1,138,977	1,138,902	1,296,820	1,297,352	1,296,070	1,520,664	1,510,102	1,509,789
Capital fee (3rd)	(Budgeted) (2)	-	1,243,029	711,029	935,611	378,072	615,592	870,580	4,894	323,994	601,164	840,293
Total annual capital funding sources		377,360	11,370,538	1,836,781	12,211,933	1,655,185	2,051,513	15,307,945	1,441,914	1,986,569	2,256,866	2,499,469
Total capital funding available		10,691,781	20,608,753	13,885,833	19,675,566	17,538,099	10,823,812	20,511,057	14,300,771	9,207,840	9,460,006	7,568,975
CIP Funding requirements from below	(Subject to change)	1,453,566	8,559,701	6,422,200	3,792,652	8,765,800	5,620,700	7,652,200	7,079,500	2,004,700	4,390,500	3,699,900
Net inc(dec) in capital reserve		(1,076,206)	2,810,837	(4,585,419)	8,419,281	(7,110,615)	(3,569,187)	7,655,745	(5,637,586)	(18,131)	(2,133,634)	(1,200,431)
Capital reserve - end bal		\$ 9,238,215	\$ 12,049,052	\$ 7,463,633	\$ 15,882,914	\$ 8,772,299	\$ 5,203,112	\$ 12,858,857	\$ 7,221,271	\$ 7,203,140	\$ 5,069,506	\$ 3,869,075
TOTALS		ANNUAL PROJECT AMOUNTS FROM CIP										
Annual CIP totals (3)	\$ 57,987,853	\$ 3,998,996	\$ 8,559,701	\$ 6,422,200	\$ 3,792,652	\$ 8,765,800	\$ 5,620,700	\$ 7,652,200	\$ 7,079,500	\$ 2,004,700	\$ 4,390,500	\$ 3,699,900
Less YTD expenditures @ 5/28	(2,545,430)	(2,545,430)	-	-	-	-	-	-	-	-	-	-
	<u>\$ 55,442,423</u>	<u>\$ 1,453,566</u>	<u>\$ 8,559,701</u>	<u>\$ 6,422,200</u>	<u>\$ 3,792,652</u>	<u>\$ 8,765,800</u>	<u>\$ 5,620,700</u>	<u>\$ 7,652,200</u>	<u>\$ 7,079,500</u>	<u>\$ 2,004,700</u>	<u>\$ 4,390,500</u>	<u>\$ 3,699,900</u>

	Major Projects (Not all Scheduled Projects)			
	FY21	FY22	FY23	FY24
Industrial Coatings & Concrete Rehabilitation	\$ 25,000	\$ 21,000	\$ 150,200	\$ 417,000
Outfall Inspection & Repairs	34,000	35,100	36,300	465,100
Facility Roofs Rehabilitation	30,000	889,200	25,000	25,800
Facility Structures Seismic Study	-	-	-	-
Electrical Distribution System Rehabilitation	105,000	-	489,352	2,457,100
Gates Rehabilitation	79,400	132,000	84,600	451,600
Headworks Equipment	70,900	230,800	122,600	32,800
Odor Control System Improvements	-	-	-	-
Primary Clarifiers Rehabilitation	-	-	-	393,800
Secondary Clarifiers Rehabilitation	-	450,000	464,400	479,200
RAS/WAS Pump Replacement	383,000	494,300	-	-
Influent Flow Meter Improvement	25,000	-	220,500	-
Centrifuge Maintenance	50,000	-	532,500	2,878,300
Cogeneration Maintenance	60,000	63,900	153,200	68,100
New Cogeneration System	5,781,001	2,552,000	-	-
	<u>\$ 6,643,301</u>	<u>\$ 4,868,300</u>	<u>\$ 2,278,652</u>	<u>\$ 7,668,800</u>

NOTES:

- (1) Capital reserve drawn during FY27. Financial Policy #555, Multi-Year Revenue Plan, states: Maintain a CIP reserve at an amount equal to the annual average value of the 10-year CIP. This amount is approximately \$5.7M. See also note (5) below
- (2) Certain amounts for FY20 already included in beginning capital reserve balance at 5/1/20
- (3) Annual CIP amounts from updated CIP, dated May 2020
- (4) The larger and more significant projects of the CIP are listed in the table to the left. The table is not inclusive of all CIP projects
- (5) \$11.5M proforma bond proceeds inserted in FY26 to fund remainder of CIP and maintain approximate \$5.5M reserve
- (6) Includes the Marin General Hospital 10-year payment plan fee of \$104K annually

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CENTRAL MARIN SANITATION AGENCY

Health & Safety Program Budget FY20 & FY21

TABLE 1 - HEALTH & SAFETY CORE PROGRAM

	Budget	Budget	Adopted	FY20	Adopted	FY21
	FY18	FY19	FY20	Change	FY21	Change
				vs FY19		vs FY20
<u>Fixed Expenses</u>						
Salary - Safety Specialist/Manager (1 FTE)	111,839	118,000	119,771	1.5%	124,562	4.0%
Car Allowance - Health & Safety Manager (1 FTE)	4,800	4,800	4,800	0.0%	4,800	0.0%
Benefits - CalPERS Retirement	24,574	29,400	8,208	-72.1%	8,782	7.0%
Benefits - SS/Medicare	1,681	1,800	1,809	0.5%	1,876	3.7%
Benefits - Health	11,040	29,200	11,140	-61.9%	11,585	4.0%
Benefits - PEHP	1,680	1,700	1,745	2.7%	1,818	4.2%
Benefits - Retiree Health (2)	6,481	6,400	6,509	1.7%	6,769	4.0%
Admin Support (200 hrs @ 66.39/hr)	-	-	-	NA	-	NA
Total Salaries & Benefits	162,095	191,300	153,982	-19.5%	160,191	4.0%
<u>Variable Expenses (account 6830-016-06)</u>						
Professional Services	6,000	6,000	6,000	0.0%	6,000	0.0%
Publications	1,300	1,600	1,600	0.0%	1,700	6.3%
Memberships	750	750	750	0.0%	795	6.0%
Office Supplies	450	450	450	0.0%	500	11.1%
Safety Shoes	200	200	200	0.0%	250	25.0%
Training Materials	2,000	2,000	2,000	0.0%	2,000	0.0%
Computer Software/Supply	3,600	4,000	4,000	0.0%	4,200	5.0%
Pump Station Safety Assessment	-	-	-	NA	-	NA
Seminars/Conferences	6,200	5,500	6,200	12.7%	5,800	-6.5%
Subtotal Variable Expenses	20,500	20,500	21,200	3.4%	21,245	0.2%
Total Health & Safety Program Expenses	182,595	211,800	175,182	-17.3%	181,436	3.6%
<u>Testing/Training Expenses</u>						
Testing and Training-CMSA 6830-017-01	13,100	5,560	9,100	63.7%	5,200	-42.9%
Testing and Training-NSD 6830-017-06	11,200	4,560	4,800	5.3%	5,200	8.3%
Subtotal Testing and Training	24,300	10,120	13,900	37.4%	10,400	-25.2%
Total Program Expenses	206,895	221,920	189,082	-14.8%	191,836	1.5%
Admin Fee (5% of NSD's share H&S Mgr Salary)	5,592	2,400	2,400	0.0%	2,500	4.2%
Salary - ARS&SO (.25 FTE)	35,842	38,800	40,200	3.6%	41,400	3.0%
Benefits - ARS&SO (FY18: .25 FTE)	11,593	12,400	11,100	-10.5%	11,800	6.3%
Car Allowance - ARS&SO Salary (.25 FTE)	1,200	-	-	NA	-	NA
Total Salaries & Benefits - ARS&SO	48,635	51,200	51,300	0.2%	53,200	3.7%

CENTRAL MARIN SANITATION AGENCY

Health & Safety Program Budget FY20 & FY21

	FY20	FY20	FY21	FY21	Comments
	NSD	CMSA	NSD	CMSA	
	39.75%	60.25%	39.75%	60.25%	
Salary - Safety Specialist/Manager (1 FTE)	47,600	72,200	49,500	75,000	3% & 4% COLA eff 07/01 and one step adjust each fiscal year.
Car Allowance - Health & Safety Manager (1 FTE)	1,900	2,900	1,900	2,900	\$400/month
Benefits - CalPERS Retirement	3,300	4,900	3,500	5,300	PEPRA (FY19 budgeted open position at higher Classic ER rate)
Benefits - SS/Medicare	700	1,100	800	1,200	ER paid medicare for salary and car allowance (1.45%)
Benefits - Health	4,400	6,700	4,600	7,000	
Benefits - PEHP	700	1,100	800	1,100	ER contributes 1.5% base salary to Post Employment Health Plan
Benefits - Retiree Health (2)	2,600	3,900	2,700	4,100	
Admin Support (200 hrs @ 66.39/hr)	-	-	-	-	Eliminated FY15
Total Salaries & Benefits	61,200	92,800	63,800	96,600	
<u>Variable Expenses (account 6830-016-06)</u>					
Professional Services	2,400	3,600	2,400	3,600	Contract services to assist in program development.
Publications	600	1,000	700	1,000	Mancomm, CalOSHA Reporter, ANSI/NFPA standards
Memberships	300	500	300	500	NSC, CWEA, American Society Safety Engineers
Office Supplies	200	300	200	300	
Safety Shoes	100	100	100	200	
Training Materials	800	1,200	800	1,200	Training Supplies, DVDs
Computer Software/Supply	1,600	2,400	1,700	2,500	Keller On-Line, MSDS Online
Pump Station Safety Assessment	-	-	-	-	
Seminars/Conferences	2,500	3,700	2,300	3,500	CASA, CWEA, Fall Prot, Forklift, and WC training
Subtotal Variable Expenses	8,500	12,800	8,500	12,800	
Total Health & Safety Program Expenses	69,700	105,600	72,300	109,400	
<u>Testing/Training Expenses</u>					
Testing and Training-CMSA 6830-017-01	-	9,100	-	5,200	Hearing tests, CPR/First Aid, ICS, Traffic Control
Testing and Training-NSD 6830-017-06	4,800	-	5,200	-	Hearing tests, CPR/First Aid, ICS, Traffic Control
Subtotal Testing and Training	4,800	9,100	5,200	5,200	
Total Program Expenses	74,500	114,700	77,500	114,600	
Admin Fee (5% of NSD's share H&S Mgr Salary)	2,400	-	2,500	-	Applies to NSD Health & Safety revenue budget
Salary - ASRS&SO (.25 FTE)	20,100	20,100	20,700	20,700	.25 FTE cost shared equally (NSD not budgeted)
Benefits - ARS&SO (FY18: .25 FTE)	5,550	5,550	5,900	5,900	.25 FTE cost shared equally (NSD not budgeted)
Car Allowance - ARS&SO Salary (.25 FTE)	-	-	-	-	NSD's ARS&SO does not receive car allowance
Total Salaries & Benefits - ARS&SO	25,650	25,650	26,600	26,600	Admin, Risk Services & Safety Officer (ARS&SO)

	FY20 Budget Summary		FY21 Budget Summary		
	NSD	CMSA	NSD	CMSA	
Program Expenditures	69,700	N/A	72,300	N/A	H&S Revenue Budget (Excludes ARS&SO)
5% Admin Fee	2,400	N/A	2,500	N/A	H&S Revenue Budget 5% Admin Fee
TOTAL 4070-000-00 Budget	72,100		74,800		
	-	38,450	-	39,400	TOTAL 6830-016-01 H&S Prog & 12.5% ASRS&SO
NSD reimburses CMSA for Outside Training Services	4,800	9,100	5,200	5,200	TOTAL 6830-017-06 (NSD) & 01 (CMSA)
Total budget for NSD	76,900	47,550	80,000	44,600	Total CMSA shared expenses and 12.5% ASRS&SO

CENTRAL MARIN SANITATION AGENCY

Public Education Committee Biennial Budget FY20 with FY21 Revised Adjustments

Program Costs	Adopted FY20	Adopted FY21
Event Enrollment (Booth costs and event support)	\$ 4,000	\$ 4,000
Juggler Show (20 shows per year annual cost)	12,000	10,000
RxSafe Marin	-	14,000
Fast Forward/Kidspeak Publication (110,000 copies)	4,000	4,000
Logo Development (new logo every other year)		2,000
Awards (6 plaques - purchase plaques local and state)	600	-
Meeting Expenses (copies, demo promo/brochure items)	500	500
SAV-R-BAY website redesign	5,000	5,300
Educational Video reproduction/updating		
Booth Set Up Supplies (numerous events throughout year)	1,000	1,000
Booth Technology equipment		2,000
Brochures (printing/updates/ development)	3,000	3,000
MCSTOPPP Calendar Support		
Promotional Items	12,000	24,000
STRAW - Students and Teachers Restoring A Watershed	1,000	1,000
High School Cu, Hg watershed Audit	1,000	1,000
Marin Science & Environmental Leadership Program	2,500	2,500
Contingency	5,000	
Totals	\$ 51,600	\$ 74,300

Program Cost Allocation to Participating Members			
Annual Total Program Costs			
Agency	Percent Share	Adopted FY20	Adopted FY21
CMSA	40.6%	\$ 20,950	\$ 30,166
LGVSD	13.2%	\$ 6,811	9,808
NSD	24.8%	\$ 12,797	18,426
SASM	11.6%	\$ 5,986	8,619
SMCSD	6.8%	\$ 3,509	5,052
SD5	3.0%	\$ 1,548	2,229
Totals	100.0%	\$ 51,600	\$ 74,300

Member Revenue to CMSA	
(Cost Plus 15% Program Management Fee)	
Adopted FY20	Adopted FY21
\$ 7,833	\$ 11,279
14,716	21,190
6,883	9,912
4,035	5,810
1,780	2,563
\$ 35,248	\$50,754

CMSA Portion (40.6%)	\$ 30,166
Public Education Group Portion (59.4%)	\$ 44,134