LAVWMA WATER Resource Recovery

Livermore-Amador Valley Water Management Agency

REGULAR MEETING
OF THE BOARD OF DIRECTORS
OF THE LIVERMORE-AMADOR VALLEY WATER MANAGEMENT AGENCY

Wednesday, May 17, 2023, 6:00 p.m.

Dublin San Ramon Services District Board Room
7051 Dublin Boulevard
Dublin, California

1. Call to Order

2. Pledge of Allegiance

3. Roll Call

4. Order of Agenda/Acknowledgement of Posting
(The agenda may be re-ordered by motion of the Board. The agenda has been posted virtually on the Agency's website and physically in the display case outside the DSRSD Building, and, as a courtesy when possible, under the circumstances, at Pleasanton City Hall and Livermore City Hall at least 72 hours prior to a regular meeting and 24 hours prior to a special meeting.)

5. Public Comment
(See text in box below for information on how to observe and submit public comments.)

6. Consent Calendar
(All items on the Consent Calendar will be considered together by one or more action(s) of the Board unless a Board member pulls an item.)

Action
Pages 4 – 8

6.a. Board Meeting Minutes for the February 15, 2023 meeting
(The Board will consider approving the minutes from the February 15, 2023 Board meeting.)

Action
Page 9

7. Annual Board Rotation – Elect Chair and Vice Chair for FY2023/24
(The Board will elect a Chair and Vice Chair for FY2023/24.)

Information
Pages 10 – 16

8. Financial Reporting for the Fiscal Year Ending June 30, 2023
(The Board will review the Financial Reports and other financial items for the Fiscal Year ending June 30, 2023.)

Information
Pages 17 – 42

9. LAVWMA Quarterly Report of Operations, 3rd Quarter, FY2022-2023
(The Board will review the Quarterly Report of Operations, 3rd Quarter, FY2022-2023.)

Information **10.** **Project Status Reports - Purchase of Three Vertical Turbine Pumps, and the San Leandro Sample Station Improvements Project**

Pages 43– 44 (The Board will receive status reports on projects at the Export Pump Station and the San Leandro Sample Station.)

Information **11.** **Project Status Reports – Review of Options to Address PG&E Electrical Service Reliability and Photo Voltaic / Battery Storage Options**

Pages 45– 74 (The Board will receive status reports and review Options to Address PG&E Electrical Service Reliability and Photo Voltaic / Battery Storage Options.)

Resolution **12.** **A Resolution of the Livermore-Amador Valley Water Management Agency Declaring an Emergency Pursuant to Public Contract Code Section 22050 and Authorizing Emergency Work**

Pages 75– 99 (The Board will consider a Resolution declaring an emergency pursuant to Public Contract Cost Section 22050 and authorizing emergency work to protect a segment of pipeline that was exposed during the recent storms. This action is exempt from the California Environmental Quality Act (CEQA) pursuant to specified statutory and categorical exemptions.)

Action **13.** **Proposed Operating and Capital Budget for Fiscal Year 2023/24**

Pages 100 – 133 (The Board will consider approving the proposed Operating and Capital Budget for Fiscal Year 2023/24.)

Information **14.** **Update and Response to Various Legal and Legislative Issues**

Pages 134 – 223 (The Board will receive a report regarding proposed legislation and legal developments affecting LAVWMA and its member agencies.)

Information **15.** **General Manager's Report**

Pages 224 – 241 (The Board will review the General Manager's Report regarding the operations and maintenance of the Agency and its facilities.)

Information **16.** **Matters From/For Board Members**

(Board members may make brief announcements or reports on his or her own activities, pose questions for clarification, and/or request that items be placed on a future agenda. Except as authorized by law, no other discussion or action may be taken.)

17. **Next Regular Board Meeting, Wednesday, August 16, 2023, 6:00 p.m. at DSRSD**

18. **Adjournment**

HOW TO SUBMIT PUBLIC COMMENTS:

Written / Read Aloud: Please email your comments to info@lavwma.com, write "Public Comment" in the subject line. In the body of the email, include the agenda item number and title, as well as your comments. If you would like your comment to be read aloud at the meeting (not to exceed three (3) minutes at staff's cadence), prominently write "Read Aloud at Meeting" at the top of the email. All comments received before 12:00 PM the day of the meeting will be included as an agenda supplement on LAVWMA's website under the relevant meeting date and provided to the Directors at the meeting. Comments received after this time will be treated as concurrent comments.

Live Comments: During the meeting, the Board Chair or designee will announce the opportunity to make public comments. Speakers will be asked to provide their name and city of residence, although providing this is not required for participation. Each speaker will be afforded up to 3 minutes to speak.

ACCESSIBILITY INFORMATION:
Board Meetings are accessible to people with disabilities and others who need assistance. Individuals who need special assistance or a disability-related modification or accommodation (including auxiliary aids or services) to observe and/or participate in this meeting and access meeting-related materials should contact Chuck Weir, General Manager, as soon as possible but at least 72 hours before the meeting at (925)-875-2202 or info@lavwma.com. Advanced notification will enable LAVWMA to swiftly resolve such requests to ensure accessibility.

PUBLIC RECORDS:
Public records that relate to any item on the open session agenda for a meeting are available for public inspection. Those records that are distributed after the agenda posting deadline for the meeting are available for public inspection at the same time they are distributed to all or a majority of the members of the Board. The Board has designated LAVWMA's website located at http://lavwma.com/agency_meetings.php as the place for making those public records available for inspection. The documents may also be obtained by contacting the General Manager.

CEQA NOTICE:
Unless expressly stated otherwise on the agenda (that a negative declaration, mitigated negative declaration, or environmental impact report is being considered), discretionary actions taken on agenda items will include a finding by the Board that the action is exempt under the California Environmental Quality Act (CEQA). More information about the CEQA determination can be found in the corresponding staff report.

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LAVWMA

Livermore-Amador Valley Water Management Agency

DRAFT

Minutes

Special Meeting of Board of Directors
Wednesday, February 15, 2023
Pursuant to AB 361, this was a web meeting available to participants and the public through the following link: https://us02web.zoom.us/j/89962740578
6:00 p.m.

1. Call to Order
Chair Julie Testa called the meeting to order at 6:00 p.m.

2. Pledge of Allegiance
The Pledge of Allegiance, led by Director Goel, was recited.

3. Roll Call
Board Members Present: Chair Julie Testa; Vice Chair Bob Carling; and Directors Arun Goel, Ann Marie Johnson, and Jeff Nibert

Staff Present: General Counsel Alexandra Barnhill, Treasurer Carol Atwood, DSRSD Operations Director Jeff Carson, DSRSD Administrative Assistant Sheree Davis, Livermore Water Resources Manager Anthony Smith, and General Manager Chuck Weir

Others: Livermore City Council Member Evan Branning; Ryan Gunstream, Noresco

4. Order of Agenda/Acknowledgement of Posting
Item No. 7, Annual Board Rotation – Elect Chair and Vice Chair for the Reminder of FY2022/23 and for FY2023/24 was removed from the agenda. It was decided to consider the Annual Board Rotation at the May 17, 2023 meeting.

5. Comments from the Public
There were no comments from the public.

6. Consent Calendar
a. Board Meeting Minutes for the November 16, 2023 meeting.
b. Consider Adopting a Resolution Authorizing Continued Remote Teleconference Meetings of the Legislative Bodies of the Livermore-Amador Valley Water Management Agency Pursuant to Brown Act Provisions

Vice Chair Carling motioned, seconded by Director Goel, to approve Consent Calendar Item Nos. 6.a and 6.b.

There were no comments from the public. The Motion passed unanimously (5 – 0) by a roll call vote.

7. Annual Board Rotation
This item was not discussed and will be considered at the May 17, 2023 meeting.

8. Establish Protocols for Future Meetings
General Counsel Barnhill outlined the options for future meetings. There are three primary options:

1. Adopt a protocol consistent with AB2449, allowing remote participation. A Zoom link would need to be provided for every meeting to allow remote participation by Directors and the public. The procedures are nuanced and compliance will require legal guidance.
2. Return to in person only meetings similar to what was done prior to COVID. Hand sanitizer is routinely available. Adequate social distancing will also be available when we return to the DSRSD Board meeting room. Masking would be at the discretion of each individual attending the meeting, unless otherwise directed by the Board.
3. Return to in person meetings but allow remote participation via traditional teleconference and/or AB 2449 on a limited basis subject to prior coordination with General Manager and General Counsel to ensure applicable requirements can be satisfied.

Board members discussed their preferences individually. Directors Goel, Johnson, Nibert, and Vice Chair Carling preferred a variation of Option No. 2, above, allowing remote teleconference participation pursuant to the Brown Act. Chair Testa preferred having the option to meet remotely but would support the direction of the Board.

Director Johnson motioned, seconded by Vice Chair Carling to return to in person meetings like before COVID and that only remote phone participation would be allowed per the Brown Act.

There were no comments from the public. The Motion passed unanimously (5 – 0) by a roll call vote.

9. Financial Reporting for the Fiscal Year Ending June 30, 2023
Treasurer Atwood provided a summary of the second quarter financial report for the Fiscal Year Ending June 30, 2023. She noted that all expenses are tracking normally. A few items that are paid early in the year, such as the EBDA semiannual invoice and insurance are tracking high but will balance out by the end of the year. O&M expenses are at 42% of budget. She also reported on two additional items. The first item is the portfolio summary which now includes two T-Bills purchased through LAVWMA's new account at Charles Schwab. The interest rate for the quarter is 2.92% and will be significantly higher next quarter since the T-Bills were only recently purchased.

The second item is that there is an RFP out for a new audit firm for both LAVWMA and DSRSD. The issue of a new audit firm has been discussed with the Board over the past few meetings. The selection process was approved by both the Chair and Vice Chair. The RFP was sent to ten firms in the northern California. The responses are due February 20, 2023 and a recommendation will go to the DSRSD Board on March 7, 2023. The results of the selection process will be presented to the Board at the May 17, 2023 meeting.

This was an information item only requiring no action by the Board.

10. Resolution Adopting a Conflict of Interest Code for the Livermore-Amador Valley Water Management Agency and Rescinding the Prior Conflict of Interest Code
The Conflict of Interest Code was last approved by the Board in August 2016 and was amended by the Fair Political Practices Commission (FPPC) in 2018. The FPPC recommends reviewing the code every five years. The current code is in compliance, but needs to be amended to add the recently approved position of Assistant Treasurer. That is the only change that is being recommended.

Vice Chair Carling motioned, seconded by Director Goel to approve the Resolution Adopting a Conflict of Interest Code for the Livermore-Amador Valley Water Management Agency and Rescinding the Prior Conflict of Interest Code.

There were no comments from the public. The Motion passed unanimously (5 – 0) by a roll call vote.

11. LAVWMA Quarterly Report of Operations, 2nd Quarter, FY2022-2023
General Manager Weir provided an overview of the report and noted the various charts showing pump performance, electrical usage, and maintenance activities. DSRSD Operations Director, Jeff Carson, provided an overview of operation of the pump station during the series of storms at the end of December 2022 and the beginning of January 2023. There were no issues and flow through EBDA was normal. This was an information item only requiring no action by the Board.

12. Project Status Reports – Motor Control Center Replacement Project, Purchase of Three Vertical Turbine Pumps, and the San Leandro Sample Station Improvements Project
General Manager Weir noted that the Notice of Completion for the Motor Control Center Replacement Project has been recorded by the County and the final payment has been made to the contractor, Royal Electric. One warranty item was addressed within 24 hours. This project is now officially completed.

The pump order from Trillium is now due to be shipped May 31, 2023. That date has not changed in the last few months. A date for witness testing prior to shipment still needs to be scheduled.

The San Leandro Sample Station is proceeding. The front end specifications, with the exception of the schedule, have been completed. There were some issues regarding pedestrian traffic in the neighborhood that needed to be resolved with the City of San Leandro and the Homeowners Association. Final technical plans and specifications are expected from the design consultant HydroScience within the next few weeks. The final bid packet should be issued before the end of March 2023. A recommendation for award of the project to a contractor through the competitive bid process is expected to be presented to the Board at the May 17, 2023 meeting.

This was an information item only requiring no action by the Board.

13. Project Status Reports – Review of Options to Address PG&E Electrical Service Reliability and Photo Voltaic / Battery Storage Options
General Manager Weir Provided a summary of the issues related to PG&E electrical service reliability, including the fact that the second feeder is no longer capable of carrying the entire

load of the pump station. As a result, options that are being considered include the following: 1) managing flows using existing storage at the pump station and treatment plants; 2) asking PG&E to restore the second feeder to its original capacity; 3) purchase of a standby generator; 4) lease of a standby generator during periods of high flow; 5) working with the Regional Board to modify the permit to address these issues; and 6) a combination of these options. The most viable option at this time appears to be both item numbers 2 and 4.

A letter will be sent to appropriate parties at PG&E identifying the history of the capacity of the second feeder and the impacts this lack of capacity have on LAVMWA's ability to pump flows as well as the associated regulatory risk. It is unknown if there will even be a response from PG&E, much less the cost and schedule. Even if this option is viable, interim steps need to be taken to address pumping issues. During the recent storms, after much evaluation and discussion, General Manager Weir and Operations Director Carson decided to rent a 2MW generator for a one month period at a cost of $48,000. This effort served both as evidence of a proactive approach as well as a proof of concept for renting a generator. Renting the generator also required renting a transformer and significant effort by DSRSD's electrical staff to make the proper connections. It has been determined that for the rental option to be productive a permanent transformer and connection modifications are necessary to improve safety as well as the time necessary to make the generator operational. The generator option was successfully tested and the unit operated three 500 HP pumps at a flow rate of over 19 MGD, which coincidently is very close to the uninterruptible capacity with East Bay Dischargers Authority of 19.72 MGD. Additional information is still being gathered and a recommendation for a capital project may be presented to the Board for consideration at the May 17, 2023 meeting.

The General Manager also provided an update on the photo voltaic / battery storage option. As noted in the report from the Electrical Consultant, DTN Engineers, the battery storage option is not viable, but the solar panel option has the potential to offset close to 40% of the total energy consumption. The company that had been working with LAVWMA has opted to not provide a formal proposal. As a result, LAVWMA will likely issue its own RFP for a solar project. Issues regarding location are still being resolved with DSRSD. Additional information and a possible project recommendation will be presented to the Board at the May 17, 2023 meeting.

Member of the public Ryan Gunstream, Noresco, spoke on behalf of his company noting that they have many years of assisting public agencies address the same issue LAVWMA is facing through a design-build process. General Manager Weir expressed skepticism regarding that approach for LAVWMA but indicated he is willing to have further discussions.

This was an information item only requiring no action by the Board.

14. Resolution Designating Authorized Representatives for FEMA and California OES Disaster Assistance

General Manager Weir explained that following a significant disaster, such as a major earthquake, funding may become available from the state and federal governments. On a federal level the lead agency is the Federal Emergency Management Agency (FEMA; and the state counterpart is the California Office of Emergency Services (Cal OES). Official designees must be named through Board resolution in order to file the necessary paperwork for disaster relief. The resolution must be reapproved every three years and was last approved in 2019. The three

positions named in the resolution are the LAVWMA General Manager, DSRSD Operations Director and LAVWMA General Counsel.

Director Johnson motioned, seconded by Director Nibert, to approve a Resolution Designating Authorized Representatives for FEMA and California OES Disaster Assistance.

There were no comments from the public. The Motion passed unanimously (5 – 0) by a roll call vote.

15. Update and Response to Various Legal and Legislative Issues
General Manager Weir provided an overview of the January 2023 updates from CASA and BACWA. These documents provide information related to all the regulatory issues facing wastewater treatment agencies, including nutrients, PFAS, and collection systems. General Counsel Barnhill noted that the legislature has been quiet but she expects there will be many bills of interest to report on at the next meeting.

This was an information item only requiring no action by the Board.

12. General Manager's Report
General Manager Weir highlighted several areas of his report, including asset management, succession planning, capital projects, and PG&E usage. The most recent PG&E bill was for $293,000 due to the extreme wet weather events. DSRSD continues to do a great job in minimizing demand charges. Despite DSRSD's efforts, approximately $40,000 of the month's total was due to the fact that DSRSD staff are now forced to keep the basins as low as possible in order to be ready for potential PG&E outages. This was an information item only requiring no action by the Board.

13. Matters From/For Board Members
There were no items from Board members.

14, Next Regular Board Meeting, Wednesday, May 17, 2023 at 6:00 p.m.
The next Board meeting will be held in person at DSRSD's Board Room.

There were no comments from the public.

21. Adjournment
There being no further action, Chair Testa adjourned the meeting at 7:35 p.m.

Minutes Approved by the Board _____.

Charles V. Weir
General Manager
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Agenda Explanation
Livermore-Amador Valley
Water Management Agency
Board of Directors
May 17, 2023

ITEM NO. 7 ANNUAL BOARD ROTATION – ELECT CHAIR AND VICE CHAIR FOR FY2023/24

Action Requested
Nominate and elect a Chair and Vice Chair for FY2023/24

Summary
At the start of each fiscal year, the LAVWMA Board has traditionally rotated each member agency through the Chair and Vice Chair positions. During FY2022/23, Julie Testa, Pleasanton, is serving as Chair and Bob Carling, Livermore, is serving as Vice Chair. The LAVWMA JPA requires that officers serve terms coinciding with the fiscal year starting each July 1.

In following with the normal rotation, it would be appropriate for the Chair to come Chair from Livermore and the Vice Chair from DSRSD.

Following is a list of LAVWMA's Past Officers:

Fiscal Year	Chair	Vice Chair
2016/17	Pleasanton – Pentin	Livermore – Woerner
2017/18	Livermore – Woerner	DSRSD – Misheloff
2018/19	DSRSD – Misheloff	Pleasanton – Pentin
2019/20	Pleasanton – Pentin	Livermore – Woerner
2020/21	Livermore – Woerner	DSRSD, Johnson
2021/22	DSRSD, Johnson	Pleasanton, Testa
2022/23	Pleasanton, Testa	Livermore, Carling
2023/24	Livermore	DSRSD

Recommendation

Action Requested
Nominate and elect a Chair and Vice Chair for FY2023/24

Attachments
None

Agenda Explanation
Livermore-Amador Valley
Water Management Agency
Board of Directors
May 17, 2023

ITEM NO. 8 FINANCIAL REPORTING FOR THE FISCAL YEAR ENDING JUNE 30, 2023

Action Requested
None at this time. This is an information item only.

To: LAVWMA Board of Directors

From: Carol Atwood, LAVWMA Treasurer

Subject: Financial Reporting for FYE 2023

Summary
Attached are the financial statements for the period July 1, 2022 through March 31, 2023.

Attachments
Schedule of Sub Fund Account Balance Sheets– Shows the assets and liabilities of LAVWMA in each of its funds.

Schedule of Sub Fund Account Activity – Shows the income and expense transactions for LAVWMA in each fund. Most of LAVWMA's activity will be in the Operations & Maintenance fund.

O&M Fund Budget vs. Actual – Shows the status of the budget to actual expenses for the O&M Fund for the period July 1, 2021 through June 30, 2022 and the period January 1, 2023 through March 31, 2023.

Investment Report – A report showing how LAVWMA's available cash is invested.

General Management Expenses Listing – All general LAVWMA invoices are approved by the LAVWMA GM and Treasurer prior to payment by DSRSD. Those invoices are summarized and are billed to LAVWMA on a monthly basis via the DSRSD bill to LAVWMA. This listing is supplemental information requested by the LAVWMA General Manager to show the vendor, description and amount of each invoice in more detail.

Selection of Auditor for the Next Five Years
Via email both Chair Testa and Vice Chair Carling stated that they were comfortable with the General Manager and General Counsel working with Treasurer Atwood to select an audit firm for the next five years. An RFP for Professional Auditing Services for both DSRSD and

LAVWMA was sent to ten northern California firms on January 20, 2023. The deadline for response was February 20, 2023. Only one firm, Maze & Associates, responded to the RFP by the deadline. The General Manager, General Counsel, and Treasurer all deemed the proposal submitted by Maze & Associates to be responsive and responsible and recommended entering into an agreement with Maze & Associates. Although the current audit firm is Maze & Associates, there will be a new Audit Partner, Whitney Crockett, for the term of the agreement. The prior Audit Partner was David Alvey. This would be consistent with GASB requirements for public agency audit services.

An agreement with Maze & Associates was fully executed on May 9, 2023. The agreement is for one year, and may be extended by LAVWMA for up to four one-year extensions. The agreement is consistent with LAVWMA's contracting requirements. The fee for FYE23 will be $11,100. It the agreement is extended subsequent fees will be adjusted by the actual Bureau of Labor Statistics CPI annual increase for the San Francisco – Oakland Area with a maximum increase of 6%.

Recommendation
None at this time. This is an information item only.

Attachments
Financial Statements for the Period July 1, 2022 – March 31, 2023.

LIVERMORE-AMADOR VALLEY WATER MANAGEMENT AGENCY
SCHEDULE OF SUB FUND ACCOUNT BALANCE SHEETS
July 2022 through March 2023

					Repair and Replacement Reserve			
	Operation & Maintenance	EBDA Capacity	2011 Debt Service	2021 Debt Service	Joint-use Replacement	Dual-use Replacement	Sole-use Replacement	Total
ASSETS								
Cash and equivalents	$ 3,071,130		$ (4,664,252)	$ 4,611,001	$ 363,446	$ 13,556	$ 14,412	$ 3,409,293
Investments (Charles Schwab)	34,018			58	13,618,993	3,711	13,581	13,670,360
Investments (LAIF)	509,031		30,630	212	464,647	436,078	1,631,194	3,071,793
Investments (LAIF FMV Adj)	3,381		12,470		(12,471)	(437)	(1,578)	1,365
Due from members	10,465							10,465
Service Charge Receivable	(96,484)			80,891	15,593			0
Capital Assets, net of accumulated depreciation		2,424,245			98,041,175	37,800	3,060,748	103,563,969
Bond Issuance Cost				408,004	-	-	-	408,004
Total assets	3,531,541	2,424,245	(4,621,152)	5,100,165	112,491,383	490,708	4,718,358	124,135,248
LIABILITIES								
Accounts payable	820,078				122,892			942,969
Due To Members	2,161,697							2,161,697
Interest payable				791,411				791,411
Deferred revenue	34,018			58	118,993	3,711	13,581	170,360
Long-term debt								-
Bond issuance premium, net of amortization				10,097,265				10,097,265
Due in more than one year				54,790,000				54,790,000
Total liabilities	3,015,792	-	-	65,678,733	241,885	3,711	13,581	68,953,702
DEFERRED INFLOWS OF RESOURCES								
Gain on refunding	-	-	3,561,106	-	-	-	-	3,561,106
NET ASSETS								
Invested in capital assets, net of related debt	-	2,424,245	-	(64,887,265)	98,041,175	37,800	3,060,748	38,676,704
Unrestricted net assets	515,749	-	(8,182,258)	4,308,696	14,208,323	449,197	1,644,029	12,943,736
Total net assets	$ 515,749	$ 2,424,245	$ (8,182,258)	$ (60,578,568)	$112,249,498	$ 486,997	$ 4,704,777	$ 51,620,440

LIVERMORE-AMADOR VALLEY WATER MANAGEMENT AGENCY
SCHEDULE OF SUB FUND ACCOUNT ACTIVITY
July 2022 through March 2023

					Repair and Replacement Reserve			
	Operation & Maintenance	EBDA Capacity	2011 Debt Service	2021 Debt Service	Joint-use Replacement	Dual-use Replacement	Sole-use Replacement	Total
OPERATING REVENUES								
Service charges - DSRSD	$ 1,133,248			$ 2,584,918	$ 139,800			$ 3,857,966
Service charges - City of Pleasanton	1,382,392			2,211,338	139,800			3,733,530
Service charges - City of Livermore	1,224,706			1,849,444	120,400			3,194,550
Service charges - Reconciled	(230,480)							(230,480)
Total operating revenues	3,509,865	-	-	6,645,700	400,000	-	-	10,555,565
OPERATING EXPENSES								
Power	1,461,861							1,461,861
LAVWMA share of EBDA O&M - Fixed	714,792							714,792
LAVWMA share of EBDA O&M - Variable	89,422							89,422
Operations agreement	1,003,372				297,738			1,301,111
Professional services	107,082							107,082
Livermore sole use O&M	13,942							13,942
Insurance	119,965							119,965
Repairs and Maintenance								-
Miscellaneous	2,214			118	6,475	202	739	9,748
Total operating expenses	3,512,651	-	-	118	304,214	202	739	3,817,923
Capital outlay	-	-	-	-		-	-	-
Total operating expenses and capital outlay	3,512,651	-	-	118	304,214	202	739	3,817,923
Operating income (loss)	(2,786)	-	-	6,645,582	95,786	(202)	(739)	6,737,642
NON-OPERATING REVENUES (EXPENSES)								
Debt Service	-	-	(5,640,799)	(1,004,892)				(6,645,690)
Interest income	23,823	-	10	1,077	122,359	3,822	13,989	165,081
Total non-operating revenues (expenses)	23,823	-	(5,640,789)	(1,003,814)	122,359	3,822	13,989	(6,480,610)
Changes in net assets	21,037	-	(5,640,789)	5,641,768	218,146	3,620	13,250	257,032
NET ASSETS (3)								
Net assets, beginning of period	494,711	2,424,245	(2,541,469)	(66,220,336)	112,031,353	483,377	4,691,527	51,363,408
Net assets, end of period	$ 515,749	$ 2,424,245	$ (8,182,258)	$ (60,578,568)	$ 112,249,498	$ 486,997	$ 4,704,777	$ 51,620,440

(1) Included FYE21 O&M reconciliation true-up.

(2) Total of the noted expenses is $25,222.18. Details see General Management Expenses Listing.

LIVERMORE-AMADOR VALLEY WATER MANAGEMENT AGENCY
Operations and Maintenance - Budget vs Actual
July 2021 - June 2022 & July - March 2023

	FYE 2022			FYE 2023		
	Budget	Actual	Variance	Budget	Actual	Variance
OPERATING REVENUES						
Service charges - DSRSD	$ 1,113,743	$ 1,113,743	$ -	$ 1,133,248	$ 1,133,248	$ 1
Service charges - City of Pleasanton	1,323,867	1,323,867	-	1,382,392	1,382,392	1
Service charges - City of Livermore	1,172,870	1,172,870	0	1,199,706	1,224,706	24,999
Service charges - Reconciled		(230,481)	(230,481)			
Total operating revenues	3,610,480	3,379,998	0	3,715,346	3,740,345	25,001
OPERATING EXPENSES						
Power	1,250,000	1,360,016	110,016	1,500,000	1,461,861	(38,139)
LAVWMA share of EBDA O&M - Fixed	689,052	732,771	43,719	676,965	714,792 (2)	37,827
LAVWMA share of EBDA O&M - Variable	150,828	116,432	(34,396)	160,959	89,422 (2)	(71,538)
Operations agreement	1,011,500	793,133	(218,367)	927,500	1,003,372	75,872
Professional services	380,100	223,324	(156,776)	329,917	107,082 (2)	(222,835)
Livermore sole use O&M	25,000	22,538	(2,462)	25,000	13,942	(11,058)
Insurance	84,000	102,358	18,358	96,926	119,965 (2)	23,040
Permits	20,000	-	(20,000)	23,078	-	(23,078)
Repairs and Maintenance	-	34,574	34,574	-	-	-
Miscellaneous	-		-	-	2,214	2,214
Total operating expenses	3,610,480	3,385,144	(225,336)	3,740,345	3,512,651	(227,694)
Capital outlay			-			-
Total operating expenses and capital outlay	3,610,480	3,385,144	(225,336)	3,740,345	3,512,651	(227,694)
Operating income (loss)	-	(5,146)	225,336	-	227,694	252,695
NON-OPERATING REVENUES (EXPENSES)						
Interest income	-	5,146	5,146	-	23,823	23,823
Total non-operating revenues (expenses)	-	5,146	5,146	-	23,823	23,823
Net Income	$ -	$ (0)	$ 230,482	-	251,517	276,518

(1) Included FYE21 O&M reconciliation true-up.

(2) Total of the noted expenses is $25,222.18. Details see General Management Expenses Listing.

LIVERMORE-AMADOR VALLEY WATER MANAGEMENT AGENCY
Treasurer's Report
Portfolio Summary
March 31, 2023

Investments	Par Value	Market Value	Book Value	% of Portfolio	Avg. Term	Avg. Days to Maturity	YTM
LAIF- Operating	$ 3,071,793	$ 3,071,793	$ 3,071,793	18.54	1	1	2.74%
T-Bill 04/18/23 912796CU1	$ 4,554,073	$ 4,554,073	$ 4,498,120	27.14	68	68	4.49%
T-Bill 06/22/23 912796ZQ5	$ 9,115,034	$ 9,115,034	$ 9,000,705	54.31	133	133	4.66%
C. Schwab Account 8516-8477	$ 1,253	$ 1,253	$ 1,253	0.01	1	1.00	0.45%
	$ 16,742,153	**$ 16,742,153**	**$ 16,571,871**	**100.00**			**3.09%**

Average Daily Balance $ 16,571,871
Effective Rate of Return **3.09%**

I certify that this report reflects all Government Agency pooled investments and is in conformity with the investment policy of Livermore-Amador Valley Water Management Agency.

The investment program herein shown provides sufficient cash flow liquidity to meet the next six month's expenses.

Original Signed by Carol Atwood — 05/12/23

Carol Atwood, Treasurer — Date

Livermore-Amador Valley Water Management Agency
General Management Expenses Listing
January 2023 - March 2023

Posted	Date	Source	Ref1	PO/Ref2	Ref3	Reference	Amount	GL Org	GL Object	GL Project	Check #	Warrant	Vendor	Comment
Y	01/31/2023		009297		6384	W 020223	225.00	87000000	812100		201622	ck020223	COMPUTER COURAGE INC.	Strategy, Project Management &
Y	01/13/2023		007848	23200272	6144	1404	1,110.00	87000000	812100		201522	ck011923	JARVIS FAY LLP	GENERAL COUNSEL SVCS -FY23
Y	02/27/2023		010918		7047	W 030223	50.00	87000000	812100		201823	ck030223	JEFF NIBERT	SPECIAL BOARD MTG ATTENDANCE -
Y	02/21/2023		010068		6951	W 022323	50.00	87000000	812100		201771	ck022323	ROBERT CARLING	SPECIAL BOARD MTG ATTENDANCE -
Y	02/21/2023		009083		6949	W 022323	50.00	87000000	812100		201789	ck022323	JULIE TESTA	SPECIAL BOARD MTG ATTENDANCE -
Y	02/15/2023		006643	23200271	6623	W 021623	11,465.74	87000000	812100		201762	ck022323	CHARLES V. WEIR	LAVWMA MANAGEMENT SERVICES-FY2
Y	03/29/2023		009297	23200767	7997	W 042023	75.00	87000000	812100		202173	ck042023	COMPUTER COURAGE INC.	General Website Updates
Y	03/13/2023		007848	23200272	7290	W 031623	6,952.00	87000000	812100		202037	ck033023	JARVIS FAY LLP	GENERAL COUNSEL SVCS -FY23
Y	03/07/2023		000313	23200701	7154	W 030923	98.92	87000000	812100		201870	ck030923	SIGNFAST, INC	2 x 8 BLK/WHT SIGNS (LAVWMA)
							20,076.66							

Expenses from journal entry and payroll:

Postage		$0.00
DSRSD		$150.00
Board		
Members		
Admin		$2,720.25
Support		
Accounting		$2,275.27
		$5,145.52
	TOTAL:	**$ 25,222.18**

Agenda Explanation
Livermore-Amador Valley
Water Management Agency
Board of Directors
May 17, 2023

ITEM NO. 9 QUARTERLY REPORT OF OPERATIONS FOR 3RD QUARTER FY2022-2023

Action Requested
None at this time. This is an information item only.

Summary
LAVWMA's Quarterly Report of Operations for the 3rd Quarter, FY 2022-2023 is attached for the Board's review. These quarterly reports are prepared by DSRSD staff and summarize all LAVWMA operations and maintenance activity for each quarter. Jeff Carson, DSRSD Operations Director, will be available to answer any questions from the Board. The report includes graphs showing Flows and Pumping Efficiency, Energy Consumption, Budget Variance, and Work Order History. Per the Board's request, the Executive Summary includes a section for Items of Interest. Total expenses are 87% of the year to date budget. The extreme wet weather this year resulted in increased costs for PG&E power, chemicals for dechlorinating the EBDA combined effluent, and labor for managing the pump station during the storms, and labor for pipeline inspection and maintenance.

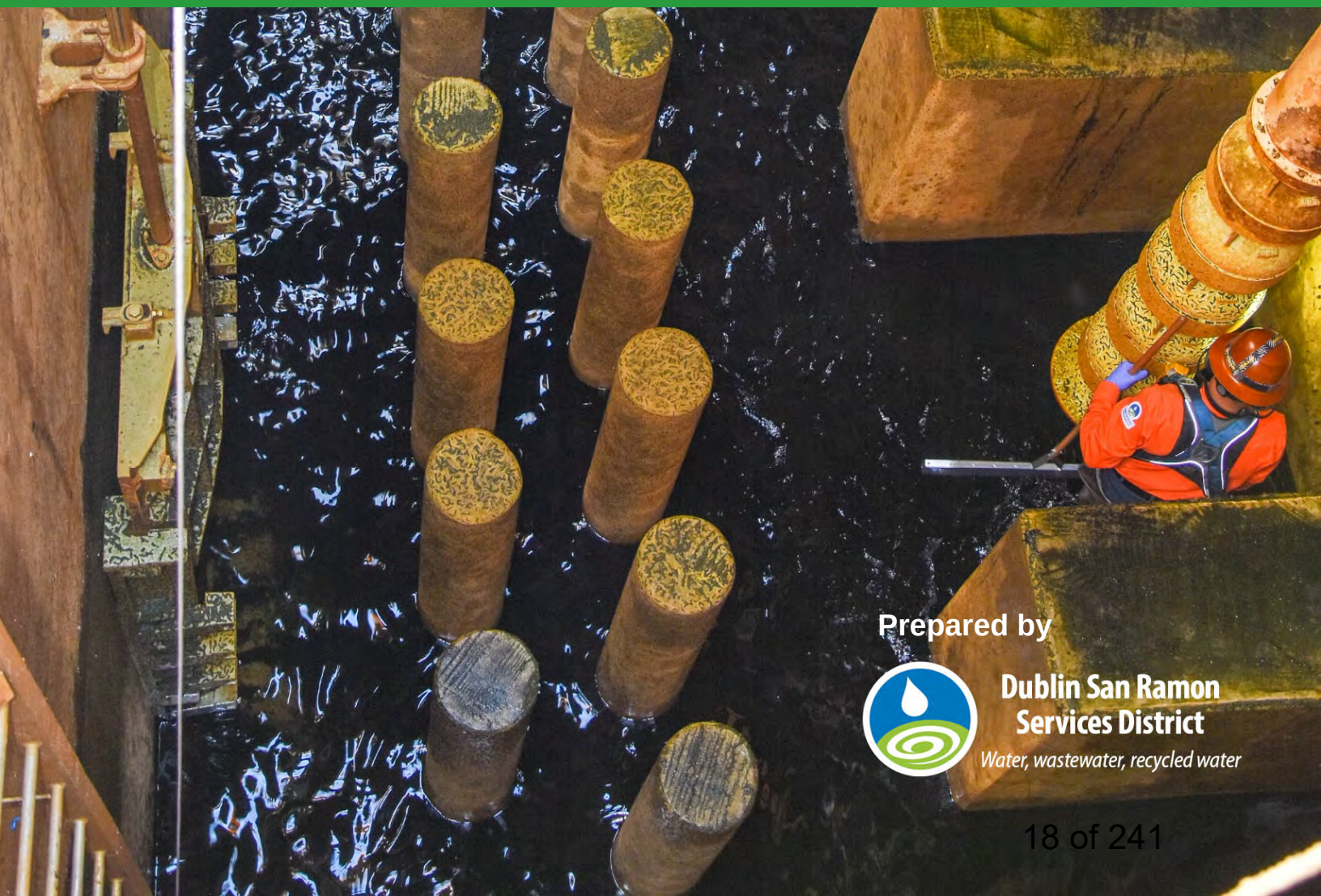
Recommendation
None at this time. This is an information item only.

Attachment
LAVWMA Quarterly Report of Operations, 3rd Quarter, FY2022-2023.

LAVWMA

QUARTERLY REPORT OF OPERATIONS

FY 2022-2023, 3rd Quarter



Prepared by

Dublin San Ramon Services District

Water, wastewater, recycled water

QUARTERLY REPORT OF OPERATIONS
LAVWMA PUMPING AND CONVEYANCE SYSTEM
3rd Quarter FY 2022-2023: January to March 2023

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3 – Monthly Average Storage Basin Levels and Volume 10
4 – Monthly Export Flow 11
5 – Labor Effort, Expenditures, and Budget Utilization 12
6 – O&M Expenditures and Budget Utilization 13
7 – O&M Expenditures and Budget Utilization for Livermore Sole Use Facilities 14
8 – Detailed YTD O&M Budget Comparison to Actual Expenses ..... 15 – 16
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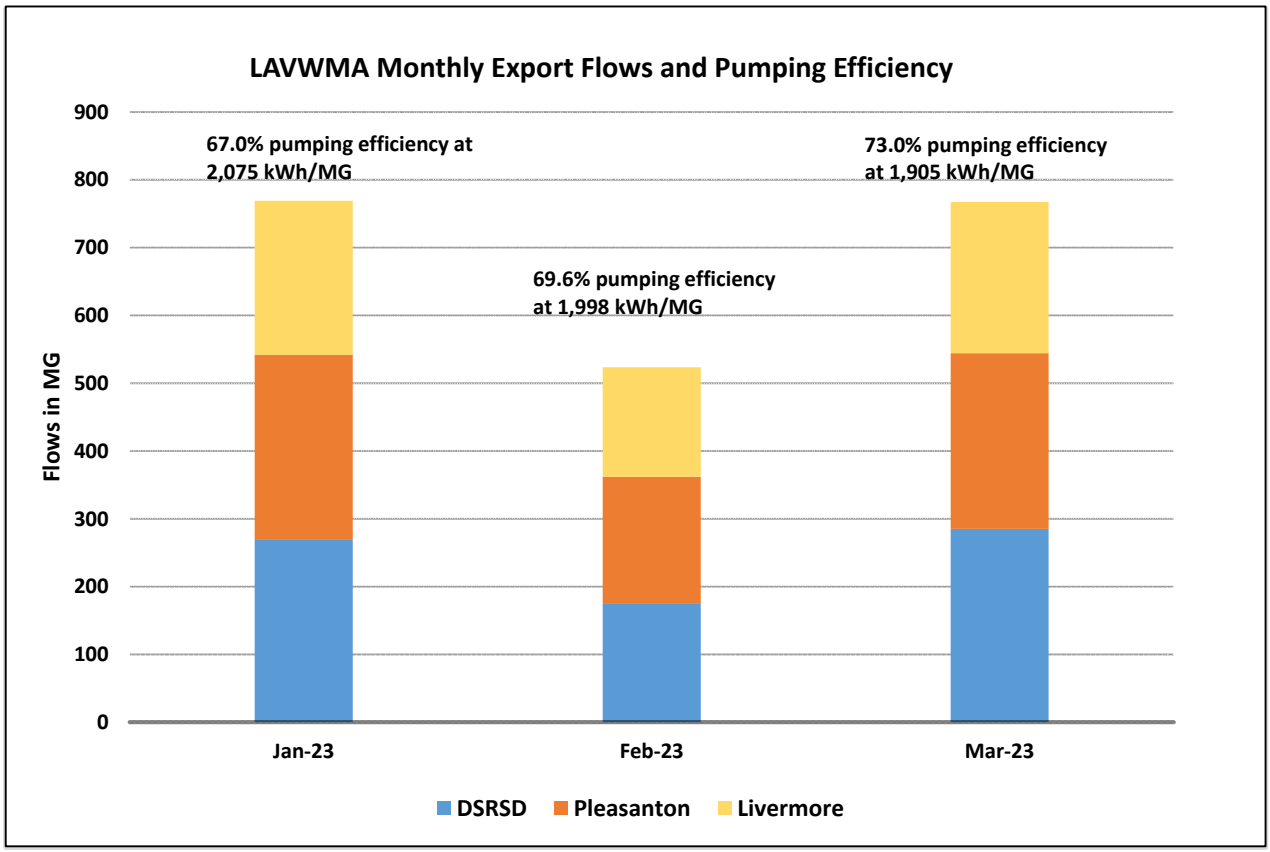
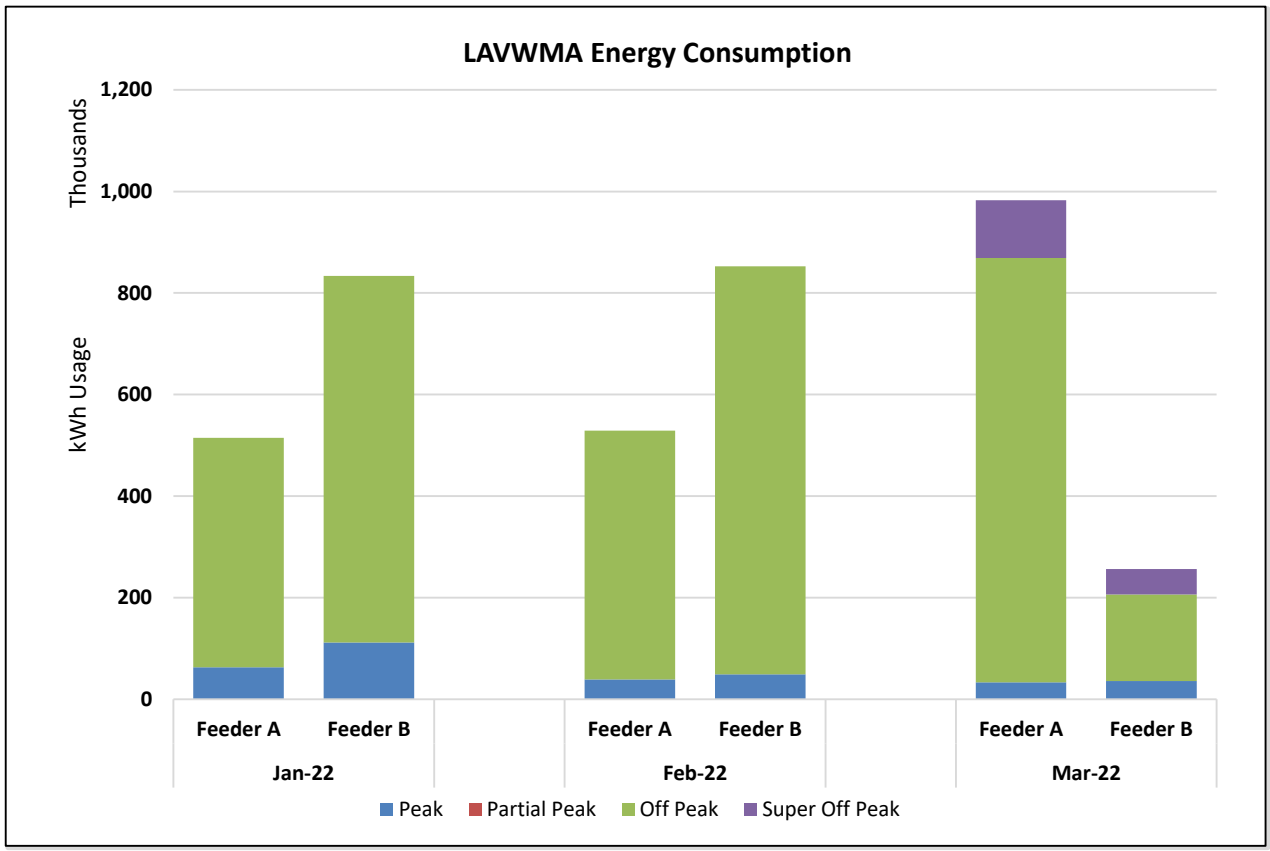
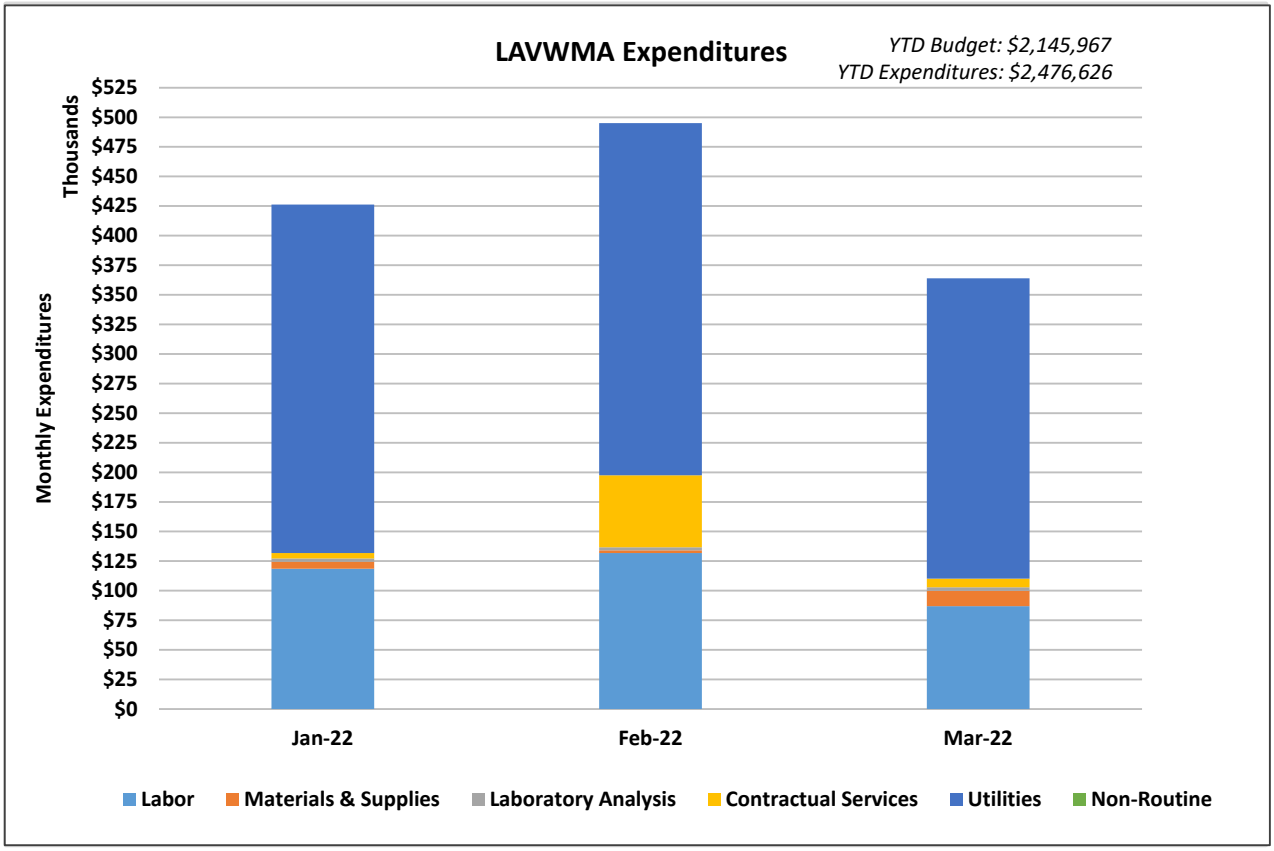
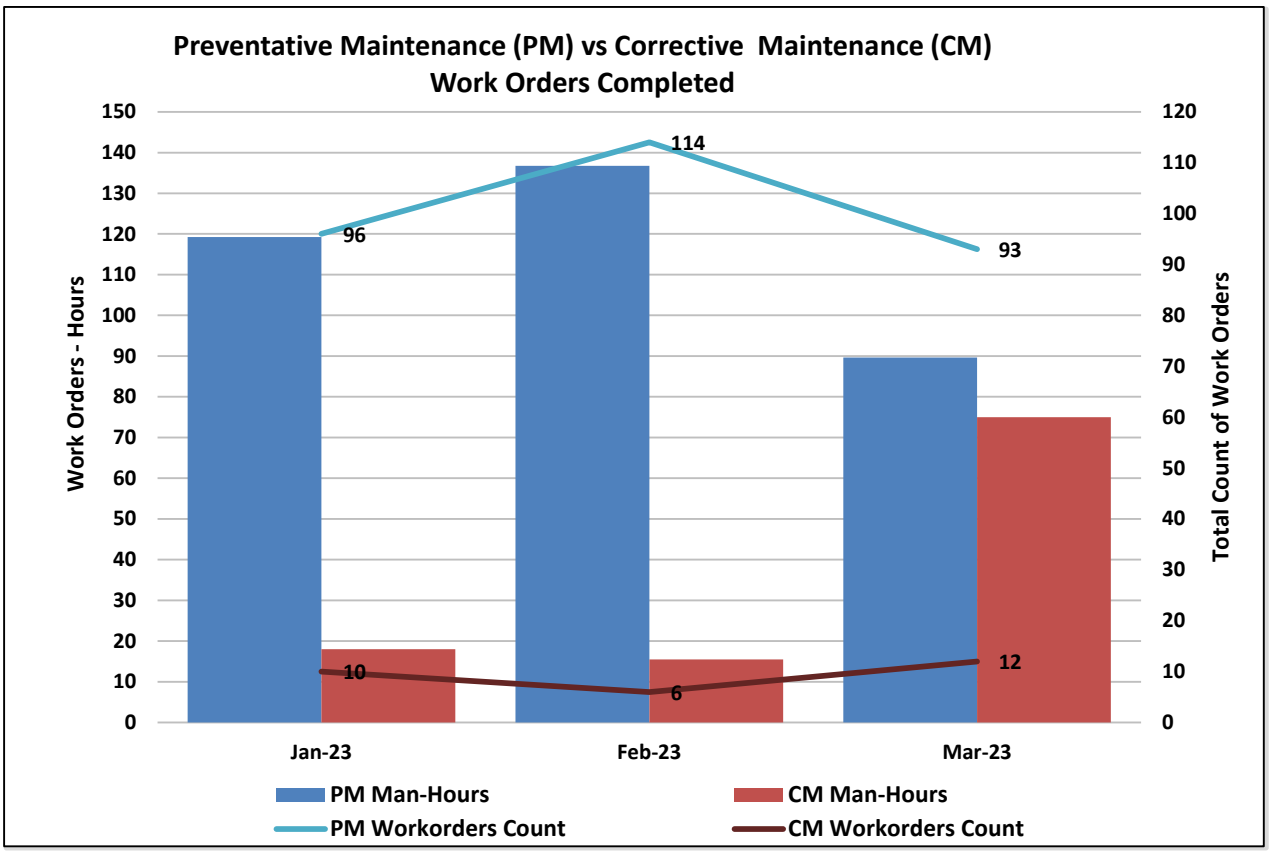
10 – Langelier Saturation Index Report (LAVWMA, DSRSD, Livermore) ..... 20 – 22
11 – Capital Projects Update 23


LAVWMA Monthly Export Flows and Pumping Efficiency
Flows in MG
900
800
700
600
500
400
300
200
100
0
67.0% pumping efficiency at 2,075 kWh/MG
69.6% pumping efficiency at 1,998 kWh/MG
73.0% pumping efficiency at 1,905 kWh/MG
Jan-23
Feb-23
Mar-23
DSRSD
Pleasanton
Livermore


LAVWMA Energy Consumption
Thousands
kWh Usage
1,200
1,000
800
600
400
200
0
Feeder A
Feeder B
Jan-22
Feeder A
Feeder B
Feb-22
Feeder A
Feeder B
Mar-22
Peak
Partial Peak
Off Peak
Super Off Peak


LAVWMA Expenditures
YTD Budget: $2,145,967
YTD Expenditures: $2,476,626
Monthly Expenditures
Thousands
$525
$500
$475
$450
$425
$400
$375
$350
$325
$300
$275
$250
$225
$200
$175
$150
$125
$100
$75
$50
$25
$0
Jan-22
Feb-22
Mar-22
Labor
Materials & Supplies
Laboratory Analysis
Contractual Services
Utilities
Non-Routine


Preventative Maintenance (PM) vs Corrective Maintenance (CM)
Work Orders Completed
Work Orders - Hours
Total Count of Work Orders
150
140
130
120
110
100
90
80
70
60
50
40
30
20
10
0
120
110
100
90
80
70
60
50
40
30
20
10
0
96
114
93
10
6
12
Jan-23
Feb-23
Mar-23
PM Man-Hours
CM Man-Hours
PM Workorders Count
CM Workorders Count

QUARTERLY REPORT OF OPERATIONS
LAVWMA PUMPING AND CONVEYANCE SYSTEM
3rd Quarter FY 2022-2023: January to March 2023

1. EXECUTIVE SUMMARY

The Livermore-Amador Valley Water Management Agency (LAVWMA) pumping and effluent conveyance system operated above regular pumping rates during several historical rainfall events throughout the third quarter of Fiscal Year 2022-2023. A total of 2,059.81 million gallons of fully treated secondary effluent were pumped to San Francisco Bay via the East Bay Dischargers Authority (EBDA) outfall diffuser and San Leandro Sample Station (SLSS); this is almost twice the amount pumped during the previous quarter. The overall efficiency of the pumping system averaged 69.9%, with an average electrical cost of $424 per million gallons, or $138 per acre-foot.

Total year-to-date operations and maintenance (O&M) expense is $2,476,626 or 87% of the O&M annual budget amount of $2,861,290 and the overall cost of operation is $665 per million gallons pumped or $217 per acre-foot.

2. OPERATIONS

Of the 2,059.81 million gallons of effluent conveyed through the LAVWMA system, approximately 611 million gallons came from the City of Livermore, 720 million gallons from City of Pleasanton and 729 million gallons from DSRSD. The monthly export flow summary is shown on Table 4. Monthly reports sent to EBDA which detail daily export flows and monitoring analysis of the treated effluent during the quarter are shown on Table 9.

LAVWMA's emergency preparedness includes the permitted Wet Weather Operations Strategy. Between January and March, multiple atmospheric rivers pushed through northern California, bringing approximately 20 inches of rain and (as previously stated) almost twice the amount of flow conveyed through the LAVWMA system. For comparison, only one inch of rain and 1,079 MG of treated effluent flow was recorded during the same time frame in 2022. Additionally, PG&E continues to grow more unreliable in providing electricity to the region, as demonstrated by a PG&E power outage experienced by the LAVWMA system on March 26. DSRSD staff utilized empty storage basins and procured an emergency generator to ensure overall system power and conveyance reliability.

Currently PG&E implements a rate plan – broken down into peak, partial peak, off peak, and seasonal super off peak periods – that increases rates for energy used during certain periods of the day, based on energy demand across the energy grid. LAVWMA's energy consumption in the third quarter reflects the beginning of PG&E's seasonal "super off peak" rate, which is available during the spring months of March, April, and May between the hours of 9 AM and 2 PM, as well as unusually high energy consumption caused by the wet weather events and increased flow. Whenever possible throughout the reporting period, staff utilized an enhanced Operations Strategy, implementing an efficient pumping plan and avoided pumping during partial peak and peak PG&E energy demand periods. However, flow demands due to EBDA pumping restrictions and substantial rainfall required LAVWMA to run during peak rate periods for short intervals on several occasions; the resulting increased electrical costs are reflected in Table 1.

Over the past quarter, staff focused on system monitoring and reliability due to the impact by the storms. Response to the many storm events themselves and response to damage to the Arroyo Mocho creek bank contributed to the overall labor hours. Staff cleared silt and soil from the emergency discharge point at San Leandro Sample Station on two occasions. Influent flowmeters located at the LAVWMA Junction Structure (area before the LAVWMA holding basins) had reached

the end of their useful lives and were replaced on the DSRSD line and the Livermore line, leading to more accurate flow reading, particularly in anticipation of the low flow season. Staff conducted a discharge exercise at the two wet weather outfall locations identified in DSRSD's permit, which is described in greater detail in Section 5. Finally, the District addressed issues with the calcium thiosulfate pumps and replenished the inventory of calcium thiosulfate, which is used to remove chlorine from treated water before it is discharged into San Lorenzo Creek at the emergency discharge point. As a result, there was an increase in labor costs over the prior quarter, as is depicted by the LAVWMA Expenditures table on page 3. The above noteworthy items contributed to the significant increase in corrective work orders in March.

Photos: Before and after photos of the discharge point that was cleared of soil and silt runoff from the January 2023 storms.

3. MAINTENANCE

During the quarter, 875 hours were spent to complete 622 preventative maintenance work orders and 183 hours to complete 55 corrective maintenance work orders on LAVWMA equipment and systems.

The following are some noteworthy maintenance activities during the quarter:

Electrical:

- Troubleshot and assessed 54" gate actuator at Junction Structure
- Prepped and tested Alamo Creek permitted emergency release point
- Troubleshot and repaired junction structure sump pump
- Installed generator, transformer, and cables
- Tested rental generator (verified Proof of Concept) for emergency power to LAVWMA pump station
- Worked with consultant to set the generator relay trip settings for rental generator
- Tested the pumps while on standby generator
- Troubleshot and repaired dewatering pumps for multiple basins
- Replaced faulty street lights throughout the pump station
- Tested LAVWMA generator phase rotation meter with contractor

Instrumentation and Controls:

- Prepped and tested Alamo Creek overflow discharge
- Installed and tested rectifier remote monitoring equipment
- Connected and tested new flow meter for Livermore pipeline in Junction Structure
- Connected and tested new flow meter for DSRSD pipeline in Junction Structure

- Tested SLSS flapper gate discharge to San Lorenzo Creek
- Repaired SLSS pressure transmitter
- Troubleshot SLSS SCADA during one of the large storms
    - Upgraded SLSS SCADA server to industrial computer that is panel mounted
- Troubleshot and repaired chlorine analyzer at Junction Structure
- Troubleshot and repaired LAVMWA PS PLC I/O issues
- Troubleshot pump 6 RTD issues

Mechanical:

- Replaced the 30" flow meter at the junction structure
- Removed several trees blown down from a wind storm
- Detected one air valve leak using Smart Detectors technology; removed obstruction and removed excess water to prevent spill from vault

4. BUDGET VARIANCE AND EXPENSES

Third quarter labor expenses totaled $337,249 for 1,580 man-hours of effort, an average of 3.0 full time equivalents (FTEs). O&M expenses for the quarter including labor, supplies, laboratory analysis, contractual services, and utilities totaled $1,285,293 for an average cost of $624 per million gallons pumped or $203 per acre-foot. The total expense for the Livermore sole use pipeline for the quarter was $3,734.

As a direct result of the storms, O&M expenses were unusually high in several areas. Electrical charges caused by peak rate use have led utilities to exceed the projected year-to-date budget by $390,805. DSRSD staff used contractual services to provide traffic management and implement the new emergency generator, with contractual services exceeding the projected year-to-date budget by $100,733. Earlier labor savings were absorbed by additional staff time used to respond to the storm, with labor now only $52,552 under the projected year-to-date budget. Overall, O&M expenses exceed the projected year-to-date budget by $331,659. DSRSD staff have communicated with the LAVWMA General Manager regarding the variances and any resulting LAVWMA Board actions which may be necessary per the terms of the Maintenance Agreement.

Operation and maintenance (O&M) expenses and budget utilization details are shown on Tables 5, 6, 7, and 8.

5. ITEMS OF INTEREST

DSRSD is the operator for the LAVWMA export and storage facilities that pump the combined flow from the DSRSD WWTP and Livermore WWTP into EBDA's system for discharge into the San Francisco Bay. Per the 2021 EBDA-LAVWMA Amended and Restated Master Agreement, LAVWMA has rights to pump up to 41.2 MGD to the EBDA system but can be curtailed to 19.72 MGD under certain conditions. On January 6, staff managed a period where EBDA was restricting the amount of flow that LAVWMA could discharge to the EBDA system due to necessary EBDA pump repair work. During this period, staff diverted treated effluent flow to the LAVWMA storage basins. After the restriction was lifted, staff increased the export pumping capacity and ran multiple pumps during the peak PG&E demand period.

LAVWMA's discharge permit allows LAVWMA to utilize two wet weather outfalls, San Lorenzo Creek in San Leandro and Alamo Canal adjacent to the DSRSD WWTP, under certain wet weather conditions. In March DSRSD staff took advantage of the historic rainfall and subsequent increased creek flow, with water board and LAVWMA's GM approval, and conducted discharge exercises at each location. A combined Livermore and DSRSD discharge flow of 35,839 gallons was recorded during the Alamo Canal exercise, with no chlorine residual detected.

During this reporting period, staff also conducted a test at the San Leandro Sample Station, where a flow of 44,495 gallons was recorded. The San Lorenzo Creek discharge uncovered an operational issue with the dechlorination system; the calcium thiosulfate pumps did not deliver adequate product for disinfection. As a result of the exercises, DSRSD created a standard process to perform weekly tests and to flush the line and updated the flow totalizers to provide real-time data.

Photo: LAVWMA Emergency Discharge Exercise at the Alamo Canal LAVWMA Junction Structure, March 29, 2023

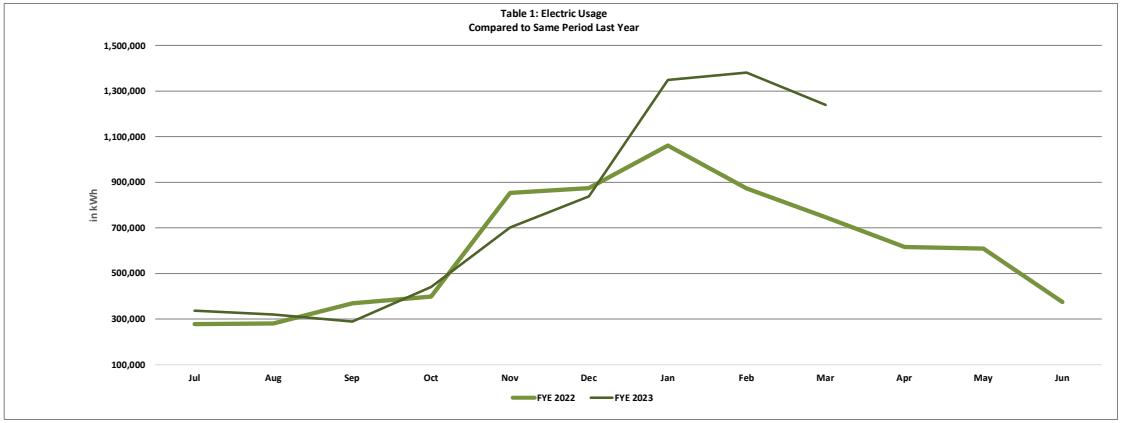
6. CAPITAL PROJECTS

As additional information, Table 11 provides a status summary of the capital projects that are primarily managed by the LAVWMA General Manager. The O&M budget and expenditures discussed in this quarterly report do not include capital projects.

TABLE 1 - Electric Usage, Efficiency and Costs

LAVWMA SYSTEM: Fiscal Year 2022-2023, Quarterly Report

	PG&E Service Accounts: Rate Schedule B20 starting March 2021																Total	Pumping			
	Acct # 8482061923-1 Service A						Acct # 8440395259-5 Service B						Billing	Total			Export	Energy	Cost		Efficiency
Month	kWh	Peak	Partial Peak	Off Peak	Super Off Peak	$	kWh	Peak	Partial Peak	Off Peak	Super Off Peak	$	Days	kWh	$/kWh	$	Flow[1] MG	kWh/MG	$/MG	$/AF	%
Jul-22	0	0	0	0	0	$1,807	336,556	1,732	1,635	333,189	0	$72,791	31	336,556	$0.22	$74,598	167	2,021	$448	$146	68.8%
Aug-22	140,062	0	44	140,018	0	$30,882	180,226	2,139	1,914	176,173	0	$40,618	32	320,288	$0.22	$71,500	163	1,966	$439	$143	70.7%
Sep-22	123,902	0	0	123,902	0	$28,070	165,391	2,105	1,813	161,473	0	$37,727	30	289,293	$0.23	$65,797	131	2,209	$502	$164	62.9%
Oct-22	140,195	0	0	140,195	0	$34,065	301,346	2,156	997	298,193	0	$67,784	29	441,541	$0.23	$101,849	201	2,199	$507	$165	63.2%
Nov-22	245,189	0	0	245,189	0	$54,210	456,025	2,817	0	453,208	0	$87,368	32	701,214	$0.20	$141,578	340	2,063	$416	$136	67.4%
Dec-22	175,006	5,433	0	169,573	0	$34,895	662,353	16,666	0	645,687	0	$126,168	29	837,359	$0.19	$161,063	406	2,061	$396	$129	67.5%
Jan-23	**514,735**	**62,976**	**0**	**451,759**	**0**	**$121,783**	**833,426**	**111,786**	**0**	**721,640**	**0**	**$171,299**	30	1,348,161	$0.22	$293,082	650	**2,075**	**$451**	**$147**	**67.0%**
Feb-23	**528,821**	**39,102**	**0**	**489,719**	**0**	**$122,322**	**852,339**	**49,185**	**0**	**803,154**	**0**	**$175,148**	32	1,381,160	$0.22	$297,470	691	**1,998**	**$430**	**$140**	**69.6%**
Mar-23	**982,853**	**33,351**	**0**	**835,295**	**114,207**	**$187,908**	**256,407**	**35,931**	**0**	**170,330**	**50,146**	**$65,305**	30	1,239,260	$0.20	$253,213	650	**1,905**	**$389**	**$127**	**73.0%**
Apr-23																	412	0	$0	$0	n/a
May-23																	0	n/a	n/a	n/a	n/a
Jun-23																	0	n/a	n/a	n/a	n/a
Quarter																					
Average	675,470					$144,004	647,391					$137,250	31	1,322,860	$0.21	$281,255	664	1,993	**$424**	**$138**	**69.9%**
Total	2,026,409					$432,013	1,942,172					$411,751	92	3,968,581		$843,764	1,992	5,978			
Minimum	514,735					$121,783	256,407					$65,305	30	1,239,260	$0.20	$253,213	650	1,905	$389	$127	67.0%
Maximum	982,853					$187,908	852,339					$175,148	32	1,381,160	$0.22	$297,470	691	2,075	$451	$147	73.0%
YTD																					
Average	316,751					$68,438	449,341					$93,801	31	766,092	$0.21	$162,239	318	1,850	$398	$130	67.8%
Total	2,850,763					$615,943	4,044,069					$844,207	275	6,894,832		$1,460,150	3,811	18,497			
Minimum	0					$1,807	165,391					$37,727	29	289,293	$0.19	$65,797	0	0	$0	$0	62.9%
Maximum	982,853					$187,908	852,339					$175,148	32	1,381,160	$0.23	$297,470	691	2,209	$507	$165	73.0%



NOTES:

1) **This Table 1 does not reflect what was the actual expenditures paid for the month and may not match what is in Table 8 Expenditures. The primary purpose of Table 1 is to show the electric usage and efficiency for the month it actually occured.**

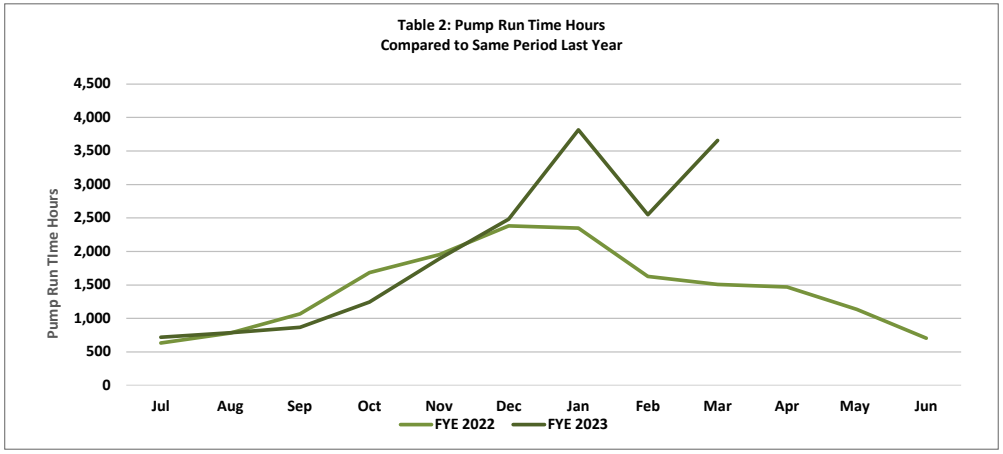
2) To calculate pumping efficiency, read dates, electric usage, and export flows are **matched to PG&E billing periods**: 12/13 - 1/11 for January, 1/12 - 2/12 for February, and 2/13 - 3/14 for March.

3) Pumping efficiency is based on continuous average flows and a TDH of 442.8 feet, including static lift of 408.8 feet and piping losses of 34 feet (per Charlie Joyce, B&C, 2/12/07).

TABLE 2 - Pump Run Time Hours

LAVWMA SYSTEM: Fiscal Year 2022-2023, Quarterly Report

Month	Pump No. 1 Hours	Pump No. 2 Hours	Pump No. 3 Hours	Pump No. 4 Hours	Pump No. 5 Hours	Pump No. 6 Hours	Pump No. 7 Hours	Pump No. 8 Hours	Pump No. 9 Hours	Pump No. 10 Hours	TOTAL Pump Run Hours	TOTAL Pump Utilization %
Jul-22	0	14	0	338	0	1	0	1	182	183	719	9.7%
Aug-22	0	1	95	296	0	1	93	1	0	298	784	10.5%
Sep-22	0	79	87	124	118	1	125	23	188	124	869	12.1%
Oct-22	0	207	79	186	128	47	309	109	110	68	1,243	16.7%
Nov-22	0	492	255	7	224	30	296	118	459	10	1,890	26.3%
Dec-22	0	430	320	240	301	105	425	110	521	29	2,483	33.4%
Jan-23	**0**	**562**	**293**	**537**	**477**	**165**	**423**	**520**	**533**	**306**	**3,815**	**51.3%**
Feb-23	**0**	**214**	**279**	**160**	**428**	**376**	**167**	**470**	**169**	**288**	**2,550**	**37.9%**
Mar-23	**0**	**511**	**513**	**93**	**544**	**517**	**411**	**539**	**0**	**531**	**3,659**	**49.2%**
Apr-23											0	0.0%
May-23											0	0.0%
Jun-23											0	0.0%
Quarter												
Average	0	429	361	263	483	353	334	510	234	375	3,341	46.1%
Total	0	1,287	1,084	790	1,449	1,058	1,001	1,529	702	1,125	10,024	
Minimum	0	214	279	93	428	165	167	470	0	288	2,550	37.9%
Maximum	0	562	513	537	544	517	423	539	533	531	3,815	51.3%
YTD												
Average	0	279	213	220	247	138	250	210	240	204	1,501	20.6%
Total	0	2,509	1,921	1,981	2,220	1,243	2,250	1,889	2,163	1,837	18,012	
Minimum	0	1	0	7	0	1	0	1	0	10	0	0.0%
Maximum	0	562	513	537	544	517	425	539	533	531	3,815	51.3%

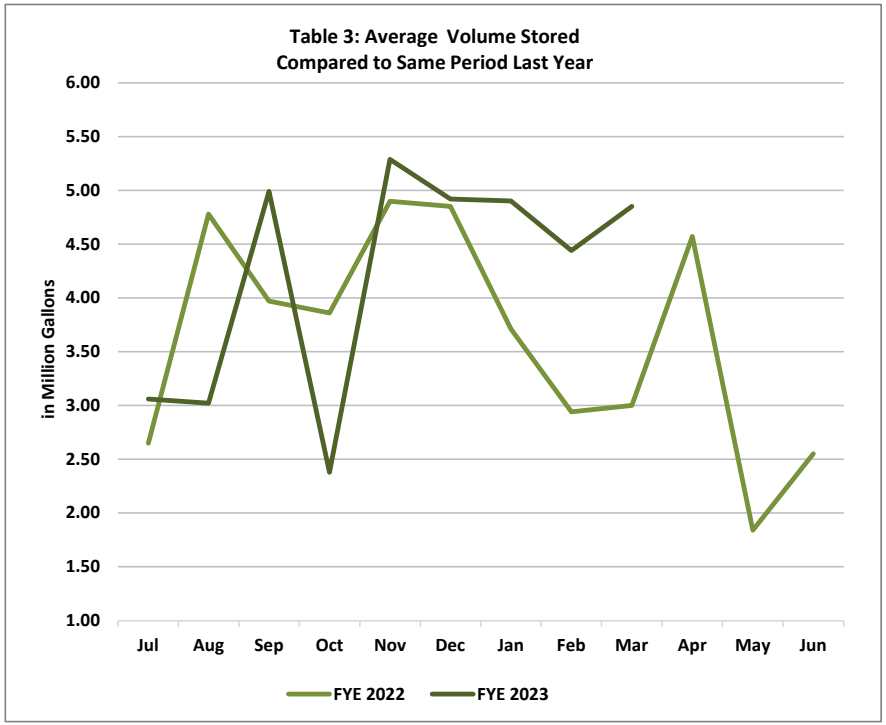


DUBLIN SAN RAMON SERVICES DISTRICT

TABLE 3 - Monthly Average Storage Basin Levels and Volume

LAVWMA SYSTEM: Fiscal Year 2022-2023, Quarterly Report

	Average Daily Volume			Average		Storage
	Basin No. 1	Basin No. 2	Basin No. 3	Volume Stored	Storage Available	Basin Utilization
Month	Feet	Feet	Feet	MG	MG	%
Jul-22	1.58	0.21	4.24	3.06	18	17.0%
Aug-22	2.17	0.22	3.82	3.02	18	16.8%
Sep-22	3.18	1.52	5.08	4.99	18	27.7%
Oct-22	3.20	0.21	1.77	2.38	18	13.2%
Nov-22	1.48	2.31	6.06	5.29	18	29.4%
Dec-22	4.06	0.25	5.27	4.92	18	27.3%
Jan-23	**4.88**	**3.45**	**0.86**	**4.90**	**18**	**27.2%**
Feb-23	**2.11**	**0.05**	**6.03**	**4.44**	**18**	**24.7%**
Mar-23	**3.08**	**0.11**	**6.23**	**4.85**	**18**	**26.9%**
Apr-23					18	0.0%
May-23					18	0.0%
Jun-23					18	0.0%
Quarter						
Average	3.36	1.20	4.37	4.73		0.26
Minimum	2.11	0.05	0.86	4.44		0.25
Maximum	4.88	3.45	6.23	4.90		0.27
YTD						
Average	3.02	1.02	4.39	4.21		17.5%
Minimum	1.48	0.05	0.86	2.38		0.0%
Maximum	4.88	3.45	6.23	5.29		29.4%



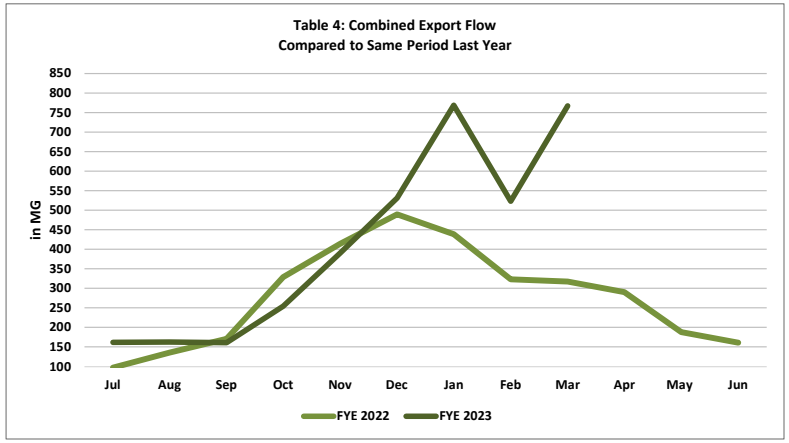
Note: Total available storage volume is 18 million gallons.

TABLE 4 - Monthly Export Flow

LAVWMA SYSTEM: Fiscal Year 2022-2023, Quarterly Report
Estimated Flow: 3,552 MG

Month	Dublin San Ramon Flow * MG	Pleasanton Flow * MG	Livermore Flow MG	Combined Export Flow MG	Total for Quarter	PGE tab
Jul-22	0.00	52.86	109.08	161.93		161.93
Aug-22	0.00	66.98	95.65	162.62		162.62
Sep-22	0.00	68.48	92.90	161.38	485.94	161.38
Oct-22	10.48	140.14	104.04	254.65		254.65
Nov-22	98.09	169.48	122.41	389.98		389.98
Dec-22	187.90	189.56	154.12	531.58	1,176.22	531.58
Jan-23	**268.84**	**273.25**	**227.01**	**769.11**		769.11
Feb-23	**174.59**	**187.42**	**161.41**	**523.42**		523.42
Mar-23	**285.27**	**259.05**	**222.97**	**767.29**	**2,059.81**	767.29
Apr-23	0.00	0.00				0.00
May-23	0.00	0.00				0.00
Jun-23	0.00	0.00			0.00	88.82
Quarter						
Total	728.70	719.73	611.39	**2,059.81**		
Average	242.90	239.91	203.80	686.60		
Minimum	174.59	187.42	161.41	523.42		
Maximum	285.27	273.25	227.01	769.11		
YTD					Budgeted Flow:	
Total	1,025.16	1,407.22	1,289.58	**3,721.97**	3552	
Average	85.43	117.27	143.29	413.55		
Minimum	0.00	0.00	92.90	161.38		
Maximum	285.27	273.25	227.01	769.11		

* Monthly totals do not include flows diverted for recycling use by DERWA and Pleasanton.



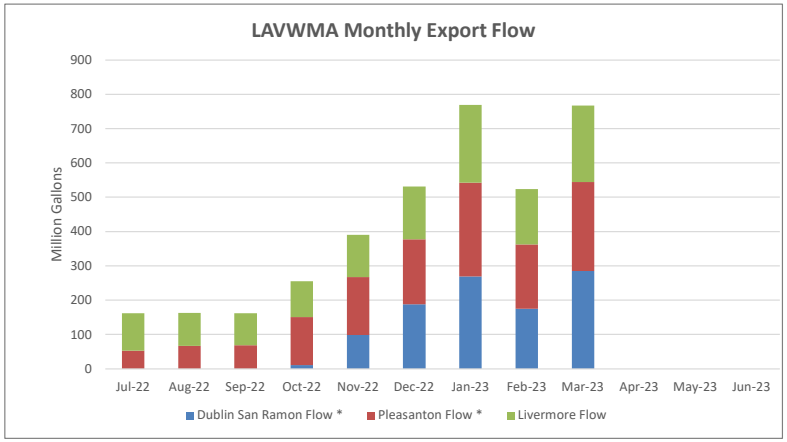


TABLE 5 - Labor Effort, Expenditures, and Budget Utilization

LAVWMA SYSTEM: Fiscal Year 2022-2023, Quarterly Report

FY Labor Budget $1,161,350

Month	Billed Labor Hours	FTE Equiv	Labor Invoice	YTD Labor Expense	Budget Utilization	Labor Budget Remaining	Export Flow MG	Export Flow AF
Jul-22	433.0	2.5	$83,781	$83,781	7.2%	$1,077,569	161.93	497
Aug-22	345.0	2.0	$73,088	$156,869	13.5%	$1,004,481	162.62	499
Sep-22	343.0	2.0	$66,501	$223,370	19.2%	$937,980	161.38	495
Oct-22	567.5	3.3	$105,424	$328,794	28.3%	$832,556	254.65	782
Nov-22	215.0	1.2	$46,528	$375,322	32.3%	$786,028	389.98	1,197
Dec-22	532.5	3.1	$105,889	$481,211	41.4%	$680,139	531.58	1,631
Jan-23	**576.0**	3.3	$118,515	$599,727	51.6%	$561,623	769.11	2,360
Feb-23	**605.5**	3.5	$131,785	$731,512	63.0%	$429,838	523.42	1,606
Mar-23	**398.5**	2.3	$86,949	$818,461	70.5%	$342,889	767.29	**2,355**
Apr-23								
May-23								
Jun-23								
QUARTER								
Total	**1,580.0**		**$337,249**				2,059.81	6,322
Average	526.7	**3.0**	$112,416				686.60	2,107
Minimum	398.5	2.3	$86,949				523.42	1,606
Maximum	605.5	3.5	$131,785				769.11	2,360
YTD								
Total YTD	4,016.0		$818,461		**70.5%**	$342,889	3,721.97	11,423
Average YTD	446.2	2.6	$90,940				413.55	1,269
Minimum	215.0	1.2	$46,528				161.38	495
Maximum	605.5	3.5	$131,785				769.11	2,360

Notes:

TABLE 6 - O&M Expenditures and Budget Utilization

LAVWMA SYSTEM: Fiscal Year 2022-2023, Quarterly Report

Total O&M Budget: $2,861,289

Month	Labor Expenses	A/P Expenses	Total O&M Expenses	YTD O&M Expenses	Budget Utilization	O&M Budget Remaining	Overall O&M Cost $/MG	Overall O&M Cost $/AF	Export Flow MG	Export Flow AF
Jul-22	$83,781	$3,146	$86,927	$86,927	3.0%	$2,774,362	$537	$175	161.93	497
Aug-22	$73,088	$171,670	$244,757	$331,684	11.6%	$2,529,605	$1,505	$490	162.62	499
Sep-22	$66,501	$75,275	$141,776	$473,460	16.5%	$2,387,829	$879	$286	161.38	495
Oct-22	$105,424	$143,851	$249,275	$722,735	25.3%	$2,138,554	$979	$319	254.65	782
Nov-22	$46,528	$147,294	$193,823	$916,558	32.0%	$1,944,731	$497	$162	389.98	1,197
Dec-22	$105,889	$168,886	$274,775	$1,191,333	41.6%	$1,669,956	$517	$168	531.58	1,631
Jan-23	**$118,515**	$307,699	$426,215	$1,617,548	56.5%	$1,243,741	$554	$181	769.11	2,360
Feb-23	**$131,785**	$363,328	$495,113	$2,112,661	73.8%	$748,628	$946	$308	523.42	1,606
Mar-23	**$86,949**	$277,017	$363,965	$2,476,626	86.6%	$384,663	$474	$155	767.29	**2,355**
Apr-23										
May-23										
Jun-23										
QUARTER										
Total	$337,249	$948,044	**$1,285,293**				**$624**	**$203**	2,059.81	6,322
Average	$112,416	$316,015	$428,431						686.60	2,107
Minimum	$86,949	$277,017	$363,965				$474	$155	523.42	1,606
Maximum	$131,785	$363,328	$495,113				$946	$308	769.11	2,360
YTD										
Total YTD	$818,461	$1,658,166	**$2,476,626**		**86.6%**	**$384,663**	**$665**	**$217**	**3,721.97**	**11,423**
Average YTD	$90,940	$184,241	$275,181							
Minimum	$46,528	$3,146	$86,927				$474	$155	161.38	495
Maximum	$131,785	$363,328	$495,113				$1,505	$490	769.11	2,360

Notes:

TABLE 7 - O&M Expenditures and Budget Utilization for Livermore Sole Use Facilities

LAVWMA SYSTEM: Fiscal Year 2022-2023, Quarterly Report

	Livermore Sole Use Facilities		
Month	Labor Expenses	A/P Expenses	Total Expenses
Jul-22	$0	$0	$0
Aug-22	$0	$545	$545
Sep-22	$0	$257	$257
Oct-22	$0	-$461	-$461
Nov-22	$0	$550	$550
Dec-22	$0	$1,245	$1,245
Jan-23	**$0**	**$1,545**	**$1,545**
Feb-23	**$589**	**$140**	**$729**
Mar-23	**$1,331**	**$129**	**$1,460**
Apr-23	$0	$0	$0
May-23	$0	$0	$0
Jun-23	$0	$0	$0
Quarter			
Total	**$1,920**	**$1,814**	**$3,734**
Average	$640	$605	$1,245
Minimum	$0	$129	$729
Maximum	$1,331	$1,545	$1,545
YTD			
YTD Total	$1,920	$3,950	$5,870
YTD Average	$160	$329	$489
YTD Minimum	$0	-$461	-$461
YTD Maximum	$1,331	$1,545	$1,545

LAVWMA
BUDGET COMPARISON TO ACTUAL EXPENSES: GOODS & SERVICES

Current FY Period: 9

ACTUAL EXPENSES BILLED TO LAVWMA FOR REGULAR O&M																
		Budget	July	August	September	October	November	December	January	February	March	April	May	June	YTD	YTD
		FY 2022-2023	2022	2022	2022	2022	2022	2022	2023	2023	2023	2023	2023	2023	TOTAL	Budget
Labor																
Staff		$1,161,350	$83,781	$73,088	$66,501	$105,424	$46,528	$105,889	$118,515	$131,785	$86,949				$818,461	$871,013
	Subtotal	**$1,161,350**	**$83,781**	**$73,088**	**$66,501**	**$105,424**	**$46,528**	**$105,889**	**$118,515**	**$131,785**	**$86,949**	**$0**	**$0**	**$0**	**$818,461**	**$871,013**
Materials & Supplies																
Operations Supplies		$13,650	$74	$12	$12	$12	$12	$14	$14	$14	$14				$179	$10,238
Mechanical Supplies		$27,300	$432	$238	$249		$1,882	$1,199	$3,617	$657	$2,355				$10,629	$20,475
Electrical Supplies		$48,447	$19	$1,188	$3,675	$2,274	$19	$38	$2,420	$1,631	$10,639				$21,903	$36,335
	Subtotal	**$89,397**	**$526**	**$1,438**	**$3,936**	**$2,286**	**$1,913**	**$1,251**	**$6,051**	**$2,302**	**$13,007**	**$0**	**$0**	**$0**	**$32,711**	**$67,048**
Laboratory Analysis																
Compliance Testing		$10,500	$848	$1,060	$848	$848	$1,060	$848	$848	$896	$1,120				$8,376	$7,875
Operational Support Testing		$4,200	$392	$392	$392	$392	$392	$392	$392	$414	$414				$3,572	$3,150
Special Sampling		$23,100	$1,380	$1,490	$1,380	$1,380	$1,490	$1,380	$1,380	$1,344	$1,344				$12,568	$17,325
	Subtotal	**$37,800**	**$2,620**	**$2,942**	**$2,620**	**$2,620**	**$2,942**	**$2,620**	**$2,620**	**$2,654**	**$2,878**	**$0**	**$0**	**$0**	**$24,516**	**$28,350**
Contractual Services																
Sub-surface Repairs		$15,750													$0	$11,813
Street Sweeping		$5,250													$0	$3,938
Cathodic Protection Survey & Repairs		$31,500													$0	$23,625
Underground Service Alert		$4,725				$508									$508	$3,544
SCADA software maintenance contract		$17,850		$5,052							$376				$5,428	$13,388
Remote monitoring annual service for PS and Rec		$5,250													$0	$3,938
Med voltage switchgear 3-yr PM (FY22, $18k))															$0	$0
HVAC Maintenance/Repairs		$788													$0	$591
Termite/Pest Control		$945													$0	$709
Landscape/weed maintenance		$10,500			$980										$980	$7,875
Janitorial Service		$9,975	*paid in July*	$440	$880			$1,320			$880				$3,519	$7,481
Fire Extinguisher Maintenance		$210													$0	$158
Postage/Shipping Charges		$0													$0	$0
Misc Professional/Contractual Services		$31,500		$14,008		$37,049		$1,763	$4,684	$60,762	$6,093				$124,358	$23,625
	Subtotal	**$134,243**	**$0**	**$19,499**	**$1,860**	**$37,556**	**$0**	**$3,083**	**$4,684**	**$60,762**	**$7,349**	**$0**	**$0**	**$0**	**$134,793**	**$100,682**
Utilities																
Electricity (PG&E)		$1,430,205	*paid in Aug*	$147,188	$66,310	$101,389	$142,128	$161,717	$293,775	$297,610	$253,342				$1,463,459	$1,072,654
Water & Sewer (Pleasanton)		$945		$396	$327		$311		$354		$218				$1,605	$709
Water (EBMUD)		$1,050		$207	$222			$215	$215		$222				$1,082	$788
Telephone/communications		$6,300													$0	$4,725
WW Treatment (DSRSD)		$0													$0	$0
	Subtotal	**$1,438,500**	**$0**	**$147,790**	**$66,859**	**$101,389**	**$142,439**	**$161,932**	**$294,344**	**$297,610**	**$253,782**	**$0**	**$0**	**$0**	**$1,466,146**	**$1,078,875**
Non-Routine																
		$0													$0	$0
		$0													$0	$0
	Subtotal	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
	Monthly Total		**$86,927**	**$244,757**	**$141,776**	**$249,275**	**$193,823**	**$274,775**	**$426,215**	**$495,113**	**$363,965**	**$0**	**$0**	**$0**	**$2,476,626**	**$2,145,968**
	YTD Total	**$2,861,290**	**$86,927**	**$331,684**	**$473,460**	**$722,735**	**$916,558**	**$1,191,333**	**$1,617,548**	**$2,112,661**	**$2,476,626**	**$2,476,626**	**$2,476,626**	**$2,476,626**		
	Combined Export Flow, mg	**3552**	**162**	**163**	**161**	**256**	**390**	**532**	**769**	**523**	**767**				**3,723**	**2,664**
	Pumping Efficiency															
	Monthly Cost, $/mg		**$537**	**$1,505**	**$879**	**$975**	**$497**	**$517**	**$554**	**$946**	**$474**	**-**	**-**	**-**		
	YTD Running Cost, $/mg	**$805**	**$537**	**$1,022**	**$974**	**$975**	**$810**	**$716**	**$665**	**$715**	**$665**	**-**	**-**	**-**	**$665**	

Q3 Notes:
Months of storms with unprecedented amount of rain
Includes $44,582.52 Generator & Transormer because of the storms
Electricity costs increased more than $100,000/month, due to electrical demand during storms

LAVWMA
BUDGET COMPARISON TO ACTUAL EXPENSES: LABOR

Current FY Period: 9

ACTUAL EXPENSES BILLED TO LAVWMA FOR REGULAR O&M															
FY 2022-2023		**Jul 2022**	**Aug 2022**	**Sep 2022**	**Oct 2022**	**Nov 2022**	**Dec 2022**	**Jan 2023**	**Feb 2023**	**Mar 2023**	**Apr 2023**	**May 2023**	**Jun 2023**	**YTD TOTAL**	**YTD Budget**
Estimated Personnel Hours															
Division 51 - FOD	**40**	**-**	**-**	**-**	**10.00**	**-**	**10.00**	**-**	**-**	**-**	**-**	**-**	**-**	**20.00**	**30.00**
Water/Wastewater Sys Lead Op	**0**													-	-
Water/Wastewater Sys OP IV-On Call	**0**													-	-
Water/Wastewater Sys OP IV	**30**													-	22.50
Water/Wastewater Sys OP III	**0**													-	-
Water/Wastewater Sys OP I/II	**10**				10.00		10.00							20.00	7.50
Maintenance Worker	**0**													-	-
Supervisor	**0**													-	-
Division 52 - WWTP	**3,080**	**133.00**	**121.50**	**171.00**	**284.00**	**123.00**	**250.50**	**140.00**	**125.50**	**115.00**	**-**	**-**	**-**	**1,463.50**	**2,310.00**
Process Lead Operator IV/V	**150**		24.00	1.00	10.00	7.00	7.00	12.50	2.00	12.00				75.50	112.50
Senior WWTP Operator III	**720**	37.00	73.50	79.50	72.00	72.00	62.00	27.00	31.00	27.50				481.50	540.00
Operator In Training	**400**	59.50	9.00	79.50	148.00	12.00	95.50	100.50	68.00	58.50				630.50	300.00
Operator II	**1,700**	36.50	15.00	11.00	54.00	32.00	86.00							234.50	1,275.00
Operator II (SLSS)	**0**													-	-
Operations Superintendent	**110**								24.50	17.00				41.50	82.50
Division 53 - MECH	**1,230**	**149.50**	**171.00**	**138.50**	**147.50**	**69.00**	**207.00**	**209.50**	**291.50**	**162.50**	**-**	**-**	**-**	**1,546.00**	**922.50**
Senior Mechanic-Crane Cert	**60**	44.00	70.50	69.00	29.50	34.00	77.00	95.00	117.50	88.50				625.00	45.00
Senior Mechanic - USA	**80**		16.50	29.50	12.50	8.00				2.00				68.50	60.00
Maintenance Worker	**60**				5.00									5.00	45.00
Mechanic I/II	**980**	20.50	29.00	28.00	17.00	4.00	62.50	86.50	109.00	40.00				396.50	735.00
Mechanic II-Crane Cert	**0**	68.50	43.00	10.00	43.00	9.00	41.50	8.00	39.00	9.00				271.00	-
Mechanic I/II - USA	**0**		4.00	2.00	10.00	2.00	24.00	20.00	17.00	23.00				102.00	-
Mechanic II-Crane Cert - USA	**0**	16.50	8.00		30.50	12.00	2.00							69.00	-
Supervisor	**50**								9.00					9.00	37.50
Division 54 - ELEC	**1,130**	**136.00**	**44.00**	**31.00**	**119.50**	**16.00**	**42.00**	**223.00**	**174.50**	**84.50**	**-**	**-**	**-**	**870.50**	**847.50**
Senior Instrument/Controls Tech	**30**	18.00		1.00		2.00	9.00	20.00	14.00	10.00				74.00	22.50
Instrumentation & Controls Tech I/II	**300**	55.00	35.00	8.50	63.50	5.00	7.00	68.00	74.50	63.50				380.00	225.00
OPS Control Sys Spec	**300**													-	225.00
Senior Electrician	**30**							36.00	10.00					46.00	22.50
Electrician I/II	**440**	63.00	7.00	19.50	53.00	8.00	26.00	94.00	73.00	8.00				351.50	330.00
Principal Eletrical Engineer	**30**		2.00	2.00	3.00	1.00		5.00	3.00	3.00				19.00	22.50
Division 55 - Laboratory	**0**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**24.00**	**-**	**-**	**-**	**24.00**	**-**
EC Inspector II-Pretreatment	**0**	-								24.00				24.00	-
Laboratory Technician	**0**	-												-	-
Supervisor	**0**	-												-	-
Division 26 - SAFETY	**60**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**45.00**
Safety Officer	**60**	-	-	-	-	-	-	-	-	-	-	-		-	45.00
Division 40 - ENG	**260**	**14.50**	**8.50**	**2.50**	**6.50**	**7.00**	**23.00**	**3.50**	**14.00**	**12.50**	**-**	**-**	**-**	**92.00**	**195.00**
Senior Engineer-Supervisory	**0**														-
Associate/Senior Civil Engineer-SME	**100**	14.50	4.50	2.50	6.50	7.00	23.00	3.50	14.00	10.50				86.00	75.00
Construction Inspector I/II	**80**		4.00											4.00	60.00
Engineering Technician II	**40**									2.00				2.00	30.00
GIS Analyst	**40**													-	30.00
Total Estimated Personnel Hours	**5,800**														
FTE	**2.8**														
Total Monthly Hours		**433.00**	**345.00**	**343.00**	**567.50**	**215.00**	**532.50**	**576.00**	**605.50**	**398.50**	**-**	**-**	**-**	**4,016.00**	**4,350.00**

Notes:
Division 55 hours in March associated with the discharge exercise

LAVWMA	January		2023	

SELECT FIRST

Enter only numerical data in the result columns and only qualifiers in the qualifier columns. Any other comments should go in the corresponding cell on the Comments tab.

Parameter	Flow	CBOD Qual	CBOD	TSS Qual	TSS	pH	pH	Total Residual Chlorine	Total Residual Chlorine	Fecal Qual	Fecal Coliforms	Entero Qual	Enterococci
Units	MGD		mg/L		mg/L	SU	SU	mg/L	mg/L		MPN/100mL		MPN/100mL
Test Method	Daily Average (Mean)		SM 5210 B-2011		SM 2540 D-2011	SM 4500-H+B-2011	SM 4500-H+B-2011	Daily Average (M	Daily Average (Mean)		SM 9221 C,E-2006		Enterolert
MDL					1.4								
RL			3.0		4.5						2		1
Location	LAVWMA-EXP		LAVWMA-EXP		LAVWMA-EXP	LAVWMA-EXP	LAVWMA-EXP	LAVWMA-EXP	SLSS		SLSS		SLSS
1/1/2023	32.29					6.80	7.05	4.24					
1/2/2023	26.49					7.04	7.34	4.88					
1/3/2023	25.72					7.13	7.25	4.01		<	2	<	10
1/4/2023	26.13		6.4		11	7.02	7.31	4.09					
1/5/2023	27.80					7.00	7.30	4.47					
1/6/2023	28.94					6.99	7.11	4.88					
1/7/2023	23.88					7.02	7.12	4.62					
1/8/2023	26.12					7.06	7.17	4.30					
1/9/2023	31.41					6.95	7.11	3.73					
1/10/2023	28.76					6.92	7.07	4.88					
1/11/2023	28.68					7.00	7.15	4.93					
1/12/2023	26.51		3.9		6.0	7.02	7.15	4.30					
1/13/2023	21.83					7.11	7.20	4.42					
1/14/2023	32.11					6.97	7.16	3.06					
1/15/2023	32.11					7.00	7.06	3.05					
1/16/2023	36.38					6.99	7.12	3.73					
1/17/2023	30.38					7.02	8.12	4.88		<	2	<	10
1/18/2023	28.45		3.5		6.4	7.07	7.07	4.93					
1/19/2023	20.49					7.13	7.23	3.35					
1/20/2023	19.41					7.02	7.25	3.79					
1/21/2023	23.80					7.00	7.29	3.74					
1/22/2023	23.11					7.23	7.23	3.79					
1/23/2023	21.50					7.08	7.26	3.03					
1/24/2023	17.12					7.13	7.96	3.31		<	2	<	10
1/25/2023	19.75					7.44	7.88	2.86					
1/26/2023	20.03		4.9		8.7	7.42	7.65	2.37					
1/27/2023	19.09					7.51	7.69	2.16					
1/28/2023	17.16					7.44	7.67	2.48					
1/29/2023	18.71					7.47	7.63	2.40					
1/30/2023	16.42					7.39	7.68	2.44					
1/31/2023	18.55					7.45	7.66	2.18		<	2	<	10

Note:
Column E - pH Minimum; online
Column F - pH Maximum; online

LAVWMA	February		2023	

SELECT FIRST

Enter only numerical data in the result columns and only qualifiers in the qualifier columns. Any other comments should go in the corresponding cell on the Comments tab.

Parameter	Flow	CBOD Qual	CBOD	TSS Qual	TSS	pH	pH	Total Residual Chlorine	Total Residual Chlorine	Fecal Qual	Fecal Coliforms	Entero Qual	Enterococci
Units	MGD		mg/L		mg/L	SU	SU	mg/L	mg/L		MPN/100mL		MPN/100mL
Test Method	Daily Average (Mean)		SM 5210 B-2011		SM 2540 D-2011	SM 4500-H+B-2011	SM 4500-H+B-2011	Daily Average (M	Daily Average (Mean)		SM 9221 C,E-2006		Enterolert
MDL					1.4								
RL			3.0		4.5						2		10
Location	LAVWMA-EXP		LAVWMA-EXP		LAVWMA-EXP	LAVWMA-EXP	LAVWMA-EXP	LAVWMA-EXP	SLSS		SLSS		SLSS
2/1/2023	17.77		6.2		8.1	7.53	7.79	2.61					
2/2/2023	18.17					7.55	7.76	2.65					
2/3/2023	15.57					7.57	7.66	2.61					
2/4/2023	18.46					7.46	7.66	2.77					
2/5/2023	22.00					7.53	7.70	2.67					
2/6/2023	21.69					7.48	7.67	2.78					
2/7/2023	20.15					7.46	7.72	3.17					
2/8/2023	17.74		4.7		8.0	7.60	7.78	3.77		<	2	<	10
2/9/2023	17.93					7.46	7.95	3.18					
2/10/2023	20.21					7.53	7.69	3.13					
2/11/2023	19.32					7.53	7.73	3.18					
2/12/2023	19.39					7.46	7.71	3.02					
2/13/2023	17.44					7.51	7.98	2.88					
2/14/2023	15.53					7.46	7.79	2.37		<	2		
2/15/2023	15.35		10		15.0	7.43	7.71	2.37					
2/16/2023	17.40					7.41	7.64	2.91					
2/17/2023	15.50					7.46	7.65	3.59					
2/18/2023	15.29					7.41	7.66	3.64					
2/19/2023	15.60					7.41	7.66	2.86					
2/20/2023	18.33					7.33	7.56	2.90					
2/21/2023	18.04					7.41	7.75	2.67		<	2	<	10
2/22/2023	16.11		7.1		13.0	7.51	7.75	2.39					
2/23/2023	16.90					7.55	7.84	2.44					
2/24/2023	23.39					7.47	7.80	3.13					
2/25/2023	20.48					7.50	7.69	3.59					
2/26/2023	21.55					7.46	7.72	3.58					
2/27/2023	22.18					7.51	7.60	3.27					
2/28/2023	25.94					7.38	7.53	3.64		<	2	<	10

Note:
Column E - pH Minimum; online
Column F - pH Maximum; online

LAVWMA	March		2023	

SELECT FIRST

Enter only numerical data in the result columns and only qualifiers in the qualifier columns. Any other comments should go in the corresponding cell on the Comments tab.

Parameter	Flow	CBOD Qual	CBOD	TSS Qual	TSS	pH	pH	Total Residual Chlorine	Total Residual Chlorine	Fecal Qual	Fecal Coliforms	Entero Qual	Enterococci
Units	MGD		mg/L		mg/L	SU	SU	mg/L	mg/L		MPN/100mL		MPN/100mL
Test Method	Daily Average (Mean)		SM 5210 B-2011		SM 2540 D-2011	SM 4500-H+B-2011	SM 4500-H+B-2011	Daily Average (M	Daily Average (Mean)		SM 9221 C,E-2006		Enterolert
MDL					1.4								
RL			3.0		4.5						2		10
Location	LAVWMA-EXP		LAVWMA-EXP		LAVWMA-EXP	LAVWMA-EXP	LAVWMA-EXP	LAVWMA-EXP	SLSS		SLSS		SLSS
3/1/2023	26.09		11		11	7.43	7.59	4.00					
3/2/2023	24.14					7.38	7.55	4.13					
3/3/2023	20.65					7.35	7.50	3.73					
3/4/2023	20.13					7.38	7.52	3.38					
3/5/2023	25.45					7.35	7.55	4.06					
3/6/2023	20.69					7.36	7.52	4.13					
3/7/2023	20.10					7.41	7.52	3.95		<	2		
3/8/2023	21.97		3.4		11	7.14	7.28	4.24					
3/9/2023	25.38					7.28	7.53	4.14					
3/10/2023	34.55					7.12	7.36	4.00					
3/11/2023	28.78					7.18	7.29	3.50					
3/12/2023	28.38					7.19	7.28	3.29					
3/13/2023	30.88					7.18	7.28	3.26					
3/14/2023	28.21					7.22	7.45	3.33		<	2	<	10
3/15/2023	28.10		5.8		8.4	7.25	7.37	3.20					
3/16/2023	24.01					7.27	7.38	3.44					
3/17/2023	24.24					7.28	7.39	2.80					
3/18/2023	23.03					7.25	7.39	2.79					
3/19/2023	24.10					7.30	7.42	2.97					
3/20/2023	22.70					7.28	7.36	3.19					
3/21/2023	26.58					7.33	7.56	3.14			2	<	10
3/22/2023	29.47		5.1		8.0	7.23	7.42	3.03					
3/23/2023	27.11					7.26	7.35	4.07					
3/24/2023	25.55					7.29	7.37	4.04					
3/25/2023	24.14					7.25	7.44	3.66					
3/26/2023	24.30					7.28	7.44	3.39					
3/27/2023	17.45					7.23	7.48	2.84					
3/28/2023	23.38					7.30	7.42	2.97		<	2	<	10
3/29/2023	22.00		6.1		6.0	7.25	7.44	3.21					
3/30/2023	23.98					7.20	7.33	3.12					
3/31/2023	21.77					7.20	7.30	3.33					

Note:
Column G - pH Minimum; online
Column H - pH Maximum; online

DUBLIN SAN RAMON SERVICES DISTRICT
WASTEWATER TREATMENT FACILITY

LAVWMA - 1st Quarter 2022

Langelier pH Saturation Index

Collection DATE	TDS (mg/L)	Temp (ºC)	Ca Hardness (mg/L $CaCO_3$)	Alkalinity (mg/L $CaCO_3$)	pH (Actual)	pH Saturation	Langlier Index
01/13/23	748	17.4	146	330	7.3	7.3	0.0
02/06/23	754	18.3	126	336	7.6	7.3	0.3
03/07/23	795	17.5	138	346	7.6	7.3	0.3
MAXIMUM	795	18.3	146	346	7.6	7.3	0.3
MINIMUM	748	17.4	126	330	7.3	7.3	0.0
AVERAGE	766	17.7	137	337	7.5	7.3	0.2

DUBLIN SAN RAMON SERVICES DISTRICT
WASTEWATER TREATMENT FACILITY

DSRSD - 1st Quarter 2022

Langelier pH Saturation Index

Collection DATE	TDS (mg/L)	Temp (ºC)	Ca Hardness (mg/L $CaCO_3$)	Alkalinity (mg/L $CaCO_3$)	pH (Actual)	pH Saturation	Langlier Index
01/13/23	765	17.4	168	342	7.5	7.2	0.3
02/06/23	781	18.5	147	348	7.6	7.2	0.4
03/07/23	784	18.3	146	336	7.6	7.2	0.4
MAXIMUM	784	18.5	168	348	7.6	7.2	0.4
MINIMUM	765	17.4	146	336	7.5	7.2	0.3
AVERAGE	777	18.1	154	342	7.6	7.2	0.4

CITY OF LIVERMORE
LIVERMORE WATER RECLAMATION PLANT

Langelier pH Saturation Index

Collection DATE	TDS (mg/L)	Temp (ºC)	Ca Hardness (mg/L $CaCO_3$)	Alkalinity (mg/L $CaCO_3$)	pH (Actual)	pH Saturation	Langlier Index
01/04/23	625	18.0	96	366	7.6	7.5	0.1
02/02/23	680	18.0	95	325	7.5	7.5	-0.1
03/01/23	660	17.0	103	353	7.5	7.5	0.0
MAXIMUM	680	18.0	103	366	7.6	7.5	0.1
MINIMUM	625	17.0	95	325	7.5	7.5	-0.1
AVERAGE	655	17.7	98	348	7.5	7.5	0.0

LAVWMA Action Item List **Month:** **May-23**

SAG Task	Responsible Party	Due Date	Status	Completion Date
Items for May 2023 LAVWMA Board Meeting.	SAG	NA	First inperson meeting in three years. Normal financial and project status reports, election of officers, 3rd Quarter O&M Report, Declaration of an Emergency for the Livermore Pipe Repair Project, FYE24 O&M and Capital Project Budget, update on legal and legislative issues, and the GM report.	
Operations Coordination Committee Task	**Responsible Party**	**Due Date**	**Status**	**Completion Date**
FYE23 Replacement Projects: See Items Below	Weir/Delight	Various dates	Refer to information below.	
MCC and Soft Starter Replacement Project. Carryover from FYE20 and into FYE21. Estimated design cost $250,000. Project now includes Electrical Improvements to the Main Switchgear at the Pump Station. Total estimated cost $2,300,000 - $2,500,000.	Weir/Atendido	12/31/2021	Project is complete. The Notice of Completion with Alameda County has been filed and final payment has been made. One warranty item was successfully resolved in January 2023, related to the settings to allow the standby generator to operate properly. Will delete this in the next report.	11/30/2022
San Leandro Sample Station Design Improvements. Estimated cost $1,000,000 plus engineering costs of $230,000 for a total of $1,230,000	Weir	12/31/2023	Final plans and specs are nearing completion. Hope to issue bid packet in May 2023. Have increased cost in FYE24 budget due to inflation, long lead time, and supply chain issues.	
Cathodic Protection Projects	Weir/Atendido	12/31/2020	Corrpro has disappeared. Will do a full survey in the next year, which mayh lead to some additional repair/upgrade work.	6/30/2023
PLC Upgrade at the Pump Station. Estimated cost $300,000	Ching	6/30/2021	Will be included in DSRSD SCADA project, which is design build. Project has begun. Scoping meetings with staff have been held and the project is progressing.	
Pipeline Inspection. Estimated cost $100,000	Halliday	12/31/2023	Will be carried over to FYE24. Have one quote and obtaining one more.	
Replace three flow meters at the junction structure. Estimated cost is $250,000.	Portugal	6/30/2023	Two meters installed; last one will be this month. Have carried over to FYE24 to allow for possible piping modifications.	
Replace 17 valve actuators at the pump station. Estimated cost is $255,555.	Quinlan	12/31/2023	There are seventeen valves that have electric actuators at the pump station. All of the valves actuators were installed when the pump station was upgraded twenty years ago and they are at the end of their useful lives. The actuators will be replaced with the newest technology and will match the style that are commonly used at DSRSD. The actuators cost approximately $9,000 each and will be installed by DSRSD staff. The total cost includes staff time for the installation.	
PG&E Reliability and Solar/Battery storage. This is a new project and no cost has yet been identified.	Weir	TBD	Solar is not an option at this time. DSRSD is the property owner and ic sompleting its own Electrical Master Plan. Unknown at this time if a project will be completed. Woodard & Curran study completed. Will include a CIP for installing tap box, transformer, and enything else to make connection to a portabel generator as quick as possible. Rental of a generator may be needed during extreme wet weather seasons.	TBD
Other Items				
Wet Weather Issues	Sevilla	10/31/2020	Many storms in January through March tested all facilities, with no serious issues.	
Live test of SLSS system	Sevilla/Atendido	3/31/2023	Was successfully tested in March 2023.	
Live test of Alamo Canal discharge during wet weather	Carson/Sevilla	TBD	Was successfully tested in March 2023.	
Wet Well Isolation Gates	Quinlan	6/30/2023	Gate is in good shape but won't fully close. No date set, perhaps this winter. May be coordinated with replacement of the valve actuators.	
EBDA Enterococcus Issue	Sevilla		No issues at this time.	
YTD O&M Expenses compared to budget	Carson, Weir	Ongoing	No issues at this time. PG&E costs in January through April 2023 were high due to the numerous storms.	

End of Report

Agenda Explanation
Livermore-Amador Valley
Water Management Agency
Board of Directors
May 17, 2023

ITEM NO. 10 PROJECT STATUS REPORTS - PURCHASE OF THREE VERTICAL TURBINE PUMPS, AND THE SAN LEANDRO SAMPLE STATION IMPROVEMENTS PROJECT

Action Requested
None at this time.

Summary
The Board previously authorized the Purchase of Three Vertical Turbine Pumps and the San Leandro Sample Station Improvements Project (SLSS Project). Each project is discussed in more detail below.

Purchase of Three Vertical Turbine Pumps
After bidding issues were resolved, Trillium was selected to provide the three new vertical turbine pumps at a total cost of $357,057. There were some delays in getting the submittals, but manufacturing of the pumps is underway. The three pumps were originally scheduled to be delivered by December 16, 2022. The pumps are now scheduled to be shipped on July 31, 2023.

The delay is frustrating, but other agencies are having the same problems with delivery of materials and getting projects completed as originally planned due to global supply chain and labor issues related to the pandemic. The last item to be scheduled is identifying dates for witness attendance at the pump testing. DSRSD staff and the pump engineering consultant, Tom Hendrey, will attend. The General Manager may also attend. The pump testing will take place at Trillium's facility in Fresno, California.

San Leandro Sample Station Improvements Project
HydroScience Engineers (HS) is the design engineer for this project. Their contract is for $185,000. The original estimate for the construction cost was $485,000, which dates back to January 2021. HS held a kick off meeting with DSRSD staff that included a site visit. In addition, HS attended the test of the system pursuant to the NPDES permit on November 3, 2021. The estimated construction cost has increased to $730,000 as was reported at previous meetings. Engineering scope has been added to the project since it was first developed and prices have increased for many major items. The proposed FYE24 Budget includes $1,000,000 for this capital project to account for inflation and contingency factors.

The front end specifications, with the exception of the final schedule, have been completed. The technical specifications and drawings are still being revised by HydroScience based on additional information. The pedestrian traffic to the Bay Trail around the construction site has been resolved with the Home Owners Association.

It is now expected that the full bid packet will be issued in May 2023. A special meeting may need to be called for Board approval Award of Bid prior to the next regular meeting on August 16, 2023.

Recommendation
There are no recommendations at this time.

Attachments
None

Agenda Explanation
Livermore-Amador Valley
Water Management Agency
Board of Directors
May 17, 2023

ITEM NO. 11 PROJECT STATUS REPORTS – REVIEW OF OPTIONS TO ADDRESS PG&E ELECTRICAL RELIABILITY AND PHOTO VOLTAIC / BATTERY STORAGE OPTIONS

Action Requested
None at this time.

Summary
PG&E Electrical Reliability
At the November 16, 2022 meeting, the Board reviewed the report from DTN Engineers, Export Pump Station Electrical Service Reliability Report. The report was in direct response to recent outages from PG&E that have been up to 16 hours in length. During dry weather, PG&E outages are not an operational issue as there is substantial storage so there is no need to use electricity to run the pumps that transmit the treated wastewater to the East Bay Dischargers Authority (EBDA) system. During wet weather, the inability to pump when storage capacity is reached could pose an operational problem. DTN worked with PG&E to get more information on the cause of the outages and to explore options for revising the system such that if one Feeder goes down the system automatically switches to the other Feeder. DTN's investigation has determined that the second feeder is now inadequate to provide the necessary power to all the pumps at the station.

To address the questions related to addressing the unreliability of PG&E power and to ensure pumping to avoid illegal discharges LAVWMA engaged the services of Woodard & Curran (W&C) who assisted during the flow modelling project during the EBDA negotiations. W&C evaluated each of the following alternatives for its ability to reduce the risk posed by blackouts:

- Status Quo prior to summer 2022
- Re-operate Storage to Increase Available Space, reflective of operations undertaken since the DTN findings of late 2022
- Upgrade Secondary PG&E Service
- Purchase Standby Generator
- Lease or Rent Standby Generator
- Combinations of the above

The final report from Woodard & Curran is attached for the Board's information. The recommendations in the report include the following:

1. Send a letter to PG&E asking them to restore Circuit 2118 to its original capacity. The cost and timing of this option is not known, but it is likely very expensive and may take many years to implement. The letter could also request that PG&E modify the circuits

such that they do not both come from the same substation, currently located in San Ramon. It is also possible that PG&E will not respond or will say it is not feasible.

2. Recognizing that the PG&E inquiry may take years to conclude and may ultimately not bear fruit, renting or leasing a generator could provide substantial risk reduction and provides flexibility. That option can be combined with re-operation of storage.

During the storms of late December and early January, the General Manager and the DSRSD Operations Director made a decision to test the concept of renting a generator. A 2MW generator was rented from United Rentals for a one month period in January and February. This also required rental of ancillary equipment, including a transformer to interface with the pump station Motor Control Center. The cost for this was $48,000, which is roughly equivalent to the increased costs of keeping the basins low in an effort to be prepared for major storms and avoid discharges to Alamo Canal. DSRSD was able to successfully connect the generator and test it successfully. The generator was able to provide power to support four of the 500 HP pumps, and a flow of over 19 MGD. Coincidentally, this closely matches the uninterruptible capacity in EBDA of 19.72 MGD. The conclusion is that rental of a 2MW generator during periods of predicted extreme storm events is a viable option and would likely prevent unpermitted discharges to Alamo Canal.

Following discussions with member agency staff it is recommended that LAVWMA install the necessary equipment to connect a rental generator more easily at the pump station. This would include a tap box, transformer, and related items. This project is also described in Item no 12, Resolution Declaring an Emergency and Authorizing Emergency Work and Item No. 13, Proposed Operating and Capital Budget for Fiscal Year 2023/24.

<u>Photo Voltaic / Battery Storage Options</u>

DTN Engineers was also working on this task. They have been working with Total Energies to develop a preliminary design for a photo voltaic system (solar panels) at the pump station. Total Energies developed a preliminary design of a system that will provide 1.74MW producing 2.8M kWh/year. In Fiscal Year ending June 30, 2022 the pump station consumed 7,333,592 kWh. The preliminary system would offset 38% of last year's kWh, which is equal to $540,000. Total Energies opted not to provide a formal proposal.

DTN was going to assist in the preparation of an RFP for a Public Private Partnership with a private firm. However, DSRSD is the property owner and has asked that the RFP not be pursued at this time. DSRSD is in the process of completing an Energy Master Plan Study that may or may not recommend a solar panel project at the LAVWMA pump station. If one is built DSRSD would receive all the benefits absent an agreement with LAVWM. As a consequence, this project is on hold until further notice. DSRSD staff will be available to respond to questions from the Board.

Recommendation
There are no recommendations at this time.

Attachment
Woodard & Curran Electrical Reliability Assessment

ELECTRICAL RELIABILITY ASSESSMENT

Woodard & Curran

2175 California Blvd Suite 315
Walnut Creek CA 94596

woodardcurran.com

Project 0011801.00
LAVWMA
April 2023

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0. EXECUTIVE SUMMARY

Woodard & Curran (W&C) evaluated several alternatives to manage the risk to LAVWMA's operations posed by electrical power outages ("blackouts") caused by failures in the service provider's (Pacific Gas and Electric, or PG&E's) system. This work was commissioned by LAVWMA under Purchase Order 23200489, in response to LAVWMA's discovery during recent power outages that a backup power circuit to the LAVWMA facility, previously thought to be adequate, was in fact not so.

Prior Work

DTN Engineers in late 2022 performed a technical study (DTN) for LAVWMA of electrical power systems feeding the LAVWMA export pump station. That study reviewed the recent history of power blackouts and information provided by PG&E, both of which point to an elevated risk of future blackouts compared to LAVWMA's long-term experience. Moreover, the study found that LAVWMA's secondary PG&E feed, while originally installed at LAVWMA's behest to provide a backup to the primary, now lacks sufficient capacity to back up the primary. The cause for that situation appears to be gradual addition of other customer loads on the trunk lines serving the secondary service, to the point that the secondary's capacity cannot be guaranteed.

The DTN report evaluated the possibility of improving or replacing the secondary PG&E service such that it could fulfill its original intent, i.e., backing up the primary service. However, the feasibility, cost, and schedule of that option rely upon PG&E, and PG&E so far has been unable to confirm those items. Accordingly, the DTN report also evaluated the possibility of deploying a standby generator.

The current work draws on information developed by DTN, as well as prior work done by W&C (Woodard & Curran) that studied the use of storage at LAVWMA.

Alternatives Evaluated

W&C evaluated each of the following alternatives for its ability to reduce the risk posed by blackouts:

- Status Quo prior to fall 2022
- Re-operate Storage to Increase Available Space, reflective of operations undertaken since the DTN findings of late 2022
- Upgrade Secondary PG&E Service
- Purchase Standby Generator
- Lease or Rent Standby Generator
- Combinations of the above

Technical Approach

For each alternative, W&C calculated the "Time To Impact", or **TTI**. TTI is the duration between the onset of a blackout and the depletion of LAVWMA storage, which would correspond to an overflow to Alamo Canal. TTI depends on the following factors:

- Available storage **S** at the moment of the blackout
- Incoming flows $\mathbf{Q_{in}}$ during the blackout. These flows vary by month, so **TTI** also varies by month.
- Lag time **L** for standby pumping to begin (for alternatives that are not purely storage-based); that lag time corresponds to the required time to diagnose the problem, dispatch personnel as needed, and operate equipment such as a generator or transfer switch depending on the alternative
- Export flows $\mathbf{Q_{out}}$ achieved once standby pumping begins
- Reliability **R** of the standby power, i.e., the estimated likelihood that the export pumps receive energy after lag time **L** has elapsed. For options involving redundant PG&E circuits, this factor accounts for the possibility that both circuits fail due to a common cause (not a far-fetched situation because they are fed from a common substation). For options involving standby generators, this factor accounts for the relatively small chance that the generator fails to start.

For each of the calculated TTI's, W&C estimated the fraction of blackouts that would exceed the specific TTI. To do this, W&C performed a statistical analysis on LAVWMA's recent blackouts, as informed by the literature suggesting that blackout duration could be modeled using a Gamma distribution.

Recent blackout frequency provided an estimate of the average number of blackouts that might occur per year in future years. That information, along with the foregoing calculations, allowed the estimation for each alternative of the average number of blackouts per year with durations in excess of TTI.

Capital and OMR (Operations, Maintenance and Replacement) costs were also estimated for each alternative. Capital costs were then annualized.

Limitations of the Analysis

There are significant uncertainties regarding many aspects of the analysis, including the value of the various parameters discussed in the technical approach outlined above: the likelihood and duration of a blackout, operating conditions at the moment of a blackout, and efficacy of measures intended to mitigate the blackout. While the analysis is helpful to identify risk reduction measures LAVWMA may undertake, it should be taken as highly approximate. There is no way to reduce risk to zero, nor any way to guarantee that any specific measure will perform best in an uncertain future.

Findings

The following metrics were computed for the alternatives, each of which was assigned a short code for easy identification.

Table 1: Performance and Cost of Alternatives

ID code	Alternative	Annual # blackouts > TTI*	Annual cost $K	Notes
BL	Baseline conditions	0.29	Not quantified	Baseline conditions pose a heightened risk of overflows, which could result in significant fines.
PGE-1	Upgrade PG&E secondary line	0.09	129	May not be feasible in the short term.
S-1	Re-operate storage	0.18	480	Recent operations reflect this option; cost is due to high energy demand charges.
GEN-1	Purchase Stationary standby generator	0.03	240	Cost from DTN.
GEN-2	Lease Stationary generator year-round	0.03	456	Cost based on actual prices for current rental of 2 MW generator, and estimated cost to pre-install a transformer and tap box.
GEN-3	Rent Stationary generator winter only	0.12	154	Cost based on actual prices for current rental of 2 MW generator and estimated cost to pre-install a transformer and tap box.
GEN-4	Contract for mobile standby generator	0.18	456	Costs assumed to be the same as GEN-2 to achieve guaranteed availability.
COMBO-1	S-1 and GEN-2	0.01	936	
COMBO-2	S-1 and GEN-3	0.06	634	

* The modeled performance of an alternative depends on the envisioned distribution of PG&E blackouts over the year. This summary table is based on a specific model scenario named "Seasonal Blend" to reflect a future scenario that postulates power outage risk is

spread over most of the year, based on a combination of winter storms and fire season outages. Other scenarios were also examined and are discussed in the body of this report.

Conclusions

The top-performing alternatives are COMBO-1, COMBO-2 and PGE-1. PGE-1, which consists of enhancing the secondary PG&E circuit, has a significant caveat: its timeline, cost and even its feasibility are not known with certainty. This alternative relies on PG&E for implementation, and PG&E has not yet provided any firm commitments.

COMBO-1 and COMBO-2 both involve re-operating storage similar to the current operations undertaken in the aftermath of the 2022 DTN report, and both involve leasing or renting a generator. They differ in the months of generator rental: COMBO-1 involves year-round rental while COMBO-2 involves rental only during winter months, traditionally the time of greatest exposure to blackouts and coincident high Q_{in}. While the likelihood of wildfire-based power outage is greatest in the late summer and fall, the risk to LAVWMA is mitigated substantially by reoperation of storage due to Q_{in} being low during those months. However, since the consequence of a summertime spill to Alamo Canal is likely higher than that of a similar spill during a winter storm, the rental periods for the generator should be selected with that in mind.

Recommendations

W&C recommends that LAVWMA continue discussions with PG&E regarding PGE-1, i.e., provision of a more robust secondary circuit. Given that PGE-1 may not be feasible, and if feasible will likely take years to complete, W&C also recommends that LAVWMA pursue an interim option. One of the COMBO options, or similar actions which utilize a combination of storage reoperation and a rental generator, would greatly reduce risk posed by blackouts.

Additionally, should an opportunity become available in the future to increase emergency storage, that would reduce risk across the board regardless of other options implemented.

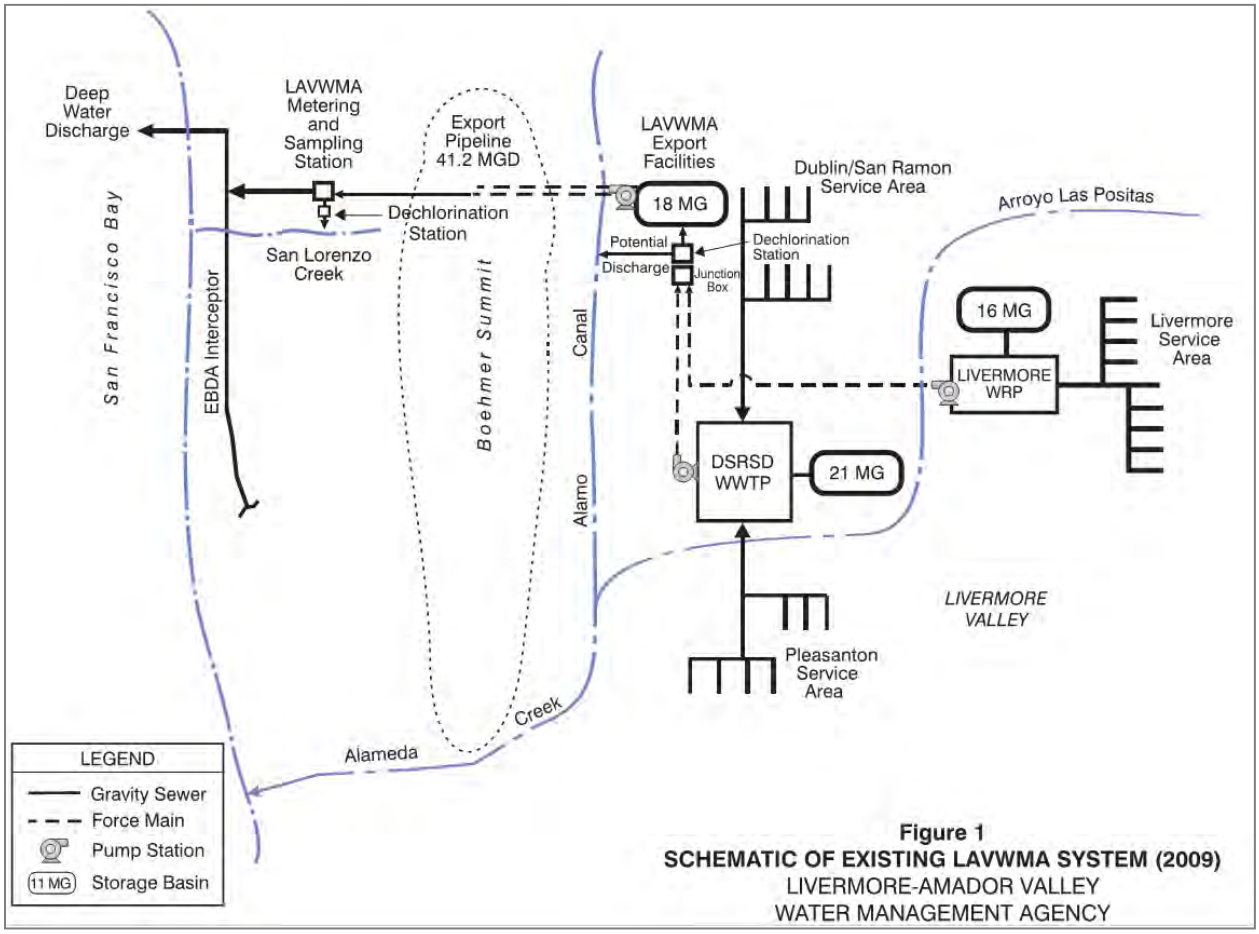
1. BACKGROUND AND PURPOSE

1.1 Background

1.1.1 LAVWMA Facilities and Operations

LAVWMA receives flows from three agencies as shown in Figure 1. The LAVWMA collects those flows and discharges them via the export pump station and pipeline to EBDA (East Bay Dischargers Association), at a maximum hydraulically limited rate of 41.2 MGD. LAVWMA's 18 MG storage basin helps buffer incoming flows should they exceed the capacity of the export pump station or should EBDA request that LAVWMA moderate its outflows to modulate downstream flows. Should the 18 MG basin fill up at a time when inflows exceed outflows, overflow will occur to Alamo Canal. Absent a power outage, that situation would typically only occur during major winter storms with a recurrence interval estimated to be roughly 10 years (Woodard & Curran).

Figure 1: LAVWMA System Schematic



1.1.2 Existing Power System Reliability

Currently, the LAVWMA export pump station has two PG&E services, a primary and a secondary, both dating to the construction of the export pump station in 2000. Both PG&E services are 2,300V 3-phase, fed by 21kV circuits originating from PG&E's San Ramon substation. The purpose of the secondary service was to provide redundancy to the primary service in the event the primary service suffered an outage, and the circuits from the two services were wired up such that only one service may feed the pump station at one time. A manual switch is operable by PG&E to switch the LAVWMA load between the two services.

The blackouts of the past two years have revealed that the secondary service now lacks capacity to back up the primary, even though as recently as 2015 its adequacy had been verified by DTN. During the recent blackouts, PG&E was asked by LAVWMA to switch the LAVWMA load to the secondary circuit to restore power to the export pump station, and PG&E declined to do so, citing insufficient capacity.

The blackouts over the past two years, as recorded by LAVWMA staff (DTN), are shown in Table 2. In number and duration, the blackouts have exceeded historic norms by what LAVWMA staff believe is a large margin. The zero duration events at the start and end of the list provide a two-year sampling period, to avoid overstating blackouts per year.

Table 2: Recent PG&E Blackouts at LAVWMA

Date	Duration (minutes)
4/1/2021	0
5/14/2021	66
7/13/2021	1
5/25/2022	38
6/10/2022	937
6/16/2022	71
6/21/2022	455
7/2/2022	8
7/2/2022	3
4/1/2023	0

1.1.3 Prognosis for Future Blackouts

As shown in Table 2, the most significant outages to strike LAVWMA recently have been summertime outages. While PG&E's attribution of root causes of those outages is not entirely clear, PG&E has indicated publicly that they intend to initiate future outages in selected areas across the state (including LAVWMA), whether manually or with automated systems, in order to reduce wildfire risk. A manually triggered blackout is termed a PSPS (Public Safety Power Shutoff) while an automatically triggered blackout is attributed to an Enhanced Powerline Safety Setting (EPSS). While these shutoffs are aimed at reducing wildfire risk, PG&E has indicated that they are not limited to wildfire season. PG&E has also not committed to a maximum blackout duration. For PSPS, they advise customers to be prepared for blackouts of two to seven days, i.e., up to a week.

In addition to the threats posed to LAVWMA by PSPS and EPSS, the baseline risk of unplanned blackouts always exists. As a case in point, the worst of the recent blackouts, according to PG&E's own records, was not specifically attributed to either PSPS or EPSS, but rather attributed to "unknown causes" or to "equipment failure" (DTN). Vague attribution such as this further limits the already poor accuracy of any future forecasts of outages, whether of the total number of blackouts, their distribution over the months of the year, or their likely duration. Clearly, since there is more at play than PSPS and EPSS, blackout risk assessment needs to consider blackouts due to winter storm damage as well as to summer demand peaks, wildfire shutoff, or other causes.

1.2 Project Purpose and Scope

This report's purpose is to inform LAVWMA actions in light of its newfound exposure to blackouts.

The contracted scope of work for this report is to analyze specific alternatives including:

- Re-operate Storage to Increase Available Space
- Upgrade Secondary PG&E Service
- Purchase Standby Generator
- Lease Standby Generator

This report analyzes the listed alternatives as well as baseline conditions and selected combination alternatives.

2. DESCRIPTION OF ALTERNATIVES

The analyzed alternatives are described in Table 3 below.

Table 3: Description of Alternatives

ID code	Alternative	Description and key values
BL	Baseline conditions	Long-term baseline operations. Per LAVWMA staff, those operations result in free storage **S** of at least 12 MG under most conditions, or about 2/3 of the 18 MG total storage.
PGE-1	Upgrade PG&E secondary line	Under this option, PG&E would be asked to improve their system to bring the secondary feed up to its originally intended capabilities. For purposes of the current work, this alternative would be one or the other of Option 1 or Option 2 examined by DTN in their recent report (DTN); while those options differed in their level of automation, they shared the key feature of an enhanced secondary service. Given that very limited information exists about the root causes of prior blackouts, and even less about the causes or spatial extent of future blackouts, the reliability of this option cannot be calculated. It is noteworthy that both services are fed from the same substation (San Ramon). For evaluation purposes, it's assumed that for this option **R** is 70%, i.e., when the primary service suffers a blackout, 70% of the time the secondary service would be online to provide a backup. PG&E would potentially be able to provide a true estimate of this option's reliability, i.e., the *conditional probability* that the second service is available given that the primary service is not. A major caveat with this alternative is that PG&E has not committed to its feasibility, cost or schedule.
S-1	Re-operate storage	This option reflects modified operations targeted at maximizing free storage under all conditions. Per LAVWMA staff, those operations result in free storage **S** of 16 MG. The increased free storage comes at a cost of higher demand charges for energy, estimated by LAVWMA to

ID code	Alternative	Description and key values
		be approximately $40K/month based on experience so far.
GEN-1	Purchase Stationary standby generator	This alternative includes the purchase and installation of a 2 MW generator. That size represents a practical transportable size and would allow up to 19 MGD of export flow $\mathbf{Q_{out}}$ (that flow was achieved in testing in 2023, using a 2MW genset). If a 1.5 MW generator were used instead, $\mathbf{Q_{out}}$ would need to be re-evaluated.
GEN-2	Lease Stationary generator year-round	This alternative is similar to GEN-1 but with a lease instead of purchase. To allow a generator to be deployed quickly, a transformer and tap box would be procured and installed.
GEN-3	Rent Stationary generator winter only	This alternative is similar to GEN-2 but involves renting the generator only during winter months. The rationale for this alternative is that summertime inflows are relatively low, so available storage could allow LAWMA to ride out a longer blackout than in the winter.
GEN-4	Contract for mobile standby generator	This alternative involves a contract with a provider to mobilize a generator upon request, i.e., after a blackout has started or when circumstances indicate a time of very high risk. A transformer and tap box would be installed similar to the other generator options.
COMBO-1	S-1 and GEN-2	This alternative combines the indicated alternatives.
COMBO-2	S-1 and GEN-3	This alternative combines the indicated alternatives.

3. EVALUATION OF ALTERNATIVES

3.1 Overview of Approach

W&C analyzed the alternatives described in Section 2 using the following approach:

- Quantify key aspects of each alternative including available storage **S**, available export flow $\mathbf{Q_{out}}$, lag time **L** for $\mathbf{Q_{out}}$ to be available after a blackout, reliability **R** of the backup power during a blackout, and life cycle costs; this is presented in Section 3.2.
- Define operational scenarios including inflows by month and assumptions about exposure to blackouts; this is presented in Section 3.3.
- For each alternative, estimate the likely Time to Impact (**TTI**) during a blackout; this is described in Section 3.4.
- Use the calculated TTI's for each alternative to estimate potential number of blackouts exceeding TTI; this is presented in Section 3.5.
- Evaluate the alternatives considering their cost, performance and other factors.

Each element is discussed below.

3.2 Key Metrics Describing Each Alternative

Key metrics for the alternatives are shown below.

Table 4: Key Metrics of the Alternatives

ID code	Alternative	Storage **S** (MG)	$\mathbf{Q_{out}}$ MGD	**L** (lag time, minutes)	Reliability **R**	Annualized Cost $K/yr
BL	Baseline conditions	12	0			0
PGE-1	Upgrade PG&E secondary line	12	42	30	70%	129
S-1	Re-operate storage	16	0			480
GEN-1	Purchase Stationary	12	19	60	99%	263

ID code	Alternative	Storage **S** (MG)	$\mathbf{Q_{out}}$ MGD	**L** (lag time, minutes)	Reliability **R**	Annualized Cost $K/yr
	standby generator					
GEN-2	Lease Stationary generator year-round	12	19	60	99%	479
GEN-3	Rent Stationary generator winter only	12	19	60	99%	177
GEN-4	Contract for mobile standby generator	12	19	480	80%	479
COMBO-1	S-1 and GEN-2	16	19	60	99%	959
COMBO-2	S-1 and GEN-3	16	19	60	99%	657

Notes concerning the various metrics are provided below.

Storage S

Alternatives reflecting baseline conditions have 12 MG of free storage, i.e., 2/3 of the 18 MG total; alternatives reflecting reoperation have 16 MG of free storage. These values are based on LAVWMA operational experience: the former value from long-term practice, the latter value from late 2022 when, upon receipt of the DTN report, LAVWMA began to re-operate storage to reduce blackout risk.

Export flow $\mathbf{Q_{out}}$

Alternative PGE-1 reflects a fully redundant electrical service, so $\mathbf{Q_{out}}$ is the full hydraulic capacity of the export pump station, 42 MGD. The alternatives involving a generator are based on a 2 MW generator, which provides about 19 MGD, based on LAVWMA's experience in early 2023. As shown in Table 5, $\mathbf{Q_{out}}$ may vary by month to reflect seasonal rental of an emergency generator.

Table 5: Q_{out} for Each Alternative

Alternative	Name	J	F	M	A	M	J	J	A	S	O	N	D
BL	Baseline -- no project, baseline operations												
PGE-1	Upgrade PG&E secondary line	42	42	42	42	42	42	42	42	42	42	42	42
S-1	Re-operate storage												
GEN-1	Purchase Stationary standby generator	19	19	19	19	19	19	19	19	19	19	19	19
GEN-2	Lease Stationary generator year-round	19	19	19	19	19	19	19	19	19	19	19	19
GEN-3	Rent Stationary generator winter only	19	19	19									19
GEN-4	Contract for mobile standby generator	19	19	19	19	19	19	19	19	19	19	19	19
COMBO-1	S-1 and GEN-2	19	19	19	19	19	19	19	19	19	19	19	19
COMBO-2	S-1 and GEN-3	19	19	19									19

Lag time L

All standby power is assumed to involve a lag time, measured in minutes, to represent the lag between the onset of an outage and onset of pumping at level $\mathbf{Q_{out}}$. Lacking precise data, W&C assigned those lag times conservatively high. For example, PGE-1 assumes **L**=30 minutes for the power cutover; this could be virtually eliminated if an ATS were installed, but it's early in the development of that option to bank on it. Generator-based options assumed **L**=60 minutes, based on the need for assessment prior to cutover, although under ideal conditions a generator could be running within a few minutes, or even less. The option for a mobile generator assumed a full work shift to bring the generator onsite and hook it up; this particular estimate may be optimistic, based on the few days spent in January 2023 deploying a rental generator.

Reliability R

The assumed reliability **R** which is the conditional probability of pumping being available given a blackout occurs, was assigned based on judgment. It should be borne in mind that PGE-1 would likely rely upon a single PG&E substation. That fact, and the lack of clarity over the root causes of prior blackouts, resulted in a relatively low value of **R**=70% being assigned. Generator-based options were generally assigned **R**=99%, except GEN-4 which was assigned **R**=80% to capture the risk of vendor non-performance.

Costs

Costs were annualized based on a 25-year planning horizon and discount rate of 3%. That discount rate is not an estimate of general inflation, which may well be substantially higher than 3%. Rather, it's intended to represent an effective interest rate, nominal minus inflation.

Rental costs for a generator were based on actual costs for renting a 2MW generator in 2023. OMR costs beyond rental are assumed to be negligible.

OMR costs for re-operated storage reflect the approximate additional demand charges incurred by LAWMA to maintain maximum space in the 18 MG basin, estimated at $40K/month.

Capital costs for PGE-1 and GEN-1 are based on the DTN report. Per DTN, the costs for PGE-1 are *highly* uncertain and might be substantially higher than shown.

There are additional identified necessary capital improvements common to all alternatives involving use of a generator, to cover installation of a transformer and tap box to facilitate use of a standby generator. Those costs were estimated at $400K by LAVWMA and are included in the costs of all generator alternatives.

To analyze the performance of an alternative, one or more operational scenarios needed to be developed. Scenarios developed by W&C are discussed next.

3.3 Operational Scenarios

For the current work, a scenario is an assumed set of future conditions including:

- **Q_{in}**, i.e., inflow to LAVWMA during a hypothetical power outage. **Q_{in}** varies by month.
- Blackout exposure, expressed with these key metrics:
    - Average number of blackouts per year in excess of a *de minimis* threshold duration (set at five minutes); that average count of blackouts was estimated from recent data.
    - Distribution of those blackouts by month, based on judgment
    - Statistical characterization of blackout duration versus probability using the Gamma distribution.

The details of these items are discussed below.

3.3.1 Q_{in} by Month

The estimate of relevant **Q_{in}** for a given month sought to characterize the average incoming flow rate that ought to be assumed during a blackout. **Q_{in}**, along with other parameters associated with an alternative, such as assumed **S** (available storage), and available export flow capacity **Q_{out}**, allow estimation of **TTI** for a given alternative and scenario. In a subsequent step, the likelihood of a blackout exceeding each computed TTI is estimated.

In estimating **Q_{in}**, the goal was not to estimate the worst possible flow – since even 10-year storm flows may cause a discharge to Alamo Canal even without a blackout (Woodard & Curran). Rather, the goal is to estimate **Q_{in}** that might occur outside major storm events, i.e., during times when storage and-or backup power might make the difference between overflowing to Alamo Canal or not.

It was assumed that blackouts may occur at any time of day. Thus, an argument could be made that average performance during a blackout could be assessed by considering average daily flows. However, in the interest of conservatism, a three-hour peak flow was selected. Using a three-hour peak reflects the possibility of a blackout occurring during daylight hours when inflows are higher than the daily average flow – a possibility borne out in many blackouts, as discussed in Section 3.3.2.

The three-hour peak flows for each of the twelve months was estimated by performing these steps:

1. For each month in the record (covering 2/1/2015 to 12/31/2019), the average daily flow in MGD was calculated.

2. For each month a peaking factor was applied to the average daily flow rate to obtain a reasonable estimate for the maximum 3-hour flow rate. The analysis was bifurcated to handle the dry season and wet season differently, based on the logic that the peaks in each season are due to different causes. The specifics are:

    - In the dry season (April through October), a peaking factor was calculated for each month by computing a 3-hr peaking factor based on the max 3-hr flow observed for the month (e.g., August) divided by the average flow in the same month.

    - In the wet season, a targeted search for storms was done to capture the influence of wet weather on peak flow. The logic of a targeted search is that inclusion of many recent dry years would pose a risk of underestimating peaking factors during wet winter days simply because few such days have occurred in the past few years. So instead, two specific time windows, corresponding to storms, were identified and used:

        - October 16, 2016, from 13:00 to 16:00

        - February 20, 2017, from 18:00 to 21:00

      The peaking factor for each of those three-hour periods was computed, then the higher value was selected; the resulting value of 1.93 was used for the $\mathbf{Q_{in}}$ peaking factor for winter months based on the February 20, 2017 storm data.

The peaking factor analysis is approximate but is judged sufficiently accurate given the objective of the analysis. It should also be borne in mind that the computed TTI's have tended to be much greater than three hours, so using a three-hour peak is conservative.

The estimated inflows $\mathbf{Q_{in}}$ for each month, shown in Table 6 below, were confirmed by LAVWMA staff to provide a reasonable basis for the incoming flows assumed during a blackout.

Table 6: Q_{in} (MGD) by month (common to all scenarios)

J	F	M	A	M	J	J	A	S	O	N	D
31.2	30.3	26.8	29.1	13.1	10.6	12.3	9.1	12.1	24.0	25.0	29.4

3.3.2 Exposure to Blackouts

Accurate statistical estimation of exposure to future blackouts based on past blackouts poses a fundamental challenge: the long-term record cannot be relied upon because it doesn't reflect emerging issues such as

wildfire risk and related actions by PG&E; however, the short-term record is by definition quite limited and thus limits statistical confidence.

For the current work, exposure estimation was done by breaking the problem into three distinct elements:

- Total number of blackouts per year
- Seasonal distribution of those blackouts
- Probability distribution of blackout duration

Diurnal weighting was *not* explicitly assigned to the blackouts because, while some research (Hines) shows a weighting toward mid-afternoon hours, the conservative assignment of $\mathbf{Q_{in}}$ as discussed above addresses correlation that exists between diurnal periods of high electrical demand and risk of blackout.

3.3.2.1 Total number of blackouts per year

Local, i.e., LAVWMA-specific, data was judged to be the best way to estimate the total number of blackouts per year, given that power reliability varies greatly over the nation and world, and even within the state. And while service line reliability has been uneven since at least the late 1990's since the state's deregulation of utilities, it's believed that the relatively recent wildfire threat and its response make long-term past data unreliable to forecast the future. Therefore, the analysis was limited to the past two years' data as experienced by LAVWMA, the outages for which are shown in Table 2. Those outages were filtered to include only outages greater than five minutes; with that filter, the average outage count is **3.2 blackouts/year**.

Without filtering out blackouts of less than five minutes duration, the count would have been 4.0 blackouts/year. W&C believes however that filtering the short-duration outages is appropriate for the current study because:

- the impact of a short blackouts is minor and would not be further reduced by any of the alternatives under consideration; and
- since very short outages often have fundamentally different causes as do longer-term outages, they are not informative as to risk of the longer-duration outages of concern to LAVWMA's operations.

Therefore, a value of 3.2 blackouts/year was assumed for the risk analyses performed for this report. Given the short observation period of only two years, this number should be regarded as highly approximate.

3.3.2.2 Seasonal Distribution of Blackouts

Research shows that generally, a large fraction of blackouts (83% according to one study (Climate Central)) are weather-related, and long-term data for California are consistent with that observation, with blackouts occurring during major winter storms. More recent experience shows that hot weather and-or wildfire also impose seasonal risk, whether due to overloading a fragile grid and-or from equipment being taken offline to reduce fire risk. Also, outages caused by human error or equipment failure can occur at any time.

Considering uncertainties regarding seasonality of outages, W&C developed a suite of scenarios, each of which assumes a different distribution of blackout risk over the year. The purpose of the suite of scenarios

rather than a single scenario is to allow judgments of an alternative's robustness, i.e., its ability to perform even if future conditions turn out to be different than assumed.

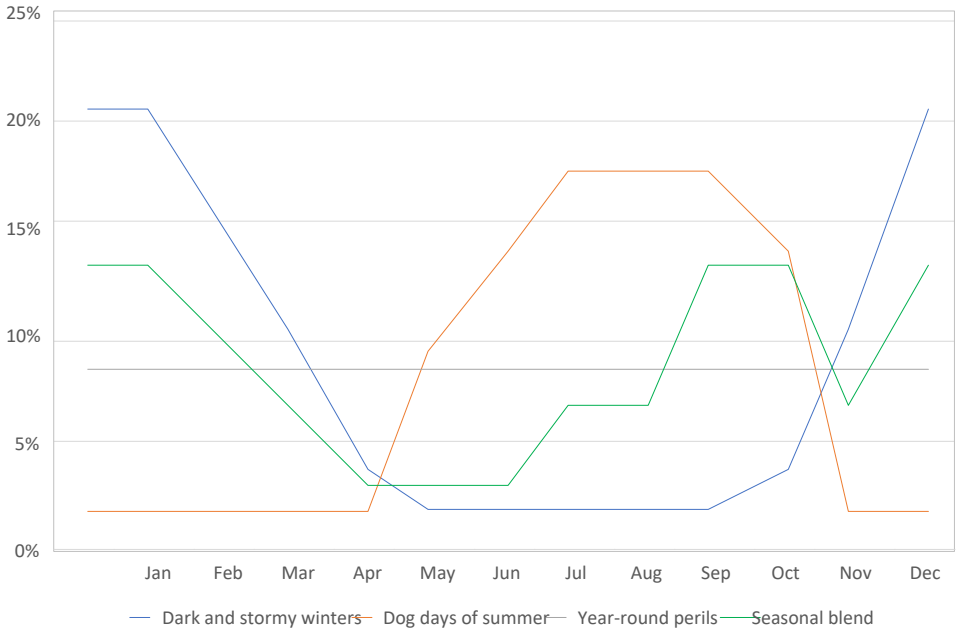
The blackout scenarios developed by W&C are shown in Table 7 along with relative risks by month assumed for each scenario. The highlighted scenario **"Seasonal Blend"** represents W&C's single best estimate of monthly exposure based on the assumption that blackouts will continue to be weather-related in the broad sense, i.e., including both winter and the wildfire season. The general shape of Seasonal Blend is roughly consistent with purely empirical studies of seasonality done on large datasets (Hines), but only roughly as that work didn't capture the current high-risk Octobers in California.

Table 7: Blackout Exposure Scenarios

		Relative Blackout Risk by Month											
#	Scenario Name	J	F	M	A	M	J	J	A	S	O	N	D
1	Dark and stormy winters	20%	20%	10%	4%	2%	2%	2%	2%	2%	4%	10%	20%
2	Dog days of summer	2%	2%	2%	2%	9%	14%	18%	18%	18%	14%	2%	2%
3	Year-round perils	8%	8%	8%	8%	8%	8%	8%	8%	8%	8%	8%	8%
4	Seasonal blend	13%	13%	7%	3%	3%	3%	7%	7%	13%	13%	7%	13%

The figure below shows this information graphically.

Figure 2: Seasonal Blackout Risk by Scenario



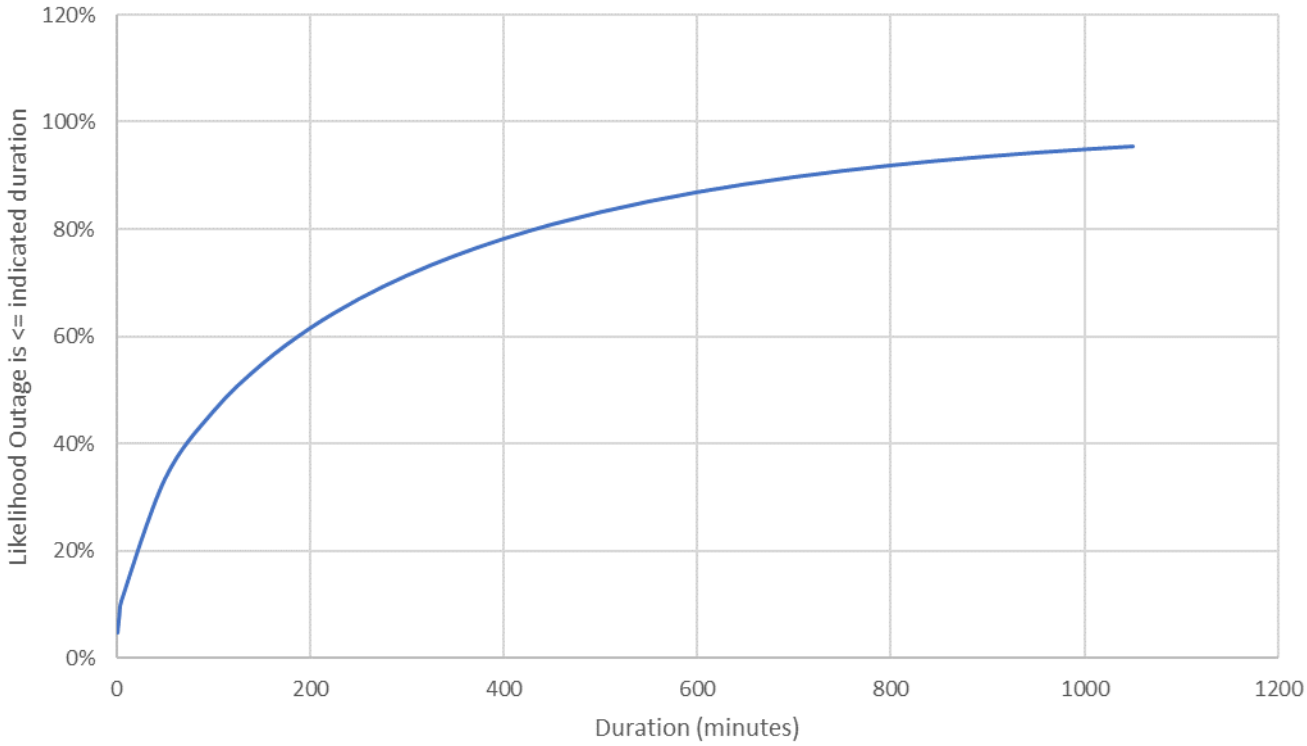
3.3.2.3 Probability Distribution of Blackout Duration

The blackouts experienced by LAVWMA over the past two years, after filtering as described in Section 3.3.2.1, range in duration from 8 minutes to 937 minutes, with an average of 262.5 minutes and a standard deviation of 369 minutes. The sparse data, and lack of reliable information about the root causes of the blackouts, it's not possible to reliably bracket the duration of future outages. The large size of the standard deviation is indicative of this issue.

Certainly, the durations experienced thus far might be exceeded. One study (Murphy) found that the average PSPS blackout lasted 46.8 hours (2,808 minutes). Maximum durations are more than three times that value, or about 163 hours (9,780 minutes). While these values are all greater than LAVWMA's worst blackout so far, they lie within the seven-day duration that PG&E itself has promulgated as a potential duration.

The wider body of research, i.e., research not focused on LAVWMA, PG&E or on PSPS/EPSS, suggests various distributions of blackout duration, for example log-normal, Gamma and exponential. For the range of durations under consideration by LAVWMA, predictions of blackout duration are relatively insensitive to the specific distribution (Kancherla), and more sensitive to the unfortunate paucity of data with which to fit parameters. Based on some recent research (Carrington) suggesting its appropriateness, W&C fit a Gamma distribution to the available data as a way of estimating the probability that a future blackout's duration will exceed a given value. The resulting cumulative probability curve is shown as Figure 3. This curve is quite approximate, but provides value by providing a basis to roughly estimate the chance of future blackouts to exceed a specific duration, including durations greater than those seen to date by LAVWMA.

Figure 3: Blackout Duration Distribution

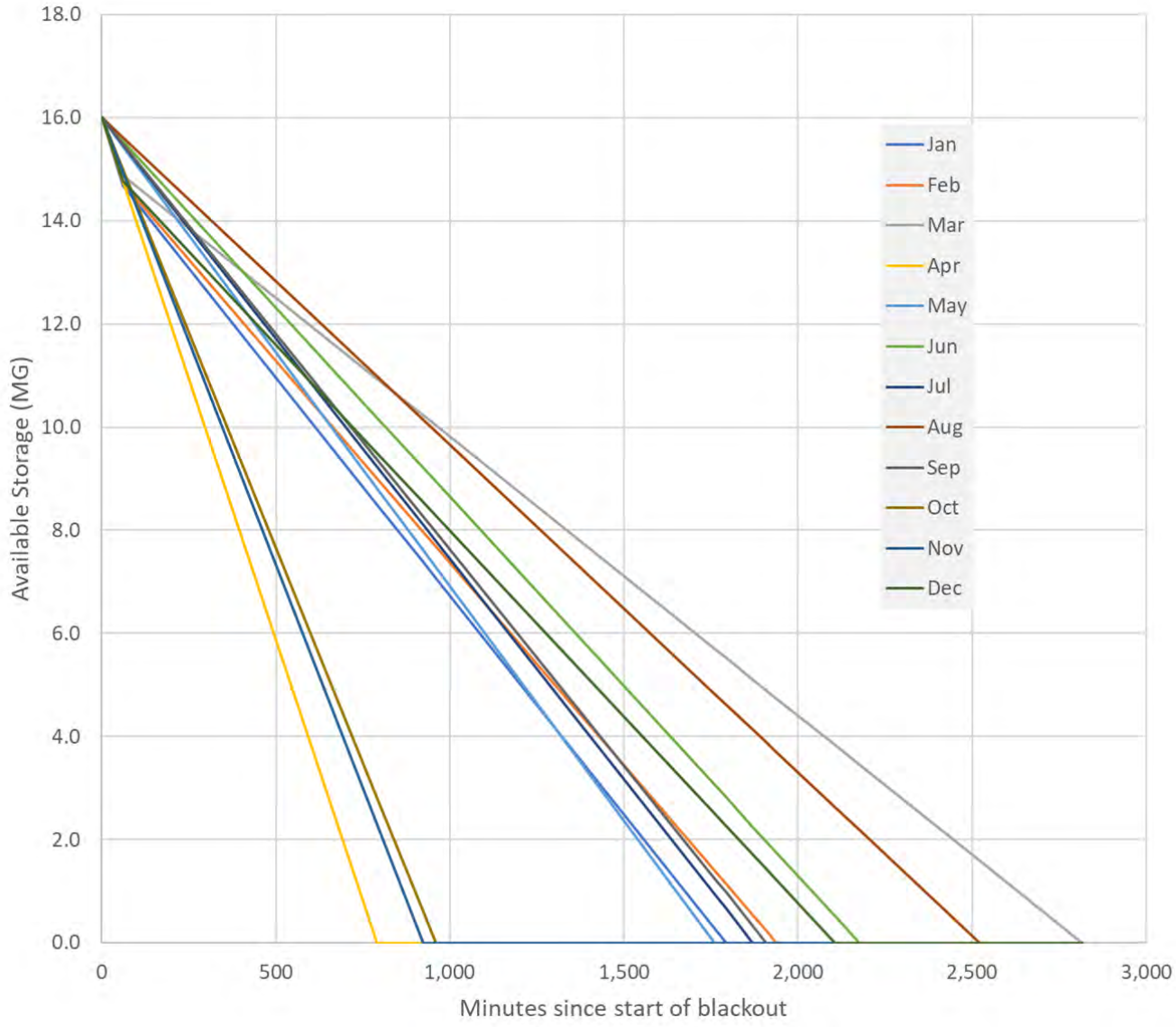


3.4 Time To Impact

W&C next built a spreadsheet model that calculates the Time to Impact, or **TTI**, for a given combination of a selected alternative (e.g., GEN-2, lease a generator in winter months) combined with an operational $\mathbf{Q_{in}}$ scenario (for this study, all analyses were done with a single set of $\mathbf{Q_{in}}$ by month). The model performs a mass balance, based on the initial available storage **S** and incoming flow $\mathbf{Q_{in}}$ for a specific month being considered. After lag time **L**, export flow $\mathbf{Q_{out}}$ helps offset incoming $\mathbf{Q_{in}}$, but for many alternatives $\mathbf{Q_{in}}$ is greater than $\mathbf{Q_{out}}$ so **TTI** is finite.

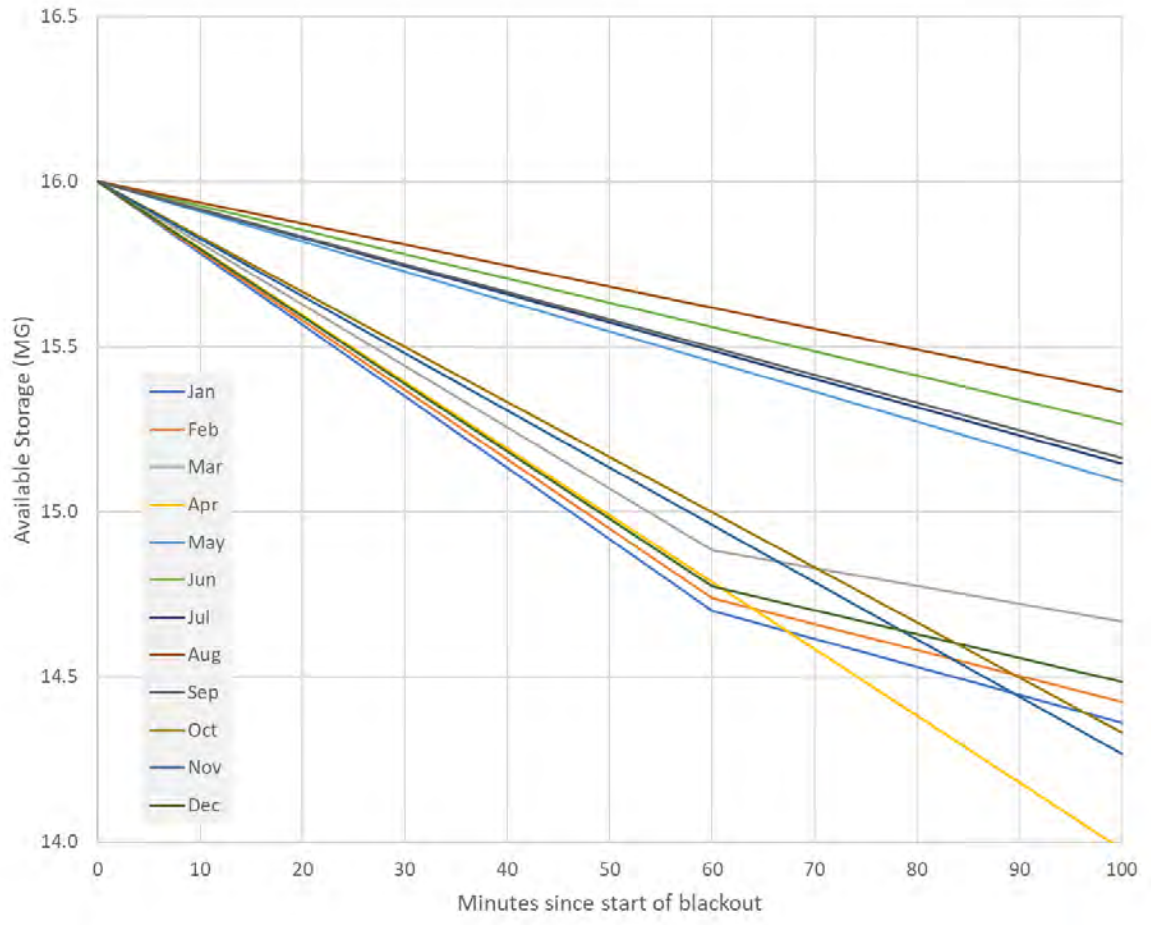
Since $\mathbf{Q_{in}}$ varies by month, **TTI** varies as well. A sample set of **TTI** results is shown in Figure 4. As shown in the figure, free storage **S** starts at 16 MG based on the re-operation of storage that is a defined part of the alternative being modeled. **S** declines to zero over a period of time (the **TTI**, by definition) that varies by season, with the quickest decline in November, when $\mathbf{Q_{in}}$ is high and the generator is not yet onsite.

Figure 4: TTI for COMBO-2: Re-operated storage plus winter generator



The analysis accounts for the lag time **L** to deploy a generator. A zoomed-in view of the prior figure is shown as Figure 5. As indicated, for the months when a generator is onsite a knee appears in the line at time **L**, depicting the use of storage slowing when the generator kicks in to export at a rate $\mathbf{Q_{out}}$ (see Table 5 for $\mathbf{Q_{out}}$ by month for each alternative).

Figure 5: Storage drawdown during lag time L



3.5 Blackouts with Durations Greater than TTI

Using the information on blackout exposure presented in Section 3.3.2, and the **TTI**'s presented in Section 3.4, W&C estimated for each combination of an alternative (e.g., PGE-1, GEN-1, etc) and scenario (e.g., Dark and Stormy Night, Dog Days, Seasonal Blend, etc) the average number of blackouts that might be expected each year with durations exceeding **TTI**. That analysis accounted for the reliability **R** of standby power by computing for each month a weighted average of two **TTI**'s: one that assumes standby power works as hoped, and one that assumes it does not.

The results of the analysis are shown in Table 8. The color banding ranks each alternative as to its performance against the specific scenario. The scenarios were developed to represent a reasonable range of future conditions, to allow a robust choice of alternative to be made: one that not only performs well for the scenario thought to be most likely ("Seasonal Blend"), but also performs acceptably well in the other scenarios.

Table 8: Average Blackouts per Year Exceeding TTI

		1	2	3	4
Option	Name	Dark and stormy winters	Dog days of summer	Year-round perils	Seasonal blend
BL	Baseline -- no project, baseline operations	0.38	0.13	0.25	0.29
PGE-1	Upgrade PG&E secondary line	0.11	0.04	0.08	0.09
S-1	Re-operate storage	0.24	0.07	0.15	0.18
GEN-1	Purchase Stationary standby generator	0.05	0.01	0.02	0.03
GEN-2	Lease Stationary generator year-round	0.05	0.01	0.02	0.03
GEN-3	Rent Stationary generator winter only	0.11	0.10	0.13	0.12
GEN-4	Contract for mobile standby generator	0.26	0.05	0.15	0.18
COMBO-1	S-1 and GEN-2	0.02	0.00	0.01	0.01
COMBO-2	S-1 and GEN-3	0.05	0.05	0.07	0.06

3.6 Overall Evaluation

The table below summarizes the costs and performance of the alternatives, focusing on performance under the "Seasonal Blend" scenario. The table also shows the percent risk reduction relative to baseline, where baseline is 100% of the existing level of risk.

Option	Name	Cost ($K/yr)	Blackouts per yr > TTI	Relative Risk
BL	Baseline -- no project, baseline operations	0	0.29	100%
PGE-1	Upgrade PG&E secondary line	129	0.09	30%
S-1	Re-operate storage	480	0.18	60%
GEN-1	Purchase Stationary standby generator	263	0.03	10%
GEN-2	Lease Stationary generator year-round	479	0.03	10%
GEN-3	Rent Stationary generator winter only	177	0.12	40%
GEN-4	Contract for mobile standby generator	479	0.18	61%
COMBO-1	S-1 and GEN-2	959	0.01	4%
COMBO-2	S-1 and GEN-3	657	0.06	20%

4. CONCLUSIONS AND RECOMMENDATIONS

4.1 Conclusions

Based on the summary metrics presented in Section 3.6, some conclusions can be made:

1. All of the alternatives outperform the Baseline by a substantial margin on a relative risk basis.

2. All of the alternatives involve significant costs relative to LAVWMA's current operational budget (which is approximately $3.6M annually).

3. PGE-1 *might* provide substantial risk reduction relative to its cost. However, as stated in Table 3, PG&E has not committed to the feasibility, cost or schedule of this alternative.

4. Option S-1, reoperation of storage, has a high annual cost due to an estimated $40K per month in electrical demand charges, but affords significant risk reduction. The $40K estimate is based on relatively little operational data during the winter of 2022-2023, so it could potentially be reduced during the summer when flows are lower.

5. GEN-4 (contracting for a mobile generator) provides little risk reduction relative to its cost, because LAVWMA would likely have to pay the full rental cost of the generator in order to have a reasonable assurance of the generator being available during a blackout. There is also a greater risk of vendor non-performance or other deployment snag, so this alternative has lower reliability R and greater lag time L than other options, resulting in lower performance than buying or leasing a generator for deployment onsite prior to a blackout.

6. While purchase of a generator (GEN-1) could be more cost-effective in the long term than rental (e.g., GEN-2 or GEN-3), it's less flexible than the rental options since it would commit LAVWMA to a cash outlay up front. By contrast, a rental could be cancelled or modified in the future if conditions change, for example if PG&E improves the secondary circuit.

When evaluating risk reduction measures, it can be helpful to consider the overall risk context, given that loss of electrical power is not the sole risk faced by LAVWMA that could result in environmental release to Alamo Canal. Even without power loss, major storms (estimated as 10 years or greater) could overwhelm the plant and result in a discharge. Thus, the background risk is about 10% annually, to which risk caused by loss of power is added. A further consideration is that summer-time overflows, e.g., during wildfire-induced power outages, could be potentially worse than overflows due to winter storms, because dilution will likely be much less during the summer.

4.2 Recommendations

1. Pursue alternative PGE-1 by asking PG&E to develop a firm cost and schedule.

2. Recognizing that the PG&E inquiry may take years to conclude and may ultimately not bear fruit, pursue one or more of the other alternatives in the interim. Specifically, renting or leasing a generator could provide substantial risk reduction and provides flexibility. That option can be combined with re-operation of storage.

5. REFERENCES

Carrington, Nichelle Le K. "Extracting Resilience Metrics From Distribution Utility Data Using Outage and Restore Process Statistics." 2021.

Climate Central. "Surging Power Outages and Climate Change." 2022.

DTN. "Export Pump Station Electrical Service Reliability Report." 2022.

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Kancherla, Sameera. "Heavy-tailed Transmission Line Restoration Times Observed in Utility Data." 2018.

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Woodard & Curran

woodardcurran.com

Agenda Explanation
Livermore-Amador Valley
Water Management Agency
Board of Directors
May 17, 2023

ITEM NO. 12. A RESOLUTION OF THE LIVERMORE-AMADOR VALLEY WATER MANAGEMENT AGENCY DECLARING AN EMERGENCY PURSUANT TO PUBLIC CONTRACT CODE SECTION 220250 AND AUTHORIZING EMERGENCY WORK

Action Requested
Approve Resolution No. 23-04 Resolution of the Livermore-Amador Valley Water Management Agency Declaring an Emergency Pursuant to Public Contract Code Section 220250 and Authorizing Emergency Work

Summary
Following heavy storms in January and February it was brought to the attention of DSRSD staff that the Livermore pipeline where it crosses under Arroyo Mocho was at serious risk of failure. Please refer to pictures in the attached report from Carollo Engineers. Riprap was added as temporary protection. Carollo Engineers was hired to review the damage and make recommendations for alternatives that would provide both temporary and permanent repairs. The Carollo report, LAVWMA – Pipeline Condition Assessment is included as **Attachment No. 12.b** for the Board's information.

This pipeline is nearly 50 years old and is likely nearing the end of its useful life based on its design. Absent a permanent fix prior to wet weather later this year, the pipe is at serious risk of failure. Erosion from storm flows as well as debris being carried by storm flows could cause the pipe to fail. If it were to fail, two things could happen: 1) there could be releases of chlorinated wastewater to the creek, or 2) water from the creek could flow into the damaged pipe and potentially overwhelm the pump station's ability to pump all the additional flow. Release of chlorinated wastewater could affect fish as there is a fish ladder not far from the site. A release of this nature could be subject to significant fines and other forms of potential liability,

It is in LAVWMA's best interests to solve this problem as quickly as possible and before wet weather this fall. The solutions cited in the Carollo report include the following:

1. Exposed pipe repair. This would involve adding a concrete cap over the pipe. There was a concrete cap over the pipe and the flooding damaged it significantly. Adding additional concrete is not a good solution as the same thing could happen during the next flood.
2. Pipeline Replacement with New Alignment using Open Cut Technology. This would provide for a rerouting of the pipeline but would involve digging a deep trench to lower the pipeline below the creek. Permitting a project in a flowing stream could be problematic and is not recommended as a long term fix.
3. Pipeline Replacement with New Alignment using Trenchless Technology. This is similar to No. 2, but uses trenchless technology that avoids digging a trench as well as avoids a prolonged permitting process.

The costs for the alternatives are also in the order of cost. Following discussions with member agency staff it is recommended to pursue Alternative No. 3. This is a significant project with an estimated cost of $2,000,000 including design, construction, permitting, easements, construction management, and staff time.

In order to complete this project before the next rainy season, it is recommended that the Board approve Resolution No. 23-04 Declaring an Emergency Pursuant to Public Contract Code Section 22050 and Authorizing Emergency Work. This relies on a state law exception that would shorten the project time by avoiding having to follow the normal requirements for public agency contract bidding when needed to avoid disruption in a public service. Nevertheless, staff will prioritize efforts to get informal quotes for the project to ensure fair and competitive pricing.

With respect to the California Environmental Quality Act (CEQA) compliance requirements for the proposed work, there are statutory and categorical exemptions that were created by the Legislature for precisely this type of circumstance. The proposed Resolution identifies the relevant exemptions and establishes facts to demonstrate that they are applicable to the facts presented here.

Recommendation
Approve Resolution No. 23-04 a Resolution of the Livermore-Amador Valley Water Management Agency Declaring an Emergency Pursuant to Public Contract Code Section 22050 and Authorizing Emergency Work.

Attachments
1. 12.a, Resolution No. 23-04 a Resolution of the Livermore-Amador Valley Water Management Agency Declaring an Emergency Pursuant to Public Contract Code Section 22050 and Authorizing Emergency Work.
2. 12.b, Carollo Engineers LAVWMA – Pipeline Condition Assessment.

LIVERMORE-AMADOR VALLEY WATER MANAGEMENT AGENCY
RESOLUTION NO. 23-04

A RESOLUTION OF THE LIVERMORE-AMADOR VALLEY WATER MANAGEMENT AGENCY DECLARING AN EMERGENCY PURSUANT TO PUBLIC CONTRACT CODE SECTION 22050 AND AUTHORIZING EMERGENCY WORK

WHEREAS, the Livermore-Amador Valley Water Management Agency ("LAVWMA") is a joint powers agency formed pursuant to the Amended and Restated Joint Exercise of Powers Agreement for the Livermore-Amador Valley Water Management Agency dated July 21, 1997; and

WHEREAS, from late 2022 through March of 2023, a series of severe winter storms characterized as atmospheric rivers struck California bringing damaging winds and historic precipitation; and

WHEREAS, Governor Newsom proclaimed a State of Emergency in Alameda and Contra Costa counties, among others, as a result of these winter storms due to their threat to critical infrastructure and declared that because of their magnitude, the necessary repairs and remedial actions are beyond the control of the services, personnel, equipment, and facilities of any single local government agency to appropriately respond; and

WHEREAS, the Governor declared that strict compliance with various statutes and regulations would prevent, hinder, or delay the mitigation of the effects of these storms; and

WHEREAS, the Governor therefore suspended applicable provisions of the Government Code and the Public Contracting Code, including but not limited to travel, advertising, and competitive bidding requirements, to the extent necessary to address the effects of these storms; and

WHEREAS, on February 9, 2023, LAVWMA and the Dublin San Ramon Services District ("DSRSD") discovered that these recent winter storms, which had brought strong winds and above normal precipitation, had left a portion of LAVWMA's pipeline and its associated manhole exposed in the Arroyo Mocho Creek, along with significant erosion in the creek bed and banks near the exposed pipeline; and

WHEREAS, in response to the unexpected pipeline exposure, DSRSD implemented temporary measures to protect the pipeline, including the placement of rip rap to prevent further bank erosion, and engaged Carollo Engineers ("Carollo") to assess the condition of the pipeline and to identify permanent repair options; and

WHEREAS, based on Carollo's Pipeline Condition Assessment, dated May 12, 2023, the pipeline is currently in constant exposure to creek elements, debris, and water, which are factors that could lead to accelerated corrosion and wear on the external parts of the pipe, or pressure and impacts from the waterway that could lead to failure of the pipeline and result in the discharge of wastewater; and

WHEREAS, the possibility of the pipeline to fail potentially causing discharge of wastewater or interruption of service could impact the creek and environmentally sensitive areas nearby, present a substantial risk to public health and safety, and subject LAVWMA to significant fines for unpermitted discharges; and

WHEREAS, the exposed pipeline, resulting from the severe winter storms, is a sudden, unexpected occurrence that poses a clear and imminent danger, requiring immediate action to prevent or mitigate the loss or impairment of life, health, property, or essential public services, including wastewater service; and

WHEREAS, based on the foregoing, the exposed pipeline's vulnerability to damage poses an untenable risk of wastewater discharge or service interruption and therefore qualifies as an "emergency," as defined under Public Contract Code section 1102; and

WHEREAS, LAVWMA is subject to the Uniform Public Construction Cost Accounting Act (Public Contract Code section 22000 et seq.), which generally requires a competitive bidding process for public projects in excess of $60,000, except in cases of emergency, as set forth in Public Contract Code section 22035; and

WHEREAS, Public Contract Code section 22050(a)(1) states that "[i]n the case of an emergency, a public agency, pursuant to a four-fifths vote of its governing body, may repair or replace a public facility, take any directly related and immediate action required by that emergency, and procure the necessary equipment, services, and supplies for those purposes, without giving notice for bids to let contracts"; and

WHEREAS, Public Contract Code section 22050(a)(2) requires that, before taking any action pursuant to Public Contract Code section 22050(a)(1), the governing body shall make a finding, based on substantial evidence, that the emergency will not permit a delay resulting from a competitive solicitation for bids, and that the action is necessary to respond to the emergency; and

WHEREAS, this emergency will not permit a delay resulting from competitive solicitation for bids, which could take several months, and action to repair or replace the exposed pipeline and associated conditions is necessary to respond to the emergency and thereby prevent the discharge of wastewater and ensure uninterrupted wastewater service; and

WHEREAS, Public Contract Code section 22050(b) authorizes the Board of Directors to delegate to the General Manager the authority to order any action to "repair or replace a public facility, take any directly related and immediate action required by [the] emergency, and procure the necessary equipment, services, and supplies for those purposes, without giving notice for bids to let contracts."

NOW, THEREFORE BE IT RESOLVED by the Board of Directors of the Livermore-Amador Valley Water Management Agency as follows:

1. The foregoing recitals are true and correct; they are material to the Board's findings and are hereby incorporated herein.

2. For the reasons noted herein, the exposed pipeline, resulting from the severe winter storms, is a sudden, unexpected occurrence that poses a clear and imminent danger, requiring immediate action to prevent or mitigate the loss or impairment of life, health, property, or essential public services, and thereby qualifies as an "emergency," as defined under the Public Contract Code.

3. The Board of Directors hereby finds, based on substantial evidence, that the emergency will not permit a delay resulting from a competitive solicitation of bids, and that action to repair or replace the exposed pipeline and associated conditions is necessary to respond to the emergency and thereby prevent the discharge of wastewater and ensure uninterrupted wastewater service.

4. Based on the foregoing, LAVWMA may repair or replace the public facility, take any directly related and immediate action required by the emergency, and procure the necessary equipment, services, and supplies for those purposes, without giving notice for bids to let contracts, pursuant to Public Contract Code section 22050(a)(1).

5. Pursuant to Public Contract Code section 22050(b), the Board of Directors hereby directs and authorizes the General Manager, in consultation with General Counsel, to order any action pursuant to Public Contract Code section 22050(a)(1) to address the emergency posed as a result of the exposed pipeline.

6. The Board of Directors further finds, based on substantial evidence, that the actions taken to repair or replace the public facility are exempt from CEQA pursuant to CEQA Guidelines Sections 15269, 15301, 15302, 15303 and 15304 because the activity involves emergency repairs to or replacement of an existing publicly-owned wastewater pipeline that was damaged as a result of a disaster in an area subject to a state of emergency. The Board further finds that there are no unusual circumstances and there will be no expansion of use of the pipeline as a result of the repair or replacement efforts.

DULY AND REGULARLY ADOPTED by LAVWMA this __ day of May, 2023, by the following vote:

AYES:
NOES:
ABSENT:

_____
Julie Testa, Chair

ATTEST: _____
Charles V. Weir, General Manager

Dublin San Ramon Services District
Water, wastewater, recycled water

LAVWMA Pipeline Condition Assessment

TECHNICAL MEMORANDUM 1

LAVWMA - Pipeline Condition Assessment

DRAFT / May 2023

carollo

Dublin San Ramon Services District

Water, wastewater, recycled water

LAVWMA Pipeline Condition Assessment

TECHNICAL MEMORANDUM 1

LAVWMA
Pipeline Condition Assessment

DRAFT / May 2023

This document is released for the purpose of information exchange review and planning only under the authority of Reace P. Fisher, April 2023, State of CA PE 81261.

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TM 1 INTRODUCTION

1.1 Purpose and Objectives

After nearly 50-years of service, the 27-inch diameter Livermore-Amador Valley Water Management Agency (LAVWMA) pipeline is showing signs of exposure in the Arroyo Mocho Creek crossing. Given the critical nature of this channel crossing, and to determine the need for and extent of future repairs, Dublin San Ramon Services District (District) is conducting a condition assessment of the pipeline based on a desktop analysis of current pipeline information and the knowledge of the District's engineering and operations staff.

The objectives of this project are to:

- Perform a site visit to evaluate current conditions and to investigate the failure mechanism of the embankment.
- Develop up to three alternatives for repairing the pipeline creek crossing.
- Assess the vulnerability of the pipeline crossing and running parallel to arroyo and provide repair/improvement alternatives for the embankment.
- Develop a cost estimate for the three alternatives and embankment repair/improvements.
- Support District to obtain necessary environmental permits to construct an emergency repair.

Recommendations will include timing and implementation of future Capital Improvement Projects to repair or replace this pipeline.

1.2 Project Approach

The pipeline condition assessment is based on our site visit to evaluate the current condition of the pipeline exposure and failing creek bank. The condition assessment evaluation considers pipe material, age, eroding stream bed and banks, and sources of potential failure mechanisms due to exposure in the creek. This analysis does not take into account internal pipeline condition due to the need for internal inspection data to provide additional evaluation on the current pipe condition.

1.3 Data Collection and Review

1.3.1 Record Drawings

The following record drawing were provided to develop an understanding of the pipeline:

- Livermore Interceptor Plan & Profile – STA L222+00.00 to STA L234+00.00 (Appendix A).

Per review of the drawings, the pipeline was estimated to be originally constructed around 1977. The pipeline crosses the Arroyo Mocho creek and then parallel for approximately 300 linear feet. The crossing is approximately 80-feet long and was originally 7-feet below the existing channel bottom of the Creek.

The record drawings indicate the pipe materials is Class 361 reinforced concrete pipe (this was confirmed via visual inspection during the site visit).

The following Photos 1.1-1.4 show the exposed pipeline in the bottom of the creek, the eroding bank, and the parallel section of pipe. Photos 1.5-1.7 show the increasing erosion risk and temporary repair required due to the heavy rain periods experienced in winter of 2023.

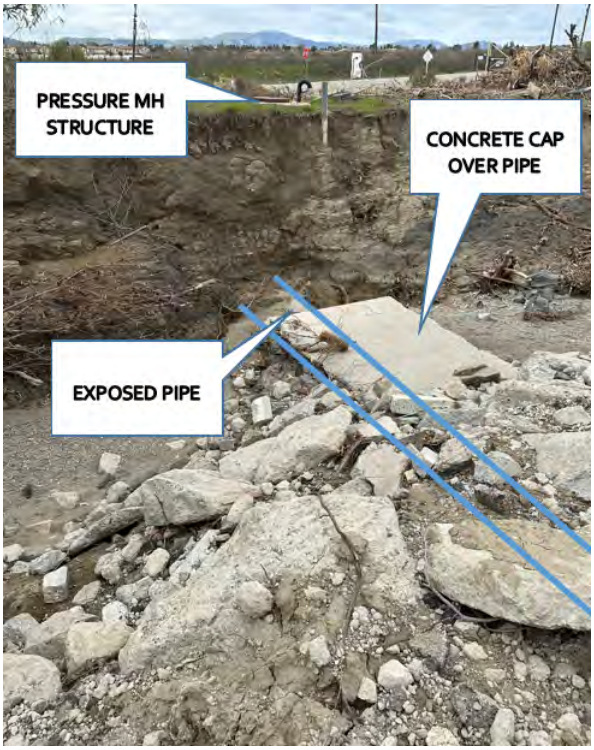


Photo 1.1: Pipe Exposed In Creek Bed (2/14/2023)

Photo 1.2: Creek Bank Continuing To Erode (2/14/2023)

Photo 1.3: Parallel Creek Embankment Risks (2/14/2023)

Photo 1.4: Parallel Creek Embankment Risks

Photo 1.5: Creek Bank Erosion (3/25/2023)

Photo 1.6: Temporary Repair (3/27/2023 Photo 1.7: Temporary Repair (3/27/2023)

Photo 1.8: Temporary Repair (3/27/2023)

1.4 Remaining Useful Life Analysis

The main intent of this project is to determine a long-term repair of the creek crossing. However, it is beneficial to determine the remaining useful life of the pipeline to determine if pipeline rehabilitation or replacement are needed along with the repairs.

Carollo assigned estimated useful life (EUL) values, in years, to the project pipeline alignment. This pipeline is also assigned a decay factor (DF) to account for external conditions that may reduce the useful life expectancy for the segment. The DF is a planning level distinction between the life expectancy of a completely buried pipe with normal soil conditions and the reduction in life expectancy of a pipe exposed to the elements (i.e. pipe exposed in a water channel). Using the actual or assumed install date for this segment, the remaining useful life (RUL) and percent life consumed are calculated as follows:

$$Age\ (years) = Today's\ Date - Install\ Date$$

$$RUL\ (years) = (EUL \times DF) - Age$$

$$\%\ Life\ Consumed = \left(1 - \frac{RUL}{EUL}\right)\ x\ 100\%$$

$$\%\ Life\ Remaining = \frac{RUL}{EUL}\ x\ 100\%$$

The resulting number of years remaining is used to assign a CIP year for replacing or rehabilitating the pipeline alignment. The project pipeline is currently exposed above the invert of the creek channel allowing for potential accelerated corrosion, exposure to impacts from floating debris, and potential large hydraulic pressure imparted on the pipeline when the creek is flowing full during a storm event. The exposure in the creek is accounted for using a 25 percent reduction in the expected estimated useful life (DF= 75%) due to the continued exposure and likelihood that a failure would occur at this crossing vs a buried and protected pipe. This decay factor has been developed using historical data for similar exposures within waterways. . Table 1.1 summarizes the useful life calculation results.

Table 1.1 Pipeline Remaining Useful Life Analysis

Year Install	Material	Diameter	Length	EUL	AGE	DF	RUL	Percent Consumed	CIP Year
1977	RCP (1)	27	80	50(1)	46	75%	-8.5	117	2023

Notes:
(1) For the purposes of analysis, an EUL of 50 years (RCP) has been used with a decay factor of 75% due to the exposed portion of the pipeline in the creek invert, pipe coatings, and unknown wall thickness which may influence the longevity of the pipeline.

This age-based condition analysis characterizes the projected physical mortality of the pipeline alignment. This is one of the four failure modes typically considered in an asset management based analysis for replacement or rehabilitation planning. The other failure modes are included in Table 2. The typical management strategies are replacement, rehabilitation, or providing alternate sources of supply. Failure of the section of pipeline within the creek bed poses a risk to eroding the embankments of the channel. This may result in harm to persons and animals using the channel and walkways near the banks. Furthermore, there are environmental concerns with pipeline failure as it is conveying secondary effluent.

Table 1.2 Failure Modes

Failure Mode	Description	Trigger	Management Strategy
Capacity	Asset demand exceeds capacity	Growth	Replace, Storage

Failure Mode	Description	Trigger	Management Strategy
Level of Service (LOS)	Functional requirements exceed asset service	Identified LOS	Rehab or Replace
Physical Mortality	Physical condition prevents functional performance	Physical deterioration due to usage, operating environment, age, unplanned human acts, or acts of nature	Rehab or replace

1.5 Rehabilitation/Replacement Technologies

The following alternatives have been evaluated for repair/replacement of the creek crossing portion of the pipeline:

- Alternative 1 – Exposed Pipe Repair.
- Alternative 2 – Pipeline Replacement (Open Cut).
- Alternative 3 – Trenchless Pipeline Replacement.

These alternative repair methods are intended to provide a complete structural repair and extend the service life of the pipeline.

1.6 Alternative 1: Exposed Pipe Repair

This option would consist of pouring a concrete cap over the exposed segment of pipeline to protect the pipeline and control the erosion of the bank creep. The concrete cap would extend to the creek banks to provide support for pipe repair. Photo 1.8 shows the proposed extents of repairs required to stabilize the bank and protect the pipe in the invert of the creek.

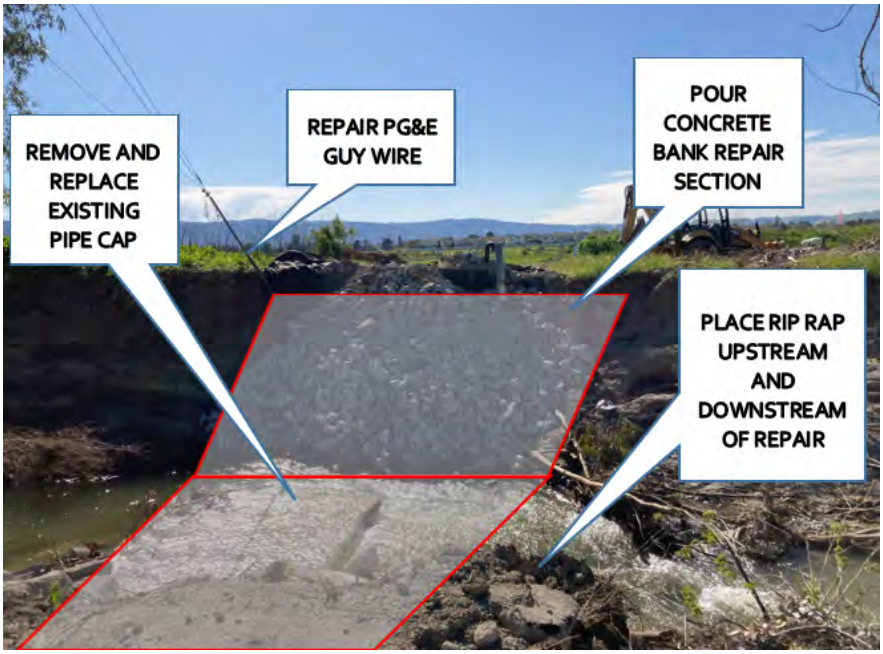


Photo 1. 8: Proposed Exposed Pipe Repair

This option does not eliminate all risk of failure because the remaining useful life of the pipeline (assuming no reduction in the decay factor) is approximately 4- years. This option would provide a repair to the creek bank from future risk of failure. However, due to the depleted useful life of the pipe and unknown condition of the existing pipe, this option is less desirable since there is a need for future rehabilitation/replacement of the pipe within 4-years.

Photo 1. 9: Proposed Bank Stabilization for Parallel Segment

In addition, environmental permitting may be required given the stream bed alteration (concrete cap and bank repairs). As we previously provided information from Department of Fish and Wildlife, the District will be allowed to repair the failing section of the crossing under an emergency basis. However, to perform a permanent repair to the creek bed, a stream bed alteration and environmental permitting are needed. The environmental impacts should be investigated further before this option can be recommended.

The second recommended preventative measure for the eroding bank near the parallel segment of pipe is to concrete line using shotcrete or rip rap to prevent further erosion. The existing pipeline is less than 10 feet from the current bank wall. If the bank continues to erode, it will expose the existing pipeline and increase risk of failure due to the exposed pipe. Photo 1.9 shows the extent of the bank repair recommendations.

1.7 Alternative 2: Pipeline Replacement with New Alignment (Open Cut)

Open cut construction can be difficult for pipeline crossings within active waterways like Arroyo Mocho Creek. However, this approach will provide a solution to extend the service life of this pipeline. It is recommended that this pipeline be lowered by approximately 7-feet to allow for additional cover over the pipe within the creek, considering the creek bedding has significantly lowered since initial installation. This additional cover will provide protection from future erosion. In addition, it is common practice to provide double containment of creek crossings to prevent direct impact on the fluid carrying pipeline. This can be accomplished with a larger diameter steel, fiberglass, concrete, or PVC casing pipe. Photo 1.10 - 1.12 show an example open cut trenching and double contained pipe installation. Most of the pipeline could be replaced within the same alignment, but some new easement acquisition may be required to accommodate the realignment away from the creek banks. Lastly, it is recommended that the District work with Pacific Gas and Electric Company (PG&E) to repair the guy wire that is being exposed due to the creek bank erosion.

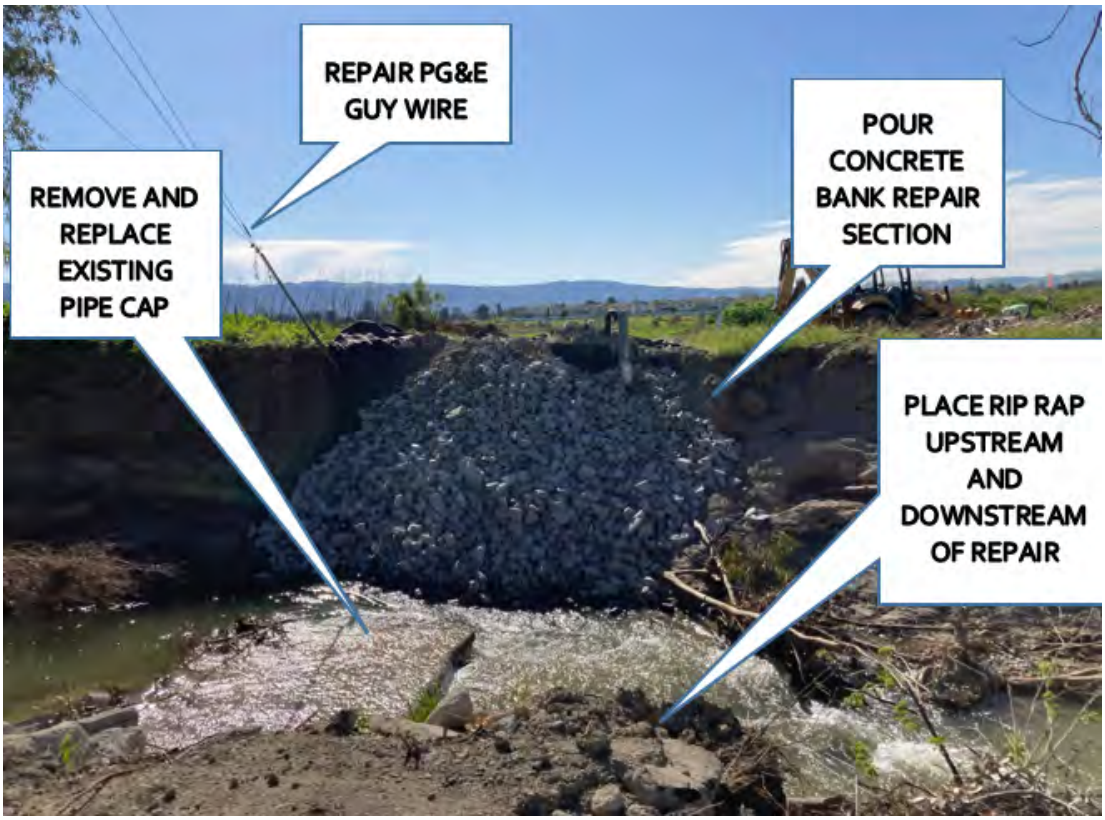


Photo 1.10: Proposed Open Cut Pipe Replacement

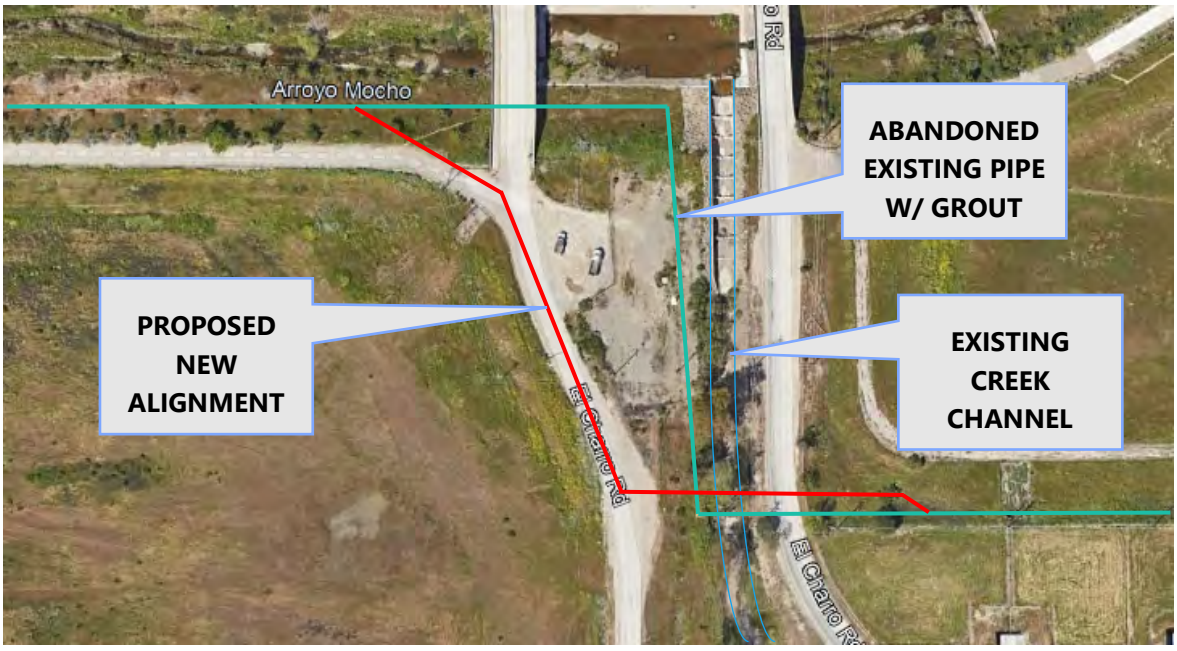


Photo 1.11: Proposed Open Cut Pipe Replacement Realignment in the Arroyo Mocho Creek crossing. Adjacent to El Charro Rd.

1.8 Alternative 3: Trenchless Crossing

This option consists of a new trenchless installation of the pipeline. Utilizing a trenchless method would allow the District the ability to mitigate some of the environmental concerns with the streambed alteration. The new trenchless crossing would lower the pipeline to avoid future streambed impacts and would be outside the busy travel way to reduce traffic impacts along El Charro Road. This new alignment also eliminates the risk related to the parallel segment of pipe along the creek. Recommended pipe materials available for this alternative are PVC or HDPE. Most of the pipeline could be replaced within the same alignment, but some new easement acquisition may be required.

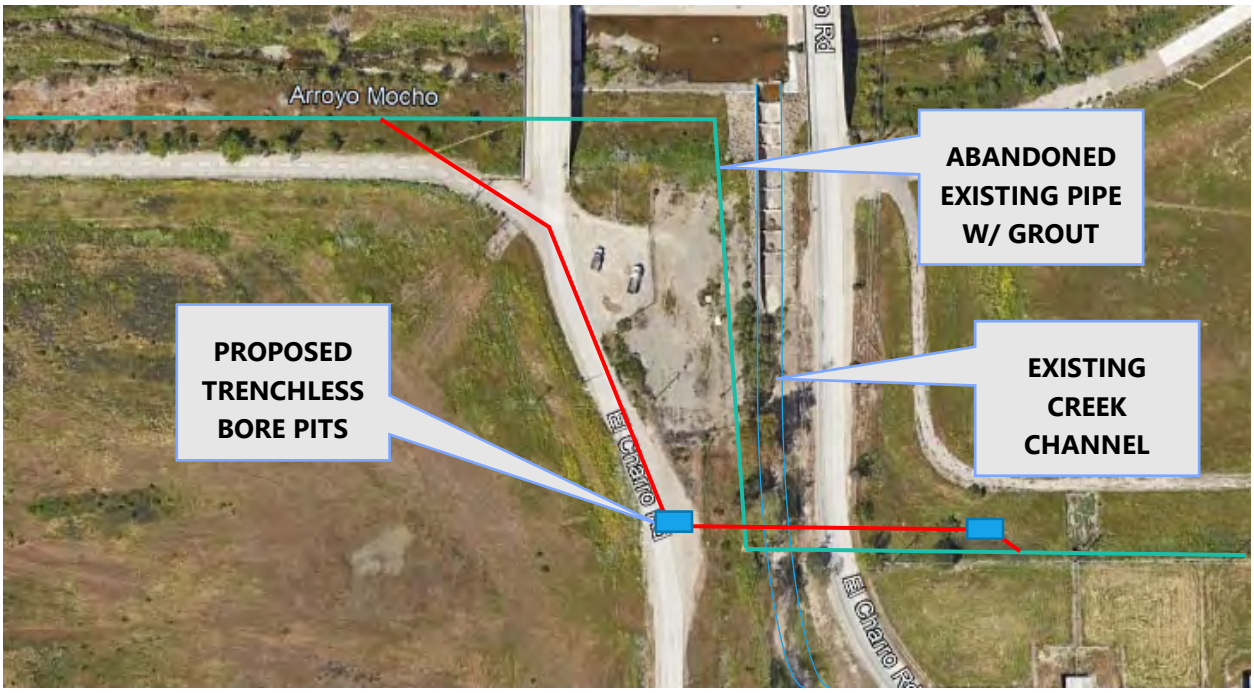


Photo 1.12: Proposed Trenchless Crossing and Pipe Realignment in the Arroyo Mocho Creek crossing. Adjacent to El Charro Rd.

The proposed trenchless method are horizontal directional drilling (HDD) or auger bore and jack (Photo 1.13 and Photo 1.14). The trenchless crossing will help mitigate environmental concerns, stream flow bypassing or dewatering, and required creek bed repairs.

Photo 1.13 Example HDD Installation

Photo 1.14: Example Auger Bore and Jack Installation

1.9 Inspection Technologies

Due to the age of the existing concrete pipe, it is suggested that an internal inspection be performed to provide a better understanding of the internal condition of the pipeline. This is recommended to add confidence that a repair can be made to the existing pipe and bank stability without the need for a pipeline rehabilitation. The intent of the inspection is to get additional information to confirm the assumptions on the remaining life of the pipeline. Pipelines determined to be in failing condition or with significant defects will be scheduled for immediate replacement/rehabilitation in addition to the bank repairs. The following inspection options have been investigated:

- Pure Technologies - Smartball leak detection:
  - Only provides leak detection, inexpensive (approximately $10-15K).
- Pure Technologies Pipe Diver or PICA Seesnake:
  - Provides leak detection and wall loss measurements, but very expensive (approximately $50-60k for this short alignment).
- CCTV internal inspection (for portions of pipe not submerged):
  - Internal inspection only, cannot do submerged sections, must be dewatered (approximately $8- 10/lf). May require additional access to pipe and some associated mobilization costs/repairs to pipeline ($5-10k).
- Pipe Coupon Testing:
  - Expose, cut, and perform analysis on pipe coupon ($8-10k for coupon analysis and repair, more for access and exposing pipe ($5-10k)).

Photos 1.15 through 1.18 show examples of the available inspection equipment.

Photo 1.15: Pure Technologies - Smartball

Photo 1.16: Pure Technologies - Pipe Driver

Photo 1.17: PICA Seesnake Internal Pressure Main Inspection Tool

Photo 1.18: Pressure Pipeline CCTV Inspection

1.10 Prioritized Action Plan

1.10.1 Rehab and Replacement Recommendations

The findings from the site inspections and desktop condition assessment estimates that the pipeline segment within the creek crossing may have exceeded the remaining useful life. The key factor reducing the expected life is the exposure of the segment within the Arroyo Mocho Creek and the age of the concrete pipe. The pipeline is currently in constant exposure to creek elements, debris, and water which are factors that could lead to accelerated corrosion/wear on the external parts of the pipe or pressure/impacts from the waterway that could lead to potential failure. Failure of a pipeline this size and operational pressure can have devastating impacts to the creek, environmentally sensitive areas nearby, and potential fines due to the spill.

It is recommended that this pipeline be replaced in the same or alternate alignment using open cut and/or trenchless construction (Alternative 2 or 3). A repair of the existing pipe within the creek channel may provide structural integrity of the crossing and a solution to protect the pipe from external elements. However, due to the depleted remaining useful life of the pipe (due to age), this alternative is not recommended. In order to delay the replacement of this pipeline, an inspection of the existing internal condition is required to make recommendations to extend the service life of the existing pipeline.

Lastly, it is recommended that further environmental investigations take place to determine the necessary environmental mitigation measures required to protect the environmentally sensitive areas in and around the creek for each alternative.

1.11 Capital Improvement Costs

The recommended project for the creek crossing pipeline replacement is based on the results of the site visit and the desktop condition assessment. The results determined a need to take immediate action due to the depleted useful life of the existing pipeline and current condition of exposed pipeline in the creek. Table 1.3 provides the estimated cost and timing developed for the recommended capital improvement projects for the planning, design, and implementation for the replacement of the creek crossing. Costs are planning level and should be further evaluated during design.

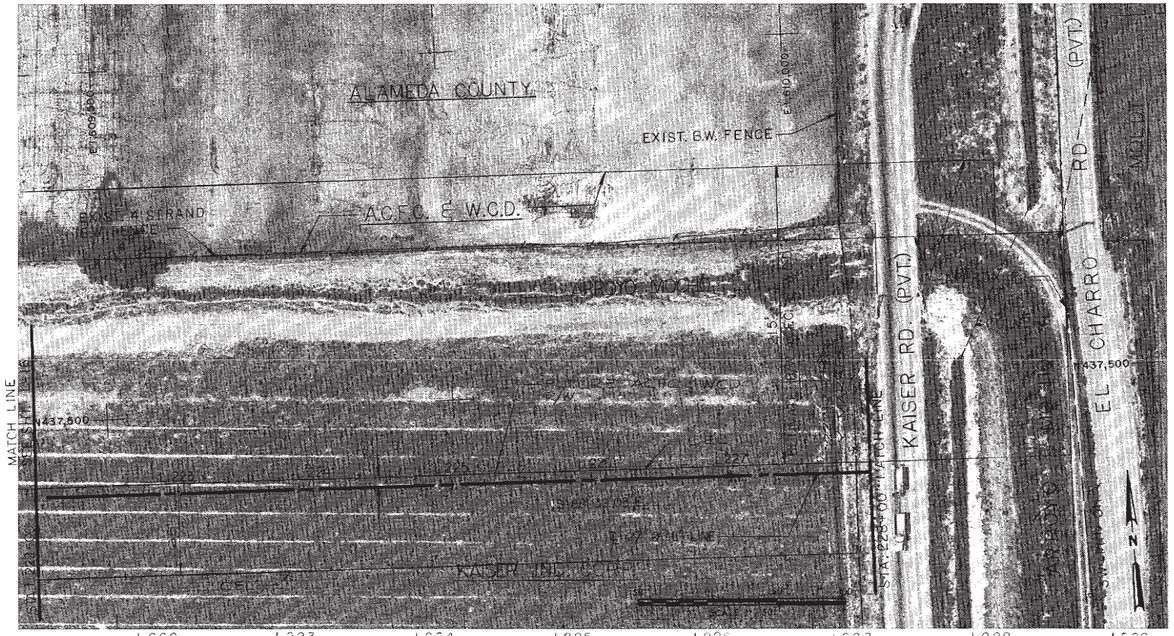
In addition to the project costs associated with the repair of the segment of pipe crossing and parallel to the creek, due to age, it is expected that repair or replacement of the upstream and downstream pipeline segments will be needed within 5-10 years. The long term cost item includes cost to replace up to 10,000 linear feet of pipe.

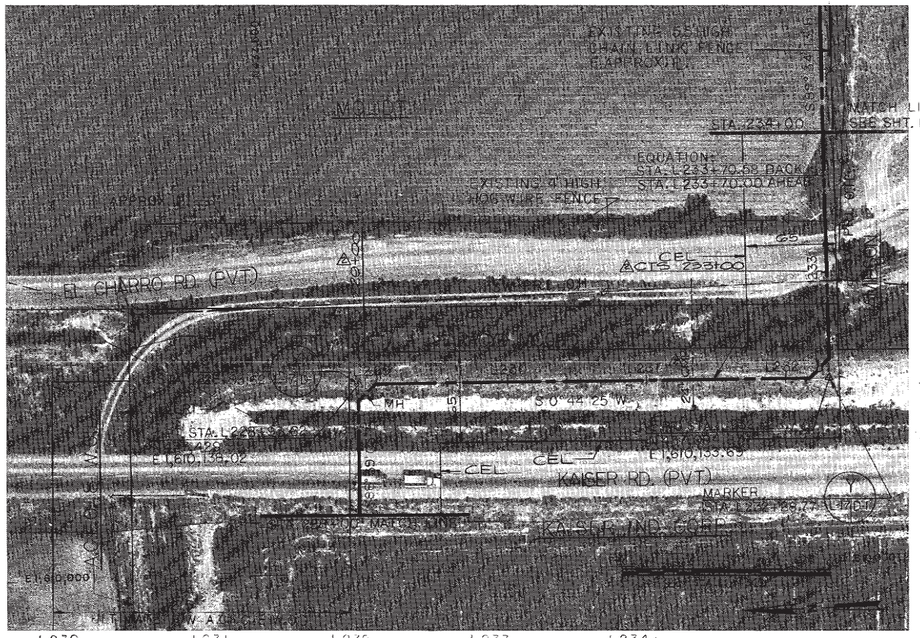
Table 1.3 Capital Improvements Plan

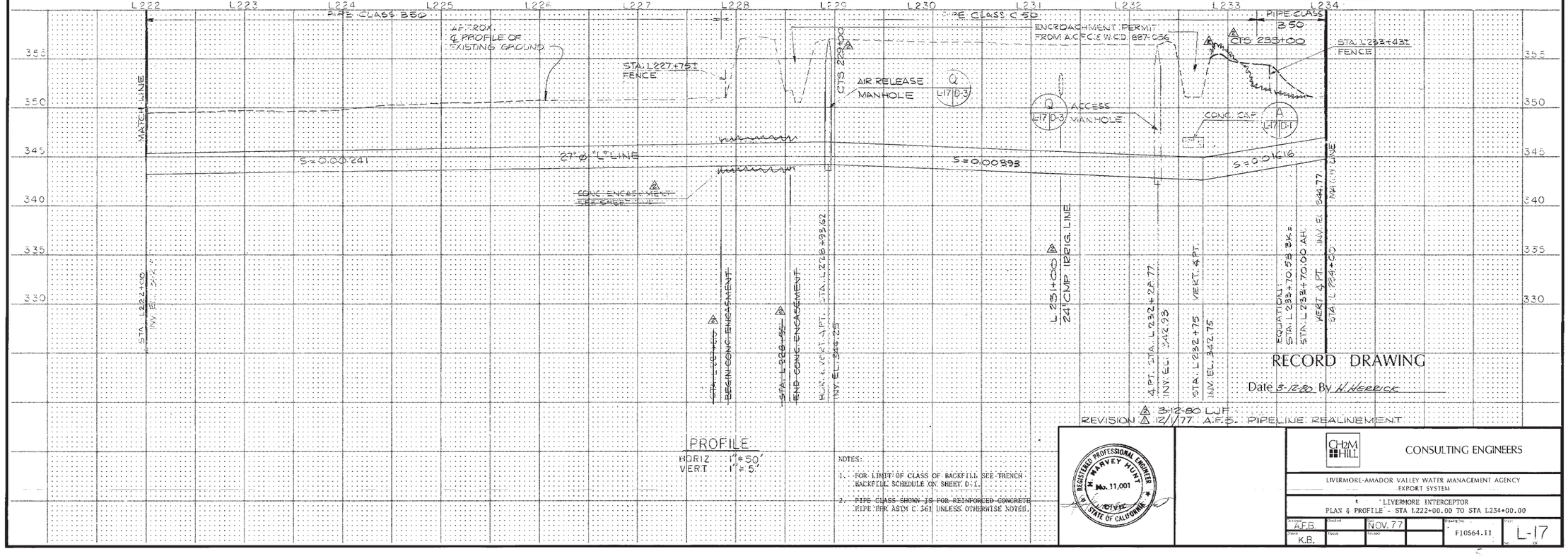
Project	Description	CIP Cost[1][2][3][4]	Year[5]
ALT 1	Exposed Pipe Repair	$175,000	2023 - 2025
ALT 2	Pipe Replacement/Realignment[6]	$1,434,000	2023 - 2025
ALT 3	Trenchless Replacement/Realignment[7]	$1,900,000	2023 - 2025
Long Term	Replacement of upstream/downstream pipe[8]	$8,400,000	2028 - 2030

Notes:
(1) Estimated Construction Cost to account for unforeseen events and unknown conditions (30 percent).
(2) Additional markups include engineering, management, environmental, and legal (25 percent).
(3) Total Contingency Markup = 62.5 percent (125 percentx130 percent-100 percent).
(4) ENR CCI = 12,791 (20 Cities, April 2023).
(5) All costs are in current 2023 values. Project timing includes time for planning, design, and construction. Construction timing should be revisited based on the inspection results.
(6) Replacement cost includes up to 700 linear feet of new piping for the realignment of the pipeline parallel to the creek. Construction assumes summertime construction and no creek bypass required. This cost includes approximately $450k for design and up to $100k for property acquisition support due to the complicated design effort.
(7) Trenchless sections assume a horizontal directional drilling with 200 feet of 30” boring to replace existing crossing outside of canal or environmentally sensitive areas. This cost includes a budgetary estimate of $450k for design and up to $100k for property acquisition support.
(8) Replacement cost included for up to 10,000 feet of 27” pipe based on the age of existing pipe. District to conduct condition assessment to delay these costs.

APPENDIX A RECORD DRAWINGS







NOTES:

1. FOR LIMIT OF CLASS OF BACKFILL SEE TRENCH BACKFILL SCHEDULE ON SHEET D-1.
2. PIPE CLASS SHOWN IS FOR REINFORCED CONCRETE PIPE PER ASTM C 361 UNLESS OTHERWISE NOTED.

RECORD DRAWING
Date 3-12-80 By H. HERRICK

3-12-80 LJF
REVISION 12/1/77 A.F.B. PIPELINE REALINEMENT

REGISTERED PROFESSIONAL ENGINEER
H. HARVEY HUNT
No. 11,001
CIVIL
STATE OF CALIFORNIA

CH2M HILL — CONSULTING ENGINEERS

LIVERMORE-AMADOR VALLEY WATER MANAGEMENT AGENCY
EXPORT SYSTEM

LIVERMORE INTERCEPTOR
PLAN & PROFILE - STA L222+00.00 TO STA L234+00.00

Designed	Checked	Date		Drawing No.	Sheet
A.F.B.		NOV. 77		F10564.T1	L-17
Drawn	Traced	Checked			
K.B.					

Agenda Explanation
Livermore-Amador Valley
Water Management Agency
Board of Directors
May 17, 2023

ITEM NO. 13 PROPOSED OPERATING AND CAPITAL BUDGET FOR FISCAL YEAR 2023/24

Action Requested
Approve the proposed Operating and Capital Budget for Fiscal Year 2023/24.

Summary
LAVWMA is required to adopt its fiscal year budget by June 30 each year. The proposed operating budget of $4,832,996 is a 29.21% increase from the FY2022/23 budget. The total revenue requirement of $18,883,096 is a 10.17% increase from the FY2022/23 budget. Debt service payments consist of $2,025,620 for the Repair Project and $4,624,480 for the Expansion Project. Debt service for the Repair Project and the Expansion Project are an increase of 0.06%. The debt service will remain at the current levels for the foreseeable future due to the successful refunding process that was completed two years ago.

The annual deposit of $400,000 to the Renewal & Replacement Fund (R&R) remains the same as last year. R&R Projects total $5,260,000 and several are being carried over from last year. They are related to the purchase of three pumps and rebuilding their motors, design improvements to the San Leandro Sample Station, cathodic protection projects on the pipelines, replacement of valve actuators and flow meters, additional pipeline inspection, repairs to the Livermore line at Arroyo Mocho, and backup power improvements at the pump station. Projects are based on recommendations from DSRSD staff. Additional details are contained in the proposed budget document. The R&R Fund balance is slowly decreasing due to the magnitude of projects. Fortunately interest rates are now near 5%. Once the major projects are completed a more thorough review of the R&R Fund will be undertaken. This is part of a larger Asset Management analysis that continues at an acceptable pace. The program will be matched to DSRSD's program that is concurrently being developed.

Like last year, this year's budget document includes Section 5.0 on Budget Trends based on past requests from the Board. The actual expenses for FY2023/24 are estimates based on data through April 30, 2023 and the expenses for FY2023/24 are as proposed in the budget. PG&E electrical costs are significantly higher than last year due to a combination of higher flows and ever increasing rates from PG&E. Labor costs are also increased based on the results from the current fiscal year.

The Proposed Operating and Capital Budget for Fiscal Year 2023/24 is included as **Attachment No. 13.a**. The operating budget is nearly identical to DSRSD's detailed O&M Budget, which is included as **Attachment No. 13.b**. The General Manager and the DSRSD Operations Director and his staff worked closely this year to agree on a budget. Staff will highlight budget items and

answer questions at the Board meeting. The proposed budget has been discussed with the LAVWMA Staff Advisory Group.

Recommendation
It is recommended that the Board approve the proposed Operating and Capital Budget for Fiscal Year 2023/24.

LIVERMORE-AMADOR VALLEY WATER MANAGEMENT AGENCY OPERATING AND CAPITAL BUDGET

FISCAL YEAR 2023/24

Approved by the LAVWMA Board _____

LIVERMORE-AMADOR VALLEY WATER MANAGEMENT AGENCY
OPERATING AND CAPITAL BUDGETS
FISCAL YEAR 2023/24

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LIVERMORE-AMADOR VALLEY WATER MANAGEMENT AGENCY
OPERATING AND CAPITAL BUDGETS
FISCAL YEAR 2023/24

EXECUTIVE SUMMARY

OPERATING BUDGET

The proposed operating budget of $4,832,996 is a 29.21% increase from the FY2022/23 budget. The total revenue requirement of $11,883,096 is a 10.17% increase from the FY2022/23 budget. Debt service payments consist of $2,025,620 for the Repair Project and $4,624,480 for the Expansion Project for a total of $7,050,100. The DSRSD budget for LAVWMA includes an increase in labor costs to account for a 4.0% COLA adjustment as well. In the past DSRSD estimated costs were typically well below actual expenses and previous budgets reflected those costs. That is not the case this year.

Projected labor costs are substantially greater than what was budgeted for a variety of reasons, including:

- DSRSD is now fully staffed; they had not been in the past.
- Labor for storms management, emergency generator set up and testing, testing of permitted bypasses at San Lorenzo Creek and Alamo Canal.
- Lab testing for two permitted bypass events and for priority pollutant monitoring required once during the permit cycle.
- Removing the silt covering the San Lorenzo Creek discharge pipe on two occasions
- Inspection of the pipelines to check for damage due to the storms and associated flooding and response to the creek bed erosion and the Livermore pipeline exposure as a result of flooding.

Expenses for PG&E Power and contract services will also exceed the current budget due to extended pumping to manage storm flows, generator rental and required parts for the connection, and traffic control for pipeline inspections.

The FY2022/23 Budget includes a few items that varied from the approved budget including:

- PG&E power will be above budget based on total actual costs for the fiscal year. Despite DSRSD staff's outstanding efforts at managing pump operation to coincide with the new time of use schedule, costs will exceed the budget by 30%. This is due to the ever increasing rates from PG&E as well as the extended pumping times and additional pumps required to manage the severe wet weather flows experienced this winter. For the full fiscal year, the average cost was slightly less than $.213/kWh.
- Contractual costs are well above budget due to the need to rent and set up the emergency generator as well as provide temporary protection for the Livermore pipeline.
- Management expenses will be below budget as major projects have been delayed due to lingering effects from the pandemic.

Based on expenses for the current fiscal year and the fact that those expenses are now in line with DSRSD's budget, this budget will use the proposed costs from DSRSD's budget for all O&M items, including PG&E power, labor, supplies, materials, contracts, and related items.

Based on historical PG&E costs, average kWh requirements for the past six years, and PG&E's projected cost per kWh increases, a power budget of as much as $2.1M could be justified. However, other estimation methods could also support a budget of $1.9M. Since this is so close to DSRSD's estimate of $1,884,500, that figure is being used for FY2023/24.

The total EBDA O&M budget of $984,279 is 17.47% more than last year. With the new Master Agreement the fixed cost is now 26.1%. Costs for EBDA are based on fixed and variable (flow based) percentages. The flow-based percentage is currently 16.3% as compared to 15.3% last year. It is in LAVWMA's best interests to reduce variable costs through a combination of reducing flows through water recycling and flow management during wet weather. An Amended and Revised Master Agreement was approved by both Boards in May 2021. The agreement was retroactive to July 1, 2021. EBDA costs for FY2023/24 are now based on the new Master Agreement.

The proposed FY2023/24 operating budget considers projected FY2022/23 expenditures and is based on the detailed budget, copy attached, prepared by DSRSD pursuant to the Maintenance Agreement. DSRSD's costs reflect a 4.0% cost of living adjustment. Other Fixed costs have been adjusted based on actual expenditures and anticipated needs for next year. Additional information is included in the remainder of the budget report.

Items that are increasing in the FY2023/24 Budget include the following:

- PG&E power costs are increasing 25.63% to account for rate increases and actual costs.
- Materials/Supplies and Contractual costs are increasing to reflect several planned O&M projects described in DSRSD's budget document.
- Permits and insurance are increasing since insurance will be nearly $110,000 this year.
- EBDA costs are increasing as described below.
- Administrative costs are increasing to include the costs for the recruitment of a new General Manager and to provide a transition period.

Monitoring/Testing and Utilities (fixed) are the only items decreasing in FY2023/24. The priority pollutant sampling that is required one time in the five-year permit cycle was completed this year. The Utilities (fixed) budget matched DSRSD's budget.

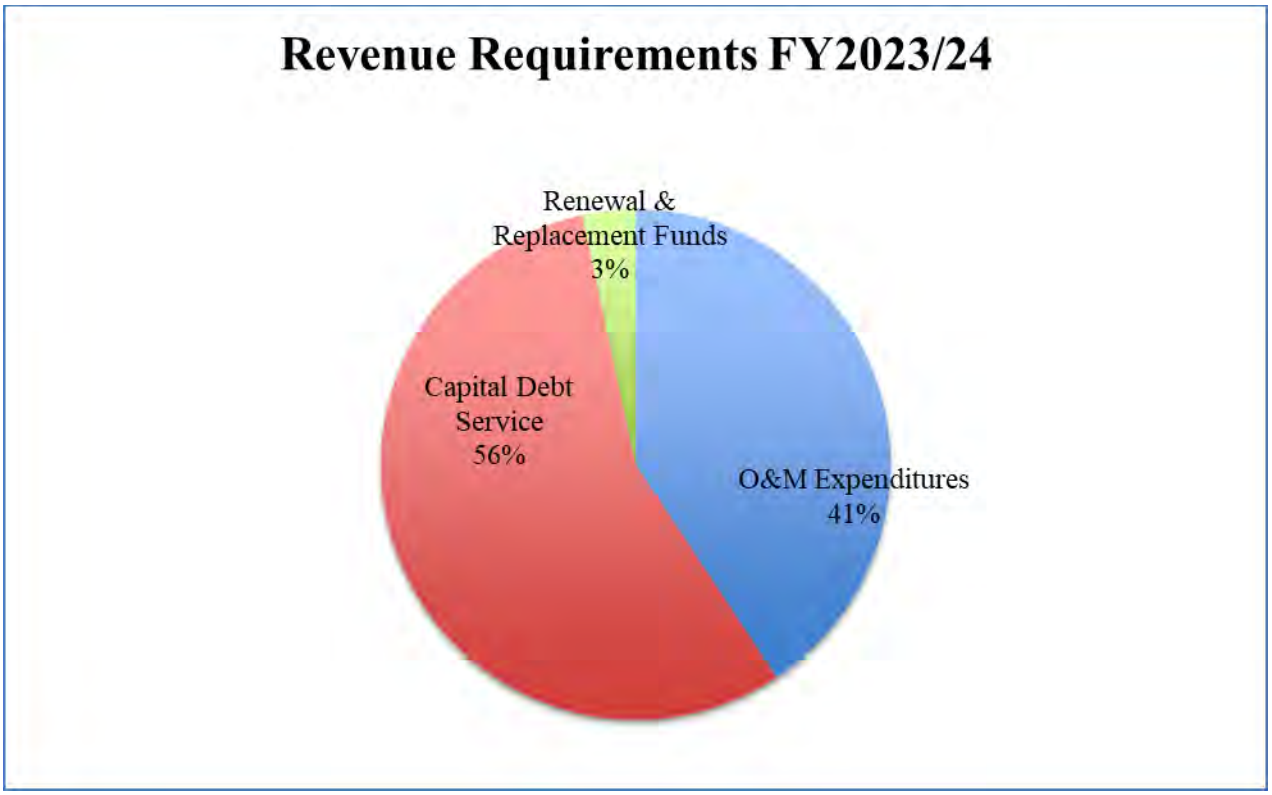
CAPITAL BUDGET

The FY2022/23 capital budget was $2,650,000, of which approximately $300,000 is projected to be spent this fiscal year. Much of this is due to delays associated with continued COVID-19 issues. In addition several of the projects are intended to span more than one fiscal year. The FY2023/24 capital budget of $5,260,000 is for the renewal and replacement of LAVWMA and EBDA facilities and includes the purchase of three new pumps and rebuilding two motors, design improvements at the San Leandro Sample Station (SLSS), cathodic protection improvements, replacement of valve actuators at the pump station, replacement of the flow meters at the junction structure, pipeline inspection, repairs to an exposed section of the Livermore pipeline, Air/Vac valve assessment near the EBDA connection, and Backup power improvements at the pump station. All of these major projects have been recommended by

DSRSD staff. Please refer to the tables below which provide descriptions and summarize the costs.

REVENUE REQUIREMENTS

The FY2023/24 budget also includes the debt service (repair and expansion) for the 2021 Bonds. Although repair and expansion of the existing pipeline is a capital cost, the associated debt service is tabulated in the operating budget to assist member agencies with their rate and fee calculations. The projected debt service includes payment of principal and interest. The refunding of the debt results in a savings of more than $1.35 million. This year's budget recommends that the annual deposit to the Joint Use Renewal Replacement Fund be continued at the $400,000 level that was approved five years ago. The fund value remains at an acceptable level. The following pie chart illustrates the allocation of the $11,883,096 in total revenue requirements for FY2023/24, which is an increase of 10.17% from last year.



1.0 GENERAL

Livermore-Amador Valley Water Management Agency (LAVWMA) is a Joint Powers Agency comprised of the Cities of Livermore and Pleasanton, and Dublin San Ramon Services District (DSRSD). The City of Livermore collects and treats all City wastewater. DSRSD delivers water to the City of Dublin and the Dougherty Valley, and it collects and treats wastewater for Dublin and southern San Ramon, and treats additional wastewater under a contract with the City of Pleasanton. LAVWMA exports treated effluent from the LAVWMA Pumping Station west over the Dublin Grade, through Castro Valley, and the City of San Leandro, to a pipeline operated by the East Bay Dischargers Authority (EBDA). EBDA dechlorinates the effluent and discharges it

through a deepwater outfall into San Francisco Bay. A significant portion of member agency flows are kept within their service areas for water recycling purposes.

1.1 Mission & Goals

LAVWMA'S MISSION

LAVWMA's mission is to support its member agencies: Dublin San Ramon Services District, City of Pleasanton, and City of Livermore by providing cost effective operation and maintenance of all of the Agency export facilities in full compliance with federal, state, and local requirements. LAVWMA supports its member agencies in their efforts to implement comprehensive water recycling programs.

We will complete our work primarily through consultants. We will invest in this diverse project team and promote a work ethic that recognizes and promotes teamwork and a positive work environment. We will practice fairness, provide challenges, and allow freedom of communication and thought to enable team members to make meaningful contributions to LAVWMA, the industry and our community.

Agency Goals & Objectives

To carry out our Mission, LAVWMA will pursue the following goals:

- **Environmental Compliance.** Continue efficient operations of facilities to prevent wastewater overflows. Meet all CEQA mitigation requirements for new construction. Exceed requirements pertaining to community impacts.

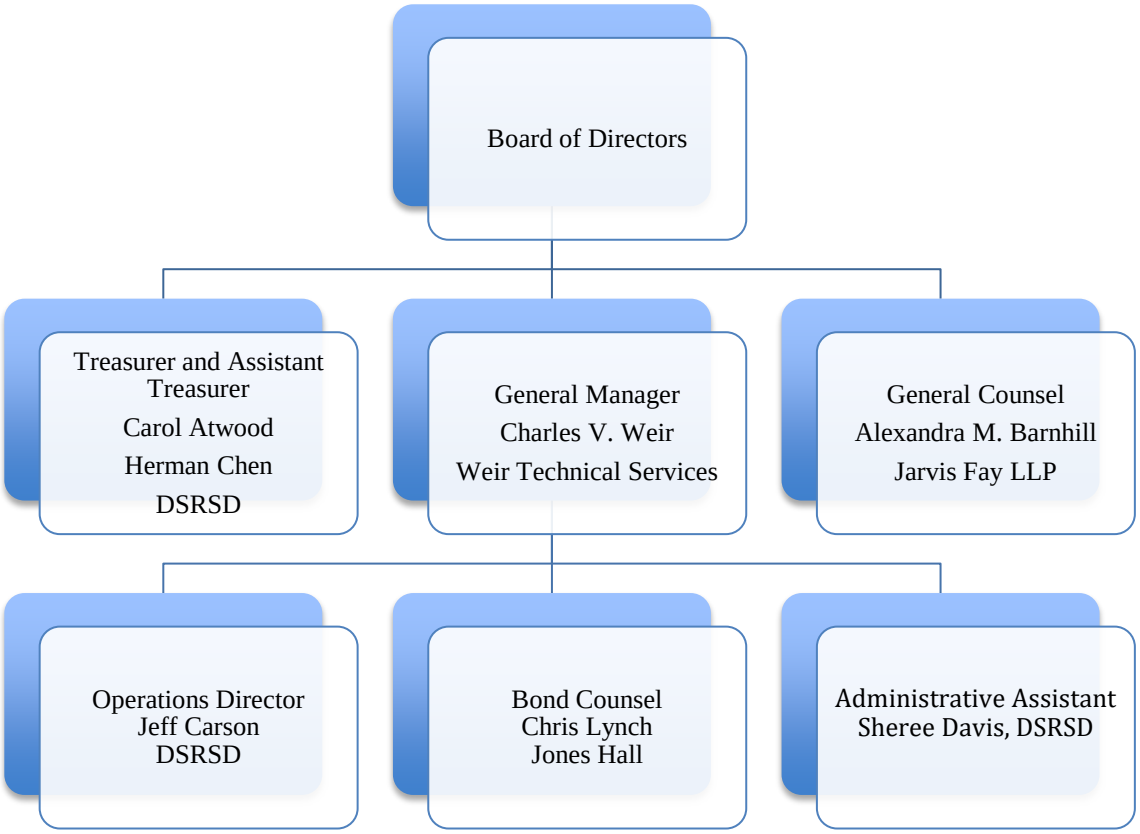
- **Cost Effectiveness.** Continue to perform routine maintenance on existing facilities in a manner that promotes cost savings over the projected life of the facilities.

- **Technical Soundness.** Provide technically sound solutions that use the newest available technology without incurring excessive risk.

- **Customer Service.** Continue to comply with the 1997 Joint Exercise of Powers Agreement (JPA) and the October 2011 Sewer Service Contract with the LAVWMA member agencies.

1.2 ORGANIZATION

The LAVWMA team proposed for FY2023/24 is shown in the following chart.



2.0 OPERATING BUDGET

2.1 Description of Services Provided

The Operations and Maintenance (O&M) budget includes all costs required to operate and maintain existing LAVWMA facilities. LAVWMA's existing facilities include the sole-use and dual-use interceptors, junction structure, Export and Livermore pumping stations, storage basins, export pipeline including appurtenances, and two emergency dechlorination stations. LAVWMA's facilities are operated and maintained by DSRSD pursuant to a Maintenance Agreement initially executed in 1979.

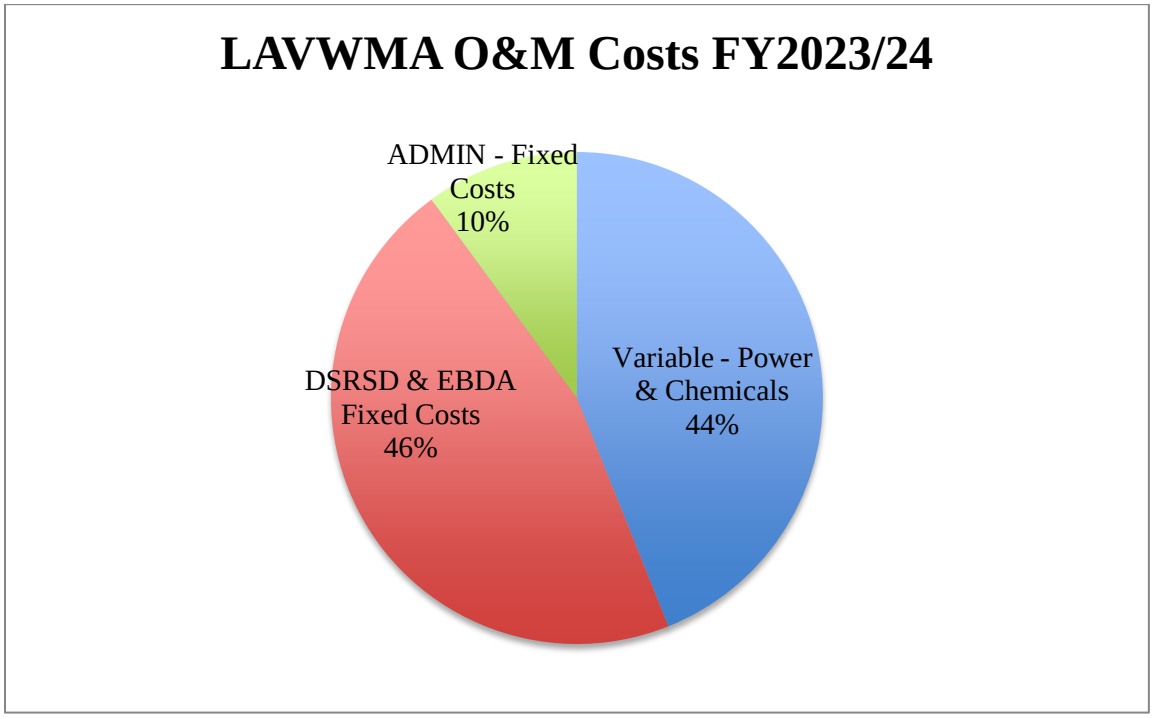
The FY2023/24 Operating Budget on the following pages includes costs for the following: O&M Variable Costs, O&M Fixed Costs, Admin/Mgmt. Costs, Total O&M Costs, Capital Program Funding, and Total Revenue Requirements.

FY2023/24 OPERATIONS BUDGET SUMMARY					
		FY2022/23 Adopted Budget	FY2022/23 Projected Actual	FY2023/24 Proposed Budget	Change From Adopted FY2022/23
OPERATIONS AND MAINTENANCE					
	VARIABLE COSTS				
	DSRSD Maintenance Agreement (Power)	$ 1,500,000	$ 1,949,164	$ 1,884,500	25.63%
	EBDA O&M (See Table, Section 2.2.1)	160,959	160,959	243,378	51.21%
	Subtotal - O&M Variable Costs	1,660,959	2,110,123	2,127,878	28.11%
	FIXED COSTS				
	DSRSD Maintenance Agreement				
	Labor	795,000	1,091,281	1,138,299	43.18%
	Materials/Supplies	50,000	32,585	129,250	158.50%
	Contractual	50,000	179,539	162,350	224.70%
	Monitoring/Testing	42,000	42,700	35,600	-15.24%
	Utilities (fixed)	7,500	6,038	3,150	-58.00%
	Non Routine	8,000	-	8,000	0.00%
	EBDA O&M (See Table, Section 2.2.3)	676,965	676,964	740,901	9.44%
	EBDA Total	837,923	837,923	984,279	17.47%
	Subtotal - O&M Fixed Costs	1,629,465	2,029,107	2,217,550	36.09%
	ADMIN/MGMT				
	Mgr/Treas/Counsel/Board	257,817	197,591	276,200	7.13%
	Services/Supplies/Misc	72,100	56,931	79,364	10.07%
	Permits/Insurance	120,004	120,000	132,004	10.00%
	Subtotal Admin/Mgmt	449,921	374,522	487,568	8.37%
	Subtotal All Fixed Costs	2,079,386	2,403,629	2,705,118	30.09%
	TOTAL O&M COSTS	$ 3,740,346	$ 4,513,751	$ 4,832,996	29.21%

		FY2023/24 Proposed Budget	FY2022/23 Projected Actual	FY2023/24 Proposed Budget	Change From Adopted FY2022/23
	CAPITAL PROGRAM FUNDING				
	Replacement Fund	400,000	400,000	400,000	0.00%
	Repair Debt Service	2,024,280	2,024,280	2,025,620	0.07%
	Expansion Debt Service	4,621,420	4,621,420	4,624,480	0.07%
	SUBTOTAL	$ 7,045,700	$ 7,045,700	$ 7,050,100	0.06%
TOTAL REVENUE REQUIREMENTS		$10,786,046	$11,559,451	$11,883,096	10.17%

2.2 Operating Budget Summaries

The following pie chart depicts the allocation of operating costs:



2.2.1 Variable Costs – Power and Chemicals

Variable costs for power (DSRSD/EBDA) and chemicals (EBDA) are directly tied to the volume of flow that LAVWMA discharges. They total $2,107,878 and make up approximately 44.03% of LAVWMA's total operating budget. Pumping and chemical costs for FY2023/24 are projected to be 28.11% more than last year. Although DSRSD has done an excellent job of managing the PG&E time of use schedule, the actual rates have increased much greater than the rate of inflation. LAVWMA's kWh costs averaged $0.213 this year as compared with just under $.20 last year. Both DSRSD and EBDA average $0.04-$0.05 more than LAVWMA. PG&E rates could increase to $0.32/kWh by the end of FY2023/24 per their documentation. An average increase to $0.27/kWh has been factored into the budget. The FY2023/24 Budget is based on actual and projected costs. The following table details the variable costs for EBDA.

Facility	**Variable Cost**	**LAVWMA Cost, 16.3%**
General Administration	$66,000	$10,754
Outfall & Forcemains	$281,800	$10,239 (22.3%)
Marina Dechlor Facility	$606,100	$106,215
Oro Loma Pump Station	$598,000	$99,957
Bay & Effluent Monitoring	$250,000	$43,255
Total	**$1,801,900**	**$270,420**

The total estimate for EBDA Variable O&M Costs is 90% of the above total, or $243,378 for a 51.21% increase from last year. One of the increases is LAVWMA's share of sodium hypochlorite to meet bacteriological limits in EBDA's effluent. Due to the long travel time in the pipeline the chlorine residual in LAVWMA's effluent when it reaches EBDA is just slightly above zero. In order to ensure that bacteriological limits are met at the EBDA outfall, sodium hypochlorite is added at the Oro Loma Pump Station to ensure an adequate residual at the Marina Dechlorination Facility, and LAVWMA pays a 5% premium on those costs, or approximately $5,000. This is far less expensive than DSRSD and Livermore increasing their sodium bisulfite dosage at their treatment plants. The other increases are due to rising PG&E costs and increased costs for sodium bisulfite for dechlorination of the effluent prior to discharge to the Bay. Chemical costs have nearly doubled in the last year. The Regional Board Basin Plan amendment was supposed to modify the chlorine residual limit, which would have vastly reduced the costs for sodium bisulfite. EPA did not approve the amendment based on objections from SU Fish and Wildlife. The Regional Board plans on issuing a blanket permit amendment to accomplish the same thing, but the timing of that is not known.

2.2.2 Fixed Costs - DSRSD Maintenance Agreement

Operation and maintenance of LAVWMA facilities for FY2023/24 is estimated by DSRSD to require 5,412 fully burdened labor hours. This is slightly less than last year. Costs for these items are based on projected costs for FY2022/23 and anticipated needs for FY2023/24. DSRSD's budget shows $1,138,299 for labor, which is consistent with this year's projected costs of $1,091,281. The proposed budget includes $1,138,299 for DSRSD labor, which includes a 4.0% COLA and matches DSRSD's budget.

2.2.3 Fixed Costs - EBDA Agreement

This item covers EBDA's fixed operational and maintenance costs that are billed to LAVWMA. It also covers costs to EBDA for various Special Projects including the Regional Monitoring Program (RMP) and LAVWMA's share of EBDA's permit fees. Some of these costs are shared on different percentages than LAVWMA's fixed cost percentage in the agreement with EBDA. As an example, the RMP cost is based on the mass of four metals: copper, chromium, nickel, and selenium. LAVWMA's share is 30.1% as compared to 17.58% last year for a total of $88,445. LAVWMA's share of the permit fee, $691,768 is based on the permitted average dry weather flows for each agency that is part of the EBDA system. LAVWMA's share of this cost is 26.62%, or $184,172. There is also a nutrient surcharge that provides funds to BACWA for studies related to nutrient control. LAVWMA's share of this fee is 20.3%, or $48,108. Lastly there is an Alternative Monitoring and Reporting fee related to Regional Board studies. LAVWMA's share of this is 33.3% (2 LAVWMA plants/6 total plants in the EBDA system), or $10,771.

LAVWMA is responsible for a portion of the forcemain system and will be billed accordingly. With the new Master Agreement LAVWMA is responsible for 26.1% of the fixed costs for "shared" EBDA facilities. The new Master Agreement was retroactive to July 1, 2020. The following table summarizes the Fixed and Special Projects costs for EBDA.

Facility and Total Variable Cost	Fixed Cost	LAVWMA Percent Cost	LAVMWA Estimated Cost
General Administration	$1,377,907	26.1%	$359,634
Outfall & Forcemains	$5,000	26.1%*22.3%=5.8%	$291
Marina Dechlor Facility	$8,000	26.1%	$2,088
Oro Loma Pump Station	$15,000	26.1%	$3,915
Bay & Effluent Monitoring	$459,867	26.1%	$125,221
NPDES Permit Fee	$691,768	26.62%	$184,172
RMP Fee	$293,760	30.11%	$88,445
Nutrients Fee	$237,114	20.29%	$48,108
Alternative Monitoring and Reporting	$32,314	33.33%	$10,771
Total	**$3,120,730**		**$822,644**

Historically, EBDA has averaged approximately 90% of budget for the fixed costs listed above. Accordingly, $740,901 is included in the FY23/24 Budget.

2.2.4 Fixed Costs - Administration & Management

This section includes general administration, program management, legal and financial services, consulting services, permits, insurance, etc. The proposed budget is $487,568 as compared with $449,921 last year or an increase of 8.37%. The increase is primarily due to the anticipated costs for the recruitment of a new General Manager. The total includes costs for the new DSRSD administrative staff person, Sheree Davis, to provide assistance to LAVWMA. Costs for travel expenses for the General Manager for two CASA Conferences and other required training for the General Manager and Administrative Assistant are included in these costs.

2.2.5 Capital Program Funding

This category includes the projected FY2023/24 debt service (repair and expansion) for the 2021 bonds. Although repair and expansion of the existing pipeline are capital costs, the associated debt service and funding program costs are tabulated in the operating budget to assist member agencies with their rate and fee calculations. The projected debt service includes payment of both principal and interest. It is recommended that the annual $400,000 deposit to LAVWMA's capital facilities Joint Renewal Replacement account be continued to help cover the $5,260,000 cost of capital projects in FY2023/24. It is acknowledged that it may not be possible to complete all of the capital projects this fiscal year. However, it is best to get them on the list so that proper planning and scheduling can occur. Dual Use facilities are minimal and have adequate replacement funds.

The first table below lists the capital projects that will be completed by the end of FY2022/23. The second table lists all recommended projects for FY2023/24. All projects have been recommended and vetted by DSRSD staff.

FY2022/23 Capital Program Expenditures	
Purchase three new pumps and rebuild motors	$5,780
Resealing of all Three Storage Basins	$0
San Leandro Sample Station Design Improvements	$48,315
MCCs and Soft Starters	$164,520
Cathodic Protection Projects	$1,082
PLC / SCADA Upgrade at the Pump Station	$0
Pipeline Inspection	$0
Electrical Improvements to the Main Switchgear	$0
Smart Detectors on Ari/Vac and Air Release Valves	$6,615
Other Misc. LAVWMA	$31,439
Other Misc. EBDA	$30,000
Cip Planning / Management Contingency	$12,250
Total Expenditures	**$300,000**

FY2023/24 Capital Program Expenditures		
Project	**Description**	**Cost**
Purchase three new pumps and rebuild two associated motors.	This project has been delayed from FYE22 and FYE23.The costs include $357,000 for the new pumps, rebuilding two motors, engineering services, and DSRSD staff time to remove the old pumps and install the new pumps and rebuilt motors. The projected delivery date for the new pumps is July 31, 2023	$510,000
San Leandro Sample Station (SLSS) Design Improvements	This project has evolved from what was described for last year's budget and is being carried over. It also now includes: 1. 24-inch flow control valve 2. 20-inch flow control valve 3. Two 30-inch flow meters 4. Two chlorine residual analyzers 5. Miscellaneous piping and fittings to accommodate different pipe sizes 6. Improvements to the Programmable Logic Controller (PLC), Human Machine Interface (HMI), Supervisory Control and Data Acquisition System (SCADA), networking and programming The SLSS station has to be designed to measure chlorine residual and monitor pH continuously. These parameters have to	$1,000,000

FY2023/24 Capital Program Expenditures		
Project	**Description**	**Cost**
	be measured both when effluent is going to EBDA and when effluent is dechlorinated and diverted to San Lorenzo Creek during wet weather events or during system testing. Composite samples of LAVWMA's effluent need to be taken when its directed to both EBDA and San Lorenzo Creek. Grab samples of LAVWMAs Effluent also need to be collected for Bacteriological analysis in both situations. The design of the SLSS is complicated by the following factors: 1) The discharge to San Lorenzo Creek wet weather outfall is rare; 2) During normal daily operations the LAVWMA pumps shut off during peak demand periods and therefore the pipeline is not full during those times; 3) The station is not staffed continuously. The goal of this project is to work with operational staff and the RWQCB to design the station to meet operational, maintenance and regulatory expectations in a manner which creates as little day to day maintenance as possible. The project will now also address probable sea level rise at the discharge point and provide a design to ensure discharge will always be possible. Approximately $135,000 has been spent on design through the end of the fiscal year. The bid packet is scheduled to be issued in May 2023.	
Cathodic Protection Projects	This project is being carried over from FYE23. Treated wastewater is conveyed from the LAVWMA Pump Station to an outfall owned by the East Bay Discharges Authority via the LAVWMA export pipeline. The export pipelines range in size from 24 to 36 - inches in diameter and span approximately 15.6 miles. The pipelines are cathodically protected using an impressed current system, which uses a rectifier and anodes buried in the ground. The project consists of improvements to	$155,000

FY2023/24 Capital Program Expenditures		
Project	**Description**	**Cost**
	the cathodic protection system, including but not limited to, repairs to the existing impressed current system, installation of additional test stations, bonding repairs to rectify electrical discontinuities, and the installation of monitoring equipment to remotely monitor the status and health of the rectifiers.	
SCADA/PLC Upgrade at the Pump Station	This project is being carried over from FYE23. The existing Programmable Logic Controller (PLC) at the pump station is almost 20 years old and is near the end of its useful life. It is an OPTO22 system and needs to be upgraded to Allen Bradley PLC to match the PLCs used by DSRSD. An upgrade to the OPTO22 system at the San Leandro Pump Station is already complete. This is a complex project that requires engineering design, equipment, installation, and construction support. Upon completion the system will be consistent with that of DSRSD improving operation and performance.	$300,000
Pipeline Inspection	This project is being carried over from FYE23. One of the recommendations from the risk analysis project was to inspect portions of the pipeline and provide a report with future recommendations. The report recommended repairs on one section that will cost approximately $35-40,000. The repot also recommends continuing to inspection portions of the forcemains annually such that the entire pipeline will have been inspected within about five years. Much of this cost is for DSRSD staff. DSRSD staff has developed a plan that will be implemented this fall.	$300,000
Replace seventeen valve actuators at the pump station	This project is being carried over from FYE23. There are seventeen valves that have electric actuators at the pump station. All of the valves actuators were installed when the pump station was upgraded twenty years ago and they are at	$255,000

FY2023/24 Capital Program Expenditures		
Project	**Description**	**Cost**
	the end of their useful lives. The actuators will be replaced with the newest technology and will match the style that are commonly used at DSRSD. The actuators cost approximately $9,000 each and will be installed by DSRSD staff. The total cost includes staff time for the installation.	
Flow meter replacement	The three flowmeters at the junction structure were at the end of their useful lives and were replaced in FYE23. The project consists of any required modifications to improve flow measurement accuracy. The cost of the project includes studies and/or analyses, infrastructure modifications, new instrumentation and controls, and/or other miscellaneous improvements.	$250,000
Replace Exposed Section of Livermore Pipeline	The LAVWMA Livermore Pipeline conveys treated effluent from the Livermore WWTP to the LAVWMA Pump Station. A portion of the LAVWMA Livermore Pipeline (approximately Station 226+00 to approximately Station 232+00) crosses the Arroyo Mocho creek and continues running parallel along the creek. When it was constructed in 1977, the pipeline was at least 4 - feet below the bottom of the Arroyo Mocho and the section running parallel to the creek was set back at least 15 - feet from the edge of the embankment. Since that time, the Arroyo Mocho has experienced significant erosion. The recent 2022/23 storms have further exacerbated the erosion, whereby the pipe crossing is now exposed and the section of pipe running parallel to the creek is within 3 - 5 feet of the edge of the embankment. The project will install a new pipeline using trenchless methods and move the pipeline away from the edge of the embankment. Costs include	$2,000,000

FY2023/24 Capital Program Expenditures		
Project	**Description**	**Cost**
	planning, permitting, design, and construction.	
Air/Vac Valve Assessment and Resolution at EBDA Line	The project will assess entrapped air in the LAVWMA export pipeline, and provide recommendations on how to exhaust any air within the export pipeline. The project cost includes engineering review and potential improvements, such as the installation of combination air valves. Cargill/East Bay Dischargers Authority will reimburse LAVWMA for all of the project costs.	$100,000
Backup Power Improvements at the Pump Station	Recent experience with PG&E unreliability and consultant studies have determined that a system for quickly connecting a portable generator capable of running up to four pumps during emergencies would help ensure continuous pumping even during storms and PG&E outages. A portable generator was tested during the storms of early 2023. However, it took at least two days to make all the connections. A generator tap box provides a safe and efficient means of connecting a portable or auxiliary power source in the event of an electrical outage. The project consists of the installation of a generator tap box and other necessary electrical equipment, including a transformer, to facilitate the connection of a mobile rental genset at the LAVWMA Pump Station. This will allow the connection to be made within a few hours.	$300,000
Other Misc. LAVWMA Renewal/Replacements	As needed	$50,000
Other Misc. EBDA Renewal/Replacements	As needed	$50,000
CIP Planning/Mgmt./Contingency	As needed	$50,000
Total Expenditures		**$5,260,000**

2.3 Changes from FY2022/23 Budget

FY2022/23 expenditures are projected to come in approximately 20.7% above budget due to labor, power, and chemical costs. The annual reconciliation process will resolve any over or under payments. The FY2023/24 Budget is 10.17% more than FY2022/23 in Total Revenue Requirement. Total O&M costs are 29.21% more than was budgeted last year.

3.0 CAPITAL BUDGET

3.1 Description of Budget

The Capital budget includes all costs associated with renewal and replacement of existing capitalized facilities. From 2001 to 2010 the 2001 Series A bond funds were the primary source of LAVWMA's capital expenditures. The bond funds were closed out in June 2011. As of July 2011 and for the foreseeable future the only source of capital funding will be the Renewal & Replacement Funds that have been established for Joint Use, Dual Use and Sole Use Facilities. Per EBDA's Emergency Reserve Policy adopted November 18, 2021, LAVWMA is responsible for $326,250 of the total $1,250,000 emergency reserve. The tables below depict the projected fund balances during FYE23 and FYE24.

R & R Fund Balances, 6/30/22	Joint	Dual	Sole	Total
Start of year	13,884,500	433,526	1,621,874	15,939,900
Deposits	400,000	0	0	400,000
Interest Earnings	600,000	1,431	5,352	606,783
ProJected Expenditures	300,000	0	0	300,000
End of Year, 6/30/23	14,584,500	434,957	1,627,226	16,646,683

R & R Fund Balances, 6/30/23	Joint	Dual	Sole	Total
Start of year	14,584,500	431,863	1,615,786	16,632,149
Deposits	400,000	0	0	400,000
Interest Earnings	650,000	1,425	5,332	656,757
ProJected Expenditures	5,260,000	0	0	5,260,000
End of Year, 6/30/24	10,374,500	433,288	1,621,118	12,428,906

As discussed previously, it is recommended that the annual contribution to the R&R Fund be continued at the $400,000 level. The following table for the last several years plus the estimated data for FY2022/23 and recommendations for FY2023/24 show that LAVWMA maintaining the Joint Use R&R Fund at a sustainable level since FY2010/11. The annual contribution should be reviewed annually.

R&R Joint Use History				
Fiscal Year	**Contributions**	**Interest**	**Expenses**	**Net**
FY2010/11	0	84,873	(245,065)	(160,192)
FY2011/12	300,000	51,626	(411,885)	(60,259)
FY2012/13	300,000	45,064	(353,404)	(8,340)
FY2013/14	300,000	36,396	(119,955)	216,441
FY2016/17	400,000	109,563	(600,000)	(90,437)
FY2017/18	400,000	225,160	(154,000)	471,160
FY2018/19	400,000	494,626	(309,115)	585,511
FY2020/21	400,000	65,407	(768,000)	(302,593)
FY2021/22	400,000	64,317	(2,598,204)	(2,133,887)
FY2022/23	400,000	600,000	(300,000)	700,000
FY2023/24	400,000	650,000	(5,260,000)	(4,210,000)
Total	**3,700,000**	**2,427,032**	**(11,119,628)**	**(4,992,596)**

3.2 Discussion of Capital Expenditures Proposed for FY2023/24

The following table summarizes $5,260,000 of anticipated FY2023/24 capital expenditures on the renewal and replacement of LAVWMA and EBDA facilities. More detailed descriptions are included in Section 2.2.5, Capital Program Funding.

FY2023/24 Capital Program Expenditures *Carryover	
*Purchase three new pumps and rebuild two motors	$510,000
*San Leandro Sample Station Design Improvements	$1,000,000
*Cathodic Protection Projects	$155,000
*SCADA/PLC Upgrade at the Pump Station	$300,000
*Pipeline Inspection	$300,000
*Replace 17 Valve Actuators at Pump Station	$255,000
Flow Meter Replacement	$190,000
Replace exposed section of Livermore Pipeline	$2,000,000
Air/Vac Valve Assessment and Resolution at EBDA line	$100,000
Back Up Power Improvements at Pump Station	$300,000
Other Misc. LAVWMA Renewal/Replacements	$50,000
Other Misc. EBDA Renewal/Replacements	$50,000
CIP Planning/Mgmt/Contingency	$50,000
Total Expenditures	**$5,260,000**

4.0 FY2022/23 Member Agency Cost Sharing & Schedule

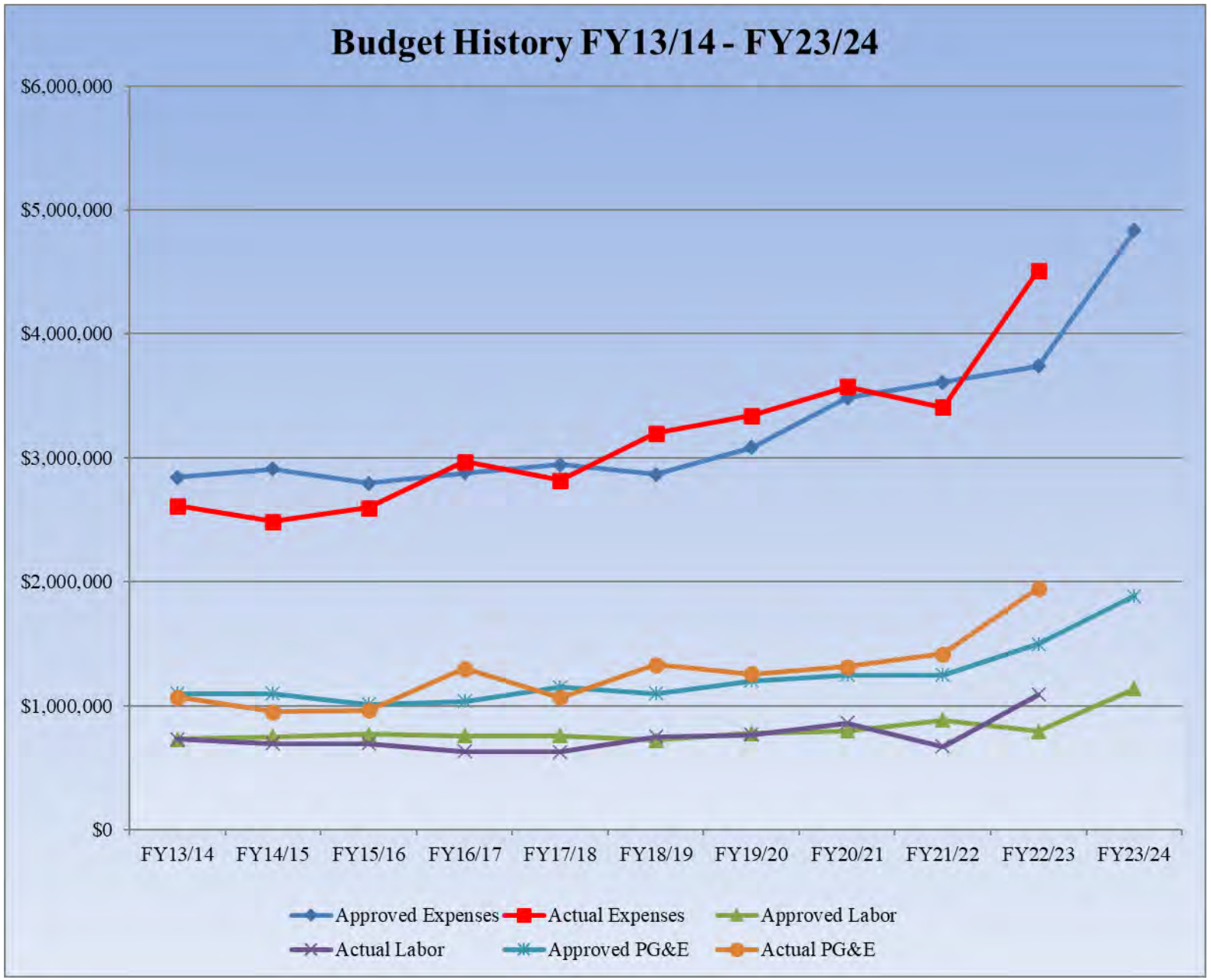
Member Agency Costs FY2023/24					
	Total	**Livermore**	**DSRSD/Pleasanton**	**DSRSD**	**Pleasanton**
Variable O&M	$ 2,127,878	$ 744,757	$ 1,383,121		
Fixed O&M	2,680,118	806,716	1,873,402		
Sole Use Fixed O&M	25,000	25,000			
Total O&M	4,832,996	1,576,473	3,256,523		
Replacement Fund	400,000	120,400	279,600		
Repair Debt	2,025,620	809,235	1,216,385		
Expansion Debt	4,624,480	1,041,433	3,583,047		
EBDA Debt	-	-	-		
Total Capital Costs	7,050,100	1,971,068	5,079,032		
Total Revenue Required	**$ 11,883,096**	**$ 3,547,541**	**$ 8,335,555**		
Semi Annual O&M Advance	2,416,498	788,237	1,628,261		
Semi Annual Replacement Fund Advance	200,000	60,200	139,800		
July 1 Bond Debt Service Advance	3,325,050	925,334	2,399,716	1,293,315	1,106,401
Jan 1 Bond Debt Service Advance	3,325,050	925,334	2,399,716	1,293,315	1,106,401
Total July 1 Advance	$ 5,941,548	1,773,771	4,167,777		
Total January 1 Advance	$ 5,941,548	$ 1,773,770	$ 4,167,777		
Percentages					
Variable O&M		35.00%	65.00%		
Fixed O&M		30.10%	69.90%		
Replacement Fund		30.10%	69.90%		
Repair Debt		39.95%	60.05%		
Expansion Debt		22.52%	77.48%		

5.0 Budget Trends FY2013/14 – FY2023/24 Still working on this section

The following charts show expense trends from FY2013/14 through FY2023/24. The charts show the following:

- Approved versus actual expenses for total expenses, labor costs, and PG&E power
- Estimated versus actual export flow
- Estimated versus actual cost per million gallons

Beginning with the FY2019/20 budget, these charts have been modified from previous presentations. The costs shown are total costs as in the approved budgets, which also include costs for EBDA. Previously, EBDA costs were not included. As a consequence, the cost per million gallons is going to be higher than the costs shown in DSRSD's Quarterly reports. The electrical cost for just pumping over the Dublin Grade is approximately $442/MG as compared with $427/MG last year, while the full disposal cost, including EBDA costs is approximately $1,024 versus $1,024 last year. Although flow and PG&E costs are directly linked, other factors such as fixed costs for labor and equipment repair generally increase at the rate of inflation or CPI, resulting in increasing cost curves. Export flow had been decreasing over time due to water recycling efforts, but this year's storms changed that significantly.


Budget History FY13/14 - FY23/24
$6,000,000
$5,000,000
$4,000,000
$3,000,000
$2,000,000
$1,000,000
$0
FY13/14
FY14/15
FY15/16
FY16/17
FY17/18
FY18/19
FY19/20
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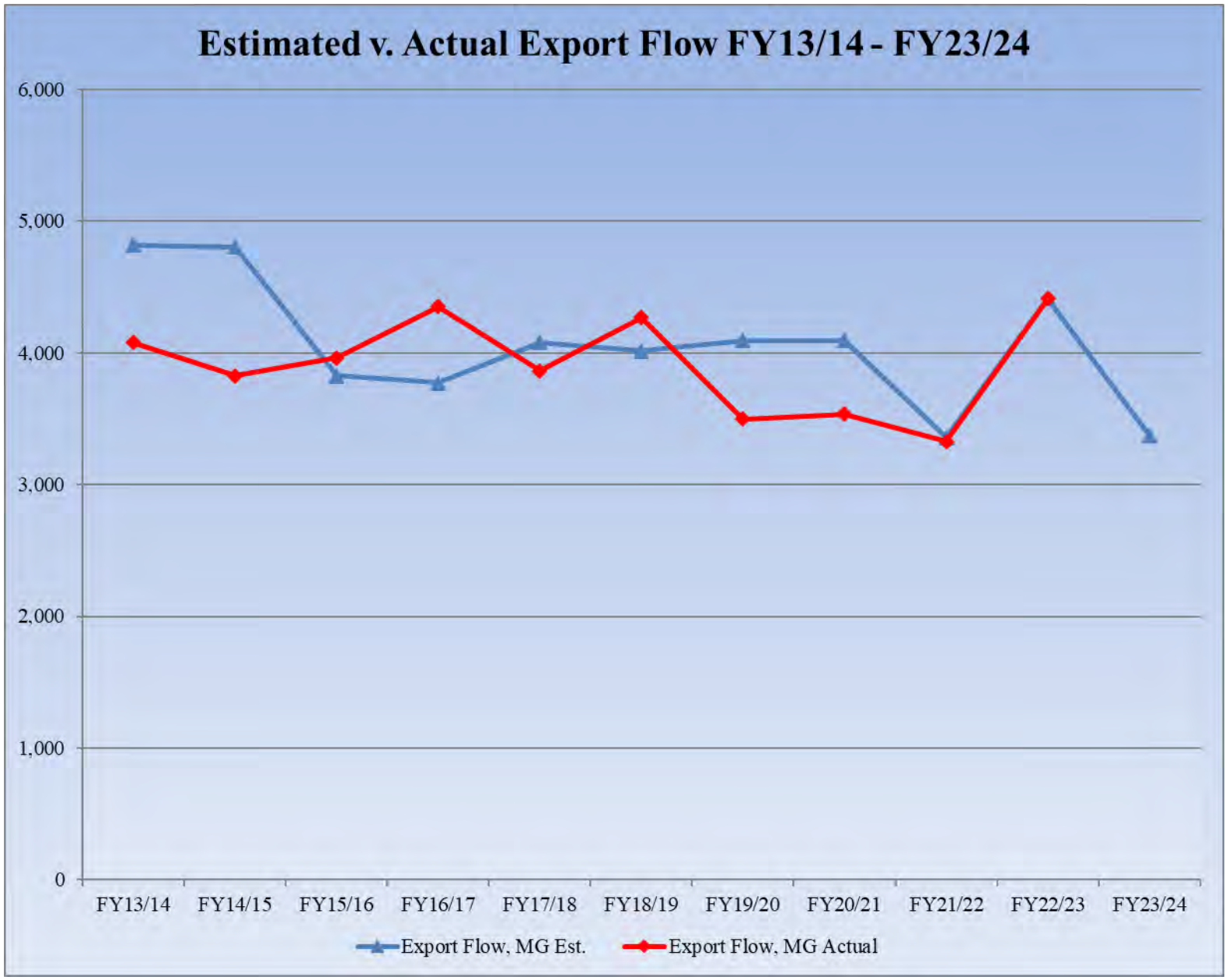
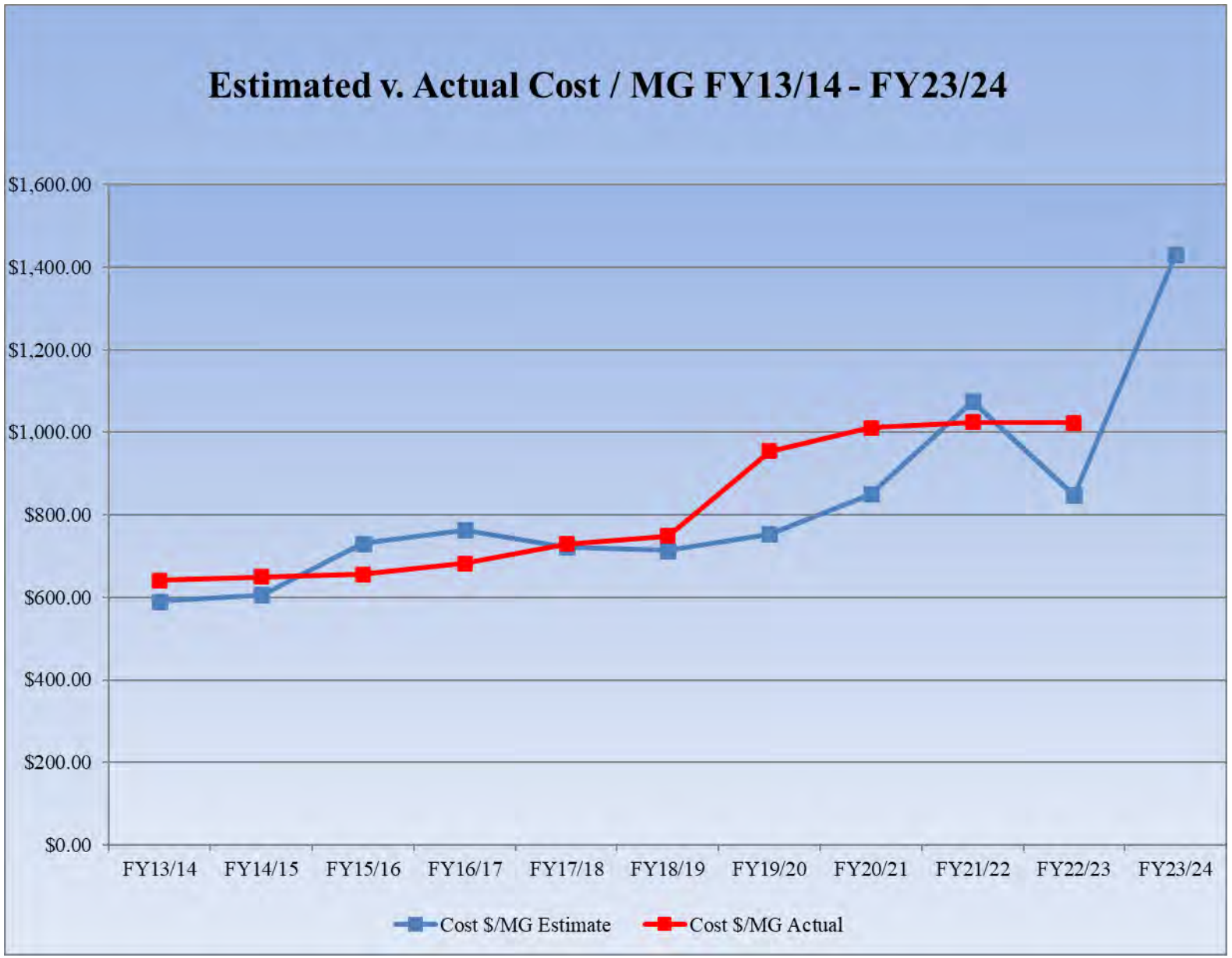
Actual PG&E


Estimated v. Actual Export Flow FY13/14 - FY23/24
6,000
5,000
4,000
3,000
2,000
1,000
0
FY13/14
FY14/15
FY15/16
FY16/17
FY17/18
FY18/19
FY19/20
FY20/21
FY21/22
FY22/23
FY23/24
Export Flow, MG Est.
Export Flow, MG Actual


Estimated v. Actual Cost / MG FY13/14 - FY23/24
$1,600.00
$1,400.00
$1,200.00
$1,000.00
$800.00
$600.00
$400.00
$200.00
$0.00
FY13/14
FY14/15
FY15/16
FY16/17
FY17/18
FY18/19
FY19/20
FY20/21
FY21/22
FY22/23
FY23/24
Cost $/MG Estimate
Cost $/MG Actual

Dublin San Ramon Services District
Water, wastewater, recycled water

Regional Wastewater Treatment Facility
7399 Johnson Drive
Pleasanton, CA 94588-3862

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fax (925) 462-0658
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April 20, 2023

Mr. Chuck Weir
LAVWMA General Manager
7501 Dublin Blvd
Dublin, CA 94568

Subject: Proposed LAVWMA FY 2023-2024 and FY 2024-2025 Operation & Maintenance Budgets

Dear Chuck:

Attached are the proposed budgets for the operation and maintenance (O&M) of the LAVWMA facilities during FY 2023-2024 and FY 2024-2025 to coincide with the District's two-year budget cycle. On Tuesday, April 18, the DSRSD Board voted to approve the proposed LAVWMA O&M budget for FY 2023-24 and FY 2024-25.

The total proposed budget for FY 2023-2024 is $3,371,949 including labor, utilities, materials, supplies, laboratory analysis and contractual services. This amount will convey treated wastewater to the discharge point in San Francisco Bay for Livermore, Pleasanton, and DSRSD customers at a rate of approximately $1,000 per million gallons (MG) based on an estimated export flow of 3,374 MG.

The total proposed budget shows a 17.9% increase from the current FY 2022-23 approved budget, mostly attributed to the significant anticipated increase in PG&E electrical rates. Electricity costs represent approximately 60% of the proposed operations and maintenance budget, and nearly 90% of the increase in O&M costs for FYE 2024.

Attachment 1 shows the proposed FY 2023-2024 O&M budget in detail. For your convenience, the expenses are separated by pumping costs ($2,636,160 or $781/MG) and pipeline maintenance costs ($735,789 or $218/MG).

Attachment 2 shows a comparison of the current year FY 2022-2023 budget (with actual 7 months expenditures and projected fiscal year-end expenses) to the proposed two-year budgets. The table also shows a history of budgeted versus actual expenses for the previous two fiscal years.

Attachment 3 provides detail on the 5,412 labor hours or equivalent to 2.6 full-time employees (FTE) that were used for the proposed two-year budgets. It shows a 6.7% reduction in labor hours from the current budget. Labor costs are based on DSRSD's burden labor rates, which are adjusted annually. DSRSD labor costs are expected to increase by 4% CPI adjustment in FYE 2024-25 per DSRSD Labor MOU agreements.

Attachment 4 shows the proposed second year FY 2024-2025 budget of $3,530,484 in detail. This amount will convey treated wastewater to the discharge point in San Francisco Bay for Livermore, Pleasanton, Dublin, and San Ramon customers at a rate of approximately $1,052 per million gallons (MG) based on an estimated export flow of 3,356 MG. For your convenience, the expenses are separated by pumping costs ($2,894,342 or $862/MG) and pipeline maintenance costs ($636,143 or $190/MG). The proposed second year budget shows a 9.4% increase from the proposed first year budget, mostly attributed to the CPI increase in labor cost and a further anticipated increase in electricity costs.

These are "not-to-exceed" budgets submitted in accordance with the Maintenance Agreement, and the total budget for each fiscal year cannot be increased without the approval of the LAVWMA Board. However, per the terms of the Maintenance Agreement, the "not-to-exceed" amount applies only to District labor, materials and supplies; but does not apply to utilities, laboratory analysis, and contractual services (Article 3, paragraph F). Utility rates and costs, in particular, are essentially beyond the control of the District, and could vary substantially depending on utility rate initiatives and higher than normal flows resulting from above normal wet weather conditions. In addition, PG&E's Public Safety Power Shutoffs, rolling blackouts, and Enhanced Powerline Safety Settings (EPSS) programs impact our revised operational strategy and could cause us to operate within peak and/or partial peak hours. The diversion of our pumping strategy is sometimes needed to meet our NPDES Wet Weather permit during events in order to maintain adequate emergency capacity in the LAVWMA storage basins due to the lack of emergency backup power. These operational diversions could have an impact to our estimated proposed electricity costs.

Not included in the proposed O&M budget amount are EBDA charges, permit fees, insurance, debt service, CIP budget, Director's fees and expenditures for the LAVWMA General Manager, Treasurer, Counsel, Auditor, and administrative staff.

Figure 1 shows the projected flow for FY 2023-2024 compared to the amount of recycled water for Pleasanton, EBMUD, and DSRSD.

Figure 2 shows a five-year historic variation in LAVWMA export flows from 2018 to 2022.
DSRSD staff is available at your convenience to discuss the proposed operating and maintenance budgets.

Sincerely,

Original Signed by Jeff Carson, April 20, 2023

Jeff Carson
Operations Director

/ems

Enclosures: Attachments 1-4, Figures 1-2

cc: Dan McIntyre, DSRSD General Manager
Jan Lee, DSRSD Assistant General Manager
Steve Delight, DSRSD Engineering Services Director
Carol Atwood, DSRSD Administrative Services Director
Daniel Repp, City of Pleasanton Managing Director of Utilities and Environmental Services
Anthony Smith, City of Livermore Water Resources Division Manager
Virgil Sevilla, DSRSD Wastewater Treatment Plant Operations Superintendent
Maurice Atendido, DSRSD Principal Electrical Engineer
Shawn Quinlan, DSRSD Mechanical Maintenance Superintendent
Diane Griffin, DSRSD Operations Compliance Manager
Clint Byrum, DSRSD Water/Wastewater Systems Operations & Maintenance Superintendent
Kristy Fournier, DSRSD Laboratory & Environmental Compliance Manager

Attachment 1

FY 2023-2024 LAVWMA OPERATION & MAINTENANCE BUDGET

SUMMARY:	Total	Pumping	Pipeline
DSRSD Labor	$1,138,299	$623,060	$515,239
Materials & Supplies	$129,250	$63,500	$65,750
Laboratory Analysis	$45,600	$9,000	$36,600
Contractual Services	$162,350	$52,700	$109,650
Utilities	$1,887,650	$1,879,100	$8,550
Non-Routine	$8,800	$8,800	$0
Total	**$3,371,949**	**$2,636,160**	**$735,789**

Assumptions:	Total	Pumping	Pipeline
Days of operation =	365		
Annual acre feet =	10,355		
Annual million gallons =	**3,374**		
Unit Costs:			
Cost/AF =	$326	$255	$71
Cost/MG=	**$999**	$781	$218

Detailed Breakdown:

	Hours	Rate	Labor	Pumping	Pipeline
LABOR					
DIVISION 51 - Field Operations					
Water-Wastewater Sys OP II	43	$184	$7,930	$0	$7,930
Supervisor	7	$298	$2,146	$0	$2,146
Subtotal	50		$10,076	$0	$10,076
DIVISION 52 - WWTP					
Process Lead Operator	289	$237	$68,475	$41,085	$27,390
Senior WWTP Operator	1,013	$215	$217,891	$130,735	$87,156
Operator I/II	1,431	$184	$262,674	$183,872	$78,802
Operator in Training	0	$154	$0	$0	$0
Supervisor	99	$355	$35,168	$17,584	$17,584
Subtotal	2,832		$584,208	$373,276	$210,933
DIVISION 53 - Mechanical					
Senior Mechanic-Crane Cert	54	$242	$13,041	$6,521	$6,521
Senior Mechanic	72	$236	$17,001	$1,700	$15,301
Mechanic II	882	$215	$189,304	$45,433	$143,871
Maintenance Worker II	54	$185	$10,008	$5,004	$5,004
Supervisor	45	$281	$12,660	$6,330	$6,330
Subtotal	1,107		$242,014	$64,988	$177,027
DIVISION 54 - Electrical					
Senior Instrument/Controls Tech	45	$233	$10,481	$5,240	$5,240
Instrument/Controls Tech	504	$212	$106,712	$53,356	$53,356
Senior Electrician	45	$216	$9,715	$9,715	$0
Electrician II	441	$196	$86,551	$86,551	$0
Supervisor	45	$328	$14,738	$7,369	$7,369
Subtotal	1,080		$228,196	$162,231	$65,965
DIVISION 56 - Safety					
Safety Officer	54	$129	$6,940	$3,470	$3,470
Subtotal	54		$6,940	$3,470	$3,470
DIVISION 40 - Engineering					
Senior Civil Engineer-SME	36	$286	$10,308	$4,123	$6,185
Associate Engineer	108	$266	$28,741	$11,496	$17,245
Construction Inspector I	72	$175	$12,596	$0	$12,596
Engineering Technician II	36	$181	$6,530	$0	$6,530
GIS Analyst II	36	$241	$8,691	$3,476	$5,214
Subtotal	288		$66,865	$19,096	$47,769
Total Labor	**5,412**		**$1,138,299**	**$623,060**	**$515,239**
FTE's	**2.6**				
Current FYE23	5,800		$1,161,350	$715,745	$294,747
Change from FYE23	-6.69%		-1.98%	-12.95%	74.81%

Note: FYE 2024 (July 2023 - June 2024) estimated labor rates are from DSRSD calendar year 2023 billing rates factored with the 4% CPI increase effective January 1, 2023.

Attachment 1

FY 2023-2024 LAVWMA OPERATION & MAINTENANCE BUDGET

	Expense	Pumping	Pipeline
MATERIALS & SUPPLIES			
Operations Supplies			
Calcium Thiosulfate dechlorinating agent	$16,800	$8,400	$8,400
Sampler	$11,000	$0	$11,000
Supplies/Expenses (misc)	$3,200	$2,600	$600
Subtotal	$31,000	$11,000	$20,000
Mechanical Supplies			
Materials and supplies	$12,450	$8,400	$4,050
Pump & equip repair parts	$6,300	$6,300	$0
Air relief valve parts	$5,250	$0	$5,250
Oils, lubricants	$3,000	$3,000	$0
Subtotal	$27,000	$17,700	$9,300
Electrical Supplies			
Instrument parts	$3,850	$1,950	$1,900
Analyzer parts	$14,450	$10,500	$3,950
MCC equipment/parts	$9,250	$3,850	$5,400
SCADA parts	$6,550	$5,050	$1,500
Miscellaneous parts and repairs	$4,650	$1,950	$2,700
Remote monitoring annual service for Rectifier Panels - one time purchase of new equipment	$21,000	$0	$21,000
RTD Controller - spare	$5,500	$5,500	$0
Replacement site lighting fisctures and spare stock	$6,000	$6,000	$0
Subtotal	$71,250	$34,800	$36,450
Total Materials & Supplies	**$129,250**	**$63,500**	**$65,750**
LABORATORY ANALYSIS			
Compliance Testing	$11,300	$9,000	$2,300
Operational Support Testing	$4,900	$0	$4,900
Special Sampling	$29,400	$0	$29,400
Total Laboratory Analysis	**$45,600**	**$9,000**	**$36,600**
CONTRACTUAL SERVICES			
Sub-surface and Surface Repairs	$35,750	$0	$35,750
Street Sweeping	$5,000	$5,000	$0
Cathodic Protection Survey and Repairs	$45,000	$0	$45,000
Underground Service Alert	$4,750	$0	$4,750
SCADA software maintenance contract and support services	$13,900	$11,850	$2,050
Remote monitoring annual service for PS and Rectifier Panels	$1,850	$0	$1,850
HVAC Maintenance/Repairs	$800	$800	$0
Termite/Pest Control	$950	$950	$0
Landscape/weed maintenance	$10,850	$8,150	$2,700
Janitorial Service	$10,000	$10,000	$0
SmartMeter Covers	$1,800	$0	$1,800
Fire Extinguisher Maint	$200	$200	$0
Professional Services, misc	$31,500	$15,750	$15,750
Total Contractual Services	**$162,350**	**$52,700**	**$109,650**
UTILITIES			
Electricity (PG&E)	$1,884,500	$1,876,400	$8,100
Water & Sewer (Pleasanton)	$1,050	$1,050	$0
Water (EBMUD)	$1,200	$1,200	$0
Telephone/communications/T-1	$900	$450	$450
Total Utilities	**$1,887,650**	**$1,879,100**	**$8,550**
NON-ROUTINE			
Basin level instrument upgrades (in-house project)	$6,600	$6,600	$0
SLSS thio tank level instrument upgrad (in-house project)	$2,200	$2,200	$0
Total Non-Routine	**$8,800**	**$8,800**	**$0**
TOTAL O&M BUDGET (LABOR, MATERIALS & SERVICES)	**$3,371,949**	**$2,636,160**	**$735,789**
Current FYE 2023 Budget	$2,861,289	$2,211,234	$650,055
Change in Proposed FYE24	17.85%	19.22%	13.19%
	$510,660	$424,926	$85,734

Attachment 2

HISTORY OF BUDGETS COMPARED TO ACTUAL EXPENSES

	FY 20-21		FY 21-22		CURRENT FY 2022-23			FY 2023-24	FY 2024-25
	Approved Budget	Actual Expenses	Approved Budget	Actual Expenses	Approved Budget	YTD (7 mos) Expenses	Projected Expenses	Proposed Budget	Proposed Budget
Labor									
Staff	$1,010,492	$873,095	$968,151	$685,374	$1,161,350	$599,727	$1,028,103	$1,138,299	$1,183,484
Subtotal	**$1,010,492**	**$873,095**	**$968,151**	**$685,374**	**$1,161,350**	**$599,727**	**$1,028,103**	**$1,138,299**	**$1,183,484**
Materials & Supplies									
Operations supplies	$12,200	$14,593	$13,000	$429	$13,650	$151	$259	$31,000	$19,100
Mechanical supplies	$25,000	$50,963	$25,000	$11,095	$27,300	$7,617	$13,058	$27,000	$31,900
Electrical supplies	$25,500	$32,623	$59,400	$42,594	$48,447	$9,634	$16,515	$71,250	$38,900
Subtotal	**$62,700**	**$98,179**	**$97,400**	**$54,117**	**$89,397**	**$17,402**	**$29,831**	**$129,250**	**$89,900**
Laboratory Analysis									
Compliance	$11,300	$10,359	$10,000	$10,098	$10,500	$6,360	$10,903	$11,300	$11,300
Operational	$4,000	$4,332	$4,000	$4,392	$4,200	$2,744	$4,704	$4,900	$4,900
Special Sampling	$15,000	$16,850	$22,000	$16,525	$23,100	$9,880	$16,937	$29,400	$29,400
Subtotal	**$30,300**	**$31,541**	**$36,000**	**$31,015**	**$37,800**	**$18,984**	**$32,544**	**$45,600**	**$45,600**
Contractual Services									
Sub-surface Repairs	$5,000	$8,376	$15,000	$0	$15,750	$0	$0	$35,750	$15,750
Street Sweeping	$5,000	$5,287	$5,000	$3,900	$5,250	$0	$0	$5,000	$5,000
Cathodic Protection Survey and Repairs	$30,000	$0	$30,000	$0	$31,500	$0	$0	$45,000	$47,250
Underground Service Alert	$3,800	$3,517	$4,500	$896	$4,725	$508	$508	$4,750	$4,800
SCADA software maintenance contract	$10,000	$4,673	$17,000	$5,029	$17,850	$5,052	$17,850	$13,900	$14,600
Rectifier monitoring 5-yr contract (FY22, $40k)	$0	$0	$5,000	$0	$5,250	$0	$5,250	$1,850	$1,950
Med voltage switchgear 3-yr PM (FY22, $18k))	$0	$0	$20,000	$0	$0	$0	$0	$0	$0
HVAC Maintenance/Repairs	$750	$0	$750	$0	$788	$0	$788	$800	$800
Termite/Pest Control	$900	$0	$900	$0	$945	$0	$945	$950	$950
Landscape/weed maintenance	$8,000	$11,364	$10,000	$13,723	$10,500	$980	$10,500	$10,850	$11,200
Janitorial Services	$3,000	$8,940	$9,500	$5,075	$9,975	$2,639	$9,975	$10,000	$10,000
Smartmeter Covers								$1,800	$1,800
Fire Extinguisher Maint	$200	$0	$200	$0	$210	$0	$210	$200	$200
Postage/Shipping Charges	$250	$0	$0	$10	$0	$0	$0	$0	$0
Professional Services, misc	$10,000	$10,563	$30,000	$9,192	$31,500	$57,504	$57,504	$31,500	$31,500
Subtotal	**$76,900**	**$52,719**	**$147,850**	**$37,825**	**$134,243**	**$66,683**	**$103,530**	**$162,350**	**$145,800**
Utilities									
Electricity (PG&E)	$1,421,000	$1,336,512	$1,301,600	$1,364,836	$1,430,205	$912,507	$1,462,413	$1,884,500	$2,062,300
Water & Sewer (Pleasanton)	$1,000	$639	$900	$1,341	$945	$1,387	$2,378	$1,050	$1,100
Water (EBMUD)	$880	$1,223	$1,000	$1,244	$1,050	$860	$1,474	$1,200	$1,300
Telephone/communications/T-1	$4,500	$5,687	$6,000	$0	$6,300	$0	$0	$900	$1,000
WW Treatment (DSRSD)	$2,500	$0	$0	$0	$0	$0	$0	$0	$0
Subtotal	**$1,429,180**	**$1,344,060**	**$1,309,500**	**$1,367,421**	**$1,438,500**	**$914,754**	**$1,466,265**	**$1,887,650**	**$2,065,700**
Non-Routine									
Basin level instrument upgrades (in-house project)	$500	$0	$0		$0	$0	$0	$6,600	$0
Junction Structure Analyzer piping rehab (in-house	$8,000	$0	$0		$0	$0	$0	$0	$0
SLSS thio tank level instrument upgrad (in-house pr	$0	$0	$0		$0	$0	$0	$2,200	$0
Subtotal	**$8,500**	**$0**	**$0**		**$0**	**$0**	**$0**	**$8,800**	**$0**
Grand Total	**$2,618,072**	**$2,399,593**	**$2,558,901**	**$2,175,752**	**$2,861,290**	**$1,617,549**	**$2,660,273**	**$3,371,949**	**$3,530,484**
Export Flow (AF)	10,815	10,321	10,305	10,301	10,901	5,101	10,378	10,355	10,301
Export Flow (MG)	3,524	3,363	3,358	3,356	3,552	1,662	3,382	3,374	3,356
Cost ($/AF)	$242	$232	$248	$211	$262	$317	$256	$326	$343
Cost ($/MG)	$743	$713	$762	$648	$806	$973	$787	$999	$1,052

Attachment 3

LAVWMA LABOR HOURS ESTIMATES

USED FOR BOTH FYE 2024 & FYE 2025

PERSONNEL

Division 51 - Field Operations (Distribution)		**50**
Water-Wastewater Sys OP IV	TV inspection of export pipe, 1/2 day/year, 2 Operators	0
Water-Wastewater Sys OP IV	Traffic control for vault entries, misc	0
Water-Wastewater Sys OP IV	Vacuum cleaning assistance at basins	0
Water/Wastewater Operator II	General tasks	43
Supervisor	Inspections/coordination/direction of staff and related activities	7
Division 52 - Treatment Plant Operations		**2832**
Process Lead Operator	Pump efficiency testing and SOP's, planning, inspections	289
Senior WWTP Operator	Spot checks on off-shifts and weekends + hours for storms	1013
WWTP Operator I/II	General tasks	1431
WWTP Operator in Training	General tasks	0
Superintendent	Inspections/direction of staff and activities, 2 hours/week	99
Division 53 - Mechanical Maintenance		**1107**
Senior Mechanic-Crane Cert	Regular maintenance, 4 hrs/day, 2 days per week	54
Senior Mechanic (USA)	USA Marking, when other trained employees are not available	72
Mechanic II	PM's and misc repairs, as needed	882
Mechanic II (USA)	USA Marking, 1 hour per day, 5 days per week	0
Mechanic II Crane Cert (USA)	Confined space entries, 4 weeks/year, 2 employees	0
Maintenance Worker	General tasks	54
Supervisor	Inspections/direction of staff and activities, 1 hour/week	45
Division 54 - Electrical & Instrumentation Maintenance		**1080**
Senior Instrument/Controls Tech	Instrument replacement/SCADA troubleshooting	45
Instrument/Controls Tech	Instrument checks/calibration	504
Senior Electrician	Switchgear & electrical inspections and repair	45
Electrician	Switchgear & electrical inspection/repairs	441
Supervisor / Senior Electrical Eng -	Inspections/direction of staff and activities	45
Division 56 - Safety		**54**
Safety Officer	Special safety inspections of LAVWMA facilities	54
Division 40 - Engineering		**288**
Senior Civil Engineer-SME	Assistance with engineering, maintenance, and bidding issues	36
Associate Engineer	Assistance with engineering, maintenance, and bidding issues	108
Construction Inspector I	Project construction inspection	72
Engineering Tech II	Plan checks on LAVWMA lines	36
GIS Analyst II	Plan checks on LAVWMA lines	36
	TOTAL BILLABLE LABOR HOURS	**5412**
	FTE's	**2.60**

Attachment 4

FY 2024-2025 LAVWMA OPERATION & MAINTENANCE BUDGET

	SUMMARY:	Total	Pumping	Pipeline
	DSRSD Labor	$1,183,484	$720,292	$463,192
0.60861969	**Materials & Supplies**	$89,900	$55,450	$34,450
	Laboratory Analysis	$45,600	$9,000	$36,600
	Contractual Services	$145,800	$53,300	$92,500
	Utilities	$2,065,700	$2,056,300	$9,400
	Non-Routine	$0	$0	$0
	Total	**$3,530,484**	**$2,894,342**	**$636,143**

Assumptions:	**Total**	**Pumping**	**Pipeline**
Days of operation =	365		
Annual acre feet =	10,301		
Annual million gallons =	**3,356**		
Unit Costs:			
Cost/AF =	$343	$281	$62
Cost/MG=	**$1,052**	$862	$190

Detailed Breakdown:

	Hours	Rate	Labor	Pumping	Pipeline
LABOR					
DIVISION 51 - Field Operations					
Water-Wastewater Sys OP II	43	$191	$8,247	$0	$8,247
Supervisor	7	$310	$2,232	$0	$2,232
Subtotal	50		$10,479	$0	$10,479
DIVISION 52 - WWTP					
Process Lead Operator	289	$247	$71,214	$71,214	$0
Senior WWTP Operator	1,013	$224	$226,607	$226,607	$0
Operator I/II	1,431	$191	$273,181	$136,591	$136,591
Operator in Training	0	$161	$0	$0	$0
Supervisor	99	$369	$36,574	$18,287	$18,287
Subtotal	2,832		$607,577	$452,699	$154,878
DIVISION 53 - Mechanical					
Senior Mechanic-Crane Cert	54	$251	$13,563	$6,781	$6,781
Senior Mechanic	72	$246	$17,681	$1,768	$15,913
Mechanic II	882	$223	$196,876	$47,250	$149,626
Maintenance Worker II	54	$193	$10,409	$5,204	$5,204
Supervisor	45	$293	$13,166	$6,583	$6,583
Subtotal	1,107		$251,695	$67,587	$184,108
DIVISION 54 - Electrical					
Senior Instrument/Controls Tech	45	$242	$10,900	$5,450	$5,450
Instrument/Controls Tech	504	$220	$110,980	$55,490	$55,490
Senior Electrician	45	$225	$10,104	$10,104	$0
Electrician II	441	$204	$90,013	$90,013	$0
Supervisor	45	$341	$15,327	$7,664	$7,664
Subtotal	1,080		$237,324	$168,720	$68,604
DIVISION 56 - Safety					
Safety Officer	54	$134	$7,218	$3,609	$3,609
Subtotal	54		$7,218	$3,609	$3,609
DIVISION 40 - Engineering					
Senior Civil Engineer-SME	36	$298	$10,720	$4,288	$6,432
Associate Engineer	108	$277	$29,891	$11,956	$17,934
Construction Inspector I	72	$182	$13,100	$5,240	$7,860
Engineering Technician II	36	$189	$6,791	$2,716	$4,075
GIS Analyst II	36	$241	$8,691	$3,476	$5,214
Subtotal	288		$69,192	$27,677	$41,515
Total Labor	**5,412**		**$1,183,484**	**$720,292**	**$463,192**
FTE's	**2.6**				

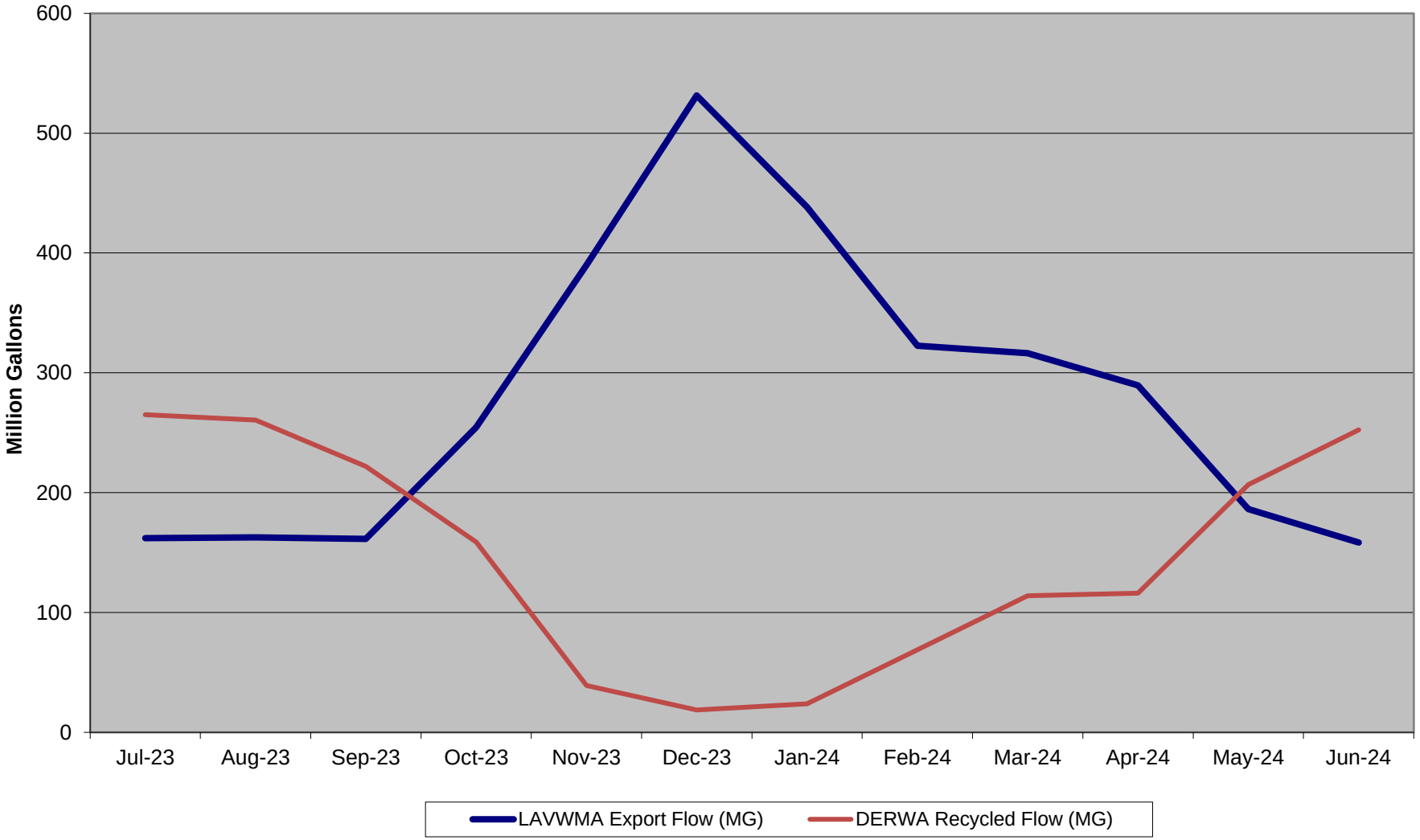
Note: FYE 2025 estimated labor rates includes 4% CPI increase from estimated FYE 2024 billing rates.

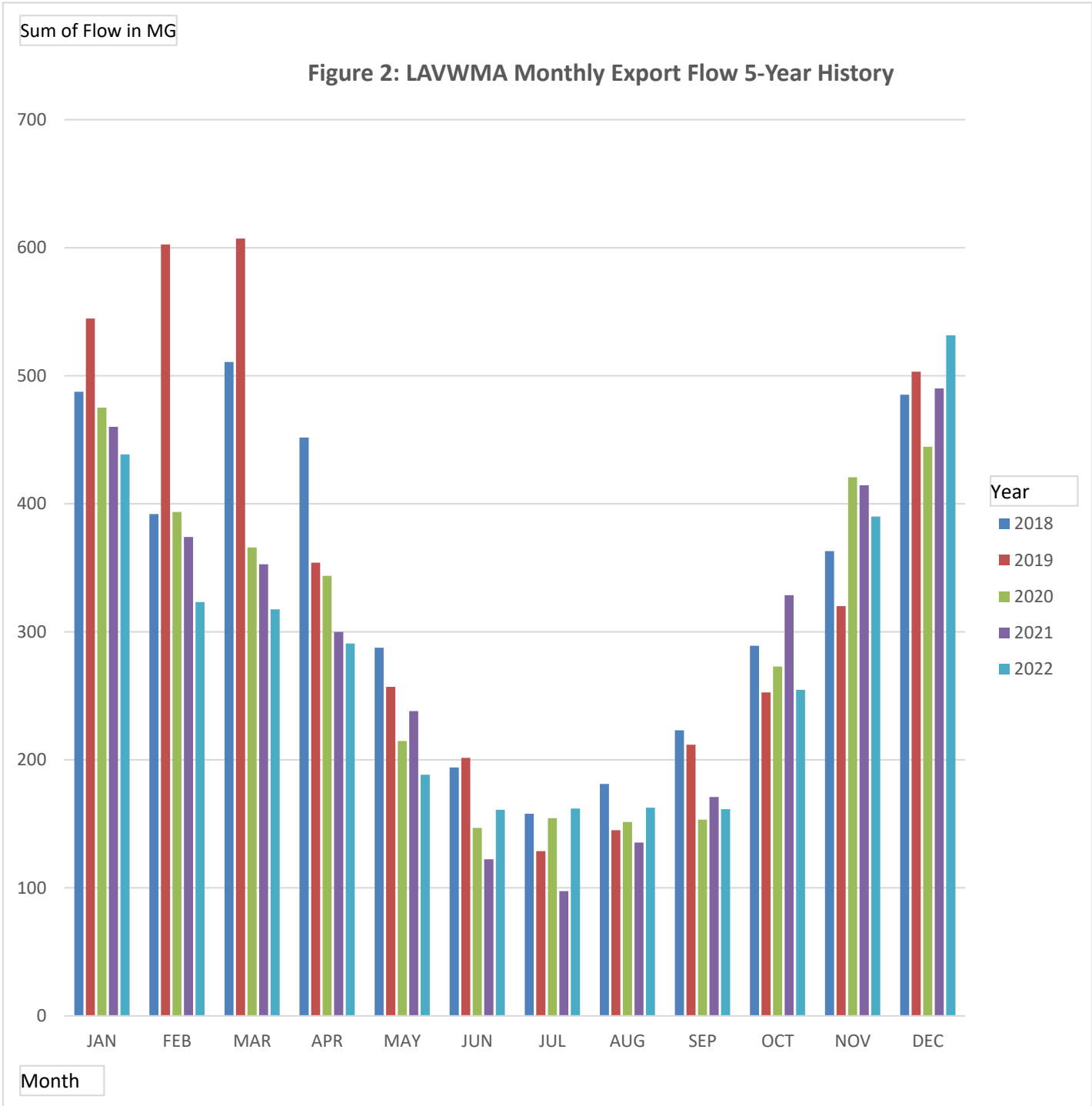
Attachment 4

FY 2024-2025 LAVWMA OPERATION & MAINTENANCE BUDGET

	Expense	Pumping	Pipeline
MATERIALS & SUPPLIES			
Operations Supplies			
Calcium Thiosulfate dechlorinating agent	$17,700	$8,850	$8,850
Sampler	$0	$0	$0
Supplies/Expenses (misc)	$1,400	$700	$700
Subtotal	$19,100	$9,550	$9,550
Mechanical Supplies			
Materials and supplies	$12,450	$8,400	$4,050
Pump & equip repair parts	$11,200	$11,200	$0
Air relief valve parts	$5,250	$0	$5,250
Oils, lubricants	$3,000	$3,000	$0
Subtotal	$31,900	$22,600	$9,300
Electrical Supplies			
Instrument parts	$3,900	$1,950	$1,950
Analyzer parts	$14,450	$10,500	$3,950
MCC equipment/parts	$9,300	$3,850	$5,450
SCADA parts	$6,550	$5,050	$1,500
Miscellaneous parts and repairs	$4,700	$1,950	$2,750
Remote monitoring annual service for Rectifier Panels - one time purchase of new equipment	$0	$0	$0
RTD Controller - spare	$0	$0	$0
Replacement site lighting fisctures and spare stock	$0	$0	$0
Subtotal	$38,900	$23,300	$15,600
Total Materials & Supplies	**$89,900**	**$55,450**	**$34,450**
LABORATORY ANALYSIS			
Compliance Testing	$11,300	$9,000	$2,300
Operational Support Testing	$4,900	$0	$4,900
Special Sampling	$29,400	$0	$29,400
Total Laboratory Analysis	**$45,600**	**$9,000**	**$36,600**
CONTRACTUAL SERVICES			
Sub-surface and Surface Repairs	$15,750	$0	$15,750
Street Sweeping	$5,000	$5,000	$0
Cathodic Protection Survey and Repairs	$47,250	$0	$47,250
Underground Service Alert	$4,800	$0	$4,800
SCADA software maintenance contract and support services	$14,600	$12,450	$2,150
Remote monitoring annual service for PS and Rectifier Panels	$1,950	$0	$1,950
HVAC Maintenance/Repairs	$800	$550	$250
Termite/Pest Control	$950	$950	$0
Landscape/weed maintenance	$11,200	$8,400	$2,800
Smartmeter Covers	$1,800	$0	$1,800
Janitorial Service	$10,000	$10,000	$0
Fire Extinguisher Maint	$200	$200	$0
Professional Services, misc	$31,500	$15,750	$15,750
Total Contractual Services	**$145,800**	**$53,300**	**$92,500**
UTILITIES			
Electricity (PG&E)	$2,062,300	$2,053,400	$8,900
Water & Sewer (Pleasanton)	$1,100	$1,100	$0
Water (EBMUD)	$1,300	$1,300	$0
Telephone/communications/T-1	$1,000	$500	$500
Total Utilities	**$2,065,700**	**$2,056,300**	**$9,400**
NON-ROUTINE			
Pump Efficiency Testing	$0	$0	$0
Corrosion Studies/Inspections	$0	$0	$0
Med voltage switchgear 3-yr PM (FY22, $18k))	$0	$0	$0
Time delay switches for electrical switchgear	$0	$0	$0
LAVWMA PS PLC Upgrade (capital project)	$0	$0	$0
Total Non-Routine	**$0**	**$0**	**$0**
TOTAL O&M BUDGET (LABOR, MATERIALS & SERVICES)	**$3,530,484**	**$2,894,342**	**$636,143**

Figure 1
FY 2023-2024 Flow Projections




Sum of Flow in MG
Figure 2: LAVWMA Monthly Export Flow 5-Year History
700
600
500
400
300
200
100
0
JAN
FEB
MAR
APR
MAY
JUN
JUL
AUG
SEP
OCT
NOV
DEC
Month
Year
2018
2019
2020
2021
2022

Agenda Explanation
Livermore-Amador Valley
Water Management Agency
Board of Directors
May 17, 2023

ITEM NO. 14 UPDATE AND RESPONSE TO VARIOUS LEGAL AND LEGISLATIVE ISSUES

Action Requested
None at this time.

Summary
Attached for the Board's information is **Attachment No. 14.a**, California Association of Sanitation Agencies (CASA) State Legislative Update, April 2023. It includes information on State Legislative activities being tracked by CASA. **Attachment No. 14.b** is CASA's Active Positions, dated April 19, 2023. The list includes descriptions of all the bills being tracked by CASA on behalf of its members. **Attachment No. 14.c** is the CASA Connects dated April 11, 2023. Also attached for the Board's information is **Attachment No. 14.d**, CASA Regulatory Update for May 2023. The CASA documents include updates on a number of regulatory and legislative issues. The updates cover topics related to Water Quality, Biosolids, Air, PFAS, nutrients, and others. The State Water Board's Sanitary Sewer Overflow (SSO) Waste Discharge Requirements has kept wastewater agencies busy complying with the requirements to update their documentation as to how they will manage their collection systems to reduce overflows to waters of the State.

Another problematic issue for public agencies is the new California Air Resources Board adoption of the Advanced Clean Fleet (ACF) regulations. This will require phasing out of gasoline powered fleet vehicles and replacing them with electric vehicles. This will also apply to large collection system vehicles that are used for routine maintenance, but also must respond to emergency situations. Having so many public agencies in the market for electric vehicles will drive up prices. Agencies are going to have to install power charging stations at their facilities to charge their vehicles. This will also be an expensive proposition with so many agencies seeking the same equipment and materials at the same time. Another issue is that many of these vehicles do not even exist yet. The General Manager recently spoke with representatives for manufacturers of large sewer maintenance vehicles, like Vactor. They were asked what they were going to do and they had no real answers. Apparently, there is a prototype being manufactured in Switzerland. They would not speculate on costs. Current vehicles can cost $300,00 - $500,000. In addition, there is no guarantee that the utilities, including PG&E, will be able to supply enough power for all the new power charging facilities. PG&E is already having problems with power reliability and these new requirements will not help that situation.

Attachment No. 14.e is BACWA Bulletin for May 2023. BACWA's Key Regulatory Issues Summary, dated May 2, 2023 is included as **Attachment No. 14.f**, which highlights regulatory issues for Bay Area wastewater treatment plants. The BACWA documents are similar to the CASA documents and cover many of the same topics, but with a focus on the Bay Area.

PFAS continues to be a hot topic on a state and national basis. Last month the EBDA General Manager prepared a PFAS Update report for her Board, which is included as **Attachment No. 14.g**. The report provides a great summary of PFAS issues on a State and federal level.

Previously, the Board received information on the storms in January and February. Fortunately, the LAVWMA agencies managed the storms quite well with a minimum of disruption. Other agencies were not so lucky. **Attachment No. 14.h** is part of the Regional Board's Executive Officer's Report for March 2, 2023 that discusses numerous impacts from the New Year's storms in the Bay Ares.

Recommendation
There is no recommendation at this time.

Attachments
14.a CASA State Legislative Update, April 2023
14.b CASA Connects for January 5, 2023
14.c CASA Connects dated April 11, 2023
14.d CASA Regulatory Update for May 2023
14.e BACWA Bulletin for May 2023
14.f BACWA Key Regulatory Issues Summary, dated May 2, 2023
14.g EBDA PFAS Update, dated April 18, 2023
14.h Regional Board Executive Officer Report, dated March 2, 2023

April 2023

Policy Committee Deadlines Looming

- Friday, April 28th is the final deadline for all bills with a fiscal impact to be heard in first house policy committees. Bills with no fiscal impact must be heard by May 5th. Accordingly, hundreds of bills have been heard in the past several weeks, and many more will be deliberated next week leading up to the deadline. Bills that fail to meet the policy committee deadlines will not be eligible to move forward this year and will become two-year bills. The final deadline for bills to be heard in the Appropriations Committee is Friday May 19th, and beyond that all bills must be passed off the Floors of their House of Origin and over to the second house by Friday June 2nd.

PFAS Bills

- CASA has been actively engaged on PFAS legislation highlighting the importance of source reduction as the highest priority strategy for managing PFAS in the environment. We have been advocating for the passage of our co-sponsored bill, AB 727 (Weber), which aims to ban PFAS in cleaning products and was passed through the Assembly Environmental Safety and Toxic Materials Committee on April 18th. In addition, CASA has given support to

AB 246 (Papan), another bill that seeks to ban PFAS in feminine care products. A third bill, AB 347 (Ting) recently emerged and would give additional enforcement authority over the various PFAS statutes to the Department of Toxic Substances Control (DTSC).

Sanitary District Act

- CASA's sponsored bill, AB 759 (Grayson) passed through the Assembly Local Government Committee on March 29th after several days of negotiations on amendments with the Committee staff and was passed with a unanimous vote of 8-0. This bill will modernize accounting procedures required by the Sanitary Districts Act and the Committee amendments include safeguards to ensure transparency in accounting practices. The bill is now awaiting passage on the Assembly Floor.

Underground Excavations

- CASA adopted an oppose, unless amended position on SB 778 (Ochoa Bogh) and actively lobbied members of the Senate Business and Professions Committee for amendments to restore the longstanding exemption for marking non-pressurized sewer lines in the Dig Alert program. We are pleased to report that the author accepted amendments that address our concerns and we have now moved to a neutral position on this bill.

If you have any questions or would like more information, please reach out to Jessica Gauger and Spencer Saks.

A full list of CASA's Bill Positions can be found linked here, and a summary of active positions can be found below. CASA has submitted letters on several bills which are linked in the table below.

Bill Number	Subject	Position (Letter)	CASA Subgroup
AB 234 (Bauer-Kahan)	Microparticles	Support in Concept	SLC
AB 246 (Papan)	PFAS in feminine hygiene products	Support	SLC

AB 305 (Villapudua)	Resources Bond	Support, if amended	SLC
AB 324 (Pacheco)	Hydrogen procurement	Support	ACE
AB 334 (Rubio)	Public contracts	Support	SLC
AB 480 (Ting)	Surplus Land Act	Oppose, unless amended	SLC
AB 557 (Hart)	Brown Act	Support Coalition	Attorneys, SLC
AB 678 (Alvarez)	Biomethane	Support	ACE
AB 727 (Weber)	PFAS in cleaning products	Co-Sponsor	SLC
AB 735 (Berman)	Workforce development	Support	SLC
AB 759 (Grayson)	Sanitary Districts Act cleanup	Sponsor	SLC
AB 805 (Arambula)	Sewer consolidations	Work with Author	SLC
AB 1033 (Ting)	ADU sale/conveyance	Oppose, unless amended	SLC
AB 1196 (Villapudua)	Resources Bond	Support, if amended	SLC
AB 1216 (Muratsuchi)	POTW fence line monitoring	Oppose	ACE, SLC
AB 1337 (Wicks)	Water shortage enforcement	Oppose	SLC
AB 1567 (Garcia)	Resources Bond	Support, if amended	SLC
AB 1594 (Garcia)	Clean Fleets	Support in Concept	ACE
AB 1628 (McKinnor)	Microfiber Filtration	Support, if amended	ACE, SLC
AB 1660 (Ta)	PFAS in cosmetics exemption	Oppose	SLC
SB 366 (Caballero)	Modernize CA Water Plan	Support, if amended	SLC
SB 411 (Portantino)	Brown Act	Support Coalition	Attorneys, SLC
SB 638 (Eggman)	Resources Bond	Support, if amended	SLC
SB 745 (Cortese)	Drought Resistant Buildings	Oppose, unless amended	SLC

SB 747 (Caballero)	Surplus Land Act	Support, if amended	SLC
SB 867 (Allen)	Resources Bond	Support, if amended	SLC

Please see below a brief overview of the upcoming hearings and bills of interest to CASA. A more detailed and full list of upcoming hearings for CASA tracked bills can be found linked here.

Thursday, April 20, 2023
ASM - THIRD READING FILE

- Bill(s) of Interest:
  - AB 759 (Grayson) – Co-Sponsor

Thursday, April 20, 2023
SEN - THIRD READING FILE

- Bill(s) of Interest:
  - SB 706 (Caballero) – Watch

Monday, April 24, 2023
ASM - WATER, PARKS AND WILDLIFE

- Bill(s) of Interest:
  - AB 305 (Villapudua) – Support, if amended
  - AB 1072 (Wicks) – Watch Spot

Monday, April 24, 2023
SEN - APPROPRIATIONS

- Bill(s) of Interest:
  - SB 613 (Seyarto) – Watch

Monday, April 24, 2023
ASM – NATURAL RESOURCES

- Bill(s) of Interest:
  - AB 241 (Reyes) – Watch
  - AB 324 (Pacheco) – Support
  - AB 678 (Alvarez) – Support
  - AB 1216 (Muratsuchi) – Oppose
  - AB 1550 (Bennett) – Watch
  - AB 1711 (Carrillo) – Watch

Monday, April 24, 2023
ASM - TRANSPORTATION

- Bill(s) of Interest:
  - AB 1012 (Quirk-Silva) – Watch
  - AB 1594 (Garcia) – Support

Monday, April 24, 2023
SEN - ENERGY, UTILITIES AND COMMUNICATIONS

- Bill(s) of Interest:
  - SB 488 (Alvarado-Gil) – Watch
  - SB 781 (Stern) – Watch

Tuesday, April 25, 2023
SEN - NATURAL RESOURCES AND WATER

- Bill(s) of Interest:
  - SB 366 (Caballero) – Support
  - SB 781 (Stern) – Watch

Tuesday, April 25, 2023
ASM - PRIVACY AND CONSUMER PROTECTION

- Bill(s) of Interest:
  - AB 1637 (Irwin) – Watch

Wednesday, April 26, 2023
ASM - APPROPRIATIONS

- Bill(s) of Interest:
  - AB 281 (Grayson) – Watch
  - AB 573 (Garcia) – Watch
  - AB 671 (Ward) – Watch
  - AB 673 (Bennett) – Watch
  - AB 1272 (Wood) – Watch
  - AB 1705 (McKinnor) – Watch

Wednesday, April 26, 2023
ASM - HOUSING AND COMMUNITY DEVELOPMENT

- Bill(s) of Interest:
  - AB 480 (Ting) – Oppose, unless amended

Wednesday, April 26, 2023
SEN - ENVIRONMENTAL QUALITY

- Bill(s) of Interest:
  - SB 663 (Archuleta) – Watch

Wednesday, April 26, 2023
SEN - GOVERNANCE AND FINANCE

- Bill(s) of Interest:
  - SB 778 (Ochoa Bogh) – Watch

- SB 867 (Allen) – Support, if amended

Wednesday, April 26, 2023
ASM - LOCAL GOVERNMENT

- Bill(s) of Interest:
  - AB 400 (Rubio) – Watch
  - AB 557 (Hart) – Support Coalition
  - AB 1033 (Ting) – Oppose, unless amended

Wednesday, April 26, 2023
ASM - LABOR AND EMPLOYMENT

- Bill(s) of Interest:
  - AB 735 (Berman) – Support

The California State Senate and State Assembly Legislative Calendars are linked as well.

The Governor's 2023-24 Budget Proposal was released on January 10, 2023. As expected, the Administration is responding to a significant $22.5 billion shortfall, stemming from significant inflation, and declining personal income tax and capital gains tax revenues. There is minimal new funding for climate programs outside of what was previously appropriated in the last few years and most items in the Climate Change Budget are funding delays or reductions. The summary of the Budget Proposal and a summary of the Climate Change budget items have been released as well.

Legislative Budget Subcommittees have been meeting to deliberate the proposed Budget items and make changes or augmentations in their respective policy areas. As of now all items have been held open for further conversations. Next month the Governor will release his May Revision (May Revise) of the Budget. Typically, the May Revise gives a more accurate projection of revenues based on April tax receipts. However, this year the personal income tax deadline has been extended to October, and how that variable will impact revenues remains unknown. The non-partisan Legislative Analyst's office is projecting revenues to be lower than initially projected and has issued several recommendations that the Legislature be prepared to make further Budget reductions this year than what was proposed by the Governor in January. The Legislature has to pass a final Budget to the Governor by the June 10 Constitutional deadline.

CASA has prepared a list of key items in the Climate Change Summary, which can be found here. Next month we will provide an overview of the Governor's May Revise and the deliberations in the Legislative Budget Subcommittees as the final Budget is negotiated.

For more information, please reach out to the CASA Staff:

Jessica Gauger, jgauger@casaweb.org
Spencer Saks, ssaks@casaweb.org

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AB 43 **(Holden D) Greenhouse gas emissions: building materials: embodied carbon trading system.**
Current Text: Amended: 3/30/2023 html pdf
Current Analysis: 04/18/2023 Assembly Appropriations *(text 3/30/2023)*
Introduced: 12/5/2022
Last Amend: 3/30/2023
Status: 4/3/2023-Re-referred to Com. on APPR.
Location: 3/27/2023-A. APPR.

Desk	Policy	**Fiscal**	Floor	Desk	Policy	Fiscal	Floor	Conf. Conc.	Enrolled	Vetoed	Chaptered
1st House				2nd House							

Calendar: 4/19/2023 9 a.m. - 1021 O Street, Room 1100 ASSEMBLY APPROPRIATIONS, HOLDEN, CHRIS, Chair
Summary: Current law requires the State Air Resources Board, by July 1, 2023, to develop a comprehensive strategy for the state's cement sector to achieve net-zero emissions of greenhouse gases associated with cement used within the state as soon as possible, but no later than December 31, 2045. Current law, effective January 1, 2023, requires the state board, by July 1, 2025, to develop, in consultation with specified stakeholders, a framework for measuring and then reducing the average carbon intensity of the materials used in the construction of new buildings, including those for residential uses. This bill would require the state board to establish an embodied carbon trading system, as defined, and would make it applicable to building materials providers, developers, architectural and engineering firms, and construction companies. The bill would require the state board to integrate the embodied carbon trading system into the framework on or before December 31, 2026, and to implement the system on and after January 1, 2029. The bill would require the state board to adopt rules and regulations for the credit allocation method, the anticipated carbon price in the scheme, and trading periods, and would make a violation of a rule, regulation, order, emission limitation, emissions reduction measure, or other measure adopted by the state board pursuant to these and other requirements of the bill an emission of an air contaminant for the purposes of the penalty provisions of the California Global Warming Solutions Act of 2006.

Position	Assigned	Subject	Group
Watch	Jessica		ACE, SLC

AB 234 **(Bauer-Kahan D) Microparticles.**
Current Text: Amended: 3/30/2023 html pdf
Introduced: 1/12/2023
Last Amend: 3/30/2023
Status: 4/3/2023-Re-referred to Com. on NAT. RES.
Location: 3/23/2023-A. NAT. RES.

Desk	**Policy**	Fiscal	Floor	Desk	Policy	Fiscal	Floor	Conf. Conc.	Enrolled	Vetoed	Chaptered
1st House				2nd House							

Summary: Would enact the Synthetic Polymer Microparticles in Cosmetic and Cleaning Products Prevention Act. The bill would prohibit a synthetic polymer microparticle from being placed on the market in this state as a substance on its own or, where the synthetic polymer microparticles are present to confer a sought-after characteristic, in mixtures in a concentration equal to or greater than 0.01% by weight. The restriction would apply on and after specified dates depending on the type of product, as described, except as otherwise provided. The bill would specify the screening tests and pass criteria to be used for purposes of determining compliance with this prohibition. The bill would make a person who violates this prohibition liable for a civil penalty not to exceed $5,000 per day for each violation, in addition to any other penalty established by law. The bill would authorize the civil penalty to be assessed and recovered in a civil action brought by a city attorney, a district attorney, a county counsel, or the Attorney General in any court of competent jurisdiction.

Position	Assigned	Subject	Group
Support in concept	Jessica		SLC

AB 241 **(Reyes D) Clean Transportation Program: Air Quality Improvement Program: funding.**
Current Text: Amended: 3/23/2023 html pdf
Current Analysis: 04/14/2023 Assembly Transportation *(text 3/23/2023)*
Introduced: 1/13/2023
Last Amend: 3/23/2023
Status: 4/18/2023-From committee: Do pass and re-refer to Com. on NAT. RES. (Ayes 11. Noes 3.) (April 17). Re-referred to Com. on NAT. RES.
Location: 4/18/2023-A. NAT. RES.

Desk	**Policy**	Fiscal	Floor	Desk	Policy	Fiscal	Floor	Conf.	Enrolled	Vetoed	Chaptered
1st House				2nd House				Conc.			

Calendar: 4/24/2023 2:30 p.m. - State Capitol, Room 447 ASSEMBLY NATURAL RESOURCES, RIVAS, LUZ, Chair

Summary: Current law establishes the Clean Transportation Program, administered by the State Energy Resources Conservation and Development Commission, to provide funding to certain entities to develop and deploy innovative technologies that transform California's fuel and vehicle types to help attain the state's climate change policies. Current law requires the commission to give preference to those projects that maximize the goals of the program based on specified criteria and to fund specified eligible projects, including, among others, alternative and renewable fuel projects to develop and improve alternative and renewable low-carbon fuels. Current law creates the Alternative and Renewable Fuel and Vehicle Technology Fund, to be administered by the commission, and requires the moneys in the fund, upon appropriation by the Legislature, to be expended by the commission to implement the program. This bill would expand the purpose of the program to include developing and deploying innovative technologies that transform California's fuel and vehicle types to help reduce criteria air pollutants and air toxics. The bill would no longer require the commission to provide certain project preferences.

Position	Assigned	Subject	Group
Watch	Jessica		ACE

AB 246 **(Papan D) Product safety: menstrual products: perfluoroalkyl and polyfluoroalkyl substances.**

Current Text: Amended: 4/12/2023 html pdf

Current Analysis: 04/16/2023 Assembly Environmental Safety And Toxic Materials *(text 4/12/2023)*

Introduced: 1/17/2023

Last Amend: 4/12/2023

Status: 4/17/2023-Re-referred to Com. on E.S. & T.M.

Location: 3/9/2023-A. E.S. & T.M.

Desk	**Policy**	Fiscal	Floor	Desk	Policy	Fiscal	Floor	Conf.	Enrolled	Vetoed	Chaptered
1st House				2nd House				Conc.			

Summary: Would, beginning January 1, 2025, prohibit any person from manufacturing, distributing, selling, or offering for sale in the state any menstrual products that contain regulated PFAS, and requires a manufacturer to use the least toxic alternative when removing regulated PFAS in menstrual products to comply with these provisions. The bill would require a manufacturer of a menstrual product to provide persons that offer the product for sale or distribution in the state with a certificate of compliance stating that the menstrual product is in compliance with these provisions and does not contain any regulated PFAS.

Position	Assigned	Subject	Group
Support	Jessica		SLC

AB 277 **(Rodriguez D) Extreme Weather Forecast and Threat Intelligence Integration Center.**

Current Text: Amended: 4/7/2023 html pdf

Current Analysis: 04/14/2023 Assembly Water, Parks And Wildlife *(text 4/7/2023)*

Introduced: 1/23/2023

Last Amend: 4/7/2023

Status: 4/10/2023-Re-referred to Com. on W., P., & W.

Location: 3/13/2023-A. W.,P. & W.

Desk	**Policy**	Fiscal	Floor	Desk	Policy	Fiscal	Floor	Conf.	Enrolled	Vetoed	Chaptered
1st House				2nd House				Conc.			

Summary: Current law establishes the Atmospheric Rivers: Research, Mitigation, and Climate Forecasting Program within the Department of Water Resources to, upon appropriation of special fund moneys, research climate forecasting and the causes and impacts that climate change has on atmospheric rivers, to operate reservoirs in a manner that improves flood protection in the state, and to reoperate flood control and water storage facilities to capture water generated by atmospheric rivers. This bill would establish the State-Federal Flood Operations Center within the Department of Water Resources and would authorize the department to administer the center in the department's divisions, offices, or programs. The bill would provide that the purpose of the center is to function as the focal point for gathering, analyzing, and disseminating flood and water-related information to stakeholders and would authorize the center to take specified actions for that purpose, including to function during emergency situations to enable the department to centrally coordinate statewide emergency responses. This bill would require the center and the Office of Emergency Services, in consultation with cooperating agencies, to develop and submit a report to the Legislature, as specified, on or before June 1, 2025, that outlines necessary technological advancements for agile forecasting and identifies regions that are and were underserved, gaps in data that would improve flood response, and strategies for improving communication and emergency response to identified regions. This bill would, upon appropriation by the Legislature, authorize the Office of Emergency

Services to expend federal emergency preparedness and hazard mitigation funds to fill any technological, operational, or preparedness gap identified in the report.

Position	Assigned	Subject	Group
Watch	Spencer		SLC

AB 281 **(Grayson D) Planning and zoning: housing: postentitlement phase permits.**

Current Text: Amended: 4/13/2023 html pdf

Current Analysis: 04/10/2023 Assembly Housing And Community Development *(text 3/9/2023)*

Introduced: 1/24/2023

Last Amend: 4/13/2023

Status: 4/17/2023-Re-referred to Com. on APPR.

Location: 4/12/2023-A. APPR.

Desk	Policy	**Fiscal**	Floor	Desk	Policy	Fiscal	Floor	Conf. Conc.	Enrolled	Vetoed	Chaptered
1st House				2nd House							

Calendar: 4/26/2023 9 a.m. - 1021 O Street, Room 1100 ASSEMBLY APPROPRIATIONS, HOLDEN, CHRIS, Chair

Summary: Would require a special district that receives an application from a housing development project for service from a special district or an application from a housing development project for a postentitlement phase permit, as specified, to provide written notice to the applicant of next steps in the review process, including, but not limited to, any additional information that may be required to begin to review the application for service or approval. The bill would require the special district to provide this notice within 30 business days of receipt of the application for a housing development with 25 units or fewer, and within 60 business days for a housing development with 26 units or more. The bill would define various terms for these purposes. By imposing additional duties on special districts, the bill would impose a state-mandated local program.

Position	Assigned	Subject	Group
Watch	Jessica		SLC

AB 305 **(Villapudua D) California Flood Protection Bond Act of 2024.**

Current Text: Amended: 4/17/2023 html pdf

Introduced: 1/26/2023

Last Amend: 4/17/2023

Status: 4/18/2023-Re-referred to Com. on W., P., & W.

Location: 3/23/2023-A. W.,P. & W.

Desk	**Policy**	Fiscal	Floor	Desk	Policy	Fiscal	Floor	Conf. Conc.	Enrolled	Vetoed	Chaptered
1st House				2nd House							

Calendar: 4/24/2023 9:30 a.m. - State Capitol, Room 444 ASSEMBLY WATER, PARKS AND WILDLIFE, BAUER-KAHAN, REBECCA, Chair

Summary: Would enact the California Flood Protection Bond Act of 2024 which, if approved by the voters, would authorize the issuance of bonds in the amount of $4,500,000,000 pursuant to the State General Obligation Bond Law for flood protection projects, as specified. The bill would provide for the submission of these provisions to the voters at the November 5, 2024, statewide general election.

Position	Assigned	Subject	Group
Support, if amended	Spencer	Bond	SLC

AB 324 **(Pacheco D) Gas corporations: renewable gas procurement.**

Current Text: Amended: 3/27/2023 html pdf

Current Analysis: 03/21/2023 Assembly Committee On Utilities And Energy *(text 1/30/2023)*

Introduced: 1/30/2023

Last Amend: 3/27/2023

Status: 3/28/2023-Re-referred to Com. on NAT. RES.

Location: 3/22/2023-A. NAT. RES.

Desk	**Policy**	Fiscal	Floor	Desk	Policy	Fiscal	Floor	Conf. Conc.	Enrolled	Vetoed	Chaptered
1st House				2nd House							

Calendar: 4/24/2023 2:30 p.m. - State Capitol, Room 447 ASSEMBLY NATURAL RESOURCES, RIVAS, LUZ, Chair

Summary: Would require the Public Utilities Commission to open a new proceeding, or a new phase of an existing proceeding, to consider establishing procurement goals for renewable hydrogen, as defined, and consider requiring each gas corporation and core transport agent to annually procure a proportionate share of renewable hydrogen to meet those goals. The bill would require the commission to make specified findings before establishing renewable hydrogen procurement targets or goals.

Position	Assigned	Subject	Group
Support	Jessica		ACE

AB 334 **(Rubio, Blanca D) Public contracts: conflicts of interest.**
Current Text: Introduced: 1/30/2023 html pdf
Current Analysis: 04/17/2023 Assembly Elections *(text 1/30/2023)*
Introduced: 1/30/2023
Status: 3/16/2023-In committee: Set, first hearing. Hearing canceled at the request of author.
Location: 2/9/2023-A. ELECTIONS

Desk	**Policy**	Fiscal	Floor	Desk	Policy	Fiscal	Floor	Conf.	Enrolled	Vetoed	Chaptered
1st House				2nd House				Conc.			

Calendar: 4/19/2023 9 a.m. - State Capitol, Room 444 ASSEMBLY ELECTIONS, BRYAN, ISAAC, Chair
Summary: Current law prohibits members of the Legislature and state, county, district, judicial district, and city officers or employees from being financially interested in any contract made by them in their official capacity, or by any body or board of which they are members. Current law authorizes the Fair Political Practices Commission to commence an administrative or civil action against persons who violate this prohibition, as prescribed, and includes provisions for the collection of penalties after the time for judicial review of a commission order or decision has lapsed, or if all means of judicial review of the order or decision have been exhausted. Current law identifies certain remote interests in contracts that are not subject to this prohibition and other situations in which an official is not deemed to be financially interested in a contract. This bill would establish that an independent contractor, who meets specified requirements, is not an officer for purposes of being subject to the prohibition on being financially interested in a contract.

Position	Assigned	Subject	Group
Support	Jessica		SLC

AB 347 **(Ting D) Household product safety: toxic substances: testing and enforcement.**
Current Text: Amended: 4/11/2023 html pdf
Current Analysis: 04/14/2023 Assembly Environmental Safety And Toxic Materials *(text 4/11/2023)*
Introduced: 1/31/2023
Last Amend: 4/11/2023
Status: 4/12/2023-Re-referred to Com. on E.S. & T.M.
Location: 2/9/2023-A. E.S. & T.M.

Desk	**Policy**	Fiscal	Floor	Desk	Policy	Fiscal	Floor	Conf.	Enrolled	Vetoed	Chaptered
1st House				2nd House				Conc.			

Summary: The Cleaning Product Right to Know Act of 2017 requires a manufacturer of a designated product, as defined, that is sold in the state to disclose on the product label and on its internet website information related to certain chemicals contained in the designated product, as specified. The act prohibits the sale in the state of a designated product that does not satisfy these requirements. This bill would require the Department of Toxic Substances Control to enforce and ensure compliance with the act. The bill would require the department to select and test samples from the designated products regulated under the act to test for compliance.

Position	Assigned	Subject	Group
Refer to SLC	Jessica		SLC

AB 400 **(Rubio, Blanca D) Local agency design-build projects: authorization.**
Current Text: Introduced: 2/2/2023 html pdf
Introduced: 2/2/2023
Status: 2/9/2023-Referred to Com. on L. GOV.
Location: 2/9/2023-A. L. GOV.

Desk	**Policy**	Fiscal	Floor	Desk	Policy	Fiscal	Floor	Conf.	Enrolled	Vetoed	Chaptered
1st House				2nd House				Conc.			

Calendar: 4/26/2023 10 a.m. - State Capitol, Room 127 ASSEMBLY LOCAL GOVERNMENT, AGUIAR-CURRY, CECILIA, Chair
Summary: Current law authorizes local agencies, as defined, to use the design-build procurement process for specified types of projects, as prescribed. Current law, among other requirements for the design-build procurement process, requires specified information submitted by a design-build entity to be certified under penalty of perjury. These provisions authorizing the use of the design-build procurement process are repealed on January 1, 2025.This bill would remove the January 1, 2025, repeal date, thereby making these provisions operative indefinitely.

Position	Assigned	Subject	Group
Watch	Jessica		SLC

AB 453 **(Cervantes D) District-based elections.**

Current Text: Introduced: 2/6/2023 html pdf
Current Analysis: 04/18/2023 Assembly Appropriations *(text 2/6/2023)*
Introduced: 2/6/2023
Status: 3/29/2023-From committee: Do pass and re-refer to Com. on APPR. with recommendation: To Consent Calendar. (Ayes 8. Noes 0.) (March 29). Re-referred to Com. on APPR.
Location: 3/29/2023-A. APPR.

Desk	Policy	**Fiscal**	Floor	Desk	Policy	Fiscal	Floor	Conf. Conc.	Enrolled	Vetoed	Chaptered
1st House				2nd House							

Calendar: 4/19/2023 9 a.m. - 1021 O Street, Room 1100 ASSEMBLY APPROPRIATIONS, HOLDEN, CHRIS, Chair
Summary: Current law requires a political subdivision that changes from an at-large method of election to a district-based election, or that establishes district-based elections, to perform various actions before a public hearing at which it votes upon an ordinance establishing district-based elections. Among these actions, the political subdivision must hold at least 2 public hearings before drawing a draft map of the proposed boundaries and at least 2 public hearings after all maps are drawn, and invite the public's input at these hearings. This bill would require a public hearing concerning district-based elections, as described above, that is consolidated with a meeting of the governing body of the political subdivision that includes other substantive agenda items, to begin at a fixed time regardless of its order on the agenda. The bill would require the governing body to provide notice of the hearing to the public.

Position	Assigned	Subject	Group
Watch	Spencer		SLC

AB 460 **(Bauer-Kahan D) State Water Resources Control Board: water rights and usage: interim relief: procedures.**
Current Text: Amended: 3/30/2023 html pdf
Current Analysis: 04/14/2023 Assembly Water, Parks And Wildlife *(text 3/30/2023)*
Introduced: 2/6/2023
Last Amend: 3/30/2023
Status: 4/3/2023-Re-referred to Com. on W., P., & W.
Location: 2/17/2023-A. W.,P. & W.

Desk	**Policy**	Fiscal	Floor	Desk	Policy	Fiscal	Floor	Conf. Conc.	Enrolled	Vetoed	Chaptered
1st House				2nd House							

Summary: Current law authorizes the State Water Resources Control Board to investigate all streams, stream systems, lakes, or other bodies of water, take testimony relating to the rights to water or the use of water, and ascertain whether water filed upon or attempted to be appropriated is appropriated under the laws of the state. Current law requires the board to take appropriate actions to prevent waste or the unreasonable use of water. This bill would authorize the board, in conducting specified investigations or proceedings to inspect the property or facilities of a person or entity, as specified. The bill would authorize the board, if consent is denied for an inspection, to obtain an inspection warrant, as specified, or in the event of an emergency affecting public health and safety, to conduct an inspection without consent or a warrant.

Position	Assigned	Subject	Group
Work w/Author	Jessica		SLC

AB 480 **(Ting D) Surplus land.**
Current Text: Amended: 4/5/2023 html pdf
Current Analysis: 03/28/2023 Assembly Local Government *(text 3/14/2023)*
Introduced: 2/7/2023
Last Amend: 4/5/2023
Status: 4/6/2023-Re-referred to Com. on H. & C.D.
Location: 3/29/2023-A. H. & C.D.

Desk	**Policy**	Fiscal	Floor	Desk	Policy	Fiscal	Floor	Conf. Conc.	Enrolled	Vetoed	Chaptered
1st House				2nd House							

Calendar: 4/26/2023 9 a.m. - State Capitol, Room 126 ASSEMBLY HOUSING AND COMMUNITY DEVELOPMENT, WICKS, BUFFY, Chair
Summary: Current law prescribes requirements for the disposal of surplus land by a local agency, as defined, and requires, except as provided, a local agency disposing of surplus land to comply with certain notice requirements before disposing of the land or participating in negotiations to dispose of the land with a prospective transferee, particularly that the local agency send a notice of availability to specified entities that have notified the Department of Housing and Community Development of their interest in surplus land, as specified. Under current law, if the local agency receives a notice of interest, the local agency is required to engage in good faith negotiations with the entity desiring to purchase or lease the surplus land. Current law requires a local agency to take formal action in a regular public meeting to declare land is surplus and is not necessary for the agency's use and to

declare land as either "surplus land" or "exempt surplus land," as supported by written findings, before a local agency may take any action to dispose of it consistent with an agency's policies or procedures. This bill would recast that provision and would exempt a local agency, in specified instances, from making a declaration at a public meeting for land that is "exempt surplus land" if the local agency identifies the land in a notice that is published and available for public comment at least 30 days before the exemption takes effect.

Position	Assigned	Subject	Group
Oppose, unless amended	Spencer		SLC

AB 516 **(Ramos D) Mitigation Fee Act: fees for improvements: expenditure reports and audits.**

Current Text: Amended: 4/5/2023 html pdf

Current Analysis: 04/18/2023 Assembly Local Government *(text 4/5/2023)*

Introduced: 2/7/2023

Last Amend: 4/5/2023

Status: 4/6/2023-Re-referred to Com. on L. GOV.

Location: 2/17/2023-A. L. GOV.

Desk	**Policy**	Fiscal	Floor	Desk	Policy	Fiscal	Floor	Conf. Conc.	Enrolled	Vetoed	Chaptered
1st House				2nd House							

Calendar: 4/19/2023 1:30 p.m. - State Capitol, Room 447 ASSEMBLY LOCAL GOVERNMENT, AGUIAR-CURRY, CECILIA, Chair

Summary: The Mitigation Fee Act imposes certain requirements on a local agency that imposes a fee as a condition of approval of a development project that is imposed to provide for an improvement to be constructed to serve the development project, or a fee for public improvements, as specified. In this regard, the Mitigation Fee Act requires the local agency to deposit the fee in a separate capital facilities account or fund, and to make certain information about the account or fund public annually, as specified. The Mitigation Fee Act requires that information to include an identification of an approximate date by which the construction of the public improvement will commence if the local agency determines that sufficient funds have been collected to complete financing on an incomplete public improvement, as specified. The Mitigation Fee Act also requires that information to include the amount of refunds made to the owners of the lots or units of the development project, as specified. This bill would require the report to include an identification of each public improvement identified in a previous report, whether construction began on the approximate date noted in the previous report, the reason for the delay, if any, and a revised approximate date that the local agency will commence construction, if applicable.

Position	Assigned	Subject	Group
Watch	Spencer		SLC

AB 530 **(Boerner Horvath D) Methane emissions.**

Current Text: Amended: 3/9/2023 html pdf

Introduced: 2/8/2023

Last Amend: 3/9/2023

Status: 3/13/2023-Re-referred to Com. on NAT. RES.

Location: 3/9/2023-A. NAT. RES.

Desk	**Policy**	Fiscal	Floor	Desk	Policy	Fiscal	Floor	Conf. Conc.	Enrolled	Vetoed	Chaptered
1st House				2nd House							

Summary: Current law requires the State Air Resources Board, no later than January 1, 2018, to approve and begin implementing the comprehensive short-lived climate pollutant strategy to achieve a reduction in the statewide emissions of methane by 40%, hydrofluorocarbon gases by 40%, and anthropogenic black carbon by 50% below 2013 levels by 2030. Current law requires the state board to undertake certain tasks, including consulting with federal and state agencies, independent scientific experts, and any other appropriate entities to gather or acquire the necessary information to carry out a life-cycle greenhouse gas emission analysis of natural gas produced and imported into the state using the best available and cost-effective scientific and technical methods, and to update relevant policies and programs to incorporate this information and other specified information. This bill would additionally require the state board to consult with the aforementioned stakeholders to gather and acquire the necessary information to estimate, using the best available and cost-effective scientific and technical methods, methane emissions from landfills in the state.

Position	Assigned	Subject	Group
Watch	Jessica		ACE, SLC

AB 557 **(Hart D) Open meetings: local agencies: teleconferences.**

Current Text: Introduced: 2/8/2023 html pdf

Introduced: 2/8/2023

Status: 2/17/2023-Referred to Com. on L. GOV.

Location: 2/17/2023-A. L. GOV.

Desk	**Policy**	Fiscal	Floor	Desk	Policy	Fiscal	Floor	Conf.	Enrolled	Vetoed	Chaptered
1st House				2nd House				Conc.			

Calendar: 4/26/2023 10 a.m. - State Capitol, Room 127 ASSEMBLY LOCAL GOVERNMENT, AGUIAR-CURRY, CECILIA, Chair

Summary: Current law, until January 1, 2024, authorizes a local agency to use teleconferencing without complying with specified teleconferencing requirements in specified circumstances when a declared state of emergency is in effect, or in other situations related to public health, as specified. If there is a continuing state of emergency, or if state or local officials have imposed or recommended measures to promote social distancing, existing law requires a legislative body to make specified findings not later than 30 days after the first teleconferenced meeting, and to make those findings every 30 days thereafter, in order to continue to meet under these abbreviated teleconferencing procedures. Current law requires a legislative body that holds a teleconferenced meeting under these abbreviated teleconferencing procedures to give notice of the meeting and post agendas, as described, to allow members of the public to access the meeting and address the legislative body, to give notice of the means by which members of the public may access the meeting and offer public comment, including an opportunity for all persons to attend via a call-in option or an internet-based service option. Current law prohibits a legislative body that holds a teleconferenced meeting under these abbreviated teleconferencing procedures from requiring public comments to be submitted in advance of the meeting and would specify that the legislative body must provide an opportunity for the public to address the legislative body and offer comment in real time. This bill would extend the above-described abbreviated teleconferencing provisions when a declared state of emergency is in effect, or in other situations related to public health, as specified, indefinitely.

Position	Assigned	Subject	Group
Support Coalition	Spencer		Attorneys, SLC

AB 573 **(Garcia D) Organic waste: meeting recovered organic waste product procurement targets.**

Current Text: Amended: 3/16/2023 html pdf

Current Analysis: 04/07/2023 Assembly Natural Resources *(text 3/16/2023)*

Introduced: 2/8/2023

Last Amend: 3/16/2023

Status: 4/11/2023-From committee: Do pass and re-refer to Com. on APPR. with recommendation: To Consent Calendar. (Ayes 11. Noes 0.) (April 10). Re-referred to Com. on APPR.

Location: 4/10/2023-A. APPR.

Desk	Policy	**Fiscal**	Floor	Desk	Policy	Fiscal	Floor	Conf.	Enrolled	Vetoed	Chaptered
1st House				2nd House				Conc.			

Calendar: 4/26/2023 9 a.m. - 1021 O Street, Room 1100 ASSEMBLY APPROPRIATIONS, HOLDEN, CHRIS, Chair

Summary: Current law requires, no later than January 1, 2018, the State Air Resources Board to approve and begin implementing a comprehensive short-lived climate pollutant strategy to achieve a certain reduction in statewide emissions of methane, including a goal of a 75% reduction in the level of the statewide disposal of organic waste from the 2014 level by 2025. Current law requires the Department of Resources Recycling and Recovery, in consultation with the state board, to adopt regulations to achieve these organic waste reduction goals, that provide for, among other things, the calculation by the department of recovered organic waste product procurement targets for each local jurisdiction, and that may include penalties to be imposed by the department for noncompliance. This bill would require the department's regulations to allow a local jurisdiction, until December 1, 2039, in procuring recovered organic waste products to meet the target procurement requirements, to use California-derived recovered organic waste that the local jurisdiction sends for processing at a facility or operation outside of the state that meets certain conditions, as provided.

Position	Assigned	Subject	Group
Watch	Jessica		ACE

AB 584 **(Hart D) California Coastal Act of 1976: coastal development: emergency waiver.**

Current Text: Amended: 3/6/2023 html pdf

Current Analysis: 03/20/2023 Assembly Appropriations *(text 3/6/2023)*

Introduced: 2/9/2023

Last Amend: 3/6/2023

Status: 3/30/2023-Read third time. Passed. Ordered to the Senate. In Senate. Read first time. To Com. on RLS. for assignment.

Location: 3/30/2023-S. RLS.

Desk	Policy	Fiscal	Floor	Desk	**Policy**	Fiscal	Floor	Conf.	Enrolled	Vetoed	Chaptered
1st House				2nd House				Conc.			

Summary: The California Coastal Act of 1976 requires the issuance of a coastal development permit if

the proposed development is in conformity with the certified local coastal program. The act provides for the certification of local coastal programs by the California Coastal Commission. The act authorizes the requirement of having to obtain a permit to be waived when immediate action by a person or public agency performing a public service is required to protect life and public property from imminent danger, or to restore, repair, or maintain public works, utilities, or services destroyed, damaged, or interrupted by natural disaster, serious accident, or in other cases of emergency, as specified. The act provides that this waiver provision does not authorize the permanent erection of structures valued at more than $25,000. This bill would increase the above-described amount to $125,000, adjusted annually for inflation pursuant to the consumer price index.

Position	Assigned	Subject	Group
Approve	Spencer		SLC

AB 587 **(Rivas, Robert D) Public works: payroll records.**

Current Text: Introduced: 2/9/2023 html pdf

Current Analysis: 04/18/2023 Assembly Appropriations *(text 2/9/2023)*

Introduced: 2/9/2023

Status: 3/22/2023-From committee: Do pass and re-refer to Com. on APPR. (Ayes 7. Noes 0.) (March 22). Re-referred to Com. on APPR.

Location: 3/22/2023-A. APPR.

Desk	Policy	**Fiscal**	Floor	Desk	Policy	Fiscal	Floor	Conf.	Enrolled	Vetoed	Chaptered
1st House				2nd House				Conc.			

Calendar: 4/19/2023 9 a.m. - 1021 O Street, Room 1100 ASSEMBLY APPROPRIATIONS, HOLDEN, CHRIS, Chair

Summary: Current law requires the Labor Commissioner to investigate allegations that a contractor or subcontractor violated the law regulating public works projects, including the payment of prevailing wages. Current law requires each contractor and subcontractor on a public works project to keep accurate payroll records, showing the name, address, social security number, work classification, straight time and overtime hours worked each day and week, and the actual per diem wages paid to each journeyman, apprentice, worker, or other employee employed by the contractor or subcontractor in connection with the public work. Current law requires any copy of records made available for inspection as copies and furnished upon request to the public or any public agency to be marked or obliterated to prevent disclosure of an individual's name, address, and social security number but specifies that any copy of records made available to a Taft-Hartley trust fund for the purposes of allocating contributions to participants be marked or obliterated only to prevent disclosure of an individual's full social security number, as specified. Current law makes any contractor, subcontractor, agent, or representative who neglects to comply with the requirements to keep accurate payroll records guilty of a misdemeanor. This bill would require any copy of records made available for inspection by, or furnished to, a multiemployer Taft-Hartley trust fund or joint labor-management committee be provided on forms provided by the Division of Labor Standards Enforcement or contain the same information as those forms.

Position	Assigned	Subject	Group
Watch Spot Bill	Jessica		SLC

AB 671 **(Ward D) CalHome Program: accessory dwelling units.**

Current Text: Amended: 4/13/2023 html pdf

Current Analysis: 04/10/2023 Assembly Housing And Community Development *(text 3/9/2023)*

Introduced: 2/13/2023

Last Amend: 4/13/2023

Status: 4/17/2023-Re-referred to Com. on APPR.

Location: 4/12/2023-A. APPR.

Desk	Policy	**Fiscal**	Floor	Desk	Policy	Fiscal	Floor	Conf.	Enrolled	Vetoed	Chaptered
1st House				2nd House				Conc.			

Calendar: 4/26/2023 9 a.m. - 1021 O Street, Room 1100 ASSEMBLY APPROPRIATIONS, HOLDEN, CHRIS, Chair

Summary: Would specify that neither the CalHome Program nor any administrative rule or guideline implementing the CalHome Program precludes a community land trust, as defined, from using CalHome Program funds to purchase residential real property in fee simple, to construct accessory dwelling units or junior accessory dwelling units on the property, and to separately lease each dwelling unit on the property to separate households or separately convey the dwelling units on separate parcels created pursuant to specified law.

Position	Assigned	Subject	Group
Watch	Jessica		SLC

AB 673 **(Bennett D) Hydrogen-fueling stations: preference.**

Current Text: Amended: 3/13/2023 html pdf

Current Analysis: 04/07/2023 Assembly Natural Resources *(text 3/13/2023)*
Introduced: 2/13/2023
Last Amend: 3/13/2023
Status: 4/11/2023-From committee: Do pass and re-refer to Com. on APPR. (Ayes 10. Noes 0.) (April 10). Re-referred to Com. on APPR.
Location: 4/10/2023-A. APPR.

Desk	Policy	**Fiscal**	Floor	Desk	Policy	Fiscal	Floor	Conf. Conc.	Enrolled	Vetoed	Chaptered
1st House				2nd House							

Calendar: 4/26/2023 9 a.m. - 1021 O Street, Room 1100 ASSEMBLY APPROPRIATIONS, HOLDEN, CHRIS, Chair
Summary: Would, except for the Clean Transportation Program and moneys allocated from the Alternative and Renewable Fuel and Vehicle Technology Fund, require the State Energy Resources Conservation Development Commission, when considering providing funding for projects for the construction and operation of hydrogen-fueling medium- and heavy-duty stations, to evaluate whether the project needs to also include access for light-duty vehicles. In this evaluation, the bill would require the commission to consider safety, regional light-duty vehicle hydrogen fueling needs, and the station fueling capacity.

Position	Assigned	Subject	Group
Watch	Spencer		ACE

AB 676 **(Bennett D) Water: general state policy.**
Current Text: Amended: 3/13/2023 html pdf
Introduced: 2/13/2023
Last Amend: 3/13/2023
Status: 3/27/2023-In committee: Hearing postponed by committee.
Location: 2/23/2023-A. W.,P. & W.

Desk	**Policy**	Fiscal	Floor	Desk	Policy	Fiscal	Floor	Conf. Conc.	Enrolled	Vetoed	Chaptered
1st House				2nd House							

Calendar: 5/2/2023 9 a.m. - State Capitol, Room 444 ASSEMBLY WATER, PARKS AND WILDLIFE, BAUER-KAHAN, REBECCA, Chair
Summary: Current law establishes various state water policies, including the policy that the use of water for domestic purposes is the highest use of water and that the next highest use is for irrigation. This bill would provide specific examples of the use of water for domestic purposes, including, but not limited to, sustenance of human beings and household conveniences. The bill would provide that all water rights remain subject to specified laws.

Position	Assigned	Subject	Group
Watch Spot Bill	Jessica		SLC

AB 678 **(Alvarez D) Biomethane procurement targets or goals: core transport agents.**
Current Text: Amended: 3/27/2023 html pdf
Current Analysis: 03/21/2023 Assembly Committee On Utilities And Energy *(text 2/13/2023)*
Introduced: 2/13/2023
Last Amend: 3/27/2023
Status: 3/28/2023-Re-referred to Com. on NAT. RES.
Location: 3/22/2023-A. NAT. RES.

Desk	**Policy**	Fiscal	Floor	Desk	Policy	Fiscal	Floor	Conf. Conc.	Enrolled	Vetoed	Chaptered
1st House				2nd House							

Calendar: 4/24/2023 2:30 p.m. - State Capitol, Room 447 ASSEMBLY NATURAL RESOURCES, RIVAS, LUZ, Chair
Summary: Current law requires the Public Utilities Commission to require each gas corporation to provide bundled basic gas service to all core customers in its service territory unless the customer chooses or contracts to have natural gas purchased and supplied by another entity. Current law requires the commission, in consultation with the State Air Resources Board, to consider adopting specific biomethane procurement targets or goals for each gas corporation, as specified. This bill would revise that latter requirement to instead require the commission to consider adopting specific biomethane procurement targets or goals for each gas corporation and core transport agent, as defined.

Position	Assigned	Subject	Group
Support	Jessica		ACE

AB 727 **(Weber D) Product safety: cleaning products: perfluoroalkyl and polyfluoroalkyl substances.**
Current Text: Amended: 4/13/2023 html pdf
Current Analysis: 04/16/2023 Assembly Environmental Safety And Toxic Materials *(text 4/13/2023)*
Introduced: 2/13/2023

Last Amend: 4/13/2023
Status: 4/17/2023-Re-referred to Com. on E.S. & T.M.
Location: 3/2/2023-A. E.S. & T.M.

Desk	**Policy**	Fiscal	Floor	Desk	Policy	Fiscal	Floor	Conf. Conc.	Enrolled	Vetoed	Chaptered
1st House				2nd House							

Summary: Would, beginning January 1, 2025, prohibit a person from manufacturing, selling, delivering, distributing, holding, or offering for sale in the state a cleaning product that contains regulated PFAS, as specified. The bill would make a violation of these provisions punishable by a civil penalty not to exceed $5,000 for a first violation and not to exceed $10,000 for each subsequent violation, upon an action brought by the Attorney General, a city attorney, a county counsel, or a district attorney.

Position	Assigned	Subject	Group
Support/Co-Sponsor	Jessica		SLC

AB 735 **(Berman D) Workforce development: utility careers.**
Current Text: Introduced: 2/13/2023 html pdf
Introduced: 2/13/2023
Status: 2/23/2023-Referred to Com. on L. & E.
Location: 2/23/2023-A. L. & E.

Desk	**Policy**	Fiscal	Floor	Desk	Policy	Fiscal	Floor	Conf. Conc.	Enrolled	Vetoed	Chaptered
1st House				2nd House							

Calendar: 4/26/2023 1:30 p.m. - State Capitol, Room 447 ASSEMBLY LABOR AND EMPLOYMENT, KALRA, ASH, Chair
Summary: Would establish the High Road Utility Careers (HRUC) program, to be administered by the California Workforce Development Board, to connect existing resources with individuals interested in careers in the utility sector and ensure a continued reliable workforce for California utilities. The bill would require the board to administer the HRUC program through partnerships with statewide water, wastewater, and energy utility associations and to coordinate the program with existing and future programs and initiatives administered by the board, including high road training partnerships, in order to align interested individuals with available resources. The bill would require the HRUC program, upon appropriation by the Legislature, to dedicate funding and resources toward accomplishing specified goals, including connecting workers to high-quality jobs or entry-level work with defined routes to advancement and increasing skills and opportunities while expanding pipelines for low-income populations.

Position	Assigned	Subject	Group
Support	Spencer		SLC

AB 753 **(Papan D) State Water Pollution Cleanup and Abatement Account: annual proceed transfers.**
Current Text: Introduced: 2/13/2023 html pdf
Current Analysis: 04/18/2023 Assembly Appropriations *(text 2/13/2023)*
Introduced: 2/13/2023
Status: 3/29/2023-Coauthors revised. From committee: Do pass and re-refer to Com. on APPR. (Ayes 9. Noes 0.) (March 28). Re-referred to Com. on APPR.
Location: 3/29/2023-A. APPR.

Desk	Policy	**Fiscal**	Floor	Desk	Policy	Fiscal	Floor	Conf. Conc.	Enrolled	Vetoed	Chaptered
1st House				2nd House							

Calendar: 4/19/2023 9 a.m. - 1021 O Street, Room 1100 ASSEMBLY APPROPRIATIONS, HOLDEN, CHRIS, Chair
Summary: Would create within the Waste Discharge Permit Fund the Waterway Recovery Account, and would annually transfer from the State Water Pollution Cleanup and Abatement Account, excluding administratively imposed civil liabilities that include a supplemental environmental project in connection with a monetary penalty, 50% of the annual proceeds to the Waterway Recovery Account. The bill would provide that moneys in the account created by the bill are continuously appropriated to the state board without regard to fiscal years to expend for the following purposes: for restoration projects that improve water quality standards, as specified; for the Clean Water Team Citizen Monitoring Program, to increase water quality monitoring; and to create and fund a community capacity program to increase disadvantaged and tribal community participation in state board and regional board outreach and regulatory processes, as specified.

Position	Assigned	Subject	Group
Watch	Jessica		Attorneys, SLC

AB 759 **(Grayson D) Sanitary districts.**
Current Text: Amended: 3/30/2023 html pdf

Current Analysis: 04/12/2023 Assembly Floor Analysis *(text 3/30/2023)*
Introduced: 2/13/2023
Last Amend: 3/30/2023
Status: 4/10/2023-Read second time. Ordered to third reading.
Location: 4/10/2023-A. THIRD READING

Desk	Policy	Fiscal	**Floor**	Desk	Policy	Fiscal	Floor	Conf. Conc.	Enrolled	Vetoed	Chaptered
1st House				2nd House							

Calendar: 4/20/2023 #36 ASSEMBLY THIRD READING FILE - ASSEMBLY BILLS
Summary: Current law authorizes the formation of a sanitary district, pursuant to specified requirements. Current law authorizes a sanitary district to acquire, plan, construct, reconstruct, alter, enlarge, lay, renew, replace, maintain, and operate garbage dumpsites and garbage collection and disposal systems, sewers, drains, septic tanks, and sewerage collection, outfall, treatment works and other sanitary disposal systems, and storm water drains and storm water collection, outfall and disposal systems, and water recycling and distribution systems, as the deemed necessary and proper by the governing board of the district. Current law generally authorizes the district to expend money only upon written order of the board. Current law also authorizes a district board, as an alternative to the functions of the treasurer, to elect to disburse district funds upon resolution of the board and the filing of a certified copy with the treasurer. Under current law, the treasurer is then required to deliver all district funds to the district, which can only be withdrawn by written order of the district boards, signed by the president and secretary. Current law requires the district board to appoint a treasurer responsible for the deposit and withdrawal of district funds. This bill would instead authorize funds to be withdrawn by a district treasurer or expended by a treasurer upon approval by the board, signed by the president and secretary.

Position	Assigned	Subject	Group
Support/Sponsor	Jessica		SLC

AB 805 **(Arambula D) Drinking water consolidation: sewer service.**
Current Text: Amended: 3/9/2023 html pdf
Current Analysis: 04/18/2023 Assembly Appropriations *(text 3/9/2023)*
Introduced: 2/13/2023
Last Amend: 3/9/2023
Status: 3/29/2023-From committee: Do pass and re-refer to Com. on APPR. (Ayes 9. Noes 0.) (March 28). Re-referred to Com. on APPR.
Location: 3/29/2023-A. APPR.

Desk	Policy	**Fiscal**	Floor	Desk	Policy	Fiscal	Floor	Conf. Conc.	Enrolled	Vetoed	Chaptered
1st House				2nd House							

Calendar: 4/19/2023 9 a.m. - 1021 O Street, Room 1100 ASSEMBLY APPROPRIATIONS, HOLDEN, CHRIS, Chair
Summary: Would authorize the State Water Resources Control Board, if sufficient funds are available, to order consolidation of sewer service along with an order of consolidation of drinking water systems when both of the receiving and subsumed water systems provide sewer service and after the state board engages in certain activities, including, but not limited to, consulting with the relevant regional water board and the receiving water system and conducting outreach to ratepayers and residents served by the receiving and subsumed water systems, as provided.

Position	Assigned	Subject	Group
Work w/Author	Jessica		SLC

AB 817 **(Pacheco D) Open meetings: teleconferencing: subsidiary body.**
Current Text: Amended: 3/16/2023 html pdf
Introduced: 2/13/2023
Last Amend: 3/16/2023
Status: 3/20/2023-Re-referred to Com. on L. GOV.
Location: 3/16/2023-A. L. GOV.

Desk	**Policy**	Fiscal	Floor	Desk	Policy	Fiscal	Floor	Conf. Conc.	Enrolled	Vetoed	Chaptered
1st House				2nd House							

Calendar: 4/26/2023 10 a.m. - State Capitol, Room 127 ASSEMBLY LOCAL GOVERNMENT, AGUIAR-CURRY, CECILIA, Chair
Summary: Current law, until January 1, 2026, authorizes the legislative body of a local agency to use alternative teleconferencing in certain circumstances related to the particular member if at least a quorum of its members participate from a singular physical location that is open to the public and situated within the agency's jurisdiction and other requirements are met, including restrictions on remote participation by a member of the legislative body. This bill would authorize a subsidiary body, as defined, to use alternative teleconferencing provisions similar to the emergency provisions indefinitely and without regard to a state of emergency. In order to use teleconferencing pursuant to the Ralph M. Brown Act, the bill would require the legislative body that established the subsidiary body

by charter, ordinance, resolution, or other formal action to make specified findings by majority vote, before the subsidiary body uses teleconferencing for the first time and every 12 months thereafter.

Position	Assigned	Subject	Group
Watch Spot Bill	Spencer		Attorneys

AB 849 **(Garcia D) Community emissions reduction programs.**

Current Text: Amended: 3/29/2023 html pdf

Current Analysis: 04/18/2023 Assembly Appropriations *(text 3/29/2023)*

Introduced: 2/14/2023

Last Amend: 3/29/2023

Status: 3/30/2023-Re-referred to Com. on APPR.

Location: 3/27/2023-A. APPR.

Desk	Policy	**Fiscal**	Floor	Desk	Policy	Fiscal	Floor	Conf.	Enrolled	Vetoed	Chaptered
1st House				2nd House				Conc.			

Calendar: 4/19/2023 9 a.m. - 1021 O Street, Room 1100 ASSEMBLY APPROPRIATIONS, HOLDEN, CHRIS, Chair

Summary: Current law requires the State Air Resources Board to prepare, and to update at least once every 5 years, a statewide strategy to reduce emissions of toxic air contaminants and criteria air pollutants in communities affected by a high cumulative exposure burden. Current law requires the state board to include in the statewide strategy, among other components, an assessment and identification of communities with high cumulative exposure burdens for toxic air contaminants and criteria air pollutants, prioritizing disadvantaged communities and sensitive receptor locations based on specified factors. Current law requires the state board, based on the assessment and identification of communities with high cumulative exposure burdens, to select locations around the state for preparation of community emissions reduction programs. Current law requires an air district encompassing any location selected by the state board to adopt, in consultation with the state board, within one year of the state board's selection, a community emissions reduction program to achieve emissions reductions for the location selected using cost-effective measures, as specified. Current law also requires an air district to submit the community emissions reduction program to the state board for review and approval as prescribed. Current law requires the air district and the state board to implement and enforce the measures in the community emissions reduction program consistent with their respective authority. This bill would additionally require the air district, in adopting a community emissions reduction program, to consult with other relevant state agencies. By imposing additional duties on air districts, this bill would impose a state-mandated local program.

Position	Assigned	Subject	Group
Watch	Jessica		ACE

AB 894 **(Friedman D) Parking requirements: shared parking.**

Current Text: Amended: 4/11/2023 html pdf

Current Analysis: 04/18/2023 Assembly Local Government *(text 4/11/2023)*

Introduced: 2/14/2023

Last Amend: 4/11/2023

Status: 4/12/2023-Re-referred to Com. on L. GOV.

Location: 3/2/2023-A. L. GOV.

Desk	**Policy**	Fiscal	Floor	Desk	Policy	Fiscal	Floor	Conf.	Enrolled	Vetoed	Chaptered
1st House				2nd House				Conc.			

Calendar: 4/19/2023 1:30 p.m. - State Capitol, Room 447 ASSEMBLY LOCAL GOVERNMENT, AGUIAR-CURRY, CECILIA, Chair

Summary: Would require a public agency, as defined, to allow entities with underutilized parking to share their underutilized parking with the public, public agencies, or other entities. The bill would require a public agency to allow shared parking arrangements to be counted toward meeting automobile parking requirements for a new or existing development or use, including, but not limited to, shared parking in underutilized spaces and in parking lots and garages that will be constructed as part of the development or developments when specified conditions regarding the distance between the entities that will share the parking are met. The bill would require the entities that are sharing parking to enter into a shared parking agreement, as specified. The bill would require a public agency to accept a parking analysis using peer-reviewed methodologies developed by a professional planning association, as specified, when determining the number of parking spaces that can be reasonably shared between different uses. The bill would require a public agency, private landowner, or lessor to examine the feasibility of shared parking arrangements to replace new parking construction or limit the number of new parking spaces that will be constructed when state funds are being used on a proposed new development or before a parking structure or surface parking lot is developed using public funds.

Position	Assigned	Subject	Group
Seek Info	Jessica		SLC

AB 900 **(Bennett D) Aquifer recharge.**
Current Text: Amended: 4/12/2023 html pdf
Current Analysis: 04/14/2023 Assembly Water, Parks And Wildlife *(text 4/12/2023)*
Introduced: 2/14/2023
Last Amend: 4/12/2023
Status: 4/17/2023-Re-referred to Com. on W., P., & W.
Location: 2/23/2023-A. W.,P. & W.

Desk	**Policy**	Fiscal	Floor	Desk	Policy	Fiscal	Floor	Conf.	Enrolled	Vetoed	Chaptered
1st House				2nd House				Conc.			

Summary: Current law requires the Natural Resources Agency to update every 3 years the state's climate adaptation strategy, known as the Safeguarding California Plan, and to coordinate with other state agencies to identify vulnerabilities to climate change by sectors and priority actions needed to reduce the risks in those sectors. Current law requires, to address the vulnerabilities identified in the plan, state agencies to maximize specified objectives, including promoting the use of the plan to inform planning decisions and ensure that state investments consider climate change impacts, as well as promote the use of natural systems and natural infrastructure, when developing physical infrastructure to address adaptation. This bill would add aquifers as part of the meaning of natural infrastructure.

Position	Assigned	Subject	Group
Watch Spot Bill	Jessica		SLC

AB 1012 **(Quirk-Silva D) State Air Resources Board: mobile source regulations: lifecycle analysis.**
Current Text: Amended: 4/3/2023 html pdf
Introduced: 2/15/2023
Last Amend: 4/3/2023
Status: 4/4/2023-Re-referred to Com. on TRANS.
Location: 3/2/2023-A. TRANS.

Desk	**Policy**	Fiscal	Floor	Desk	Policy	Fiscal	Floor	Conf.	Enrolled	Vetoed	Chaptered
1st House				2nd House				Conc.			

Calendar: 4/24/2023 2:30 p.m. - 1021 O Street, Room 1100 ASSEMBLY TRANSPORTATION, FRIEDMAN, LAURA, Chair
Summary: Current law imposes various limitations on emissions of air contaminants for the control of air pollution from vehicular and nonvehicular sources. Current law generally designates the State Air Resources Board as the state agency with the primary responsibility for the control of vehicular air pollution. Current law requires the state board to adopt and implement motor vehicle emission standards, in-use performance standards, and motor vehicle fuel specifications for the control of air contaminants. This bill would require the state board, if it proposes a regulation to regulate a mobile source, to prepare a lifecycle analysis, as defined, of any technology required by the regulation.

Position	Assigned	Subject	Group
Watch	Jessica		ACE

AB 1033 **(Ting D) Accessory dwelling units: local ordinances: separate sale or conveyance.**
Current Text: Amended: 3/9/2023 html pdf
Current Analysis: 04/17/2023 Assembly Housing And Community Development *(text 3/9/2023)*
Introduced: 2/15/2023
Last Amend: 3/9/2023
Status: 4/12/2023-In committee: Set, first hearing. Hearing canceled at the request of author.
Location: 3/9/2023-A. H. & C.D.

Desk	**Policy**	Fiscal	Floor	Desk	Policy	Fiscal	Floor	Conf.	Enrolled	Vetoed	Chaptered
1st House				2nd House				Conc.			

Calendar: 4/19/2023 9:30 a.m. - State Capitol, Room 126 ASSEMBLY HOUSING AND COMMUNITY DEVELOPMENT, WICKS, BUFFY, Chair
Summary: The Planning and Zoning Law, authorizes a local agency, by ordinance or ministerial approval, to provide for the creation of accessory dwelling units in areas zoned for residential use, as specified. Existing law requires the ordinance to include specified standards, including prohibiting the accessory dwelling unit from being sold or otherwise conveyed separate from the primary residence, except as provided by a specified law. This bill would instead provide that an accessory dwelling unit may be sold or otherwise conveyed separate from the primary residence as provided by specified law, as described above, or by ordinance.

Position	Assigned	Subject	Group
Oppose	Jessica		SLC

AB 1072 **(Wicks D) Water conservation and efficiency: low-income residential customers.**
Current Text: Amended: 3/23/2023 html pdf

Introduced: 2/15/2023
Last Amend: 3/23/2023
Status: 3/27/2023-Re-referred to Com. on W., P., & W.
Location: 3/23/2023-A. W.,P. & W.

Desk	**Policy**	Fiscal	Floor	Desk	Policy	Fiscal	Floor	Conf. Conc.	Enrolled	Vetoed	Chaptered
1st House				2nd House							

Calendar: 4/24/2023 9:30 a.m. - State Capitol, Room 444 ASSEMBLY WATER, PARKS AND WILDLIFE, BAUER-KAHAN, REBECCA, Chair
Summary: Would declare the policy of the state that access to water conservation and efficiency programs needs to be available to all residents. The bill would also set forth related findings including that reaching the state's environmental justice goals and commitments requires designing climate adaptation programs so that all households may participate.

Position	Assigned	Subject	Group
Watch Spot Bill	Jessica		SLC

AB 1121 **(Haney D) Public works: ineligibility list.**
Current Text: Amended: 3/20/2023 html pdf
Current Analysis: 04/18/2023 Assembly Appropriations *(text 3/20/2023)*
Introduced: 2/15/2023
Last Amend: 3/20/2023
Status: 3/22/2023-From committee: Do pass and re-refer to Com. on APPR. with recommendation: To Consent Calendar. (Ayes 7. Noes 0.) (March 22). Re-referred to Com. on APPR.
Location: 3/22/2023-A. APPR.

Desk	Policy	**Fiscal**	Floor	Desk	Policy	Fiscal	Floor	Conf. Conc.	Enrolled	Vetoed	Chaptered
1st House				2nd House							

Calendar: 4/19/2023 9 a.m. - 1021 O Street, Room 1100 ASSEMBLY APPROPRIATIONS, HOLDEN, CHRIS, Chair
Summary: Current law generally requires a contractor or subcontractor to be registered with the Department of Industrial Relations to be qualified to bid on, be listed in a bid proposal, or engage in the performance of any public works contract. Current law requires a contractor or subcontractor to meet specific conditions to qualify for this registration. Current law requires the Department of Industrial Relations to maintain on its internet website a list of contractors that are currently registered to perform public work. This bill would require awarding authorities to submit to the Department of Industrial Relations' electronic project registration database a list of ineligible contractors, as specified, pursuant to local debarment or suspension processes.

Position	Assigned	Subject	Group
Watch Spot Bill	Jessica		SLC

AB 1196 **(Villapudua D) Water Quality, Supply, and Infrastructure Improvement Act of 2014.**
Current Text: Introduced: 2/16/2023 html pdf
Introduced: 2/16/2023
Status: 2/17/2023-From printer. May be heard in committee March 19.
Location: 2/16/2023-A. PRINT

Desk	Policy	Fiscal	Floor	Desk	Policy	Fiscal	Floor	Conf. Conc.	Enrolled	Vetoed	Chaptered
1st House				2nd House							

Summary: The Water Quality, Supply, and Infrastructure Improvement Act of 2014, a bond act approved by the voters as Proposition 1 at the November 4, 2014, statewide general election, authorizes the issuance of general obligation bonds to finance a water quality, supply, and infrastructure improvement program, as specified. Under the bond act, $520,000,000 is available, upon appropriation by the Legislature, for expenditures, grants, and loans for projects that improve water quality or help provide clean, safe, and reliable drinking water to all Californians. Current law requires projects eligible for this funding to help improve water quality for a beneficial use. This bill would make a nonsubstantive change to the latter provision.

Position	Assigned	Subject	Group
Support, if amended	Spencer	Bond	SLC

AB 1216 **(Muratsuchi D) Wastewater treatment plants: monitoring of air pollutants.**
Current Text: Amended: 4/13/2023 html pdf
Introduced: 2/16/2023
Last Amend: 4/13/2023
Status: 4/17/2023-Re-referred to Com. on NAT. RES.
Location: 3/16/2023-A. NAT. RES.

Desk	**Policy**	Fiscal	Floor	Desk	Policy	Fiscal	Floor	Conf.	Enrolled	Vetoed	Chaptered
1st House				2nd House				Conc.			

Calendar: 4/24/2023 2:30 p.m. - State Capitol, Room 447 ASSEMBLY NATURAL RESOURCES, RIVAS, LUZ, Chair

Summary: Would require, on or before January 1, 2025, the owner or operator of a wastewater treatment facility that is located within 1,500 feet of a residential area and has an original design capacity of 425,000,000 gallons or more per day to develop, install, operate, and maintain a fence-line monitoring system in accordance with guidance developed by the appropriate air quality management district. The bill would require the fence-line monitoring system to include equipment capable of measuring pollutants of concern, including hydrogen sulfide, nitrogen oxides, and volatile organic compounds emitted to the atmosphere from wastewater treatment or reclamation processes that the appropriate district deems appropriate for monitoring. The bill would also require the owner or operator of a wastewater treatment facility to collect real-time data from the wastewater treatment-related fence-line monitoring system, to maintain records of that data, and to transmit the data to the appropriate air quality management district in accordance with the district's guidance. In addition, the bill would require, to the extent feasible, the data generated by these systems to be provided to the public as quickly as possible in a publicly accessible format.

Position	Assigned	Subject	Group
Oppose	Jessica		ACE, SLC

AB 1272 **(Wood D) State Water Resources Control Board: drought planning.**

Current Text: Introduced: 2/16/2023 html pdf

Current Analysis: 03/24/2023 Assembly Water, Parks And Wildlife *(text 2/16/2023)*

Introduced: 2/16/2023

Status: 3/28/2023-From committee: Do pass and re-refer to Com. on APPR. (Ayes 12. Noes 2.) (March 28). Re-referred to Com. on APPR.

Location: 3/28/2023-A. APPR.

Desk	Policy	**Fiscal**	Floor	Desk	Policy	Fiscal	Floor	Conf.	Enrolled	Vetoed	Chaptered
1st House				2nd House				Conc.			

Calendar: 4/26/2023 9 a.m. - 1021 O Street, Room 1100 ASSEMBLY APPROPRIATIONS, HOLDEN, CHRIS, Chair

Summary: Would require the State Water Resources Control Board to establish a program, in consultation with the Department of Fish and Wildlife, to adopt principles and guidelines for diversion and use of water in coastal watersheds, as specified, during times of water shortage for drought preparedness and climate resiliency. The bill would require that the principles and guidelines provide for the development of watershed-level plans to support public trust uses, public health and safety, and the human right to water in times of water shortage, among other things. The bill also would require the state board, prior to adopting those principles and guidelines, to allow for public comment and hearing, as provided.

Position	Assigned	Subject	Group
Watch	Spencer		SLC

AB 1334 **(Pellerin D) Mobilehome parks: additional spaces: exemption from additional fees or charges.**

Current Text: Introduced: 2/16/2023 html pdf

Current Analysis: 04/17/2023 Assembly Housing And Community Development *(text 2/16/2023)*

Introduced: 2/16/2023

Status: 3/2/2023-Referred to Com. on H. & C.D.

Location: 3/2/2023-A. H. & C.D.

Desk	**Policy**	Fiscal	Floor	Desk	Policy	Fiscal	Floor	Conf.	Enrolled	Vetoed	Chaptered
1st House				2nd House				Conc.			

Calendar: 4/19/2023 9:30 a.m. - State Capitol, Room 126 ASSEMBLY HOUSING AND COMMUNITY DEVELOPMENT, WICKS, BUFFY, Chair

Summary: Current law, the Mobilehome Parks Act, generally regulates various classifications of mobilehome and related vehicle parks, and imposes enforcement duties on the Department of Housing and Community Development and local enforcement agencies. The act authorizes any person to file an application with the governing body of a city or county for a conditional use permit for a mobilehome park. The act requires a person, before operating a mobilehome park, and each year thereafter, to obtain a valid permit from the enforcement agency in order to operate the park. The act also requires the owner of a mobilehome park to obtain a permit to create, move, shift, or alter park lot lines.This bill would authorize an owner of an existing mobilehome park that is subject to, or intends to qualify for, a valid permit to operate the park, to apply to the enforcement agency to add additional spaces to the mobilehome park not to exceed 10% of the previously approved number of spaces in the mobilehome park. The bill would exempt the additional spaces from any business tax, local registration fee, use permit fee, or other fee that does not apply to the existing spaces in the park. This bill contains other related provisions and other existing laws.

Position	Assigned	Subject	Group
Watch	Jessica		SLC

AB 1337 **(Wicks D) State Water Resources Control Board: water shortage enforcement.**
Current Text: Introduced: 2/16/2023 html pdf
Current Analysis: 04/14/2023 Assembly Water, Parks And Wildlife *(text 2/16/2023)*
Introduced: 2/16/2023
Status: 3/2/2023-Referred to Coms. on W., P., & W. and JUD.
Location: 3/2/2023-A. W.,P. & W.

Desk	**Policy**	Fiscal	Floor	Desk	Policy	Fiscal	Floor	Conf. Conc.	Enrolled	Vetoed	Chaptered
1st House				2nd House							

Summary: Would authorize the State Water Resources Control Board to adopt regulations for various water conservation purposes, including, but not limited to, to prevent the waste, unreasonable use, unreasonable method of use, or unreasonable method of diversion of water, and to implement these regulations through orders curtailing the diversion or use of water under any claim of right. The bill would require the board to provide notice and an opportunity to be heard before issuing an order, except where an opportunity to be heard before the issuance of an order would be impractical given the likelihood of harm to the purposes of the various water conservation regulations. The bill would provide that a person or entity may be civilly liable for a violation of any regulation or order issued by the board pursuant to these provisions in an amount not to exceed $1,000 for each day in which the violation has occurred and $2,500 for each acre-foot of water diverted or used in violation of the applicable requirement. The bill would authorize the imposition of this civil liability by the superior court, as specified, or administratively by the board. The bill would provide that a regulation or order issued by the board pursuant to these provisions, or by emergency regulation, is exempt from the alifornia Environmental Quality Act (CEQA).

Position	Assigned	Subject	Group
Oppose	Jessica		SLC

AB 1374 **(Alvarez D) Greenhouse Gas Reduction Fund: investment plan.**
Current Text: Introduced: 2/17/2023 html pdf
Introduced: 2/17/2023
Status: 3/2/2023-Referred to Com. on NAT. RES.
Location: 3/2/2023-A. NAT. RES.

Desk	**Policy**	Fiscal	Floor	Desk	Policy	Fiscal	Floor	Conf. Conc.	Enrolled	Vetoed	Chaptered
1st House				2nd House							

Summary: The California Global Warming Solutions Act of 2006 authorizes the State Air Resources Board to include the use of market-based compliance mechanisms. Current law requires all moneys, except for fines and penalties, collected by the state board as part of a market-based compliance mechanism to be deposited in the Greenhouse Gas Reduction Fund and to be available upon appropriation. Current law requires the Department of Finance, in consultation with the state board and any other relevant state agency, to develop, as specified, a 3-year investment plan for the moneys deposited in the fund. Current law requires the investment plan to allocate, among other things, a minimum of 25% of the available moneys in the fund to projects located within, and benefiting individuals living in, disadvantaged communities and an additional minimum of 5% to projects that benefit low-income households or to projects located within, and benefiting individuals living in, low-income communities located anywhere in the state. This bill would increase those amounts from 25% to 50% and from 5% to 15%.

Position	Assigned	Subject	Group
Watch	Jessica		ACE

AB 1375 **(Dixon R) Coastal protection.**
Current Text: Introduced: 2/17/2023 html pdf
Introduced: 2/17/2023
Status: 2/18/2023-From printer. May be heard in committee March 20.
Location: 2/17/2023-A. PRINT

Desk	Policy	Fiscal	Floor	Desk	Policy	Fiscal	Floor	Conf. Conc.	Enrolled	Vetoed	Chaptered
1st House				2nd House							

Summary: The California Coastal Act of 1976 provides for the protection of California's coast and requires any person wishing to perform or undertake any development in the coastal zone, as defined, to obtain a coastal development permit, except as specified. This bill would state the intent of the Legislature to enact subsequent legislation related to coastal protection.

Position	Assigned	Subject	Group
Watch Spot Bill	Jessica		ACE

AB 1379 **(Papan D) Open meetings: local agencies: teleconferences.**

Current Text: Amended: 3/23/2023 html pdf
Introduced: 2/17/2023
Last Amend: 3/23/2023
Status: 3/27/2023-Re-referred to Com. on L. GOV.
Location: 3/23/2023-A. L. GOV.

Desk	**Policy**	Fiscal	Floor	Desk	Policy	Fiscal	Floor	Conf. Conc.	Enrolled	Vetoed	Chaptered
1st House				2nd House							

Calendar: 4/26/2023 10 a.m. - State Capitol, Room 127 ASSEMBLY LOCAL GOVERNMENT, AGUIAR-CURRY, CECILIA, Chair

Summary: The Ralph M. Brown Act, requires, with specified exceptions, that all meetings of a legislative body be open and public, and that all persons be permitted to attend unless a closed session is authorized. The act generally requires for teleconferencing that the legislative body of a local agency that elects to use teleconferencing post agendas at all teleconference locations, identify each teleconference location in the notice and agenda of the meeting or proceeding, and have each teleconference location be accessible to the public. Current law also requires that, during the teleconference, at least a quorum of the members of the legislative body participate from locations within the boundaries of the territory over which the local agency exercises jurisdiction. This bill, with respect to those general provisions on teleconferencing, would require a legislative body electing to use teleconferencing to instead post agendas at a singular designated physical meeting location, as defined, rather than at all teleconference locations. The bill would remove the requirements for the legislative body of the local agency to identify each teleconference location in the notice and agenda, that each teleconference location be accessible to the public, and that at least a quorum of the members participate from locations within the boundaries of the territory over which the local agency exercises jurisdiction.

Position	Assigned	Subject	Group
Watch Spot Bill	Jessica		SLC

AB 1401 **(Garcia D) Low Carbon Fuel Standard regulations: alternative diesel fuel regulations.**
Current Text: Amended: 3/13/2023 html pdf
Introduced: 2/17/2023
Last Amend: 3/13/2023
Status: 3/20/2023-In committee: Hearing postponed by committee.
Location: 3/9/2023-A. TRANS.

Desk	**Policy**	Fiscal	Floor	Desk	Policy	Fiscal	Floor	Conf. Conc.	Enrolled	Vetoed	Chaptered
1st House				2nd House							

Summary: The California Global Warming Solutions Act of 2006 requires the State Air Resources Board to adopt rules and regulations to achieve the maximum technologically feasible and cost-effective greenhouse gas emissions reductions to ensure that the statewide greenhouse gas emissions are reduced to at least 40% below the statewide greenhouse gas emissions limit, as defined, no later than December 31, 2030. Pursuant to the act, the state board has adopted the Low Carbon Fuel Standard regulations. This bill would require the state board, in administering the Low Carbon Fuel Standard, to deem a Tier 2 pathway application certified under specified circumstances.

Position	Assigned	Subject	Group
Watch	Spencer		ACE

AB 1423 **(Schiavo D) Product safety: perfluoroalkyl and polyfluoroalkyl substances: artificial turf or synthetic surfaces.**
Current Text: Amended: 4/13/2023 html pdf
Current Analysis: 04/14/2023 Assembly Environmental Safety And Toxic Materials *(text 4/13/2023)*
Introduced: 2/17/2023
Last Amend: 4/13/2023
Status: 4/17/2023-Re-referred to Com. on E.S. & T.M.
Location: 3/16/2023-A. E.S. & T.M.

Desk	**Policy**	Fiscal	Floor	Desk	Policy	Fiscal	Floor	Conf. Conc.	Enrolled	Vetoed	Chaptered
1st House				2nd House							

Summary: Would, commencing January 1, 2024, require a manufacturer or installer of a covered surface, defined as artificial turf or a synthetic surface that resembles grass, proposing to design, sell, or install a field with a covered surface to any party to notify the party at the earliest possible date that the covered surface contains regulated PFAS, as defined. The bill would also prohibit, commencing January 1, 2024, a public entity, including a charter city, charter county, city, or county, any public or private school serving pupils in kindergarten or any of grades 1 to 12, inclusive, a public institution of higher education, other than the University of California, or a private institution of higher education from purchasing or installing a covered surface containing regulated PFAS, as provided.

Position	Assigned	Subject	Group

AB 1453 **(Dixon R) Coastal resources: State Coastal Conservancy: grants: ocean waste.**
Current Text: Introduced: 2/17/2023 html pdf
Introduced: 2/17/2023
Status: 3/23/2023-In committee: Set, first hearing. Hearing canceled at the request of author.
Location: 3/9/2023-A. NAT. RES.

Desk	**Policy**	Fiscal	Floor	Desk	Policy	Fiscal	Floor	Conf. Conc.	Enrolled	Vetoed	Chaptered
1st House				2nd House							

Summary: Existing law establishes in the Natural Resources Agency the State Coastal Conservancy. Existing law authorizes the conservancy to undertake educational projects and programs, including projects and programs relating to the preservation, protection, enhancement, maintenance, and enjoyment of coastal resources, as provided. This bill would require the conservancy, on or before January 1, 2025, upon appropriation by the Legislature, to establish a 5-year program to provide grants for specified activities, including funding regular cleanups of beaches and the waterways that empty into them. The bill would require the conservancy, on or before January 1, 2029, to develop a report reviewing the efficacy of this program and submit the report to the Legislature as well as make it available on the conservancy's internet website.

Position	Assigned	Subject	Group
Watch	Spencer		SLC

AB 1460 **(Bennett D) Local government.**
Current Text: Introduced: 2/17/2023 html pdf
Introduced: 2/17/2023
Status: 2/18/2023-From printer. May be heard in committee March 20.
Location: 2/17/2023-A. PRINT

Desk	Policy	Fiscal	Floor	Desk	Policy	Fiscal	Floor	Conf. Conc.	Enrolled	Vetoed	Chaptered
1st House				2nd House							

Summary: Existing law, the Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000, provides the exclusive authority and procedure for the initiation, conduct, and completion of changes of organization and reorganization for cities and districts, except as specified. This bill would make a nonsubstantive change to the provision naming the act.

Position	Assigned	Subject	Group
Watch Spot Bill	Jessica		SLC

AB 1490 **(Lee D) Affordable housing development projects: adaptive reuse.**
Current Text: Amended: 4/10/2023 html pdf
Current Analysis: 04/17/2023 Assembly Housing And Community Development *(text 4/10/2023)*
Introduced: 2/17/2023
Last Amend: 4/10/2023
Status: 4/12/2023-In committee: Set, first hearing. Hearing canceled at the request of author.
Location: 3/9/2023-A. H. & C.D.

Desk	**Policy**	Fiscal	Floor	Desk	Policy	Fiscal	Floor	Conf. Conc.	Enrolled	Vetoed	Chaptered
1st House				2nd House							

Calendar: 4/19/2023 9:30 a.m. - State Capitol, Room 126 ASSEMBLY HOUSING AND COMMUNITY DEVELOPMENT, WICKS, BUFFY, Chair
Summary: Current law requires the Department of Housing and Community Development to give priority with respect to funding under the Multifamily Housing Program to projects that prioritize adaptive reuse in existing developed areas served with public infrastructure, as specified. Current law establishes various streamlined, ministerial review processes for housing development proposals meetings specified standards. This bill would define adaptive reuse as the retrofitting and repurposing of an existing building to create new residential units. The bill would require a local government to approve a development proposal for a multifamily housing development project that is an adaptive reuse project and that meets specified affordability and site requirements, including that 100% of the units be made available for lower income households, 50% of which shall be made available to very low income households, pursuant to a streamlined, ministerial review process.

Position	Assigned	Subject	Group
Work w/Author	Spencer		SLC

AB 1548 **(Hart D) Greenhouse Gas Reduction Fund: grant program: recycling infrastructure projects.**
Current Text: Amended: 3/16/2023 html pdf
Current Analysis: 04/14/2023 Assembly Natural Resources *(text 3/16/2023)*
Introduced: 2/17/2023
Last Amend: 3/16/2023

Status: 4/17/2023-VOTE: Do pass as amended and be re-referred to the Committee on [Appropriations] (PASS)
Location: 4/17/2023-A. APPR.

Desk	Policy	**Fiscal**	Floor	Desk	Policy	Fiscal	Floor	Conf. Conc.	Enrolled	Vetoed	Chaptered
1st House				2nd House							

Summary: The California Global Warming Solutions Act of 2006 designates the State Air Resources Board as the state agency charged with monitoring and regulating sources of emissions of greenhouse gases. The act authorizes the state board to include the use of market-based compliance mechanisms. Existing law requires all moneys, except for fines and penalties, collected by the state board as a part of the market-based compliance mechanism to be deposited in the Greenhouse Gas Reduction Fund. This bill contains other existing laws.

Position	Assigned	Subject	Group
Refer to ACE Committee	Jessica		ACE

AB 1550 **(Bennett D) Green hydrogen.**
Current Text: Amended: 4/18/2023 html pdf
Current Analysis: 04/11/2023 Assembly Committee On Utilities And Energy *(text 2/17/2023)*
Introduced: 2/17/2023
Last Amend: 4/18/2023
Status: 4/18/2023-Re-referred to Com. on NAT. RES. From committee chair, with author's amendments: Amend, and re-refer to Com. on NAT. RES. Read second time and amended.
Location: 4/12/2023-A. NAT. RES.

Desk	**Policy**	Fiscal	Floor	Desk	Policy	Fiscal	Floor	Conf. Conc.	Enrolled	Vetoed	Chaptered
1st House				2nd House							

Calendar: 4/24/2023 2:30 p.m. - State Capitol, Room 447 ASSEMBLY NATURAL RESOURCES, RIVAS, LUZ, Chair
Summary: Would require, on and after January 1, 2045, that all hydrogen produced and used in California for the generation of electricity or fueling of vehicles be green hydrogen, as defined, in furtherance of the state's policy to achieve net zero greenhouse gas emissions as soon as possible, but no later than 2045. Because a violation of a state board regulation implementing this requirement would be a crime, the bill would impose a state-mandated local program.

Position	Assigned	Subject	Group
Watch	Spencer		ACE

AB 1567 **(Garcia D) Safe Drinking Water, Wildfire Prevention, Drought Preparation, Flood Protection, Extreme Heat Mitigation, and Workforce Development Bond Act of 2024.**
Current Text: Amended: 4/7/2023 html pdf
Current Analysis: 04/14/2023 Assembly Water, Parks And Wildlife *(text 4/7/2023)*
Introduced: 2/17/2023
Last Amend: 4/7/2023
Status: 4/10/2023-Re-referred to Com. on W., P., & W.
Location: 3/9/2023-A. W.,P. & W.

Desk	**Policy**	Fiscal	Floor	Desk	Policy	Fiscal	Floor	Conf. Conc.	Enrolled	Vetoed	Chaptered
1st House				2nd House							

Summary: Would enact the Safe Drinking Water, Wildfire Prevention, Drought Preparation, Flood Protection, Extreme Heat Mitigation, and Workforce Development Bond Act of 2024, which, if approved by the voters, would authorize the issuance of bonds in the amount of $15,105,000,000 pursuant to the State General Obligation Bond Law to finance projects for safe drinking water, wildfire prevention, drought preparation, flood protection, extreme heat mitigation, and workforce development programs.

Position	Assigned	Subject	Group
Support, if amended	Spencer	Bond	SLC

AB 1586 **(Hart D) Community services districts.**
Current Text: Introduced: 2/17/2023 html pdf
Introduced: 2/17/2023
Status: 2/18/2023-From printer. May be heard in committee March 20.
Location: 2/17/2023-A. PRINT

Desk	Policy	Fiscal	Floor	Desk	Policy	Fiscal	Floor	Conf. Conc.	Enrolled	Vetoed	Chaptered
1st House				2nd House							

Summary: Existing law, the Community Services District Law, provides for the formation of community services districts, governed by a 5-member board of directors, to provide specified services within the

boundaries of the district and for the financing of those services by specified charges and indebtedness. Under that law, a district may destroy a record pursuant to specified provisions governing the destruction of records of special districts. This bill would make a nonsubstantive change to that provision.

Position	Assigned	Subject	Group
Watch Spot Bill	Jessica		SLC

AB 1594 **(Garcia D) Medium- and heavy-duty zero-emission vehicles: public agency utilities.**

Current Text: Amended: 3/13/2023 html pdf

Introduced: 2/17/2023

Last Amend: 3/13/2023

Status: 3/14/2023-Re-referred to Com. on TRANS.

Location: 3/9/2023-A. TRANS.

Desk	**Policy**	Fiscal	Floor	Desk	Policy	Fiscal	Floor	Conf.	Enrolled	Vetoed	Chaptered
1st House				2nd House				Conc.			

Calendar: 4/24/2023 2:30 p.m. - 1021 O Street, Room 1100 ASSEMBLY TRANSPORTATION, FRIEDMAN, LAURA, Chair

Summary: Current law establishes the Air Quality Improvement Program that is administered by the State Air Resources Board for purposes of funding projects related to, among other things, the reduction of criteria air pollutants and improvement of air quality, and establishes the Medium- and Heavy-Duty Zero-Emission Vehicle Fleet Purchasing Assistance Program within the Air Quality Improvement Program to make financing tools and nonfinancial supports available to operators of medium- and heavy-duty vehicle fleets to enable those operators to transition their fleets to zero-emission vehicles. This bill would require any state regulation that seeks to require, or otherwise compel, the procurement of medium- and heavy-duty zero-emission vehicles by a public agency utility to ensure that those vehicles can support a public agency utility's ability to maintain reliable water and electric services, respond to disasters in an emergency capacity, and provide mutual aid assistance statewide and nationwide, among other requirements. The bill would define a public agency utility to include a local publicly owned electric utility, a community water system, and a wastewater treatment provider, as specified.

Position	Assigned	Subject	Group
Support in concept	Jessica		ACE

AB 1596 **(Alvarez D) Watershed, Clean Beaches, and Water Quality Act: beaches: water quality.**

Current Text: Introduced: 2/17/2023 html pdf

Introduced: 2/17/2023

Status: 4/13/2023-In committee: Set, first hearing. Hearing canceled at the request of author.

Location: 3/9/2023-A. E.S. & T.M.

Desk	**Policy**	Fiscal	Floor	Desk	Policy	Fiscal	Floor	Conf.	Enrolled	Vetoed	Chaptered
1st House				2nd House				Conc.			

Summary: Existing law, the Watershed, Clean Beaches, and Water Quality Act, among other things, provides that it is the intent of the Legislature that the purpose of maintaining clean beaches, clean water, and an integrated and coordinated watershed program is to protect beaches, coastal waters, rivers, lakes, and streams from contaminants, pollution, and other environmental threats. The act requires the State Water Resources Control Board, in consultation with the State Coastal Conservancy, to award grants to public agencies and nonprofit organizations for projects designed to improve water quality at public beaches, as specified. This bill would require the board, to the extent feasible, to identify and implement projects to improve beach access and address ocean water quality on public beaches that experience significant restrictions of use, as defined, due to bacteria levels that exceed public health standards, whether the source is from urban runoff or transboundary flows.

Position	Assigned	Subject	Group
Watch	Jessica		SLC

AB 1628 **(McKinnor D) Microfiber filtration.**

Current Text: Amended: 3/22/2023 html pdf

Current Analysis: 04/18/2023 Assembly Appropriations *(text 3/22/2023)*

Introduced: 2/17/2023

Last Amend: 3/22/2023

Status: 3/29/2023-Coauthors revised. From committee: Do pass and re-refer to Com. on APPR. (Ayes 7. Noes 2.) (March 28). Re-referred to Com. on APPR.

Location: 3/29/2023-A. APPR.

Desk	Policy	**Fiscal**	Floor	Desk	Policy	Fiscal	Floor	Conf.	Enrolled	Vetoed	Chaptered
1st House				2nd House				Conc.			

Calendar: 4/19/2023 9 a.m. - 1021 O Street, Room 1100 ASSEMBLY APPROPRIATIONS, HOLDEN, CHRIS, Chair

Summary: Would require, on and after January 1, 2029, that all new washing machines offered for sale in California for residential, commercial, or state use contain a microfiber filtration system, as defined, with a mesh size not greater than 100 micrometers.

Position	Assigned	Subject	Group
Support, if amended	Jessica		ACE, SLC

AB 1637 **(Irwin D) Local government: internet websites and email addresses.**

Current Text: Amended: 3/16/2023 html pdf

Current Analysis: 04/18/2023 Assembly Local Government *(text 3/16/2023)*

Introduced: 2/17/2023

Last Amend: 3/16/2023

Status: 4/17/2023-Assembly Rule 56 suspended. (Pending re-refer to Com. on P. & C.P.)

Location: 4/17/2023-A. L. GOV.

Desk	**Policy**	Fiscal	Floor	Desk	Policy	Fiscal	Floor	Conf. Conc.	Enrolled	Vetoed	Chaptered
1st House				2nd House							

Calendar:
4/19/2023 1:30 p.m. - State Capitol, Room 447 ASSEMBLY LOCAL GOVERNMENT, AGUIAR-CURRY, CECILIA, Chair
4/25/2023 1:30 p.m. - State Capitol, Room 126 ASSEMBLY PRIVACY AND CONSUMER PROTECTION, GABRIEL, JESSE, Chair

Summary: The California Public Records Act requires a local agency to make public records available for inspection and allows a local agency to comply by posting the record on its internet website and directing a member of the public to the internet website, as specified. This bill, no later than January 1, 2025, would require a local agency, as defined, that maintains an internet website for use by the public to ensure that the internet website utilizes a ".gov" top-level domain or a ".ca.gov" second-level domain, and would require a local agency that maintains an internet website that is noncompliant with that requirement to redirect that internet website to a domain name that does utilize a ".gov" or ".ca.gov" domain. This bill, no later than January 1, 2025, would also require a local agency that maintains public email addresses to ensure that each email address provided to its employees utilizes a ".gov" domain name or a ".ca.gov" domain name. By adding to the duties of local officials, the bill would impose a state-mandated local program.

Position	Assigned	Subject	Group
Watch	Jessica		SLC

AB 1660 **(Ta R) Cosmetic products: perfluoroalkyl and polyfluoroalkyl substances (PFAS).**

Current Text: Amended: 4/10/2023 html pdf

Introduced: 2/17/2023

Last Amend: 4/10/2023

Status: 4/13/2023-In committee: Set, first hearing. Hearing canceled at the request of author.

Location: 3/9/2023-A. E.S. & T.M.

Desk	**Policy**	Fiscal	Floor	Desk	Policy	Fiscal	Floor	Conf. Conc.	Enrolled	Vetoed	Chaptered
1st House				2nd House							

Summary: Current law prohibits, beginning January 1, 2025, a person or entity from manufacturing, selling, delivering, holding, or offering for sale in commerce any cosmetic product that contains intentionally added perfluoroalkyl and polyfluoroalkyl substances (PFAS). Current law defines, for these purposes, "PFAS" to mean a class of fluorinated organic chemicals containing at least one fully fluorinated carbon atom, and "intentionally added PFAS" to mean PFAS chemicals that a manufacturer has intentionally added to a product and that have a functional or technical effect on the product, or PFAS chemicals that are intentional breakdown products of an added chemical. This bill would authorize a person or entity to petition the board to exempt an intentionally added PFAS from that prohibition, and would authorize the State Air Resources Board to, in consultation with the State Water Resources Control Board, the Office of Environmental Health Hazard Assessment, and the Department of Toxic Substances Control, exempt an intentionally added PFAS from that prohibition if the state board determines that the intentionally added PFAS meets specified qualifications. The bill would require the petitioner to provide specified information in their exemption petition to the board, including, among other things, the name of the intentionally added PFAS proposed for exemption, its intended end use, and its intended concentration in the proposed cosmetic product.

Position	Assigned	Subject	Group
Oppose	Jessica		SLC

AB 1705 **(McKinnor D) Solid waste facilities: state policy goals.**

Current Text: Amended: 3/21/2023 html pdf

Current Analysis: 04/07/2023 Assembly Natural Resources *(text 3/21/2023)*
Introduced: 2/17/2023
Last Amend: 3/21/2023
Status: 4/11/2023-From committee: Do pass and re-refer to Com. on APPR. (Ayes 8. Noes 3.) (April 10). Re-referred to Com. on APPR.
Location: 4/10/2023-A. APPR.

Desk	Policy	**Fiscal**	Floor	Desk	Policy	Fiscal	Floor	Conf. Conc.	Enrolled	Vetoed	Chaptered
1st House				2nd House							

Calendar: 4/26/2023 9 a.m. - 1021 O Street, Room 1100 ASSEMBLY APPROPRIATIONS, HOLDEN, CHRIS, Chair
Summary: Current law prohibits a person from establishing or expanding a solid waste facility in a county after a countywide or regional agency integrated waste management plan has been approved unless the solid waste facility is, among other things, a disposal facility, a transformation facility, or an EMSW conversion facility that meets specific criteria. Current law defines an "EMSW conversion facility" as a facility where municipal solid waste conversion that meets specific requirements takes place and defines "transformation" as incineration, pyrolysis, distillation, or biological conversion, excluding composting, gasification, EMSW conversion, or biomass conversion. Current law authorizes the Department of Resources Recycling and Recovery, by regulation, to specify classifications of solid waste facilities that are exempt from these and other facility regulations if the department makes specific findings, including that the nature of the solid wastes poses no significant threat to the public health, the public safety, or the environment. This bill would prohibit a person from establishing or expanding a transformation facility or an EMSW conversion facility in the state until the Department of Resources Recycling and Recovery has determined that the state has achieved the above-described solid waste and organic waste policy goals of the state for 3 consecutive years.

Position	Assigned	Subject	Group
Watch	Jessica		ACE, SLC

AB 1711 **(Carrillo, Juan D) Energy: hydrogen: Clean Energy Equity Act.**
Current Text: Amended: 4/10/2023 html pdf
Current Analysis: 04/14/2023 Assembly Transportation *(text 4/10/2023)*
Introduced: 2/17/2023
Last Amend: 4/10/2023
Status: 4/18/2023-From committee: Do pass and re-refer to Com. on NAT. RES. with recommendation: To Consent Calendar. (Ayes 15. Noes 0.) (April 17). Re-referred to Com. on NAT. RES.
Location: 4/18/2023-A. NAT. RES.

Desk	**Policy**	Fiscal	Floor	Desk	Policy	Fiscal	Floor	Conf. Conc.	Enrolled	Vetoed	Chaptered
1st House				2nd House							

Calendar: 4/24/2023 2:30 p.m. - State Capitol, Room 447 ASSEMBLY NATURAL RESOURCES, RIVAS, LUZ, Chair
Summary: Would enact the Clean Energy Equity Act and would require the State Energy Resources Conservation and Development Commission to equitably allocate moneys appropriated by the Legislature for hydrogen-fueling infrastructure to specifically prioritize rural communities and low-income communities. The bill would require the commission and the State Air Resources Board, except as provided, to jointly review and submit a report to the Legislature on the progress toward establishing hydrogen-fueling infrastructure that is equally accessible to all communities, especially rural communities and low-income communities.

Position	Assigned	Subject	Group
Watch	Spencer		ACE

SB 12 **(Stern D) California Global Warming Solutions Act of 2006: emissions limit.**
Current Text: Introduced: 12/5/2022 html pdf
Current Analysis: 03/13/2023 Senate Environmental Quality *(text 12/5/2022)*
Introduced: 12/5/2022
Status: 3/30/2023-April 10 set for first hearing canceled at the request of author.
Location: 3/15/2023-S. APPR.

Desk	Policy	**Fiscal**	Floor	Desk	Policy	Fiscal	Floor	Conf. Conc.	Enrolled	Vetoed	Chaptered
1st House				2nd House							

Summary: Under the California Global Warming Solutions Act of 2006, the State Air Resources Board is required to approve a statewide greenhouse gas emissions limit equivalent to the statewide greenhouse gas emissions level in 1990 to be achieved by 2020 and to ensure that statewide greenhouse gas emissions are reduced to at least 40% below the 1990 level by no later than December 31, 2030. Under the act, a violation of a rule, regulation, order, emission limitation, emission reduction measure, or other measure adopted by the state board under the act is a crime. This bill instead would require the state board to ensure that statewide greenhouse gas emissions are reduced to at least 55% below the 1990 level by no later than December 31, 2030.

Position	Assigned	Subject	Group
Watch	Jessica		ACE

SB 34 **(Umberg D) Surplus land disposal: violations: Orange County.**
Current Text: Amended: 2/22/2023 html pdf
Current Analysis: 04/14/2023 Senate Governance And Finance *(text 2/22/2023)*
Introduced: 12/5/2022
Last Amend: 2/22/2023
Status: 4/10/2023-Set for hearing April 19.
Location: 1/18/2023-S. GOV. & F.

Desk	**Policy**	Fiscal	Floor	Desk	Policy	Fiscal	Floor	Conf. Conc.	Enrolled	Vetoed	Chaptered
1st House				2nd House							

Calendar: 4/19/2023 9 a.m. - 1021 O Street, Room 2200 SENATE GOVERNANCE AND FINANCE, CABALLERO, ANNA, Chair
Summary: Would, until January 1, 2030, would require the County of Orange, or any city located within Orange County, if notified by the Department of Housing and Community Development that its planned sale or lease of surplus land is in violation of existing law, to cure or correct the alleged violation within 60 days, as prescribed. The bill would prohibit an Orange County jurisdiction that has not cured or corrected any alleged violation from disposing of the parcel until the department determines that it has complied with existing law or deems the alleged violation not to be a violation.

Position	Assigned	Subject	Group
Refer to SLC	Spencer		SLC

SB 229 **(Umberg D) Surplus land: disposal of property: violations: public meeting.**
Current Text: Amended: 2/23/2023 html pdf
Current Analysis: 04/14/2023 Senate Governance And Finance *(text 2/23/2023)*
Introduced: 1/23/2023
Last Amend: 2/23/2023
Status: 4/10/2023-Set for hearing April 19.
Location: 2/1/2023-S. GOV. & F.

Desk	**Policy**	Fiscal	Floor	Desk	Policy	Fiscal	Floor	Conf. Conc.	Enrolled	Vetoed	Chaptered
1st House				2nd House							

Calendar: 4/19/2023 9 a.m. - 1021 O Street, Room 2200 SENATE GOVERNANCE AND FINANCE, CABALLERO, ANNA, Chair
Summary: Current law prescribes requirements for the disposal of land determined to be surplus land by a local agency. Those requirements include a requirement that a local agency, before disposing of a property or participating in negotiations to dispose of that property with a prospective transferee, send a written notice of availability of the property to specified entities, depending on the property's intended use, and send specified information in regard to the disposal of the parcel of surplus land to the Department of Housing and Community Development. Current law, among other enforcement provisions, makes a local agency that disposes of land in violation of these disposal provisions, after receiving notification of violation from the department, liable for a penalty of 30% of the final sale price of the land sold in violation for a first violation and 50% for any subsequent violation. Under current law, except as specified, a local agency has 60 days to cure or correct an alleged violation before an enforcement action may be brought. This bill would require a local agency that has received a notification of violation from the department to hold an open and public session to review and consider the substance of the notice of violation. The bill would require the local agency's governing body to provide prescribed notice no later than 14 days before the public session.

Position	Assigned	Subject	Group
Disapprove	Spencer		SLC

SB 265 **(Hurtado D) Cybersecurity preparedness: critical infrastructure sectors.**
Current Text: Introduced: 1/31/2023 html pdf
Current Analysis: 04/07/2023 Senate Appropriations *(text 1/31/2023)*
Introduced: 1/31/2023
Status: 4/10/2023-April 10 hearing: Placed on APPR suspense file.
Location: 4/10/2023-S. APPR. SUSPENSE FILE

Desk	Policy	**Fiscal**	Floor	Desk	Policy	Fiscal	Floor	Conf. Conc.	Enrolled	Vetoed	Chaptered
1st House				2nd House							

Summary: Would require the Office of Emergency Services (Cal OES) to direct the California Cybersecurity Integration Center (Cal-CSIC) to prepare, and Cal OES to submit to the Legislature on or before January 1, 2025, a strategic, multiyear outreach plan to assist critical infrastructure sectors, as defined, in their efforts to improve cybersecurity and an evaluation of options for providing grants or alternative forms of funding to, and potential voluntary actions that do not require funding and that

assist, that sector in their efforts to improve cybersecurity preparedness. The bill would make related findings and declarations.

Position	Assigned	Subject	Group
Watch Spot Bill	Jessica		SLC

SB 366 **(Caballero D) The California Water Plan: long-term supply targets.**

Current Text: Amended: 3/22/2023 html pdf
Introduced: 2/8/2023
Last Amend: 3/22/2023
Status: 4/11/2023-Set for hearing April 25.
Location: 3/29/2023-S. N.R. & W.

Desk	Policy	Fiscal	Floor	Desk	Policy	Fiscal	Floor	Conf.	Enrolled	Vetoed	Chaptered
1st House				2nd House				Conc.			

Calendar: 4/25/2023 9 a.m. - State Capitol, Room 112 SENATE NATURAL RESOURCES AND WATER, MIN, DAVE, Chair

Summary: Current law requires the Department of Water Resources to update every 5 years the plan for the orderly and coordinated control, protection, conservation, development, and use of the water resources of the state, which is known as the California Water Plan. Current law requires the department to include a discussion of various strategies in the plan update, including, but not limited to, strategies relating to the development of new water storage facilities, water conservation, water recycling, desalination, conjunctive use, water transfers, and alternative pricing policies that may be pursued in order to meet the future needs of the state. Current law requires the department to establish an advisory committee to assist the department in updating the plan. This bill would require the department to instead establish a stakeholder advisory committee, to expand the membership of the committee to include tribes and environmental justice interests, to prohibit a member of the committee from serving longer than the development of 2 updates, and to require the committee to meet a minimum of 4 times annually. The bill would require the department, in coordination with the California Water Commission, the State Water Resources Control Board, other state and federal agencies as appropriate, and the stakeholder advisory committee to develop a comprehensive plan for addressing the state's water needs and meeting specified water supply targets established by the bill for purposes of "The California Water Plan."

Position	Assigned	Subject	Group
Support, if amended	Jessica		SLC

SB 411 **(Portantino D) Open meetings: teleconferences: bodies with appointed membership.**

Current Text: Introduced: 2/9/2023 html pdf
Current Analysis: 04/14/2023 Senate Governance And Finance *(text 2/9/2023)*
Introduced: 2/9/2023
Status: 4/10/2023-Set for hearing April 19.
Location: 2/22/2023-S. GOV. & F.

Desk	Policy	Fiscal	Floor	Desk	Policy	Fiscal	Floor	Conf.	Enrolled	Vetoed	Chaptered
1st House				2nd House				Conc.			

Calendar: 4/19/2023 9 a.m. - 1021 O Street, Room 2200 SENATE GOVERNANCE AND FINANCE, CABALLERO, ANNA, Chair

Summary: Current law, until January 1, 2024, authorizes the legislative body of a local agency to use alternate teleconferencing provisions during a proclaimed state of emergency or in other situations related to public health that exempt a legislative body from the general requirements (emergency provisions) and impose different requirements for notice, agenda, and public participation, as prescribed. The emergency provisions specify that they do not require a legislative body to provide a physical location from which the public may attend or comment. Current law, until January 1, 2026, authorizes the legislative body of a local agency to use alternative teleconferencing in certain circumstances related to the particular member if at least a quorum of its members participate from a singular physical location that is open to the public and situated within the agency's jurisdiction and other requirements are met, including restrictions on remote participation by a member of the legislative body. This bill would authorize a legislative body to use alternate teleconferencing provisions similar to the emergency provisions indefinitely and without regard to a state of emergency. The bill would alternatively define "legislative body" for this purpose to mean a board, commission, or advisory body of a local agency, the membership of which board, commission, or advisory body is appointed and which board, commission, or advisory body is otherwise subject to the Ralph M. Brown Act.

Position	Assigned	Subject	Group
Support Coalition	Spencer		Attorneys, SLC

SB 414 **(Allen D) Climate change: applications using hydrogen: assessment.**

Current Text: Amended: 4/12/2023 html pdf
Current Analysis: 03/27/2023 Senate Governance And Finance *(text 2/9/2023)*
Introduced: 2/9/2023
Last Amend: 4/12/2023
Status: 4/14/2023-Set for hearing April 26.
Location: 3/29/2023-S. E.Q.

Desk	**Policy**	Fiscal	Floor	Desk	Policy	Fiscal	Floor	Conf.	Enrolled	Vetoed	Chaptered
1st House				2nd House				Conc.			

Calendar: 4/26/2023 9 a.m. - 1021 O Street, Room 1200 SENATE ENVIRONMENTAL QUALITY, ALLEN, BENJAMIN, Chair

Summary: Would, on or before December 31, 2025, require the State Air Resources Board, in consultation with the State Energy Resources Conservation and Development Commission (Energy Commission) and the Public Utilities Commission (PUC), upon appropriation by the Legislature, to complete an assessment of the use of hydrogen in certain applications, as specified. The bill would require the state board, the Energy Commission, and the PUC to consider the findings in the assessment in their plans, rulemakings, reports, or other process related to the planning, implementation, or regulation of hydrogen production, distribution, storage, or usage in the state.

Position	Assigned	Subject	Group
Refer to ACE Committee	Jessica		ACE

SB 477 **(Committee on Housing) Accessory dwelling units.**
Current Text: Introduced: 2/14/2023 html pdf
Introduced: 2/14/2023
Status: 3/30/2023-Set for hearing May 2.
Location: 2/22/2023-S. HOUSING

Desk	**Policy**	Fiscal	Floor	Desk	Policy	Fiscal	Floor	Conf.	Enrolled	Vetoed	Chaptered
1st House				2nd House				Conc.			

Calendar: 5/2/2023 1:30 p.m. - 1021 O Street, Room 1200 SENATE HOUSING, WIENER, SCOTT, Chair

Summary: Current law provides for the creation by local ordinance, or by ministerial approval if a local agency has not adopted an ordinance, of accessory dwelling units to allow single-family or multifamily dwelling residential use in accordance with specified standards and conditions. Current law also provides for the creation of junior accessory dwelling units by local ordinance, or, if a local agency has not adopted an ordinance, by ministerial approval, in accordance with specified standards and conditions.This bill would make nonsubstantive changes and reorganize various provisions relating to the creation and regulation of accessory dwelling units and junior accessory dwelling units, including the provisions described above, and would make related nonsubstantive conforming changes.

Position	Assigned	Subject	Group
Watch Spot Bill	Spencer		Attorneys, SLC

SB 488 **(Alvarado-Gil D) California Renewables Portfolio Standard Program: bioenergy projects: community choice aggregators.**
Current Text: Amended: 4/10/2023 html pdf
Introduced: 2/14/2023
Last Amend: 4/10/2023
Status: 4/12/2023-Set for hearing April 24.
Location: 2/22/2023-S. E. U., & C.

Desk	**Policy**	Fiscal	Floor	Desk	Policy	Fiscal	Floor	Conf.	Enrolled	Vetoed	Chaptered
1st House				2nd House				Conc.			

Calendar: 4/24/2023 3 p.m. or upon adjournment of Session - 1021 O Street, Room 1200 SENATE ENERGY, UTILITIES AND COMMUNICATIONS, BRADFORD, STEVEN, Chair

Summary: Current law vests the Public Utilities Commission with regulatory authority over public utilities, including electrical corporations, while local publicly owned electric utilities are under the direction of their governing boards. Current law requires electrical corporations, by December 1, 2023, to collectively procure, through financial commitments of 5 to 15 years, inclusive, their proportionate share of 125 megawatts of cumulative rated generating capacity from existing bioenergy projects that commenced operations before June 1, 2013, and requires a local publicly owned electric utility serving more than 100,000 customers to procure its proportionate share of 125 megawatts of cumulative rated generating capacity from bioenergy projects subject to terms of at least 5 years, but exempts from these requirements a local publicly owned electric utility that previously entered into 5-year financial commitments for its proportionate share under certain conditions. This bill would authorize the cumulative rated generating capacity to be procured from bioenergy projects regardless of when the projects commence operations.

Position	Assigned	Subject	Group
Watch	Jessica		ACE

SB 493 **(Min D) Air pollution: alternative vehicles and electric and hydrogen infrastructure.**

Current Text: Introduced: 2/14/2023 html pdf

Current Analysis: 04/17/2023 Senate Environmental Quality *(text 2/14/2023)*

Introduced: 2/14/2023

Status: 3/27/2023-Set for hearing April 19.

Location: 3/21/2023-S. E.Q.

Desk	**Policy**	Fiscal	Floor	Desk	Policy	Fiscal	Floor	Conf.	Enrolled	Vetoed	Chaptered
1st House				2nd House				Conc.			

Calendar: 4/19/2023 9 a.m. - 1021 O Street, Room 1200 SENATE ENVIRONMENTAL QUALITY, ALLEN, BENJAMIN, Chair

Summary: Would require the Energy Commission, in consultation with the State Air Resources Board and the Public Utilities Commission (PUC), to conduct an assessment, as specified, of the electric and hydrogen infrastructure needed to meet the deadlines in Executive Order No. N-79-20 for the transition of medium- and heavy-duty vehicles to zero-emission vehicles. The bill would require the Energy Commission, on or before December 31, 2024, to post the assessment on its internet website and submit the assessment to the Legislature. The bill would require the state board to incorporate the findings of the assessment into a strategic plan to meet the deadlines in Executive Order No. N-79-20 for the transition of medium- and heavy-duty fleets to zero-emission vehicles. The bill would require the state board to post the strategic plan on its internet website and submit the plan to the Legislature on or before December 31, 2025.

Position	Assigned	Subject	Group
Watch	Spencer		ACE

SB 501 **(Newman D) Hydrogen refueling stations: reliability and service quality plan.**

Current Text: Amended: 3/20/2023 html pdf

Current Analysis: 04/15/2023 Senate Energy, Utilities And Communications *(text 3/20/2023)*

Introduced: 2/14/2023

Last Amend: 3/20/2023

Status: 4/18/2023-From committee: Do pass and re-refer to Com. on E.Q. (Ayes 17. Noes 0.) (April 18). Re-referred to Com. on E.Q.

Location: 4/18/2023-S. E.Q.

Desk	**Policy**	Fiscal	Floor	Desk	Policy	Fiscal	Floor	Conf.	Enrolled	Vetoed	Chaptered
1st House				2nd House				Conc.			

Summary: Would require the State Energy Resources Conservation and Development Commission to develop a plan for improving reliability, service quality, and operational uptime of retail hydrogen fueling stations, would require specified metrics for measuring reliability, and would require the use of a public workshop process to develop the measures. The bill would require hydrogen refueling stations to maintain a publicly available online customer feedback portal, post the online address for the portal in a place clearly visible to a customer during refueling, and disqualify a refueling station from receiving publicly funded grants if it fails to comply. The bill would require the energy commission to convene a public workshop process to create additional feedback portal requirements.

Position	Assigned	Subject	Group
Watch	Jessica		ACE

SB 537 **(Becker D) Open meetings: local agencies: teleconferences.**

Current Text: Amended: 3/22/2023 html pdf

Current Analysis: 04/14/2023 Senate Governance And Finance *(text 3/22/2023)*

Introduced: 2/14/2023

Last Amend: 3/22/2023

Status: 4/10/2023-Set for hearing April 19.

Location: 3/29/2023-S. GOV. & F.

Desk	**Policy**	Fiscal	Floor	Desk	Policy	Fiscal	Floor	Conf.	Enrolled	Vetoed	Chaptered
1st House				2nd House				Conc.			

Calendar: 4/19/2023 9 a.m. - 1021 O Street, Room 2200 SENATE GOVERNANCE AND FINANCE, CABALLERO, ANNA, Chair

Summary: Current law, until January 1, 2024, authorizes the legislative body of a local agency to use alternate teleconferencing provisions during a proclaimed state of emergency or in other situations related to public health that exempt a legislative body from the general requirements (emergency provisions) and impose different requirements for notice, agenda, and public participation, as prescribed. The emergency provisions specify that they do not require a legislative body to provide a physical location from which the public may attend or comment. Current law, until January 1, 2026,

authorizes the legislative body of a local agency to use alternate teleconferencing in certain circumstances related to the particular member if at least a quorum of its members participate from a singular physical location that is open to the public and situated within the agency's jurisdiction and other requirements are met, including restrictions on remote participation by a member of the legislative body. These circumstances include if a member shows "just cause," including for a childcare or caregiving need of a relative that requires the member to participate remotely. This bill would authorize certain legislative bodies to use alternate teleconferencing provisions similar to the emergency provisions indefinitely and without regard to a state of emergency. The bill would also require a legislative body to provide a record of attendance on its internet website within 7 days after a teleconference meeting, as specified. The bill would define "legislative body" for this purpose to mean a board, commission, or advisory body of a multijurisdictional cross county agency, the membership of which board, commission, or advisory body is appointed and which board, commission, or advisory body is otherwise subject to the act. The bill would also define "multijurisdictional" to mean a legislative body that includes representatives from more than one county, city, city and county, special district, or a joint powers entity.

Position	Assigned	Subject	Group
Watch Spot Bill	Jessica		SLC

SB 561 **(Blakespear D) Public contracts: environmentally preferable purchasing.**

Current Text: Introduced: 2/15/2023 html pdf

Introduced: 2/15/2023

Status: 2/22/2023-Referred to Com. on RLS.

Location: 2/15/2023-S. RLS.

Desk	**Policy**	Fiscal	Floor	Desk	Policy	Fiscal	Floor	Conf. Conc.	Enrolled	Vetoed	Chaptered
1st House				2nd House							

Summary: Current law requires the Department of General Services, in consultation with the California Environmental Protection Agency, members of the public, industry, and public health and environmental organizations, to provide state agencies with information and assistance regarding environmentally preferable purchasing. Existing law defines "environmentally preferable purchasing" for purposes of those provisions. This bill would make a nonsubstantive change to the definition of "environmentally preferable purchasing."

Position	Assigned	Subject	Group
Watch Spot Bill	Jessica		SLC

SB 613 **(Seyarto R) Organic waste: reduction goals: local jurisdictions: low-population exemption.**

Current Text: Amended: 4/11/2023 html pdf

Current Analysis: 03/27/2023 Senate Environmental Quality *(text 2/15/2023)*

Introduced: 2/15/2023

Last Amend: 4/11/2023

Status: 4/14/2023-Set for hearing April 24.

Location: 3/29/2023-S. APPR.

Desk	Policy	**Fiscal**	Floor	Desk	Policy	Fiscal	Floor	Conf. Conc.	Enrolled	Vetoed	Chaptered
1st House				2nd House							

Calendar: 4/24/2023 10 a.m. - 1021 O Street, Room 2200 SENATE APPROPRIATIONS, PORTANTINO, ANTHONY, Chair

Summary: Current law requires, no later than January 1, 2018, the State Air Resources Board to approve and begin implementing a comprehensive short-lived climate pollutant strategy to achieve a certain reduction in statewide emissions of methane, including a goal of a 75% reduction in the level of the statewide disposal of organic waste from the 2014 level by 2025. Current law requires the Department of Resources Recycling and Recovery, in consultation with the state board, to adopt regulations that achieve those targets for reducing organic waste in landfills that may include, among other things, different levels of requirements for local jurisdictions and phased timelines based upon their progress in meeting the organic waste reduction goals, and penalties to be imposed by the department for noncompliance. This bill would exempt a local jurisdiction, as defined, from those requirements and regulations until December 31, 2028, if the local jurisdiction disposes of fewer than 5,000 tons of solid waste per year and has fewer than 7,500 people, as provided.

Position	Assigned	Subject	Group
Watch	Spencer		SLC

SB 638 **(Eggman D) Climate Resiliency and Flood Protection Bond Act of 2024.**

Current Text: Amended: 3/20/2023 html pdf

Current Analysis: 04/14/2023 Senate Governance And Finance *(text 3/20/2023)*

Introduced: 2/16/2023

Last Amend: 3/20/2023

Status: 4/10/2023-Set for hearing April 19.

Location: 3/28/2023-S. GOV. & F.

Desk	**Policy**	Fiscal	Floor	Desk	Policy	Fiscal	Floor	Conf. Conc.	Enrolled	Vetoed	Chaptered
1st House				2nd House							

Calendar: 4/19/2023 9 a.m. - 1021 O Street, Room 2200 SENATE GOVERNANCE AND FINANCE, CABALLERO, ANNA, Chair

Summary: Would enact the Climate Resiliency and Flood Protection Bond Act of 2024 which, if approved by the voters, would authorize the issuance of bonds in the amount of $6,000,000,000 pursuant to the State General Obligation Bond Law, for flood protection and climate resiliency projects.

Position	Assigned	Subject	Group
Support, if amended	Spencer	Bond	SLC

SB 663 **(Archuleta D) California Renewables Portfolio Standard Program: renewable hydrogen.**

Current Text: Amended: 3/20/2023 html pdf

Current Analysis: 04/15/2023 Senate Energy, Utilities And Communications *(text 3/20/2023)*

Introduced: 2/16/2023

Last Amend: 3/20/2023

Status: 4/18/2023-From committee: Do pass and re-refer to Com. on E.Q. (Ayes 17. Noes 0.) (April 18). Re-referred to Com. on E.Q.

Location: 4/18/2023-S. E.Q.

Desk	**Policy**	Fiscal	Floor	Desk	Policy	Fiscal	Floor	Conf. Conc.	Enrolled	Vetoed	Chaptered
1st House				2nd House							

Calendar: 4/26/2023 9 a.m. - 1021 O Street, Room 1200 SENATE ENVIRONMENTAL QUALITY, ALLEN, BENJAMIN, Chair

Summary: Current law establishes the California Renewables Portfolio Standard Program, which requires the Public Utilities Commission to implement annual procurement targets for the procurement of eligible renewable energy resources, which is defined as an electrical generating facility that meets the definition of "renewable electrical generation facility" subject to certain conditions, for all retail sellers, as defined, and requires local publicly owned electric utilities to adopt and implement a renewable energy resources procurement plan to achieve the targets and goals of the program. This bill would include a facility that uses renewable hydrogen, as defined, meeting certain requirements, including a requirement that sellers and purchasers of renewable hydrogen comply with a system for tracking and verifying the use of renewable hydrogen, as a renewable electrical generation facility for purposes of the California Renewables Portfolio Standard Program.

Position	Assigned	Subject	Group
Watch	Jessica		ACE

SB 674 **(Gonzalez D) Air pollution: refineries: community air monitoring systems: fence-line monitoring systems.**

Current Text: Amended: 4/10/2023 html pdf

Current Analysis: 04/14/2023 Senate Judiciary *(text 4/10/2023)*

Introduced: 2/16/2023

Last Amend: 4/10/2023

Status: 4/12/2023-Set for hearing April 18.

Location: 3/29/2023-S. JUD.

Desk	**Policy**	Fiscal	Floor	Desk	Policy	Fiscal	Floor	Conf. Conc.	Enrolled	Vetoed	Chaptered
1st House				2nd House							

Summary: Current law requires a refinery-related community air monitoring system to be installed near each petroleum refinery that meets certain requirements. Current law requires the owner or operator of a petroleum refinery to develop, install, operate, and maintain a fence-line monitoring system in accordance with guidance developed by the appropriate air quality management district or air pollution control district. Current law requires the air districts and the owners or operators of refineries to collect real-time data from those monitoring systems, to maintain records of that data, and, to the extent feasible, provide to the public those data in a publicly accessible format. This bill would extend the above requirements to refineries engaging in other types of refining processes, including those using noncrude oil feedstock, and to auxiliary facilities. The bill would require the refinery-related community air monitoring system and the fence-line monitoring system to be installed on or before January 1, 2026, and after a 30-day public comment period and those systems to be updated, as specified. The bill would require the appropriate air district to establish pollutants for the monitoring systems to monitor and would include certain pollutants identified by the Office of Environmental Health Hazard Assessment. The bill would authorize the air district to exclude a pollutant for monitoring at those monitoring systems, as provided. The bill would require air districts, on a 5-year basis, to review the list of pollutants being measured and would authorize the air districts to revise the list, as provided. The bill would require the air districts and the owners and operators of refineries to maintain records of the data collected from those systems for at least 5 years and would

require the owners and operators to post online, and to notify the public of the availability of, quarterly reports containing certain information. The bill would require owners and operators of refineries to notify the air district and the public, as provided, as quickly as possible of any exceedances of the lowest available one-hour average reference exposure levels set by the office or the United States Environmental Protection Agency.

Position	Assigned	Subject	Group
Refer to ACE Committee	Jessica		ACE

SB 705 **(Ashby D) Utility workers: harassment: public campaign.**

Current Text: Amended: 4/18/2023 html pdf

Current Analysis: 04/07/2023 Senate Energy, Utilities And Communications *(text 3/20/2023)*

Introduced: 2/16/2023

Last Amend: 4/18/2023

Status: 4/18/2023-Read second time and amended. Re-referred to Com. on APPR.

Location: 4/10/2023-S. APPR.

Desk	Policy	**Fiscal**	Floor	Desk	Policy	Fiscal	Floor	Conf.	Enrolled	Vetoed	Chaptered
1st House				2nd House				Conc.			

Summary: Would require the Public Utilities Commission to develop, in coordination with electrical corporations, gas corporations, and the unions representing the impacted workers, and conduct a 5-year, statewide, public campaign to raise awareness and understanding around the harassment of utility workers and contractors in the state, as specified. The bill would require the commission, at the end of each year of the campaign, to evaluate the effectiveness of the campaign, and to prepare and publish on its internet website an annual report describing the campaign's activities, effectiveness, and gaps, as specified. The bill would require implementation of these provisions to be subject to the commission receiving sufficient funding for the campaign.

Position	Assigned	Subject	Group
Watch Spot Bill	Jessica		SLC

SB 706 **(Caballero D) Public contracts: progressive design-build: local agencies.**

Current Text: Amended: 4/10/2023 html pdf

Current Analysis: 03/24/2023 Senate Governance And Finance *(text 3/21/2023)*

Introduced: 2/16/2023

Last Amend: 4/10/2023

Status: 4/18/2023-Read second time. Ordered to third reading.

Location: 4/18/2023-S. THIRD READING

Desk	Policy	Fiscal	**Floor**	Desk	Policy	Fiscal	Floor	Conf.	Enrolled	Vetoed	Chaptered
1st House				2nd House				Conc.			

Calendar: 4/20/2023 #44 SENATE SENATE BILLS -THIRD READING FILE

Summary: Current law, until January 1, 2029, authorizes local agencies, defined as any city, county, city and county, or special district authorized by law to provide for the production, storage, supply, treatment, or distribution of any water from any source, to use the progressive design-build process for up to 15 public works projects in excess of $5,000,000 for each project, similar to the progressive design-build process authorized for use by the Director of General Services. Current law requires a local agency that uses the progressive design-build process to submit, no later than January 1, 2028, to the appropriate policy and fiscal committees of the Legislature a report on the use of the progressive design-build process containing specified information, including a description of the projects awarded using the progressive design-build process. Current law requires the design-build entity and its general partners or joint venture members to verify specified information under penalty of perjury. This bill would authorize all cities, counties, city and counties, or special districts to use the progressive design-build process for other projects in addition to water-related projects and would extend these provisions until January 1, 2030. The bill would change the required reporting date to no later than December 31, 2028.

Position	Assigned	Subject	Group
Watch Close	Spencer		SLC

SB 709 **(Allen D) Low-Carbon Fuel Standard regulations: biogas derived from livestock manure.**

Current Text: Amended: 3/30/2023 html pdf

Current Analysis: 04/17/2023 Senate Environmental Quality *(text 3/30/2023)*

Introduced: 2/16/2023

Last Amend: 3/30/2023

Status: 3/30/2023-From committee with author's amendments. Read second time and amended. Re-referred to Com. on E.Q.

Location: 3/1/2023-S. E.Q.

Desk	**Policy**	Fiscal	Floor	Desk	Policy	Fiscal	Floor	Conf.	Enrolled	Vetoed	Chaptered
1st House				2nd House				Conc.			

Calendar: 4/19/2023 9 a.m. - 1021 O Street, Room 1200 SENATE ENVIRONMENTAL QUALITY, ALLEN, BENJAMIN, Chair

Summary: Current law requires the State Air Resources Board to approve and begin implementing a comprehensive strategy to reduce emissions of short-lived climate pollutants in the state to achieve, among other things, a reduction in methane emissions to 40% below 2013 levels by 2030. Current law requires the state board, in consultation with the Department of Food and Agriculture, to adopt regulations to reduce methane emissions from livestock manure management operations and dairy manure management operations consistent with the strategy, as specified. Current law requires those regulations to be implemented on or after January 1, 2024, if the state board, in consultation with the department, makes certain determinations. Current law requires the state board to provide guidance on credits generated pursuant to the Low-Carbon Fuel Standard regulations, and the market-based compliance mechanism, adopted pursuant to the act from the methane reduction protocols described in the comprehensive strategy for short-lived climate pollutants. Existing law requires the state board to ensure that projects developed before the implementation of the regulations to reduce methane emissions from livestock manure management operations and dairy manure management operations receive credit under the Low-Carbon Fuel Standard regulations and the market-based compliance mechanism for at least 10 years. Existing law also makes projects eligible for an extension of credits after the first 10 years, as specified. This bill would eliminate the requirement that the state board ensure those projects receive credit for at least 10 years and would eliminate the requirement for those projects to be eligible for an extension of credits after the first 10 years.

Position	Assigned	Subject	Group
Support	Jessica		ACE

SB 745 **(Cortese D) The Drought-Resistant Buildings Act.**

Current Text: Introduced: 2/17/2023 html pdf

Current Analysis: 04/13/2023 Senate Housing *(text 2/17/2023)*

Introduced: 2/17/2023

Status: 3/30/2023-Set for hearing April 18.

Location: 3/1/2023-S. HOUSING

Desk	**Policy**	Fiscal	Floor	Desk	Policy	Fiscal	Floor	Conf.	Enrolled	Vetoed	Chaptered
1st House				2nd House				Conc.			

Summary: Would require the California Building Standards Commission to develop and propose mandatory building standards to reduce the designed potable water demand of new buildings by 25% from current mandatory design requirements and to minimize the use of potable water for nonpotable uses. The bill would require the commission to adopt mandatory building standards that require new buildings to be designed to capture graywater and use alternative water sources for nonpotable building and landscaping water uses, as specified.

Position	Assigned	Subject	Group
Oppose, unless amended	Jessica		SLC

SB 747 **(Caballero D) Land use: economic development: surplus land.**

Current Text: Amended: 4/13/2023 html pdf

Current Analysis: 04/07/2023 Senate Governance And Finance *(text 3/22/2023)*

Introduced: 2/17/2023

Last Amend: 4/13/2023

Status: 4/13/2023-Read second time and amended. Re-referred to Com. on RLS.

Location: 4/12/2023-S. RLS.

Desk	**Policy**	Fiscal	Floor	Desk	Policy	Fiscal	Floor	Conf.	Enrolled	Vetoed	Chaptered
1st House				2nd House				Conc.			

Summary: Current law authorizes a city, county, or city and county, with the approval of its legislative body by resolution after a public hearing, to acquire, sell, or lease property in furtherance of the creation of an economic opportunity, as defined. Existing law specifies the Legislature's intent regarding those provisions. This bill would authorize a city, county, or city and county, in addition to a sale or lease, to otherwise transfer property to create an economic opportunity. The bill would make related, conforming changes. The bill would additionally state the Legislature's intent is to ensure that residents of the state have access to jobs that allow them to afford housing without the need for public subsidies.

Position	Assigned	Subject	Group
Support, if amended	Spencer		SLC

SB 769 **(Gonzalez D) Local government: fiscal and financial training.**

Current Text: Introduced: 2/17/2023 html pdf
Current Analysis: 04/14/2023 Senate Governance And Finance *(text 2/17/2023)*
Introduced: 2/17/2023
Status: 4/10/2023-Set for hearing April 19.
Location: 3/1/2023-S. GOV. & F.

Desk	**Policy**	Fiscal	Floor	Desk	Policy	Fiscal	Floor	Conf. Conc.	Enrolled	Vetoed	Chaptered
1st House				2nd House							

Calendar: 4/19/2023 9 a.m. - 1021 O Street, Room 2200 SENATE GOVERNANCE AND FINANCE, CABALLERO, ANNA, Chair

Summary: Would require, if a local agency provides any type of compensation, salary, or stipend to a member of a legislative body, or provides reimbursement for actual and necessary expenses incurred by a member of a legislative body in the performance of official duties, all local agency officials, as defined, to receive at least two hours of fiscal and financial training, as described. The bill would require the training to be received at least once every two years, as provided. This bill contains other related provisions and other existing laws.

Position	Assigned	Subject	Group
Watch	Spencer		SLC

SB 778 **(Ochoa Bogh R) Excavations: subsurface installations.**

Current Text: Amended: 4/12/2023 html pdf
Current Analysis: 04/06/2023 Senate Business, Professions And Economic Development *(text 2/17/2023)*
Introduced: 2/17/2023
Last Amend: 4/12/2023
Status: 4/18/2023-Set for hearing April 26.
Location: 4/10/2023-S. GOV. & F.

Desk	**Policy**	Fiscal	Floor	Desk	Policy	Fiscal	Floor	Conf. Conc.	Enrolled	Vetoed	Chaptered
1st House				2nd House							

Calendar: 4/26/2023 9 a.m. - State Capitol, Room 112 SENATE GOVERNANCE AND FINANCE, CABALLERO, ANNA, Chair

Summary: Underground Facilities Safe Excavation Board, also known as the Dig Safe Board, for the enforcement and administration of the Safe Dig Act. Current law requires certain entities, before beginning excavation, to delineate the area to be excavated and to notify the appropriate regional notification center, which, in response to that contact, is required to provide the excavator with a ticket and to notify certain operators who have a subsurface installation in the proposed excavation area. Current law requires an operator to take one of specified actions before the legal excavation start date and time, including locating and field marking within the delineated area and, where multiple subsurface installations of the same type are known to exist together, mark the number of subsurface installations. Current law prohibits an excavator from beginning excavation until the excavator receives an electronic positive response from all known operators of subsurface installations, as specified. Current law also establishes emergency and notification procedures for an excavator who discovers or causes damage to a subsurface installation. This bill, among other changes, would revise requirements for notifying operators of subsurface installations within a proposed area of excavation, would specify conditions under which an excavator is required to contact the regional notification to request a return trip, and would revise requirements for an excavator to use vacuum equipment. The bill would authorize an operator, under certain circumstances, to choose not to locate and field mark an area to be excavated. The bill would revise the requirements related to subsurface installation operator responses that an excavator must receive before beginning excavation, and the emergency and notification procedures when an excavator discovers or causes damage to a subsurface installation. The bill would revise the meaning of "inaccurate field mark" for purposes of exempting from liability an excavator who damages a subsurface installation due to an inaccurate field mark.

Position	Assigned	Subject	Group
Oppose, unless amended	Jessica, Spencer		SLC

SB 781 **(Stern D) Methane emissions: low-methane natural gas.**

Current Text: Amended: 4/10/2023 html pdf
Current Analysis: 03/27/2023 Senate Environmental Quality *(text 2/17/2023)*
Introduced: 2/17/2023
Last Amend: 4/10/2023
Status: 4/12/2023-Set for hearing April 24.
Location: 3/29/2023-S. E. U., & C.

Desk	**Policy**	Fiscal	Floor	Desk	Policy	Fiscal	Floor	Conf. Conc.	Enrolled	Vetoed	Chaptered
1st House				2nd House							

Calendar: 4/24/2023 3 p.m. or upon adjournment of Session - 1021 O Street, Room 1200

SENATE ENERGY, UTILITIES AND COMMUNICATIONS, BRADFORD, STEVEN, Chair

Summary: The California Global Warming Solutions Act of 2006 designates the State Air Resources Board as the state agency responsible for monitoring and regulating sources of emissions of greenhouse gases that cause global warming in order to reduce emissions of greenhouse gases. The act requires all state agencies to consider and implement strategies to reduce their greenhouse gas emissions. This bill would additionally require state agencies to prioritize strategies to reduce methane emissions, including emissions from imported natural gas, where feasible and cost effective. The bill would require the state board, no later than December 31, 2024, to establish a certification standard for natural gas producing low-methane emissions. The bill would require, no later than December 31, 2025, that natural gas procured on behalf of state agencies be certified as producing low-methane emissions.

Position	Assigned	Subject	Group
Watch	Jessica		ACE

SB 865 **(Laird D) Municipal water districts: automatic exclusion of cities.**

Current Text: Introduced: 2/17/2023 html pdf

Introduced: 2/17/2023

Status: 4/10/2023-Set for hearing April 19. April 19 set for first hearing canceled at the request of author.

Location: 3/1/2023-S. GOV. & F.

Desk	**Policy**	Fiscal	Floor	Desk	Policy	Fiscal	Floor	Conf. Conc.	Enrolled	Vetoed	Chaptered
1st House				2nd House							

Summary: Current law authorizes a governing body of a municipal water district to adopt an ordinance excluding any territory annexed to a metropolitan water district organized under the Metropolitan Water District Act, if the territory is annexed prior to the effective date of the formation of the municipal water district. Current law requires the Secretary of State to issue a certificate reciting the passage of the ordinance and the exclusion of the area from the municipal water district within 10 days of receiving a certified copy of the ordinance. This bill would extend the number of days the Secretary of State has to issue a certificate to 14 days.

Position	Assigned	Subject	Group
Watch Spot Bill	Jessica		SLC

SB 867 **(Allen D) Drought and Water Resilience, Wildfire and Forest Resilience, Coastal Resilience, Extreme Heat Mitigation, Biodiversity and Nature-Based Climate Solutions, Climate Smart Agriculture, and Park Creation and Outdoor Access Bond Act of 2023.**

Current Text: Introduced: 2/17/2023 html pdf

Current Analysis: 03/23/2023 Senate Natural Resources And Water *(text 2/17/2023)*

Introduced: 2/17/2023

Status: 4/13/2023-Set for hearing April 26.

Location: 3/28/2023-S. GOV. & F.

Desk	**Policy**	Fiscal	Floor	Desk	Policy	Fiscal	Floor	Conf. Conc.	Enrolled	Vetoed	Chaptered
1st House				2nd House							

Calendar: 4/26/2023 9 a.m. - State Capitol, Room 112 SENATE GOVERNANCE AND FINANCE, CABALLERO, ANNA, Chair

Summary: Would enact the Drought and Water Resilience, Wildfire and Forest Resilience, Coastal Resilience, Extreme Heat Mitigation, Biodiversity and Nature-Based Climate Solutions, Climate Smart Agriculture, and Park Creation and Outdoor Access Bond Act of 2023, which, if approved by the voters, would authorize the issuance of bonds in an unspecified amount pursuant to the State General Obligation Bond Law to finance projects for drought and water resilience, wildfire and forest resilience, coastal resilience, extreme heat mitigation, biodiversity and nature-based climate solutions, climate smart agriculture, and park creation and outdoor access programs.

Position	Assigned	Subject	Group
Support, if amended	Spencer	Bond	SLC

Total Measures: 88
Total Tracking Forms: 88

CASA News

Come Grow With Us!

CASA is delighted to share that we will be continuing the CASA Mentoring Program in 2023-24 after another successful year. Join us as a mentor or mentee to inspire others, share knowledge and drive change! This 11-month comprehensive program, kicking off in October and concluding in August 2024, serves to connect clean water professionals from across the state of California. Working with Core Consulting, which has a depth of experience developing mentoring and training programs working with public agencies, CASA will match mentor/mentee pairs based on their professional goals, preferences, and experience. The program is open to both associates and agency members. Want to learn more? Join us for a virtual information session on Monday, July 31, from 12:00pm - 12:30pm or Wednesday, August 16, from 11:30am - 12:00pm and be sure to visit the CASA LEAD webpage! If you already know you are interested in this program for the upcoming year, please email Alyssa Downs (adowns@casaweb.org) so we can add you to our interest list.

Federal Update

Support National Wipes Legislation

Last month, the bipartisan, bicameral WIPPES Act was introduced in Congress. The *Wastewater Infrastructure Pollution Prevention and Environmental Safety (WIPPES) Act* (S. 1350/H.R. 2964), would require wipes manufacturers to print a clear and conspicuous "Do Not Flush" label on their nonflushable wipes product packaging.

We're asking CASA members to reach out to your congressional delegations urging them to support the WIPPES Act. To help, CASA has created support letter templates to send to your House delegations and Senator Dianne Feinstein. CASA and the other stakeholders have also created a fact sheet that can be sent along with your letters to congressional offices.

The key to advancing this meaningful legislation will be increasing broad support for the bills through additional co-sponsorships, and the most direct way to do this is by having members of Congress hear directly from their constituents! Letters should be sent to congressional offices by May 15.

Read More

State Legislative Update

Sign up for CASA's State Legislative Updates

CASA has created a new comprehensive e-newsletter to share state legislative updates with the CASA membership. If you are interested in receiving these updates, please contact Spencer Saks. The first edition is available here.

Air Climate and Energy Updates

CARB Approves New Regulations

The California Air Resources Board (CARB) approved the In-Use Locomotive Regulation on Thursday, April 27 and the Advanced Clean Fleet (ACF) Regulations on Friday April 28. The ACF Regulations are of significant importance to CASA members as they require phasing in zero-emission medium- and heavy-duty trucks for truck replacements in the near term (if ZEVs are available). The regulations also do not provide for fleets to expand their compressed natural gas (CNG) fleet vehicles (even those fueled by biomethane) after January 1, 2024. This limits the sector's ability to accept diverted food waste in support of SB 1383.

However, after two years of working with CARB staff, Board members, and other state agencies, the Board responded to CASA and the wastewater community's concerns and adopted a Resolution with amendments stating they recognize "…that multiple reliable uses for non-fossil biomethane will be needed for successful implementation (of SB 1383). The Board recognizes the need for coordination meetings with other state agencies such as CEC, CPUC, State Water Resources Control Board, CalRecycle, CDFA, CNRA, CalOSHA and other relevant stakeholders such as the California Association of Sanitation Agencies and the California Air Pollution Control Officers Association, to implement SB 1383 and SB 1440. As such, the Board directs staff to prioritize policy discussions related to SB 1383 and SB 1440 implementation…to achieve the SB 1383 target." Thank you to

all those who have been involved in this process, and we look forward to working with state and local agencies to find ways to continue our beneficial use of wastewater biogas!

Member News

New Members

Welcome to CASA!

[City of Santa Clara]

[Ridgeline Municipal Strategies]

Central San Welcomes New Board Member

Central Contra Costa Sanitary District (Central San) is delighted to welcome Florence Wedington as the newest member of its Board of Directors. Ms. Wedington was sworn into office on April 26, 2023, following her appointment by the Board to fill a vacancy in Division 3 (Walnut Creek area). The seat was vacant following the passing of Board Member David R. Williams in March. Ms. Wedington is a registered Professional Civil Engineer with over 30 years of experience in the wastewater, recycled water, and water industries working in both the private and public sectors. She is currently a Senior Civil Engineer at East Bay Municipal Utility District and leads their Office of Water Recycling where she manages a $100 million five-year capital budget. Read more in the press release here.

OC San Video Contest

As the regional sewer provider for central and northwest Orange County, the Orange County Sanitation District (OC San) is responsible for safely collecting, treating, disposing, and recycling of over 180 million gallons of wastewater every day. As environmental stewards, OC San's goal is to educate the younger generations on the impacts and contributions of their actions. OC San's goal is to help their community understand the value of wastewater. To do so they are launching a video contest among high school and college students in their service area to spread the message that there are a multitude of career opportunities in the wastewater field. This is a great opportunity for students to showcase their skills and for them to learn about their regional sewer service provider. For full contest information visit ocsan.gov/video.

Upcoming Events

2023 Special Districts Legislative Days

CASA is a proud Partner of the 2023 Special Districts Legislative Days, scheduled for May 16 - 17 at the Sheraton Grand Sacramento. Gain the edge on policy changes impacting your agency and exchange ideas with California's top decision-makers

at the 2023 Special Districts Legislative Days, an interactive and informative two-day legislative conference in our State's Capitol.

Fully one-third of the State Legislature turned over this year, making the 2023 Special Districts Legislative Days a MUST-ATTEND EVENT! Register at legislativedays.csda.net today.

Read More

Partnering For Impact

Register today for the CWEA and CASA Partnering for Impact (PFI) event happening on June 6, 2023, from 9:00am to 4:15pm in Berkeley, CA. The goal of Partnering for Impact is to build stronger utility, university, and industry collaborations for innovation and find areas where we can create a positive impact together. At this year's event, we'll discuss ways we can implement innovative solutions even faster. This year's featured topics include the risks and rewards associated with various technologies, and what we're learning about innovations in biosolids resource recovery. Register here!

CASA Annual Conference

CASA is pleased to announce that we will be hosting our Annual Conference on August 9 - 11 in San Diego at the Manchester Grand Hyatt! The theme of this year's Annual Conference is The New Water Era. The Conference will feature a host of speakers covering important topics, including wastewater-based epidemiology, workforce development, agency financing, regulatory topics such as PFAS and nutrients, and much more! Keep an eye out for registration opening in the next two weeks, you won't want to miss it!

Careers and Opportunities

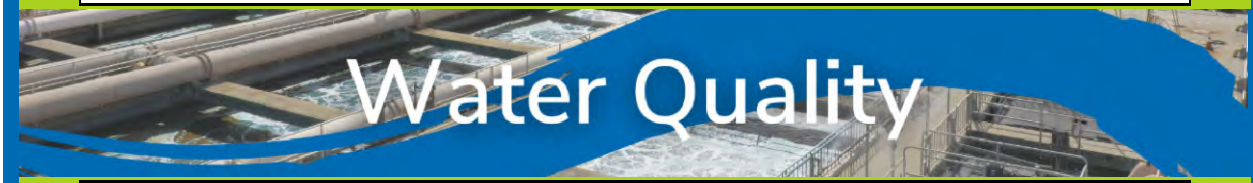
Visit CASA's Job Board.

CASA represents more than 130 local public agencies engaged in the collection, treatment and recycling of Wastewater and biosolids to protect public health and the environment. Our mission is to provide trusted information and advocacy on behalf of California clean water agencies, and to be a leader in sustainability and utilization of renewable resources.

Visit Our Website

Top Stories for May

- **SWRCB Nutrient Management Workshop on May 18**
- **CASA Submits Comments on SWRCB Water Quality Enforcement Policy Update**
- **SSS WDR Virtual Webinar on May 3**
- **CARB Approves Advanced Clean Fleet Regulations**
- **CASA "All Committees" Meeting on May 23**
- **In-Person CASA RWG & CWG Meetings in SoCal on May 11 and May 17**
- **Find out more by viewing the CASA Calendar and Upcoming Events**



SWRCB Nutrient Management Workshop on May 18

On May 18, the State Water Resources Control Board (SWRCB) is hosting an all-day virtual nutrient management staff workshop. To participate, you may register using the link on the formal Notice, which also includes the agenda. The event will feature presentations about the status of the SWRCB's development of nutrient standards for

inland and coastal waters, the strategy of the San Francisco Bay's nutrient reduction study evaluating different management options and their estimated expense, and the Los Angeles County Sanitation District's nutrient removal evaluation and planning efforts. After the presentations portion of the workshop concludes, participants will be invited to discuss immediate actions that could be taken to incentivize wastewater agencies to evaluate the feasibility of reducing nutrients as part of their future planning for facility upgrades including recycled water projects. CASA will be participating in the event, and agencies with experience in these arenas are strongly encouraged to prepare and plan to participate in the workshop in order to share and provide local-perspective and experience about what management actions are needed at this time in order for California to achieve goals in the Governor's Water Supply Strategy (2022) and Resiliency Portfolio (2021). If you have questions or comments about this workshop, please reach out to Jared Voskuhl.

CASA Submits Comments on SWRCB Water Quality Enforcement Policy Update

On April 28, CASA submitted comments on the SWRCB's proposed changes to their water quality enforcement policy. CVCWA and CASQA also submitted comments, and previously the SWRCB held a workshop on April 18 during their Board meeting to discuss the policy changes. Per the rulemaking's Notice, the SWRCB plans to formally adopt the final version on August 15. You may access these materials on the SWRCB program page here. Please let Jared Voskuhl know your questions or feedback.

CASA and Water Coalition Submit Comments on ELAP's May 2 Update to the SWRCB

On April 27, CASA joined with ACWA, CA-NV-AWWA, and CMUA, to provide comments on the annual update provided by the California Environmental Laboratory Accreditation Program (ELAP) scheduled for the SWRCB meeting on May 2. Since the regulations' adoption three years prior, there has been a 25% decrease in accredited labs across California, which has been attributed to the cost of compliance with the new regulations. This substantial change in the lab population is expected to result in significant fee increases to the labs maintaining their accreditation, in order for the ELAP program to be funded to the same level as in prior years. If you have questions or feedback on the letter, please reach out to Jared Voskuhl.

Summit Partners Next SSS WDR Webinar on May 3

On May 3, the Clean Water Summit Partners (BACWA, CASA, Clean Water SoCal, CVCWA, CWEA) will host another free Zoom webinar on the reissued statewide Sanitary Sewer System Waste Discharge Requirements Order (SSS WDR Order) that the SWRCB adopted on December 6, 2022. You may register here for webinar, which starts at 12:30 PM and last for 3 hours, as shown in the linked schedule.. This event is designed specifically for collection system LROs, data submitters, managers, and operators to further understand the streamlined process for existing enrollees to transfer current Order enrollment to the new Order by June 4, 2023, prior to the new Order becoming effective, as well as focusing on how enrollees designate their Legally Responsible Official(s), understand different categories of spills, likely changes to make on spill reporting forms, and techniques for crews overflow volume estimation. The event also will focus on increasing coordination with stormwater agencies, as well as how to maximize the use of stormwater conveyance systems as containment. Finally, the webinar will cover priority actions to comply with modified spill reporting and updated Spill Emergency Response Plan requirements by June 5, 2023. For your reference, the

video presentations and slides from the Summit Partners' prior two workshops on January 11 and March 22 are all available and archived online. If you have any questions, do not hesitate to reach out to Jared Voskuhl during the interim, or, you may use the interactive FAQ document to which the State Water Resources Control Board's team is providing responses.

2023-24 CWSRF Draft IUP Scheduled for Release in Second Half of May

By May 19, the SWRCB's Division of Financial Assistance intend to release the 2023-24 draft Intended Use Plan for the Clean Water State Revolving Fund. Previously, the SWRCB has planned to release it in the first half of May, but this has been pushed back slightly, along with the associated comment deadline and workshop which tentatively will held during the Board's June 20 SWRCB meeting. The SWRCB's associated work drafting policy amendments for adoption later in the summer is also pending. CASA's CWSRF subgroup is actively meeting and developing our position on these matters, so if you have questions or comments, please reach out to Jared Voskuhl

Cerio Study Stakeholder Advisory Committee Met on 4/13

On April 13, the Stakeholder Advisory Committee (SAC) for the c. dubia study met to discuss the education and technical guidance resources being developed for labs, as well as the second intercalibration study design advised by the Expert Science Panel (ESP) for the Southern California Coastal Water Research Project (SCCWRP) to conduct this spring. On March 28, SCCWRP held a SAC meeting to review and report out on the education and training meeting they held with the Expert Science Panel. The 3/28 meeting agenda and recording are available. During the meeting, CASA representatives requested the next intercalibration round of sampling include supplemental controls for water quality parameters, which the Expert Science Panel declined to recommend pursuing with the current study. Prior meeting materials are available on SCCWRP's webpage for this study. If you have questions or feedback about these study developments, please reach out to Jared Voskuhl.

USEPA Approves California Toxicity Provisions on 5/1

On May 1, after nearly two decades of development, the Statewide Toxicity Provisions that the SWRCB adopted in 2020 and re-adopted in 2021 have now been approved by USEPA. They provisions take effect immediately, and for those agencies with the new toxicity language in your permits, you have until June 1 to transition to the new requirements. You may read more in the linked letter from USEPA to the SWRCB. If you have questions, please reach out to Jared Voskuhl.

SWRCB Expected to Release Draft Conservation Regulations in the next 2-6 Weeks

In the second half of May or first half of June, the SWRCB intends to release water use efficiency regulations under the 2018 legislation making water conservation a way of life. The proposed regulations, if adopted, would establish unique water use efficiency goals for each urban retail water supplier in California. The SWRCB's overview and framework is linked, and the associated Standardized Regulatory Impact Assessment ("SRIA") for this rulemaking also has been released. You can review the work to date on the SWRCB's program page, which includes analyses of expected adverse impacts to collection systems and treatment facilities due to lower flows.

Previously on March 30, CASA, Clean Water SoCal, and CVCWA submitted comments on the draft framework, and subsequently, CASA has been collaborating with ACWA, CMUA, and WateReuse California on prospective variances to avert wastewater infrastructure impacts and funding solutions to mitigate unavoidable impacts. CASA also is working with SWRCB staff to identify a date after the release of the regulations for them to present on the Water Use Objective Exploration Tool so that agencies may utilize the water use objective calculator, analyze the results, and assess prospective impacts related to indoor conservation over the coming years and decade. If you have questions, please reach out to Jared Voskuhl.

CASA Advocacy on PFAS and CERCLA Liability Exemptions

On April 13, USEPA announced that they are seeking public input to assist the Agency's consideration to potentially designate seven additional PFAS chemicals as hazardous substances under CERCLA. The Agency asking for input and data on the below PFAS chemicals and for precursors to PFOA and PFOS: PFBS, PFHxS, PFNA, HFPO-DA, PFBA, PFDA, and PFHxA. This Advanced Notice of Proposed Rulemaking (ANPRM) comes as USEPA continues to work to finalize its Rulemaking to designate PFOA and PFOS as hazardous substances under CERCLA. The deadline for submitting public comments is June 12, 2023. This ANPRM comes as USEPA continues to work to finalize its Rulemaking to designate PFOA and PFOS as hazardous substances under CERCLA.

On April 24, CASA joined a coalition letter addressed to the Senate Committee on Environment and Public Works leadership in anticipation of Senate draft committee legislation about the need to provide liability exemptions under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) for the clean water sector and other public sector who are all passive receivers of PFAS chemicals. Specifically, the letter urges that any PFAS legislation the committee develops include a specific provision that ensures the signatory organizations are explicitly recognized as “passive receivers” of PFAS and afford these essential public services a narrow exemption from liability under)." The letter explains that without such an explicit exemption, the designation of PFAS as a hazardous substance under CERLCA would shift the “polluter pays” principle of the law to that of a “community pays” model, placing the burden of compliance and cleanup onto ratepayers and the public at-large.

This request is similar to the comment letter that CASA submitted on March 27 to USEPA's Office of Enforcement and Compliance Assurance in response to the recent public CERCLA listening session. The purpose of that listening session was for the Agency to outline what potential liability enforcement policies the Agency may consider if and when PFAS chemicals are designated as a hazardous substance and hear concerns from the public on the topic. During the listening session, EPA stated that they do not intend to extend enforcement liability to POTWs. However, attendees who provided verbal comments during the session raised the issue that this intention from EPA is appreciated but does not provide legal certainty for wastewater agencies. NACWA also submitted a letter in response, detailing the limitations of CERCLA protections. NACWA’s letter provides an overview of the Diamond Alkali Superfund Site, where the Diamond Alkali Company illegally dumped a highly toxic dioxin directly into the Passaic River for decades while going to great lengths to hide what it was doing. If you have any questions or would like more information, please reach out to Sarah Sapirstein.

2023 California Bacteria Summit Update and 2022 Resources Online
In September of this year, the SWRCB is tentatively planning to host the 2023 Bacteria Summit. This will be the second year for the convening of water professionals, researchers, and policymakers to collaborate and prioritize feasible technical and regulatory actions. The SWRCB has convened a planning committee for this year's summit, and Steve Jepsen from Clean Water SoCal is serving on it to represent the clean water community.

Additionally, on April 26, the SWRCB published online the summary of the 2022 Bacteria Summit. Last year, the SWRCB and the California Stormwater Quality Association (CASQA) co-hosted an in-person three-day summit between September 14 and 16. The purpose of the summit was to identify the priority technical and regulatory actions needed to recreate safely in California's river and ocean waters, to eat shellfish safely, and the process to implement those actions. The linked document provides summaries and takeaways for each day of the summit, presentation information, and small group discussion feedback. The final 2022 Bacteria Summit Summary can be found on the State Water Board's Bacterial Objectives webpage. If you have any questions or input for this year's summit, please reach out to Steve Jepsen.

Wastewater Infrastructure and Funding Roadmap for Small DACS Released
The U.S. Chamber of Commerce has published their roadmap on funding for small and disadvantaged community water supplies, in partnership with Veolia and The Water Center at the University of Pennsylvania. This roadmap includes detailed discussions on the history of the funding that has been made available for drinking water, the status of the U.S.'s water and wastewater infrastructure, and information on the current drinking water supply. This in-depth report and roadmap can be found here. If you have any questions or would like more information, please reach out to Sarah Sapirstein.

WateReuse Panel Discussion on Treatment Strategies for PFAS in Water Reuse
On May 18, from 11am – 12pm, WateReuse is hosting a webinar on treatment strategies for PFAS in water reuse. This webinar seeks to address the challenges PFAS pose to many water reuse applications due to concerns about potential contamination of soils and groundwater. With the impending U.S. EPA rulemaking, the removal of PFAS for potable reuse projects is particularly critical. This webinar is free for WateReuse members, and you can register here.

BACWA Annual Members Meeting on May 5
On May 5, BACWA will hosts their annual meeting for members in-person at the David Brower Center in Berkeley. The event webpage is here, and the program is available here, which will feature updates on a variety of regulatory and technical topics including PFAS, air regulatory compliance, and biosolids, updates and appearances from regulators at the San Francisco Regional Water Board, SWRCB, USEPA, and Bay Area Air Quality Management District. You may register here for this free event, and if you have any questions beforehand, reach out to Jennifer Dyment.

CVCWA Annual Conference on May 11
On May 11, the Central Valley Clean Water Association will host their Annual Meeting which will feature a day of dynamic speakers speaking relevant regulatory topics

including the SSS WDR, CV-SALTS, the Toxicity Provisions, emerging Water Quality concerns and regulations, and appearances by representatives from the Central Valley Regional Water Quality Control Board. You may register here for this in-person event hosted at Regional San in Sacramento or contact Debbie Mackey with questions.

CASA All Committees & Workgroup Meeting on May 23

On May 23, CASA will be hosting our first All Committees and Workgroup meeting, which seeks to bring each of staff's various groups together to discuss cross media issues, including the State Legislative Committee, Federal Legislative Committee, Communications Committee, Regulatory Workgroup, Collections Workgroup, ACE Workgroup, and Associates Committee. The inception for this gathering occurred at CASA's Regulatory Workgroup Strategic Planning meeting in March, where there was interest in holding a virtual large group discussion with CASA's various committees and workgroups so that we could coordinate on important issues and increase partnerships between members who do not usually meet otherwise. The inaugural meeting will be held on May 23 from 9 to 11 AM. This meeting is open to all, and we encourage participation from each of our committees and workgroups attendees. If you have any questions or would like more information, please reach out to Jared Voskuhl.

SWRCB Agenda Roundup

Here are recent State Water Board agendas for their meetings on April 4, April 18, and May 2-3. The Executive Director reports are available for April and May, and they feature a link to the SWRCB's current statewide and regional policies calendar.

Organics Grant Program Deadline Extended to May 2

On April 21, the latest round of Questions and Answers for the Organics Grant Program was released. This is a grant program that funds projects that will lower overall greenhouse gas emissions by expanding existing capacity or establishing new facilities in California to reduce the amount of California-generated green materials, food materials, and/or Alternative Daily Cover being sent to landfills. You can visit the ORG7 Q&A Webpage here.

Due to the high volume of questions that were submitted, the grant application due date has been extended to May 2, 2023**.** For more information, go to Notice of Funds Available: Organics Grant Program (FYs 2021-22 and 2022-23) webpage. You can also find more information at the program website. If you have any questions or would like more information, please reach out to Greg Kester.

PFAS Summit on Agriculture and Natural Resource Challenges

On May 24 and 25, Jim Ippolito from Colorado State, will be hosting a virtual PFAS Summit. This summit will address the state of PFAS science for agriculture and natural resource challenges, and it includes an impressive list of speakers. Registration will be

available in mid-April, and CASA will share links when they are available. If you are looking for more information, please reach out to Greg Kester.

CASA & CWEA Partnering for Impact Event on June 6
On June 6, CASA and CWEA will host their 2023 Partnering for Impact seminar at the David Brower Center in Berkeley with Dr. David Sedlak as the keynote speaker. These have been extremely well received events, which foster proactive discussion and exchange among participants and panelists. The flyer is available to view here. Please reach out to Greg Kester if you have any questions or comments.

CARB Approves Advanced Clean Fleet Regulations
On April 27 and 28, the California Air Resources Board (CARB) approved both the Advanced Clean Fleet (ACF) Regulations and the In-Use Locomotive Regulation. After two years of working with CARB staff, Board members, and other state agencies, the Board heard CASA's concerns and adopted a favorable Resolution calling for agencies to coordinate with CASA to prioritize policy discussions related to SB 1383 and SB 1440 implementation. The ACF Regulations are of significant importance to the clean water community, as they require phasing in zero-emission medium- and heavy-duty trucks for truck replacements in the near term, if ZEVs are available. The Regulations do not provide for fleets to expand their compressed natural gas (CNG) fleet vehicles after January 1, 2024, which limits our members' ability to accept diverted food waste in support of SB 1383 since we will not have a way of fully utilizing the additional biogas that will be produced as a result of co-digesting diverted food waste. If you have any questions or would like to engage on this issue, please reach out to Sarah Deslauriers.

Statewide Wastewater Air Toxics Study Kickoff Meeting with CARB held April 25
On April 25, CARB hosted their kickoff meeting for the Statewide Wastewater Air Toxic Study. As part of CARB's recent amendments to their Air Toxics "Hot Spots" Program Emission Inventory Criteria and Guidelines (EICG) and the Reporting of Criteria Air Pollutants and Toxic Air Contaminants Regulation (CTR). CARB approved a phased compliance approach that allows permitted WWTPs to report business-as-usual through 2028 while the sector executes a statewide Two-Step Process. The meeting on April 25 started the Two-Step Process, and CARB answered questions that CASA raised in order to develop the approach for Step 1. See the summary of the issue that was provided to CASA members during the Winter Conference for background information. If you have any questions or would like more information, please reach out to Sarah Deslauriers.

CASA Resources with Regional Regulatory Approaches to Climate Change in Permits
In 2017, the SWRCB adopted a Comprehensive Climate Change Resolution, and Regional Water Quality Control Boards (RWQCBs) were called upon to make recommendations for modifying permits or other regulatory requirements to reduce

the vulnerability of water and wastewater infrastructure to flooding, storm surge, and sea level rise. Over the ensuing years, different RWQCBs have issued permits with special studies requiring climate change vulnerability assessments and resilience or disaster planning requirements, all ranging in levels of detail and types of impacts to assess, beyond flooding. In 2021, California Resource Strategies provided CASA with a summary of permits with these types of studies. CASA has since built upon that summary to share the latest permits that the nine RWQCBs have issued for your reference and consideration. The updated summary can be found here. Please let Sarah Deslauriers know if you have any questions or if you are currently renewing a permit with these types of special studies required.

CASA Calendar

May 3	Clean Water Summit Partners SSS WDR Webinar
May 11	Regulatory Workgroup (OC SAN – Hybrid)
May 17	Collection Systems Mtg with Clean Water SoCal (IRWD – Hybrid)
May 19	Attorneys Committee
May 23	All CASA Committees & Workgroups - Virtual Meeting
May 25	CASA Air Quality, Climate Change, and Energy Workgroup
June 6	Partnering for Impact
June 15	Regulatory Workgroup (Virtual)

Upcoming Events

May 2	SWRCB Meeting
May 4	USEPA Webinar on PFAS Drinking Water Standards
May 5	BACWA Annual Meeting (Berkeley, CA)
May 11	CVCWA Annual Conference (Sacramento, CA)
May 15	OPC Microplastics RFP Applications Due

May 16	SWRCB Meeting
May 18	SWRCB Nutrient Management Workshop (Virtual)
May 18	WateReuse Webinar on Treatment Strategies for PFAS
May 19	2023-24 Draft Intended Use Plan Release (Tentative)
May 24-25	Colorado PFAS Summit for Agricultural and Natural Resources
May 30	USEPA Comment Deadline for PFAS Drinking Water Standards
June 1	California Water Quality Monitoring Council Meeting
June 6	SWRCB Meeting
June 12	SWRCB Water Quality Fees Workshop
June 12	USEPA Comment Deadline on PFAS ANPR
June 13	SWRCB ELAP Fees Workshop
June 20	SWRCB Meeting (CWSRF 23-24 IUP Workshop)

For more information, please reach out to the CASA Regulatory Team:

Jared Voskuhl, **Water Quality**
Greg Kester, **Biosolids**
Sarah Deslauriers, **ACE**
Spencer Saks, **Newsletter**

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BACWA Bulletin - May 2023

Meetings

- Lab Committee Monthly TNI Training - Tues 5/16, Virtual
- Recycled Water Committee - Tues 5/16, Virtual
- Collection Systems Committee - Thurs 5/18, Virtual
- AIR Committee - Wed 5/31, Virtual
- BAPPG - Wed 6/7, Virtual
- Laboratory Committee - Tues 6/13, Virtual
- Permits Committee - Tues 6/13, Virtual
- BACWA Executive Board- Fri 6/16, Orinda + Virtual
- Visit the Calendar for details

Upcoming Events

- State Water Board Workshop on Nutrient Management - Thurs 5/18, Virtual
- EPA Webinar on Water Quality Improvement Fund BIL Funding - Thurs 5/18, Virtual
- EPA Biosolids Webinar Series - Tues 5/23, Virtual
- CWEA Introduction to Electrical and Instrumentation Technology - Tues 5/23, Walnut Creek
- California Environmental Laboratory Accreditation Program (ELAP) Conference - 5/30 to 6/1, Virtual
- CASA and CWEA Partnering for Impact - Tues 6/6, Berkeley

View previous BACWA Bulletins

Annual Members Meeting - Materials Available Online

Thank you to our members for making the 2023 Annual Members Meeting a success! Slides from the presentations are now available on the **BACWA website**, and videos will be posted soon. Meeting highlights included:

- Talks from the **Regional Water Board**, Bay Area Air Quality Management District, **EPA Region 9**, and **State Water Board** on current and upcoming regulatory priorities.
- A panel discussion on nutrient management, including an **overview from BACWA's Executive Director**, an update on the **science program** from

SFEI, **highlights** from the 2022 Group Annual Report and the ongoing study of recycled water and nature-based solutions, and the **regulator perspective** from the Regional Water Board.

- BACWA's **Year in Review** and a celebration of our **committee accomplishments**.
- A remembrance of **Dave Williams**, BACWA's Executive Director from 2013-2020. You can also contribute your memories of Dave online (**Kudo board** or **video tributes**) through May 17th.

Please respond to our **Annual Meeting Survey** so we can continue to improve the event in future years.

Regulatory Issues Matrix Updated

Each year before the Annual Members Meeting, BACWA updates its Key Regulatory Issues Summary matrix, a tool to familiarize its members and their governing bodies with the regulatory issues facing BACWA and its member agencies. The **May 2023 version of the Regulatory Issues matrix** is now available. In addition, presentations from the **Annual Members Meeting** on regulatory "Hot Topics" are available on the BACWA website, including **Air quality regulations**, **Biosolids**, and **Collection Systems**.

CARB Adopts Advanced Clean Fleet Regulations

On April 28th, the California Air Resources Board (CARB) approved the **Advanced Clean Fleet** Regulations, which have significance to BACWA members as they:

- Require phasing in zero-emission medium- and heavy-duty trucks for truck replacements in the near term (if ZEVs are available).
- DO NOT provide for fleets to expand their compressed natural gas fleet vehicles (fueled by biomethane) post January 1, 2024. This limits the wastewater sector's ability to accept diverted food waste in support of SB 1383. Fortunately, thanks to engagement from CASA, the **final resolution** was adopted with amendments stating that CARB recognizes the need for further policy discussions with CASA, state agencies, and others to achieve the SB 1383 target.

For more, see the **CARB press release** or media coverage (**LA Times, SF Chronicle**), or attend our next AIR committee meeting on May 31st.

BAYWORK Training Needs Survey - Respond by Friday 5/12

BAYWORK is requesting input on Administrative Support Professionals who work at your agency and their potential training needs. BAYWORK asks for your help in directing this inquiry to the Administrative Support Professionals and Human Resources Professionals at your agency:

- **Administrative Support Professionals Survey**
- **Human Resources Professionals Survey**

Staff should respond to the survey that best describes their work at your agency. The deadline for completing the survey is Friday, May 12th. Survey responses are confidential.

Sanitary Sewer Systems Must Certify Coverage in the Reissued General Order (SSS-WDR) by June 4

In late 2022, the State Water Board adopted a reissued statewide Sanitary Sewer Systems General Order (**2022-0103-DWQ)** that becomes effective on June 5, 2023. To ensure continued regulatory coverage, sanitary sewer systems that are currently enrolled in the 2006 SSS-WDR must re-enroll by June 4. The re-enrollment period is now open through a module in the online California Integrated Water Quality System (**CIWQS**) database, and will need to be completed by a Legally Responsible Official. A **video** and **guidance document** on re-enrollment are available from the State Water Board.

To help members prepare for new requirements in the reissued SSS-WDR, BACWA and its Clean Water Summit Partners have hosted several training webinars. Videos from the webinar series are available for free on the **CWEA** website.

USEPA Approves Statewide Toxicity Provisions

On May 1, USEPA approved the **Statewide Toxicity Provisions** that have been under development at the State Water Board for more than a decade (see **approval letter**). The Statewide Toxicity Provisions take effect immediately, although BACWA members with transitional language within individual NPDES Permits have until June 1 to transition to the new requirements. If you have questions, please reach out to Regulatory Program Manager **Mary Cousins**.

Member Assistance Needed to Review and Certify Two Special Studies for the Nutrient Watershed Permit

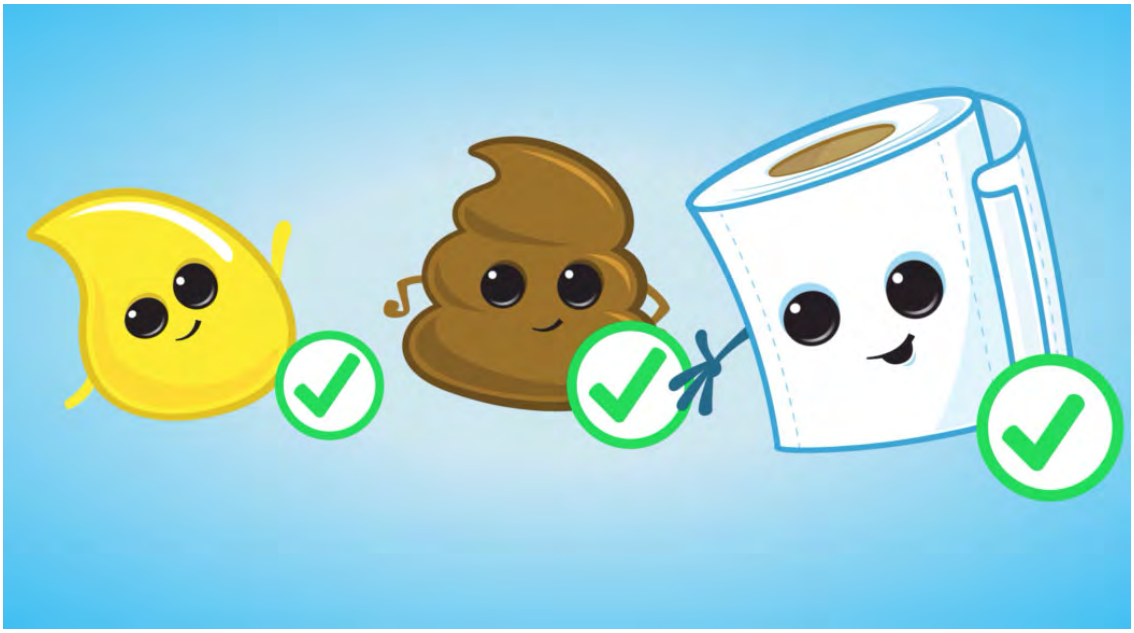
BACWA requires assistance from its member agencies in finalizing two special studies that were required by the 2019 Nutrient Watershed Permit. The two studies are:

- Regional Evaluation of Potential Nutrient Discharge Reduction by Water Recycling
- Nature-Based Solutions for Nutrient Load Reductions from Wastewater

Agencies that are listed as permittees in the Nutrient Watershed Permit have already received their agency-specific reports (if applicable), and will shortly receive draft summary reports for the entire region. To demonstrate permit compliance, each agency will then need to provide a sign-off letter certifying acceptance of each of the two reports. BACWA will coordinate signature collection so that we can meet the July 1st compliance deadline for these two reports. Thank you in advance for your assistance!

Three P's Video Now Available en Español

Following up on the success of the "Three P's video" (80,000 views on YouTube and counting!), BACWA's Bay Area Pollution Prevention Group (**BAPPG**) has produced a version in Spanish. Check it out on **YouTube** or download the **MP4**. English versions are also available (**YouTube**; **MP4**). Thanks again to **Castro Valley Sanitary District** for originating this video! BACWA members are welcome to post and share the video.



COVID-19 Updates

In March 2023, the Executive Board and Nutrient Strategy Team returned to meeting in-person, as required by State law regarding public meetings. Committees are meeting in-person based on the direction of each committee's leaders and membership. Where possible, a hybrid videoconferencing option will be offered. Questions and concerns can be directed toward Executive Director **Lorien Fono**.

Member News

Send in *updates from your agency to post here.*

West County Wastewater recently celebrated the groundbreaking of their "Clean & Green" energy and sustainability project. The project will reduce the district's greenhouse gas emissions by 93% and house a state-of-the-art microgrid for uninterrupted operations during power outages. Find our more **here**.

What's new in BACWA's Committees

AIR Committee

The **March meeting** included updates on the statewide study characterizing emissions of air toxics; engagement with the Bay Area Air Quality Management District; and the **Advanced Clean Fleet Regulations** (see update above). The next committee meeting is scheduled for Wednesday, May 31.

Asset Management Committee

The May meeting featured a presentation and Q&A session on Ross Valley Sanitary District's **Infrastructure Asset Management Plan**. The next quarterly meeting is slated for August.

BAPPG

At the June 7th meeting, representatives from two member agencies will present on public outreach efforts for horizontal levee projects. The committee recently worked with NACWA to submit a joint **comment letter** regarding FDA and USEPA

oversight of the regulatory approval process for pesticides.

Collections Systems Committee

The next committee meeting is scheduled for Thursday, May 18th and will include two presentations: one on large-diameter pipe cleaning and nozzle optimization (Nezat Training & Consulting), and the other on collection system monitoring and analysis (ADS Environmental Services).

Laboratory Committee

The next **TNI monthly training session** will be held May 16th at 10 AM. The next regular committee meeting is scheduled for Tuesday, June 13th.

Laboratory committee members should also check out CWEA's new **Laboratory Analyst Candidate Handbook**, which is in effect for exams taken after July 1st. CWEA's Norah Duffy discussed the changes at our February committee meeting (see **notes**).

Permits Committee

Following the **April meeting**, the committee contributed to comments on the State Water Board's Water Quality Enforcement Policy (see **CASA comment letter**). The next regular committee meeting is scheduled for Tuesday, June 13th.

Pretreatment Committee

The March meeting was held in-person in Oakland. USEPA provided updates (see **slides**) about electronic reporting requirements that will take effect in 2025, PFAS, and other topics. State Water Board staff also provided updates about PFAS and enhanced source control (see **slides**). The committee plans to next convene in August.

Recycled Water Committee

The committee's next meeting is scheduled for Tuesday, May 16th and will include a presentation on the San Francisco-Peninsula Regional Purewater Project. The

committee is also supporting finalization of the recycled water study required by the 2nd Nutrient Watershed Permit (see announcements above).

Upcoming Events

May 18th, 9 AM: State Water Board Workshop on Nutrient Management

On Thursday 5/18, the State Water Board will hold a public staff workshop to present information on the impact of nutrient discharges on inland and ocean waters and activities underway or planned to address nutrients. The agenda includes the San Francisco Bay Nutrient Management Strategy as well as updates from southern California stakeholders. More information, including a link to participate in or view the workshop, is **available here**.

May 18th, 2 PM: EPA Webinar on San Francisco Bay Water Quality Improvement Funding

On Thursday 5/18, EPA is holding a free webinar to provide a detailed review of the **Request for Applications** (RFA) currently open under the **San Francisco Bay Water Quality Improvement Fund**. This RFA is for Year 2 of funding from the Bipartisan Infrastructure Law, focused on Environmental Justice Communities. Webinar access information is available **here**.

May 23rd: CWEA Introduction to Electrical & Instrumentation Technology, Walnut Creek

In this one-day training offered by CWEA, dive into the fundamentals and theories behind various electrical and instrumentation devices, equipment, and components found in the water and wastewater industry. The class will equip you with supportive knowledge and demonstrate how each component plays a role in the electrical and instrumentation technology. Presenter Wilson G. Wong is the Control Systems Specialist for Union Sanitary District, where he has worked for the past 16 years. **Register here**.

May 23rd, Noon: EPA Biosolids Webinar on Updates to Pathogen

and Vector Attraction in Sewage Sludge

Join the EPA Office of Water Biosolids Program and EPA Office of Research and Development for a webinar on the updated document "**Pathogens and Vector Attraction in Sewage Sludge**," published in 2023. The new version improves flow, removes redundancies and contains updates to clarify pathogen Alternatives 3 and 4 for Class A sewage sludge. The methods section has been updated to include the U.S. EPA methods for testing sewage sludge for the presence of fecal coliforms and Salmonella. **Register here**.

May 30th to June 1st: ELAP Annual Conference

Register Now to reserve your free tickets for ELAPCON 2023!
The California Environmental Laboratory Accreditation Program (ELAP) team is holding its third annual ELAP Conference From Tuesday, May 30 through Thursday, June 1st. Join virtually, each day from 9am – 12pm, to enhance your knowledge of ELAP's changing regulations and welcome TNI-2!

June 6th, Berkeley: CASA and CWEA Partnering for Impact

Partnering for Impact is a one-day, highly-interactive gathering of wastewater thought-leaders, practitioners, academics, and regulators who strive to advance technology and innovation through partnerships. The agenda will cover innovations in liquid and solid stream processes, and ways our sector can speed-up the delivery of innovative projects. The day is structured to include provocative topics, dynamic speakers, panel leaders, and roundtable sessions. See **flyer with registration information**.

Our mailing address is:
BACWA Bay Area Clean Water Agencies
PO Box 24055, MS 702
Oakland, CA 94623

BACWA BAY AREA CLEAN WATER AGENCIES

KEY REGULATORY ISSUE SUMMARY

Updated May 2, 2023

Action items for member agencies are in **bold**

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New updates in this version are shown in Purple highlighting

Background Highlights	Challenges and Recent Updates	Next Steps for BACWA	Links/Resources
NUTRIENTS IN SAN FRANCISCO BAY			
• San Francisco Bay receives some of the highest nitrogen loads among estuaries worldwide, yet has not historically experienced the water quality problems typical of other nutrient-enriched estuaries. It is not known whether this level of nitrogen loading, which will continue to increase in proportion to human population increase, is sustainable over the long term. • Because of the complexity of the science behind nutrient impacts in SF Bay, stakeholders in the region are participating in the Nutrient Management Strategy (NMS) steering committee to prioritize scientific studies and ensure that all science to be used for policy decisions is conducted under one umbrella.	• For FY23, BACWA is contributing $1.8M to fund scientific research needed to make management decisions for the 3rd Watershed Permit. This funding is required by the 2nd Watershed Permit. • The focus of current scientific efforts is improving model representation of biogeochemistry, light attenuation, dissolved oxygen, and Harmful Algal Bloom dynamics. Field and lab observations are supporting these improvements. • The science team is developing an Assessment Framework for Open Bay habitats and Lower South Bay sloughs. • In summer 2022, a harmful algae bloom in San Francisco Bay brought increased public attention to this topic. The NMS science team is assisting with data interpretation, and has revised the science plan accordingly.	• **Continue to participate in NMS steering committee, Nutrient Technical Workgroup, and planning subcommittee meetings, and provide funding for scientific studies.** • **Working with NMS stakeholders, identify preliminary scenarios for nutrient modeling of the Bay.** • Continue to assist with preparation of a brief "State of the Science" document summarizing the scientific accomplishments of the NMS team for public use. • Continue to engage with Nutrient Technical Team and BACWA's Nutrient Management Strategy technical consultant, Mike Connor, to provide review of recent work products and charge questions for the science team.	BACWA Nutrients Page: https://bacwa.org/nutrients/ NMS FY23 Program Plan (Revised Dec. 2022) https://docs.google.com/document/d/11IWlrDMpUw_OBQ6Lj-qj67sOLwI490lkRWW431e9nuU NMS Work Products https://sfbaynutrients.sfei.org/books/reports-and-work-products SFEI Presentation on Science of 2022 Bloom https://docs.google.com/presentation/d/1R468fFPMfq1d1xY6cHFU-uta9aMCynx5/ BACWA Nutrient FAQ https://bacwa.org/wp-content/uploads/2023/01/BACWA-Nutrient-Fact-Sheet.pdf

Background Highlights	Challenges and Recent Updates	Next Steps for BACWA	Links/Resources
SF BAY NUTRIENT WATERSHED PERMIT			
• The 1st Nutrient Watershed Permit was adopted in 2014, and required a regional study on Nutrient Treatment by Optimization and Upgrades, completed in 2018. • The 2nd Nutrient Watershed Permit was adopted in 2019. It includes: o Continued individual POTW nutrient monitoring and reporting; o Continued group annual reporting; o Significantly increased funding for science; o Regional assessment of the feasibility and cost for reducing nutrients through nature-based systems and recycled water; o Establishing current performance for Total Inorganic Nitrogen (TIN), and "load targets" for nutrient loads based on 2014 to 2017 load data plus a 15% buffer for growth and variability o Recognition of "early actors" who are planning projects that will substantially decrease TIN loads. • Through the nutrient surcharge levied on permittees, BACWA funds compliance with the following provisions on behalf of its members: o Group Annual Reporting o Regional Studies on Nature-Based Systems and Recycled Water o Support of scientific studies through the Regional Monitoring Program (RMP) with $11M over the five-year permit term.	• Studies related to Recycled Water and Nature-Based Systems are underway, and will be completed by the due date of July 1, 2023. • Each year by February 1, BACWA submits a Group Annual Report on behalf of its members. The report summarizes trends in nutrient concentrations and loading for each agency, and for all the agencies as a whole. The annual reporting period in the 2nd Watershed Permit is based on a water year (Oct. 1 – Sept. 30). In the dry season of 2022, TIN loads were the second lowest since monitoring began in July 2012 (only 2021 was lower). • In response to the summer 2022 algae bloom, Regional Water Board staff have signaled that the 3rd Watershed Permit is likely to include nutrient load reduction requirements (see presentation at right). The magnitude, timing, and format of these reductions have yet to be determined. • BACWA staff met with the 18 largest wastewater treatment plants (representing 95% of the regional TIN load from POTWs) to identify projects that could reduce nutrient loads during the term of the 3rd Watershed Permit and beyond.	• BACWA continues to convene a Nutrient Strategy Team to develop BACWA's key tenets for the 3rd Watershed Permit, and **members are encouraged to participate.** The Nutrient Strategy Team is actively engaging with the Regional Water Board to expand upon the key tenets and discuss implementation details for the 3rd Watershed Permit, such as how and when load reductions would be required. • Review draft reports by consultant teams from HDR and SFEI for the Nutrient Removal by Recycled Water Evaluation and the Nature-Based Solutions study. Individual agency reports have been drafted, and draft summary reports will be available by May 2023. **Agency sign-off on the final reports will be required.** • Agencies will continue to report nutrient monitoring data both through CIWQS and directly to BACWA.	2nd Nutrient Watershed Permit: https://www.waterboards.ca.gov/sanfranciscobay/board_decisions/adopted_orders/2019/R2-2019-0017.pdf Special Studies of Recycled Water and Nature-Based Solutions: https://bacwa.org/document-category/2nd-watershed-permit-studies/ Optimization/Upgrade Study Information: https://bacwa.org/document-category/optimization-and-upgrade-studies/ BACWA Group Nutrient Annual Reports: http://bacwa.org/document-category/nutrient-annual-reports/ Presentations to SF Board of Supervisors Land Use and Transportation Committee (October 2022) https://sfgov.legistar.com/View.ashx?M=F&ID=11339273&GUID=863B565D-6662-419D-B519-87D5FBB4BAE3 BACWA Presentation to East Bay Leadership Council https://bacwa.org/document/sf-bay-nutrient-management-presentation-to-eblc-2023-04-18/

Background Highlights	Challenges and Recent Updates	Next Steps for BACWA	Links/Resources
CHLORINE RESIDUAL COMPLIANCE			
• The Basin Plan chlorine residual effluent limit is 0.0 mg/L. Chlorine residual is the most frequent parameter for violations for Region 2 POTWs. Because there are 24 hourly reporting events each day, the "opportunities" for violations are enormous. However, the actual violation rates are infinitesimal (~0.001%). • Agencies are overdosing their effluent with the dechlorination agent, sodium bisulfite, to prevent chlorine violations, a practice which costs more than $1 million regionally each year. • The Regional Water Board worked with BACWA to develop a Basin Plan Amendment modifying the effluent limit for chlorine residual.	• The Basin Plan Amendment includes: o A 0.013 mg/L Water Quality Objective in marine and estuarine waters, which will be applied as a WQBEL in permits and calculated incorporating dilution. The WQBEL will be applied as a 1-hour average. o A Minimum Level (ML), or Reporting Limit of 0.05 mg/L for online continuous monitoring system. • The Basin Plan Amendment was adopted by the Regional Water Board in 2020, and approved by the State Water Board and Office of Administrative Law in 2021. Unfortunately, the EPA does not plan to approve the Basin Plan Amendment due to concerns expressed by federal natural resource agencies about potential chlorine toxicity to fish. • Sections of the Basin Plan Amendment related to removal of Oil & Grease effluent limits are in effect. This change is being implemented in reissued NPDES permits. The blanket permit amendment for Oil & Grease that was meant to implement the change region-wide will not go into effect.	• Engage with Regional Water Board staff to identify an alternative regulatory strategy for modifying chlorine effluent limits. Regional Water Board staff are currently exploring regulatory options.	Background and Status information about Basin Plan Amendment: https://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/planningtmdls/amendments/chlorinebpa.html Final Basin Plan Amendment adopted by Regional Water Board: https://www.waterboards.ca.gov/sanfranciscobay//water_issues/programs/planningtmdls/amendments/chlorinebpa/2_Chlorine_Resolution_R2-2020-0031.pdf

Background Highlights	Challenges and Recent Updates	Next Steps for BACWA	Links/Resources
PESTICIDES			
• Pesticides are regulated via FIFRA, and not the Clean Water Act. POTWs do not have the authority to regulate pesticide use in their service area, but may be responsible for pesticide impacts to their treatment processes or to surface water. • Through BAPPG, BACWA aims to proactively support a scientific and regulatory advocacy program so that pesticides will not impact POTWs' primary functions of collecting and treating wastewater, recycling water, and managing biosolids, or impact receiving waters via the "down the drain" route.	• EPA reviews all registered pesticides at least once every 15 years. Each review allows opportunity for public comment. • BACWA continues to fund consultant support to write comment letters advocating for the consideration of POTW and surface water issues by EPA and the California Department of Pesticide Registration (CalDPR). Funding for pesticide regulatory outreach in FY23 is $60K.The pesticides regulatory team also supports the California Stormwater Quality Association (CASQA) on outreach work related to urban pesticide use. • The Regional Water Board leverages BACWA's efforts to provide their own comment letters. • With chronic toxicity limits likely in the near term, POTWs will be in compliance jeopardy if pesticides contribute to toxicity. • Baywise.org has launched webpages on flea and tick control messaging to pet owners and veterinarians. • In January 2023, CalDPR released a Sustainable Pest Management Roadmap. The Roadmap identifies actions that would enhance understanding of pesticide use in urban areas and enhance outreach to urban pesticide users.	• Advocate for implementation of specific actions from the Sustainable Pesticide Management Roadmap, and for additional resources to be directed to CalDPR to support implementation. • Continue to comment on EPA pesticide re-registrations and CalDPR actions. • Engage with EPA on proposed changes to the regulatory approval process for pesticides (see comment letter at right). • Work with veterinary associations on messaging with respect to flea and tick control alternatives. • Continue to develop summaries of EPA actions on pesticides. • Look for opportunities to work with CalDPR on pesticides research. • Work with other regional associations, such as the CASQA to collaborate on funding pesticide regulatory outreach.	BACWA Pesticide Regulatory Support Page: https://bacwa.org/bappg-pesticides/ Baywise flea and tick pages: https://baywise.org/residential/pets/keep-pets-free-of-fleas-and-ticks/ https://baywise.org/residential/pets/ BACWA-CASQA Urban Pesticides Collaboration Fact Sheet: https://bacwa.org/wp-content/uploads/2022/08/CASQA-BACWA-Factsheet-July2022.pdf CalDPR Sustainable Pest Management Roadmap https://www.cdpr.ca.gov/docs/pressrls/2023/012623.htm BACWA coalition letter on modernizing the pesticide approval process https://bacwa.org/document/bacwa-nacwa-coalition-comments-on-fda-epa-pesticide-modernization-2023-04-25/

Background Highlights	Challenges and Recent Updates	Next Steps for BACWA	Links/Resources
MERCURY AND PCBS			
• The Mercury & PCBs Watershed Permit was reissued by the Regional Water Board in December 2022. The Watershed Permit is based on the TMDLs for each of these pollutants. • Aggregate mercury and PCBs loads have been well below waste load allocations through 2021, the last year for which data have been compiled. • Method 1668C for measuring PCB congeners has not been promulgated by EPA. Data collected during the first permit term varied widely depending on which laboratory performed the analyses. BACWA Laboratory Committee developed an updated PCB Protocol to reduce variability between laboratories running Method 1668C, effective January 1, 2014. Data have been more consistent since the distribution of this document. • In 2017, EPA adopted federal pretreatment program rules requiring dental offices to install dental amalgam separators. The rule is intended to reduce dental office discharge of mercury. The compliance date was July 14, 2020.	• The Mercury & PCBs Watershed Permit requires risk reduction program funding. For FY24, BACWA has budgeted $12,500 to support risk reduction activities related to fish consumption. • In January 2022, monitoring requirements for mercury were reduced for most dischargers by a blanket NPDES Permit amendment (Order R2-2021-0028) (see link at right). Revised monitoring frequencies are also reflected in the reissued permit. • As part of the 2021 Triennial Review of the Basin Plan, the Regional Water Board has prioritized designation of three new beneficial uses: Tribal Tradition and Culture (CUL), Tribal Subsistence Fishing (T-SUB) and Subsistence Fishing (SUB). Water bodies designated with these beneficial uses could also be assigned lower mercury objectives. • The Mercury & PCBs Watershed Permit reissued in December 2022 is very similar to the 2017 Permit. Effluent limitations are unchanged. The only significant difference is a reduction in the monitoring frequency for PCB Congeners for some agencies.	• Coordinate with local community-based organizations and Water Boards staff to develop concepts for risk reduction activities that BACWA could support during the term of the reissued permit. Later in FY24, BACWA may solicit proposals to support risk reduction activities during the term of the reissued permit. • Continue outreach to dentists BAPPG and BACWA's pretreatment committee. Per federal rules, all dental facilities were required to submit one-time compliance reports by October 2020. • Schedule risk reduction presentations by the current grantees to the Regional Water Board in 2023. • Track potential Basin Plan Amendments resulting from the Triennial Review project related to new beneficial use designations. The new designations are not expected to impact the bay-wide mercury TMDL in the near term, but there could be localized or longer-term impacts.	2022 Mercury & PCBs Watershed Permit (Effective Feb. 1, 2023) https://www.waterboards.ca.gov/sanfranciscobay/board_decisions/adopted_orders/2022/R2-2022-0038.pdf Risk Reduction Materials: https://bacwa.org/mercurypcb-risk-reduction-materials/ BACWA PCBs Protocol: https://bacwa.org/wp-content/uploads/2014/02/PCBs-Sampling-Analysis-and-Reporting-Protocols-Dec13.pdf One-Time Compliance Report for Dental Offices: https://www.waterboards.ca.gov/water_issues/programs/npdes/docs/drinkingwater/one-time_compliance_report_for_dental_offices.pdf NPDES Permit Amendment for Monitoring and Reporting https://www.waterboards.ca.gov/sanfranciscobay/board_decisions/adopted_orders/2021/R2-2021-0028.pdf

Background Highlights	Challenges and Recent Updates	Next Steps for BACWA	Links/Resources
STATE WATER BOARD TOXICITY PROVISIONS			
• The State Water Board has been working since before 2012 to establish Toxicity Provisions in the SIP that would introduce uniform Whole Effluent Toxicity Requirements for the state. • During individual permit reissuances since 2015, the Regional Water Board has been performing RPAs for chronic toxicity and giving chronic toxicity limits to agencies with Reasonable Potential. • Proposed Final Statewide Toxicity Provisions were released in October 2020, incorporating revisions to previous versions from 2018 to 2020. The Provisions establish: o Use of Test of Significant Toxicity (TST) as statistical method to determine toxicity replacing EC25/IC25 (with concerns it will lead to more false positive results); o Numeric limits for chronic toxicity for POTWs >5 MGD and with a pretreatment program; smaller POTWs would receive effluent targets and only receive limits if Reasonable Potential is established; o Regional Water Board discretion on whether to require RPAs for acute toxicity; o For POTWs with *Ceriodaphnia dubia* as most sensitive species, numeric targets rather than limits until after completion of state-wide study on lab/ testing issues (Dec. 31, 2023).	• The State Water Board first adopted the Statewide Toxicity Provisions in December 2020. In October 2021, the State Water Board affirmed that the Statewide Toxicity Provisions were adopted as state policy for water quality control for all inland surface waters and estuaries. • USEPA approved the Statewide Toxicity Provisions on May 1, 2023. • Since 2016, agencies have had the option to skip sensitive species screening upon permit reissuance and pay the avoided funds to the RMP to be used for CECs studies. Under the Toxicity Provisions, agencies will be required by the provisions to do sensitive species screening once every 15 years. • BACWA joined SCAP, CVCWA and NACWA in a lawsuit alleging EPA did not follow proper procedure in requiring use of the TST, which has not been officially promulgated. The lawsuit was dismissed. POTWs' only recourse is to challenge individual permits that include the procedure. • The State Water Board is collaborating with stakeholders on a special study to improve the quality of *Ceriodaphnia dubia* testing. The first phase of this multi-laboratory study of toxicity testing has been completed, and a second intercalibration round of testing will be conducted in late spring and summer 2023.	• **Begin conducting toxicity testing using the Statewide Toxicity Provisions.** Member agencies with individual NPDES permits reissued after August 2022 will automatically transition to new toxicity testing requirements on June 1, 2023. • **Plan to conduct a species sensitivity screening** to comply with the Toxicity Provisions, which require a study no more than 10 years old be used to determine a "Tier I" species for use in compliance monitoring. • **Continue to review draft NPDES permits implementing the Toxicity Provisions.** As of August 2022, all reissued individual NPDES permits contain language implementing the Toxicity Provisions. Regional Water Board staff developed this language with BACWA member input. Although the new language is mostly standardized, small changes may be necessary to clarify details of the new provisions. • Share information on the special study on the *Ceriodaphnia dubia* test method with agencies who have that species in their permits.	SWRCB Toxicity Page: http://www.swrcb.ca.gov/water_issues/programs/state_implementation_policy/tx_ass_cntrl.shtml Toxicity Workshop Presentations from 2017 BACWA Workshop: https://bacwa.org/bacwa-toxicity-workshop-september-18-2017/ Regional Water Board presentation on implementation of Statewide Toxicity Provisions from December 2020: https://bacwa.org/wp-content/uploads/2021/01/Slides-from-RWQCB-Regarding-R2-Tox-Language-in-NPDES-Permits-2020-12-08.pdf *Ceriodaphnia* Quality Assurance Study https://www.sccwrp.org/about/research-areas/additional-research-areas/ceriodaphnia-toxicity-testing-quality-assurance/ USEPA Approval of Statewide Toxicity Provisions https://bacwa.org/wp-content/uploads/2023/05/05.01.2023-EPA-CWA-303c-Approval-of-California-Toxicity-Provisions.pdf

Background Highlights	Challenges and Recent Updates	Next Steps for BACWA	Links/Resources
COMPOUNDS OF EMERGING CONCERN (CECS)			
• Pharmaceuticals and other trace compounds of emerging concern (CECs) are ubiquitous in wastewater at low concentrations and have unknown effects on aquatic organisms. • The State Water Board has formed a Pretreatment and CECs Unit. • Region 2's CEC strategy focuses on monitoring/tracking concentrations of constituents with high occurrence and high potential toxicity. Much of what the State Water Board is considering for its monitoring program is already being implemented in Region 2 through the RMP.	• The Regional Water Board has stated that voluntary and representative participation in RMP CECs studies is key to avoiding regulatory mandates for CECs monitoring. These studies are informational and not for compliance purposes. BACWA developed a White Paper on representative participation to support facility selection for these studies. • Bay dischargers are continuing to provide supplemental funding for RMP CECs studies through the NPDES Permit Amendment adopted in December 2021 by the Regional Water Board. • The State Water Board has recently increased its focus on CECs. In November 2022, a State Water Board Science Advisory Panel released a report identifying risk-based and occurrence-based monitoring strategies in aquatic ecosystems. Similar approaches are already in use in the Bay Area by the RMP.	• Continue to participate in the RMP Emerging Contaminants Workgroup. • Participate in RMP studies by collecting wastewater samples at member facilities. Studies in FY23 include ethoxylated surfactants and quaternary ammonia compounds, in addition to the Regional PFAS Study and OPC-funded microplastic study (see next page). • Update the 2020 White Paper created for use by the RMP or others in selecting representative POTWs for participation in CEC studies. The 2020 White Paper will be updated to note recently completed and ongoing studies of CECs in Bay Area wastewater.	RMP Emerging Contaminant Workgroup: http://www.sfei.org/rmp/ecwg#tab-1-4 BACWA CECs White Paper: https://bacwa.org/document/bacwa-cec-white-paper-updated-june-2020/ NPDES Permit Amendment for Monitoring and Reporting https://www.waterboards.ca.gov/sanfranciscobay/board_decisions/adopted_orders/2021/R2-2021-0028.pdf State Water Board CECs webpage: https://www.waterboards.ca.gov/water_issues/programs/cec/index.html

Background Highlights	Challenges and Recent Updates	Next Steps for BACWA	Links/Resources
MICROPLASTICS			
• Microplastic pollution is a environmental threat with the potential to impact wastewater disposal and reuse, as well as biosolids end uses. • Microplastics have been a focus of the RMP in recent years. BACWA has participated in the Workgroup and developed a POTW Fact Sheet. One conclusion of the RMP work is that POTWs contribute much lower microplastic loads than stormwater. As a result, the RMP is focusing future microplastics sampling efforts on stormwater pathways.	• In February 2022, the Ocean Protection Council (OPC) adopted a Statewide Microplastics Strategy that calls for increased water recycling, additional monitoring of wastewater, source control in wastewater, and additional scientific research. • In 2021, the OPC funded a study investigating microplastic removal through wastewater treatment processes. The study is being carried out by SCCWRP. The study commenced in 2021 with a pilot study involving BACWA member agency participation. Full-scale sampling and analysis of influent, effluent, and biosolids is planned to be completed in 2023. • The Draft 2024 California Integrated Report (303(d) List) notes that San Francisco Bay is "potentially threatened" by microplastics. Due to data limitations, the Bay is not proposed to be listed as an impaired water body during this listing cycle. • Additional research to improve scientific understanding of microplastics in aquatic ecosystems will be needed to support a future impairment determination for San Francisco Bay. The Water Boards and Ocean Protection Council are supporting allocation of funding towards these research efforts. • Ongoing microplastics investigations by the RMP are focused on tire particles in stormwater.	• Continue to participate in the RMP Microplastics Workgroup. • Three BACWA member agencies are participating in the OPC-funded microplastic study. As of May 2023, sampling efforts are ongoing. • Continue tracking State Water Board and Ocean Protection Council actions via the CASA Microplastics Workgroup. CASA is working with SCCWRP to provide additional funding for testing of new sample collection and/or analysis methods.	BACWA Microplastics Fact Sheet: https://bacwa.org/wp-content/uploads/2019/09/BACWA-Microplastics-flyer.pdf SFEI Microplastics project: https://www.sfei.org/projects/microplastics Ocean Protection Council Microplastics Strategy: https://www.opc.ca.gov/webmaster/ftp/pdf/agenda_items/20220223/Item_6_Exhibit_A_Statewide_Microplastics_Strategy.pdf 2024 California Integrated Report / 303(d) List https://www.waterboards.ca.gov/water_issues/programs/water_quality_assessment/2024-integrated-report.html

Background Highlights	Challenges and Recent Updates	Next Steps for BACWA	Links/Resources
PER- AND POLYFLUOROALKYL SUBSTANCES (PFAS)			
• Per- and polyfluoroalkyl substances (PFAS) are a group of human-made substances that are very resistant to heat, water, and oil. PFAS have been used in surface coating and protectant formulations. Common PFAS-containing products are non-stick cookware, cardboard/paper food packaging, water-resistant clothing, carpets, and fire-fighting foam. • Perfluorooctane sulfonic acid (PFOS) and perfluorooctanoic acid (PFOA) are two types of PFAS no longer manufactured in the US; however, other types of PFAS are still produced and used in the US. • All PFAS are persistent in the environment, can accumulate within the human body, and have demonstrated toxicity at relatively low concentrations. • Potential regulatory efforts to address PFAS focus on drinking water in order to minimize human ingestion of these chemicals, although regulators have also expressed concern about uptake into food from biosolids. • In July 2020, the SWRCB issued an investigative order for POTWs. At that time, BACWA obtained SWRCB approval to fund and conduct a Regional PFAS Study in lieu of the investigative order. • In April 2021, the formation of an "EPA Council on PFAS" was announced.	• The EPA and State of California are developing drinking water standards for PFAS compounds. o DDW has developed drinking water notification levels (NLs) and response levels for PFOA, PFOS, and Perfluorobutane Sulfonic Acid (PFBS), Perfluorohexane Sulfonic Acid (PFHxS). o EPA has released final health advisories for PFOA (0.004 ng/L) and PFOS (0.02 ng/L). o In February 2023, EPA proposed Maximum Contaminant Levels for PFOA and PFOS as individual contaminants, and PFHxS, PFNA, PFBS, and HFPO-DA (commonly referred to as GenX Chemicals) as a PFAS mixture. By design, these MCLs are very close to the current limits of quantification. • EPA is conducting pretreatment standards rulemaking for three types of industrial users: Metal Finishing, Organic Chemicals, Plastics and Synthetic Fibers, and landfills. • EPA is developing a new analytical method for PFAS in complex matrices like wastewater. Draft Method 1633 is expected to be finalized later in 2023. • In August 2022, EPA proposed a rule designating PFOA and PFOS as hazardous substances under CERCLA (the Superfund law). BACWA submitted a comment letter on the proposal (link at right). • In late 2022, EPA issued permitting guidance for pretreatment programs and NPDES permits. It recommends use of Draft Method 1633.	• BACWA's Regional PFAS Study is being conducted by SFEI in two phases: o In Phase 1, fourteen representative facilities collected samples in Q4 2020 for influent, effluent, RO concentrate, and biosolids. BACWA prepared a Fact Sheet regarding Phase 1 results (see link at right). o Sample collection for Phase 2 of the PFAS Regional Study was completed in mid-2022 and included sampling of influent, effluent, and biosolids; residential sewersheds, commercial and industrial users; hauled organic waste used as digester feed; and groundwater. Phase 2 study results will be shared with members in May 2023 once QA/QC is complete. • BACWA's Phase 2 study results could support new legislative efforts in 2023. For example, BAPPG submitted comments on legislation banning PFAS in menstrual products (AB246). • BACWA will continue tracking developments at the federal, state and regional level, in particular to understand the impact of the CERCLA designation on biosolids reporting.	BACWA PFAS Documents: https://bacwa.org/pfas-links/ SWRCB PFAS Resources: https://www.waterboards.ca.gov/pfas/ EPA PFAS Resources https://www.epa.gov/pfas EPA PFAS Strategic Roadmap https://www.epa.gov/pfas/pfas-strategic-roadmap-epas-commitments-action-2021-2024 EPA Proposed Drinking Water Regulations https://www.epa.gov/pfas/pfas-strategic-roadmap-epas-commitments-action-2021-2024 2022 PFAS Legislation Outcomes for CA: https://www.cwea.org/news/pfas-legislation-we-have-seen-in-2022/ BACWA Comment Letter on CERCLA Designation: https://bacwa.org/wp-content/uploads/2022/11/BACWA-PFAS-CERCLA-Ltr-2022-11-07.pdf EPA NPDES Permitting Guidance (Dec. 2022) https://www.epa.gov/system/files/documents/2022-12/NPDES_PFAS_State%20Memo_December_2022.pdf

Background Highlights	Challenges and Recent Updates	Next Steps for BACWA	Links/Resources
SANITARY SEWER SYSTEMS GENERAL ORDER			
• In 2022, the State Water Board reissued the statewide Sanitary Sewer Systems General Order (SSS-WDR). The reissued order replaces the 2006 Order and the 2013 Monitoring and Reporting Program. BACWA and partner organizations were successful in working with the State Water Board to make many favorable modifications to the draft prior to its final adoption. • The State Water Board's goals for the update were: o Updating the 2006 Order o Clarifying compliance expectations and enhancing enforceability o Addressing system resiliency, including climate change impacts o Identifying valuable data and eliminating non-valuable reporting requirements	• The reissued order effective date is June 5, 2023. • The reissued SSS-WDR contains numerous new and modified requirements, such as: o A prohibition on discharges to groundwater; o Reduced spill reporting requirements for small spills (spills from laterals or <50 gallons); o New spill monitoring requirements such as photo documentation and faster water quality sampling; o New requirements for preparation of Sewer System Management Plans (SSMPs), including a focus on system resiliency, prioritizing corrective actions, and coordinating with stormwater agencies; o Modified annual reporting requirements; o New mapping requirements; and o Modified timelines for preparation of audits and SSMPs. The State Water Board has prepared an online tool to assist agencies in determining compliance dates (at right).	• **Sanitary Sewer System Agencies must certify continuing coverage in the reissued WDR by June 4th.** Other key deadlines before June 5th order effective date include: o Uploading existing SSMPs to CIWQS o Updating Spill Emergency Response Plans o Identifying an appropriate Legally Responsible Official • Work with the Collection System committee and CASA to identify and fulfill member needs for guidance and templates materials, such as guidance for Sewer System Management Plans. • Continue to coordinate with CASA and CWEA on training opportunities for members as they transition to enrollment under the new SSS-WDR.	State Water Board SSS-WDR page: (includes training video on certifying continued coverage by June 4th) https://www.waterboards.ca.gov/water_issues/programs/sso/ Reissued SSS-WDR (General Order 2022-0103-DWQ), Effective June 5, 2023 https://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2022/wqo_2022-0103-dwq.pdf Materials from Clean Water Summit Partners Webinars on Reissued SSS-WDR https://casaweb.org/resources/speaker-presentations/ SSMP and Audit Due Dates Lookup Tool from State Water Board https://www.waterboards.ca.gov/water_issues/programs/sso/lookup/

Background Highlights	Challenges and Recent Updates	Next Steps for BACWA	Links/Resources
LABORATORY ACCREDITATION			
• In May 2020, the State Water Board adopted new comprehensive regulations for the Environmental Laboratory Accreditation Program. • Adoption of the new regulations was required by AB 1438, legislation that became effective in 2018. • The new ELAP regulations are replacing the current state-specific accreditation standards with a national laboratory standard established by The NELAC Institute (TNI).	• The new ELAP regulations became effective as of **January 1, 2021**. Compliance with TNI standards is required beginning **January 1, 2024**. • Adoption of TNI standards poses a challenge since there are more than 1,000 individual requirements. Setup costs may include: o Hiring and/or training staff; o Hiring consultants to set up the TNI documentation framework; o Purchasing Laboratory Information Management System (LIMS) software; o Purchasing documents and training material from TNI, etc. • The new standards will be a particular burden on small laboratories, which may choose to close if they cannot economically meet the new standards. • ELAP's "Roadmap to ELAP Accreditation" Program is the outreach and training component of the new regulations. ELAP staff have presented to the Lab Committee in June 2020, February 2021, April 2021, June 2022, and April 2023. • The BACWA Lab Committee began providing monthly TNI training sessions beginning in July 2021. BACWA has provided funding for the TNI training sessions to continue through FY23.	• Offer monthly training sessions to BACWA members. The free virtual training sessions are open to BACWA members holding a valid copy of the 2016 TNI Standard, and are occurring on the 3rd Tuesday of each month. Training is provided by Diane Lawver of Quality Assurance Solutions, LLC, and other subject matter experts. BACWA's TNI training sessions are recorded, and a link is available upon request. • Communicate with ELAP staff on behalf of BACWA's Laboratory Committee as new guidance and training materials are developed for TNI implementation and methods updates. • Continue to work through BACWA's Laboratory Committee to support members as they navigate laboratory accreditation under the new TNI standards. • Publicize training opportunities offered by consultants, ELAP, and others. • Provide a forum for BACWA laboratories to share experiences and lessons learned from various approaches to TNI implementation.	State Water Board's 'Roadmap to ELAP Accreditation' page: https://www.waterboards.ca.gov/drinking_water/certlic/labs/roadmap_to_elap_accreditation.html Roadmap to Accreditation Presentation to BACWA Lab Committee: https://bacwa.org/wp-content/uploads/2020/06/California-ELAP-Regulations-BACWA_06092020.pdf State Water Board's ELAP regulations page: http://www.waterboards.ca.gov/drinking_water/certlic/labs/elap_regulations.shtml Monthly Training Session flyer: https://bacwa.org/wp-content/uploads/2021/07/BACWA-Lab-TNI-Training-Series-Flyer.pdf ELAP Timeline Guidance Tool: https://www.waterboards.ca.gov/drinking_water/certlic/labs/docs/2022/elap-scheduler-1-1.xlsx

Background Highlights	Challenges and Recent Updates	Next Steps for BACWA	Links/Resources
PHASE-OUT OF BIOSOLIDS AS ALTERNATIVE DAILY COVER			
• Regulatory drivers are indicating that biosolids used as alternative daily cover (ADC) or disposed in landfills will be phased out. SB 1383, adopted in September 2016 requires organics diversion: -50% by 2020 (relative to 2014) -75% by 2025 (relative to 2014) CalRecycle is the state agency responsible for implementation. • Regulations implementing SB 1383 went into effect in 2022. Jurisdictions can begin local enforcement January 1, 2024, and compliance is required by January 1, 2025. Requirements include: o Diverted biosolids must be anaerobically digested and/or composted to qualify as landfill reduction. o CalRecycle is accepting applications to qualify other specific treatment technologies as landfill reduction (per Article 2 of SB 1383). o Local ordinances restricting land application are disallowed. • While the regulations implementing SB 1383 do not explicitly forbid biosolids disposal/reuse in landfills, it is assumed that since biosolids are a relatively "clean" waste stream that can be easily diverted, landfills will stop accepting biosolids. • The Bay Area Biosolids Coalition (BABC) was formed to find sustainable, cost-effective, all-weather options for biosolids management. BABC is a BACWA Project of Special Benefit.	• BACWA's 2021 Biosolids Trends Survey Report compiles member agency activities in 2018-2020, as well as survey responses regarding SB 1383 implementation. • Jurisdictions that divert organic waste must also procure the end products of diversion, such as biogas, biomethane, and compost (but not biosolids). Procurement rules are being phased in over three years (2023 to 2025) and there are interim rules regarding procurement of biogas from POTWs. • Currently, some County ordinances restrict the beneficial use of biosolids. CalRecycle considers bans on land application to be unenforceable and has agreed to approach counties with restrictive ordinances to conduct outreach and assess compliance. • AB 1857, signed in 2022, removes a diversion credit for municipal solid waste incinerators. CalRecycle will soon prepare draft regulations implementing the law, which could be applicable to biosolids treated using pyrolysis. • The *Biosolids in the Baylands* white paper was released in 2022 by the San Francisco Bay Joint Venture. The white paper identifies data gaps that need to be filled. Studies funded by BACWA and BABC (e.g., PFAS) and other current studies will be considered to help fill remaining data gaps before identifying new monitoring requirements at land applications sites.	• Engage through CASA and BABC to follow development of regulations implementing AB 1857, with the goal of avoiding limits on POTWs using pyrolysis for organic waste management. • Continue to engage with the Regional Water Board regarding supplemental monitoring requirements for biosolids land application sites in the Baylands. • Actively work through CASA with California Air Resource Board, CalRecycle, State Water Board, and California Department of Food and Agriculture to develop sustainable long-term options for biosolids beneficial use. • Meet with BAAQMD regularly in 2023 to discuss alignment of state and local regulations.	BACWA 2021 Biosolids Trends Survey Report: https://bacwa.org/wp-content/uploads/2021/12/BACWA-2021-Biosolids-Trends-Survey-Report.pdf BABC website: http://www.bayareabiosolids.com/ CASA White Paper on SB 1383 Implementation: https://bacwa.org/document/summary-of-sb-1383-and-its-implementation-casa-2020/ CalRecycle website for California Short-Lived Climate Pollutant Reduction Strategy https://www.calrecycle.ca.gov/organics/slcp CalRecycle Procurement FAQ (Updated per AB 1985) https://calrecycle.ca.gov/organics/slcp/faq/recycledproducts/ *Biosolids in the Baylands* White Paper https://bacwa.org/wp-content/uploads/2022/07/Biosolids-in-the-Baylands-White-Paper-March-2022.pdf Viewpoint Video https://www.viewpointproject.com/ptv-segments-biosolids/

Background Highlights	Challenges and Recent Updates	Next Steps for BACWA	Links/Resources
CLIMATE CHANGE MITIGATION			
• CARB's Climate Change Scoping Plan Update lays out the approach for the State to meet its greenhouse gas (GHG) emissions reduction targets through 2030. The latest Scoping Plan was updated in 2022 targeting carbon neutrality by 2045, including policies addressing: o Short-lived climate pollutants o Carbon sequestration on Natural and Working Lands o Largest emitters (transportation, electricity, and industrial sectors) • SB 1383 (Short-Lived Climate Pollutant Reduction) calls for: o 40% methane reduction by 2030 o 75% diversion of organic waste from landfills by January 1, 2025 o Policy / regulatory development encouraging production/use of biogas • BAAQMD developed a Clean Air Plan requiring GHG emissions supporting CARB's 2050 target (80% below 1990 levels). • BAAQMD proposed the development of Regulation 13 (climate pollutants) targeting methane and nitrous oxide reductions related to organics diversion and management. After a pause of several years, BAAQMD may revisit Regulation 13 later in 2023. • CARB states POTWs are part of the solution for reducing fugitive methane and encourages diversion of organics to POTWs to use available digester capacity and produce biogas.	• CARB is pursuing rapid fleet conversion to zero-emission vehicles (ZEVs), including medium and heavy-duty vehicles, through the Advanced Clean Fleet rule. The proposed regulations will allow organizations to opt into one of two programs: o **Public Fleets:** With exceptions, requiring 50% of vehicles added to be ZEV by 2024, and 100% by 2027. o **High Priority Fleet** (**Group 3**): With exceptions, requiring 10% of vehicles added to be ZEV by 2030 and 100% by 2042. • Complete conversion will be difficult for heavy-duty specialty trucks, and will remove a potential market for biogas. CASA is engaging to request continued allowance of biogas as a sustainable transportation fuel. • In addition to pushing for ZEVs, CARB is proposing changes to the Low Carbon Fuel Standard that reflect increasing emphasis on hydrogen as a transportation fuel. Conversion of biogas into hydrogen is currently in research & development stage. • Many POTWs are exploring energy generation, but BAAQMD air toxics regulations could make such programs more difficult to implement. Direct injection of biogas to PG&E's pipelines or use as a transportation fuel may be more efficient. • In late 2022, EPA released a draft proposal for apportionment of renewable fuel credits (RINs) for food waste-based and sludge-based biogas.	• Closely follow rule development of Regulation 13 (climate pollutants), which BAAQMD plans to revisit later in 2023. • The Advanced Clean Fleet rule was adopted April 28, 2023 with a Board Resolution directing staff to work with CASA to implement SB 1383 and preserve multiple uses of biomethane. BACWA is supporting CASA's enhanced advocacy to CARB to preserve existing pathways that allow biogas to be used for fueling vehicles. The outreach is required so that biogas produced at treatment plants continues to have a permissible and economical end use, and so utilities have reliable power for heavy-duty vehicles. • Look for ways to inform BAAQMD on opportunities and challenges for climate change mitigation by Bay Area POTWs, including education about anaerobic digesters and POTW operations. • Work with PG&E and BAAQMD to explore options for POTWs to inject biogas into PG&E pipelines. In February 2022, the CPUC approved a mandatory biomethane procurement program for CA's four large gas IOUs (including PG&E) under SB 1440. CASA has been discussing the barriers to pipeline injection with CPUC and CalOSHA staff.	Climate Change Scoping Plan, including 2022 Update: https://ww2.arb.ca.gov/our-work/programs/ab-32-climate-change-scoping-plan CARB Low Carbon Fuel Standard: https://ww2.arb.ca.gov/our-work/programs/low-carbon-fuel-standard CARB Advanced Clean Fleet Rule: https://ww2.arb.ca.gov/our-work/programs/advanced-clean-fleets SB 1383: https://www.calrecycle.ca.gov/organics/slcp BAAQMD Clean Air Plan: http://www.baaqmd.gov/plans-and-climate/air-quality-plans/current-plans BAAQMD Regulation 13 http://www.baaqmd.gov/rules-and-compliance/rules/regulation-13-climate-pollutants EPA Renewable Fuel Standards https://www.epa.gov/renewable-fuel-standard-program/proposed-renewable-fuel-standards-2023-2024-and-2025

Background Highlights	Challenges and Recent Updates	Next Steps for BACWA	Links/Resources
CLIMATE CHANGE ADAPTATION			
• Climate change and water resilience are a strategic priority of both the State Water Board and Regional Water Board. • In April 2019, Governor Newsom signed Executive Order N-10-19 directing State Agencies to recommend a suite of priorities and actions to build a climate-resilient water system and ensure healthy waterways through the 21st century. • Bay Area coordination occurs through Bay Adapt, the Bay Area Climate Adaptation Network (BayCAN), and other venues. BACWA has signed a letter of support for the Bay Adapt Joint Platform. • In April 2022, the State released a Climate Adaptation Strategy, including an updated climate change assessment for the Bay Area region. • The California Coastal Commission's November 2021 *Sea Level Rise Planning Guidance* recommends that agencies "understand and plan" for 2.7 feet of sea level rise by 2050. • The Regional Water Board is modifying the Basin Plan to address climate change and wetland policy. The changes will occur through multiple Basin Plan amendments.	• In 2022, the Regional Water Board adopted a Climate Change Basin Plan amendment addressing dredge and fill procedures near the region's shorelines, especially for climate adaptation projects. • Separately from the Basin Plan amendment, the NDPES division has released information regarding NPDES permitting of nature-based solutions. • Shallow groundwater response to Sea Level Rise is a concern in low-lying Bay Area communities. Information about current and future depth-to-groundwater maps is summarized in a January 2023 report now available from Pathways Climate Institute and SFEI. • In 2023, the Bay Conservation and Development Commission (BCDC) plans to develop "Regional Shoreline Adaptation Guidance" and standards for the Bay Area.	• Follow up with members regarding sea level rise planning, as discussed at a member agency roundtable in August 2022. Prepare for engagement with the Regional Water Board on expectations for sea level rise planning • Work with members to identify a suitable way to track sea level rise adaptation plans, per the request of Regional Water Board staff. • Engage with BCDC during the agency's development of Regional Shoreline Adaptation Plan guidance, which will likely impact most BACWA member agencies. BACWA is participating in an advisory group for the Regional Shoreline Adaptation Plan. • Continue to work with Regional Water Board and other resource agencies to look for regulatory solutions to encourage wetlands projects for shoreline resiliency.	California Coastal Commission's *Critical Infrastructure at Risk* https://documents.coastal.ca.gov/assets/slr/SLR%20Guidance_Critical%20Infrastructure_12.6.2021.pdf OPC Sea Level Rise Action Plan – August 2022 https://www.opc.ca.gov/webmaster/_media_library/2022/08/SLR-Action-Plan-2022-508.pdf Climate Change Basin Plan Amendment https://www.waterboards.ca.gov/sanfranciscobay/board_info/agendas/2022/July/7_ssr.pdf California Climate Adaptation Strategy https://climateresilience.ca.gov BayCAN Funding Tracker https://www.baycanadapt.org/ Bay Adapt Joint Platform https://www.bayadapt.org/ NPDES Permitting for Nature-Based Solutions https://bacwa.org/wp-content/uploads/2022/08/NPDES-Permitting-for-Nature-Based-Solutions-5.pdf 2023 Report on Shallow Groundwater Response https://www.sfei.org/projects/shallow-groundwater-response-sea-level-rise

Background Highlights	Challenges and Recent Updates	Next Steps for BACWA	Links/Resources
TOXIC AIR CONTAMINANTS			
• Regulation 11, Rule 18 (Rule 11-18), adopted in 2017, is BAAQMD's local effort to protect public health from toxic air pollution from existing facilities, including POTWs. • Per the Rule, BAAQMD will conduct site-specific Health Risk Screening Analyses (HRSAs) and determine each facility's prioritization score (PS). BAAQMD will conduct Health Risk Assessments (HRAs) for all facilities with a cancer PS>10 or non-cancer PS>1.0. After verifying the model inputs, if the facility still has PS above that threshold, that facility would need to develop and implement a Risk Reduction Plan that may include employing Best Available Retrofit Control Technology for Toxics (TBARCT). • AB 617 (Community Air Protection Program) – requires CARB to harmonize community air monitoring, reporting, & local emissions reduction programs for air toxics and GHGs). POTWs within communities already impacted by air pollution may have to accelerate implementation of risk reduction measures. • AB 2588 (Air Toxics "Hot Spots" Program) - Establishes a statewide program for the inventory of air toxics emissions from individual facilities, as well as requirements for risk assessment and public notification of potential health risks. 2020 updates expanded compound list from >500 to >1,700.	• BACWA developed a White Paper on BAAQMD Rule 11-18 to describe its potential impacts on the POTW community. • In response to planning and budgeting challenges identified by the AIR Committee, BAAQMD moved all POTWs to Phase 2 to give sufficient time to update the model's inputs, and plan for emissions reduction or TBARCT, as needed. • AIR Committee gathered data on proximity factors from each facility and submitted to BAAQMD for updating prioritization scores, which will be use in HRA development. • In the *Final Statement of Reasons* for rulemaking on AB 617 and AB 2588, CARB provided the wastewater sector time to develop a short-list of relevant compounds and perform a pooled emissions estimating effort to update outdated default emission factors (through 2028). • In December 2021, BAAQMD amended Rule 2-5 to reduce allowable levels of toxic air contaminants in new source permitting. In March 2022, BAAQMD and BACWA convened a working group to address concerns related to toxic air contaminants and rule-making, which is meeting quarterly. BACWA is coordinating with BAAQMD about implementation of the two-step process and its timing relative to BAAQMD Rule 11-18 and 2-5.	• Continue participating in the BAAQMD working group to discuss toxic air contaminants, rule development, and related air quality regulatory issues. • **Report "business as usual" for air toxics through 2028 (for year 2027 data).** If BAAQMD requests additional monitoring of air toxics, member agencies should refer to the one-page handout on this topic prepared by CASA. The wastewater sector has until 2028 to perform a statewide "two-step process" to determine a shortlist of compounds relevant to the wastewater sector to report. • Continue to Participate in CASA Subgroup meetings to plan the "two-step process" study. • **For budget planning purposes, BACWA members with permitted capacity > 5 MGD should expect the study to cost approximately $2,300 per MGD of permitted average dry weather flow.** Study costs will be refined and spread over four fiscal years. BACWA will assist CASA in collecting funds for this effort from participants who are BACWA's members. BACWA members should anticipate budgeting for this process beginning in FY25.	BAAQMD Rule 11-18 page: https://www.baaqmd.gov/rules-and-compliance/rules/regulation-11-rule-18-reduction-of-risk-from-air-toxic-emissions-at-existing-facilities BAAQMD Rule 2-5 https://www.baaqmd.gov/rules-and-compliance/rules/reg-2-permits?rule_version=2021%20Amendments Rule 11-18 Process Flowchart: https://bacwa.org/document/baqmd-11-18-process-flowchart-08-17-17/ CARB page on AB 617 and AB 2588: https://ww2.arb.ca.gov/our-work/programs/criteria-and-toxics-reporting *Final Statement of Reasons* https://ww3.arb.ca.gov/board/15day/ctr/fsor.pdf CASA One-Page Handout on Air Toxics Reporting https://bacwa.org/wp-content/uploads/2022/03/CTR-EICG_CASAOnePageIssue-Approach_March2022.pdf Timing of Rule 11-18 vs. Process for AB 617 https://bacwa.org/document/baaqmd-rule-11-18-vs-carb-two-step-process-for-ab-617-feb-2023/

Background Highlights	Challenges and Recent Updates	Next Steps for BACWA	Links/Resources
RECYCLED WATER			
• Approximately 10 percent of the municipal wastewater of Region 2 POTWs is currently recycled. Expansion of recycled water projects is a goal of many BACWA members, but implementation is slowed by high costs, regulatory uncertainty, and administrative requirements. • As of 2018, the State Water Board has adopted uniform water recycling criteria for two types of Indirect Potable Reuse: surface water augmentation and groundwater augmentation. • As of 2020, virtually all recycled water in Region 2 was produced at centralized facilities using municipal wastewater, and was treated to meet standards for non-potable reuse. • The State Water Board is developing regulations for Direct Potable Reuse. Regulations for raw water augmentation must be adopted by December 31, 2023. The State Water Board is pursuing a regulatory path that also includes treated water augmentation. The State Water Board will issue draft regulations for Direct Potable Reuse in spring 2023.	• Beginning in 2020, all agencies have been required to report monthly wastewater and recycled water volumes into the State's Geotracker database. The 2023 survey included new questions about future plans for increased recycled water production. • The State Water Board is currently developing standards for onsite treatment and reuse of non-potable water in multi-family, mixed use, and commercial buildings. Draft regulatory concepts for onsite non-potable reuse were released in August 2022. The State Water Board is expected to begin rulemaking for onsite non-potable recycled water by late spring and complete the regulations by the end of 2023. • BACWA is currently completing a Regional Evaluation of Potential Nutrient Discharge Reduction by Water Recycling, as required by the 2nd Nutrient Watershed Permit. • The State Water Board is launching a "Strike Team" to assess how California will meet new recycled water goals listed in California's Water Supply Strategy (August 2022). The new goals call for 800,000 acre-feet per year of recycled water by 2030 and 1.8 million acre-feet per year by 2040. The Strike Team will also document challenges to meeting these goals, including but not limited to funding.	• **This spring, BACWA members should plan to sign off on individual facility reports and review the draft overall report for the Regional Evaluation of Potential Nutrient Discharge Reduction.** The consultant team has completed most individual reports, and will produce the overall draft report by May 2023. The overall report, including individual facility reports, must be submitted by July 1, 2023. • Review draft regulations for Direct Potable Reuse and Onsite Non-potable Reuse and work through Recycled Water committee to develop comments, as needed. • Track California legislation with potential impacts on recycled water funding, mandates, or regulations.	Water Boards Recycled Water Policy and Regulations https://www.waterboards.ca.gov/water_issues/programs/recycled_water/ Direct Potable Reuse framework documents https://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/direct_potable_reuse.html Volumetric Annual Reporting Data: https://www.waterboards.ca.gov/water_issues/programs/recycled_water/volumetric_annual_reporting.html Special Studies of Recycled Water and Nature-Based Systems: https://bacwa.org/document-category/2nd-watershed-permit-studies/ California's Water Supply Strategy (August 2022) https://resources.ca.gov/-/media/CNRA-Website/Files/Initiatives/Water-Resilience/CA-Water-Supply-Strategy.pdf

Previously covered issues with no updates can be found in previous BACWA issues summaries.

ACRONYMS

ADC	Alternate Daily Cover
BAAQMD	Bay Area Air Quality Management District
BACT	Best Available Control Technology
BCDC	Bay Conservation and Development Commission
BTU/SCF	British thermal units per standard cubic foot
CalDPR	California Department of Pesticide Registration
CARB	California Air Resources Board
CASA	California Association of Sanitation Agencies
CAP	Criteria Air Pollutant
CEC	Compound of Emerging Concern
CIWQS	California Integrated Water Quality System
CVCWA	Central Valley Clean Water Agencies
CWEA	California Water Environment Association
DDW	Division of Drinking Water, State Water Resources Control Board
EC25/IC25	25% Effect Concentration/25% Inhibition Concentration
ELAP	Environmental Laboratory Accreditation Program
ELTAC	Environmental Laboratory Technical Advisory Committee
EPA	United States Environmental Protection Agency
FIFRA	Federal Insecticide, Fungicide, and Rodenticide Act
FY	Fiscal Year
GHG	Greenhouse Gas
HRSA	Health Risk Screening Analyses
HRA	Health Risk Assessment
MCL	Minimum Contaminant Level (Drinking Water)
MGD	Million Gallons per Day
NACWA	National Association of Clean Water Agencies
NELAC	National Environmental Laboratory Accreditation Conference
NMS	Nutrient Management Strategy
OEHHA	Office of Environmental Health Hazard Assessment
OPC	Ocean Protection Council
PCB	Polychlorinated Biphenyl
PFAS	Per- and Polyfluoroalkyl Substances
PFBS	Perfluorobutane Sulfonic Acid
PFHxS	Perfluorohexane Sulfonic Acid
PFOA	Perfluorooctanoic Acid
PFOS	Perfluorooctane Sulfonic Acid
POTW	Publicly Owned Treatment Works
PS	Prioritization Score
RMP	Regional Monitoring Program
RPA	Reasonable Potential Analysis
SCAP	Southern California Alliance of POTWs
SF Bay	San Francisco Bay
SFEI	San Francisco Estuary Institute
SSMP	Sewer System Management Plan
TMDL	Total Maximum Daily Load
TIN	Total Inorganic Nitrogen
TNI	The NELAC Institute
TST	Test of Significant Toxicity
WQBEL	Water Quality Based Effluent Limitation
WQO	Water Quality Objective
ZEV	Zero-Emission Vehicle

ITEM NO. RA5 PFAS UPDATE

Recommendation
For the Committee's information only; no action is required.

Background
Per- and polyfluoroalkyl substances (PFAS) are a large group of human-made substances that are very resistant to heat, water, and oil. PFAS have been used extensively in surface coating and protectant formulations. Common PFAS-containing products are non-stick cookware, cardboard/paper food packaging, water-resistant clothing, carpets, and fire-fighting foam. All PFAS are persistent in the environment, can accumulate within the human body, and have demonstrated toxicity at relatively low concentrations. PFOA and PFOS, two of the most common PFAS compounds, were found in the blood of nearly all people tested in several national surveys.

As a result of public attention on the issue of PFAS, there is a lot of activity at the national, state, and local levels on regulations, legislation, and research. This report outlines recent developments.

Discussion
Drinking Water Regulations
Regulatory efforts to address PFAS have primarily focused on drinking water in order to minimize human ingestion of these chemicals. In August 2019, California's Division of Drinking Water (DDW) lowered the drinking water notification levels to 6.5 ng/L for PFOS and 5.1 ng/L for PFOA (lowest detection possible at the time). In February 2020, DDW also lowered the response levels to 10 ng/L for PFOA and 40 ng/L for PFOS.

On March 14, 2023, the U.S. EPA released their proposed drinking water Maximum Contaminant Levels (MCLs) and Maximum Contaminant Level Goals (MCLGs) for select PFAS compounds. These draft MCLs will go through the formal approval process and are expected to be adopted by the end of 2023, and become enforceable standards by the end of 2026. For PFOA and PFOS, the proposed limit is 4 parts per trillion (ppt), or 4 ng/L. The proposed rule also contains site-specific limitations on any mixture containing one or more of PFNA, PFHxS, PFBS, and/or GenX Chemicals. Potential risk would be assessed using a hazard index calculation, defined in the proposed rule.

While the proposed MCLs are of obvious concern to drinking water agencies, they are unlikely to directly affect EBDA or our members' wastewater operations. Where wastewater facilities discharge into waterbodies that have the potential to be drinking water sources, there is a chance that the MCLs could be implemented as effluent limits in wastewater permits. However, because EBDA discharges to the Bay, any limits on EBDA's effluent would be more likely driven by the potential for impacts to aquatic ecosystems or fish consumption. Levels safe for aquatic health and fish consumption have yet to be defined.

Hazardous Waste Regulation

In August 2022, EPA proposed a rule designating PFOA and PFOS as hazardous substances under the federal Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) – also known as the Superfund law. The intent of this approach by EPA is to invoke a "polluter pays" principle, forcing the chemical companies that produce PFAS compounds to take responsibility for cleaning them up. The Superfund law works by triggering cleanups once contamination exceeds EPA thresholds, and another provision allows the agency to sue for cost recovery. However, the wastewater sector and other industries that are passive receivers of PFAS have argued that we should not be subject to these requirements. There are unlikely to be any immediate ramifications to wastewater agencies from this designation because the default reportable quantity is one pound per day for PFOA and PFOS, a mass which is unlikely to be reached in wastewater agencies' biosolids or effluent. However, the wastewater sector is continuing to push for an exemption to counter the risk that the reportable quantity could be lowered in the future.

Legislative and Regulatory Approaches to Biosolids in Other States

The most significant impacts to wastewater agencies have come from state legislatures taking action related to PFAS in biosolids. The Maine legislature passed L.D. 1911 in April 2022, banning use of all products that contain wastewater biosolids due to concerns about PFAS contamination. The legislation was prompted by discoveries of groundwater, soils, and milk with high levels of PFAS at farms and dairies where biosolids were applied. Importantly, paper mill residuals with high levels of PFAS were applied as soil amendments in many of these areas. Irrespective of the specific causes of the contamination, wastewater agencies in Maine must now haul their biosolids out of state for agricultural reuse.

In Arizona, recently proposed House Bill 2669 would have banned the land application of Class B biosolids within 3 miles of any area with a population greater than 128 people per square mile and within 1 mile of any land used for the production of direct human consumption crops or a residential zone. The legislation was prompted by a site near Yuma, Arizona which receives biosolids from Southern California. As opposed to PFAS, the driver in this case appears to be mismanagement at the site (stockpiled biosolids to which septage was added) that led to flies, odors, and complaints. Following advocacy by local utilities, the legislation was amended, and the bill currently moving forward bans application of sewage or septage, but not biosolids.

On the positive side, the approach being taken by the Michigan Department of Environment, Great Lakes, and Energy (EGLE) toward regulating biosolids for PFAS is being held up as a model for California and other states. The Michigan strategy, which rolled out in 2021, established a threshold at which PFAS in biosolids are considered to be at background levels. Michigan EGLE conducted a study of biosolids from 42 wastewater treatment plants and found that the average PFOS concentration was 18

µg/kg. They then established thresholds for determining that wastewater agencies were "industrially impacted" and worked with agencies whose biosolids concentrations were above those thresholds to investigate potential sources and develop a source reduction program. Agencies with PFOS below 50 µg/kg were not required to take further action. Agencies with PFOS at or above 50 µg/kg but below 150 µg/kg were asked to reduce land application loading rates and develop source reduction programs. Only biosolids exceeding 150 µg/kg are not permitted to be land applied, and source reduction programs for those agencies are also required.

Research

Because there are so many unknowns and additional data is required to support rational regulation, there is a lot of research underway into the sources, pathways, and impacts of PFAS in the environment.

A recent study conducted by University of Arizona investigated the impact of long-term land application of Class B biosolids on PFAS presence in soils. The study found that even after decades of land application, the concentration and accumulation of PFAS in soils receiving the biosolids was comparatively low, and significant attenuation of PFAS occurred near the soil surface. These results suggest that the potential for groundwater contamination is relatively small. The University of Arizona is now leading a national study looking at PFAS in soils with a history of land application of biosolids. This study, which kicked off in 2021, is looking at soil, groundwater, and crop uptake to better understand potential routes of PFAS exposure.

In July 2020, the State Water Resources Control Board (SWRCB) issued an investigative order requiring all wastewater treatment plants (WWTPs) to monitor for PFAS in influent, effluent, and biosolids quarterly for one year. The San Francisco Bay Region was exempted from that order in favor of conducting a regional study through the Regional Monitoring Program. In Phase 1 of the study, influent, effluent, and biosolids samples were analyzed at a select number of Bay Area WWTPs, which included Dublin San Ramon Services District, Union Sanitary District, and EBDA's combined outfall. Levels detected in wastewater effluent and biosolids from Bay Area agencies were lower than in other household products, and concentrations of individual PFAS compounds in effluent were well below DDW action levels. The study also showed that levels of PFAS in influent were not correlated with the number of industrial dischargers in an agency's service area, leading to the conclusion that PFAS is primarily coming from residential and commercial sources. Another interesting finding was that effluent PFAS concentrations consistently exceed influent concentrations. This is not because wastewater plants are creating or contributing PFAS, but rather because significant quantities of PFAS precursors can be found in influent, and those precursors are converted to detectable PFAS compounds through the treatment process.

The Bay Area Clean Water Agencies (BACWA) and the San Francisco Estuary Institute (SFEI) conducted sampling for Phase 2 of the regional study last Fall, and they are

currently analyzing the resulting data. The focus of Phase 2 is on gathering information that is actionable and can inform management of PFAS. Since source control appears to be the most effective way to reduce PFAS in effluent and biosolids, the study is seeking to better understand sources in the sewershed by sampling upstream in several sewer service areas.

In parallel, work is ongoing to analyze PFAS data from the rest of the state collected under the SWRCB investigative order. Consulting firm CDMSmith, at the direction of a California Association of Sanitation Agencies (CASA) work group including the EBDA General Manager, has been reviewing the data set to understand trends and to identify potential outliers. The concept is that if the wastewater community offers peer-to-peer support to agencies with high PFAS levels, focusing on a source control approach like the Michigan model, we may be able to head off more stringent regulation in the state. Meanwhile, SWRCB staff has said publicly that they do not see any causes for concern in the wastewater or biosolids PFAS data and do not expect to move forward with regulations in the immediate future.

California Legislation

As noted above, because we are receivers of PFAS, the wastewater community is primarily focused on source control rather than treatment as the most effective way to address PFAS in the environment. CASA has been working with a consortium of environmental advocacy partners, including Environmental Working Group, to sponsor and support legislation targeted at companies producing products containing PFAS. CASA's sponsored bill from last session, AB 2247, would have required labeling and disclosure of PFAS in a range of products, paving the way for further regulation. Unfortunately, the Governor vetoed the bill citing state administration costs, but several other PFAS-related bills were successfully signed. These included AB 1817, which banned PFAS in textiles such as clothing and household products, and AB 2771, which prohibits the manufacture, distribution, or sale of any cosmetic product in the state that contains "intentionally added PFAS" starting January 1, 2025.

CASA and its environmental partners are sponsoring a new bill this session, AB 727, which would ban PFAS in cleaning products. Bills are also moving through the legislature to ban PFAS in menstrual products (AB 246) and artificial turf (AB 1423).

Executive Officer's Report March 2, 2023

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New Year's Storm Impacts Update (Mike Chee)

In the February 2023 Executive Officer's Report, we provided an overview of the wastewater and stormwater-related spills and other incidents reported during the almost three-week onslaught of storms that began on New Year's Eve. That report included preliminary information, and this month we are updating that information to reflect more detailed reporting.

From December 31 through January 19, we received 170 California Office of Emergency Services (Cal-OES) incident reports totaling over 74 million gallons of unauthorized discharges of wastewater and stormwater to surface waters (over 186 million gallons were released from wastewater collection and treatment systems and about 112 million gallons were recovered resulting in the 74 million gallons discharged). As a reminder from our last report, roughly 10 billion gallons of authorized wastewater discharges took place during that period, so the spills represented a relatively small percent of all wastewater discharges.

Sanitary sewer collection systems and wastewater agencies in all nine Bay Area counties notified Cal-OES about these discharges, which can be categorized as combined sewer overflows (CSOs), i.e., overflows from San Francisco's combined sewer systems; sanitary sewer overflows (SSOs); and treatment plant spills reflecting various levels of treatment. These discharges were caused by the influx of stormwater into sewage systems, overwhelming collection system and treatment capacities. Due to the high volumes of stormwater infiltrating the sanitary sewer collection systems, the nature of the combined sewer overflows and sanitary sewer overflows were comparable. They were mostly stormwater mixed with routine sanitary flows.

As noted last month, untreated or partially treated sewage spills contain solids, pathogens, biochemical oxygen demand, and nutrients. These pollutants affect water quality; however, the rain and related runoff from the recent storms greatly diluted these pollutants. We received no reports of dead fish.

Below is a summary of the top ten spills by volume. They illustrate the range and nature of the various incidents that took place.

- **West County Wastewater District** reported an unauthorized discharge of 41.4 million gallons of stormwater and wastewater from its treatment plant to Wildcat Creek Marsh. The discharge occurred on January 11, when the plant's equalization and storage basins overtopped due to a surge in influent entering the plant.
- **The Martinez Marathon Refining Company** reported an unauthorized discharge of 11.2 million gallons of stormwater and wastewater from its treatment plant to a marsh leading to the Carquinez Strait. The discharge occurred on January 4, when heavy rainfall overwhelmed a stormwater retention pond.
- **East Bay Municipal Utility District (EBMUD)** reported three large sanitary sewer overflows totaling about 4.8 million gallons. The sanitary sewer overflows occurred on New Year's Eve at EBMUD's Alice Street and San Leandro Creek overflow structures (both in Oakland) and its Webster Street overflow structure (in Alameda).

These sanitary sewer overflows occurred when wastewater and stormwater in the collection system overwhelmed EBMUD's south interceptor.

- **Sewer Authority Mid-Coastside (SAM)** reported that two large sanitary sewer overflows, totaling over 4.1 million gallons, occurred on New Year's Eve and New Year's Day. The largest, at 3.8 million gallons, occurred in Half Moon Bay due to the failure of the Montara Force Main that conveys wastewater to SAM's wastewater treatment plant. The failure was caused by a deteriorated section of the force main that was exacerbated by a surge in combined wastewater and stormwater volume. Due to the force main failure, SAM shut down the Montara Pump Station to make temporary repairs, which caused a sanitary sewer overflow at the Montara Pump Station manhole for over 3.5 days as temporary emergency repairs were undertaken. Simultaneously, Pilarcitos Creek overtopped its banks and flooded the adjacent SAM treatment plant, threatening critical electrical infrastructure. The permanent force main repair was completed in February. The second sanitary sewer overflow occurred on Highway 1 behind 140 and 150 Wienke Way due to another force main rupture. Both sanitary sewer overflows discharged to the Pacific Ocean.
- **The City and County of San Francisco** reported an estimated 2.3 million gallons of combined wastewater and stormwater discharged from its bayside combined sewer system to San Francisco Bay through storm drains in the Marina Green parking lot. San Francisco used a computer model to simulate the storm and showed that approximately 18.6 million gallons of combined sewage and stormwater overflowed its collection system and flooded an area along Marina Boulevard. San Francisco assumed that all modeled flows on the Marina Green parking lot discharged to San Francisco Bay and about 16.3 million gallons of combined sewage and stormwater was returned to the collection system for discharge through authorized outfalls. Meanwhile, San Francisco estimated that over 74 million gallons of combined wastewater also flooded the area along Folsom Street and Harrison Street, over 20 million gallons flooded the Lower Alemany area, and about 1.5 million gallons flooded the area near Marin Street and Indiana Street near Islais Creek. These sewer overflows from the combined sewer system occurred when San Francisco's transport/storage boxes exceeded their capacity and the outfalls carrying authorized combined sewer discharges could not keep up with all the combined wastewater. Most of the combined sewage and stormwater was eventually returned to the collection system for discharge through authorized outfalls.
- **The City of Burlingame** reported a 2.3-million-gallon sanitary sewer overflow on New Year's Eve that occurred at four manholes and discharged to Lower San Francisco Bay.
- **The City of Oakland** reported three large sanitary sewer overflows on New Year's Eve and January 10 that totaled over 1.2 million gallons. The sanitary sewer overflows occurred at three manholes. One discharged to Lion Creek and the others discharged into Lake Temescal.
- **The City of Millbrae** reported an unauthorized discharge of over 930,000 gallons from its treatment plant to an unpermitted outfall leading to Lower San Francisco Bay. The discharge occurred on New Year's Eve when influent to the plant

exceeded the plant's biological treatment capacity, forcing the City to discharge primary-treated wastewater and stormwater from its equalization and storage basin.

- **The City of Richmond** reported an approximately 910,000-gallons sanitary sewer overflow on New Year's Eve that occurred from a manhole that discharged to Meeker Slough.
- **The City of San Mateo** reported two large sanitary sewer overflows on New Year's Eve and January 4 that totaled approximately 770,000 gallons. Both sanitary sewer overflows occurred from manholes that discharged into Borel Creek and then to Marina Lagoon.

We were able to compile this data because we have strong wastewater reporting requirements. However, we should not lose sight of the other substantial impacts of these storms. They caused significant property damage by inundating homes and businesses and damaging critical infrastructure. The weather caused tidal surges, high winds, downed trees, power outages, saturated soils, sink holes, and mud slides. Significant flooding blocked roadways and trapped people in their cars for hours. More than a dozen people died.

Flooding occurred in San Francisco, San Mateo, Alameda, Pleasanton, and coastal areas, to name just some examples. The City of San Mateo's Marina Lagoon, which captures stormwater runoff within San Mateo, overflowed into adjacent neighborhoods during the storms, transporting the sanitary sewer overflows noted above with the floodwaters. The Belmont Mobile Home Community was flooded up to 4 feet deep after the New Year's Eve storm, displacing the community for almost a week before residents could return. The Arroyo Mocho overtopped its banks and flooded a Vulcan Materials gravel mining operation in Pleasanton. The flood waters eroded the banks of a treatment pond and breached the levee between the creek and the pond (see photo of pond in the foreground with creek beyond).

We received reports of flooding at wastewater treatment plants, as well. The Oro Loma and Castro Valley Sanitary Districts treatment plant in San Lorenzo, and the City of San

Leandro treatment plant in San Leandro, flooded on New Year's Eve from surges in influent wastewater. While these floods did not result in unauthorized discharges, floodwaters did reach up to 3 feet deep, threatening critical infrastructure. The Delta Diablo treatment plant reported an overflow at its plant headworks totaling approximately 84,000 gallons. Delta Diablo captured and routed about 80,000 gallons of the overflow back to its headworks for treatmentbut discharged about 4,000 gallons to a drainage channel.

These storms highlight infrastructure vulnerabilities and provide an opportunity to better prepare for and mitigate the impacts of intense storms. We continue to implement actions to prepare for such storms. For example, new Statewide Waste Discharge Requirements for Sanitary Sewer Systems that become effective in June will strengthen asset management requirements for wastewater collection systems. The Board issued Cleanup and Abatement Order R2-2021-0021 to the City and County of San Francisco requiring actions to reduce flooding risks at three low-lying areas by 2028. Other enforcement orders, including an East Bay Communities consent decree and several cease and desist orders, aim to better manage wet weather flows. The San Francisco Bay Beaches TMDL requires the City of San Mateo to improve its collection system to reduce infiltration and inflow. We also continue to engage stakeholders to promote infrastructure improvements, including nature-based solutions, that provide resilience in the face of climate change.

Agenda Explanation
Livermore-Amador Valley
Water Management Agency
Board of Directors
May 17, 2023

ITEM NO. 15 GENERAL MANAGER'S REPORT

Action Requested
None at this time. This is an information item only.

Summary
The General Manager's (GM) tenure began on April 17, 2014. A two-year extension was approved on April 20, 2016, a three-year extension was approved on February 21, 2018, and an additional three year extension was approved on February 17, 2021. The agreement requires a report on hours worked during the fiscal year at each Board meeting. There is a limitation of 1,000 hours per fiscal year. For the fiscal year ending June 30, 2022 the General Manager billed LAVWMA 544 hours. For the fiscal year ending June 30, 2023 the General Manager has billed LAVWMA approximately 480 hours, which is also normal due to the number of capital projects.

In addition to the brief descriptions below, there are several items of interest for the Board's review:

1. Asset Management.
Asset Management continues to proceed. DSRSD is focusing on training staff to make better work requests and make use of mobile technology so that we end up with corrective maintenance data that is useful and able to be analyzed. So additional training SOP's are being created for CSEAM. There is a new eOM system for tracking SOPs, maintenance of equipment and useful lives, among other items. The LAVWMA General Manager participated in an over meeting of the new eOM system on May 11, 2023 and was very impressed. There is still a need to make updates and add content now that there is a new format that is user friendly to staff for adding content. We did an energy master plan for the Treatment facilities. There is new instrumentation inside the local control panels. There is an application that came with the new electrical equipment that has a very modern dashboard that has some asset management features and some reporting tools. **Attachment No. 15.a** is an email from Aaron Johnson, DSRSD, showing some screen shots of the system used for tracking LAVWMA equipment.

2. FYE23 Capital Project Planning
Please refer to the Action Item List, **Attachment No. 15.b** for a status report on all capital projects for FYE23. The General Manager is working closely with DSRSD staff to ensure that projects are managed as effectively as possible. The Action Item List has been modified to track all capital projects in addition to other key tasks.

3. Succession Planning
Work on this task is on target. The Staff Advisory Group (SAG) have reviewed a job description. The succession plan includes the following elements: 1) interfacing with staff at the member

agencies to identify key persons to assist a new General Manger in the transition, and 2) identifying which member agency staff will fill in on a temporary basis if the General Manager becomes unavailable to serve. It is anticipated that a Request for Qualifications/Proposal (RFQ/P) for a new General Manager will be issued several months before the incumbent's current agreement ends, April 17, 2024. This should allow adequate time for a transition and potential overlap between the two individuals. At this time, the use of a professional recruiting firm is not anticipated. A flyer will be prepared and distributed at the CASA conference in San Diego in August announcing that the position is soon to be open. CASA's next conference is in January 2024 in Palm Springs and a more formal flyer with RFQ/P dates will be distributed at that time. Postings on job boards for CASA, CWEA, ACWA, League of Cities, and other organizations will also be used. Member agency staff have offered to assist in flyer and RFQ/P submittals.

4. PG&E Costs and Max Demand Data

There is information in the Quarterly Report of Operations citing DSRSD staff efforts to minimize demand charges. They continue to do a great job. **Attachment No. 15.c** is a summary of all PG&E costs for this fiscal year. It is presented in tabular and chart form. The average kWh cost for the fiscal year is $0.2134/kWh. It is projected that the total kWh usage for the fiscal year will be 8,077,000 as compared with 7,334,000 last year. The six year average is 7,661,000 kWh. For comparison the highest of those years was FYE19 with a total of 8,711,000 kWh. FYE19 was far worse in terms of total water pumped, but it was more consistent and not a series of atmospheric rivers like this year.

Following is a brief description of major activities since the February 15, 2023 Board meeting:

- Attended LAVWMA O&M meetings with DSRSD, Livermore and Pleasanton staff.
- Updated Capital Project Planning and Action Item List.
- Drafted February 15, 2023 minutes and sent out for review. Updated based on comments received.
- Prepared items for the May 17, 2023 Board meeting and prepared the packet for distribution. Made updates to website as needed for files and legal requirements.
- Scheduled the May 17, 2023 meeting at DSRSD based on direction from the Board at the February 15, 2023 meeting.
- Worked DSRSD staff on developing a draft layout for solar panels at the pump station site. Notified DTN Engineers that the project is on hold pending decisions from DSRSD. Met with Ryan Gunstream, Noresco, to discuss solar project options.
- Worked with Woodard & Curran, and DSRSD staff on the PG&E Electrical Reliability Assessment and Options Draft Report; made various edits to draft versions of the report. Received and reviewed final report.

- Managed various capital projects, including reviewing all documents, for the pump purchase, PG&E Reliability, and SLSS improvements project.
- Continued working with DSRSD staff for pipeline inspection project to begin summer 2023.
- Logged into DSRSD system to review and approve invoices and review and respond to emails.
- Worked with DSRSD staff on testing the San Lorenzo Creek and Alamo Canal discharge process pursuant to the NPDES permit.
- Worked with DSRSD staff and Carollo Engineers on the Livermore Pipeline repair project. Reviewed and edited draft versions of the Carollo report.
- Worked with DSRSD staff to develop the CIP list for FYE24.
- Prepared the FY2023/24 Operating and Capital Budget for the May 17, 2023 Board meeting.
- Reviewed, made minor edits, and commented on DSRSD's 3rd quarter O&M report.
- Reviewed and sent to DocuSign for LAVWMA to execute the MOA for the regional recycled water project.
- Continued reviewing PG&E bills to ensure they are using the proper rate schedule. Maintained all data in a spreadsheet for proper tracking and budget preparation.
- Continued working with HydroScience and DSRSD staff to address comments on plans and technical specs for the SLSS project to HydroScience. Front end specifications have been completed except for the final schedule. Expect final technical specs and plans in May 2023.
- Kept SAG members informed on various issues and projects.
- Continued to work with General Counsel to track legislation of interest to LAVWMA and the member agencies.
- Continued working with DSRSD staff to manage electrical use at the pump station. .
- Monitored progress of other pump station and O&M projects managed by DSRSD staff.
- Reviewed and approved invoices for SLSS design, PG&E Reliability Evaluation, and other projects for payment by DSRSD.
- Continued to Discuss Asset Management issues with DSRSD staff. LAVWMA continues to follow their lead.
- Worked with Treasurer and General Counsel to develop process for selection of audit firm for the next five years. Finalized an agreement with Maze & Associates for one year with an option to add up to four additional years.
- Worked with DSRSD staff on various inquiries regarding projects near the forcemain to ensure there would be no issues of concern with the integrity of the forcemain.
- Continued working with Administrative Assistant II Sheree Davis to discuss responsibilities and procedures. Reviewed many boxes of old files for determining keep or destroy.
- Attended EBDA Managers Advisory Committee (MAC) meetings. Made notes of same and shared with SAG members.
- Continued reviewing EBDA issues of concern including Cargill brine project and strategic planning. Reviewed modifications to EBDA's strategic plan.

- Took required training through DSRSD for cybersecurity including phishing scams and password security.
- Prepared and submitted monthly invoices for LAVWMA General Management services.
- Reviewed and approved DSRSD monthly invoices for O&M services.
- Continued working with EBDA and LAVWMA agency staff to address enterococcus and other permit issues.
- Used DocuSign system for Board Resolutions, Agreements, minutes, and other documents.
- Reviewed EBDA, DSRSD, and DERWA agenda packets.
- Reviewed and directed handling of scanned mail sent by DSRSD staff.
- Responded to various emails and phone calls from outside agencies and organizations.

Next Meeting
The next Regular Board meeting is scheduled for August 16, 2023 at the DSRSD Board Room.

Recommendation
None at this time. This is an information item only.

Attachments
15.a Email from Aaron Johnson, DSRSD
15.b Action Item List
15.c PG&E Cost Summary

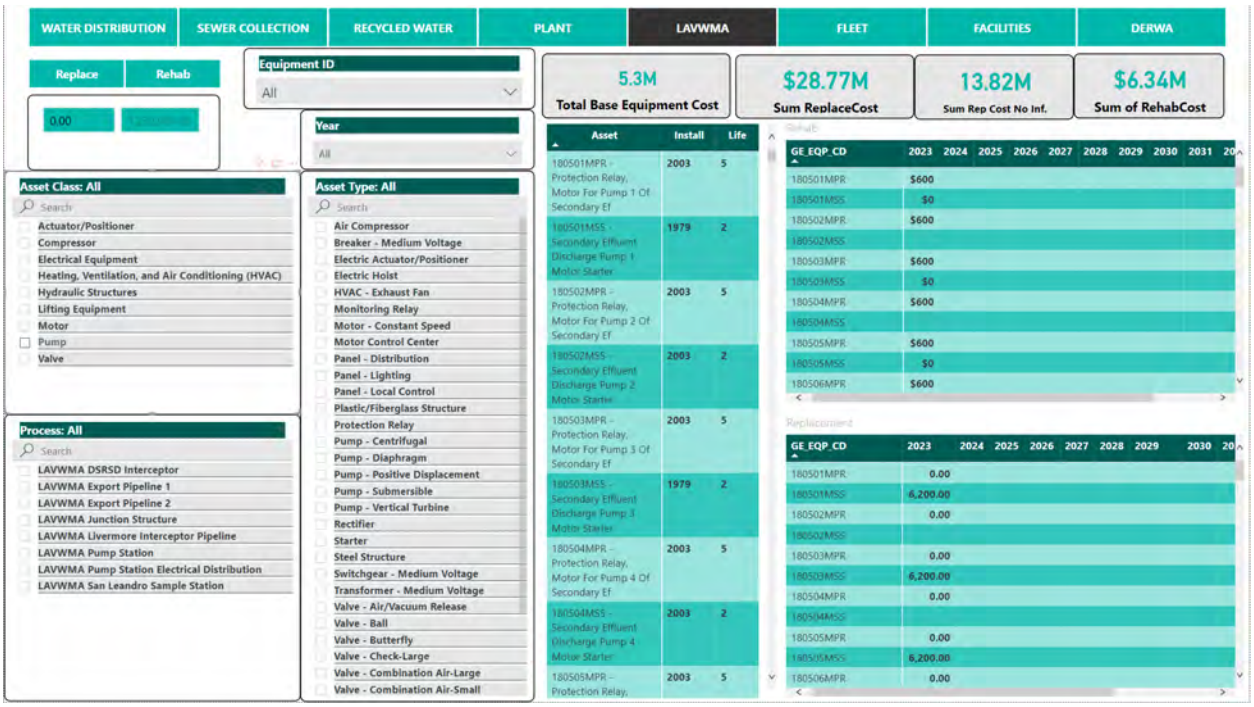
The items I have been working on for LAVWMA are related to the new LAVWMA eOM, and working with Spencer to get National Plant to give us a proposal on the inspection of siphons and long stretches of the exports system that are under water. There was not much requested in regards to the newly adopted LAVWMA budget. I gave all of the information I had to Operations. I built some PowerBI reports that you may like. It gives a bit more access to the data driving the replacement model and is similar to the printouts I have sent you in the past. Below is a screen shot of the different report tabs. You can drill into the individual assets. If you are familiar with PowerBi I can send you the report file.

WATER DISTRIBUTION | SEWER COLLECTION | RECYCLED WATER | PLANT | LAVWMA | FLEET | FACILITIES | DERWA

$0 $4,798,700

Process
- LAVWMA DSRSD Interceptor
- LAVWMA Export Pipeline 1
- LAVWMA Export Pipeline 2
- LAVWMA Junction Structure
- LAVWMA Livermore Interceptor Pipeline
- LAVWMA Pump Station
- LAVWMA Pump Station Electrical Distribution
- LAVWMA San Leandro Sample Station

BudgetYear	2023			2025			2027				
Asset	Rehab Cost	Replace Cost	Total Cost	Rehab Cost	Replace Cost	Total Cost	Rehab Cost	Replace Cost	Total Cost	Rehab Cost	Rep
180501MPR - Protection Relay, Motor For Pump 1 Of Secondary Ef	$600	$0	$600								
180501MSS - Secondary Effluent Discharge Pump 1 Motor Starter	$0	$6,200	$6,200								
180502MPR - Protection Relay, Motor For Pump 2 Of Secondary Ef	$600	$0	$600								
180503MPR - Protection Relay, Motor For Pump 3 Of Secondary Ef	$600	$0	$600								
180503MSS - Secondary Effluent Discharge Pump 3 Motor Starter	$0	$6,200	$6,200								
180504MPR - Protection Relay, Motor For Pump 4 Of Secondary Ef	$600	$0	$600								
180505MPR - Protection Relay, Motor For Pump 5 Of Secondary Ef	$600	$0	$600								
180505MSS - Secondary Effluent Discharge Pump 5 Motor Starter	$0	$6,200	$6,200								
180506MPR - Protection Relay, Motor For Pump 6 Of Secondary Ef	$600	$0	$600								
180506MSS - Secondary Effluent Discharge Pump 6 Motor Starter	$0	$6,200	$6,200								
180507MPR - Protection Relay, Motor For Pump 7 Of Secondary Ef	$600	$0	$600								
180508MPR - Protection Relay, Motor For Pump 8 Of Secondary Ef	$600	$0	$600								
180508MSS - Secondary Effluent Discharge Pump 8 Motor Starter	$0	$6,200	$6,200								
180509MPR - Protection Relay, Motor For Pump 9 Of Secondary Ef	$600	$0	$600								
180510MPR - Protection Relay, Motor For Pump 10 Of Secondary E	$600	$0	$600								
180510MSS - Secondary Effluent Discharge Pump 10 Motor Starter	$0	$6,200	$6,200								
180518P - Combined Influent Chlorine Sample Pump				$300	$0	$300				$0	
180520P - Emergency Discharge Chlorine & Ph Sample Pump				$500	$0	$500				$0	
180675CV - Valve To Basin 1, Pump For Wash Down System				$200	$0	$200					
180675MCN - Wash Down System Pump Motor Starter	$0	$6,200	$6,200								
180675V - Wash Down System Pump Discharge Shut-off Valve	$0	$2,000	$2,000							$100	
180730CV - Secondary Effluent Discharge Pump 1 Valve 1	$200	$0	$200								
180734CV - Secondary Effluent Discharge Pump 3 Valve 1	$200	$0	$200								
180736CV - Secondary Effluent Discharge Pump 4 Valve 1	$200	$0	$200								
180738CV - Secondary Effluent Discharge Pump 5 Valve 1	$200	$0	$200								


WATER DISTRIBUTION
SEWER COLLECTION
RECYCLED WATER
PLANT
LAVWMA
FLEET
FACILITIES
DERWA
Replace
Rehab
Equipment ID
All
Year
All
5.3M
Total Base Equipment Cost
$28.77M
Sum ReplaceCost
13.82M
Sum Rep Cost No Inf.
$6.34M
Sum of RehabCost
Asset Class: All
Search
Actuator/Positioner
Compressor
Electrical Equipment
Heating, Ventilation, and Air Conditioning (HVAC)
Hydraulic Structures
Lifting Equipment
Motor
Pump
Valve
Asset Type: All
Air Compressor
Breaker - Medium Voltage
Electric Actuator/Positioner
Electric Hoist
HVAC - Exhaust Fan
Monitoring Relay
Motor - Constant Speed
Motor Control Center
Panel - Distribution
Panel - Lighting
Panel - Local Control
Plastic/Fiberglass Structure
Protection Relay
Pump - Centrifugal
Pump - Diaphragm
Pump - Positive Displacement
Pump - Submersible
Pump - Vertical Turbine
Rectifier
Starter
Steel Structure
Switchgear - Medium Voltage
Transformer - Medium Voltage
Valve - Air/Vacuum Release
Valve - Ball
Valve - Butterfly
Valve - Check-Large
Valve - Combination Air-Large
Valve - Combination Air-Small
Process: All
Search
LAVWMA DSRSD Interceptor
LAVWMA Export Pipeline 1
LAVWMA Export Pipeline 2
LAVWMA Junction Structure
LAVWMA Livermore Interceptor Pipeline
LAVWMA Pump Station
LAVWMA Pump Station Electrical Distribution
LAVWMA San Leandro Sample Station
Asset
Install
Life
180501MPR – Protection Relay, Motor For Pump 1 Of Secondary Ef
2003
5
180501MSS – Secondary Effluent Discharge Pump 1 Motor Starter
1979
2
180502MPR – Protection Relay, Motor For Pump 2 Of Secondary Ef
2003
5
180502MSS – Secondary Effluent Discharge Pump 2 Motor Starter
2003
2
180503MPR – Protection Relay, Motor For Pump 3 Of Secondary Ef
2003
5
180503MSS – Secondary Effluent Discharge Pump 3 Motor Starter
1979
2
180504MPR – Protection Relay, Motor For Pump 4 Of Secondary Ef
2003
5
180504MSS – Secondary Effluent Discharge Pump 4 Motor Starter
2003
2
180505MPR – Protection Relay,
2003
5
Rehab
GE_EQP_CD
2023
2024
2025
2026
2027
2028
2029
2030
2031
180501MPR
$600
180501MSS
$0
180502MPR
$600
180502MSS
180503MPR
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180503MSS
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180504MPR
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180504MSS
180505MPR
$600
180505MSS
$0
180506MPR
$600
Replacement
GE_EQP_CD
2023
2024
2025
2026
2027
2028
2029
2030
180501MPR
0.00
180501MSS
6,200.00
180502MPR
0.00
180502MSS
180503MPR
0.00
180503MSS
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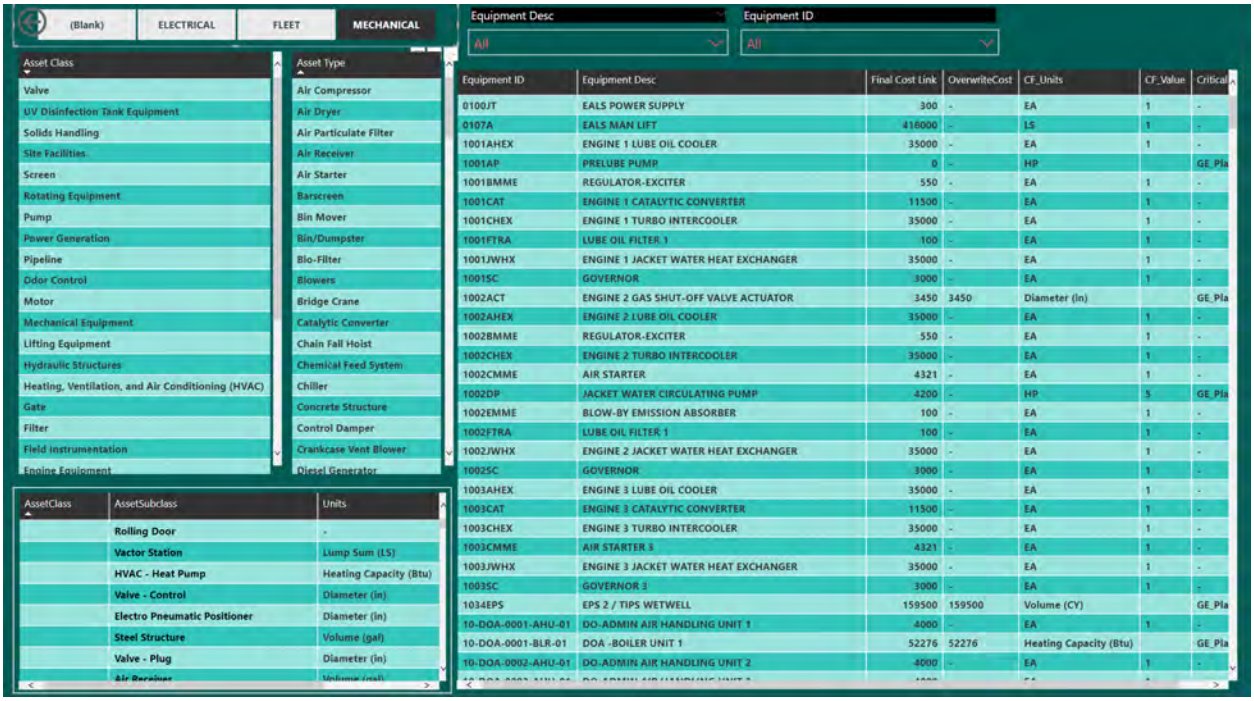
180504MPR
0.00
180504MSS
180505MPR
0.00
180505MSS
6,200.00
180506MPR
0.00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ELECTRICAL
FLEET
MECHANICAL
Equipment Desc
All
Equipment ID
All
Asset Class
Valve
UV Disinfection Tank Equipment
Solids Handling
Site Facilities
Screen
Rotating Equipment
Pump
Power Generation
Pipeline
Odor Control
Motor
Mechanical Equipment
Lifting Equipment
Hydraulic Structures
Heating, Ventilation, and Air Conditioning (HVAC)
Gate
Filter
Field Instrumentation
Engine Equipment
Asset Type
Air Compressor
Air Dryer
Air Particulate Filter
Air Receiver
Air Starter
Barscreen
Bin Mover
Bin/Dumpster
Bio-Filter
Blowers
Bridge Crane
Catalytic Converter
Chain Fall Hoist
Chemical Feed System
Chiller
Concrete Structure
Control Damper
Crankcase Vent Blower
Diesel Generator
AssetClass
AssetSubclass
Units
Rolling Door
Vactor Station
Lump Sum (LS)
HVAC - Heat Pump
Heating Capacity (Btu)
Valve - Control
Diameter (in)
Electro Pneumatic Positioner
Diameter (in)
Steel Structure
Volume (gal)
Valve - Plug
Diameter (in)
Equipment ID
Equipment Desc
Final Cost Link
OverwriteCost
CF_Units
CF_Value
Critical
0100JT
EALS POWER SUPPLY
300
EA
1
0107A
EALS MAN LIFT
416000
LS
1
1001AHEX
ENGINE 1 LUBE OIL COOLER
35000
EA
1
1001AP
PRELUBE PUMP
0
HP
GE_Pla
1001BMME
REGULATOR-EXCITER
550
EA
1
1001CAT
ENGINE 1 CATALYTIC CONVERTER
11500
EA
1
1001CHEX
ENGINE 1 TURBO INTERCOOLER
35000
EA
1
1001FTRA
LUBE OIL FILTER 1
100
EA
1
1001JWHX
ENGINE 1 JACKET WATER HEAT EXCHANGER
35000
EA
1
1001SC
GOVERNOR
3000
EA
1
1002ACT
ENGINE 2 GAS SHUT-OFF VALVE ACTUATOR
3450
3450
Diameter (in)
GE_Pla
1002AHEX
ENGINE 2 LUBE OIL COOLER
35000
EA
1
1002BMME
REGULATOR-EXCITER
550
EA
1
1002CHEX
ENGINE 2 TURBO INTERCOOLER
35000
EA
1
1002CMME
AIR STARTER
4321
EA
1
1002DP
JACKET WATER CIRCULATING PUMP
4200
HP
5
GE_Pla
1002EMME
BLOW-BY EMISSION ABSORBER
100
EA
1
1002FTRA
LUBE OIL FILTER 1
100
EA
1
1002JWHX
ENGINE 2 JACKET WATER HEAT EXCHANGER
35000
EA
1
1002SC
GOVERNOR
3000
EA
1
1003AHEX
ENGINE 3 LUBE OIL COOLER
35000
EA
1
1003CAT
ENGINE 3 CATALYTIC CONVERTER
11500
EA
1
1003CHEX
ENGINE 3 TURBO INTERCOOLER
35000
EA
1
1003CMME
AIR STARTER 3
4321
EA
1
1003JWHX
ENGINE 3 JACKET WATER HEAT EXCHANGER
35000
EA
1
1003SC
GOVERNOR 3
3000
EA
1
1034EPS
EPS 2 / TIPS WETWELL
159500
159500
Volume (CY)
GE_Pla
10-DOA-0001-AHU-01
DO-ADMIN AIR HANDLING UNIT 1
4000
EA
1
10-DOA-0001-BLR-01
DOA -BOILER UNIT 1
52276
52276
Heating Capacity (Btu)
GE_Pla
10-DOA-0002-AHU-01
DO-ADMIN AIR HANDLING UNIT 2
4000
EA
1

LAVWMA Action Item List **Month:** **May-23**

SAG Task	Responsible Party	Due Date	Status	Completion Date
Items for May 2023 LAVWMA Board Meeting.	SAG	NA	First inperson meeting in three years. Normal financial and project status reports, election of officers, 3rd Quarter O&M Report, Declaration of an Emergency for the Livermore Pipe Repair Project, FYE24 O&M and Capital Project Budget, update on legal and legislative issues, and the GM report.	
Operations Coordination Committee Task	**Responsible Party**	**Due Date**	**Status**	**Completion Date**
FYE23 Replacement Projects: See Items Below	Weir/Delight	Various dates	Refer to information below.	
MCC and Soft Starter Replacement Project. Carryover from FYE20 and into FYE21. Estimated design cost $250,000. Project now includes Electrical Improvements to the Main Switchgear at the Pump Station. Total estimated cost $2,300,000 - $2,500,000.	Weir/Atendido	12/31/2021	Project is complete. The Notice of Completion with Alameda County has been filed and final payment has been made. One warranty item was successfully resolved in January 2023, related to the settings to allow the standby generator to operate properly. Will delete this in the next report.	11/30/2022
San Leandro Sample Station Design Improvements. Estimated cost $1,000,000 plus engineering costs of $230,000 for a total of $1,230,000	Weir	12/31/2023	Final plans and specs are nearing completion. Hope to issue bid packet in May 2023. Have increased cost in FYE24 budget due to inflation, long lead time, and supply chain issues.	
Cathodic Protection Projects	Weir/Atendido	12/31/2020	Corrpro has disappeared. Will do a full survey in the next year, which mayh lead to some additional repair/upgrade work.	6/30/2023
PLC Upgrade at the Pump Station. Estimated cost $300,000	Ching	6/30/2021	Will be included in DSRSD SCADA project, which is design build. Project has begun. Scoping meetings with staff have been held and the project is progressing.	
Pipeline Inspection. Estimated cost $100,000	Halliday	12/31/2023	Will be carried over to FYE24. Have one quote and obtaining one more.	
Replace three flow meters at the junction structure. Estimated cost is $250,000.	Portugal	6/30/2023	Two meters installed; last one will be this month. Have carried over to FYE24 to allow for possible piping modifications.	
Replace 17 valve actuators at the pump station. Estimated cost is $255,555.	Quinlan	12/31/2023	There are seventeen valves that have electric actuators at the pump station. All of the valves actuators were installed when the pump station was upgraded twenty years ago and they are at the end of their useful lives. The actuators will be replaced with the newest technology and will match the style that are commonly used at DSRSD. The actuators cost approximately $9,000 each and will be installed by DSRSD staff. The total cost includes staff time for the installation.	
PG&E Reliability and Solar/Battery storage. This is a new project and no cost has yet been identified.	Weir	TBD	Solar is not an option at this time. DSRSD is the property owner and ic sompleting its own Electrical Master Plan. Unknown at this time if a project will be completed. Woodard & Curran study completed. Will include a CIP for installing tap box, transformer, and enything else to make connection to a portabel generator as quick as possible. Rental of a generator may be needed during extreme wet weather seasons.	TBD
Other Items				
Wet Weather Issues	Sevilla	10/31/2020	Many storms in January through March tested all facilities, with no serious issues.	
Live test of SLSS system	Sevilla/Atendido	3/31/2023	Was successfully tested in March 2023.	
Live test of Alamo Canal discharge during wet weather	Carson/Sevilla	TBD	Was successfully tested in March 2023.	
Wet Well Isolation Gates	Quinlan	6/30/2023	Gate is in good shape but won't fully close. No date set, perhaps this winter. May be coordinated with replacement of the valve actuators.	
EBDA Enterococcus Issue	Sevilla		No issues at this time.	
YTD O&M Expenses compared to budget	Carson, Weir	Ongoing	No issues at this time. PG&E costs in January through April 2023 were high due to the numerous storms.	

PG&E Energy Cost Summary for FYE22
Detailed Monthly Charges
Meter A Rate Schedule B20S - Business High Use

Month	Customer Charge				Demand Charge Max Peak								Total Monthly Cost	Demand Charge Max Part Peak					
	Number	Unit	Unit Cost	Cost	Number P1	Unit	Unit Cost	Cost	Number P2	Unit	Unit Cost	Cost		Number P1	Unit	Unit Cost	Cost	Number P2	Unit
6/13 - 7/13/2022	31	Days	$58.30343	$ 1,807.41		kW		$0.00		kW		$0.00	$0.00		kW		$ -		kW
7/14 - 8/14/22	32	Days	$58.30343	$ 1,865.71		kW				kW				106	kW	$ 6.13000	$ 649.78		kW
8/15 - 9/13/22	30	Days	$58.30343	$ 1,749.10		kW				kW					kW		$ -		kW
9/14 - 10/12/22	29	Days	$58.30343	$ 1,690.80		kW				kW					kW				kW
10/13 - 11/13/22	32	Days	$58.30343	$ 1,865.71		kW		$0.00		kW			$0.00		kW				kW
11/14 - 12/12/22	29	Days	$58.30343	$ 1,690.80		kW			369	kW	$2.24000	$342.02	$342.02		kW				kW
12/13 - 1/11/23	30	Days	$57.70034	$ 1,731.02	1487	kW	$2.24000	$2,109.56	1492	kW	$2.57000	$1,405.96	$3,515.52		kW				kW
1/12 - 2/12/23	32	Days	$56.65864	$ 1,813.08	1482	kW	$2.57000	$3,808.74		kW			$3,808.74		kW				kW
2/13 - 3/14/23	30	Days	$59.79616	$ 1,793.88	744	kW	$2.57000	$1,019.78	1106	kW	$2.57000	$1,326.46	$2,346.24		kW				kW
3/15 - 4/13/23	30	Days	$63.38189	$ 1,901.46	752	kW	$2.57000	$1,932.64		kW			$1,932.64		kW				kW
		Days		$ -		kW				kW					kW				kW
		Days		$ -		kW		$0.00		kW		$0.00	$0.00		kW				kW
TOTALS	305			$ 17,908.96	4465				2967				$11,945.16	106				0	

Meter B Rate Schedule B20S - Business High Use **1/12-2/12/23 Rate was B19S Business Med-High Use**

Month	Customer Charge				Demand Charge Max Peak								Total Monthly Cost	Demand Charge Max Part Peak					
	Number	Unit	Unit Cost	Cost	Number P1	Unit	Unit Cost	Cost	Number P2	Unit	Unit Cost	Cost		Number P1	Unit	Unit Cost	Cost	Number P2	Unit
6/13 - 7/13/2022	31	Days	$58.30343	$ 1,807.41	25	kW	$30.06000	$751.50		kW		$0.00	$751.50	20	kW	$ 6.13000	$122.60		kW
7/14 - 8/14/22	32	Days	$58.30343	$ 1,865.71	22	kW	$30.06000	$661.32		kW		$0.00	$661.32	22	kW	$ 6.13000	$134.86		kW
8/15 - 9/13/22	30	Days	$58.30343	$ 1,749.10	22	kW	$30.06000	$374.75	22	kW	$30.06000	$286.57	$661.32	23	kW	$ 6.13000	$79.89	21	kW
9/14 - 10/12/22	29	Days	$58.30430	$ 1,690.82	20	kW	$30.06000	$352.43	22	kW	$2.24000	$20.39	$372.82	22	kW	$ 6.13000	$79.06		kW
10/13 - 11/13/22	32	Days	$58.30343	$ 1,865.71	33	kW	$2.24000	$73.92		kW			$73.92		kW				kW
11/14 - 12/12/22	29	Days	$58.30343	$ 1,690.80	38	kW	$2.24000	$49.90	488	kW	$2.24000	$452.33	$502.22		kW				kW
12/13 - 1/11/23	30	Days	$57.70034	$ 1,731.02	1820	kW	$2.24000	$2,581.97	1820	kW	$2.57000	$1,715.05	$4,297.02		kW				kW
1/12 - 2/12/23	32	Days	$30.47581	$ 975.23	1376	kW	$2.53000	$3,481.28		kW			$3,481.28		kW				kW
2/13 - 3/14/23	30	Days	$59.79616	$ 1,793.88	488	kW	$2.57000	$668.89	1368	kW	$2.57000	$1,640.69	$2,309.57		kW				kW
3/15 - 4/13/23	30	Days	$63.38189	$ 1,901.46	485	kW	$2.57000	$1,246.45		kW			$1,246.45		kW				kW
		Days		$ -		kW		$0.00		kW			$0.00		kW				kW
		Days		$ -		kW									kW				kW
TOTALS	305			$ 17,071.14	4329				3720				$14,357.43	87				21	

Meters A & B Combined Rate Schedule B20S - Business High Use

Month	Customer Charge				Demand Charge Max Peak								Total Monthly Cost	Demand Charge Max Part Peak					
	Number	Unit	Unit Cost	Cost	Number P1	Unit	Unit Cost	Cost	Number P2	Unit	Unit Cost	Cost		Number P1	Unit	Unit Cost	Cost	Number P2	Unit
6/13 - 7/13/2022	31	Days		$ 3,614.81	25	kW		$0.00		kW		$0.00	$751.50	20	kW		$ 122.60	0	kW
7/14 - 8/14/22	32	Days		$ 3,731.42	22	kW						$0.00	$661.32	128	kW		$ 784.64	0	kW
8/15 - 9/13/22	30	Days		$ 3,498.21	22	kW						$286.57	$661.32	23	kW		$ 79.89	21	kW
9/14 - 10/12/22	29	Days		$ 3,381.62	20	kW						$20.39	$372.82	22	kW		$ 79.06	0	kW
10/13 - 11/13/22	32	Days		$ 3,731.42	33	kW		$0.00				$0.00	$73.92	0	kW		$ -	0	kW
11/14 - 12/12/22	29	Days		$ 3,381.60	38	kW						$794.35	$844.25	0	kW		$ -	0	kW
12/13 - 1/11/23	30	Days		$ 3,462.03	3307	kW		$0.00				$3,121.01	$7,812.54	0	kW		$ -	0	kW
1/12 - 2/12/23	32	Days		$ 2,788.30	2858	kW		$0.00				$0.00	$7,290.02	0	kW		$ -	0	kW
2/13 - 3/14/23	30	Days		$ 3,587.77	1232	kW						$2,967.15	$4,655.81	0	kW		$ -	0	kW
3/15 - 4/13/23	30	Days		$ 3,802.91	1237	kW						$0.00	$3,179.09	0	kW		$ -	0	kW
		Days		$ -	0	kW						$0.00	$0.00	0	kW		$ -	0	kW
		Days		$ -	0	kW						$0.00	$0.00	0	kW		$ -	0	kW
TOTALS	305			$ 34,980.10	8794				0				$26,302.59	193				21	

		Total Monthly Cost	Demand Charge Max Demand								Total Monthly Cost	Energy Charges Peak					
Unit Cost	Cost		Number P1	Unit	Unit Cost	Cost	Number P2	Unit	Unit Cost	Cost		Number P1	Unit	Unit Cost	Cost	Number P2	Unit	Unit Cost
		$0.00		kW		$0.00		kW		$0.00	$0.00		kWh		$ -		kWh	
		$649.78	383	kW	$ 28.04000	$10,739.32		kW		$0.00	$10,739.32		kWh				kWh	
		$0.00	385	kW	$ 28.04000	$6,117.39	371	kW	$28.04000	$4,507.90	$10,625.29		kWh				kWh	
			623	kW	$ 28.04000	$10,240.40	378	kW	$28.04000	$4,385.84	$14,626.24		kWh		$ -		kWh	
			760	kW	$ 28.04000	$21,310.40		kW			$21,310.40		kWh		$ -		kWh	
			372	kW	$ 28.04000	$6,114.65	379	kW	$28.04000	$4,397.45	$10,512.10		kWh			5433	kWh	$ 0.16684
			1487	kW	$ 28.04000	$26,407.14	1875	kW	$29.15000	$20,040.63	$46,447.76	10683	kWh	$ 0.16684	$ 1,782.35	52293	kWh	$ 0.18019
			1510	kW	$ 29.15000	$44,016.50		kW			$44,016.50	39102	kWh	$ 0.18019	$ 7,045.79		kWh	
			1868	kW	$ 29.15000	$29,041.17	1869	kW	$30.91000	$26,959.70	$56,000.88	14840	kWh	$ 0.18019	$ 2,674.02	18511	kWh	$ 0.18351
			1869	kW	$ 30.91000	$57,770.79		kW			$57,770.79	16513	kWh	$ 0.18351	$ 3,030.30		kWh	
				kW		$0.00		kW			$0.00		kWh				kWh	
		$ -		kW		$0.00		kW		$0.00	$0.00		kWh		$ -		kWh	
		$649.78	9257				4872				$272,049.28	81138				76237		

		Total Monthly Cost	Demand Charge Max Demand								Total Monthly Cost	Energy Charges Peak					
Unit Cost	Cost		Number P1	Unit	Unit Cost	Cost	Number P2	Unit	Unit Cost	Cost		Number P1	Unit	Unit Cost	Cost	Number P2	Unit	Unit Cost
		$122.60	974	kW	$ 28.04000	$27,310.96		kW		$0.00	$27,310.96	1732	kWh	$ 0.18675	$ 323.45		kWh	
		$134.86	534	kW	$ 28.04000	$14,973.36		kW		$0.00	$14,973.36	2139	kWh	$ 0.18675	$ 399.46		kWh	
$ 6.13000	$55.78	$135.68	529	kW	$ 28.04000	$8,405.46	467	kW	$28.04000	$5,674.36	$14,079.82	1172	kWh	$ 0.18675	$ 218.87	933	kWh	$ 0.18675
		$79.06	979	kW	$ 28.04000	$16,092.06	971	kW	$28.04000	$11,266.28	$27,358.34	1190	kWh	$ 0.18675	$ 222.23	966	kWh	$ 0.16684
			985	kW	$ 28.04000	$27,619.40		kW			$27,619.40	2817	kWh	$ 0.16684	$ 469.99		kWh	
			1434	kW	$ 28.04000	$23,571.00	1379	kW	$28.04000	$16,000.20	$39,571.21	1686	kWh	$ 0.16684	$ 281.29	14980	kWh	$ 0.16684
			1820	kW	$ 28.04000	$32,320.77	1825	kW	$29.15000	$19,506.21	$51,826.98	27487	kWh	$ 0.16684	$ 4,585.93	84299	kWh	$ 0.18019
			1868	kW	$ 26.46000	$49,427.28		kW			$49,427.28	49185	kWh	$ 0.18520	$ 9,109.06		kWh	
			491	kW	$ 29.15000	$7,633.41	1375	kW	$30.91000	$19,833.92	$27,467.33	6951	kWh	$ 0.18019	$ 1,252.50	28980	kWh	$ 0.18351
			1807	kW	$ 30.91000	$55,854.37		kW			$55,854.37	14452	kWh	$ 0.18351	$ 2,652.09		kWh	
				kW		$0.00		kW			$0.00		kWh		$ -		kWh	
		$ -		kW		$0.00		kW		$0.00	$0.00		kWh					
		$472.19	11421				6017				$335,489.05	108811				130158		

		Total Monthly Cost	Demand Charge Max Demand								Total Monthly Cost	Energy Charges Peak					
Unit Cost	Cost		Number P1	Unit	Unit Cost	Cost	Number P2	Unit	Unit Cost	Cost		Number P1	Unit	Unit Cost	Cost	Number P2	Unit	Unit Cost
	$0.00	$ 122.60	974	kW		$ -	0	kW		$0.00	$ 27,310.96	1732	kWh		$ 323.45	0	kWh	
	$0.00	$ 784.64	917	kW		$ -	0	kW		$0.00	$ 25,712.68	2139	kWh		$ 399.46	0		
		$ 135.68	914	kW		$ -	838	kW		$10,182.26	$ 24,705.11	1172	kWh		$ 218.87	933		
		$ 79.06	1602	kW		$ -	1349	kW		$15,652.12	$ 41,984.58	1190	kWh		$ 222.23	966		
		$ -	1745	kW		$ -	0	kW		$0.00	$ 48,929.80	2817	kWh		$ 469.99	0		
		$ -	1806	kW		$ -	1758	kW		$20,397.65	$ 50,083.31	1686	kWh		$ 281.29	20413		
		$ -	3307	kW		$ -	3700	kW		$39,546.83	$ 98,274.74	38170	kWh		$ 6,368.28	136592		
		$ -	3378	kW		$ -	0	kW		$0.00	$ 93,443.78	88287	kWh		$ 16,154.85	0		
		$ -	2359	kW			3244	kW		$46,793.62	$ 83,468.21	21791	kWh		$ 3,926.52	47491		
		$ -	3676	kW			0	kW		$0.00	$ 113,625.16	30965	kWh		$ 5,682.39	0		
		$ -	0	kW			0	kW		$0.00	$ -	0	kWh		$ -	0		
		$ -	0	kW			0	kW		$0.00	$ -	0	kWh		$ -	0		
		$1,121.97	20678				10889				$607,538.33	189949				206395		

	Total Monthly Cost	Energy Charges Part Peak								Total Monthly Cost	Energy Charges Off Peak							Total Monthly Cost
Cost		Number P1	Unit	Unit Cost	Cost	Number P2	Unit	Unit Cost	Cost		Number P1	Unit	Unit Cost	Cost	Number P2	Unit	Unit Cost	Cost	
$0.00	$0.00		kWh		$ -		kWh		$0.00	$0.00		kWh		$0.00		kWh		$ -	$0.00
		44	kWh	$ 0.15333	$ 6.75		kWh		$0.00	$6.75	140018	kWh	$0.12693	$17,772.48		kWh		$ -	$17,772.48
			kWh		$ -		kWh			$0.00	76150	kWh	$0.12693	$9,665.72	47752	kWh	$0.12693	$ 6,061.16	$15,726.88
	$0.00		kWh				kWh				83934	kWh	$0.12693	$10,653.74	56261	kWh	$0.12672	$ 7,129.39	$17,783.14
	$0.00		kWh				kWh				245189	kWh	$0.12672	$31,070.35		kWh			$31,070.35
$906.44	$906.44		kWh				kWh				93356	kWh	$0.12672	$11,830.07	76217	kWh	$0.12672	$ 9,658.22	$21,488.29
$9,422.68	$11,205.03		kWh				kWh				227733	kWh	$0.12672	$28,858.33	224026	kWh	$0.13414	$30,050.85	$58,909.17
	$7,045.79		kWh				kWh				489719	kWh	$0.13414	$65,690.91		kWh			$65,690.91
$ 3,396.95	$6,070.97		kWh				kWh				505646	kWh	$0.13414	$67,827.35	329649	kWh	$0.13746	$45,313.55	$113,140.91
	$3,030.30		kWh				kWh				633450	kWh	$0.13746	$87,074.04		kWh			$87,074.04
			kWh				kWh					kWh		$0.00		kWh			$0.00
$0.00	$0.00		kWh				kWh		$0.00	$0.00		kWh		$0.00		kWh		$ -	$0.00
	$28,258.53	44				0				$6.75	2495195			$330,442.99	733905				$428,656.17

	Total Monthly Cost	Energy Charges Part Peak								Total Monthly Cost	Energy Charges Off Peak							Total Monthly Cost
Cost		Number P1	Unit	Unit Cost	Cost	Number P2	Unit	Unit Cost	Cost		Number P1	Unit	Unit Cost	Cost	Number P2	Unit	Unit Cost	Cost	
$0.00	$323.45	1635	kWh	$ 0.15333	$ 250.69		kWh			$250.69	333189	kWh	$0.12693	$ 42,291.68		kWh		$ -	$42,291.68
$0.00	$399.46	1914	kWh	$ 0.15333	$ 293.47		kWh			$293.47	176173	kWh	$0.12693	$ 22,361.64		kWh		$ -	$22,361.64
$ 174.24	$393.11	1016	kWh	$ 0.15333	$ 155.78	797	kWh	$ 0.15333	$ 122.20	$277.99	91247	kWh	$0.12693	$ 11,581.98	70226	kWh	$0.12693	$ 8,913.79	$20,495.77
$161.17	$383.40	997	kWh	$ 0.15333	$ 152.87		kWh			$152.87	167474	kWh	$0.12693	$ 21,257.47	130719	kWh	$0.12672	$16,564.71	$37,822.19
	$469.99		kWh				kWh				453208	kWh	$0.12672	$ 57,430.52		kWh			$57,430.52
$2,499.26	$2,780.56		kWh				kWh				360683	kWh	$0.12672	$ 45,705.75	285004	kWh	$0.12672	$36,115.71	$81,821.46
$15,189.84	$19,775.77		kWh				kWh				416600	kWh	$0.12672	$ 52,791.55	305040	kWh	$0.13414	$40,918.07	$93,709.62
	$9,109.06		kWh				kWh				803154	kWh	$0.13959	$112,112.27		kWh			$112,112.27
$5,318.12	$6,570.62		kWh				kWh				26548	kWh	$0.13414	$ 3,561.15	143782	kWh	$0.13746	$19,764.27	$23,325.42
	$2,652.09		kWh				kWh				311772	kWh	$0.13746	$ 42,856.18		kWh			$42,856.18
	$0.00		kWh				kWh					kWh		$ -		kWh			$0.00
			kWh				kWh			$0.00		kWh				kWh		$ -	$0.00
	$42,857.50	5562				797				$975.03	3140048			$411,950.19	934771				$534,226.73

	Total Monthly Cost	Energy Charges Part Peak								Total Monthly Cost	Energy Charges Off Peak							Total Monthly Cost
Cost		Number P1	Unit	Unit Cost	Cost	Number P2	Unit	Unit Cost	Cost		Number P1	Unit	Unit Cost	Cost	Number P2	Unit	Unit Cost	Cost	
$0.00	$ 323.45	1635	kWh		$ 250.69	0	kWh		$0.00	$250.69	333189	kWh		$ -	0	kWh		$ -	$42,291.68
$0.00	$ 399.46	1958	kWh		$ 300.22	0	kWh		$0.00	$300.22	316191	kWh		$ -	0	kWh		$ -	$40,134.12
$174.24	$ 393.11	1016	kWh		$ 155.78	797	kWh			$277.99	167397	kWh		$ -	117978	kWh		$14,974.95	$36,222.65
$161.17	$ 383.40	997	kWh		$ 152.87	0	kWh			$152.87	251408	kWh		$ -	186980	kWh		$23,694.11	$55,605.32
$0.00	$ 469.99	0	kWh		$ -	0	kWh			$0.00	698397	kWh		$ -	0	kWh		$ -	$88,500.87
$3,405.70	$ 3,687.00	0	kWh		$ -	0	kWh			$0.00	454039	kWh		$ -	361221	kWh		$45,773.93	$103,309.75
$24,612.51	$ 30,980.80	0	kWh		$ -	0	kWh			$0.00	644333	kWh		$ -	529066	kWh		$70,968.91	$152,618.79
$0.00	$ 16,154.85	0	kWh		$ -	0	kWh			$0.00	1292873	kWh		$ -	0	kWh		$ -	$177,803.17
$8,715.07	$ 12,641.59	0	kWh		$ -	0	kWh			$0.00	532194	kWh			473431	kWh		$65,077.83	$136,466.33
$0.00	$ 5,682.39	0	kWh		$ -	0	kWh			$0.00	945222	kWh			0	kWh		$ -	$129,930.22
$0.00	$ -	0	kWh		$ -	0	kWh			$0.00	0	kWh			0	kWh		$ -	$0.00
$0.00	$ -	0	kWh		$ -	0	kWh			$0.00	0	kWh			0	kWh		$ -	$0.00
	$71,116.03	5606				797				$981.77	5635243			$0.00	1668676				$962,882.90

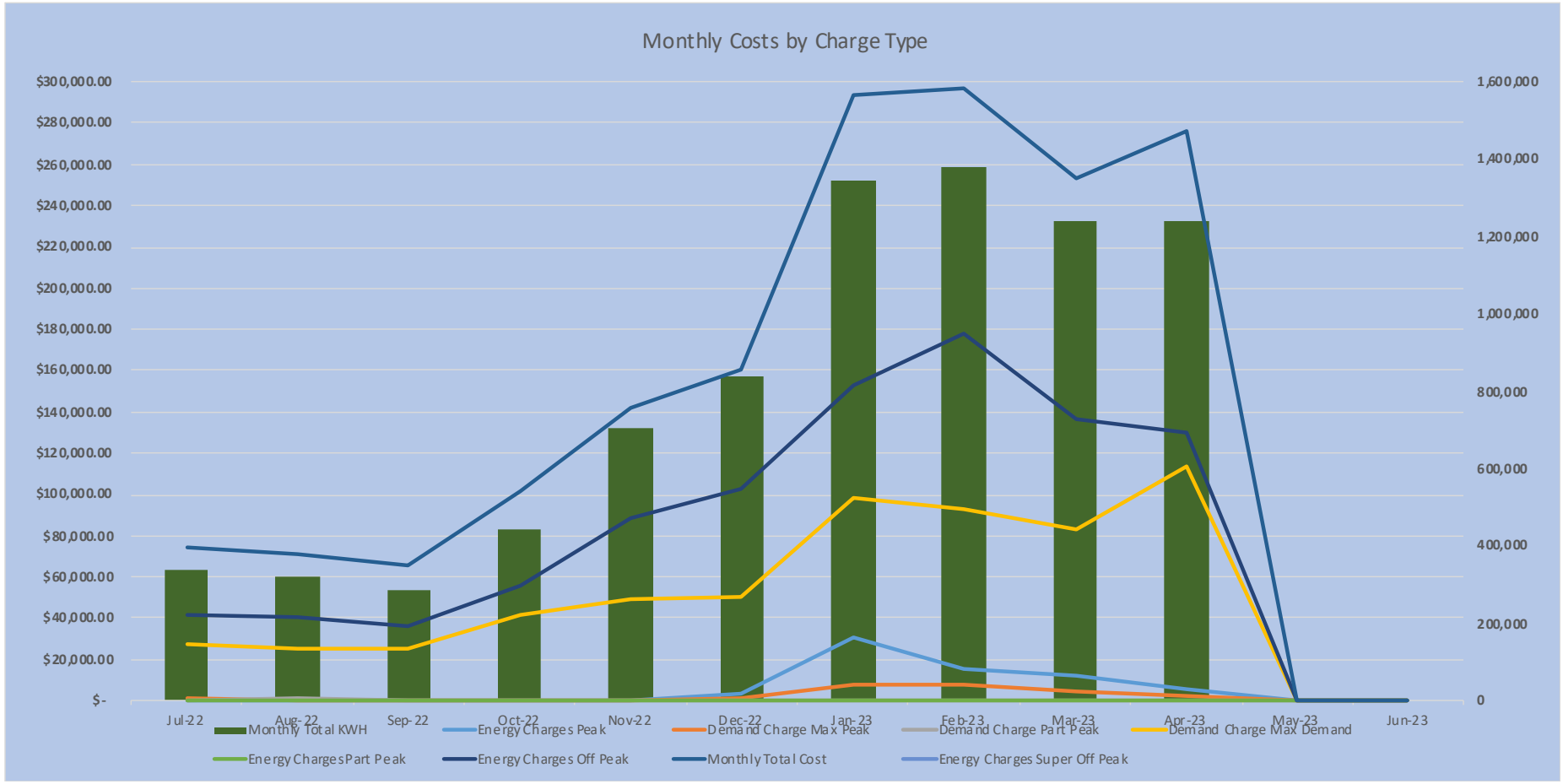
Energy Charges Super Off Peak							Total Monthly Cost	Power Factor Adjustment	Energy Commission Tax	PDP Program Credits	Total Monthly Cost	Total kWh	Average $/kWh
Number P1 Unit	Unit Cost	Cost	Number P2 Unit	Unit Cost	Cost								
kWh		$0.00	kWh			$0.00	$0.00				$1,807.41	0	NA
kWh		$0.00	kWh			$0.00	$0.00	($77.03)	$42.02	($116.60)	$30,882.43	140062	$0.22049
kWh		$0.00	kWh			$0.00	$0.00	($68.14)	$37.18		$28,070.31	123902	$0.22655
kWh		$0.00	kWh			$0.00	$0.00	($77.10)	$42.06		$34,065.14	140195	$0.24298
kWh		$0.00	kWh			$0.00	$0.00	($110.34)	$73.56		$54,209.68	245189	$0.22109
kWh		$0.00	kWh			$0.00	$0.00	($96.26)	$52.51		$34,895.91	175006	$0.19940
kWh		$0.00	kWh			$0.00	$0.00	($180.16)	$154.42		$121,782.78	514735	$0.23659
kWh		$0.00	kWh			$0.00	$0.00	($211.53)	$158.65		$122,322.13	528821	$0.23131
kWh		$0.00	114207 kWh	$0.07577	$ 8,653.46		$8,653.46	($393.14)	$294.86		$187,908.05	982853	$0.19119
190433 kWh	$0.07577	$14,429.11	kWh				$14,429.11	($336.16)	$252.12		$166,054.30	840396	$0.19759
kWh		$0.00	kWh				$0.00				$0.00		#DIV/0!
kWh		$0.00	kWh				$0.00				$0.00		#DIV/0!
190433		$14,429.11	114207				$23,082.57	($1,549.86)	$1,107.38	($116.60)	$781,998.14	3691159	$0.21186

Energy Charges Super Off Peak							Total Monthly Cost	Power Factor Adjustment	Energy Commission Tax	PDP Program Credits	Total Monthly Cost		
Number P1 Unit	Unit Cost	Cost	Number P2 Unit	Unit Cost	Cost								
kWh		$ -	kWh		$ -	$0.00		($168.28)	$100.97		$72,790.98	336556	$0.21628
kWh		$ -	kWh		$ -	$0.00		($126.16)	$54.07		$40,617.73	180226	$0.22537
kWh		$ -	kWh			$0.00		($115.77)	$49.62		$37,726.63	165391	$0.22811
kWh		$ -	kWh		$ -	$0.00		($165.74)	$90.41		$67,784.16	301346	$0.22494
kWh		$ -	kWh			$0.00		($228.01)	$136.81		$87,368.34	456025	$0.19159
kWh		$ -	kWh		$ -	$0.00		($397.41)	$198.71		$126,167.54	662353	$0.19048
kWh		$ -	kWh		$ -	$0.00		($291.70)	$250.03		$171,298.74	833426	$0.20554
kWh		$ -	kWh			$0.00		($213.08)	$255.70		$175,147.73	852339	$0.20549
kWh		$ -	50146 kWh	$0.07577	$ 3,799.56	$3,799.56		($38.46)	$76.92		$65,304.86	256407	$0.25469
76313 kWh	$0.07577	$ 5,782.24	kWh			$5,782.24		$20.13	$120.76		$110,433.68	402537	$0.27434
kWh		$ -	kWh			$0.00					$0.00		#DIV/0!
kWh		$0.00	kWh			$0.00					$0.00		#DIV/0!
76313		$5,782.24	50146			$9,581.80		($1,724.48)	$1,334.00	$0.00	$954,640.40	4446606	$0.21469

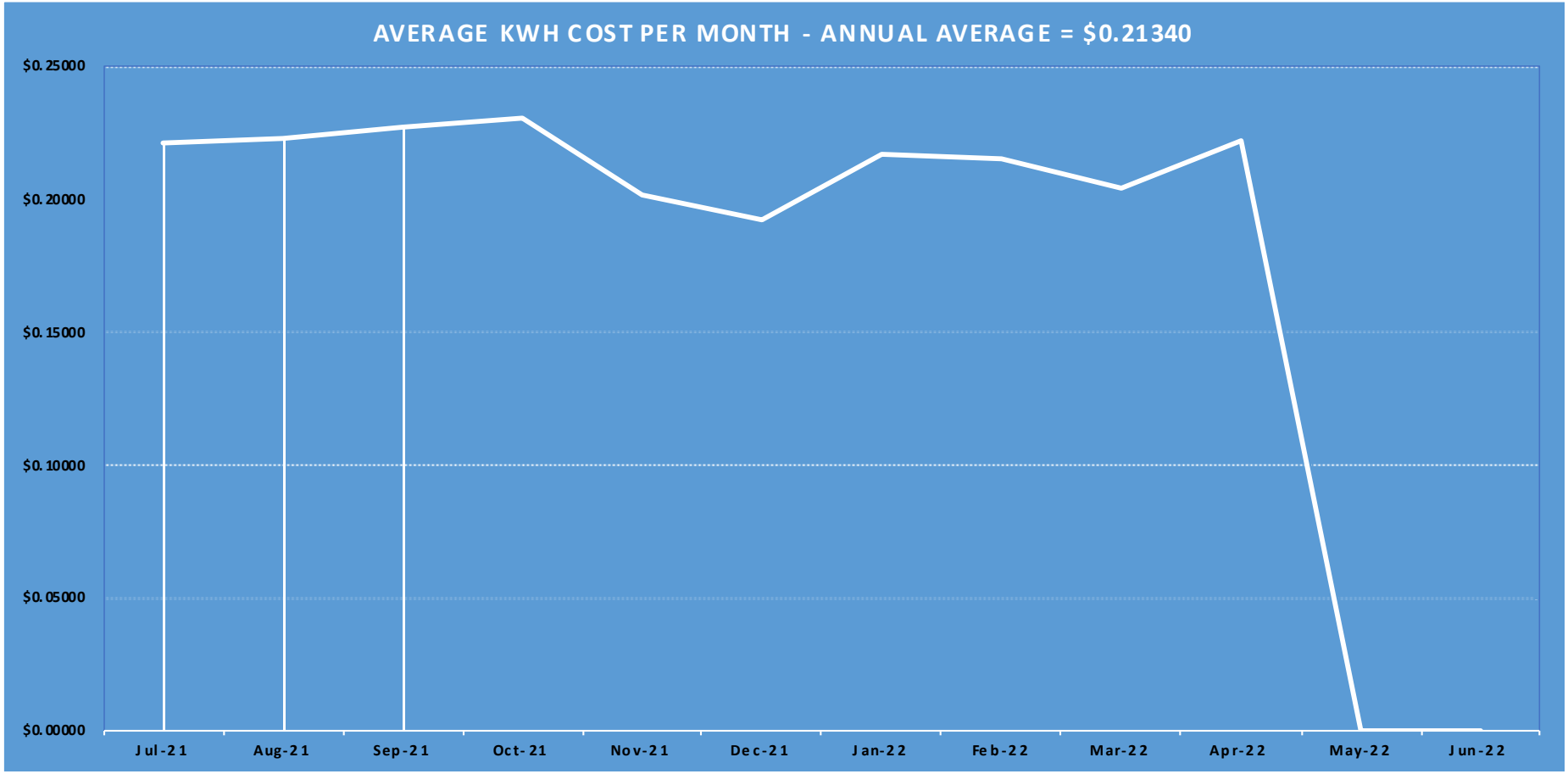
Energy Charges Off Peak							Total Monthly Cost	Power Factor Adjustment	Energy Commission Tax	PDP Program Credits	Total Monthly Cost	Total kWh	Average $/kWh
Number P1 Unit	Unit Cost	Cost	Number P2 Unit	Unit Cost	Cost								
0 kWh		$ -	0 kWh		$ -	$0.00		($168.28)	$ 100.97	$0.00	$74,598.39	336,556	$0.22165
0 kWh		$ -	0 kWh		$ -	$0.00		($203.19)	$ 96.09	($116.60)	$ 71,500.16	320,288	$0.22324
0 kWh		$ -	0 kWh		$ -	$0.00		($183.91)	$ 86.80	$0.00	$65,796.95	289,293	$0.22744
0 kWh		$ -	0 kWh		$ -	$0.00		($242.84)	$ 132.47	$0.00	$101,849.30	441,541	$0.23067
0 kWh		$ -	0 kWh		$ -	$0.00		($338.35)	$ 210.37	$0.00	$141,578.02	701,214	$0.20190
0 kWh		$ -	0 kWh		$ -	$0.00		($493.67)	$ 251.22	$0.00	$161,063.45	837,359	$0.19235
0 kWh		$ -	0 kWh		$ -	$0.00		($471.86)	$ 404.45	$0.00	$293,081.52	1,348,161	$0.21739
0 kWh		$ -	0 kWh		$ -	$0.00		($424.61)	$ 414.35	$0.00	$297,469.87	1,381,160	$0.21538
0 kWh			164353 kWh		$ 12,453.03	$12,453.03		($431.60)	$ 371.78	$0.00	$253,212.91	1,239,260	$0.20433
266746 kWh			0 kWh		$ -	$20,211.34		($316.03)	$ 372.88	$0.00	$276,487.97	1,242,933	$0.22245
0 kWh			0 kWh		$ -	$0.00		$0.00	$ -	$0.00	$0.00	0	#DIV/0!
0 kWh			0 kWh		$ -	$0.00		$0.00	$ -	$0.00	$0.00	0	#DIV/0!
266746		$0.00	164353			$32,664.37		($3,274.34)	$2,441.38	($116.60)	$1,736,638.54	8137765	$0.21340

PG&E Monthly Summary Costs FYE23

Month	Customer Charge	Demand Charge Max Peak	Demand Charge Part Peak	Demand Charge Max Demand	Energy Charges Peak	Energy Charges Part Peak	Energy Charges Off Peak	Energy Charges Super Off Peak	Power Factor Adjustment	Energy Commission Tax	PDP Program Credits	Monthly Total Cost	Monthly Total KWH	Average KWH Cost
Jul-22	$3,614.81	$751.50	$122.60	$27,310.96	$ 323.45	$250.69	$42,291.68	$0.00	($168.28)	$100.97	$0.00	$74,598.39	336,556	$0.22165
Aug-22	$3,731.42	$661.32	$784.64	$25,712.68	$ 399.46	$300.22	$40,134.12	$0.00	($203.19)	$96.09	($116.60)	$71,500.16	320,288	$0.22324
Sep-22	$3,498.21	$661.32	$135.68	$24,705.11	$ 393.11	$277.99	$36,222.65	$0.00	($183.91)	$86.80	$0.00	$65,796.95	289,293	$0.22744
Oct-22	$3,381.62	$372.82	$79.06	$41,984.58	$ 383.40	$152.87	$55,605.32	$0.00	($242.84)	$132.47	$0.00	$101,849.30	441,541	$0.23067
Nov-22	$3,731.42	$73.92	$0.00	$48,929.80	$ 469.99	$0.00	$88,500.87	$0.00	($338.35)	$210.37	$0.00	$141,578.02	701,214	$0.20190
Dec-22	$3,381.60	$844.25	$0.00	$50,083.31	$ 3,687.00	$0.00	$103,309.75	$0.00	($493.67)	$251.22	$0.00	$161,063.45	837,359	$0.19235
Jan-23	$3,462.03	$7,812.54	$0.00	$98,274.74	$ 30,980.80	$0.00	$152,618.79	$0.00	($471.86)	$404.45	$0.00	$293,081.49	1,348,161	$0.21739
Feb-23	$2,788.30	$7,290.02	$0.00	$93,443.78	$ 16,154.85	$0.00	$177,803.17	$0.00	($424.61)	$414.35	$0.00	$297,469.87	1,381,160	$0.21538
Mar-23	$3,587.77	$4,655.81	$0.00	$83,468.21	$ 12,641.59	$0.00	$136,466.33	$12,453.03	($431.60)	$371.78	$0.00	$253,212.92	1,239,260	$0.20433
Apr-23	$3,802.91	$3,179.09	$0.00	$113,625.16	$ 5,682.39	$0.00	$129,930.22	$20,211.34	($316.03)	$372.88	$0.00	$276,487.96	1,242,933	$0.22245
May-23	$0.00	$0.00	$0.00	$0.00	$ -	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	0	#DIV/0!
Jun-23	$0.00	$0.00	$0.00	$0.00	$ -	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	0	#DIV/0!
Total	$34,980.10	$26,302.59	$1,121.97	$607,538.33	$71,116.03	$981.77	$962,882.90	$32,664.37	($3,274.34)	$2,441.38	($116.60)	$1,736,638.50	8,137,765	$0.21340

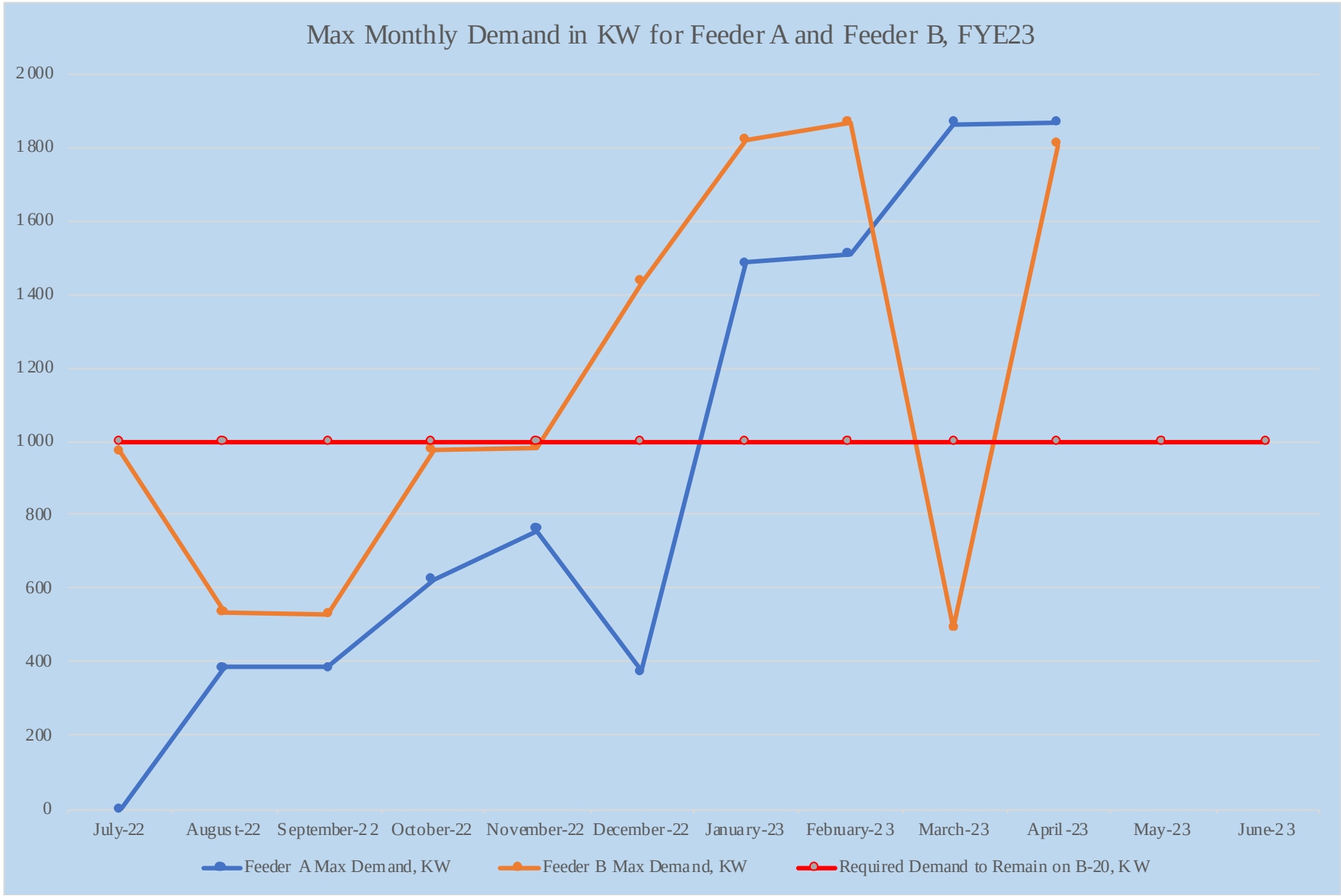

Monthly Costs by Charge Type
$300,000.00
$280,000.00
$260,000.00
$240,000.00
$220,000.00
$200,000.00
$180,000.00
$160,000.00
$140,000.00
$120,000.00
$100,000.00
$80,000.00
$60,000.00
$40,000.00
$20,000.00
$-
1,600,000
1,400,000
1,200,000
1,000,000
800,000
600,000
400,000
200,000
0
Jul-22
Aug-22
Sep-22
Oct-22
Nov-22
Dec-22
Jan-23
Feb-23
Mar-23
Apr-23
May-23
Jun-23
Monthly Total KWH
Energy Charges Peak
Demand Charge Max Peak
Demand Charge Part Peak
Demand Charge Max Demand
Energy Charges Part Peak
Energy Charges Off Peak
Monthly Total Cost
Energy Charges Super Off Peak

Month	Average KWH Cost per Month - Annual Average = $0.19354
Jul-21	$0.22165
Aug-21	$0.22324
Sep-21	$0.22744
Oct-21	$0.23067
Nov-21	$0.20190
Dec-21	$0.19235
Jan-22	$0.21739
Feb-22	$0.21538
Mar-22	$0.20433
Apr-22	$0.22245
May-22	#DIV/0!
Jun-22	#DIV/0!
Average	$0.21340


AVERAGE KWH COST PER MONTH - ANNUAL AVERAGE = $0.21340
$0.25000
$0.20000
$0.15000
$0.10000
$0.05000
$0.00000
Jul-21
Aug-21
Sep-21
Oct-21
Nov-21
Dec-21
Jan-22
Feb-22
Mar-22
Apr-22
May-22
Jun-22

Month	Feeder A Max Demand, KW	Feeder B Max Demand, KW	Required Demand to Remain on B-20, KW
July-22	0	974	999
August-22	383	534	999
September-22	385	529	999
October-22	623	979	999
November-22	760	985	999
December-22	372	1434	999
January-23	1487	1820	999
February-23	1510	1868	999
March-23	1868	491	999
April-23	1869	1807	999
May-23			999
June-23			999
(1) No. > 999	4	4	
(2) 3 consecutive months	Yes	Yes	

Transfers Off of Schedule B-20: *PG&E will review its Schedule E-20 accounts annually. A customer will be eligible for continued service on Schedule B-20 if its maximum demand has either: (1) Exceeded 999 kilowatts for at least 5 of the previous 12 billing months; or (2) Exceeded 999 kilowatts for any 3 consecutive billing months of the previous 14 billing months. If a customer's demand history fails both of these tests, PG&E will transfer that customer's account to service under a different applicable rate schedule.*


Max Monthly Demand in KW for Feeder A and Feeder B, FYE23
2 000
1 800
1 600
1 400
1 200
1 000
800
600
400
200
0
July-22
August-22
September-22
October-22
November-22
December-22
January-23
February-23
March-23
April-23
May-23
June-23
Feeder A Max Demand, KW
Feeder B Max Demand, KW
Required Demand to Remain on B-20, KW

Projections for FYE24

Month	Actual Monthly Total Cost	Actual Monthly Total KWH	Actual Average KWH Cost
Jul-22	$74,598.39	336,556	$0.22165
Aug-22	$71,500.16	320,288	$0.22324
Sep-22	$65,796.95	289,293	$0.22744
Oct-22	$101,849.30	441,541	$0.23067
Nov-22	$141,578.02	701,214	$0.20190
Dec-22	$161,063.45	837,359	$0.19235
Jan-23	$293,081.49	1,348,161	$0.21739
Feb-23	$297,469.87	1,381,160	$0.21538
Mar-23	$253,212.92	1,239,260	$0.20433
Apr-23	$276,487.96	1,242,933	$0.22245
May-23	$0.00	0	#DIV/0!
Jun-23	$0.00	0	#DIV/0!
Total	$1,460,150.54	6,894,832	$0.2118
Average	$146,015.05	689,483	
FYE23 Straight Line Projection	$1,752,180.65	8,273,798	

		Actual KWH
5/1/2022		609245
6/1/2022		375180
Projected Total for rest of FYE23		984,425
Projected Total KWH		7,879,257
Projected Cost for Rest of FYE23 Using Current Average KWH Cost	$1,668,627	$208,476
FYE23 Projected Cost	$1,668,627	$1,668,627

Conclusion averaging the two methods	
Total Estimated FYE23	Total Estimated KWH
$1,710,404	8,076,528

Projected Total KWH for FYE24 Based on the Average of FYE22 and FYE23

Budget projection best based on KWH usage and KWH cost and not the total bills.	
PG&E Presentation shows $0.063 increase in June - September 2023	0.063
Increase in January - March 2022 was $0.018	0.018
Increase in March - June 2022 was $0.026	0.026
Increase in June - August 2022 was $0.003	0.003
Total Estimated Increase for FYE24 is sum of the above, or $0.011	0.110
Estimated KWH cost at end of FYE24 is current average plus projected increase, or $0.3218	$0.3218
Assume Average KWH cost to be the average of current and projected, or $0.27	$0.2668

Budget Estimate for FYE24 Using Actual KWH Average for Last Six Years

Fiscal Year	Total KWH From Quarterly Reports	Total Costs from Quarterly Reports	Average KWH Cost	Average Increase
FYE18	7,619,866	$1,077,759	$0.1414	
FYE19	8,710,960	$1,355,726	$0.1556	$0.0142
FYE20	7,454,749	$1,267,923	$0.1701	$0.0144
FYE21	7,132,800	$1,329,898	$0.1864	$0.0164
FYE22	7,333,592	$1,455,980	$0.1985	$0.0121
FYE23 Est	8,076,528	$1,710,404	$0.2118	$0.0132
Average	7,721,416	$1,366,282	$0.1773	$0.0141

1. FYE24 Estimate based on six year average KWH x estimated $/KWH shown below
FYE24 Budget
$2,059,878
Round Down to $2,000,000

2. Alternate FYE24 Budget Estimate
Six Year Average KWH Usage times Current $/KWH plus Average Six Year Increase
$1,743,816

Compromise is to use the average of 1 and 2, above
$1,901,847
Round down to $1,900,000