



Central Marin Sanitation Agency

COMMISSION SPECIAL MEETING AGENDA

Tuesday, August 21, 2018

at the Agency Office

7:00 p.m.

Members of the public may directly address the Board on any item appearing on the Agenda. They may address the Board when the item is called by the Board Chair and he/she indicates it is the time for the public to speak to the agenda item. Audio and video recordings will be made of this meeting and will be posted to the Agency website.

1. 7:00 p.m.: Call Meeting to Order/Pledge of Allegiance

2. Roll Call

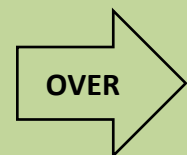
3. Open Period for Public Participation

Open time for public expression, up to two minutes per speaker, on items within CMSA's jurisdiction and not on the Board of Commissioners' agenda. The Board will not discuss or take action during open time.

4. Consent Calendar

Matters listed under this item are considered routine and will be enacted by one motion. The consent calendar may include resolutions; therefore, the motion, second, and vote will also be applicable to the resolution and recorded accordingly. There will be no separate discussion of these items unless requested by a member of the Board or the public prior to the time the Board votes on the motion to adopt.

- a) Minutes—Regular Board Meeting—July 10, 2018
- b) Treasurer's Report—Operating Account—July 2018
- c) Schedule of Investments—July 2018
- d) NPDES, Process, and Maintenance Report—July 2018
- e) Performance Metric Report—July 2018
- f) Resolution of Appreciation for Al Boro
- g) Revised Leaves of Absence Policy
- h) Fiscal Year 2018 Green Business Report



5. **Agency Facilities Master Plan Presentation**
Recommendation: Receive the Agency Facilities Master Plan presentation from Carollo Engineers, and provide comments and/or direction to the General Manager, as appropriate.
6. **Board of Commissioners' Compensation Policy**
Recommendation: Review and discuss the Board of Commissioners' Compensation Policy, and provide direction to the General Manager, as appropriate.
7. **CMSA Response to the Marin County Civil Grand Jury Report – Consolidation of Sanitation Districts**
Recommendation: Provide direction to staff on the preparation of the Agency's response.
8. **Adjourn to Closed Session**
PUBLIC EMPLOYEE PERFORMANCE EVALUATION
California Government Code Section 54957
Title: General Manager
9. **Reconvene in Open Session**
10. **Compensation and/or Benefit Adjustment to General Manager***
Recommendation: Discussion and possible action.
11. **North Bay Watershed Association (NBWA) Report***
12. **Oral Reports by Commissioners/General Manager***
13. **Next Scheduled Meeting**
Tuesday, October 9, 2018 at 7:00 p.m. at the Agency office.

*Information not furnished with Agenda

In compliance with the Americans with Disabilities Act, if you need special assistance to participate in this meeting, please contact Central Marin Sanitation Agency at 415-459-1455. For auxiliary aids or services or other reasonable accommodations to be provided by the Agency at or before the meeting, please notify the Agency at least 3 business days in advance of the meeting date (meeting is the second Tuesday of each month). If the Agency does not receive timely notification of your reasonable request, the Agency may not be able to make the necessary arrangements by the time of the meeting.



Central Marin Sanitation Agency

COMMISSION REGULAR MEETING MINUTES
Tuesday, July 10, 2018
at the Agency Office

Note: The minutes are an official record of the Board meeting.

There are also official audio and video recordings available on the Agency's website at www.cmsa.us. The time stamps on these minutes refer to the items' start times on the video recording of the meeting. Please contact CMSA at 415-459-1455 for information about receiving a copy of these records.

1. Call Meeting to Order/Pledge of Allegiance

Chair Furst called the meeting to order at 7:00 p.m. A quorum was present.

2. Roll Call

00:00:30

Present: Chair Diane Furst; Vice Chair Tom Gaffney; Commissioners Maribeth Bushey, Michael Boorstein, Dean DiGiovanni, and Dan Hillmer

Absent: None

Staff present: Jason Dow, General Manager and Kate Brouillet, Recording Secretary

Public present: Chris Kubik, Marin Clean Energy; Chance Cutrano, Sierra Club of Marin; Tom Flynn, resident of Larkspur; Dan Monte, resident of San Anselmo; Norma Fragoso, Environmental Forum of Marin; and Felicia Newhouse, RVSD.

3. Comments from the Public

00:00:52

There were no comments from the public.

4. Consent Calendar

00:01:10

- a) Minutes—Regular Board Meeting—June 12, 2018
- b) Treasurer's Report—Operating Account—June 2018
- c) Schedule of Investments—June 2018
- d) NPDES, Process, and Maintenance Report—June 2018
- e) Performance Metric Report—June 2018
- f) Regulatory Consulting Services Agreement with MMO Consulting
- g) Resolution of Appreciation for Kit Groves
- h) FY 2018 Asset Management Report—Annual Report
- i) Emulsion Polymer Supply Contract Extension

Comments from the Public:

There were no comments from the public.

ACTION: Commissioner Hillmer moved to approve the Consent Calendar items 4a-4j; second, Commissioner Gaffney.

Ayes: BOORSTEIN, BUSHEY, DIGIOVANNI, FURST, GAFFNEY, HILLMER

Nos: NONE

Abstentions: NONE

5. FY 2018-19 Commission Officers, Finance Committee, and North Bay Watershed Association Board Appointments 00:01:44

GM Dow stated that the Commission annually selects officers and makes appointments to its standing Finance Committee and the North Bay Watershed Association's (NBWA) Board of Directors. He said that these appointments are for a one-year term and are normally made at the July Board meeting. GM Dow stated that he met with alternate Commissioner Boro a few months ago, and at that time he indicated his intention to resign from the CMSA Board.

The Board briefly discussed nominations of Board members for the open positions.

Comments from the Public

There were no comments from the public.

ACTION: Commissioner Gaffney nominated Diane Furst for Commission Chair; second, Commissioner Bushey.

Ayes: BOORSTEIN, BUSHEY, DIGIOVANNI, FURST, GAFFNEY, HILLMER

Nos: NONE

Abstentions: NONE

Commissioner Bushey nominated Commissioner Gaffney for Vice-Chair.

Commissioner Gaffney said he expects to be removed from the CMSA Board soon, as RVSD rotates Board members to serve on the CMSA Board every two years.

ACTION: Commissioner Gaffney nominated Commissioner Boorstein for Vice Chair; second, Commissioner Hillmer.

Ayes: BOORSTEIN, BUSHEY, DIGIOVANNI, FURST, GAFFNEY, HILLMER

Nos: NONE

Abstentions: NONE

ACTION: Commissioner Hillmer nominated Commissioner DiGiovanni for Secretary; second, Commissioner Boorstein.

Ayes: BOORSTEIN, BUSHEY, DIGIOVANNI, FURST, GAFFNEY, HILLMER

Nos: NONE

Abstentions: NONE

ACTION: Commissioner Hillmer nominated the currently serving Commissioners for the Standing Finance Committee (Commissioners Boorstein, DiGiovanni, and Gaffney).

Ayes: BOORSTEIN, BUSHEY, DIGIOVANNI, FURST, GAFFNEY, HILLMER

Nos: NONE

Abstentions: NONE

Chair Furst stated that due to time commitments, she cannot continue to serve as the North Bay Watershed Association Board representative.

Commissioner Boorstein stated he would be able to represent CMSA for the NBWA Board.

Chair Furst called for a vote on selecting Commissioner Boorstein as the NBWA Board representative for CMSA, and GM Dow as the Alternate.

Ayes: BOORSTEIN, BUSHEY, DIGIOVANNI, FURST, GAFFNEY, HILLMER

Nos: NONE

Abstentions: NONE

Commissioner Gaffney asked that Board compensation for serving on standing committees be included as a future agenda item for discussion.

GM Dow stated that he could bring the Board policy on Compensation to a future meeting for review and discussion by the Board.

6. Participation in the MCE Deep Green Program

00:08:40

GM Dow stated that participation in the MCE Deep Green Program has been discussed by the Board a few times in the past. At last month's meeting, the Board reviewed its power procurement costs, energy generation sources, renewable certification, and actual real time greenhouse gas emissions for energy delivered to Program participants. He stated that a key question raised and considered by Board members was: "How does MCE guarantee that its Program power is 100% renewable at any time, given the daily and seasonal variations in its renewable generation profile?" He said that at the conclusion of the Board discussion and

public comment period, the Board decided to continue the Program item to the July meeting and directed staff to seek responses to several questions.

GM Dow stated that Chris Kubrik, Business Development Manager with Marin Clean Energy, provided the answers to the Board's questions that were included in the staff report, and was in attendance.

Commissioner Bushey asked Ms. Kubrik to describe what the source of the energy would be for a peak load demand by the Agency during a night-time winter storm event.

Ms. Kubrik gave a detailed answer describing energy sources, interconnections through the grid via the CAISO, responsibilities for energy generation and distribution, and resource adequacy. She stated that the power that is received by customers is not specifically related to the generation of the energy, and that the Deep Green Program is a contractual arrangement with customers, mapped to MCE's supply from solar and wind sources.

Commissioner Bushey asked Ms. Kubrik to clarify a chart supplied with the staff memo. Ms. Kubrik answered Commissioner Bushey's question.

Chair Furst invited the public to speak.

Comments from the Public

Dan Monte, resident of San Anselmo, stated that he encourages CMSA to go with the Deep Green Program, as it increases the use of renewable power.

Norma Fragoso of the Environmental Forum of Marin stated that she is very concerned with the increase in greenhouse gas emissions, commends CMSA for producing its own energy, and going to Deep Green would set an example by reducing the Agency's emissions to zero.

Tom Flynn, a resident of Larkspur and a professional in environmental management, stated that it is a matter of conscience to take advantage of this opportunity to choose sustainable options, and that it is an investment in renewable energy.

Chance Cutrano of the Sierra Club of Marin stated that these types of incremental steps toward sustainability are cumulative and important, and encourages the Board to choose the Deep Green Program.

The Board discussed participation in the Deep Green program, including clean energy development, CMSA's energy production and eventual delivery of excess energy, and green energy development in the county.

ACTION: Commissioner Boorstein moved to recommend that CMSA participate in the MCE Deep Green Program; second, Commissioner Hillmer.

Ayes: BOORSTEIN, FURST, GAFFNEY, HILLMER

Nos: BUSHEY, DIGIOVANNI

Abstentions: NONE

The motion passed.

Some members of the public left the meeting.

7. Proposed FY 19 Agency Business Plan

00:48:48

GM Dow stated that over the past several months, concurrent with development of the Agency's FY 19 budget and updating its 10-year Capital Improvement Program, the Agency's Strategic Planning Committee (ASPC) prepared the proposed FY 19 Business Plan. He referred to the Board memo and reviewed the significant new objectives in the plan.

The Board discussed the plan and asked a few questions regarding some of the Actions, including the FY 20 debt issuance and laboratory accreditation.

GM Dow answered the Board's questions.

Chair Furst said that the plan is visually attractive and easy to read, and Commissioner Gaffney noted there were a lot of actions to accomplish.

Commissioner Gaffney said that there was one change he recommended for the last Action under Objective 4.2, that "treatment plant manager" should be changed to "chief plant operator."

GM Dow noted two other corrections to be made on Objective 6.1, the word "programs" is to follow the word "compensation" in the second to the last Action; and "a benefit" should be added after the word "Prepare" and the word "program's" removed, in the last Action.

Comments from the Public:

There were no comments from the public.

ACTION: Commissioner DiGiovanni moved to adopt the Agency's FY 19 Business Plan with the corrections as stated above; second, Commissioner Gaffney.

Ayes: BOORSTEIN, BUSHEY, DIGIOVANNI, FURST, GAFFNEY, HILLMER

Nos: NONE

Abstentions: NONE

8. Reject All Bids for the Pavement Rehabilitation Project

01:04:30

GM Dow stated that bid proposals for the Pavement Rehabilitation Project (Project) were opened on June 19, and only one bid proposal by Ghilotti Bros. Inc. (GBI) for \$412,413 was received, which was significantly higher than the construction cost estimate of \$190,000. GM Dow stated that after the bid opening, staff contacted several contractors on the Project's plan holders list and discussed the project costs with GBI's estimator. GM Dow said that some contractors decided to prepare and submit bids on larger paving projects that opened on the same day as the CMSA

project. He stated that as the bid proposal significantly exceeds the current project budget in the FY19 Capital Improvement Plan, staff recommends that all bids be rejected.

GM Dow said that based on the current competitive bid climate, staff plans to informally bid the Agency's high priority paving work and re-bid the remaining paving work this winter after the construction season ends.

The Board asked a few questions regarding the Uniform Public Construction Cost Accounting Act (UPCCAA) bidding requirements, the areas that need paving work, the reasoning for the higher bid proposals, and outreach to prospective contractors.

GM Dow answered the Board's questions.

Comments from the Public

There were no comments from the public.

ACTION: Commissioner Hillmer moved to reject all bids for the Pavement Rehabilitation Project; second, Commissioner Bushey.

Ayes: BOORSTEIN, BUSHEY, DIGIOVANNI, FURST, GAFFNEY, HILLMER

Nos: NONE

Abstentions: NONE

9. Cancel the September Board Meeting and Reschedule the August Board Meeting 01:12:48

GM Dow stated that the Board periodically cancels a regular Board meeting if staff informs the Board that there is not any new, priority, or time sensitive business items planned for the regular meeting agenda. He said if the Board cancels the meeting, staff includes that month's routine business items on the subsequent month's Board meeting agenda.

GM Dow stated that over the past several years, the Board has cancelled its August meeting, but this year, due to staff vacation schedules and to accommodate the Facilities Master Plan presentation by Carollo Engineers, staff is proposing to cancel the September meeting and reschedule the August meeting to either Tuesday, 8/21, or Thursday, 8/23. He said that he has contacted most Board members, and each has indicated their availability for the proposed August meeting dates.

The Board discussed the proposed meeting times, and agreed on August 21.

Comments from the Public

There were no comments from the public.

ACTION: Commissioner Hillmer moved to cancel the regular August and September Board meetings, and to schedule a special meeting for August 21; second, Commissioner DiGiovanni.

Ayes: BOORSTEIN, BUSHEY, DIGIOVANNI, FURST, GAFFNEY, HILLMER

Nos: NONE

Abstentions: NONE

10. North Bay Watershed Association (NBWA) Report **01:15:07**

Chair Furst stated that the NBWA Board meeting was postponed to July 13 due to the July 4th holiday, and expects there will be a report from Commissioner Boorstein next month. Commissioner Boorstein said he plans to attend the meeting.

11. Oral Reports by Commissioners/General Manager **01:15:30**

GM Dow referred to his handout and reported:

- Staff found a discharged bullet on the primary clarifier deck and brought it to the San Quentin gun range to discuss with the range control officer. It was the second bullet found in the past year. Staff notified San Rafael police, and both San Quentin and SRPD are performing an investigation.

DIRECTION: Commissioner Bushey, with concurrence of the Board, asked staff to obtain a written response from San Quentin on the results of their investigation and the policy/procedure put in place to address this issue.

- The Technical Services Manager recruitment closed on July 2nd and interviews are scheduled for the end of July; a new hire is planned by September.
- The Safety Manager recruitment interviews have been completed, and one of two top candidates will be selected by 7/13.
- A replacement ferric tank installation project, including a chemical-resistant concrete coating, seismic restraints, and new piping supply system, was completed by Agency maintenance staff.

Commissioner Gaffney commented on the July Informational Item #1 regarding the EPA Rulemaking Process for Blending.

12. Next Scheduled Meeting **01:23:44**

Special Meeting: Tuesday, August 21, 2018 at 7:00 p.m. at the Agency office.

Chair Furst adjourned the meeting at 8:25 p.m.

Respectfully submitted,

Kate Brouillet, Recording Secretary

Dean DiGiovanni, Secretary

Central Marin Sanitation Agency
Treasurer's Report - Operating Account
For the Month of July 2018

I. Accounts Summary: Bank & Investment Accounts

Summary of Bank & Money Market Accounts

Westamerica Bank - Account Activity shown below	\$ 490,808.93
Local Agency Investment Fund (LAIF) - Refer to Schedule of Investments	19,052,084.95
California Asset Management Program (CAMP) - Refer to Schedule of Investments	366,093.00
Total Bank & Investment Accounts: Ending Balance on July 31, 2018	<u>\$ 19,908,986.88</u>

II. Account Activity for Westamerica Bank

Beginning Balance on July 1, 2018 1,639,442.79

Cash Receipts (Deposits into Westamerica):

Transfers from LAIF	550,000.00
JPA Service Charges (FY19 Q1: RVSD, SRSD)	2,611,156.40
Debt Service Charges (FY19 Q1: RVSD, SRSD)	3,192,963.13
Capacity Charges: SRSD - FY18: 1 Residential Connection, 77 Fixture Units	38,956.37
Permit and Inspection Fees	200.00
LGVSD - pollution prevention & FOG (FY18 3Q: January-March)	2,862.98
RVSD - FOG Program (FY18 3Q: January-March)	2,945.30
SRSD - FOG Program (FY18 3Q: January-March)	3,051.91
Almonte FOG Program (FY18 3Q: January-March)	778.72
Revenue from Haulers & RVs	5,124.93
Revenue from Organic Waste Programs	18,652.28
SQSP Wastewater Services Contract (FY18: May & June)	179,817.66
SQ Village Operations & Maintenance Contract (FY18: June)	8,256.12
COBRA Health Benefit Payments from separated employees/retirees	89.44
Miscellaneous Reimbursements: CSRMA Health & Wellness Program, SD#2 check issued in error to CMSA will be reimbursed to SD#2	5,303.00
Total Cash Receipts	<u>\$ 6,620,158.24</u>

Cash Disbursements (Withdrawals from WestAmerica):

July 2018 Operating account disbursements register (see attached)	\$1,424,989.25
Regular Payroll paid 07/06/18	126,431.87
Regular Payroll paid 07/20/18	138,170.59
Transfers to EFTPS Federal Payroll Taxes (07/05, 07/11, 07/25)	79,148.51
Transfers to LAIF (FY19 Q1: JPA Payments)	6,000,000.00
Bank Fee	51.88
Total Cash Disbursements	<u>\$7,768,792.10</u>
Ending Balance on July 31, 2018	<u>\$ 490,808.93</u>

Prepared by: 
Kenneth Spray, Administrative Services Manager

Reviewed by: 
Jason Dow, General Manager

Central Marin Sanitation Agency
 Operating Account Disbursements Register
 For the Month of July 2018

Check Number	Date	Vendor/Payee	Amount	Description
17043				Last check # from prior month's register
17044	07/03/18	Phillip Frye	212.97	Reimbursement for retiree health benefits by check
17045	07/03/18	James L. Johnson	183.34	Reimbursement for retiree health benefits by check
17046	07/03/18	Byron Jones	237.34	Reimbursement for retiree health benefits by check
17047	07/07/18	Allied Electronics Inc	17.89	Fuse holder
17048	07/07/18	Allied Fluid Products Corp	5,198.33	Process tank wash-down fire hoses (20)
17049	07/07/18	Bartley Pump Inc	4,300.00	SQPS FY 18 CIP: Motor Relocation Project, June 2018 (Note B)
17050	07/07/18	Katherine Brouillet	185.23	Employee expense reimb: Office/break room supplies
17051	07/07/18	CDW Government, Inc.	733.95	Windows server back-up license renewal
17052	07/07/18	City Electric Supply	23.96	Electrical fittings
17053	07/07/18	Evoqua Water Tech LLC	9,941.62	Hydrogen peroxide (1 delivery)
17054	07/07/18	Fastenal Company	873.73	Miscellaneous parts & supplies for inventory, June 2018
17055	07/07/18	Foster Flow Control	163.50	Valve hand wheel
17056	07/07/18	Grainger	2,944.34	Replacement hose and angle valves for primary clarifier rehabilitation; misc. electrical parts (5 invoices)
17057	07/07/18	Harrington Industrial Plastics	8,838.99	Primary clarifier rehabilitation parts; reclaimed water piping and hose bibs; PVC pipe, valve and fittings for inventory (4 invoices)
17058	07/07/18	Horizon Dist. Inc	449.77	Sprinkler parts and landscaping materials
17059	07/07/18	Kaman Industrial Technologies	18,003.00	Gallery system expansion joints and ratcheting wrenches
17060	07/07/18	Lystek International LTD	8,077.33	Biosolids beneficial reuse fee, June 2018
17061	07/07/18	Marin Color Service	222.35	Paint supplies, June 2018
17062	07/07/18	Marin Office Supply	172.21	Office supplies, June 2018
17063	07/07/18	McMaster-Carr Supply Co.	2,222.16	Primary clarifier 3W line rehabilitation hardware
17064	07/07/18	Monica Oakley	3,900.00	Prof Svcs: Regulatory consulting, June 2018
17065	07/07/18	MurCal Inc	2,050.15	Cogeneration system pressure sensors
17066	07/07/18	Navia Benefit Solutions	130.68	Balance due from 2017
17067	07/07/18	P.G.& E.	11,028.30	Electricity service, 05/15-06/13/2018
17068	07/07/18	Platt	2,029.85	Conduit for inventory
17069	07/07/18	Roy's Sewer Service, Inc.	6,562.50	San Quentin Village PS Maint: Hydro flushing, cleaning, and CCT inspection of sewer mains (Note B)
17070	07/07/18	SPURR	1,568.04	Natural gas supply, May 2018
17071	07/07/18	Synagro West, Inc.	4,042.50	Biosolids land application fee, May 2018
17072	07/09/18	Teledyne Instruments Inc	382.15	Battery backup cables for lab
17073	07/09/18	Tidal Marine Construction Inc	19,950.00	Prof. Svcs: FY 18 marine outfall diffuser inspection and repairs
17074	07/09/18	Univar USA Inc	7,932.70	Sodium bisulfate (1 delivery); sodium hypochlorite (1 delivery)
17075	07/09/18	VWR International	197.36	Lab chemical supplies
17076	07/09/18	CASA	6,500.00	Bay Area Biosolids Coalition membership fee, FY 18-19
17077	07/09/18	DLT Solutions, Inc.	612.50	Annual AutoCAD license renewal
17078	07/10/18	Dublin San Ramon	680.00	Bay Area Chemical Consortium participation fee, FY 18-19
17079	07/10/18	California Public Employee	4,127.45	Contribution to Retiree Health Benefits Trust Fund, PPE 06/30/2018 (Note C)
17080	07/10/18	California State Disbursement	250.50	EE Garnishment, PPE 06/30/2018 (Note A)
17081	07/10/18	ICMA Retirement Trust-457	4,073.00	Deferred compensation contributions, PPE 06/30/2018 (Note A)
17082	07/10/18	Navia Benefit Solutions	607.68	Flexible spending account, PPE 06/30/2018
17083	07/11/18	SEIU Local 1021	1,026.65	Union dues, PPE 06/30/2018
17084	07/12/18	South County of Marin CDJR	20,900.00	Replacement Agency vehicle, 2018 Jeep Grand Cherokee
17085	07/12/18	AireSpring	775.27	Telephone service, June 2018
17086	07/12/18	Amazing Solutions, Inc.	75.00	Prof Svcs: Administrative software support, June 2018
17087	07/12/18	Aramark Uniform Services	1,146.10	Uniform service, June 2018
17088	07/12/18	Aramark Uniform Services	62.87	Replacement uniform jacket
17089	07/12/18	Brandon Tire	843.40	Bobcat tire replacement
17090	07/12/18	CAL-CARD	6,144.17	State of California Purchase Card, May-June 2018
17091	07/12/18	Carollo Engineers, Inc.	12,786.29	Prof Svcs: PG&E Interconnection Design Project and 2017 Facilities Master Plan Project, June 2018

Central Marin Sanitation Agency
 Operating Account Disbursements Register
 For the Month of July 2018

Check Number	Date	Vendor/Payee	Amount	Description
17092	07/12/18	Abraham Clark	600.00	Employee expense reimb: Operations Grade III Exam Review
17093	07/12/18	Comcast	191.20	Internet service, 07/04-08/03/2018
17094	07/12/18	Dee Consultants LLC	6,720.00	Prof Svcs: Construction Management Support, June 2018
17095	07/12/18	Evoqua Water Tech LLC	194.80	Lab tank rentals
17096	07/12/18	Fisher Scientific	546.28	Bacteria, borate buffer, and lab containers (3 invoices)
17097	07/12/18	Foster & Kroeger	11,500.00	Landscape maintenance: Removal of 7 pine trees and stumps, removal of brush on Andersen hillside
17098	07/12/18	Kit Groves	260.00	Employee expenses eligible for Agency dental reimbursement
17099	07/12/18	Hagel Supply Co.	365.55	Paper supplies and cleaners, June 2018
17100	07/12/18	Home Depot Credit Services	1,615.07	Landscape supplies; electrical tools and supplies
17101	07/12/18	IEDA, Inc.	809.00	Labor relations consulting, July 2018
17102	07/12/18	Jackson's Hardware	1,779.92	Safety flags, groundskeeping supplies, concrete anchors, June 2018
17103	07/12/18	JDH Corrosion Consultants, Inc.	6,280.00	Prof Svcs: Cathodic Protection Survey for CMSA pipelines and SRSD Simms Street Force Main (Note B) (2 invoices)
17104	07/12/18	Ken Grady Co., Inc.	436.00	Process instrumentation analyzer parts
17105	07/12/18	Koff & Associates, Inc.	3,000.00	Prof Svcs: Lab Analyst recruitment, final billing
17106	07/12/18	Marin Independent Journal	114.00	Public Notice: Bid notice for Chemical Storage Facilities Coating Project
17107	07/12/18	Marin County Tax Collector	1,320.00	Legal services: General Counsel, April-June 2018
17108	07/12/18	Marin Sanitary Service	2,749.30	Cardboard, rag box, and grit disposal, June 2018
17109	07/12/18	Marin Resource Recovery Center	190.00	Yard waste disposal; June 2018 (2 invoices)
17110	07/12/18	Metal Service Center	242.99	Stainless steel plate
17111	07/12/18	Monterey Mechanical	3,222.85	Headworks Odor Scrubber Fan Replacement Project, release of retention
17112	07/12/18	MSDSonline Inc	2,899.00	Safety Data Sheet subscription renewal, FY 18-19
17113	07/12/18	Navia Benefit Solutions	50.00	Flexible Spending Account, monthly fee
17114	07/12/18	Orchard Business/SYNCB	1,191.80	Tools, groundskeeping, and electricals supplies, June 2018
17115	07/12/18	Pipette.com	359.03	Single channel pipettes
17116	07/12/18	Platt	23.51	Part for OPS control room
17117	07/12/18	Powerstride Battery Co Inc	1,270.43	Electric cart batteries replacement and recycling fee
17118	07/12/18	Praxair Distribution, Inc.	162.09	Oxygen tank refill
17119	07/12/18	Recology Sonoma Marin	34,103.95	Biosolids hauling fee, April-June 2018
17120	07/12/18	Ricoh USA Inc	1,344.27	Admin copier lease and copy fee; 06/23-07/22/2018
17121	07/12/18	VOID		Check issued in error, voided
17122	07/12/18	Rockwell Solutions	15,760.72	Replacement sludge recirculation grinder, motor, and control panel.
17123	07/12/18	Calmat Co./Shamrock Materials	87.35	Propane
17124	07/12/18	VWR International	877.23	Autoclave supplies; phosphate buffer with dilution vial (4 invoices)
17125	07/12/18	Waste Management	3,647.08	Redwood Landfill biosolids reuse fee, June 2018
17126	07/12/18	Wells Fargo Vendor	631.24	Maintenance copier lease, 06/13-07/12/2018
17127	07/20/18	AICPA (Payment-Dues)	275.00	Membership renewal (1 employee)
17128	07/20/18	Amazon	4,558.38	AirFiber radio antennas; computer supplies, June 2018
17129	07/20/18	AT&T	369.63	Fax and emergency phone services, 07/07-08/06/2018
17130	07/20/18	AT&T Dataplan	405.73	Wireless service, 06/02-07/01/2018
17131	07/20/18	Basler Electric Company	1,347.14	Voltage relay required by PG&E Interconnection Agreement
17132	07/20/18	Katherine Brouillet	130.33	Employee expense reimb: office and break room supplies
17133	07/20/18	California Public Employee	1,657.00	Contribution to Retiree Health Benefits Trust Fund, PPE 07/14/2018 (Note C)
17134	07/20/18	California State Disbursement	250.50	EE Garnishment, PPE 07/14/2018 (Note A)
17135	07/20/18	CSRMA	195,766.00	Property insurance premium and Workers' Comp insurance pooled deposit, FY 18-19
17136	07/20/18	Evoqua Water Tech LLC	18,117.00	Calcium nitrate (2 deliveries)
17137	07/20/18	Graphic Products Inc	276.00	Tape for label maker
17138	07/20/18	ICMA Retirement Trust-457	4,153.00	Deferred compensation contributions, PPE 07/14/2018 (Note A)
17139	07/20/18	Koff & Associates, Inc.	4,875.00	Prof Svcs: Technical Services Manager recruitment, Phase I

Central Marin Sanitation Agency
 Operating Account Disbursements Register
 For the Month of July 2018

Check Number	Date	Vendor/Payee	Amount	Description
17140	07/20/18	Navia Benefit Solutions	607.68	Flexible spending account, PPE 07/14/2018
17141	07/20/18	Nexgen Utility Management	7,000.00	Nexgen license and support, annual renewal
17142	07/20/18	Nickell Fire Protection Inc	1,425.00	Annual fire sprinkler and hydrant inspection
17143	07/20/18	RMC	593.35	Admin printer maintenance contract renewal, FY 18-19
17144	07/20/18	SEIU Local 1021	983.87	Union dues, PPE 07/14/2018
17145	07/20/18	Town of Corte Madera	2,103.00	Reimbursement for check to CMSA in error
17146	07/20/18	Univar USA Inc	3,591.15	Sodium hypochlorite (1 delivery)
17147	07/20/18	Wiley Price & Radulovich	962.50	Prof Svcs: Employment law services, June 2018
17148	07/20/18	The Eidam Corporation Inc	5,940.00	Prof. Svcs: Agency Facebook page, June 2018
17149	07/30/18	Allied Fluid Products Corp	1,730.01	Seals for heating water pumps
17150	07/30/18	Alpha Analytical Lab Inc.	395.00	Bacteriological water analysis
17151	07/30/18	BWS Distributors, Inc.	383.04	Parts for handheld gas monitors
17152	07/30/18	Caltest Analytical Laboratory	6,652.69	Lab analyses; May and June 2018
17153	07/30/18	CDW Government, Inc.	5,034.51	Cloud storage licensing and support for Agency servers
17154	07/30/18	City Electric Supply	137.88	Electrical supplies for OPS Control Room
17155	07/30/18	ChemStation of Northern Cal.	3,116.20	Odor control materials
17156	07/30/18	Cole-Parmer Instrument Co.	492.77	Pressure switch for inventory
17157	07/30/18	CWEA TCP	365.00	Membership and certificate renewals (3 employees)
17158	07/30/18	California Water Environment	120.00	CWEA monthly meeting fee, July (3 employees)
17159	07/30/18	DELL Marketing L.P.	612.78	Computer equipment for automated BOD system
17160	07/30/18	Evoqua Water Tech LLC	657.19	Deionized water service
17161	07/30/18	Fisher Scientific	1,134.08	Lab chemicals, filters, and buffer solutions (8 invoices)
17162	07/30/18	Galco Industrial Electronics	206.93	Aluminum enclosure and panel
17163	07/30/18	Grainger	445.40	SD2 PS Maint: Motor start capacitor (Note B) (1 invoice); Safety supplies and maintenance parts (5 invoices)
17164	07/30/18	Harrington Industrial Plastics	60.55	Final vault PH meter parts
17165	07/30/18	IDEXX Distribution Inc	165.53	Colilert testing supplies
17166	07/30/18	Jaybird	386.40	Turbo motor
17167	07/30/18	Koff & Associates, Inc.	3,000.00	Prof Svcs: Laboratory Analyst recruitment, June 2018
17168	07/30/18	Lord and Sons Inc	274.20	Parts for primary valve replacement
17169	07/30/18	McMaster-Carr Supply Co.	1,578.47	SQ PS Maint: Channel grinder parts (Note B) (1 invoice); Parts for samplers, headworks, isolation channels (8 invoices)
17170	07/30/18	Novato Sanitary District	4,122.49	Prof Svcs: Joint Health & Safety Program, June 2018
17171	07/30/18	Ricoh USA Inc	154.34	Lab copier lease, 07/09-08/08/2018
17172	07/30/18	South County of Marin CDJR	2,595.00	Jeep Grand Cherokee, six-year extended warranty
17173	07/30/18	Teledyne Instruments Inc	14,525.34	Refrigerated sampler and associated equipment
17174	07/30/18	Thomas Fish Company	138.50	Rainbow trout for monthly bioassay
17175	07/30/18	Russ Turnbull	1,000.00	Employee expenses eligible for Agency dental reimbursement
17176	07/30/18	Univar USA Inc	3,480.63	Sodium hypochlorite (1 delivery)
17177	07/30/18	USA BlueBook	189.14	Quality control material for TSS analysis
17178	07/30/18	VWR International	315.87	Autoclave supplies; lab supplies (3 invoices)
17179	07/30/18	Western Exterminator Co. Inc.	178.50	Pest control service, July 2018
17180	07/30/18	Kunning Zhu	115.00	Employee expense reimb: DMV report and mileage to pre-employment physical

Payments by Automatic Clearing House:

7/3/2018	Payments to 25 retirees	7,614.27	Reimbursement for retiree health benefits
7/3/2018	Give Something	7,038.42	OPS control room furniture and fixtures
7/3/2018	CalPERS Medical ins	63,245.35	Medical insurance, June 2018
7/3/2018	Delta Dental	7,380.96	Dental insurance, June 2018
7/3/2018	Lincoln Life Ins	2,205.58	Life insurance, June 2018
7/3/2018	Vision Service Plan -(CA)	874.14	Vision insurance, June 2018

Central Marin Sanitation Agency
 Operating Account Disbursements Register
 For the Month of July 2018

Check Number	Date	Vendor/Payee	Amount	Description
	7/10/2018	CalPERS	32,984.62	Retirement pension contribution: Agency and employees, PPE 06/30/2018 (Note C)
	7/23/2018	CalPERS	30,673.98	Retirement pension contribution: Agency and employees, PPE 07/14/2018 (Note C)
	7/20/2018	CalPERS	598,231.00	FY 18-19 unfunded accrued liability for Classics and PEPRA
	7/9/2018	EDD	0.04	2nd Quarter Wages report
	7/5/2018	EDD	7,467.08	State & SDI Taxes, Kit Groves' last check
	7/10/2018	EDD	11,029.85	State & SDI Taxes, PPE 06/30/2018
	7/23/2018	EDD	12,115.12	State & SDI Taxes, PPE 07/14/2018
	7/10/2018	NRS/PEHP-3 and Z	33,895.04	Deferred compensation and MARA contribution, PPE 06/30/2018
	7/24/2018	NRS/PEHP-3 and Z	12,342.01	Deferred compensation and MARA contribution, PPE 06/30/2018
	7/3/2018	Michael Owen Boorstein	100.00	Stipend for 07/10/2018 Board meeting
	7/3/2018	Maribeth Bushey	100.00	Stipend for 07/10/2018 Board meeting
	7/3/2018	Dean DiGiovanni	100.00	Stipend for 07/10/2018 Board meeting
	7/3/2018	Diane L. Furst	100.00	Stipend for 07/10/2018 Board meeting
	7/3/2018	Thomas E Gaffney	100.00	Stipend for 07/10/2018 Board meeting
	7/3/2018	Dan Hillmer	100.00	Stipend for 07/10/2018 Board meeting
	7/2/2018	Hilton	209.31	Correction for credit card charge, employee travel
		Grand Total	1,424,989.25	

Notes:

- A: Not an Agency Expense. Expense funded through Payroll deduction.
- B: Not an Agency Expense. CMSA will be reimbursed for this expense.
- C: CMSA is partially reimbursed for this expense per Employee Labor Agreements.

Central Marin Sanitation Agency
Schedule of Investments
As of Month Ending July 31, 2018

Description	Book Value	Market Value	Agency Reserve Target for July 31, 2018
I. Investments managed by California Asset Management Program (CAMP)			
<u>Money Market Funds (< 1 year in maturity)</u>			
CAMP Cash Reserve Pool: 2.11% at 07/31/18			
b1. Agency Unrestricted Reserve: Operating	\$ 16,093.00	\$ 16,093.00	See LAIF
b2. Agency Unrestricted Reserve: Emergency	\$ 250,000.00	\$ 250,000.00	\$ 250,000
b3. Agency Unrestricted Reserve: Insurance	\$ 100,000.00	\$ 100,000.00	\$ 100,000
Total with CAMP	\$ 366,093.00	\$ 366,093.00	
II. Investments managed by Local Agency Investment Fund (LAIF)			
<u>Money Market Funds (< 1 year in maturity)</u>			
Local Agency Investment Fund (LAIF): 1.854% at 06/30/18			
a. Current Year Operating	\$ 8,277,385.35	\$ 8,277,385.35	
b1. Agency Unrestricted Reserve: Operating	\$ 2,939,407.00	\$ 2,939,407.00	\$ 2,955,500
c1. Capital Reserves (Restricted)	\$ 993,301.00	\$ 993,301.00	\$ 993,301
c1. Capital Reserves (Restricted-Capacity/Connection Fees)	\$ -	\$ -	
c2. Capital Reserves (Unrestricted)	\$ 6,841,991.60	\$ 6,841,991.60	\$ 5,434,896
Total with LAIF	\$ 19,052,084.95	\$ 19,052,084.95	
TOTAL INVESTMENTS	\$ 19,418,177.95	\$ 19,418,177.95	
<u>Amount designated for Capital Reserves</u>			
1. CAMP	\$ -	\$ -	
2. LAIF	\$ 7,835,292.60	\$ 7,835,292.60	\$ 6,428,197
Total	\$ 7,835,292.60	\$ 7,835,292.60	\$ 6,428,197

DEFINITIONS:

Description - the issuer, type of security and interest rate

Book Value - Original cost net of accumulated amortization

Market Value - Market values are per the fiscal agent's respective monthly statements

Statement of Compliance


The above of investments are in compliance with the Agency's investment policy adopted annually by the Board of Commissioners in accordance with California Government Code Section 53601, authorized investments, and 53646, investments policy. In addition, the Agency does have the financial ability to meet its cash flow requirements for the next six months.



BOARD MEMORANDUM

August 16, 2018

To: CMSA Commissioners and Alternates

From: Chris Finton, Treatment Plant Manager 

Approved: Jason Dow, General Manager

Subject: **July 2018 NPDES Permit Compliance, Treatment Process, and Maintenance Activities Report**

Recommendation: Accept the July 2018 NPDES Permit Compliance, Treatment Process, and Maintenance Activities Report.

I. NPDES Permit Compliance

Our NPDES permit testing for July showed that the CMSA treatment plant effluent was in compliance with all permit limits. The Monthly Compliance Summary Table shows the results by permitted parameter, the sample’s frequency, the sample results, and the permit limit. We successfully passed the July 96-hour flow through bioassay test.

CMSA’s NPDES permit specifies quarterly monitoring for enterococcus bacteria and for each wet weather blend event, to verify compliance with established effluent limits. No blend events were recorded in July allowing CMSA to forgo enterococcus sampling. The next quarterly sampling is tentatively scheduled for late August.

II. Influent Flow

July in central Marin County was marked by periods of fog, high winds, and for a few days this past month, periods of high heat. It remained very dry with no precipitation recorded by the Headwork’s rain gauge. The plant’s average daily influent flow was 8.3 MGD.

The CMSA treatment plant and each satellite collection agency’s daily average and total monthly influent flows are shown in the table below:

July Monthly Influent Flows	San Rafael (SRSD)	Ross Valley (SD#1)	San Quentin (SQSP)	Corte Madera (SD#2)	CMSA Plant Total
Average Daily (MGD)	3.5 MGD	3.5 MGD	0.47 MGD	0.83 MGD	8.3 MGD
Total for Month (MG)	109.5 MG	109.1 MG	14.6 MG	25.8 MG	259.0 MG
Percent of Flow	42.0 %	42.0 %	6.0 %	10.0 %	100 %

III. Treatment Process

Annual dry weather preventative maintenance continued through July with Operations transitioning process equipment in and out of service. Specifically, Primary Clarifiers 6 and 7 were rotated out of service for annual maintenance, and staff also executed a flow diversion in the Headworks to allow for the installation of a temporary isolation “coffer” dam in the primary influent channel; both process tanks and several isolation gates were locked and tagged out and turned over to the Maintenance Department. The Mixed Liquor Suspended Solids (MLSS) inventory averaged 1,053 mg/l in July, a 7.0% decrease from last month. The biomass inventory is at an optimal level based on present process conditions, and aligns with the process control decision to carry between 1,000 and 1,200 mg/L to manage our biomass and effectively meet our permit limits.

Graph No.3 shows the coliform most probable number (MPN), which represents the effectiveness of the disinfection process. All fourteen coliform samples collected in July were below our KPI of 30 MPN, and remained well below our daily limit of 10,000 MPN. The total coliform monthly geometric mean for July was 1.7 MPN, well below our permit’s monthly limit of 240 MPN.

Graph No.4 shows the Total Suspended Solids (TSS), which is a good indicator of the effluent quality. The TSS monthly average in July was 3.7 mg/l, which is 25.0% of our Key Performance Indicator (KPI) of 15 mg/l, and is 12.0% of our permit’s monthly average limit of 30 mg/l.

IV. Maintenance Activities

The cogeneration system produced 95.0% of the Agency’s power in July, and MCE supplied the balance. The generator, as indicated on Graph No.8, was in service and produced green power for the entire month.

- July 15 – The cogeneration system was temporarily removed from service for a scheduled 2,000 hour preventative maintenance procedure

The majority of July’s work activities were spent performing annual process equipment preventative maintenance. In addition, project work included the replacement of four influent channel isolation gates near the Headworks; replacement of two sump pumps in the facility’s gallery system; replacement of the second and final process return sump pump and its base stand; replacement of the drive chain, leveling of the weirs, and rehabilitation of the reclaimed water piping in primary clarifier 1; replacement of two influent composite samplers; and relocating a pH meter probe at the final effluent sample vault.

Attachment:

- July 2018 NPDES Permit Compliance, Treatment Process, and Maintenance Activities Report

NPDES Permit Compliance, Treatment Process, and Maintenance Activities Report

July 2018



Staff performing a confined space entry to replace channel isolation gates under the influent channel deck.



Recently installed influent channel isolation gate.

Monthly Compliance Summary Table

Central Marin Sanitation Agency

July, 2018

Final Effluent Monitoring

Parameter	Frequency	Units	Results	Limit
Carbonaceous BOD Highest Weekly Average	Weekly	mg/L	4.9	Maximum 40
Carbonaceous BOD Monthly Average	Monthly	mg/L	4.2	Maximum 25
Carbonaceous BOD Monthly Removal Rate	Monthly	%	98.9	Minimum 85
Total Suspended Solids Highest Weekly Average	Weekly	mg/L	3.9	Maximum 45
Total Suspended Solids Monthly Average	Monthly	mg/L	3.7	Maximum 30
Total Suspended Solids Monthly Removal Rate	Monthly	%	99.2	Minimum 85
Chlorine Residual Instant Limit	Instant	mg/L	ND	Maximum 0.0
Ammonia Monthly Average	Monthly	mg/L	30.7	Maximum 60
Ammonia Maximum Daily	Daily	mg/L	31.6	Maximum 120
pH Lower Limit	Continuous	SU	7.1	Minimum 6
pH Upper Limit	Continuous	SU	7.4	Maximum 9
Bacteriological Analysis				
Total Coliform Monthly Geometric Mean	3 X Week	MPN/100mL	1.7	Maximum 240
Total Coliform Daily Maximum	3 X Week	MPN/100mL	4.5	Maximum 10,000
Enterococcus Monthly Geometric Mean	Monthly	MPN/100mL	*	Maximum 35
Flow Through Bioassay				
Acute Toxicity 11 Sample 90th Percentile	Monthly	% survival	100	Minimum 70
Acute Toxicity 11 Sample Median	Monthly	% survival	100	Minimum 90
Metals Analysis				
Copper Daily Limit	Monthly	ug/L	3.50	Maximum 85
Copper Monthly Average	Monthly	ug/L	3.50	Maximum 49
Cyanide Daily Limit	Monthly	ug/L	J2.20	Maximum 41
Cyanide Monthly Average	Monthly	ug/L	J2.20	Maximum 21
Mercury Weekly Average	Weekly	ug/L	0.0024	Maximum 0.072
Mercury Monthly Average	Monthly	ug/L	0.0024	Maximum 0.066
Mercury Monthly Loading	Monthly	kg/mo	0.00180	
Mercury Annual Loading (watershed permit)	Jan-Dec	kg/yr	0.03586	Maximum 0.11
Permit Analysis				
Dioxin - Total Equivalent (TEQ) Daily Maximum	1/Permit Cycle	ug/L	*	Maximum 2.8E-08
Dioxin - Total Equivalent (TEQ) Monthly Average	1/Permit Cycle	ug/L	*	Maximum 1.4E-08
Polychlorinated Biphenyls (PCBs) Daily Limit	1/Permit Cycle	ug/L	*	Maximum 0.017
Polychlorinated Biphenyls (PCBs) Monthly Limit	1/Permit Cycle	ug/L	*	Maximum 0.012
Quarterly Analysis				
Oil and Grease Daily Limit	Quarterly	mg/L	*	Maximum 20
Oil and Grease Monthly Average	Quarterly	mg/L	*	Maximum 10
Chronic Bioassay Toxicity	Quarterly	Tuc	*	Maximum 20
Chronic Bioassay Toxicity (3 sample median)	Quarterly	Tuc	ND	Maximum 10
Flow Analysis	Daily Max	Hourly Max	5 minute Max	Monthly Average
Effluent Flow	7.0	12.3	30	6.6
Influent Flow	8.7	14.6	16.9	8.3
# Days Blended				0

* Monitoring Not Required This Month ND = None Detected X = Data not available at report time J = Detected by not Quantified

Glossary of Terms
NPDES Permit Compliance Summary Table

- **Ammonia:** CMSA's NPDES permit requires that we analyze the final effluent for ammonia due to its toxicity to aquatic organisms and potential for providing nutrients to algae in the San Francisco Bay. The permit has a maximum daily limit of 120 mg/L and a monthly average limit of 60 mg/L. The maximum daily limit is the number that cannot be exceeded on any sample and the monthly average applies to all samples collected in any month (although typically we are required to take only one sample).
- **Biochemical Oxygen Demand (BOD):** The amount of dissolved oxygen needed by microorganisms (biomass) to stabilize organic material in the effluent. The permit limits for our effluent require that removal of 85% influent BOD, and meet a weekly average of less than 40 mg/L and a monthly average of less than 25 mg/L BOD.
- **Chlorine Residual:** The secondary effluent is disinfected with hypochlorite (chlorine "bleach"), and then the residual chlorine is neutralized with sodium bisulfite to protect the Bay environment. The final effluent chlorine residual limit is 0.0 mg/l, which is monitored continuously.
- **Bacteria:** Coliform and enterococcus bacteria are the indicator organisms for the determination of the effectiveness of the disinfection process.
- **Dioxin - Total Equivalents:** These are 17 dioxin-like compounds that we analyze for twice per year which have permit limits.
- **Oils and Grease:** We are required to monitor our effluent for Oils and Grease quarterly.
- **Flow Through Bioassay:** A 96-hour test in which we test the toxicity of our effluent to young rainbow trout (15-30 days old) in a flow-through tank to determine their survivability under continuous exposure to CMSA effluent. The permit requires that we maintain a 90th percentile survival of at least 70% and an 11-sample median survival of at least 90%. In layman's terms, this means that out of the last 11 samples, only one bioassay may fall below 70% survival, and the middle value—when all 11 samples are placed in numerical order—must be at least 90%.
- **Metals Analysis:** Our permit requires that we analyze our effluent for many different metals on a monthly basis. We have permit limits for three of the metals. The limits are stated as a maximum daily limit and a monthly average limit.
- **pH:** pH is a measurement of acidity, with pH 7.0 being neutral and higher pH values being basic and lower pH values being acidic. Our permit effluent pH must stay within the range of 6.0 to 9.0, which we monitor continuously.
- **Total Suspended Solids (TSS):** Measurement of suspended solids in the effluent. Our permit requires that we remove at least 85% of the influent TSS and that the effluent limit is less than 45 mg/L as a weekly average and less than 30 mg/L as a monthly average.

Executive Summary Process Performance Data
July 2018

The removal efficiencies shown are based on the monthly average of the following treatment processes that were in service.

Primary Clarifier Performance

Average Total Suspended Solids (TSS) in:	478.8	mg/l
Average TSS out:	84.3	mg/l
Average Percent Removal Achieved:	81.1	%
Average Total Carbonaceous Biochemical Oxygen Demand (CBOD) in:	382.4	mg/l
Average CBOD out:	182.2	mg/l
Average Percent Removal Achieved:	51.6	%
Average Plant Influent Flows:	8.3	MGD

Expected removal efficiencies as outlined in Metcalf & Eddy Wastewater Engineering Manual

Design 50-70% Removal

Design 25-40% Removal

Biotower Performance

Average TSS out:	110.0	mg/l
Average CBOD out:	65.6	mg/l
Average Percent CBOD Removal Achieved:	64.0	%

Design 25-30% Removal

Aeration Tanks/Activated sludge

Dissolved Oxygen set point:	2.0	mg/l
Average MLSS:	1,053	mg/l
Average MCRT:	3.26	Days
Average SVI:	149	

Secondary Clarifiers

Average WAS concentration:	6,546	mg/l
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Final Effluent

Average Effluent TSS for the month was:	3.7	mg/l	(Maximum Limit: 30mg/l)
Week #1 weekly average	3.5		(Maximum Limit: 45mg/l)
Week #2 weekly average	3.8		"
Week #3 weekly average	3.8		"
Week #4 weekly average	3.9		
Week #5 weekly average	N/A		"
Monthly average TSS removal efficiency through the plant was:	99.2	%	(Minimum Limit: 85%)
 Average Effluent CBOD was:	4.2	mg/l	(Maximum Limit: 25mg/l)
Week #1 weekly average	3.4		(Maximum Limit: 40mg/l)
Week #2 weekly average	3.4		"
Week #3 weekly average	4.8		"
Week #4 weekly average	4.9		
Week #5 weekly average	N/A		"
Monthly average CBOD removal efficiency through the plant was:	98.9	%	(Minimum Limit: 85%)
 Disinfection Dosing Rate:	3.7	mg/l	monthly average
Total Coliform Monthly Geometric Mean:	1.7	MPN	(Maximum 240)
The Daily Maximum Total Coliform Count for the month was:	4.5	MPN	(Maximum 10,000)
Enterococcus Monthly Geometric Mean:	N/A	MPN	(Maximum 35 MPN)
Effluent pH for the month was:			
Min	7.1		(Min 6.0)
Max	10.2		(Max 9.0)

Digester Treatment

Average Thickened Waste Concentration from the RDT was:	6.9	%	
Average percent of Volatile Solids destroyed was:	85.4	%	
Cubic feet of biogas produced was:	7,404,390	(Total)	238,851 (Daily Average)
Average temperature of the digester was:	102.0	degrees Fahrenheit	

Executive Summary Process Performance Data

July 2018

The removal efficiencies shown are based on the monthly average of the following treatment processes that were in service.

Dewatering

Average Centrifuge Feed concentration was:	2.9	%
Average Biosolids concentration was:	26.3	%
Average TSS of the Centrate was:	293	mg/l
Solids capture of the Centrifuge was:	99.1	%
Polymer use per Dry ton of biosolids was:	11.13	#/dry ton
Average polymer feed rate per run was:	3.42	gpm
Average concentration of the polymer batches was:	0.328	%
Average sludge feed rate per run was:	64.6	gpm

Comments:

The treatment plant has been running well with final effluent being of very good quality.

Graph #1:

Depicts the total influent flow (from all collection agencies) entering the treatment plant.

The red graph line represents total influent flows; and the black graph line depicts the CMSA Headworks rain gauge recordings for the month.

Graph #2:

Depicts individual collection member agency flows.

The Y-axis is in the dry weather flow range of 0-20 MGD.

Graph #3:

Depicts the coliform most probable number (MPN) results which are an indication of the performance of the disinfection system.

The monthly Total Coliform Geometric Mean was 1.7 MPN through July, which is less than our KPI median of 30 MPN and permit limit of 240 MPN.

Graph #4:

Depicts the total suspended solids in the effluent.

Our monthly average was 3.7 mg/l versus our KPI of 15 mg/l and permit monthly average limit of 30 mg/l.

Graph #5:

Depicts the effluent CBOD which is measuring the oxygen demand of the wastewater.

The July effluent CBOD average was 4.2 mg/l, well below our NPDES limits of 40 mg/l weekly and 25 mg/l for the month.

Graph #6:

Depicts the degree to which the biosolids have been dewatered.

Our biosolids % concentration exceeded our KPI of 25% for the entire month of July.

Graph #7:

Depicts the amount of biogas that is produced in the digesters, and then used to produce electricity.

Biogas production in July averaged 238,851 cubic feet per day, which exceeded our monthly KPI of 200,000 cubic feet per day. The lower than normal KPI values as depicted on Graph 7 were the result of receiving fewer organic waste deliveries this past month.

Graph #8:

This graph depicts the amount of energy produced through cogeneration versus the energy purchased from MCE for Agency operations.

The cogeneration engine was online for the entire month of July producing 95.0% of the facility's power needs. The engine was temporarily removed from service on July 15 for a scheduled 2,000-hour maintenance procedure.

Glossary of Terms Process Performance Data Sheet

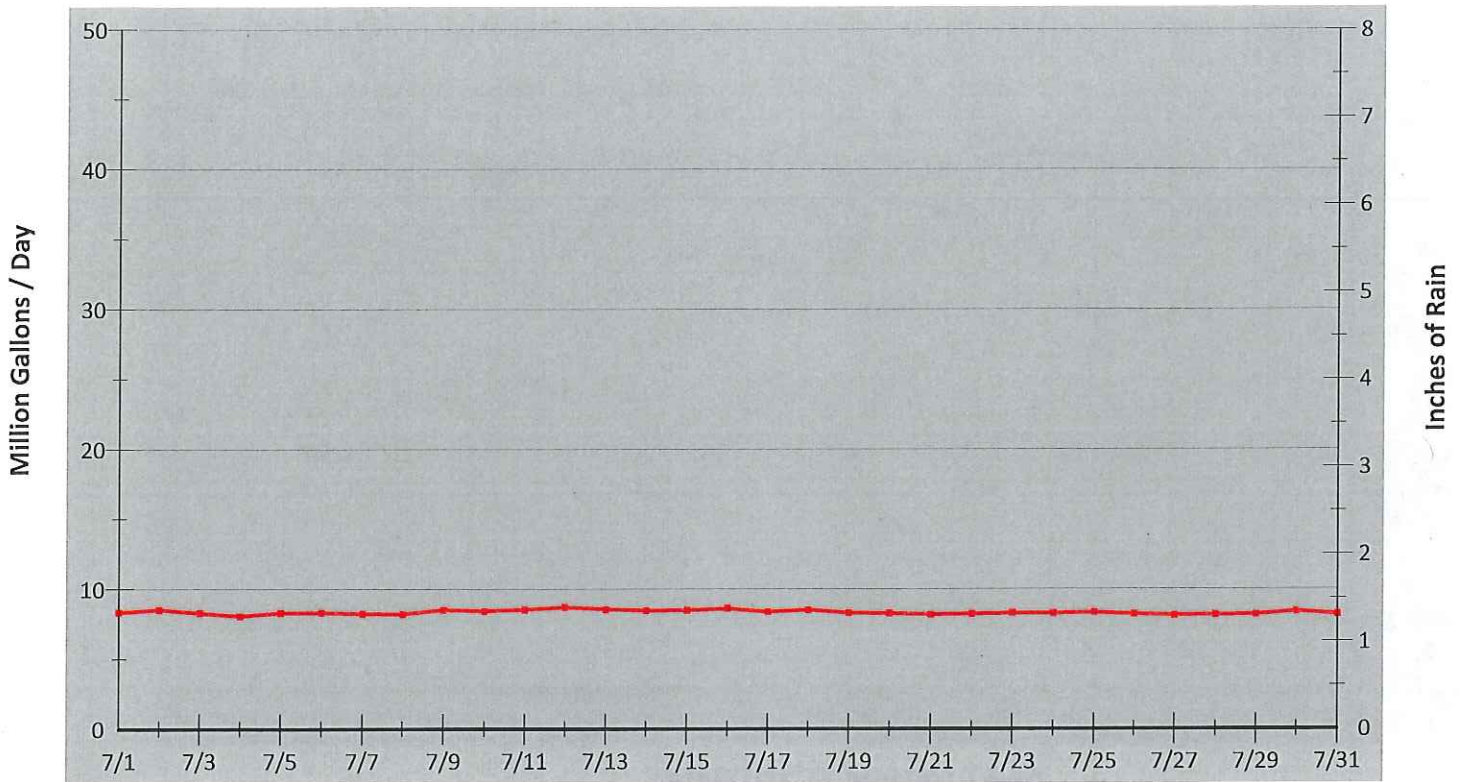
- **Aeration Tanks:** A biological process that takes place after the biotowers, where biomass (microorganisms) is mixed with the wastewater to feed on dissolved and suspended organic material. High speed blowers are used to provide compressed air to mix the tank contents.
- **Anaerobic Digesters:** In the anaerobic digestion process, organic material removed in the primary and secondary clarifiers is digested by anaerobic bacteria. The end products are methane, carbon dioxide, water, stabilized organic matter, and some inorganic material.
- **Biosolids:** Anaerobically digested solids that are removed from the two digesters, dewatered, and then beneficially reused. Beneficial reuse may include landfill alternate daily cover (ADC), land application in the summer as a soil amendment and fertilizer, or converted into a liquid fertilizer for agricultural applications.
- **Biotower:** A biological treatment process, occurring after the primary clarifiers and before the aeration tanks, in which the wastewater trickles over a biomass-covered media. The biomass feeds on the dissolved and suspended solids in the wastewater.
- **Centrifuge:** Process equipment used to dewater biosolids prior to beneficial reuse.
- **Cogeneration System:** A system comprised of a dual-fuel engine coupled to an electric generator that is used to produce energy to power the Agency facilities. Fuels the system uses are methane biogas produced in the anaerobic digesters and, when biogas is not available, purchased natural gas. As well as generating electricity, the system supplies heat for plant processes and building heating.
- **Chlorine Contact Tanks (CCTs):** The final treatment process is disinfection and de-chlorination. The CCTs allow contact time for injected chlorine solution to disinfect the wastewater. Sodium bisulfite, the de-chlorination chemical, is introduced at the end of the CCTs to neutralize any residual chlorine to protect the San Francisco Bay environment.
- **Rotary Drum Thickener (RDT):** Waste activated sludge removed from the secondary clarifiers is thickened in rotary drum thickeners before being transported to the anaerobic digesters. Thickening removes some of the sludge's water content, to decrease hydraulic loading to the digesters.
- **Final Effluent:** After all the treatment processes are completed, the final effluent is discharged into to central San Francisco Bay through a 10,000-foot-long deep-water outfall.
- **Mean Cell Residence Time (MCRT):** An expression of the average time that a microorganism will spend in the secondary treatment system.
- **Mixed Liquor Suspended Solids (MLSS):** The liquid in the aeration tanks is called MLSS and is a combination of water, solids, and microbes. Suspended solids in the MLSS measured in milligrams per liter (mg/l).

- **Most Probable Number (MPN):** Concentrations, or number of colonies, of total coliform bacteria are reported as the “most probable number.” The MPN is not the absolute count of the bacteria but a statistical estimate of their concentration.
- **Polymer:** Polymer is added to digested sludge prior to dewatering to improve solids coagulation and water separation.
- **Primary Clarifier:** A physical (as opposed to biological) treatment process where solids that settle or float are removed and sent to the digesters for further processing.
- **Return Activated Sludge (RAS):** The purpose of returning activated sludge (biomass) to the aeration tanks is to maintain a sufficient concentration of microbes to consume the wastewater’s dissolved solids.
- **Secondary Clarifiers:** Provides settling for the biomass after aeration. Most of the settled biomass is returned to the aeration tank as return activated sludge (RAS) and some is sent to the RDT unit as waste activated sludge.
- **Sludge Volume Index (SVI):** This is a calculation used to indicate the settling ability of the biomass in the secondary clarifiers.
- **Thickened Waste Activated Sludge (TWAS):** Waste activated sludge is thickened in the RDTs, and then the TWAS product is pumped to the digester for processing.
- **Volatile Solids:** Organic content of the wastewater suspended solids.
- **Waste Activated Sludge (WAS):** Biomass that is removed from the secondary clarifiers pumped to the RDTs for thickening.

Units of Measurement

- kg/month (Kilograms per Month): 1 kilogram = 2.205 lbs.
- KPI (Key Performance Indicators): The Agency’s process performance goals.
- Kwh (Kilowatt Hours): A unit of electric power equal to using 1 Kw for 1 hour.
- Milligrams per Liter (mg/L): A measure of the concentration by weight of a substance per unit volume. For practical purposes, one mg/L is equal to one part per million (ppm).
- MPN/100mL (Most Probable Number per 100 milliliters): Statistical estimate of a number per 100 milliliters of a given solution.
- Percent by Mass (% by mass): A measure of the combined mass of a solute + solvent.
- Percent by Volume (% by vol): A measure of the volume of a solution.
- ug/L (Micrograms per Liter of Solution): Mass per unit volume.

Graph #1: CMSA Influent Flow

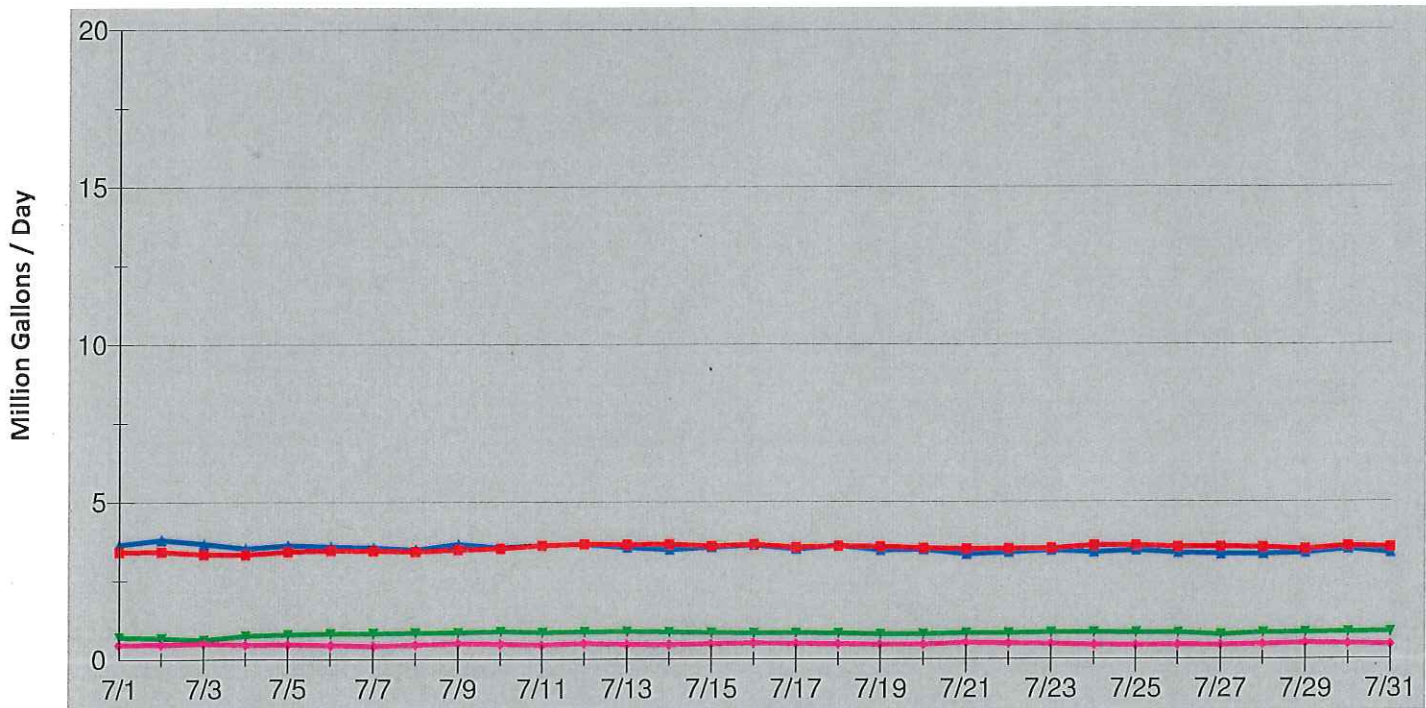


Date (7/1/2018 to 7/31/2018)

■ Flow (Daily Average) • Rainfall

(#1) CMSA Influent Flow

Graph #2: Collection System Influent Flows

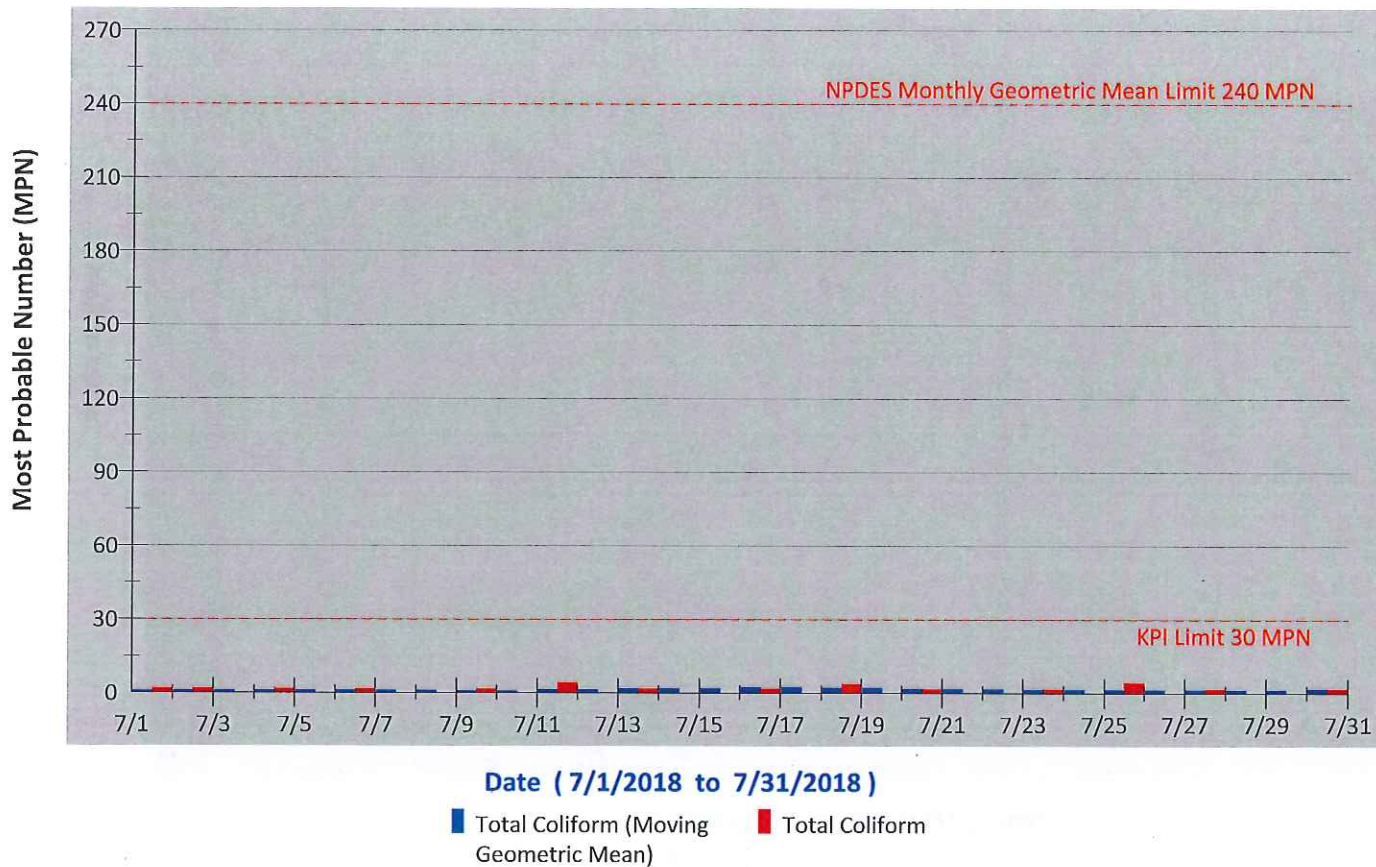


Date (7/1/2018 to 7/31/2018)

▲ RV Flow (Daily Average) ■ SR Flow (Daily Average) ▼ SD#2 Flow (Daily Average) ◆ SQ Flow (Daily Average)

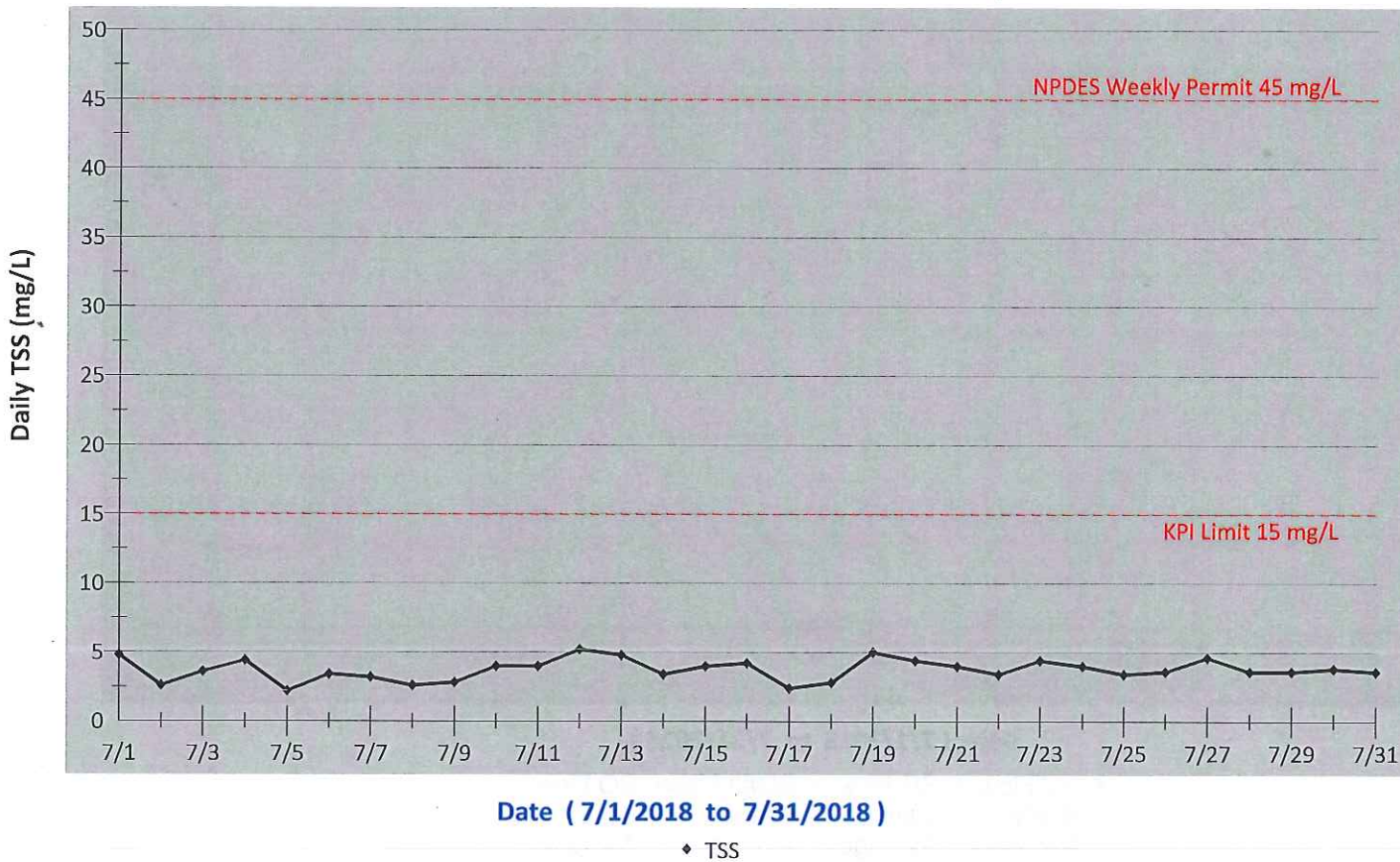
(#2) Collection System Influent Flows

Graph #3: Total Coliform & Monthly Geometric Mean



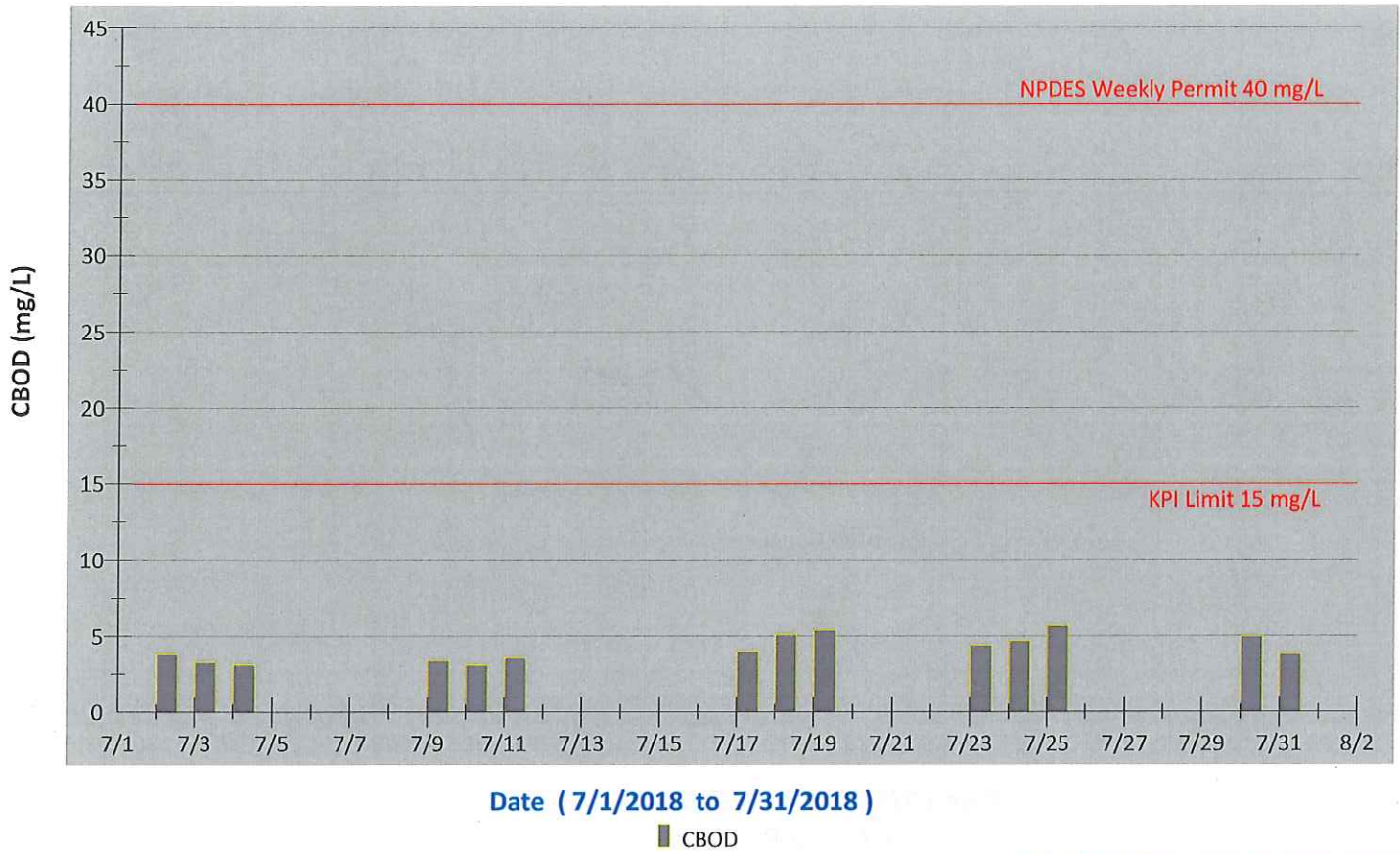
(#3) Total Coliform & Monthly Geometric Mean

Graph #4: Effluent Total Suspended Solids (TSS)



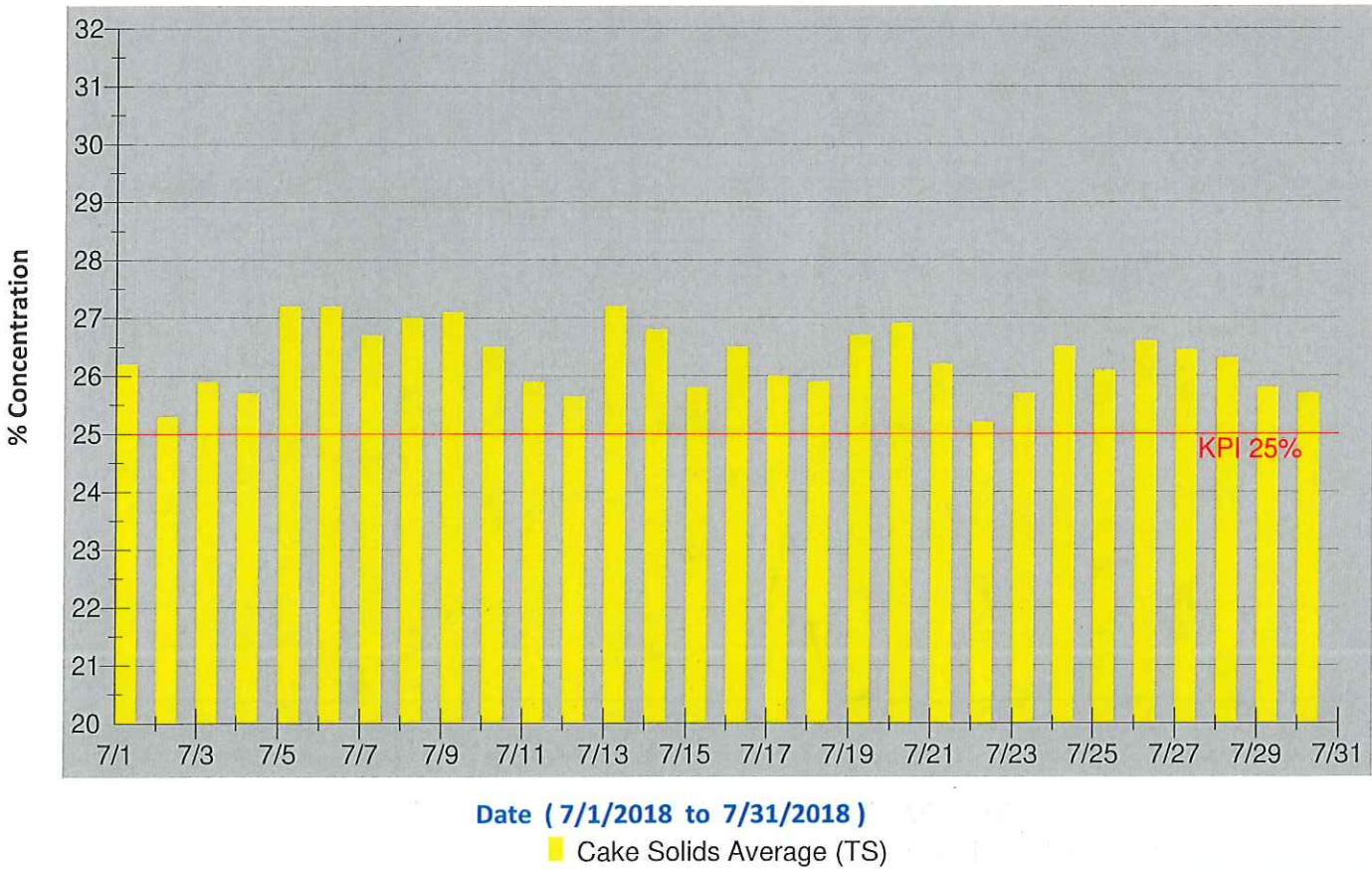
(#4) Effluent Total Suspended Solids (TSS)

Graph #5: Effluent Carbonaceous Biological Oxygen Demand (CBOD)



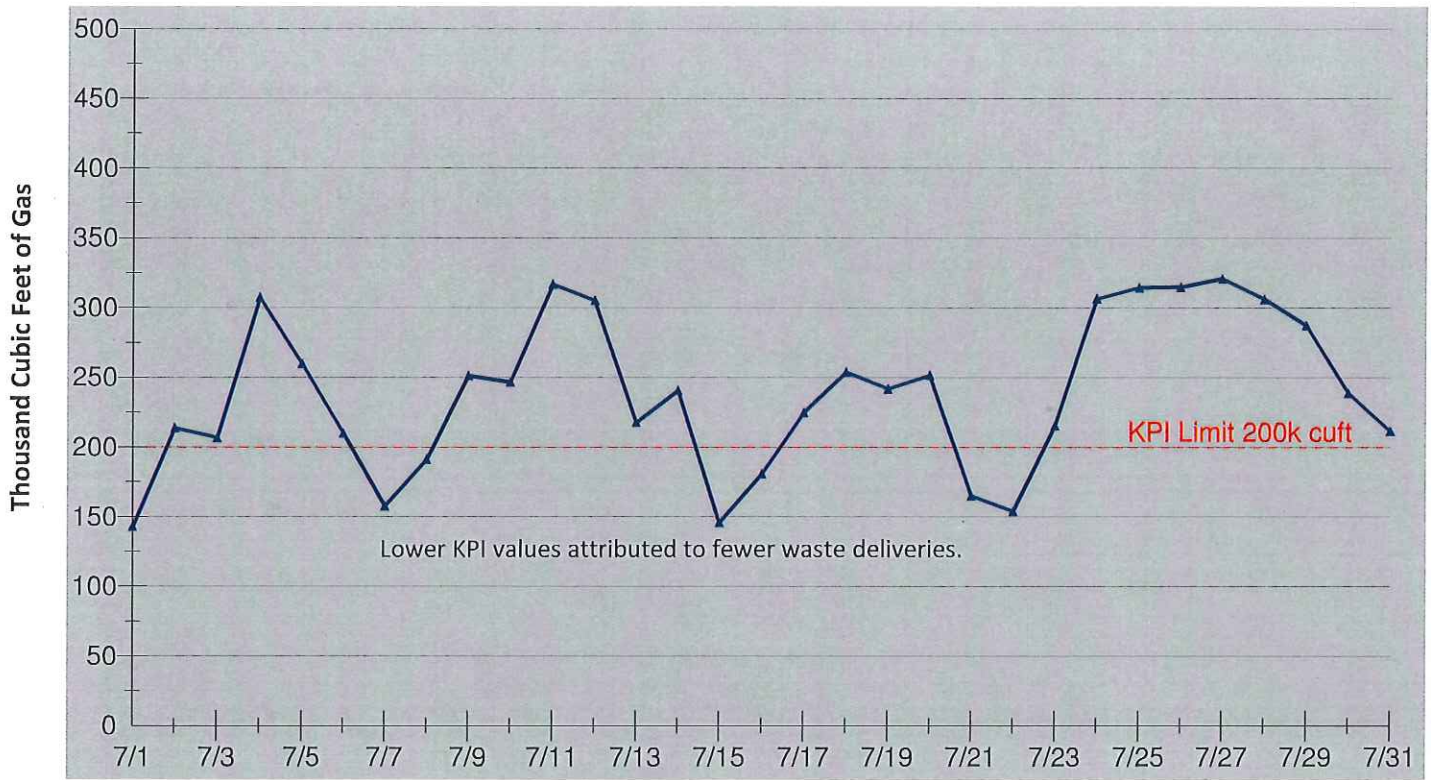
(#5) Effluent Carbonaceous Biological Oxygen Demand (C

Graph #6: Biosolids Concentration



(#6) Biosolids Concentration

Graph #7: Biogas Production

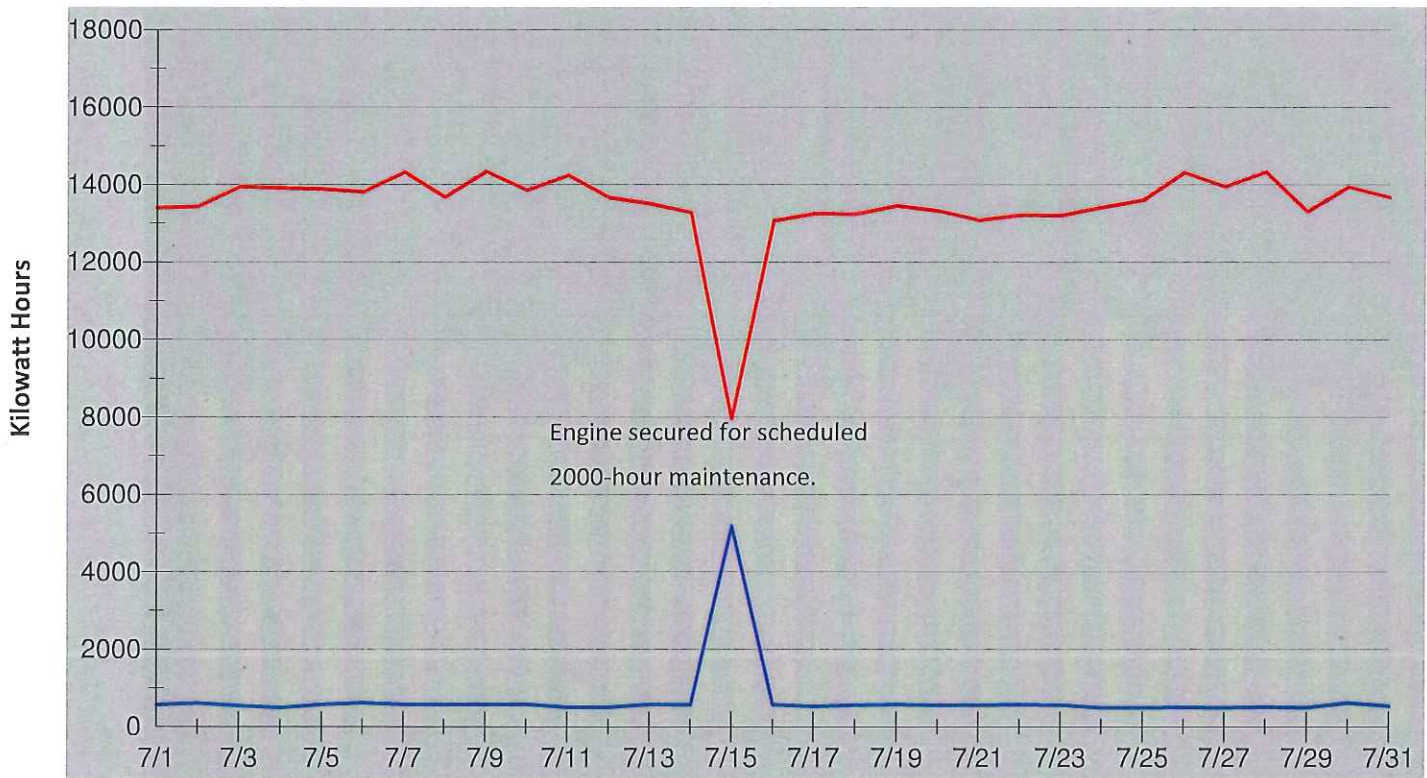


Date (7/1/2018 to 7/31/2018)

▲ Biogas Produced

(#7) Biogas Production

Graph #8: Kilowatt Hours Purchased vs. Kilowatts Produced



Date (7/1/2018 to 7/31/2018)

Utility Power

Kilowatts Produced

(#8) Kilowatt Hours Purchased vs. Kilowatts Produced



BOARD MEMORANDUM

August 16, 2018

To: CMSA Commissioners and Alternates

From: Jason Dow, General Manager 

Subject: **Performance Metric Report – July 2018**

Recommendation: Accept the July 2018 Performance Metric report.

Performance Summary: The Agency's performance in operations and maintenance activities, regulatory and environmental compliance, and public education and outreach met or exceeded our metric goals/targets. Noteworthy metrics or variances are described below.

Table I – Treatment/Process Metrics

Final effluent quality remained very good in July, and operations staff continue to rotate process tanks and equipment out of service for annual preventative maintenance. FOG loads continue to be lower than normal due to a major FOG hauler, Sacramento Rendering Company, taking some loads to the Santa Rosa facility resulting in lower biogas and energy production.

Table II – Employee Metrics

Training highlights included Underground Utility Locator training for operations, maintenance, and engineering staff; new employee orientation training; WIMS and LIMS software training for operations and technical services staff; and several field staff received classification-specific training for personal development.

Table III - Environmental and Regulatory Compliance Metrics

There weren't any NPDES permit exceedances in July, and all regulatory reports were submitted on schedule. FOG and source control inspections continue to be fewer than planned due to limited staff resources. Recruitment for an Environmental Services Analyst is underway and the vacant position should be filled by October, providing the staff resources to perform the normal number of source control inspection going forward.

Table IV - Public Outreach

There were three odor alerts posted to the website, and the Agency did not receive any public odor complaints. Alerts were posted for an influent flow diversion to install a cofferdam in the primary influent channel for a gate replacement project, removing a primary clarifier from service for annual preventative maintenance, and for the monthly cleaning of the chlorine contact tanks.

Monthly public education events may include staff attendance at public outreach events, school classroom and/or juggler show presentations, and Agency tours. Events over the past month are presented below with the event date and number of attendees. The May 18 school event wasn't reported by the Juggler until late June.

Public Outreach Events

<u>Date</u>	<u>Event</u>	<u>Attendees</u>
7/1-5	Marin County Fair	1,526

School Events – Juggler Show Presentation

<u>Date</u>	<u>School</u>	<u>Attendees</u>
7/6	North Bay Children's Center in Novato	50
7/24	Timothy Murphy School in San Rafael	50

CMSA Tours

<u>Date</u>	<u>Group</u>	<u>Attendees</u>
7/27	Public	2
7/30	Public	2

Attachment:

- July 2018 Performance Metric Report

CMSA CY18 PERFORMANCE METRICS – July 2018

TABLE I - TREATMENT/PROCESS METRICS

Metric	Definition	Measurement	Range/Target/Goal
1) Wastewater Treated	Volume of wastewater influent treated and disposed, in million gallons (Mg)	259.0 Mg	165 – 820 Mg
2) Biosolids Reuse	Alternate Daily Cover (ADC) at the Redwood Landfill, in wet tons (wt) Fertilizer and soil amendment at land application sites, in wet tons (wt) Bio-Fertilizer production at the Lystek facility, in wet tons (wt)	64.5 wt 140 wt 135.5 wt	360 – 665 wt
3) Conventional Pollutant Removal	Removal of the conventional NPDES pollutants - Total Suspended Solids (TSS) and Carbonaceous Biological Oxygen Demand (cBOD) a. tons of TSS removed; % TSS removal b. tons of organics removed (cBOD); % cBOD removal	508.4 tons; 99.2% 404.2 tons; 98.9%	> 85% > 85%
4) Priority Pollutants Removal	Diversion of priority NPDES metals from discharge to the S.F. Bay: a. % Mercury b. % Copper	98.6% 96.5%	88 – 99% 84 – 98%
5) Biogas Production	Biogas generated in our anaerobic digesters, in million cubic feet (Mft ³) Natural gas (methane) equivalent of the biogas, in million cubic feet (Mft ³)	7.40 Mft ³ 4.74 Mft ³	6.0 to 9.5 Mft ³ 3.8 to 6.1 Mft ³
6) Energy Produced	Energy produced from cogeneration of generated biogas and purchased natural gas - in kilowatt hours Cogeneration system runtime on biogas, <i>in hours (hrs.); % time during month</i> Biogas value (natural gas cost equivalent)	417,806 kWh 571 hrs; 77.0% \$22,034	380 to 480,000 kWh 540 hrs.; 75% \$15,000 to \$30,000
7) Efficiency	The cost to operate and maintain the treatment plant per million gallons of wastewater treated, in dollars per million gallons Energy used, kilowatt hours, per million gallons treated	\$1,389 /Mg 1,698 kWh/Mg	\$451-\$1,830/Mg (wet - dry) 670 - 2,400 kWh/Mg

Table II – EMPLOYEE METRICS

Metric	Definition	Measurement	Target/Goal
1) Employee Training	Hours of internal training – safety, web-based, project, vendor, etc. Hours of external training – employment law, technical, regulatory, etc.	Internal = 165 External = 16	variable
2) Work Orders	Preventative maintenance (PM) labor hours Planned corrective maintenance (CM) labor hours; % of CM+UCM hrs. Unplanned corrective maintenance (UCM) labor hours; % of CM+PM hrs. Ratio of PM to total corrective maintenance (CM + UCM);	529 hrs 427 hrs (81.0%) 102 hrs (15.0%) 1.07	300 – 500 hrs ≥ 70% total CM hrs ≤ 30% total hours ≥ 0.45
3) Overtime Worked	Monthly hours of OT worked; <i>Year to date hours of OT (YTD)</i> % of regular hours worked; % <i>Year to date (YTD)</i>	161 hrs; (952 hrs) 2.5%; (1.8%)	< 5%

CMSA CY18 PERFORMANCE METRICS – July 2018

Table III - ENVIRONMENTAL AND REGULATORY COMPLIANCE METRICS

Metric	Definition	Measurement	Range/Target/Goal
1) Permit Exceedances	# of NPDES permit exceedances	0	0
2) Regulatory Analyses	# of analyses by the CMSA laboratory for NPDES, Stormwater, and Biosolids regulatory compliance monitoring and reporting	613	150-750
3) Process Control Analyses	# of analyses by the CMSA laboratory for process control monitoring	620	400-1,250
4) Contract Laboratory Analyses	# of analyses by contract laboratories for regulatory compliance reporting	39	0-50
5) Quality Control Testing	# of CMSA performed laboratory analyses for QA/QC purposes	133	100-300
6) Water Quality Sample Analyses	# of ammonia, coliform (total and fecal), enterococcus, and/or sulfide analyses performed for the CMSA member agencies (SSOs, etc.)	28	as-needed
7) Pollution Prevention Inspections	Inspections of industrial and commercial businesses in the Agency's pretreatment and pollution prevention programs and Novato Sanitary District's Mercury Reduction Program – 255 businesses regulated	14	variable
8) FOG Program Inspections	Inspections of food service establishments (FSEs) in the Almonte, TCSD, SD2, RVSD, SRSD, and LGVSD service areas – approx. 316 FSEs are regulated and 63 FSEs have waivers.	20	20 – 50
9) Permits Issued/Renewed	Permits issued for the pretreatment, pollution prevention, and FOG source control programs, and for groundwater discharge	0	variable

Table IV- PUBLIC OUTREACH

Metric	Definition	Measurement	Target/Goal
1) Public Education Events	Attendance at public education outreach events; # of booth visitors; <i>(YTD)</i>	1,526; <i>(2,062)</i>	3,500/year
2) School Events	Participation or sponsorship in school outreach events; attendees; <i>(YTD)</i>	100; <i>(1,246)</i>	variable
3) Agency Tours	Tours given to students and the public; # of people, <i>(YTD)</i>	4; <i>(186)</i>	variable
4) Odor Notifications	Number of odor alerts posted to the Agency website	3	1-10
5) Odor Complaints	Number of odor complaints received from the public	0	0



BOARD MEMORANDUM

August 16, 2018

To: CMSA Commissioners and Alternates
From: Jason Dow, General Manager 
Subject: **Resolution of Appreciation for Al Boro**

Recommendation: Approve CMSA Resolution #331, a Resolution of Appreciation for Al Boro.

Summary: Al Boro has served on the CMSA Board of Commissioners since February 1990, and recently resigned from the Board, effective July 31, 2018. With over 28 years of dedicated service at the Agency, Al has participated in nearly all of the discussions and decisions associated with annual budgets, long term financial planning, debt issuance, capital project delivery, strategic and succession planning, labor relations and contract negotiations, wet weather flow management, and personnel and financial policy development among many other important topics. Al's leadership on the Board, thoughtful approach to Agency business, and valuable guidance will be missed, and staff wishes Al a wonderful retirement.

Attachment:

- CMSA Resolution #331: Resolution of Appreciation for Al Boro



CMSA Resolution No. 331

*Resolution of Appreciation for
Albert Boro*

WHEREAS, **Albert Boro**, has served as a representative of the San Rafael Sanitation District on the Central Marin Sanitation Agency (CMSA) Board as a Commissioner since February 1990; and

WHEREAS, **AI** has demonstrated his dedication to the work of the Board by serving as Board Chair, Vice-Chair, or Secretary for many of those years, and by bringing a thoughtful perspective to the meetings; and

WHEREAS, during his tenure on the Board, **AI** has worked with over thirty different Board representatives from CMSA's member agencies and its three general managers, and he had an influential hand in selecting the current general manager in 2002; and

WHEREAS, **AI** has been a respected senior member of the Board who has mentored new members, and leaves a legacy of valuable community services; and

WHEREAS, **AI** participated in the many Board discussions and decisions associated with the development and successful implementation of the Agency's Wet Weather Improvement Program, including the issuance of revenue bonds and awarding of \$58 million in design and construction contracts; and

WHEREAS, **AI** participated in the development of all three of the Agency's five-year Strategic Business Plans, the first beginning in 2005, and consistently supported Agency staff as they endeavored to achieve each plan's Vision, Mission, Goals, and Values; and

WHEREAS, **AI** encouraged the development of the Central Marin Food-to-Energy Program, and the public-private partnership with Marin Sanitary Service to make the Program a success; and

WHEREAS, **AI** has proven his commitment to environmental stewardship and resource recovery by unwaveringly supporting the Agency's programs, projects, initiatives, financial sustainability, and green business practices; and

WHEREAS, **AI** has always shown the intention to act in the best interest of the Agency and its customers during his long tenure at CMSA, and will be missed by all.

NOW, THEREFORE, BE IT RESOLVED that the Commissioners of the Central Marin Sanitation Agency express their appreciation to **AI** for his years of service and dedication to the Agency.

PASSED, APPROVED, AND ADOPTED the 21st day of August, 2018.

AYES:

NAYS:

ABSTAIN:

ABSENT:

ATTEST:

Diane Furst, Chair

Dean DiGiovanni, Secretary



BOARD MEMORANDUM

August 16, 2018

To: CMSA Commissioners and Alternates

From: Jason Dow, General Manager

A handwritten signature in blue ink, appearing to be 'JD', is written over the name Jason Dow.

Subject: Revised Leaves of Absence Policy

Recommendation: Approve the revised Personnel Policy #304: Leaves of Absence.

Discussion: A new state law became effective on January 1, 2018, that requires employers to provide up to 12 weeks of unpaid time off to eligible employees for them to bond with their new child. To comply with the law, staff asked the Agency's Employment Law Attorney, Joan Newman with Wiley Price Radulovich, to update our Leaves of Absence Personnel Policy. Ms. Newman added the New Parent Leave section to the policy, and at the request of staff, she reviewed and updated other provisions in the policy to comply with changes in state law since its last updating. During the review of the proposed changes, staff and Ms. Newman made additional minor revisions as shown in the attached policy.

Staff provided the revised policy to the SEIU Local 1021 representative, and met with the represented employees' lead union steward to review the policy changes and answer several questions.

Attachments:

- Personnel Policy #304: Leave of Absence

POLICY #:	304
SECTION:	BENEFITS
SUBJECT:	Leaves of Absence
DATE:	07/12/201608/21/18

POLICY

All probationary and regular full-time employees are entitled to the ~~types of~~ leave provisions outlined below, subject to the approval of the General Manager/designee and in accordance with law. Employees in other classifications will be granted such leaves as are required by law. All leave time must be requested in writing and approved by the employee's supervisor and department manager prior to submitting the request to the General Manager/designee for final approval.

PROCEDURES

1. General Provisions

- A. A leave of absence may include both paid and unpaid time off. An employee will continue to receive health insurance benefits as long as the employee is on paid status, except as otherwise required by law. Employees who are granted an unpaid leave of absence that exceeds thirty (30) days, and who have exhausted their paid accrued leave, and who wish to continue health insurance coverage may be eligible to do so at their expense at the Agency's group rates, except to the extent that the law requires continuation of health insurance during the leave.
- B. All requests for leave must be submitted in writing to the employee's supervisor, department manager, and then to the GM/designee. Employees should contact the Administrative Assistant for the necessary forms. The Agency may also request additional documentation substantiating the need for a leave.
- CB. Seniority, vacation, sick leave and holiday benefits do not accrue during periods of unpaid leave of absence.
- DC. If an employee's leave exceeds thirty (30) days, their performance evaluation, and consideration for ~~regular any compensation~~ increase in connection therewith, shall be delayed for the length of time during which the employee is on leave of absence.
- ED. Employees granted a leave of absence which exceeds thirty (30) days ~~must are~~ expected to provide the Agency with two (2) weeks' notice prior to their anticipated return to work date.
- FE. Employees who require an extension to a leave of absence should request the extension a minimum of two (2) weeks before the original leave expires. If two

weeks' notice is not possible under the circumstances, the employee should notify the Agency of a needed extension immediately upon learning of such need.

- F. ~~Depending on the type of leave, the employee shall complete the appropriate Leave of Absence Request Form. (Forms are available from Administration.) The Agency may also request additional documentation substantiating the need for a leave.~~
- G. The probationary period of a probationary employee will be extended for the period of the leave of absence.
- H. Failure to return to work on the next scheduled workday following the expiration of a leave of absence may result in termination.

2. Bereavement Leave

In the event of a death in the immediate family, eligible employees may request a paid bereavement leave of absence of up to twenty-four (24) hours ~~per incident~~. If more time is needed, employees may request that additional days off be charged to their accrued paid time off or, if the employee has no accrued paid time off, any additional approved days off may be taken without pay. Sick leave may not be used for bereavement purposes.

For the purpose of this policy, immediate family shall be defined as: parent, step-parent, father/mother in-law, brother, sister, step-brother/sister, brother/sister in-law, child, step-child, grandparent, spouse, uncle, aunt, member of household or legal guardian, and or registered domestic partner.

An employee may request the Use-use of accrued paid leave in the case of death of persons other than "immediate family" ~~may be granted upon approval of the Agency~~. If granted by the Agency, such leave may be charged to the employee's accrued vacation, holiday or compensatory time, at the employee's option.

Employees must submit a written leave request and have it approved by their supervisor prior to taking the leave.

3. Military Leave

An employee who is a member of the uniformed services of the United States shall be allowed leave in accordance with the provisions of law governing military leaves. The Agency shall follow all governing laws in effect at the time of an employee's request for Military Leave.

- A. An employee who is called to military service is entitled to up to thirty (30) calendar days of leave to perform military service per fiscal year, with full pay and benefits, provided the employee has been employed with the Agency for at least one (1) year, and to the extent required by law.
- B. Employees requiring military leave must provide advance written notice of the

need for a leave, unless prevented from doing so by military necessity or if providing notice would be impossible or unreasonable. A copy of the military orders must be attached to the employee's completed Leave of Absence Request form.

- C. An employee returning from military leave of less than thirty-one (31) days shall report to work on the first full regularly scheduled workday following completion of service, plus time for safe transportation back to the employee's residence plus an additional eight (8) hours. An employee whose military leave lasts between exceeds thirty-one (31) to 180 days must submit an application for re-employment within fourteen (14) days after the completion of service lasting between thirty one (31) to one hundred eighty one (181) days. An employee whose military leave exceeds one hundred eighty (180) days must submit an application for re-employment within ninety (90) days after completion of military service.
- D. An employee returning from a military leave will generally may be reinstated in the position held previously, or a comparable position, and at the salary he/she would have received had employment with the Agency been continuous, exclusive of step increases/shift assignments, consistent with applicable law.
- E. If an employee becomes disabled as a result of military service and is no longer able to perform the essential functions of the job held previously, with or without reasonable accommodation, the Agency shall provide the employee with another position of equivalent seniority, pay and status for which the employee is qualified, to the extent required by law.

4. Jury Duty

Employees summoned for jury duty or subpoenaed as a witness at a court trial **will be provided paid time off during the time of their service**. Employees shall receive compensation at their regular rate of pay only for those hours required to serve which occur during their regularly scheduled work week.

~~Jury fees, excluding mileage, received by employees shall be remitted to the Agency for any period of jury service for which the employee receives Agency pay. Employees may retain jury duty fees during hours other than regularly scheduled working hours, or for any period of service that is unpaid by the Agency.~~

Employees who work on a weekend or on a swing or graveyard shift and are called for jury duty shall have their regular schedule converted to a Monday through Friday day shift during the jury duty period only.

In advance of the requested jury time off, employees shall complete the appropriate leave request form indicating the day(s) required for attendance, and must submit it to their immediate supervisor, along with a copy of the subpoena. Upon return, employees shall submit documentation of attendance for those dates.

If a subpoena is received without advance warning, and the employee is unable to

submit appropriate leave forms and documentation prior to leaving work, employees shall notify their supervisor as soon as possible and submit the appropriate documentation upon return to work.

5. School Visits Leave

Employees who are parents or guardians of any child in K-12 or in a licensed child day care facility are allowed up to eight (8) hours unpaid time off per month with a maximum of forty (40) hours per school year, to participate in any child's school activities.

- A. Employees must provide their supervisor with reasonable notice for the planned time off by completing the appropriate leave request form and obtaining supervisory approval.
- B. Employees must use vacation, compensatory, or holiday time to cover the time off. If the employee does not have sufficient time accrued, any time used for school visits that is not covered by vacation, compensatory, or holiday time will be unpaid.
- C. Employees must provide, upon the Agency's request, written verification of parental participation from the school or licensed day care facility that specifies the date and time of the activity.

6. Medical and Pregnancy-Disability Leave of Absence

A. General Provisions

An unpaid Leave of Absence may be granted to an employee who is temporarily unable to perform the job due to medical or pregnancy-disability ("PD") reasons. In this event, employees should apply for California State Disability Insurance (SDI) benefits and ~~may~~ must use their accrued sick leave hours in connection with this leave. If employees requesting medical leave for any purpose other than PD have no available sick leave, they must substitute paid vacation, holiday or compensatory time benefits during the ~~otherwise-unpaid portion of the~~ leave, subject to approval by the General Manager. Employees on leave for pregnancy-related reasons have the option to elect to use accrued paid vacation, holiday, or compensatory time under these circumstances. The employee's paid leave hours will be integrated with any benefits from outside sources (e.g., SDI benefits, workers' comp benefits, etc.) if any, as described in *Policy #303* of this Manual. ~~Leaves of Absence shall generally not exceed six (6) months, inclusive of the portion paid by the use of available sick leave or other accrued time off.~~

B. Requests for Leave Approval

Employees requesting a medical or pregnancy-disability leave of absence shall complete the Leave of Absence Request Form and attach a note from their physician with the following information:

1. A verification from the physician that the employee's ~~has a~~ medical condition or PD requiring a leave of absence from work
2. The anticipated beginning date for the leave of absence
3. The anticipated return-to-work date.

C. Length of Leave

Medical and pregnancy-disability leave requests are considered shall be granted only for the period of disability as documented by the physician's statement, generally not to exceed six (6) months.

D. Status Reports

While on leave, employees shall generally be requested to report to the Agency on a monthly basis regarding their medical status, except where a definite return to work date is known in advance and certified by the treating health care provider), and there has been no significant change in that return to work date.

E. Return to Work

In order to return to work following a leave of absence for medical or PD pregnancy-related reasons, the employee must submit a written medical release from the physician. The physician note releasing the employee to return to work must specifically indicate any medically-required work restrictions and the anticipated duration of such restrictions.

If employees returning from a leave of absence have a protected disability and require accommodation to perform their job, the Agency will engage in the interactive process with the employee to determine if an effective reasonable accommodation can be made.

F. Position Reinstatement

Employees returning from an approved medical or pregnancy-related leave will be reinstated to their former position, or a comparable position, at the end of the approved leave, unless those positions no longer exist, or the employee has been terminated, for legitimate business reasons unrelated to the leave, and otherwise as required by law.

7. Work Related Injury or Illness Leave of Absence

California Workers' Compensation laws cover all Agency employees. The protections provided by these laws come into effect if employees are injured or become ill as a result of work or working conditions. In addition to temporary disability benefits, workers' compensation insurance coverage may also provide to eligible employees permanent disability benefits, rehabilitation, and death benefits. The Agency pays the full cost of workers' compensation insurance premiums.

- A. If employees become injured or ill as a result of Agency-related work, they must report it to their supervisor immediately. The supervisor will see that the employee gets immediate medical attention, if necessary, and that the required reports of the injury or illness are completed. If an employee does not report promptly, workers' compensation insurance benefits may be delayed or precluded.
- B. An employee who needs to request a leave of absence due to a workers' compensation injury or illness shall complete the appropriate Workers' Compensation Forms. If the employee is off work for more than a few days, the employee may be eligible for a medical leave of absence. (See Section 6, above.)
- C. If an employee is deemed eligible to receive workers' compensation benefits, any such benefits received from the Workers' Compensation Insurance Fund shall be integrated with that employee's available sick leave, as described in *Policy #303* in this manual. If an employee's sick leave is exhausted during the medical leave, the Agency will integrate other available accrued leaves.
- D. A medical leave of absence due to a work-related illness or injury shall continue until the employee either:
- is determined to be medically able to return to duty; or
 - accepts employment outside the Agency; or
 - accepts employment in another Agency position; or
 - is permanently medically precluded from returning to the former position, with or without reasonable accommodation; or
 - elects retirement.

8. Modified Duty Assignment

The Agency shall attempt to provide temporary modified duty assignments to employees whose work-related injury or illness results in the temporary inability to perform the functions of their job. See *Policy # 311 – Modified Duty/Return to Work*.

9. Family & Medical Leave

The Family and Medical Leave Act ("FMLA") allows eligible employees to take up to 12 weeks of unpaid leave within a 12-month period for their own serious illness, the birth or adoption of a child, or the care of a seriously ill child, spouse, registered domestic partner, or parent. A 12-month period is defined ~~for each employee~~ as the 12 months beginning the first day leave is taken.

To be eligible for leave under the FMLA and California Family Rights Act ("CFRA"), the employee must have been employed by the Agency for at least 12 months, and must have worked at least 1,250 hours during the 12-month period immediately preceding the request for leave. In addition, the employee must work at a facility with at least 50

employees in a 75-mile radius. Because the Agency employs fewer than 50 employees, Agency employees are not eligible to take FMLA/CFRA leave. Please see the *Appendix A* to this Manual, entitled "Family Care and Medical Leave," for a further description of these leaves.

10. New Parent Leave

Eligible employees may request an unpaid leave of up to 12 weeks in a 12-month period to bond with their new child. The leave must be take place within one year of the birth, adoption, or foster care placement of the child.

To be eligible for this leave, the employee must have been employed by the Agency for at least 12 months, and must have worked at least 1,250 hours during the 12-month period immediately preceding the request for leave. In addition, the employee must work at a facility with at least 20 employees in a 75-mile radius.

While the employee is on approved New Parent Leave, CMSA will provide the employee continuing coverage under its group health plan. Employees on New Parent Leave may use any accrued paid time off, such as vacation, holiday, and paid sick leave. Upon return from the approved leave, the employee will be returned to his/her same position, or a comparable position.

Employee taking approved New Parent Leave may be eligible to receive paid family leave benefits (i.e., family temporary disability insurance benefits) by making a claim to the state Employment Development Department (EDD).

10. Personal Leave of Absence

An employee may request an unpaid personal leave of absence for extenuating circumstances. The maximum period that may be granted for a personal leave shall not exceed thirty (30) calendar days. The employee must complete the Leave of Absence Request Form in advance of the desired leave date, stating the reason for the leave and the length of time requested. The employee must use all available vacation, holiday, administrative, and compensatory time prior to requesting, and/or during, an otherwise an unpaid personal leave. ~~with the exception of employees covered under the MOU, who may opt to use accrued paid time off during the first fifteen (15) calendar days of the personal leave.~~

If taking leave under this section to care for a seriously ill child, spouse, parent or registered domestic partner, ~~or to bond with a minor child within one year of the birth or placement of the child in connection with foster care or adoption,~~ the employee may be eligible to receive paid family leave benefits (i.e., family temporary disability insurance benefits) by making a claim to the state Employment Development Department (EDD). ~~If an employee is eligible to receive paid family leave benefits from EDD, the employee must first exhaust at least two weeks of accrued paid leave accrued~~

~~vacation before receiving the state being eligible to receive Paid Family Leave benefits.~~

Upon return to work from an approved personal leave of absence, the Agency will attempt to reinstate the employee in the same or a similar position. There is no guarantee of reinstatement following a personal leave of absence.

11. Child's Suspension

An employee who is the parent or guardian of a child who has been suspended from school may request unpaid time off if required to appear at the school in connection with that suspension. The employee must give reasonable notice to the Agency of the request for such leave.

12. Victims of Domestic Violence or Sexual Assault

A victim of domestic violence or sexual assault may request unpaid time off in accordance with applicable law ~~must give the Agency reasonable advance notice, to the extent possible, of the intention to take unpaid time off in order~~ to obtain, for example:

- A temporary restraining order;
- Restraining order;
- Other court assistance;
- Medical attention for injuries caused by domestic violence or assault; and/or
- Services from a shelter, program or counselor related to domestic violence or assault.

Employees requesting this leave must give the Agency reasonable advance notice.

Employees taking approved leave under this section may, at their discretion, use accrued vacation, holiday, or sick leave, or compensatory time off that is otherwise available to them.



BOARD MEMORANDUM

August 16, 2018

To: CMSA Commissioners and Alternates
From: Jason Dow, General Manager *JD*
Subject: **Fiscal Year 2018 Green Business Report**

Recommendation: Accept the Agency's FY 2018 Green Business Report.

Summary: After the close of the fiscal year, staff prepares a Green Business Report (Report) of our various recycling, disposal, product reuse, energy efficiency, and other green business activities. Agency staff members from different departments and work groups track the Agency's green business activities over the fiscal year and provide the metrics for the Report. The Report is posted on the Agency website, and is comprised of five distinct initiative areas that are briefly summarized below.

Table 1 - Agency Recycling: Materials and supplies that have been used by Agency staff or hired contractors, and are collected in separate containers for off-site recycling, such as paper and plastic products, green waste, aluminum, scrap metal, and cardboard.

Table 2 - Reused Agency Products: Reclaimed water, biogas, and biosolids that are renewable resources from the wastewater treatment processes.

Table 3 - Hazardous Material Collection and Disposal: Materials that are classified as hazardous substances by regulatory agencies that should be handled and disposed of properly to protect the environment, such as pharmaceuticals, lubricants, mercury-containing devices, and herbicides.

Table 4 - Green Activities: Programs and initiatives that provide an environmental benefit – reducing greenhouse gas emissions, potable water and fossil fuel use, and vehicle use.

Table 5 - Energy Saving Activities: Elements or components in recently completed or in-progress Agency projects and initiatives that increase energy efficiency.

Attachment

- FY18 Green Business Report

GREEN BUSINESS REPORT – FY 2018

I. Agency Recycling

Item	Description	Recycling Measurement	Quantity
1) Paper	Paper cups, plates, printer paper, newspaper, magazines, and other paper based materials are separately disposed of in office containers, collected by staff and transferred to 64 gallon bins that are picked up and recycled weekly by Marin Sanitary Service.	# of 64 gallon bins	52 <i>FY 17 - 62</i>
2) Aluminum cans	Aluminum beverage cans, aluminum foil, and other aluminum materials are deposited by employees in bins outside the Agency lunch room. The bin contents are picked up and recycled weekly by Marin Sanitary Service, and bins may be partially full.	# of 90 gallon bins	52 <i>FY 17 - 127</i>
3) Plastics	Plastic food, beverage, and storage containers and other plastic materials (labeled #1-#7) are deposited by employees in bins outside the Agency lunch room. The bin contents are periodically transferred to a larger storage area, and the plastic is sold at the Marin Recycling Center.	# of 64 gallon bins	22 <i>FY 17 - 9</i>
4) Scrap Metal	Iron, steel, and related metals are collected in 20 yard bins and then recycled, typically four times per year, by Marin Sanitary Service.	lbs. of metal	122,790 <i>FY 17 -134,650</i>
5) Cardboard	Waste cardboard boxes, packing, and similar material are collected in a 3-yard dumpster. Marin Sanitary Service picks up the dumpster and recycles the materials.	# of 3 yard bins	53 <i>FY 17 - 52</i>
6) Green waste	Grass clippings, tree branches, and trimmings from pruning and landscaping activities are deposited in 3-yard dumpsters, and used by Marin Sanitary Service in a composting operation.	# of 3 yard bins	63 <i>FY 17 - 89</i>

II. Reused Agency Products

Metric	Definition	Reuse Measurement	Quantity
1) Recycled water	Treated wastewater that is reused for Agency landscape irrigation, tank wash down, and cogeneration engine cooling, used offsite at the Remillard Pond, and delivered through the Agency's truck fill station.	million gallons/year % of effluent	395 8.66% <i>FY 17 – 5.8%</i>
2) Biosolids	Treated biosolids that are beneficially reused as: - alternate daily cover at Redwood landfill - soil amendment/fertilizer for land application - biofertilizer production for agricultural use	wet tons/year wet tons/year wet tons/year	3,392 1,383 1,782
3) Biogas	Biogas generated in the Agency's anaerobic digesters is used for fuel in an engine-generator to produce on-site electricity.	Million ft ³ of biogas	102.3 <i>FY 17 – 104.7</i>

CMSA GREEN BUSINESS REPORT – FY 2018

III. Hazardous Material Collection and Disposal

Metric	Description	Recycling Measurement	Quantity
1) Oils and Lubricants	Used oils and lubricants from CMSA equipment, vehicles, and engine-generators are collected and stored in a waste oil facility. The supplier periodically collects the materials for recycling.	gallons	Oil: 625 <i>FY 17 – 983</i> Coolant: 200 <i>FY 17 – 200</i>
2) Mercury	Collected mercury containing devices: - amalgam waste at dental offices is collected and disposed of by certified haulers - fluorescent tubes are collected by the public education program agencies - mercury thermometers exchanged for digital thermometers at CMSA	kg linear feet # of thermometers	36.75 620 0
3) Pharmaceuticals	Old or unused pharmaceuticals are brought to pharmacies and police stations by the public for proper disposal. CMSA and the Marin County public education program agencies fund the collection and disposal expenses, and the program is administered by the Marin County Environmental Health Department.	lbs. of pharmaceuticals	7,871 <i>FY 17 – 7,413</i>
4) Batteries	Depleted, used, or damaged batteries collected by staff and brought to a Hazardous Waste facility and Interstate Battery. Sources of batteries include: - Agency vehicles - Devices (AA, C, D, 9V, etc.) and employee batteries brought from home	# of batteries lbs.	28 110
5) Electronic Waste	Electronic products that contain toxic materials, from Agency facilities and employees - cell phones, computers, computer monitors, process instrumentation, etc. – are collected and stored on-site, then periodically disposed of at the Marin Hazardous Household Waste Facility.	# of devices	291 <i>FY 17 – 341</i>
6) Herbicides and Pesticides	The Agency uses the same types of herbicides and pesticide products utilized by the County of Marin as part of their Integrated Pest Management Program. Waste products are disposed of at the Marin Sanitary Service Household Hazardous Waste Facility.	gallons/lbs	Herbicide: 1.54 <i>FY 17 – 2.82 gal</i> Insecticide: 0 <i>FY 17 – 0 lb</i> Fungicide: 2.0 <i>FY 17 – 0 gal</i>

CMSA GREEN BUSINESS REPORT – FY 2018

IV. Green Activities

Metric	Description	Environmental Benefit
1) Potable Water Conservation	High efficiency water fixtures have been installed in all Agency facilities and buildings. Staff records the Agency's daily potable water use.	Potable water use in FY17 was 163,064 gal <i>FY 17 – 169,048 gallons</i>
2) Green Commuting	Programs encourage employees to use alternate commute methods such as carpool, biking, public transit, etc., when convenient and affordable for Agency employees. Administrative procedures are in place to assist in registering, tracking, and utilizing these modes of transportation.	During FY 18, 18 Agency employees participated in the program, which reduces the number of vehicles on roads during commute hours, emissions and fossil fuel use.
3) Spare the Air Days	Participation in the Bay Area Air Quality Management District's Spare the Air Day program. The Agency does not use gasoline fueled landscape maintenance equipment on these specified days.	24 days in FY 18 that resulted in lower emissions and GHG reduction
4) Increased Digital Document Management	Digital and email correspondence to replace hard copy mailing. Many agency documents are now posted on the Agency website for viewing.	Reduced use of paper, toner, and postage
5) Green vehicle fleet	Agency staff use bicycles and electric carts to travel around Agency property and within the treatment plant, and 40% of Agency vehicles are alternate fuel – Hybrids.	Fuel savings and reduced GHG emissions

V. Energy Saving Activities

Project/Initiative	Description of Energy Saving Aspect of initiative
1) PG&E Interconnection Agreement Modification Project and Power Delivery	CMSA's electrical cogeneration system currently powers the Agency's facilities for an average 22-23 hours per day with biogas as its fuel source. In May 2017, CMSA obtained a new utility interconnection agreement (IA) from PG&E, and the Agency is working with PG&E to upgrade on-site and off-site electrical systems to allow CMSA to supply excess generated power to the grid. PG&E has determined it does not need to upgrade its system, and CMSA's system design has been approved by PG&E and the improvements should be completed in 2018. CMSA has also executed a power sale agreement with MCE for future power delivery.
2) Power Monitoring Equipment	In addition to the power monitoring system installed in the switchgear building in FY17, the Agency's Green House Gas/Energy Efficiency team completed a facility energy consumption audit. Their report of findings identified facility equipment, in order from highest to lowest energy consumption, that should be monitored and the proper monitoring equipment to be used. The team was authorized to procure and install the additional power monitoring devices on the top 10 energy consuming pieces of equipment. In addition to installing monitoring devices, staff installed a monitor in the Agency' main office entry way which allows visitors to view the Agency's power consumption, by specific area, in real time along with several other key facility performance measures.

CMSA GREEN BUSINESS REPORT – FY 2018

VI. Energy Saving Activities, cont.

Project/Initiative	Description of energy saving aspect of initiative
3) Lighting System Replacement	<p>The Agency has a multi-year program to replace fluorescent, incandescent, and metal halide fixtures/bulbs throughout the Agency's facilities with energy-efficient lighting – electronic ballast fluorescents or LEDs. In FY18, the Agency replaced eighty-five high pressure sodium fixtures in the Solids Handling Building's Gas Compressor Room, Hypochlorite and Sodium Bisulfite chemical storage rooms, and underground Galleries B, E, and F with new high-efficiency LED fixtures, or retrofitted existing fixtures to utilize high efficiency LED's lighting. These upgrades will save the Agency 54,644 kWh of electricity annually.</p>
5) Energy Generation	<p>The Agency uses a cogeneration system comprised of an internal combustion engine coupled to a generator to produce over 95% of the Agency's energy needs. The system is fueled by biogas generated in the Agency's anaerobic digesters and purchased natural gas; a small amount of utility electricity is purchased to minimize system disruptions when energy demand instantaneously changes. For FY 18, metrics for energy generation and the resulting electricity procurement savings are:</p> <ul style="list-style-type: none"> - Biogas generation (from Table 2): <i>102.3 million cubic feet or 65.5 million cubic feet of NG (equivalent gas)</i> - Natural gas purchase: <i>77,254 therms</i> - Annual energy costs without cogeneration: <i>\$ 1,140,984 (assumes purchasing all electricity and 1/6 current NG for boiler fuel)</i> - Electricity savings due to cogeneration: <i>\$ 970,539 (use of biogas and natural gas as cogeneration fuel)</i> - Electricity savings due to biogas use: <i>\$ 870,600 (value of biogas used as engine fuel)</i>



BOARD MEMORANDUM

August 16, 2018

To: CMSA Commissioners and Alternates
From: Jason Dow, General Manager JD
Subject: **Agency Facilities Master Plan Presentation**

Recommendation: Receive the Agency Facilities Master Plan presentation from Carollo Engineers, and provide comments and/or direction to the General Manager, as appropriate.

Summary: Carollo Engineers has nearly completed the 2017 Facilities Masterplan (Plan) work, and will give a presentation at the August 21 Board meeting. Over the past year, I have provided the Board with status reports on several of the Plan's tasks, such as Solar Power Generation and Sea Level Rise, so Carollo's presentation will focus on the Nutrient Removal, Biosolids Management, Organic Receiving Facility Expansion, and Biogas Utilization tasks. After receiving Board comments and feedback, the Final Plan Report will be prepared and submitted, and staff will post it on the CMSA website. Carollo's presentation is attached to this staff report.

Discussion: The Plan is comprised of ten separate tasks that evaluated Agency facilities and renewable resource management opportunities and options given potential future regulatory and environmental considerations. An optional task, development of a treatment plant model, will not be exercised at this time, but may be considered by staff in the future with an expanded scope of work. A summary of each task's scope of work and its key findings are presented below.

1. Equipment and Facility Condition Assessment – Carollo conducted a focused condition assessment of the Agency's assets that included a visual assessment of selected equipment, systems, processes, and areas in the facility. Their assessment team prepared a risk based evaluation of the assessment findings, held a workshop with the CMSA project team to review and receive comments on the Technical Memorandum (TM), and the final draft TM was submitted. An important element in the TM is a prioritized list of projects, by process area, with recommended completion timeframes and conceptual project costs. Staff completed an independent field review of the TM recommendations and prepared an action plan to address most of them. Key projects were presented to and accepted by the Finance Committee, and were subsequently incorporated into the Agency's FY 19 10-year Capital Improvement Program (CIP) and the Board adopted 5-year Revenue Plan.

2. Biogas Utilization – Carollo peer reviewed the digester capacity and biogas production estimates that were prepared in the Interconnection Agreement Modification Project, and investigated other alternatives to utilize the excess biogas. Those alternatives included a second power generation facility, a biomethane fueling station for vehicles, and transporting biomethane to the local natural gas distribution system for injection. Carollo prepared site layouts and conceptual project costs for each alternative, and the findings will be presented at the 8/21 Board meeting.
3. Organic Waste Receiving Facility – The existing facility’s underground storage tank has a capacity of 30,000 gallons, and staff projects that as the organic waste program expands in the future there will likely be limited tank capacity. To avoid this situation and prevent rejecting organic waste deliveries, Carollo developed and evaluated above- and below-ground facility expansion alternatives for the Agency’s future consideration. These alternatives with cost estimates will also be presented at the 8/21 meeting.
4. Nutrient Removal – Under the Regional Water Board’s Nutrient Watershed Permit, the Bay Area Clean Water Agencies (BACWA) completed a preliminary assessment of technologies and facilities at CMSA to reduce nutrient loading to the central San Francisco Bay, which would likely not be required until issuance of the Agency’s 2024 NPDES permit. BACWA considered side-stream treatment systems, modifications of existing treatment processes, and construction of new processing facilities. Carollo evaluated and expanded the BACWA assessment findings to identify locations where side-stream and/or new treatment facilities could be built, refine cost estimates, identify timing for construction and design, and prioritize technologies based on their cost effectiveness. These alternatives with cost estimates will also be presented at the 8/21 meeting.
5. Biosolids Management Alternatives – CMSA uses three beneficial reuse options for our biosolids and more options are expected to be available in the future. Carollo estimated the Agency’s future biosolids production volumes assuming an increase in the organic waste receiving program, developed a series of options that considered the landfill organic waste diversion requirements in SB 1383, and provided dry and wet weather seasons recommendations. These alternatives and recommendations will also be presented at the 8/21 meeting.
6. Biosolids Dewatering – Digested sludge is dewatered with high speed centrifuges, and last year CMSA hired a centrifuge service company to conduct a condition assessment of the centrifuges to determine when rehabilitation work should be scheduled. Carollo used the condition assessment report in a dewatering alternatives analysis to determine if CMSA should consider replacing the centrifuges with a different technology. The analysis considered space limitations in the existing building, capital and lifecycle costs, power and polymer usage, and dewatering performance.

Alternatives considered in the analysis included rehabilitating our three existing centrifuges, and installing new centrifuges, screw filter presses, and rotary fan presses.

New centrifuges scored the highest of the alternatives. Given that staff has proactively maintained the existing centrifuges, the condition assessment found that they were in good condition and have 5-10 years of service life. Using the assessment and Carollo TM information, staff moved a CIP project to replace the centrifuges from FY18 to FY22, and plans to replace them with new centrifuges.

7. Blending Reduction Alternative Analysis – CMSA’s NPDES Permit allows blending of primary and secondary effluent during wet weather events that cause flows to exceed the capacity of the secondary treatment system. Our 2012 NPDES Permit required completion and submittal of a No Feasible Alternative to Blending Analysis (NFAA) with the 2017 NPDES Permit renewal application. In this task, Carollo reviewed and updated the 2012 NFAA to reflect current storage and treatment costs, recent blending history, and any new technologies available to reduce blending frequency and volumes. This information was provided to the Agency’s regulatory consultant for peer review and inclusion in the 2017 NFAA.

Staff presented the alternatives to the Board at the December 2016 Board meeting. In January, the Board selected the “Maintain the Existing Secondary Treatment System” alternative from the TM, and that was noted as the Agency’s preferred alternative in the Agency’s NPDES Permit renewal application that was submitted to the Regional Water Board. In CMSA’s 2018 NPDES permit, the RWB accepted the Board’s selection and blending was authorized.

8. Secondary Treatment – CMSA’s biological secondary treatment process consists of bio-towers, aeration basins, and secondary clarifiers. Carollo worked with staff to determine the most efficient operation of the secondary system process during several flow conditions. The evaluation considered treatment process stability, power consumption, odors, and other concerns that impact operations. The TM provides a season based outline for secondary system operational strategies that aligns with the Agency’s current operating modes to produce a high quality final effluent.
9. Solar Power Generation – Carollo conducted a feasibility analysis to determine practical locations on Agency property and buildings to install solar power facilities and the amount of power that could be generated. The analysis considered solar system capital and lifecycle costs, operational impacts due to limited space, and construction limitations. Each alternative’s lifecycle cost analysis assumed the generated solar power will offset biogas generated power, which would be sold to MCE under the Agency’s power purchase agreement. The economics of each alternative was not favorable, and due to long payback periods and low cost/benefit ratios the Agency does not plan to deliver a solar power generation project during the term of the current CIP.
10. Sea Level Rise – CMSA’s facility is included in the Marin BayWAVE sea level rise vulnerability assessment of the eastern Marin shoreline from Sausalito to the northern end of Novato. Carollo used BayWAVE data to determine impacts to Agency facilities and the hydraulic capacity of the outfall during dry and wet weather operations. The TM

findings showed that CMSA's property will not be impacted by sea level rise in 2100 with a 100-year storm event, and the effects on the outfall hydraulics is minimal.

Alignment with Strategic Plan: This activity is a strategic action to support Goal 1 – Objective 1.4 in the Agency's FY18 Business Plan as shown below.

Goal One: CMSA will continue to operate and maintain its wastewater facility to produce high quality effluent and biosolids, within a changing regulatory environment.

Objective 1.4: Prepare an Agency Facilities Master Plan.

Actions: Complete the tasks in the plan's scope of work.

Present Master Plan Findings and Recommendations to the Board

Attachment:

- 2017 Agency Facilities Master Plan Presentation



2017 Facilities Master Plan
CMSA Contract No. 17-05

**Central Marin Sanitation Agency
Special Commission Meeting**
August 21, 2018



Master Plan Overview

 <p>Liquid Stream</p>	 <p>Solid Stream</p>
 <p>Energy Management</p>	 <p>Plant-wide Issues</p>

2



Liquid Stream Completed TMs

TM 7: Blending Reduction

- Scope
- Update Agency's 2011 Utility Analysis Report and develop additional blending reduction alternatives.
- Agency Actions
- Board selected "No project alternative", and that was accepted by RWB.
- Blending authorized in 2018 NPDES permit.

TM 8: Secondary Treatment

- Scope
- Model Agency's secondary treatment process and identify efficient secondary treatment operating strategies.
- Agency Actions
- TM findings confirmed current dry and wet weather operating modes are best to produce high quality effluent.

4

2

Solids Stream Completed TMs

TM 6: Biosolids Dewatering

- Scope
 - Review Agency's existing dewatering facility and perform a dewatering alternatives analysis.
- Agency Actions
 - Centrifuge replacement project moved from FY18 to FY22 in the CIP.
 - Existing centrifuges will be replaced with either two higher capacity units or three similar capacity units.

5

Energy Management Completed TMs

TM 9: Solar Power Generation

- Scope
 - Evaluate potential for solar PV system including conceptual layout, regulatory considerations, and design criteria.
- Agency Actions
 - Financial evaluations of solar array alternatives were not favorable.
 - No project included in the CIP.

6

Plant-wide Issues Completed TMs

TM 1: Condition Assessment

•Scope

•Conduct condition assessment of Agency facilities and develop prioritized project list with costs and timing.

•Agency Actions

•CMSA created an action plan to address the recommendations.
•Priority projects have either been addressed or integrated into the FY19 Budget's 10-yr CIP.

TM 10: Sea Level Rise

•Scope

•Determine impacts of sea level rise to CMSA property including reduction in outfall capacity.

•Agency Actions

•CMSA property not impacted by future projected sea level rise in 2100 with 100-yr storm event.
•Hydraulic evaluation showed existing pump station could deliver peak wet weather flows to marine outfall at 2050 projected sea level rise and 100-yr storm event.

7

Focus of Today's Presentation



TM 4
Nutrient
Removal



TM 3
Organic Waste
Receiving

TM 5
Biosolids
Management

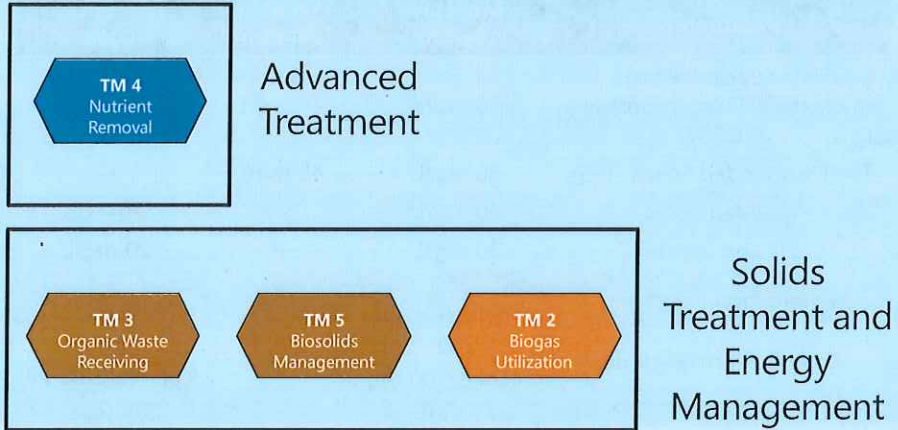


TM 2
Biogas
Utilization



8

Focus of Today's Presentation



9



Selected Current Permit Discharge Limits

Parameter	Monthly Average	Weekly Average	Maximum Daily
5-day Carbonaceous Biochemical Oxygen Demand (CBOD ₅)	25 mg/L	40 mg/L	--
Total Suspended Solids (TSS)	30 mg/L	45 mg/L	--
Total Ammonia	60 mg/L	--	120 mg/L
Oil and Grease	10 mg/L	--	20 mg/L
Enterococcus Bacteria	35 colonies/100 mL	--	--
Total Coliform Bacteria	240 colonies/100 mL	--	10,000 colonies/100 mL
Copper	49 µg/L	--	84 µg/L
Cyanide	21 µg/L	--	37 µg/L
Dioxin-TEQ	1.4 x 10 ⁻⁸ µg/L	--	2.8 x 10 ⁻⁸ µg/L

11

Proposed Nutrient Reduction Limits in the BACWA Work Plan

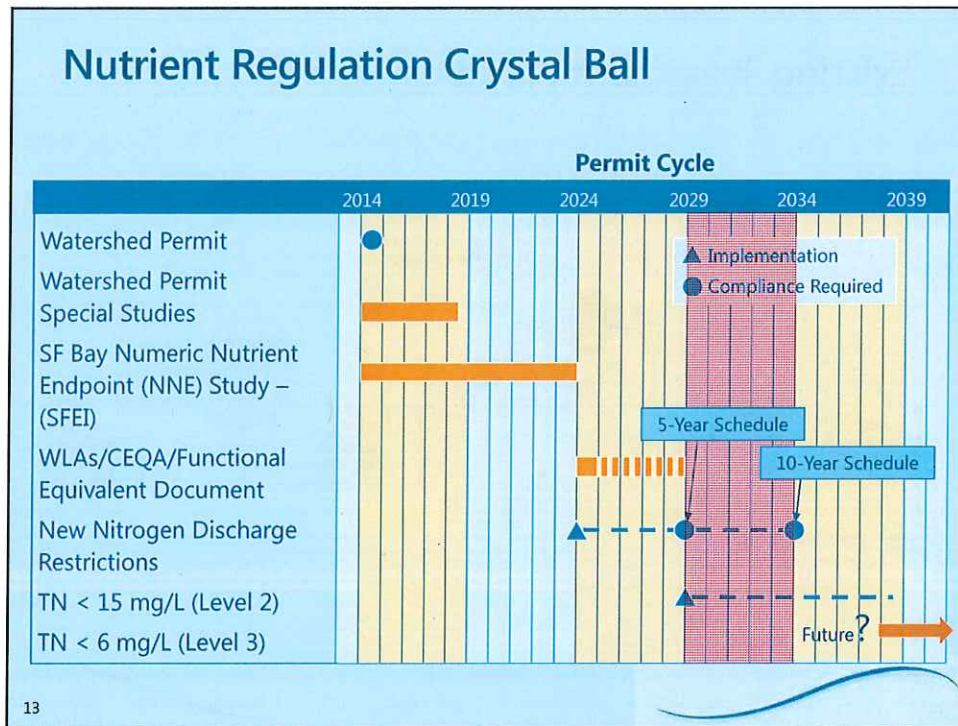


Level ⁽¹⁾	Total Ammonia	Total Nitrogen	Total Phosphorous
1	Variable	Variable	Variable
2	2 mg/L	15 mg/L	1.0 mg/L
3	2 mg/L	6 mg/L	0.3 mg/L

- (1) The seasonal impacts will be considered for all three treatment levels:
- Dry Season = May 1 to September 30
 - Wet Season = October 1 to April 30

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Nutrient Regulation Crystal Ball



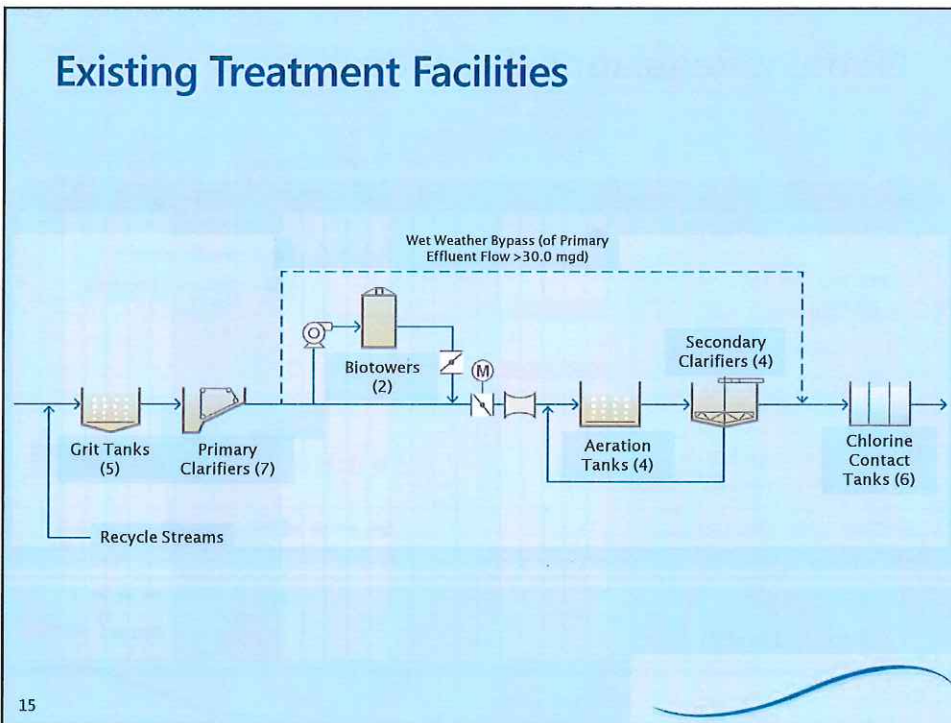
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Compliance for Load Caps Expected Between 2029 and 2034

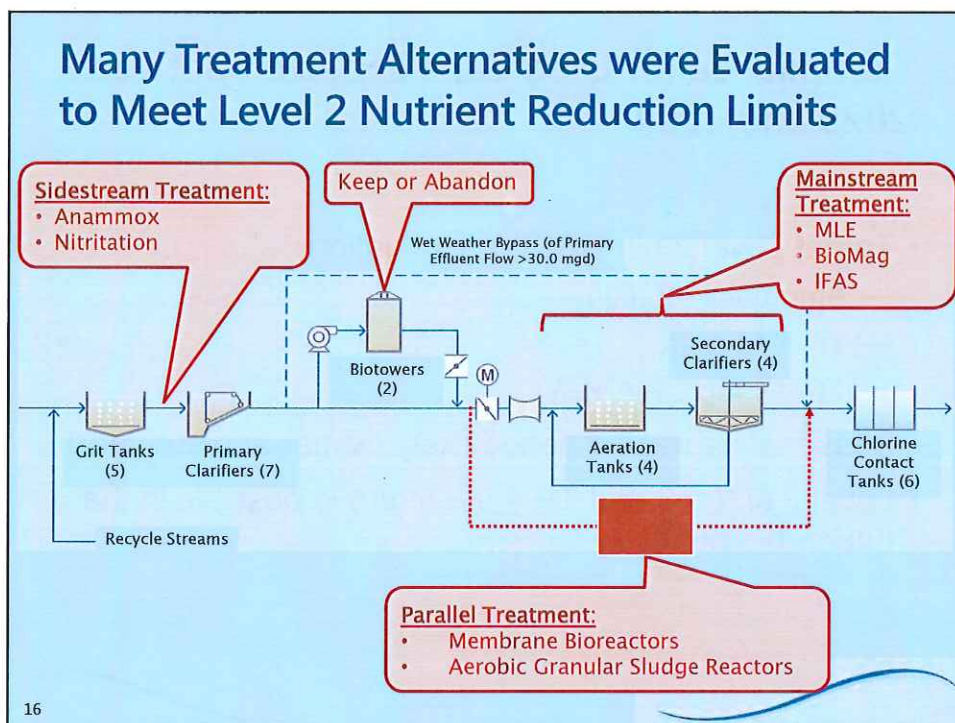
- Target Level 2 per BACWA evaluation
 - Ammonia = 2 mg/L
 - TN = 15 mg/L
 - TP = 1 mg/L (unlikely)
- Seasonal averaging period likely (winter and summer)
- Level 3 (TN = 6 and TP = 0.3 mg/L) is possible in the future, but not likely

14

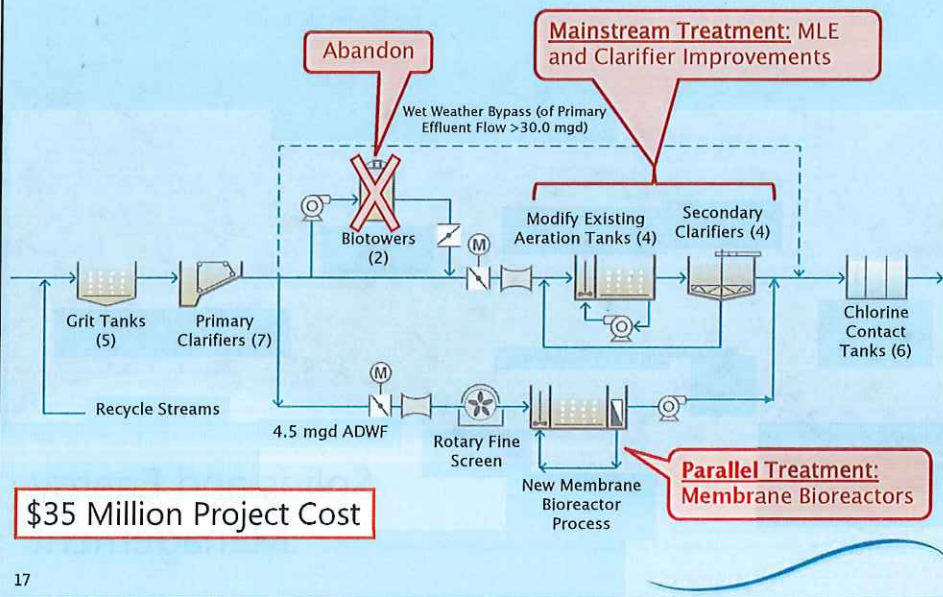
Existing Treatment Facilities



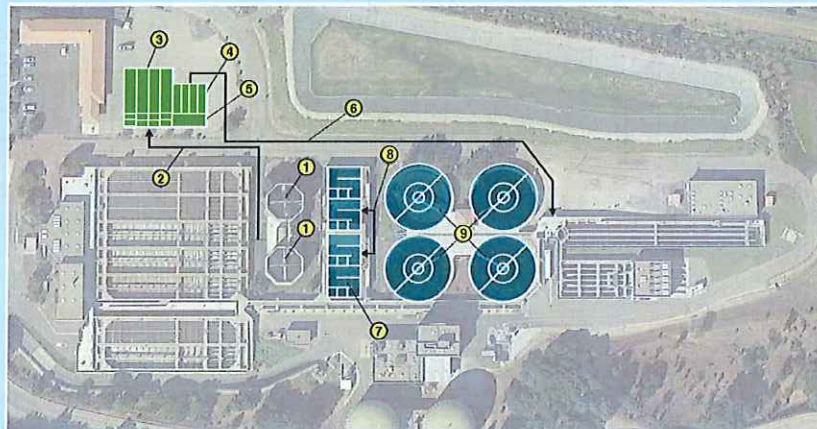
Many Treatment Alternatives were Evaluated to Meet Level 2 Nutrient Reduction Limits



A Possible Treatment Alternative Includes...

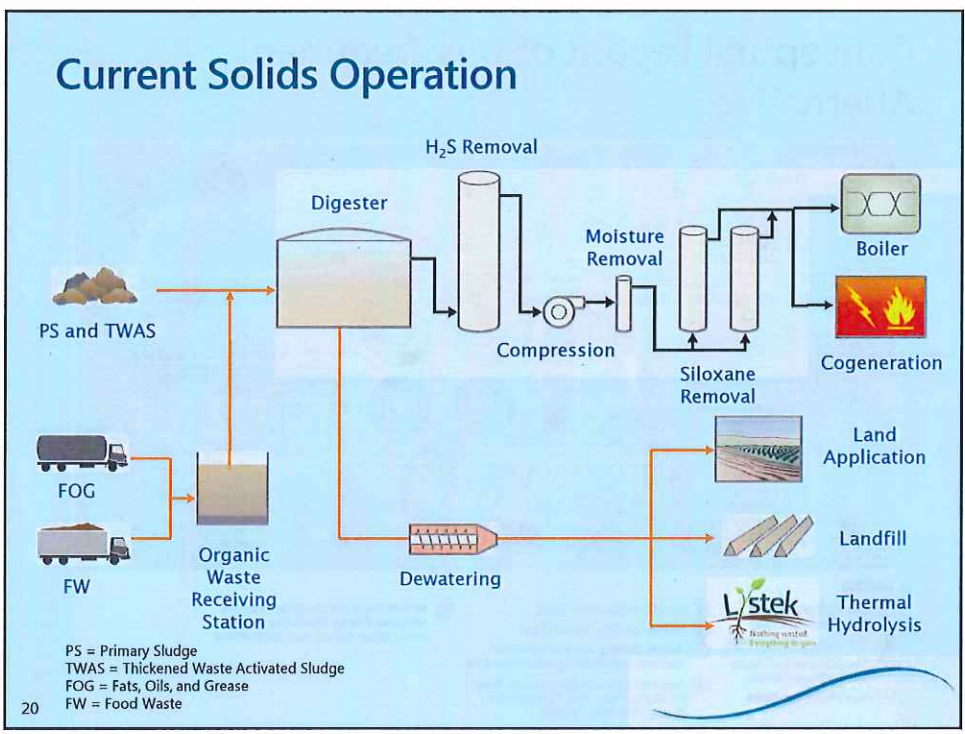
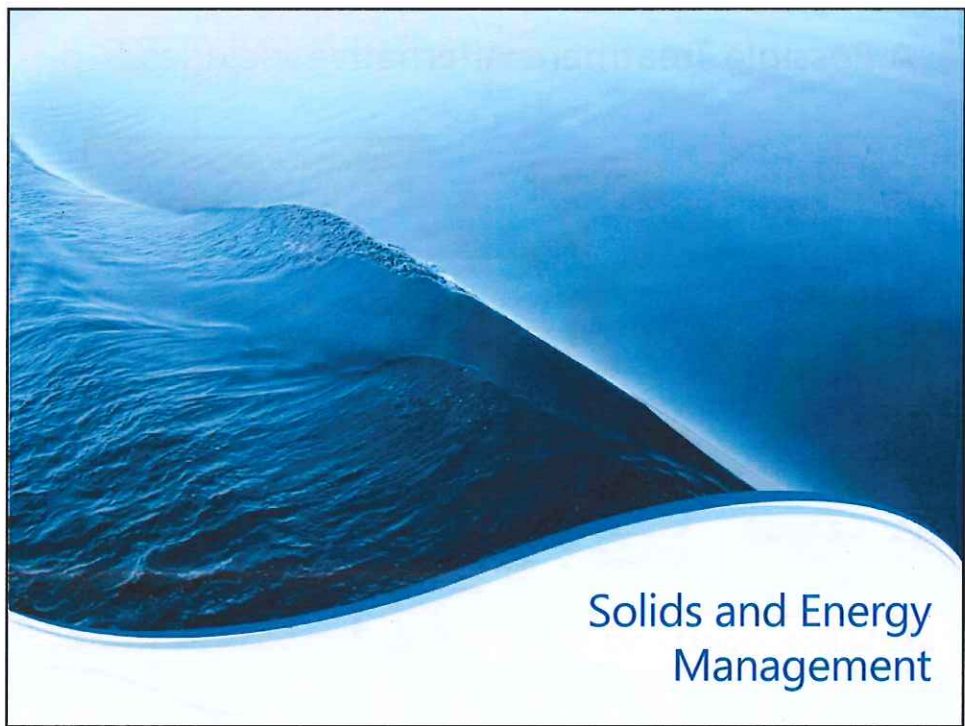


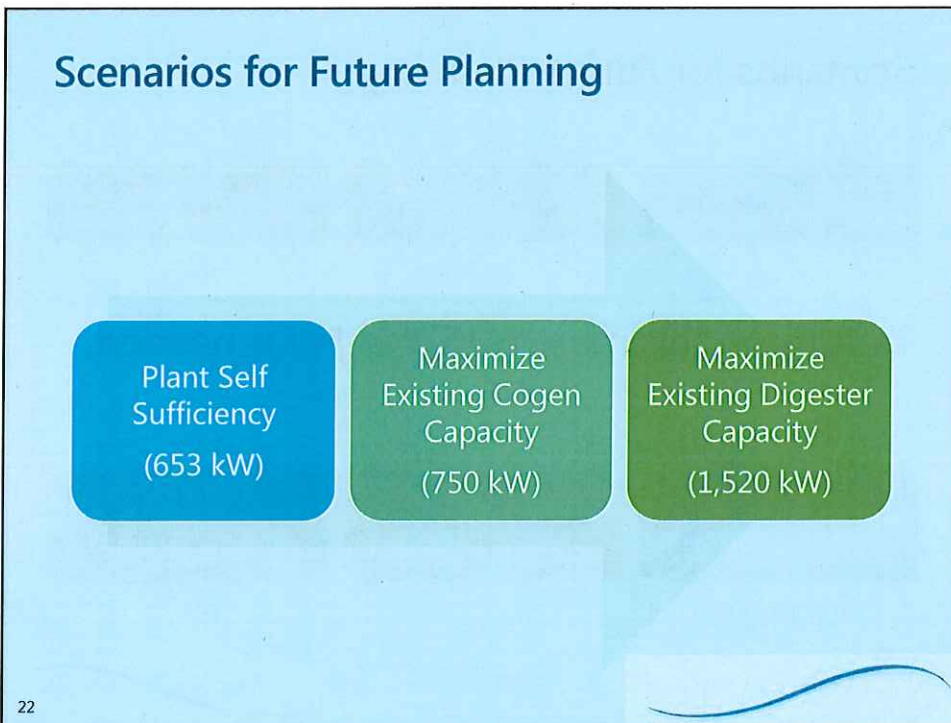
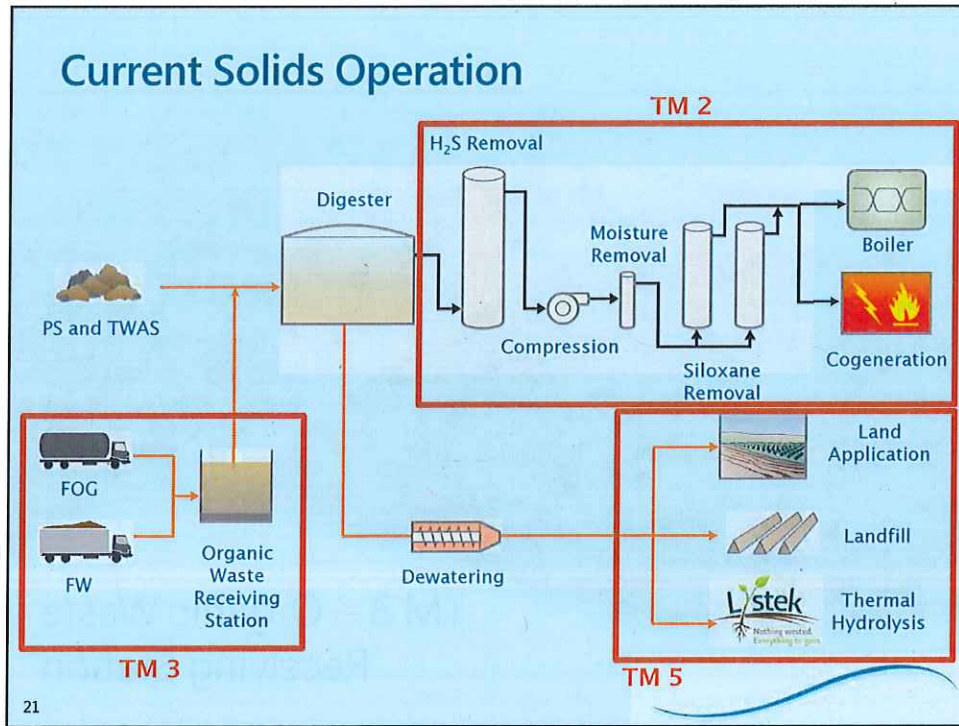
Conceptual Layout of this Treatment Alternative

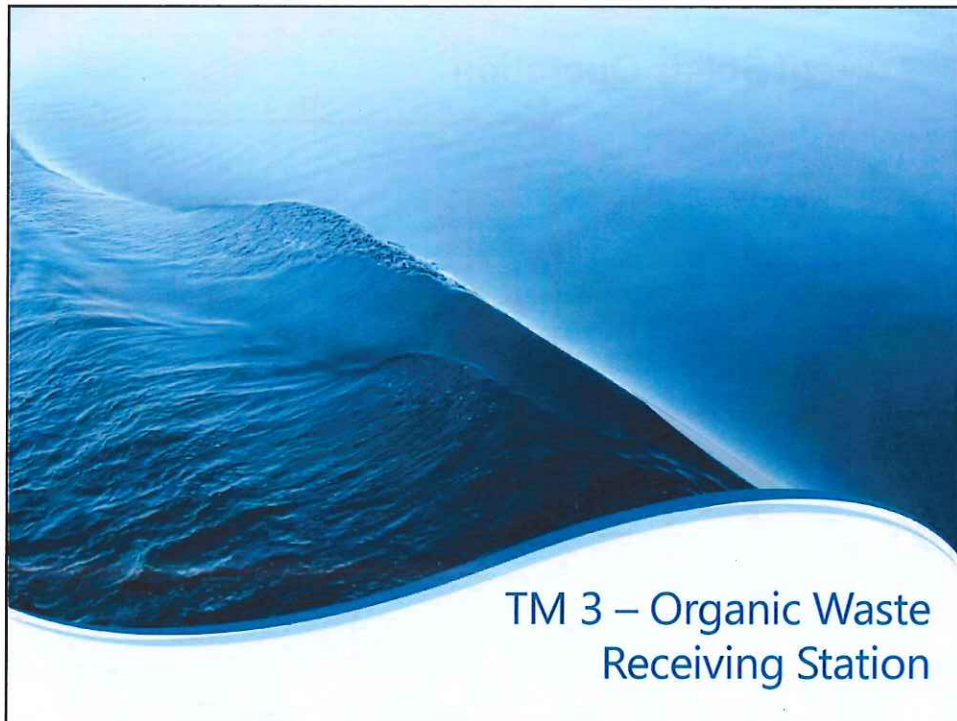


LEGEND

- ① Existing Biotower (Abandoned in Place)
- ② New Primary Effluent Pipe
- ③ New MBR Aeration Tanks with Preanoxic Zones
- ④ New Membrane Tanks
- ⑤ New Deoxygenation Tanks
- ⑥ New Secondary Effluent Pipe
- ⑦ Retrofit Existing Aeration Tanks to Modified Ludzak-Ettinger Configuration
- ⑧ New Returned Activated Sludge Pipes for Sludge Pleaeration Configuration during Peak Flow Periods
- ⑨ Retrofit Existing Secondary Clarifiers with New Energy Dissipating Inlets, Flocculation Baffles, and Mechanisms







Scenarios for Future Planning

Plant Self Sufficiency
(653 kW)

Maximize Existing Cogen Capacity
(750 kW)

Maximize Existing Digester Capacity
(1,520 kW)

To achieve this more FOG and FW is needed...

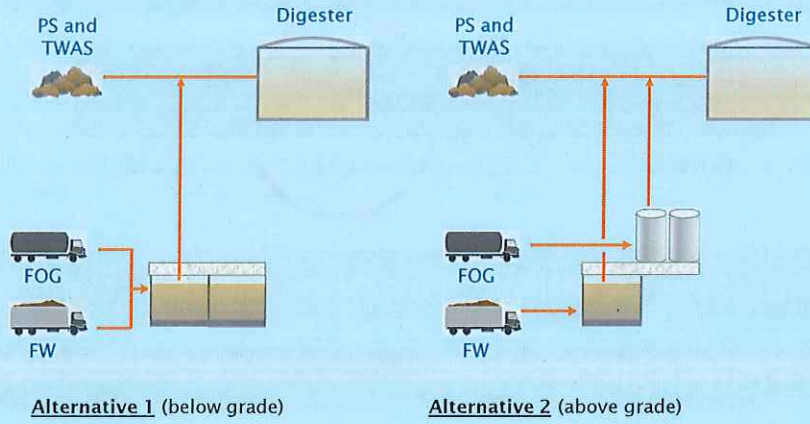
26% increase in FOG
and FW loading*

52% increase in FOG
and FW loading*

260% increase in FOG
and FW loading*

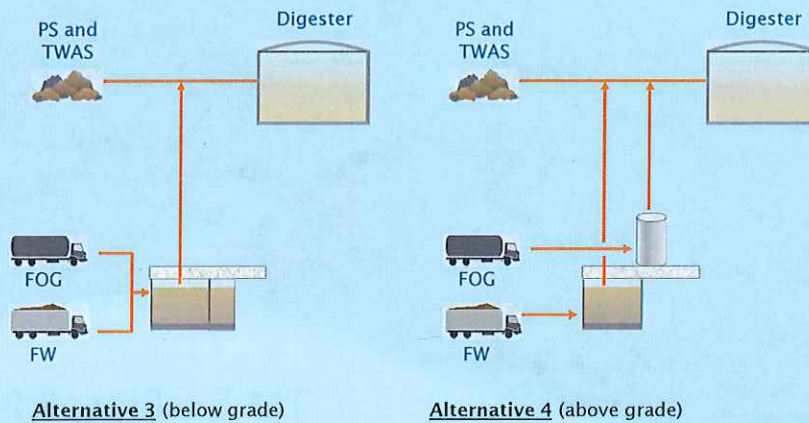
* FY 16/17 used as baseline year

Alternatives 1 & 2: Double Existing Storage



25

Alternatives 3 & 4: Storage for 1 day HRT



26

Alternative 3 is Preferred Because...

It has the lowest project cost

Alt 1 – double below grade storage	Alt 2 – double above grade storage	Alt 3 – 1 day HRT below grade storage	Alt 4 – 1 day HRT above grade storage
\$1.6 M	\$2.3 M	\$1.2 M	\$1.4 M

It has the smallest footprint

It is familiar to staff

27



Scenarios for Future Planning

Plant Self Sufficiency
(653 kW)

Maximize Existing Cogen Capacity
(750 kW)

Maximize Existing Digester Capacity
(1,520 kW)

To achieve this more biosolids will be produced...

3% increase in biosolids*

5% increase in biosolids*

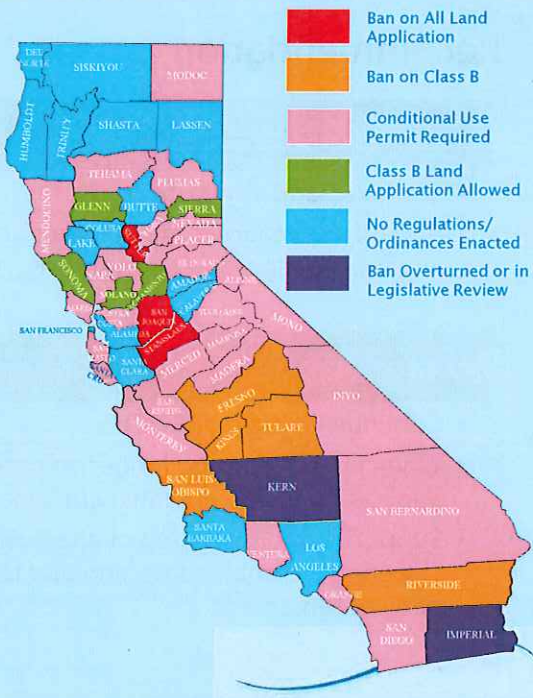
24% increase in biosolids*

* FY 16/17 used as baseline year

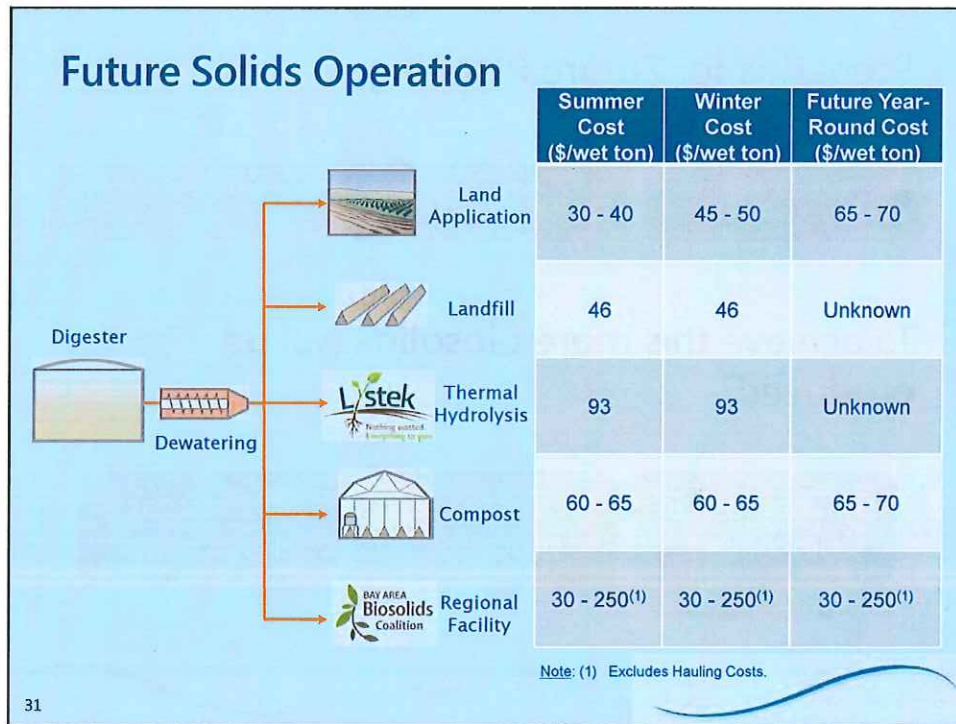
29

Regulatory Drivers

- **SB 1383** – 50% organics diversion from landfills by 2020; 75% diversion by 2025
- **AB 341** – 75% solid waste diversion from landfills by 2020
- **AB 1594** – ADC of green waste won't receive diversion credit starting 2020
- **AB 876** – requires organic waste generators to ID facilities (like POTWs) that can accept their organic waste.
- **AB 1826** – Required increased organic waste recycling and decreased organic waste production



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Recommendation

Summer Plan:

- Continue land application
- As land application cost increases above \$60 per wet ton, increase portion sent to compost

Winter Plan:

- Continue landfilling (ADC)
- When landfilling is no longer an option, pursue winter land application in Sacramento with Synagro
- Support implementation of a regional BAB Coalition facility, targeting a combined tipping and hauling fee of \$65 to \$70 per wet ton or less.

32

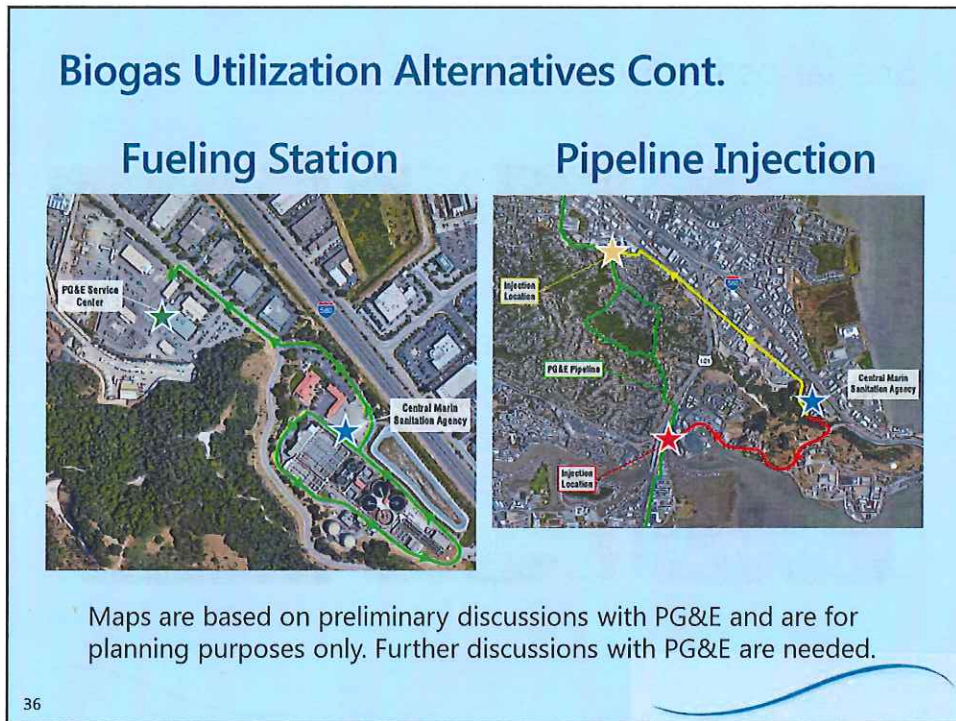
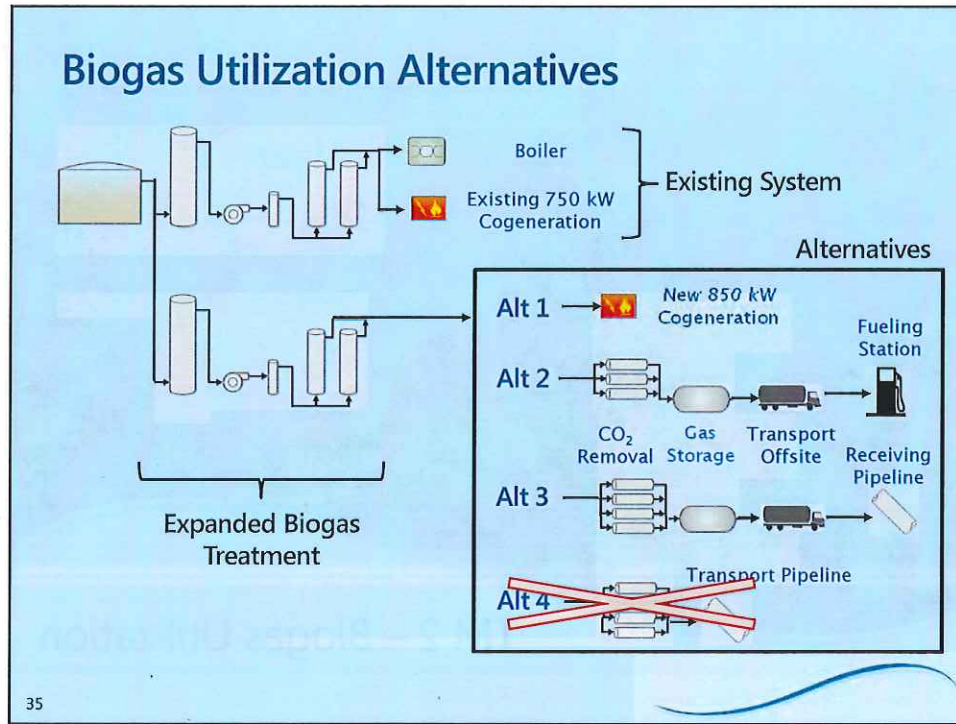


Scenarios for Future Planning

- Plant Self Sufficiency (653 kW)
- Maximize Existing Cogen Capacity (750 kW)
- Maximize Existing Digester Capacity (1,520 kW)

To achieve this new energy generating equipment may be needed...

- N/A – Existing cogen is sufficient ✓
- N/A – Existing cogen is sufficient ✓
- Equipment to process additional 770 kw is needed



Alternative Considerations

Implementation Issues

- Would need PG&E approval before implementation

Project Costs

Cogeneration	RNG for Fueling Station	RNG for Pipeline Injection
\$8.9 M	\$13.3 M	\$22.6 M

Financing Uncertainties

- Fixed electricity pricing for 10 to 20 years
- Typical contract for LCFS credits and RINs is only 5 years

Next Steps

- Cogeneration system alternative planning study

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BOARD MEMORANDUM

August 16, 2018

To: CMSA Commissioners and Alternates
From: Jason Dow, General Manager *JD*
Subject: **Board of Commissioners' Compensation Policy**

Recommendation: Review and discuss the Board of Commissioners' Compensation Policy, and provide direction to the General Manager, as appropriate.

Summary: Board members occasionally ask about the Board's compensation amount (stipend) and the types of service that are eligible for a stipend. At the July meeting, a Board member asked about possible compensation for Board members serving on a Board committee, as committee members can spend considerable time preparing for and attending meetings. After a brief discussion, the Board directed staff to include on an upcoming meeting agenda a discussion on Board Policy #2 – Compensation for Agency Officials.

Discussion: In December 2009, the Board adopted a Compensation for Agency Officials Policy (Policy), and in April 2010 the Policy was incorporated into a new Board of Commissioners' Policy Manual. During the Policy development discussion, the Board decided to maintain its meeting stipend at \$100 for each day's service, and that services eligible for a stipend included attendance at Board meetings, conferences, meetings of multi-jurisdictional government bodies where a Board member serves as the Agency representative, and other Board requested meetings or services. At the time, the Board specifically excluded attendance at committee meetings from being eligible for a stipend. A possible explanation for this exclusion could be that the Board did not have any standing committees and very rarely used ad hoc committees.

Staff researched the genesis of the current \$100 stipend, and learned that the Board approved a stipend increase from \$75 to \$100 per day of service in December 1986. This action was taken by the Board to comply with Senate Bill 1844 that the Governor signed in July 1986, which became effective in January 1987. SB 1844 increased the daily stipend amount in the Health and Safety Code for sanitation and sanitary district officials to \$100.

In July 2000, SB 1559 became effective to align an annual stipend increase for sanitary district officials with a 1989 law that allows up to a 5% stipend increase for water district officials.

The 2000 law allowed sanitary districts to increase their stipend up to 5% per year, and allowed a retroactive 5% increase since its last adjustment. In discussion with Legal Counsel Jack Govi, SB 1559 could be interpreted to allow up to a retroactive 5% stipend increase from the date a sanitary district board approves the increase back to 2000 or its last adjustment, which for CMSA would be 1987. Counsel Govi advised a conservative interpretation for CMSA is a retroactive adjustment to 2000. Given that interpretation, the maximum stipend for CMSA would be \$100 times 5% per year for 18 years, or \$240.67 per day of service.

Since 1987, the Board has periodically considered increasing its daily stipend and each time decided to maintain the current amount. According to Section 6489 in the Health and Safety Code, an increase in the daily stipend amount must be made by passing an ordinance.

Board stipend amounts for selected sanitary and sanitation districts in Marin County, and if the district provides a stipend for committee meetings, are shown in the table below.

Agency	Stipend Amount	Stipend for Committee Meetings
CMSA	\$100	No
Las Gallinas Valley Sanitary	\$252	Yes
Novato Sanitary	\$225	Yes
Ross Valley Sanitary	\$314	Yes
Sewerage Agency of Southern Marin	\$100	Yes
San Rafael Sanitation	\$100	No, does not use committees
Sanitary District #2	\$0*	No
Sanitary District #5	\$100	No
Sausalito Marin City Sanitary	\$160	Yes

* City council is the sanitary board, and sanitary items are on the council meeting agenda.

Attachment:

- CMSA Board of Commissioners' Policy #2 – Compensation for Agency Officials

COMPENSATION POLICY FOR AGENCY OFFICIALS

MEETING STIPENDS

1. General

Consistent with California Health and Safety Code Section 6489, Commissioners receive a daily meeting stipend for each day's attendance at meetings, as defined in this policy. Such compensation is in addition to any reimbursement for meals, lodging, travel and expenses consistent with this policy.

2. Stipend Amount

Commissioners or alternates in the place of Commissioners who attend meetings/events as defined in Section 3 shall receive \$100.00 as their daily stipend. Should the Commission raise the \$100 stipend in the future, this amount shall be adjusted per the adjustment made by Board Resolution without the need to amend this policy.

3. Meetings and Service Subject to Daily Stipend

a. Committee meetings of the Board are not subject to a daily meeting stipend.

b. For a commissioner or alternate to be entitled to a daily stipend under this policy, the event in question must constitute one of the following:

- (1) A meeting of the Agency board within the meaning of Government Code Section 54952.2(a).
- (2) A conference or organized educational activity conducted in compliance with Government Code Section 54952.2(c), including ethics training required by Government Code Sections 53234 and following.
- (3) A meeting of any multi-jurisdictional governmental body on which the Board member serves as the Agency's designated representative.

- (4) Any meeting attended or service provided on a given day at the formal request of the Board and for which the Board approves payment of a daily meeting

4. Aggregate Limits

The number of days for which a Commissioner receives a daily stipend will not exceed six days in a calendar month or state law, whatever is less.


- a. The stipend amount is for all meetings in a given day. Multiple meetings in one day do not justify multiple stipend payments.



BOARD MEMORANDUM

August 16, 2018

To: CMSA Commissioners and Alternates

From: Jason Dow, General Manager 

Subject: **CMSA Response to the Marin County Civil Grand Jury Report – Consolidation of Sanitation Districts**

Recommendation: Provide direction to staff on the preparation of the Agency’s response.

Summary: At the May Board meeting, the Board discussed the Grand Jury’s Consolidation of Sanitary Districts Report (Report), considered options to respond to the Report, and decided to discuss the Report and the Agency’s response after the JPA member agencies adopt their respective responses. San Rafael Sanitation District and Ross Valley Sanitary District have approved their responses, while Sanitary District #2 and CMSA requested and received approval for a 90-day response extension from the Grand Jury Foreperson. CMSA must submit its responses by October 13, 2018, four days after the October Board meeting.

Discussion: Marin County’s 2017/2018 Civil Grand Jury released the Report on April 20, 2018. In summary, the Report briefly explains the history of special district formation in the county, notes successful local fire agency consolidations, concludes that sanitation/sanitary districts should combine into larger regional agencies to save rate-payer money and more effectively address climate change issues, and specifically references consolidation recommendations in the 2005 Central Marin Regionalization Scenarios Evaluation and the 2017 LAFCO Central Marin Wastewater Study.

The Report has four recommendations, one of which requires a response from CMSA, RVSD, SD2, and SRSD. Larkspur, a JPA member agency, was not required to respond.

Recommendation 2: “Central Marin Sanitation Agency (JPA), Sanitary District #1 (Ross Valley), Sanitary District #2 (Corte Madera), and the San Rafael Sanitation District should reorganize into a single sanitary/sanitation district. Each entity should complete a reorganization application with Marin LAFCO by 9/30/2018 and announce this action on the agenda of the next Board meeting for public involvement.”

In regards to filing a LAFCO consolidation application by 9/20/18, staff learned during the 2007 consolidation planning work that LAFCO requires a significant amount of decisions to be made

and evaluations to be completed prior to the submittal of a consolidation application, all of which could not be finished by the proposed September 30 filing date. During the 2007 consolidation planning work, staff and a consultant, Paul Causey, who was serving as RVSD's interim general manager, prepared an initial list of 119 consolidation tasks and activities. That list is attached and was provided to the JPA member agencies for use in preparing their report.

Staff prepared the draft response below that aligns with the SRSD and RVSD responses, and has been reviewed by Chair Furst.

"CMSA has commissioned four consolidation studies since the Agency was created in 1979, and has learned that CMSA cannot initiate a consolidation of its Joint Powers Agreement (JPA) member agencies; they must initiate and fully support any form of consolidation. CMSA agrees with the Ross Valley Sanitary District and San Rafael Sanitation District's response that filling a consolidation application with LAFCO by 9/30/18 is not realistic and impractical due to the amount of supporting information needed to be included with the application. In 2007, a consolidation planning study was performed that identified over 119 separate detailed studies, evaluations, and tasks that would need to be completed and addresses before a wastewater consolidation could be implemented.

CMSA's Vision is to protect the environment and public health by providing wastewater, environmental, and resource recovery services of exceptional quality and value to its customers. In support of this Vision, CMSA looks forward to working closely with its JPA member agencies to identify and collaborate on regional projects and activities to enhance the delivery of wastewater services, increase operational efficiencies, share staff and resources, and save public funds in a fully transparent manner. If the JPA member agencies initiate discussions of functional and/or political consolidation in the future, CMSA will actively participate in them."

Staff is seeking direction on how to respond to the Report. A few options are:

- a) Approve the above response as presented.
- b) Approved a modified version of the above response.
- c) Form an ad hoc committee to draft a response for Board review at the October 9 meeting.
- d) Take another action.

CMSA's response needs to be approved by the October 9 meeting, for submittal to the Grand Jury Foreperson by October 13.

Attachments:

- 1) San Rafael Sanitation District's response, dated June 25, 2018
- 2) Ross Valley Sanitary District's response, dated June 26, 2018
- 3) June 2007 Consolidation Action Listing – Central Marin Wastewater Agency Consolidation
- 3) 2018 Marin County Civil Grand Jury Report – Consolidation of Sanitation Districts

AGENCY RESPONSE TO GRAND JURY REPORT

Report Title: **Consolidation of Sanitation Districts**

Report Date: **April 13, 2018**

Response Date: **July 13, 2018**

Agency Name: **San Rafael Sanitation District** Agenda Date: **June 25, 2018**

Response by: **Gary O. Phillips**

Title: **Board Chair**

FINDINGS

- I (we) agree with the findings numbered: **N/A**
 - I (we) disagree partially with the findings numbered: **N/A**
 - I (we) disagree wholly with the findings numbered: **N/A**
- (Attach a statement specifying any portions of the findings that are disputed; include an explanation of the reasons therefor.)

RECOMMENDATIONS

- Recommendations numbered **N/A** have been implemented.
(Attach a summary describing the implemented actions.)
- Recommendations numbered **N/A** have not yet been implemented, but will be implemented in the future.
(Attach a timeframe for the implementation.)
- Recommendations numbered **R2** require further analysis.
(Attach an explanation and the scope and parameters of an analysis or study and a timeframe for the matter to be prepared for discussion by the officer or director of the agency or department being investigated or reviewed, including the governing body of the public agency when applicable. This timeframe shall not exceed six months from the date of publication of the Grand Jury report.)
- Recommendations numbered **N/A** will not be implemented because they are not warranted or are not reasonable.
(Attach an explanation.)

Date: _____ Signed: _____

GARY O. PHILLIPS, Board Chair
San Rafael Sanitation District

Number of pages attached **5** (including this page)

Response Form

ATTACHMENT "A"

RESPONSE FROM THE SAN RAFAEL SANITATION DISTRICT TO GRAND JURY REPORT "CONSOLIDATION OF SANITATION DISTRICTS"

Recommendations:

R2: Central Marin Sanitation Agency (JPA), Sanitary District #1 (Ross Valley), Sanitary District #2 (Corte Madera), and the San Rafael Sanitation District should reorganize into a single sanitary/sanitation district. Each entity should complete a reorganization application with Marin LAFCO by 9/30/2018 and announce this action on the agenda of the next board meeting for public involvement.

Response: *Require further analysis:* The District is supportive of the goals of enhanced cooperation and efficiency that can be gained by working together with its JPA member agencies, including the possibility of consolidation. However, the recommendation that the District should submit a reorganization application with Marin LAFCO by 9/30/2018 is unrealistic. The cooperation and negotiation process between all the member agencies and the supporting documents that are required for the application are complex and time consuming. (Please see the attached "Consolidation Action Listing," which was prepared during a consolidation study in 2007 that lists various tasks to be performed prior to submitting an application to LAFCO.) Since this process is long term, the District is focused on issues that can be accomplished at the present and will continue to work with its JPA member agencies and neighboring agencies to identify and implement agreements and other steps that will enhance the overall efficient provision of services. In the meantime, the District will begin discussions with the other JPA member agencies regarding consolidation.

RESPONSE TO MARIN COUNTY CIVIL GRAND JURY REPORT

Report Title: *Consolidation of Sanitation Districts*
 Report Date: April 13th, 2018
 Public Release Date: April 20th, 2018
 Response By: Ross Valley Sanitary District

RECOMMENDATIONS for Ross Valley Sanitary District (R1, R2)

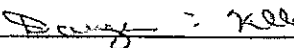
R1. Marin LAFCO should complete the planned reorganization of the Murray Park Sewer Maintenance District and the San Quentin Village Sewer Maintenance District with Ross Valley Sanitary District.

HAS NOT BEEN IMPLEMENTED, BUT WILL BE IMPLEMENTED IN THE FUTURE. RVSD agrees with this recommendation. RVSD believes the process should be done in two phases. The first action will be to seek formal support from Marin County to initiate the annexation application for the Murray Park SMD, since this SMD is already located within RVSD and is provided with operations and maintenance service by RVSD to Marin County under contract. After the successful completion of this phase, then the more complicated process for annexation of the SQVSMD would be initiated. The SQVSMD is located outside of the RVSD Service Area and involves other entities such as the State of California Bureau of Prisons, whose system the SQVSMD flows must pass through. RVSD is unclear why the Grand Jury Report did not request a response from Marin County on R1, as the County owns both SMD's and would have to formally endorse and support the annexation.

R2. Central Marin Sanitation Agency (JPA), Sanitary District #1 (Ross Valley), Sanitary District #2 (Corte Madera), and the San Rafael Sanitary District should reorganize into a single sanitary/sanitation district. Each entity should complete a reorganization application with Marin LAFCO by 9/30/2018 and announce this action on the agenda of the next board meeting for public involvement.

REQUIRES FURTHER ANALYSIS. RVSD agrees with the recommended action, and supported a similar recommendation made in the 2016 Marin LAFCO MSR. However, the timeline recommended, September 2018, is impractical and does not reflect the complexity and time required to develop the supporting information for a reorganization application to LAFCO. See **Exhibit 1** to this response, which is a partial list of the activities and topics that were addressed as part of the 2005-06 efforts at consolidation. As this list illustrates, a properly prepared application to LAFCO will likely require several years of coordinated work by the member agencies.

Date: 6/26/18

Signed: 
 Douglas T. Kelly, President, RVSD Board

Consolidation Action Listing
Central Marin Wastewater Agency Consolidation
June 2007

	B	C	D
1	Action Category and Description	Assigned to	Scoping Meeting Comments
2	ASSETS		
3	Prepare recommendations for consolidated agency mapping and GIS data base management	Consultant	Consultant to assess SRSD and RVSD systems and make rec'd on which to use. RVSD uses Munsys
4	Evaluation of telemetry and data transmission needs to CMSA	Consultant	CMSA is converting SD#2 to radio telemetry; some SRSD
5	Evaluate computer and MIS requirements for consolidation	Consultant	CMSA has Novel network that is expandable
6	Evaluate and recommend new facility computer monitoring system	Consultant	Utilize CMSA PCS and HMI interface
7	Conduct asset evaluations of all above ground facilities and pump stations	Consultant	
8	Perform condition assessment of underground facilities	Consultant	Sampling determination by HDR - to Board in July
9	Conduct asset valuation recommendations and evaluations	Consultant	RVSD is starting 5-yr CCTV inspection; SRSD/RVSD joint program for FY08 to obtain sample information??
10	Assess existing CMMS systems; rec'd common system	Consultant	
11	Determine how to handle SRSD share of San Rafael PW bldg	Staff/SRSD	
12	RVSD to decide if Larkspur property will be sold or not.	Staff/RVSD	
13	SRSD to determine which shared assets stay with PW	SRSD staff	
14			
15	BOARD		
16	Prepare technical memo on options for new agency naming process	Staff	Naming contest? Name must be part of LAFCO app
17	Prepare a technical memo on elections	Staff	
18	Prepare technical memorandums on Sanitary District authorities	Staff	
19	Coordinate efforts to develop new agency logo	Staff	Logo contest?
20	Prepare evaluation of customer benefits resulting from consolidation	Consultant	
21	Decide on sanitary district zoning methodology (EDU, Population, other)	Consultant	
22	Decide on condition assessment methodology (sampling size)	Consultant	conditional on task #61
23			
24			
25	FINANCE		
26	Develop an implementation budget for consolidation	Staff	pay with CMSA operating dollars/reserves?
27	Coordinate efforts to coordinate audit programs	Staff	
28	Prepare training program for sewer service charge collections for the future	Staff	
29	Prepare financial model technical memorandum - budget combinations	Consultant	
30	Evaluation of Gann Limitations for new agency	Consultant	Each Agency calculates appropriation limits. May be exempt?
31	Prepare combining financial statements from consolidation with identification of potential long term savings	Consultant	
32	Prepare sewer service charge process procedure	Consultant	
33	Evaluate and contrast agency Investment Policies and recommend future Investment Policy	Consultant	PFM prepared detailed investment policy for CMSA
34	Preparation of Technical Memorandum on Accounting and Financial Management including audit requirements.	Consultant	
35	Prepare technical memo on current rate and fee structure for each agency with recommendations for the future	Staff	
36	Prepare 10 year rate evaluation and funding model - recommendations on rates and charges	Consultant	
37	Prepare 10 year financial evaluation with and without consolidation	Consultant	
38	Develop joint capital planning process and 10 year plan	Consultant	
39	Evaluation of GASB 45 Requirements for new agency	Consultant	
40	Evaluate debt administration needs and affects	Consultant/Legal	
41	Prepare financial consolidation requirements for combining agencies	Consultant	
42	Prepare outline of budget for new agency and three year financial model for budget	Staff	Can modify CMSA's budget and 5-yr forecast; add collection system operating budget; expand engr and administration budgets; add members CIP; modify 5-yr forecast
43	Prepare technical memo on rates and charges for combined agency	Staff	
44	Identify existing financial policies and procedures; TM on which should be used for new agency, GAP analysis	Staff	Consultant support
45	Billing change notices to commercial and industrial customers	Consultant/staff	
46			
47			
48			

**Consolidation Action Listing
Central Marin Wastewater Agency Consolidation
June 2007**

	B	C	D
49	LAFCO		
50	Manage the LAFCO process w/ agency managers and LAFCO Executive Officer	Staff	
51	Prepare drafts of all LAFCO resolutions and documents for consolidation	Staff	
52	Prepare LAFCO timeline and schedule for all consolidation decisions	Staff	
53	Coordinate all required agency filings for LAFCO	Staff	
54	Prepare terms and conditions for all LAFCO resolutions	Staff	
55	Prepare Standard "Disclosure" Checklist for each agency identifying critical financial, administrative and operational information	Staff	
56	Preparation of maps and drawings needed for LAFCO submittal	Consultant	Revised Service area map need o be submitted to State Controller. Survey of boundaries to be exact - high lvl of effort
57			
58	LEGAL		
59	Identification of legal requirements for land and facilities transfer to consolidated agency	Legal	
60	Prepare necessary notifications to bond/debt holders of consolidation	Bond Counsel	CMSA bond Indenture says bond holders must approve consolidation
61	Review of all agency agreements and contracts for the future	Legal	Staff to perform initial review
62	Review of bond/debt covenants for consolidated agency	Bond Counsel	
63	Determine if sanitary district can have representatives from zones/wards	Legal	County assessor can help establish zones?
64	Select legal Counsel for consolidation/LAFCO process	Staff	Govt does;t have time - other in County Counsel office?
65	Prepare legal descriptions of easements upon transfer from members to new agency	Legal/Staff	
66			
67	Miscellaneous		
68	Prepare RFP for building expansion program	Staff	
69	Manage the Murray Park & San Quentin Village annexations	Staff	
70			
71	OPERATIONS		
72	Define listing of collection system procedures - new and old	Staff	
73	Preparation of Technical Memorandum comparing management polices and procedures and identifying changes necessary from these evaluations	Staff	
74	Prepare technical memo on regulatory requirements from consolidation	Staff	
75	Prepare listing of all agency operating equipment for consolidated district	Staff	
76	Prepare photo album of all operating equipment	Staff	
77	Prepare system inventory of all operating facilities of the combined agency	Staff	
78	Prepare technical memorandum on records management of consolidated agency	Staff	
79	Define list of new ordinance requirements for collection system operations	Staff	Special Legal Counsel assistance
80	Preparation of New agency SSMP timeline	Staff	
81	Prepare new agency SSMP pursuant to state regulations combining collection agency SSMP's	Staff	
82	Prepare draft Corte Madera services agreement	Consultant	
83	Draft revised treatment/services agreement for Corte Madera	Staff	
84	Prepare draft facility expansion evaluation for new employees	Consultant	
85	Prepare alternative organizational charts and make recommendations for future organization	Staff	Management Committee to Review
86	Prepare a photo handbook of all employees including backgrounds	Staff	
87	Identify and address sewer easement and right of way issues	Staff	
88	Determine HR staffing and resource needs for new organization	Staff	
89			
90	Union/Labor		
91	Prepare comparison table of MOU's, salaries, benefits	Staff	Management Committee to Review
92	Prepare technical memo on early retirement program	Staff	Management Committee to Review
93	Prepare new salary schedule for a new organization	Staff	Management Committee to Review
94	Prepare technical memo on methods for dealing with salaries	Staff	Management Committee to Review
95	Prepare demographic information on all potential new employees	Staff	Management Committee to Review
96	Union negotiations preparation and support - management team	Staff	Management Committee to Review

**Consolidation Action Listing
Central Marin Wastewater Agency Consolidation
June 2007**

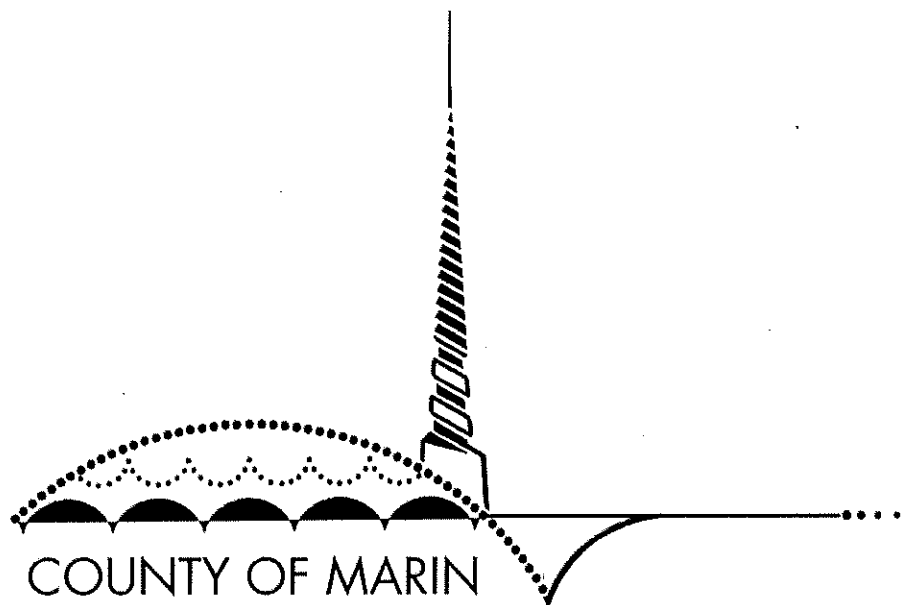
	B	C	D
97	Prepare new job classifications for combined agency in CMSA format	Staff	
98	Preparation of Staffing Plan from consolidation	Consultant	Management Committee to Review
99	Prepare Bargaining Unit Negotiations Strategy	Consultant	Management Committee to Review
100	Prepare existing, new, and future agency org charts	Staff/Consultant	Management Committee to Review
101			
102			
103	IMPLEMENTATION PROCESS		
104	Prepare Implementation Schedule for Consolidation	Staff/Consultant	Working draft Schedule prepared by July CMSA Mtg
105	Prepare monthly consolidation communications and outreach documents	Staff/PR?	Management Committee to Review
106	Identify needs for and prepare RFPs for professional assistance	Staff	Legal, Labor relations, surveying, actuary, auditor, finance advisor, others
107	Identify necessary notifications resulting from consolidation decision	Staff	Management Committee to Review
108	Prepare presentations to all agencies elected councils or boards on consolidation process	Staff	
109	Make presentations to all elected officials on consolidation	Staff	
110	Report to CMSA Board on consolidation efforts	Staff	
111	Coordinate joint employee meetings for all agency employees affected by consolidation	Staff	Management Committee to Review
112	Collect employee needs from all employees affected by consolidation	Staff	Management Committee to Review
113	Assist consultant in defining advantages and disadvantages of consolidated agency	Staff	
114	Prepare listing of all agency agreements that will need to be evaluated for termination	Staff	
115	Identify staffing changes required to support consolidation	Staff	Management Committee to Review
116	Coordinate the Agency Managers Meetings - agendas, TM's, facilitation, presentations	Staff	
117	Identification of termination issues for each agency	Staff	Management Committee to Review
118	Develop consolidation website for communications	Staff	
119	Manage To DO Consolidation Issues List	Staff	
120	Manage data collection needs for consultants from all combining agencies	Staff	
121	Identify transition issues by agency across consolidation date	Staff	
122	Preparation of Five Year Consolidated Agency Business Plan	Consultant	
123	Prepare new Employee Orientation Program	Consultant	
124	Coordinate public input process to evaluate customer benefits	Consultant	
125	Assist with implementation schedule and plan	Consultant	
126	Prepare Consolidation Evaluation Report	Consultant	advantages/disadvantages; cost savings; draft ASAP-Jan 08?
127	Preparation of Press Releases regarding Consolidation	Consultant	
128	Identification of Transition Notification Issues for Consolidation	Consultant	e.g. moving notices
129	Evaluate environmental concepts and concerns from consolidation - CEQA needs and requirements from consolidation	Consultant	

2017-2018 MARIN COUNTY CIVIL GRAND JURY

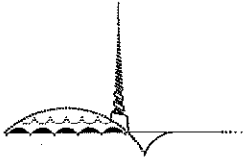
Consolidation of Sanitation Districts

Report Date: April 13, 2018

Public Release Date: April 20, 2018



COUNTY OF MARIN



Consolidation of Sanitation Districts

SUMMARY

Marin residents support an unusually high number of special districts. These local government entities, such as police, fire and sanitation districts, serve residents daily and are funded through fees and taxes. Each district is governed by a board of directors that decides how money is budgeted and spent. These boards are accountable only to the voters yet public oversight is largely missing. Some Marin districts have responded to budget tightening by sharing resources that led to consolidations, while other districts have responded by increasing their budgets and raising fees. This report examines the merits of consolidating special districts, why certain attempts have succeeded where others have failed, and what path forward is in the best interest of the residents of Marin.

The creation of a high number of special districts in Marin was not by design. It developed over time without a master plan as areas that were once isolated rural communities developed their own services. Today these communities have become connected neighborhoods that are still served by a patchwork of districts.

Consolidation has been recommended repeatedly, most recently in two studies published in 2017. A local Marin study recommends specific sanitary district consolidations.¹ A report by the Little Hoover Commission asks that the State of California remove barriers to district consolidations.² This is not a new idea. A decade earlier an independent consulting firm hired to study the issue by Central Marin Sanitation Agency, Joint Powers Authority (CMSA, JPA) and its member sanitation districts recommended consolidation.³ These studies describe decreased costs, increased efficiency and the use of best practices as benefits.

Several examples exist of successful consolidations in Marin, motivated by budget concerns and cost savings. A police consolidation in central Marin has demonstrated substantial cost savings and fire districts in southern Marin are currently collaborating with the end goal of consolidation.

For decades, attempts to combine sanitary districts have been unsuccessful. We examine why, including the differences in funding schemes, the fear of losing local control, and the lack of oversight.

Increasingly, special districts will be required to respond to climate change challenges, such as sea level rise and increased wildfire risk due to drought. Specific to sanitation, the use of gravity in wastewater systems results in sanitation facilities being located at the lowest elevation, thereby

¹ “Central Marin Wastewater Services Study.” *Marin LAFCO*.

² “Special Districts: Improving Oversight & Transparency.” *The Little Hoover Commission*.

³ “Central Marin Regionalization Scenarios Evaluation.” *Red Oak Consulting*.

exposing them to rising sea levels. Large capital expenditures will be required as Federal and State funds diminish. Consolidated districts will be better able to prepare for these scenarios.

This report discusses the consolidation process itself. The path to move from separate districts to one consolidated district is complex and requires months or years of increased cooperation. It begins with shared service agreements, proceeding to formal contracts and finally consolidation.

BACKGROUND

Marin's Early History Led to a Large Number of Special Districts

The North Pacific Coast Railway was completed in 1875 and some of the large tracts of land in central Marin were subdivided to meet the new demand for homeownership. At that time the county was sparsely populated with small towns along the railway line. Soon the increase in population, combined with failing septic tank systems and poor water quality issues, made improvements necessary.

Consequently, an election was held in 1899 and what would later become the first special district in Marin, Sanitary District Number 1, was formed. Today it is also known as the Ross Valley Sanitary District (RVSD). RVSD brought together the communities of Ross, Kentfield, San Anselmo and Fairfax to solve mutual sanitation problems.⁴

Before the Golden Gate Bridge was completed in 1937, Marin was accessible to the growing San Francisco population only by ferries, resulting in modest growth. The access created by the bridge spurred growth in both primary and vacation homes. World War II brought an increasing number of defense industry workers, many of whom remained in Marin. Small special districts proliferated to serve isolated rural communities. Rapid growth of new residents in the 1950s resulted in further proliferation of special districts. (See Appendix C for a map of current sanitation districts.)

In 2018 our communities are no longer isolated but most of the special districts remain. A few districts have already formally merged while others contract with neighboring districts to provide mandated services, such as sanitation or water, a crucial step in the consolidation process.

⁴ Ross Valley Sanitary District.

APPROACH

The Grand Jury reviewed the complete list of Marin County special districts compiled by the 2013-14 Marin County Civil Grand Jury report, "What Are Special Districts and Why Do They Matter?"⁵ Previously there was no centralized database of all separate political entities within Marin. For the purpose of this study, we will focus on 63 special districts and Joint Powers Authorities (JPAs), which contain studied districts. (Please see the glossary for a definition of JPA and Appendix A for the list of districts.)

- The majority of studied districts are police, fire and sanitation districts.
- Transportation and open space districts were excluded because they are countywide.
- School districts are special districts but were excluded because they were considered to be beyond the scope of this investigation.
- Cities and towns were excluded, however, dependent districts and some departments within cities and towns are considered.

The Jury examined documents including the districts' audited financial statements, public reports and records, including:

- "Special Districts: Improving Oversight & Transparency."⁶
- "Central Marin Wastewater Services Study."⁷
- "Central Marin Regionalization Scenarios Evaluation."⁸
- "It's Time to Draw the Line; A Citizen's Guide to LAFCOs California's Local Agency Formation Commissions."⁹
- "What's So Special About Special Districts? A Citizen's Guide to Special Districts in California."¹⁰
- "Special Districts: The Threat of Consolidation and How to Stop It."¹¹
- "Understanding Proposition 218."¹²
- "What Are Special Districts and Why Do They Matter?"¹³

The jury interviewed representatives from:

- Marin municipalities and towns.
- County administrator's office.
- Legal expert for special districts.
- Marin LAFCO.
- Marin JPAs.
- Marin special districts.

The jury toured the Central Marin Sanitation Agency waste treatment facility.

⁵ "What Are Special Districts and Why Do They Matter?" 2013/2014 Marin County Civil Grand Jury.

⁶ "Special Districts: Improving Oversight & Transparency." *The Little Hoover Commission*.

⁷ "Central Marin Wastewater Services Study." *Marin LAFCO*.

⁸ "Central Marin Regionalization Scenarios Evaluation." *Red Oak Consulting for CMSA*.

⁹ Tami Bui and Bill Ihrke "It's Time to Draw the Line A Citizen's Guide to LAFCOs California's Local Agency Formation Commissions." Senate Committee on Local Government.

¹⁰ "What's so special about Special Districts? A Citizen's Guide to Special Districts in California" (4th edition) *Senate Local Government Committee*.

¹¹ Adam Probolsky "Special Districts: The Threat of Consolidation and How to Stop It" *PUBLICCEO*, June 8, 2015.

¹² "Understanding Proposition 218" *Legislative Analyst's Office*, December 1996.

¹³ *Ibid*

DISCUSSION

As stated in the introduction, the high number of special districts in Marin is not by design but rather an accident of our history. Several groups have examined the issue and recommended consolidation as the remedy. This report discusses in detail three studies, two published within the past year. The third study and the discussion that follows are focused on sanitation districts and their repeated failures to consolidate. Some consolidations have succeeded in Marin and they are commonplace elsewhere. Finally, the Grand Jury will explain the complicated consolidation process and what actions are in the best interest of Marin.

In 2017, a study conducted by the Little Hoover Commission¹⁴ recommended legislation to remove barriers to special district consolidations, and an unrelated study by Marin LAFCO¹⁵ recommended specific consolidations meriting immediate initiation.

Both of these studies identified the following issues:

- Districts need to prepare for the effects of climate change, including floods, sea level rise, drought, and an increased risk of wildfire.
- Districts should cooperate and combine resources in order to prepare adequately for these events. Fire and police leaders are cooperating in this manner but sanitation districts are not, yet wastewater services are affected by sea level rise and drought more than any other municipal service.
- Decreased redundancy of operations can reduce costs. For example, one administration department supporting one board of directors should cost less than several administration offices each with a board of directors. The increased standardization of policies and practices across similar spheres of influence and the use of best practices will improve service and operations.

In 2005, the Central Marin Sanitation Agency, JPA, and its member districts (Sanitary District #1, Sanitary District #2, San Rafael Sanitary District, and City of Larkspur) commissioned a report titled “Central Marin Regionalization Scenarios Evaluation.”¹⁶ The examiners rejected scenarios in which no consolidations were considered. Instead, they strongly recommended total consolidation of the JPA and its component districts into a single district. Three districts and the JPA agreed to consolidate but the board of RVSD declined and the agreement failed.

Special Districts: Improving Oversight and Transparency The Little Hoover Commission

In 2016 and 2017, the Little Hoover Commission analyzed 2,071 of California’s independent special districts and reviewed the state’s role and responsibility in overseeing them. The August

¹⁴ “Special Districts: Improving Oversight & Transparency.” *The Little Hoover Commission*.

¹⁵ “Central Marin Wastewater Services Study.” *Marin LAFCO*.

¹⁶ “Central Marin Regionalization Scenarios Evaluation.” *Red Oak Consulting*.

2017 “Special Districts: Improving Oversight and Transparency”¹⁷ report delved into four primary areas of concern for special districts.

Recommendations included:

- The State of California should simplify and create consistency in the special district consolidation process.
- Oversight of special districts should be improved, specifically, opportunities to bolster the effectiveness of LAFCO.
- The continued need for districts to improve transparency and public engagement.
- The urgency of climate change adaptation in California and the front-line roles that special districts, particularly water, wastewater treatment and flood control districts, play in preparing their communities and defending them from harm.

Central Marin Wastewater Services Study
Marin LAFCO

In July 2017, Marin LAFCO published the results of the wastewater services review that included recommending consolidations of sanitation districts

One of the three stated objectives of the study is to “... serve as the source document to initiate one or more government reorganizations, such as special district formations, consolidations, and/or dissolutions.” The Grand Jury agrees with several conclusions and recommendations.

Conclusions of the Central Marin Wastewater Services Study included:

- Reorganize Murray Park Sewer Maintenance District (MPSMD) and San Quentin Village Sewer Maintenance District (SQVSMD), two county dependent districts with areas of 0.1 and 0.01 sq. miles respectively, so that both districts are absorbed by Ross Valley Sanitary District (RSVD) with an area of over 26 sq. miles.
 - Conclusion No. 5 of Study: These reorganizations would eliminate two dependent special districts governed by the County of Marin and operating under antiquated statutes in favor of recognizing RVSD as the preferred and more capable service provider going forward.¹⁸
- Explore regional reorganization and consolidation of agencies to align with the Ross Valley watershed and San Rafael Creek watershed.
 - Conclusion No. 6 of Study: Additional Merit to Explore Regional Consolidation. Information collected and analyzed in this study provides sufficient merit for the Commission to further evaluate options to reorganize and consolidate public wastewater services in Central Marin and most pertinently among agencies in the Ross Valley watershed (RVSD, Corte Madera - Sanitary District #2,¹⁹ MPSMD) and San Rafael

¹⁷ “Special Districts: Improving Oversight and Transparency” *California LAFCO*

¹⁸ “Central Marin Wastewater Services Study” *Marin LAFCO*, pg.29

¹⁹ *Corte Madera - Sanitary District #2. Town of Corte Madera.*

Creek watershed (San Rafael Sanitary District,²⁰ Central Marin Sanitation Agency,²¹ SQVSMD).²²

- The commission should consider initiating the dissolution of MPSMD and SQVSMD and place their service areas in RVSD.
 - Recommendation 7. The Commission should consider proceeding with reorganizations to dissolve MPSMD and SQVSMD and concurrently place their respective service areas in RVSD.²³
- The sewer agencies in central Marin should coordinate efforts to establish policies and protocols in addressing the increasing effects of climate change relative to wastewater services.
 - Recommendation 11. The affected agencies in Central Marin should coordinate efforts to establish policies and protocols in addressing the increasing effects of climate change relative to wastewater services. This includes resiliency planning with respect to droughts, storm events, and rising water tables.²⁴

Central Marin Regionalization Scenarios Evaluation **Red Oak Consulting**

In 2005, Central Marin Sanitation Agency (CMSA) commissioned Red Oak Consulting to study regionalization options. It is a comprehensive study addressing topics such as long-term planning, evaluations of existing organizational structures, operations and procedures, and scenarios for regionalization.

The purpose of the report was to analyze issues facing CMSA, leading to the evaluation of its then-current structure against other regionalization solutions.

The report offered the commissioners four possible scenarios for consideration:

- Scenario 1A Joint Powers Agreement (no change).
- Scenario 1B Modified Joint Powers Agreement.
- Scenario 2 Partial combination of one or several of the agencies.
- Scenario 3 Total combination of CMSA and all member agencies.

The examiners rejected scenarios 1A and 2. The remaining options presented by Red Oak Consulting recommended Scenario 1B—implementing modifications to the JPA, while researching and proceeding toward Scenario 3—Total Combination.

The following remarks were prescient since none of the recommendations of the report were adopted:

“The modifications to the JPA could be viewed as ‘stepping stones’ toward total combination... It allows the CMSA and member agencies to focus on their immediate priorities. Additionally, ironing out issues during the execution of such modifications would also facilitate the

²⁰ San Rafael Sanitary District. *City of San Rafael*.

²¹ Central Marin Sanitation Agency.

²² “Central Marin Wastewater Services Study.” *Marin LAFCO*, pg.29

²³ Ibid., pg.33

²⁴ Ibid., pg.34

establishment of any new structure. This option allows for the establishment of trust among the participants for continued momentum toward the ultimate goal.

“The total combination (Scenario 3) could easily be pushed aside and, in five years, the Commissioners could find themselves in the same place they are today.”²⁵

Sanitation Districts Should Consolidate

The four districts that cooperate to form the CMSA JPA have considered full consolidation since its inception. This is logical because forming a JPA can be a step in the process of full consolidation. However, all proposals over the years have been rejected, including after the publication of the regionalization report discussed above, which was eventually terminated in 2007 by a vote of the RVSD board of directors.

The 2010-11 Grand Jury focused on the consolidation failure in its report, “Ross Valley Sanitary District: Not Again!”²⁶ The jury noted that it was the third report in five years about this particular district. The report detailed a series of lawsuits that accumulated extensive legal fees in the years between the 2007 failure and the 2010 report.

However, the legal battles did not stop in 2010 and have not been confined to central Marin. The Sausalito–Marin City Sanitary District (SMCSD) is suing the Tamalpais Community Services District (TCSD) for \$500,000 plus interest and legal costs.²⁷ SMCSD claims it was incorrectly charged in a mutual contract.

The RVSD recently sued SQVSD and CMSA over a contract dispute.²⁸ At issue was a contract for services for SQVSD that was awarded to CMSA over RVSD. It is worth pointing out that RVSD is a member district of CMSA.

The Las Gallinas Sanitary District board of directors accepted—under pressure—the resignations of top employees in 2017.²⁹ The resulting investigation of the alleged wrongdoing of the general manager cost the district \$19,500 but did not find any misuse of funds. The district has an annual budget of over \$14 million.

The lawsuits are wasteful, because even when successful, the award simply moves money from one district to another after accumulating large legal bills. If the districts had already been consolidated then decisions regarding best use of funds could be made by regional management rather than being decided in court.

It is important to point out that these are examples of independent districts overseen only by the voters. Dependent districts are also at risk for wasteful spending, though it is more difficult to see

²⁵ *Ibid* pg.3-9

²⁶ “Ross Valley Sanitary District: Not Again!” Marin County Civil Grand Jury.

²⁷ “Tam Valley Sued by Sewage District in Billing Dispute” *Marin Independent Journal*. 18 August 2017

²⁸ “Marin Sanitation Agencies End Legal Battle” *Marin Independent Journal*. 28 May 2015

²⁹ “San Rafael Sewage Chief Soiled by Backflow of Staff Ire” *Marin Independent Journal*. 6 November 2017

because wasteful expenditures can be absorbed by its parent entity. Sanitation District #2 functions as if it were a department of the Town of Corte Madera, leaving open the possibility of staff, supplies, and resources being commingled between the town and district. The district's budget of over \$5.5 million is difficult to correctly assess because of this possibility. The San Rafael Sanitation District is another dependent district that functions as if it were a department of its parent jurisdiction, in this case the City of San Rafael.

Enterprise District Funding Reduces Pressure on Sanitation Districts to Consolidate

Districts that collect and dispose of sewage charge a fee for this service rather than depend entirely on property taxes. When the revenue is lower than needed or desired, the district will raise fees using Proposition 218 rules. Non-enterprise agencies, such as police and fire, cannot increase their funding as easily from municipal annual budgets, creating pressure to do more with less money, which is a strong incentive to consolidate. When savings are realized through shared services, often the desire is to make the savings permanent through consolidation. Sanitation districts have avoided the pressures to consolidate by raising fees.

The Lack of Public Attention Reduces Pressure on Sanitation Districts to Consolidate

The discussion is about the use of public money yet sanitation districts do not attract the attention that is needed for proper oversight. The Grand Jury in 2011 reported, "No one wants to think about sewers or pipes or overflows. They want to flush and forget."³⁰

This year's Little Hoover Commission report also discusses the lack of public interest. "Special districts in general are geographically close to their constituents and provide a limited number of services. This often leads to low public visibility and a lack of engagement. Special districts are often referred to as 'ghost governments, invisible governments and under-the-radar governments.' The public has limited practical ability to understand the workings of the special district and make informed decisions in voting."³¹

This is especially true with sanitation districts. The CMSA JPA-led effort to regionalize was a multi-year process that did not include much input from the community. Although meetings were open, the public was not encouraged to participate.

The "flush and forget" attitude should not be used as an excuse to avoid engagement. Instead, people should be made aware that the discussion is not about the flush, it's about the bill. The public has the strongest oversight power over these districts and transparency is crucial to inform and involve them.

The State of California strongly supports more participation in local elections, and in 2015 passed SB 415, the California Voter Participation Rights Act. This law requires that special districts hold their elections only in March or November in even numbered years, no later than November 2022. The aim is to increase visibility of special districts and the elections of their independent boards.

³⁰ "What Are Special Districts and Why Do They Matter?" 2013/2014 Marin County Civil Grand Jury

³¹ "Special Districts: Improving Oversight & Transparency." *The Little Hoover Commission*

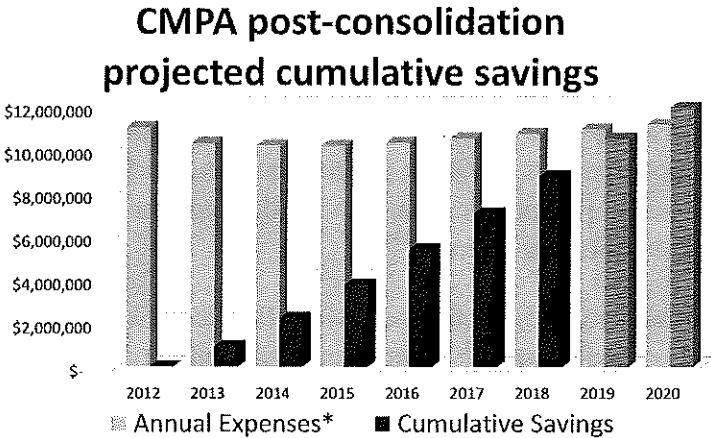
Fear of losing local control is often a reason for withdrawing from the consolidation. This fear is not supported by the facts. The consolidation of police and fire districts in Marin demonstrates that local control was not reduced. During the consolidation process, local control is repeatedly studied and negotiated. Districts are independent and cannot be forced to cooperate or share.

Only if each district agrees can consolidation move forward.

Consolidation has Succeeded in Marin and Elsewhere

Central Marin Police Authority (CMPA) is a recent example of a consolidation process. The police departments of Larkspur, Corte Madera and San Anselmo began sharing services in 2012, guided by a Memorandum of Understanding (MOU) that helped pilot increasing involvement and build trust. A completed JPA consolidation occurred in 2014.³²

This combined entity has a substantially lower need for revenue than the three independent departments combined. The consolidation will save the equivalent of these agencies’ combined annual budgets in just seven years. The main motivation for the consolidation project was to reduce costs. The new department serves the same population with 42 officers compared to a pre-consolidation headcount of 55. (See Appendix B)



*The merger was initiated in 2012 and completed in 2013.
2012-2014 data is from audited financials
2015-2018 data is from district budgets
2019-2020 data has been projected by the Grand Jury

Another area of consolidation is the Southern Marin Fire Protection District, which serves Tamalpais Valley, Almonte, Homestead Valley, Alto, Strawberry, Tiburon, Sausalito, Fort Baker, and Marin Headlands. As a result of sharing services, the new district is projected to save \$315,000 per year while streamlining services and management. “Demonstrated cost savings is

³² [Central Marin Police Authority history](#)

what kept everyone at the table,” said an officer involved with the consolidation project.³³ Currently, some of the shared services include battalion chiefs, equipment and training.

Successful Mergers Outside of Marin

Here are three examples of large districts that demonstrate the advantages of consolidation:

- **Truckee Sanitary District (TSD)** is one of the oldest sanitary districts in the state with boundaries that extend across county lines. It provides wastewater collection and conveyance within Nevada and Placer counties. In the 1960s, TSD annexed the adjacent Donner Lake drainage area in adjoining Placer County in order to help protect the lake water quality. One district in control of one watershed as a sphere of influence is the most efficient model for environmental protection.³⁴
- **East Bay Municipal Utility District**—often referred to as East Bay MUD³⁵—performs both water and sewerage treatment services within Alameda and Contra Costa counties and has a very large sphere of influence. It was first formed in 1923 out of a necessity for stored water and soon started purchasing water rights and reservoir infrastructure. The water system today serves approximately 1.4 million people in a 332-square-mile area. Its smaller wastewater system, added in 1944, was created by election to protect the bay and today serves approximately 685,000 people in an 88-square-mile area. This entity has an annual budget of over 1 billion dollars. It warrants public involvement as it prepares for drought and climate change challenges, improves aging infrastructure in congested urban areas, and attends to hundreds of miles of pipe, yet maintains fresh water quality and release of safely-treated wastewater.
- **Sonoma County Water Agency (SCWA)** is a countywide dependent district whose board members are the county district supervisors. Though SCWA functions like a county government department, it is a separate entity of local government having its defined set purpose: water. This overarching agency oversees public water systems, from collection and distribution of fresh water to the conveyance and treatment of wastewater. It also attends to important water stewardship concerns for the public (flooding, recycling), wildlife (river fish) and environment (groundwater protection). SCWA works with water companies, municipalities, sanitary districts and zones operating eight sanitation systems, while giving resources to drought and climate change projects.³⁶

Marin LAFCO is Underfunded and Understaffed

Special district consolidations require the participation and approval of Marin LAFCO. Currently, the staff consists of one executive officer and one commission clerk. An additional full-time employee is on disability leave.

This level of staffing may be adequate in general but not to handle the additional workload that would be created by initiating the recommendations in this report. The agency is staffed

³³ [Southern Marin Fire Department](#)

³⁴ [Truckee Sanitary District](#)

³⁵ [East Bay MUD](#)

³⁶ [Sonoma County Water Agency](#)

adequately to produce the reports required by law, but handling an influx of requests for consolidations, annexations and other boundary changes will most likely require additional resources.

Marin LAFCO is funded by 42 separate entities divided into three categories. Each category is responsible for one third each:

- Marin County
- Cities and towns
- 30 special districts

These contributions are calculated by the State Controller's office based on revenues and not based on need. The agency itself cannot adjust its revenue so the county should consider voluntarily increasing its contribution beyond its one-third obligation. It is in the best interest of the residents of Marin County to ensure Marin LAFCO is adequately staffed. The county's 2016-2017 contribution was just over \$150,000.³⁷ An increase would allow the agency to hire an additional analyst to handle consolidations. The proven cost savings of consolidations justify this voluntary expense.

Understanding the Consolidation Process

The process does not begin with an agreement to consolidate. First, two or more districts need to identify services that can be shared. Tailored Memorandums of Understanding (MOUs) and formal contracts are used when agreements are made. A fire department, for example, might agree to serve a particular neighborhood not in its own district because its station is closer to that neighborhood. This improves service to the residents in the area by decreasing response times while also reducing costs.

Districts should cooperate on the purchase and use of expensive line items. For example, CMSA and nearby districts maintain their own heavy equipment and software. In some cases these items are not fully utilized by either district and could be easily shared using a simple MOU. This can be repeated in numerous scenarios, such as personnel, capital equipment and contracted services.

³⁷ Annual Operating Budget, Marin LAFCO

CONCLUSION

The Grand Jury has determined that Marin has an excessive number of sanitary districts. Small districts are inherently inefficient due to duplication of expenditures and redundancy in operations. Special districts often lack sufficient oversight and accountability. Many have experienced cost and administrative challenges but have operated with very little public oversight. Operational benefits of consolidation are widely recognized and recommended. Marin has already experienced several successful consolidations. The Grand Jury is in support of this trend.³⁸

The Grand Jury recommends several consolidations that can be accomplished within one year. In addition to those actions, the remaining districts should pursue logical consolidations:

- Las Gallinas Sanitation District should consolidate with the to-be-formed central Marin sanitation district.
- Sausalito-Marín City Sanitary District and Tiburon Sanitary District #5 should consolidate with the to-be-formed Southern Marin Sanitation District. (Recommendation No.3)
- Novato Sanitary District should consider a plan to consolidate with the to-be-formed Central Marin Sanitation district. (Recommendation No. 2)
- The ultimate goal should be a countywide water and sanitation agency—Marin Municipal Utilities District (Marin MUD).

³⁸ "Merging and Dissolving Special Districts" Yale Law School, p.494, 2014

FINDINGS

- F1. Marin County has a large number of sanitary districts.
- F2. Independent sanitary districts are accountable only to district voters.
- F3. The public is not greatly involved in local sanitary district governance.
- F4. The public is not well informed about funding schemes or governance of sanitary districts.
- F5. Marin County's current system of sanitary districts is not cost-efficient.
- F6. Consolidation of sanitary districts in Marin has been recommended multiple times by governmental and non-governmental agencies.
- F7. Well-executed consolidations of sanitary districts will reduce administrative and operating costs.
- F8. Well-executed consolidations of sanitary districts will improve service.
- F9. Sanitation districts need to prepare for sea level rise.
- F10. Marin LAFCO is underfunded and understaffed.

RECOMMENDATIONS

- R1. Marin LAFCO should complete the planned reorganization of Murray Park Sewer Maintenance District and San Quentin Village Sewer Maintenance District with Ross Valley Sanitary District.
- R2. Central Marin Sanitation Agency (JPA), Sanitary District #1 (Ross Valley), Sanitary District #2 (Corte Madera), and the San Rafael Sanitary District should reorganize into a single sanitary/sanitation district. Each entity should complete a reorganization application with Marin LAFCO by 9/30/2018 and announce this action on the agenda of the next board meeting for public involvement.
- R3. Sewerage Agency of Southern Marin (JPA), Almonte Sanitary District, Alto Sanitary District, Richardson Bay Sanitary District, Homestead Valley Sanitary District, Public Works Department of the City of Mill Valley, and Tamalpais Community Services District should reorganize into a single sanitary/sanitation district. Each entity should initiate a reorganization application with Marin LAFCO and announce this action on the agenda of the next board meeting for public involvement.
- R4. The County of Marin should allocate additional funds to Marin LAFCO.

REQUEST FOR RESPONSES

Pursuant to Penal code section 933.05, the grand jury requests responses as follows:

From the following elected governing bodies:

- Marin County Board of Supervisors (R4)
- City of Mill Valley, Department of Public Works (R3)
- Almonte Sanitary District (R3)
- Alto Sanitary District (R3)
- Homestead Valley Sanitary District (R3)
- Murray Park Sewer Maintenance District (R1)
- Richardson Bay Sanitary District (R3)
- San Quentin Village Sewer Maintenance District (R1)
- San Rafael Sanitary District (R2)
- Sanitary District #1 (Ross Valley) (R1,R2)
- Sanitary District #2 (Corte Madera) (R2)
- Tamalpais Community Services District (R3)

From the following governing bodies:

- Marin LAFCO (R1)
- Joint Powers Authorities:
 - Central Marin Sanitation Agency (R2)
 - Sewerage Agency of Southern Marin (R3)

The governing bodies indicated above should be aware that the comment or response of the governing body must be conducted in accordance with Penal Code section 933 (c) and subject to the notice, agenda and open meeting requirements of the Brown Act.

Note: At the time this report was prepared information was available at the websites listed.

Reports issued by the Civil Grand Jury do not identify individuals interviewed. Penal Code Section 929 requires that reports of the Grand Jury not contain the name of any person or facts leading to the identity of any person who provides information to the Civil Grand Jury. The California State Legislature has stated that it intends the provisions of Penal Code Section 929 prohibiting disclosure of witness identities to encourage full candor in testimony in Grand Jury investigations by protecting the privacy and confidentiality of those who participate in any Civil Grand Jury investigation.

GLOSSARY

Annexation: When a district attaches additional territory to its boundary.

Consolidation: When two or more districts become one.

Contract: A legally binding agreement.

Dissolution: Refers to a district ceasing to exist.

Joint Powers Authority (JPA): An additional government entity created so that two or more special districts or local government entities can share a function.

LAFCO: Local Agency Formation Commission:³⁹ Mandated by the state to regulate and plan local government. Every county, including Marin, has a local office. Its responsibilities include:

- Initiation of special district consolidations
- Special district boundary changes
- Sphere of influence studies
- Service reviews
- Out-of-district service agreements
- Adoption of local policies

The Little Hoover Commission: An independent state oversight agency with a mission to investigate state government operations, such as special districts.

Memorandum of Understanding (MOU): A non-binding, written agreement often setting guidelines, timelines and goals.

Merger: Occurs when one district consumes another.

Special district: A local government entity created to address specific local community needs to tax themselves through public petition, and possible election. Special districts are further defined by their purpose, funding, and governing structure.

- *Single purpose:* A special district can have one purpose, such as a sewer maintenance district, which exists solely to maintain the sewer pipe.
- *Multi-purpose:* A district can provide a combination of services, such as maintaining both a water treatment plant and a community park.
- *Enterprise funding districts* collect service charges as the primary source of revenue, such as a water district that charges based on use.
- *Non-enterprise districts*, such as most fire protection and police districts, receive tax funds and do not charge based on a fee-for-service model.
- *Dependent districts* are governed by a separate entity, such as the county Board of Supervisors or city council.
- *Independent districts* have their own board of directors and do not report to the county Board of Supervisors or any other government agency. Oversight of independent districts is provided directly by the voters.

Reorganization: Combining two or more changes in one proposal.

³⁹ [Marin LAFCO](#)

Sphere of Influence: An established boundary line adopted by LAFCO to designate the boundary and service area for a city or special district.⁴⁰

Sanitary: A category of health and safety codes with powers and functions that involve the maintenance and operation of facilities such as garbage dump sites, garbage collection and disposal systems, sewers, storm water drains, and stormwater recycling and distribution systems.

Sanitation: A category of health and safety codes with powers and function that involve maintaining and operating sewage systems, sewage treatment plants and sewage disposal systems.

⁴⁰ Sphere of Influence

APPENDIX A

Special districts considered in this investigation:

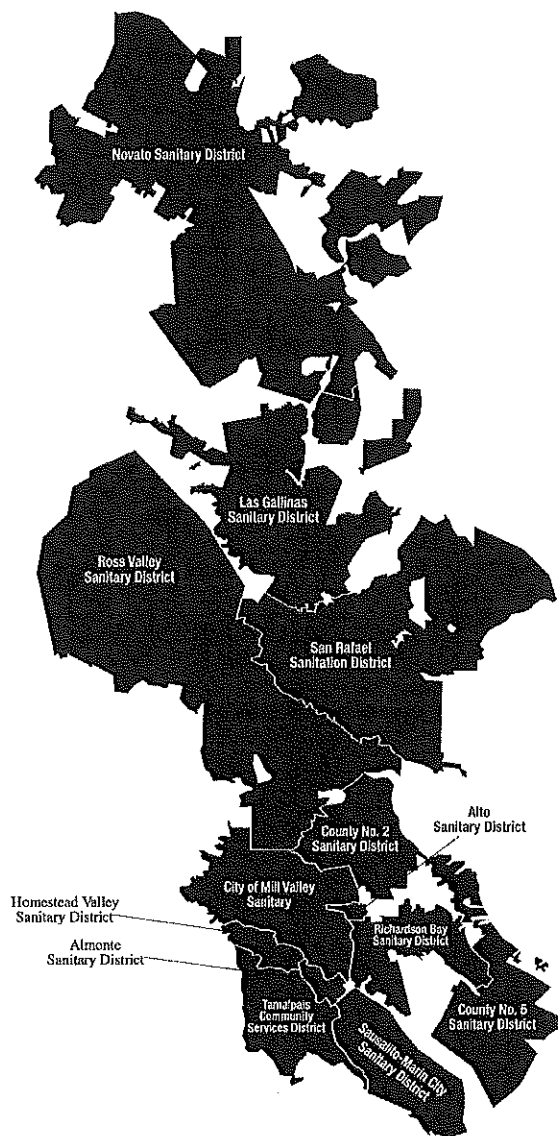
1. Almonte Sanitary District
2. Alto Sanitary District
3. Bel Marin Keys CSD
4. Bolinas Community Public Utility District
5. Bolinas Fire Protection District
6. Bolinas Highlands Permanent Road Division
7. Corte Madera Sanitary District No. 2
8. CSA #1 (Loma Verde)
9. CSA #6 (Gallinas Creek)
10. CSA #9 (Northbridge)
11. CSA #13 (Lucas Valley)
12. CSA #14 (Homestead Valley)
13. CSA #16 (Greenbrae)
14. CSA #17 (Kentfield)
15. CSA #18 (Las Gallinas)
16. CSA #19 (San Rafael)
17. CSA #20 (Indian Valley, Dominga Canyon)
18. CSA #23 (Terra Linda)
19. CSA #25 (Unincorporated Novato)
20. CSA #27 (Ross Valley Paramedic)
21. CSA #28 (West Marin Paramedic)
22. CSA #29 (Paradise Cay)
23. CSA #31 (County Fire)
24. CSA #33 (Stinson Beach)
25. Homestead Valley Sanitary District
26. Inverness Public Utility District
27. Inverness Subdivision No. 2 Permanent Road Division
28. Kentfield Fire Protection District
29. Las Gallinas Sanitary District
30. Marin City CSD
31. Marin County Flood Control and Water Conservation District
32. Marin County Law Library
33. Marin County Lighting District
34. Marin County Open Space District
35. Marin County Transit District
36. Marin Healthcare District
37. Marin Municipal Water District
38. Marin Resource Conservation District
39. Marin/Sonoma Mosquito & Vector Control District
40. Marinwood Community Service District
41. Monte Cristo Permanent Road Division
42. Mt. View Ave - Lagunitas Permanent Road Division
43. Muir Beach Community Services District
44. Murray Park Sewer Maintenance District
45. North Marin Water District
46. Novato Fire Protection District
47. Novato Sanitary District
48. Paradise Estate Permanent Road Division
49. Richardson Bay Sanitary District
50. Ross Valley Sanitary District

51. Rush Creek Lighting and Landscape
52. San Quentin Village Sewer Maintenance District
53. San Rafael Sanitation District
54. Sausalito - Marin City Sanitary District
55. Sleepy Hollow Fire Protection District
56. Southern Marin Fire Protection District
57. Stinson Beach County Water District
58. Stinson Beach Fire Protection District
59. Strawberry Recreation District
60. Tamalpais Community Services District
61. Tiburon Fire Protection District
62. Tiburon Sanitary District #5
63. Tomales Village Community Services District

**APPENDIX B: CENTRAL MARIN POLICE AUTHORITY
POST-CONSOLIDATION ANALYSIS**

Source	2012 Budget \$	2013 Budget \$	2014 Budget \$	2015 Budget \$	2016 Budget \$	2017 Budget \$	2018 Budget \$	2019 Projected	2020 Projected
Expenses	11,095,129	10,348,615	10,251,452	10,226,658	10,371,547	10,578,978	10,790,557	11,006,369	11,226,496
Expenses w/out merge	11,095,129	11,317,032	11,543,372	11,774,240	12,009,724	12,249,919	12,494,917	12,744,816	12,999,712
Annual Savings	-	968,417	1,291,920	1,547,582	1,638,177	1,670,941	1,704,360	1,738,447	1,773,216
Cumul. Savings	-	968,417	2,260,337	3,807,918	5,446,096	7,117,037	8,821,397	10,559,844	12,333,060

APPENDIX C: WASTEWATER AGENCIES IN MARIN COUNTY



Map thanks to The Marin Association of REALTORS®