



Livermore-Amador Valley Water Management Agency  
Celebrating 50 years 1974 - 2024

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

**Wednesday, May 15, 2024, 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.)
- Action 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 6.a. Special Board Meeting Minutes for the March 28, 2024 meeting**  
(The Board will consider approving the minutes from the March 28, 2024 Board meeting.)  
**Pages 5 – 6**
- Action 7. Annual Board Rotation – Elect Chair and Vice Chair for FY2024/25**  
(The Board will elect a Chair and Vice Chair for FY2024/25.)  
**Page 7**
- Information 8. Financial Reporting for the Fiscal Year Ending June 30, 2024**  
(The Board will review the Financial Reports and other financial items for the Fiscal Year ending June 30, 2024.)  
**Page 8 - 11**
- Information 9. LAVWMA Quarterly Report of Operations, 3rd Quarter, FY2023-2024**  
(The Board will review the Quarterly Report of Operations, 3rd Quarter, FY2023-2024.)  
**Pages 12 – 30**

- |                 |     |   |
|-----------------|-----|---|
| Information     | 10. | <b>Project Status Reports - Purchase of Three Vertical Turbine Pumps, the San Leandro Sample Station Improvements Project, and the Emergency Repair of the Livermore Interceptor Pipeline</b><br>(The Board will receive status reports on capital improvement projects at the Export Pump Station, the San Leandro Sample Station, and the Livermore Interceptor Pipeline.)  |
| Pages 31– 53    |     |   |
| Action          | 11. | <b>Amendment No. 3 to Agreement for Consultant Services with HydroScience for the Design of the San Leandro Sample Station Improvements Project</b><br>(The Board will consider an amendment to the agreement with HydroScience for the design of the San Leandro Sample Station Improvements Project regarding scope of work and compensation.)  |
| Pages 54 – 63   |     |   |
| Resolution      | 12. | <b>A Resolution of the Livermore-Amador Valley Water Management Agency Terminating an Emergency Action Procurement for Repair of the Livermore Interceptor Pipeline Pursuant to Public Contract Code Section 22050</b><br>(The Board will consider a Resolution terminating an emergency action procurement for repair of the Livermore Interceptor Pipeline pursuant to Public Contract Cost Section 22050 which was necessary to undertake emergency work to protect a segment of pipeline that was exposed during the winter storms. The pipeline has been repaired. This action is exempt from the California Environmental Quality Act (CEQA) pursuant to specified statutory and categorical exemptions.) |
| Pages 64– 67    |     |   |
| Resolution      | 13. | <b>Update to Investment Policy</b><br>(The Board will consider approving an update to the Investment Policy.)   |
| Pages 68 – 76   |     |   |
| Action          | 14. | <b>Authorization to Terminate the Agreement with DSRSD for Treasurer Services effective June 30, 2024</b><br>(The Board will consider terminating the agreement with DSRSD for Treasurer Services effective June 30, 2024.)   |
| Pages 77 – 79   |     |   |
| Resolution      | 15. | <b>A Resolution of the Livermore-Amador Valley Water Management Agency naming Levi Fuller as the Treasurer effective July 1, 2024</b><br>(The Board will consider a Resolution naming Levi Fuller as the Treasurer effective July 1, 2024)  |
| Pages 80– 81    |     |   |
| Action          | 16. | <b>Authorization for the General Manager to Execute an Agreement with Regional Government Services Authority for Finance and Administrative Services in an Amount not to Exceed \$100,000</b><br>(The Board will consider approving an agreement with Regional Government Services Authority for Finance and Administrative Services in an amount not to Exceed \$100,000.)   |
| Pages 82 –100   |     |   |
| Action          | 17. | <b>Proposed Operating and Capital Budget for Fiscal Year 2024/25</b><br>(The Board will consider approving the proposed Operating and Capital Budget for Fiscal Year 2024/25.)  |
| Pages 101 – 126 |     |   |
| Action          | 18. | <b>Approval of Agreement with National Plant Services to 1) Complete Phase 2 of the LAVWMA Pipeline Inspection Project, and 2) Rehabilitate Approximately 1,000 Linear Feet of Pipeline, Previously Identified During the Phase 1 Inspection for a Total not to Exceed \$700,000</b><br>(The Board will consider approving an agreement with National Plant Services for pipeline inspection and repair for a total not to exceed \$700,000.)   |
| Pages 127 – 157 |     |   |

- Action**      **19.      Update and Response to Various Legal and Legislative Issues**  
**Pages 158 – 215**      (The Board will receive a report regarding proposed legislation and legal developments affecting LAVWMA and its member agencies. The Board will also be asked to approve a letter in support of Senate Bill 1430 providing PFAS liability protection for water and wastewater agencies.)
- Resolution**      **20.      A Resolution Recognizing Charles V. Weir for His Ten Years of Service to the Livermore-Amador Valley Water Management Agency and his Contributions to the Wastewater Industry**  
**Pages 216– 218**      (The Board will consider a Resolution of appreciation for retiring General Manager Charles V. Weir.)
- Information**      **21.      General Manager’s Report**  
**Pages 219 – 235**      (The Board will review the General Manager’s Report regarding the operations and maintenance of the Agency and its facilities.)
- Information**      **22.      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.)
- 23.      Next Regular Board Meeting, Wednesday, August 21, 2024, 6:00 p.m. at DSRSD.**
- 24.      Adjournment**

**HOW TO SUBMIT PUBLIC COMMENTS:**

**Written / Read Aloud:** Please email your comments to [info@lavwma.com](mailto: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 live comments and read into the record.

**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](mailto: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](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.

## LAVWMA Regular Meeting of May 15, 2024

### **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**  
**Minutes**  
**DRAFT**  
**Special Meeting of Board of Directors**  
**Thursday, March 28, 2024**  
**6:00 p.m.**

**1. Call to Order**

Chair Bob Carling called the meeting to order at 6:00 p.m.

**2. Pledge of Allegiance**

The Pledge of Allegiance was recited.

**3. Roll Call**

Board Members Present: Chair Bob Carling, Vice Chair Arun Goel, Directors Evan Branning, Dinesh Govindarao, Jeff Nibert, and Julie Testa.

Staff Present: General Counsel Alexandra Barnhill and General Manager Chuck Weir

Member Agency Staff Present: None

Others Present: Levi Fuller

**4. Order of Agenda/Acknowledgement of Posting**

There were no changes to the Agenda.

**5. Comments from the Public**

None.

**6. Consent Calendar**

- a. Board Meeting Minutes for the March 14, 2024 meeting.

**Director Nibert motioned, seconded by Director Testa, to approve Consent Calendar Item Nos. 6.a.**

There were no comments from the public. The Motion passed unanimously (6 – 0).

**7. Resolution Approving Agreement for General Management Services with Levi Fuller, Jr.. dba Fuller Management and Operational Process Services LLC and Appointing the Same as General Manager and Board Secretary**

General Counsel Barnhill provided an overview of the application and interview process for a new General Manager to replace retiring General Manager Weir, and the negotiations to develop an agreement with Levi Fuller, Jr. to be the next LAVWMA General Manager. She also responded to several questions from Board members.

**Director Branning motioned, seconded by Director Testa, to approve Resolution 24-01, Resolution Approving Agreement for General Management Services with Levi Fuller, Jr., dba Fuller Management and Operational Process Services LLC and Appointing the Same as General Manager and Board Secretary.**

There were no comments from the public. The Motion passed unanimously (6 – 0).

**8. Matters From/For Board Members**

There were no matters from/for Board members.

**9, Next Regular Board Meeting, Wednesday, May 15, 2024 at 6:00 p.m. at DSRSD**

**10. Adjournment**

There being no further action, Chair Carling adjourned the meeting at 6:08 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 15, 2024

## **ITEM NO. 7 ANNUAL BOARD ROTATION – ELECT CHAIR AND VICE CHAIR FOR FY2024/25**

### **Action Requested**

Nominate and elect a Chair and Vice Chair for FY2024/25

### **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 FY2023/24, Bob Carling, Livermore, is serving as Chair and Arun Goel, DSRSD, 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 from DSRSD and the Vice Chair from Pleasanton.

Following is a list of LAVWMA's Past Officers:

<b>Fiscal Year</b>	<b>Chair</b>	<b>Vice Chair</b>
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	Carling, Livermore	Goel, DSRSD
2024/25	DSRSD	Pleasanton

### **Recommendation**

### **Action Requested**

Nominate and elect a Chair and Vice Chair for FY2024/25.

### **Attachments**

None

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Agenda Explanation  
Livermore-Amador Valley  
Water Management Agency  
Board of Directors  
May 15, 2024

**ITEM NO. 8 FINANCIAL REPORTING FOR THE FISCAL YEAR ENDING JUNE 30, 2024**

**Action Requested**

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

To: LAVWMA Board of Directors  
From: Chuck Weir, Acting LAVWMA Treasurer  
Subject: Financial Reporting for June 30, 2024

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**Summary**

Attached are the financial statements for the period ending December 31, 2023. The reports have been prepared by Dori Campbell.

**Attachments**

**O&M Fund Budget vs. Actual** – Shows the status of the budget to actual expenses for the Operations & Maintenance Fund for the period July 1, 2022 through June 30, 2023 and the period July 1, 2023 through June 30, 2024.

**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.

**Recommendation**

None at this time

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LIVERMORE-AMADOR VALLEY WATER MANAGEMENT AGENCY  
Operations and Maintenance - Budget vs Actual  
FY23 and FY24: July - March

	July 2022 - March 2023				July 2023 - March 2024			
	Annual Budget	YTD Actuals	\$ Variance	% Variance	Annual Budget	YTD Actuals	\$ Variance	% Variance
<b>OPERATING REVENUES (see revenue tab)</b>								
Service charges - DSRSD	\$ 1,133,248	1,133,248	\$ -		\$ 1,468,671	\$ 1,468,671	\$ -	
Service charges - City of Pleasanton	1,382,392	1,382,392	-		1,787,851	1,787,851	-	
Service charges - City of Livermore	1,224,706	1,224,706	-		1,576,473	1,576,473	-	
Service charges - Reconciled		906,507 (1)	906,507				-	
Total operating revenues	3,740,345	4,646,852	-	-	4,832,995	4,832,995	-	-
<b>OPERATING EXPENSES</b>								
Power	1,500,000	1,461,861	38,139	97.5%	1,884,500	1,506,962	377,538	80.0%
LAVWMA share of EBDA O&M - Fixed	676,965	744,253	(67,288)	109.9%	740,901	775,645 (2)	(34,744)	104.7%
LAVWMA share of EBDA O&M - Variable	160,959	43,986	116,973	27.3%	243,378	273,735 (2)	(30,357)	112.5%
Operations agreement	927,500	1,002,822	(75,322)	108.1%	1,451,650	806,593	645,057	55.6%
Professional services	329,917	107,082	222,835	32.5%	355,564	280,097 (2)	75,467	78.8%
Livermore sole use O&M	25,000	14,492	10,508	58.0%	25,000	24,090	910	96.4%
Insurance	96,926	119,965	(23,039)	123.8%	106,620	124,646 (2)	(18,027)	116.9%
Permits	23,078	-	23,078	0.0%	25,384	20,000	5,384	78.8%
Repairs and Maintenance	-	15,974	(15,974)		-	-	-	
Miscellaneous	-	-	-		-	-	-	
Total operating expenses	3,740,345	3,510,436	229,909	93.9%	4,832,996	3,811,770	1,021,226	78.9%
Operating income (loss)	-	1,136,416				1,021,225		
<b>NON-OPERATING REVENUE (EXPENSE)</b>								
Interest income		165,081				541,108		
Total non-operating revenue (expense)		165,081				541,108		
Net Income		1,301,496				1,562,333		

(1) Included FY23 O&M reconciliation true-up.

(2) Total of the noted expenses is \$1,454,124. Details see GM approved invoices tab.

**LIVERMORE-AMADOR VALLEY WATER MANAGEMENT AGENCY**  
**Treasurer's Report**  
**Portfolio Summary**  
**March 31, 2024**

<b>Investments</b>	<b>Par Value</b>	<b>Market Value</b>	<b>Book Value</b>	<b>% of Portfolio</b>	<b>Days to Maturity</b>	<b>YTM</b>	<b>Credit Rating</b>
LAIF- Operating	\$ 1,165,964	\$ 1,165,964	\$ 1,165,964	9%	\$ 1	4.30%	N/A
T-Bill 06/27/24 912796Y45	\$ 3,232,000	\$ 3,191,267	\$ 3,149,861	20%	\$ 88	5.22%	AA+
T-Bill 12/26/24 912796ZV4	\$ 3,301,000	\$ 3,181,494	\$ 3,149,920	20%	\$ 270	4.80%	AA+
T-Bill 12/31/25 91282CJSI	\$ 3,151,000	\$ 3,125,398	\$ 3,151,599	20%	\$ 640	4.23%	AA+
C. Schwab Account 8516-8477	\$ 4,768,613	\$ 4,768,613	\$ 4,768,613	31%	\$ 1	0.45%	N/A
	<b>\$ 15,618,577</b>	<b>\$ 15,432,736</b>	<b>\$ 15,385,957</b>	<b>100%</b>		<b>3.38%</b>	

**Book Value** **\$ 15,385,957**  
**Effective Rate of Return** **3.38%**

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.

\_\_\_\_\_  
Approver

5/1/2024  
\_\_\_\_\_  
Date

**Livermore-Amador Valley Water Management Agency**  
**General Management Expenses Listing**  
**July 2023 - March 2024**

EFF DATE	CHECK NO	WARRANT	VDR NAME/ITEM DESC	COMMENTS	AMOUNT
04/03/2024	205222	ck041824	FIELDMAN, ROLAPP & ASSOC. INC.	Annual Debt Transparency Repor	625.00
04/03/2024	205248	ck041824	JULIE TESTA	Special Board Mtg Attendance	50.00
04/03/2024	205213	ck041824	ROBERT CARLING	Special Board Mtg Attendance -	50.00
04/03/2024	205230	ck041824	JEFF NIBERT	Special Board Mtg Attendance -	50.00
04/03/2024	205219	ck041824	EVAN BRANNING	Special Board Mtg Attendance -	50.00
03/18/2024	205108	ck040424	REGIONAL WATER QUALITY CONTROL BOARD	LAVWMA's Mandatory Minimum Pen	3,000.00
03/18/2024	205071	ck040424	DOWNEY BRAND LLP	Special Consultant for Permit	3,445.00
03/18/2024	205113	ck040424	JULIE TESTA	Special Board Mtg Attendance -	50.00
03/18/2024	205064	ck040424	ROBERT CARLING	Special Board Mtg Attendance -	50.00
03/18/2024	205084	ck040424	JEFF NIBERT	Special Board Mtg Attendance	50.00
03/04/2024	204987	ck032824	WEIR TECHNICAL SERVICES	LAVWMA Management Services-FY2	17,861.39
03/18/2024	205002	ck032824	JARVIS FAY LLP	General Counsel Svcs - March 2	5,135.00
03/18/2024	205002	ck032824	JARVIS FAY LLP	Gen Col for Livermore Int Pipe	2,289.00
02/28/2024	204828	ck030724	JULIE TESTA	Board Meeting Attendance - 02/	50.00
02/28/2024	204798	ck030724	ROBERT CARLING	Board Attendance Meeting - 02/	50.00
02/28/2024	204810	ck030724	JEFF NIBERT	Board Meeting Attendance - 02/	50.00
02/28/2024	204801	ck030724	EVAN BRANNING	Board Meeting Attendance - 02/	50.00
02/13/2024	204732	ck022924	WEIR TECHNICAL SERVICES	LAVWMA Management Services - J	10,848.50
02/20/2024	204697	ck022224	MAZE & ASSOCIATES	FYE2023 AUDIT SERVICES	360.00
02/20/2024	204693	ck022224	JARVIS FAY LLP	General Counsel Svcs - January	2,488.50
02/20/2024	204693	ck022224	JARVIS FAY LLP	General Counsel Svcs - January	75.00
01/22/2024	0	CC012224	SIGNFAST, INC	LAVWMA Board Name Plate	39.77
01/30/2024	204569	ck020724	EAST BAY DISCHARGERS AUTHORITY	Semi Annual Invoice for FY 202	363,242.59
01/30/2024	204569	ck020724	EAST BAY DISCHARGERS AUTHORITY	Semi Annual Invoice for FY 202	136,867.50
12/26/2023	204404	ck012524	WEIR TECHNICAL SERVICES	LAVWMA Management Services-Dec	9,497.25
12/26/2023	204374	ck011824	JARVIS FAY LLP	General Counsel Svcs - Dec 202	158.00
12/26/2023	204374	ck011824	JARVIS FAY LLP	General Counsel Svcs - Dec 202	832.50
12/26/2023	204233	ck122823	SWRCB - ATTN: ACCT OFFICE	Water Board Annual Permit Fee	20,000.00
12/26/2023	204223	ck122823	JARVIS FAY LLP	General Counsel Svcs - Novembe	3,436.50
12/26/2023	204223	ck122823	JARVIS FAY LLP	General Counsel Svcs (CIP) - N	79.00
11/20/2023	204178	ck122123	SDRMA	2022/2023 Property/Liability P	4.46
11/20/2023	204136	ck122123	WEIR TECHNICAL SERVICES	LAVWMA Management Services-FY2	14,648.44
11/20/2023	204031	ck120723	DOWNEY BRAND LLP	Special Consultant for Permit	2,897.50
11/20/2023	204044	ck120723	MAZE & ASSOCIATES	FYE2023 AUDIT SERVICES	1,070.00
11/20/2023	203974	ck113023	MAZE & ASSOCIATES	FYE2023 AUDIT SERVICES for Oct	4,300.00
11/20/2023	203947	ck113023	WEIR TECHNICAL SERVICES	LAVWMA Management Services-Oct	16,770.72
11/20/2023	203971	ck113023	JARVIS FAY LLP	General Counsel Svcs - October	948.00
11/20/2023	203971	ck113023	JARVIS FAY LLP	General Counsel Svcs (CIP)- Oc	4,046.50
11/20/2023	203989	ck113023	JULIE TESTA	BOARD MEETING ATTENDANCE - 11/	50.00
11/20/2023	203959	ck113023	ROBERT CARLING	BOARD MEETING ATTENDANCE - 11/	50.00
11/20/2023	203972	ck113023	JEFF NIBERT	BOARD MEETING ATTENDANCE - 11/	50.00
11/20/2023	203966	ck113023	EVAN BRANNING	BOARD MEETING ATTENDANCE - 11/	50.00
10/23/2023	0	CC102323	SIGNFAST, INC	LAVWMA Board Room Name Plate	39.77
09/12/2023	203712	ck102623	JARVIS FAY LLP	General Counsel Svcs - Sept 20	481.50
09/12/2023	203712	ck102623	JARVIS FAY LLP	Gen Coun Svcs - Livermore Inte	7,614.50
09/12/2023	203622	ck101923	WEIR TECHNICAL SERVICES	LAVWMA Management Svcs - Sept	13,822.76
09/12/2023	203525	ck100523	JARVIS FAY LLP	General Counsel Svcs - August	7,981.00
09/12/2023	203525	ck100523	JARVIS FAY LLP	General Counsel Svcs - Aug 202	20,259.50
09/12/2023	203538	ck100523	U.S. BANK EQUIPMENT FINANCE	Trustee Fee	2,150.00
09/05/2023	203378	ck092123	WEIR TECHNICAL SERVICES	LAVWMA Management Services (Au	23,576.13
09/05/2023	203341	ck091423	EVAN BRANNING	BOARD MTG ATTENDANCE - 08/16/2	50.00
08/31/2023	0			Reclass expense to project str	94.34
08/08/2023	203140	ck082423	WEIR TECHNICAL SERVICES	LAVWMA Management Services-Jul	16,325.45
08/17/2023	203170	ck082423	JARVIS FAY LLP	General Counsel Svcs - July 20	12,156.00
08/23/2023	203185	ck082423	JULIE TESTA	BOARD MTG ATTENDANCE - 08/16/2	50.00
08/23/2023	203156	ck082423	ROBERT CARLING	BOARD MTG ATTENDANCE - 08/16/2	55.13
08/23/2023	203175	ck082423	MAZE & ASSOCIATES	FYE2023 AUDIT SERVICES	5,370.00
08/23/2023	203171	ck082423	JEFF NIBERT	BOARD MTG ATTENDANCE - 08/16/2	50.00
08/08/2023	203083	ck081723	EAST BAY DISCHARGERS AUTHORITY	Semi-Annual Invoice for FY23-2	412,402.50
08/08/2023	203083	ck081723	EAST BAY DISCHARGERS AUTHORITY	Semi-Annual Invoice for FY23-2	136,867.50
07/31/2023	0			Reclass expense to project str	79.54
07/31/2023	0			WARRANT=230731 RUN=1 BIWEEKLY	129.33
07/06/2023	202930	ck072023	SDRMA	Property/Liability Package Pro	121,641.89
<b>Total Expense</b>					<b><u>1,406,912.96</u></b>



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Agenda Explanation  
Livermore-Amador Valley  
Water Management Agency  
Board of Directors  
May 15, 2024

**ITEM NO. 9 QUARTERLY REPORT OF OPERATIONS FOR 3rd QUARTER FY2023-2024**

**Action Requested**

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

**Summary**

LAVWMA's Quarterly Report of Operations for the 3rd Quarter, FY 2023-2024 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. Dan Gill, DSRSD Operations Director, will be available to answer any questions from the Board. The report has been substantially modified to provide better graphics and interpretation of results, particularly in terms of energy consumption and pump station efficiency. Pumping efficiency averages 73.6% for the fiscal year.

**Recommendation**

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

**Attachment**

LAVWMA Quarterly Report of Operations, 3rd Quarter, FY2023-2024.



QUARTERLY REPORT OF OPERATIONS

FY 2023-2024, 3<sup>rd</sup> Quarter



## Quarterly Report of Operations LAVWMA Pumping and Conveyance System

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## Current Quarter Metrics

Monthly export flow totals were about 175-225 million gallons (MG) each month during Q3 FYE 2024 (Figure 1). Pump efficiency remained consistent each month at about 74%.

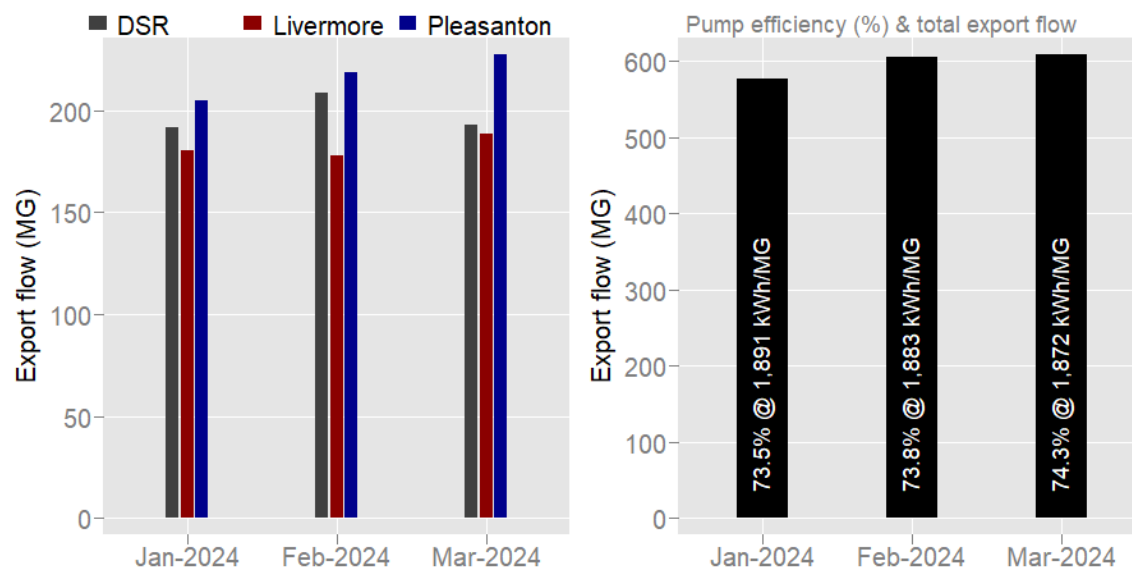


Figure 1 - LAVWMA Quarter 3 FYE 2024 export flows for Jan-2024, Feb-2024, & Mar-2024; monthly flows shown by source (left plot) and as total (right plot) with pump efficiency (%) at noted kilowatt hour (kWh) per million gallons (MG)

Most usage for either feeder (service) was done during off-peak hours (Figure 2). Feeder A was mostly off-peak except for minor usage during February and March (Figure 2; see Table 2 for monthly values). Feeder B provides power to the building, so there will always be minor charges for building equipment during peak and partial peak periods.

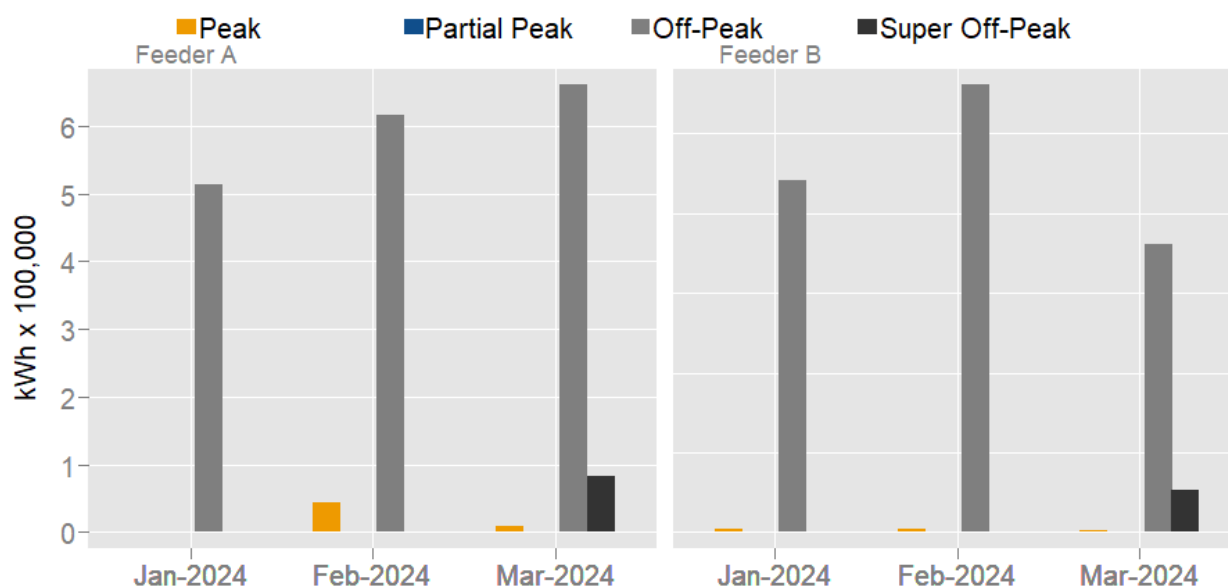


Figure 2 - LAVWMA Quarter 3 FYE 2024 electric usage as kilowatt hour (kWh) for Jan-2024, Feb-2024, & Mar-2024; monthly usage displayed separately for feeder A (left) & feeder B (right) by time of use: peak, partial peak, off-peak; & super off-peak

Labor and utilities covered the largest fraction of overall cost in Q3 FYE 2024 (Figure 3, 3 left-most plots). There were no expenses for non-routine work this quarter. Expenditures increased from January to February.

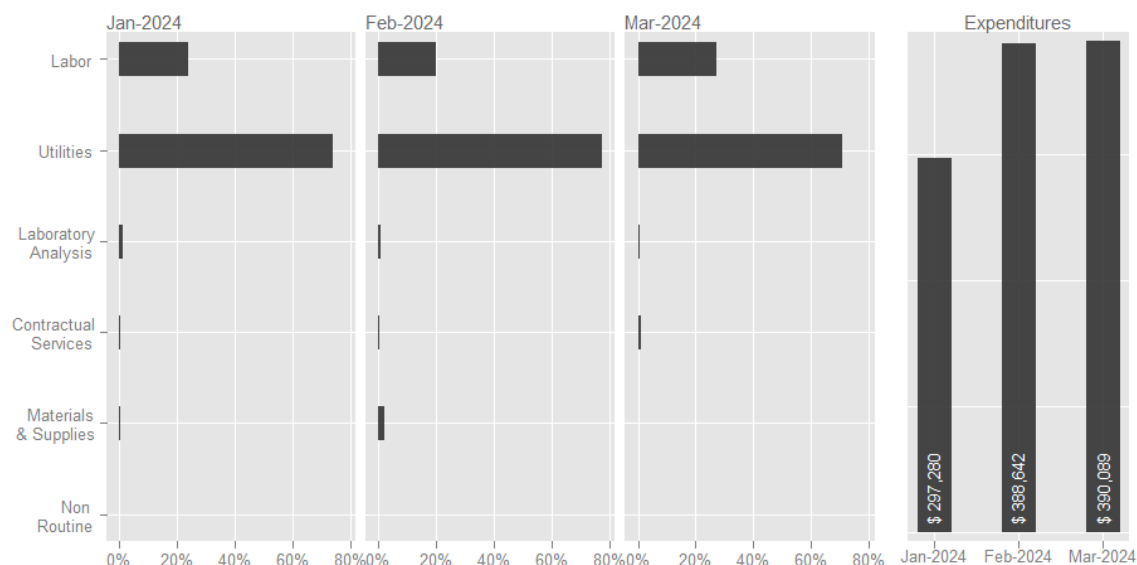


Figure 3 - LAVWMA Quarter 3 FYE 2024 expenditures for Jan-2024, Feb-2024, & Mar-2024 as percent of total cost by type (labor, utilizes, laboratory analysis, contractual services, materials & supplies, & non routine; left plot) and as monthly total (right plot)

There were no major equipment failures in Q3, the pipeline and pumping plant ran without issue. Preventative maintenance (PM) work orders exceeded corrective maintenance (CM) work orders each month during Q2 FYE 2024 (Figure 4, right plot). (Figure 4, left plot).

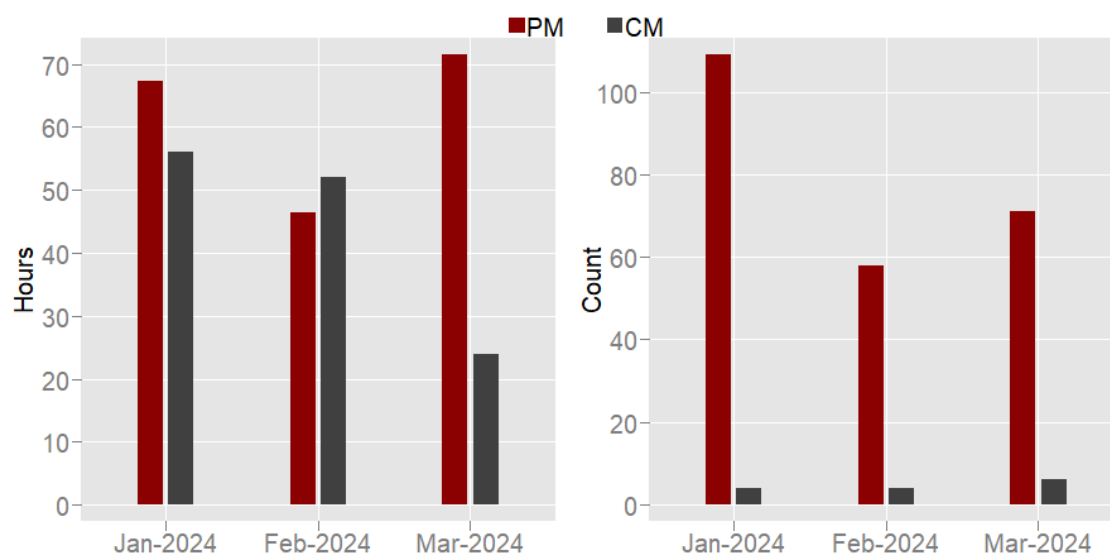


Figure 4 - LAVWMA Quarter 3 FYE 2024 preventative maintenance (PM) & corrective maintenance (CM) work order hours (left plot) and count (right plot) for Jan-2024, Feb-2024, & Mar-2024



## Executive Summary

The Livermore-Amador Valley Water Management Agency (LAVWMA) pumping and effluent conveyance system operated normally during the third quarter of Fiscal Year End (FYE) 2024. Just over 1,791 million gallons (MG) 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; Table 6 or section Export Flow for more details). The overall efficiency of the pumping system averaged 73.6%, with an average electrical cost of \$445 per MG, or \$145 per acre-foot (AF; Table 1 or section Electrical Usage, Efficiency, & Cost for more details).

## Operations

Of the 1,791.05 MG of effluent conveyed through the LAVWMA system during the third quarter, approximately 593 MG came from Dublin San Ramon (DSR), 547 MG from the City of Livermore, and 651 from the City of Pleasanton. Refer to section Export Flow for more details.

PG&E's current rate plan has four time-of-use (TOU) periods (in order of decreasing rates): peak (year-round), partial peak (June-September), off-peak (year-round), and super off-peak (March-May). Whenever possible, staff implement an efficient pumping plan to avoid pumping during higher rate periods (i.e., peak and partial peak).

Over the past quarter, DSRSD staff strategically managed LAVWMA's holding basins to minimize the number of pumps running during a given billing cycle. Such an approach was based on anticipated flows from the City of Livermore and DSRSD's wastewater treatment facilities. Refer to section Electrical Usage, Efficiency, & Cost for more information about energy use.

## Maintenance

During the quarter, staff logged 185.25 hours completing 238 preventative maintenance (PM) work orders and 132 hours completing 14 corrective maintenance (CM) work orders on LAVWMA equipment and systems. Refer to Figure 4 for monthly breakdown.

Since pumps 1, 3, and 5 have been installed, we have maximized their operation in order to see if there will be any deficiencies within the warranty period. So far, the pumps have operated without any major issue.

The following are some additional noteworthy maintenance activities during the quarter:

### Electrical

- Pump Station Pump #3 commissioned.
- Pump Station Pump #5 motor overhaul completed, installed, commissioned.
- Received 17 actuators for replacement at pump station.
- Changed out EBDA flowmeter vault sump pump that failed due to contractor concrete chipping.

### Instrument & Controls

- Completed SCADA communication to all pipeline rectifiers to improve monitoring.
- Completed as-built drawings of SLSS control panel with DTN Engineers.
- Completed repair of Pump Station Pumps #3 and #10 motor temperature sensors and wiring.

## Operations

- Normal operational activities.

## Mechanical

- Normal maintenance activities.

## Electrical Usage, Efficiency, & Cost

Monthly pump efficiency ( $O_e$ ) was estimated as the fraction of a calculated kWh/MG given full efficiency (i.e., 100%) to the actual kWh/MG (see equations below).

$$O_e = \frac{\text{full efficiency kWh}}{\text{actual kWh}} \times 100$$

$$\text{Full Efficiency kWh} = \frac{\overline{GPM} \times TDH}{3960} \times 0.746 \times d \times 24h$$

where

- $\overline{GPM} = \frac{\text{Export Flow (MG)} \times 10^6}{d \times 1440 \text{ min/d}}$
- $TDH$  (total dynamic head) = 442.8 ft (static lift = 408.8 ft, piping losses = 34 ft)
- 3960 = units conversion constant for water between 40° F and 220° F
- 0.746 = horsepower to kW conversion constant (0.746 hp / kW)
- $d$  = number of days
- $h$  = indicates hour (as 24 hours/day)



Table 1 - LAVWMA Quarter 1 (Q1) & Quarter 2 (Q2) & Quarter 3 (Q3) FYE 2024 kWh usage, export flow, pump efficiency, & cost for PG&E-based billing cycle; current quarter & year-to-date (YTD) summaries provided below monthly values

	Billing Days	kWh	Flow (MG)	kWh/MG	Pump Efficiency	Cost (\$)	\$/kWh	\$/MG	\$/AF
<b>Q1</b>									
Jul-2023	31	364,203	181	2,017.73	68.9%	\$98,646	\$0.27	\$547	\$178
Aug-2023	31	289,123	155	1,867.71	74.4%	\$73,439	\$0.25	\$474	\$155
Sep-2023	30	375,670	201	1,869.34	74.4%	\$99,961	\$0.27	\$497	\$162
<b>Q2</b>									
Oct-2023	30	464,989	251	1,853.43	75.0%	\$113,596	\$0.24	\$453	\$148
Nov-2023	31	632,068	335	1,886.26	73.7%	\$149,155	\$0.24	\$445	\$145
Dec-2023	30	822,696	434	1,894.06	73.4%	\$178,247	\$0.22	\$410	\$134
<b>Q3</b>									
Jan-2024	30	959,509	505	1,900.74	73.1%	\$218,755	\$0.23	\$433	\$141
Feb-2024	32	1,224,205	646	1,894.16	73.4%	\$298,944	\$0.24	\$463	\$151
Mar-2024	30	1,169,625	625	1,870.18	74.3%	\$274,588	\$0.23	\$439	\$143
<b>Q3</b>									
Average		1,117,780	592	1,888	73.6%	\$264,096	\$0.24	\$445	\$145
Total	92	3,353,339	1,777	5,665		\$792,287			
Minimum		959,509	505	1,870	73.1%	\$218,755	\$0.23	\$433	\$141
Maximum		1,224,205	646	1,901	74.3%	\$298,944	\$0.24	\$463	\$151
<b>YTD</b>									
Average		700,232	370	1,895	73.4%	\$167,259	\$0.24	\$462	\$151
Total	275	6,302,088	3,333	17,054		\$1,505,331			
Minimum		289,123	155	1,853	68.9%	\$73,439	\$0.22	\$410	\$134
Maximum		1,224,205	646	2,018	75.0%	\$298,944	\$0.27	\$547	\$178

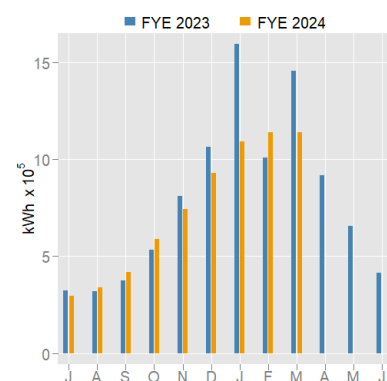


Figure 5 - LAVWMA monthly kWh usage FYE 2023 & FYE 2024 through Mar-2024

Table 2 - LAVWMA Quarter 1 (Q1) & Quarter 2 (Q2) FYE 2024 kWh usage and cost for PG&E-based billing cycle separately for Service A & Service B

	Service A				Service B				
	Peak (kWh)	Partial Peak (kWh)	Off-Peak (kWh)	Super Off-Peak (kWh)	Cost (\$)	Peak (kWh)	Partial Peak (kWh)	Off-Peak (kWh)	Super Off-Peak (kWh)
<b>Q1</b>									
Jul-2023	0	0	0	0	\$1,995	2,155	1,941	360,107	0
Aug-2023	0	0	276,136	0	\$64,834	2,471	2,123	8,393	0
Sep-2023	0	6	361,638	0	\$89,817	2,735	2,225	9,066	0
<b>Q2</b>									
Oct-2023	0	0	451,960	0	\$105,228	2,486	1,264	9,279	0
Nov-2023	240	0	183,254	0	\$49,078	3,335	0	445,239	0
Dec-2023	0	0	367,106	0	\$78,679	3,117	0	452,473	0
<b>Q3</b>									
Jan-2024	0	0	514,206	0	\$116,728	3,348	0	441,955	0
Feb-2024	44,071	0	615,830	0	\$152,272	3,259	0	561,045	0
Mar-2024	9,037	0	660,297	83,328	\$172,363	2,828	0	361,097	53,038
<b>Q3</b>									
Average	17,703	0	596,778	27,776	147,121	3,145	0	454,699	17,679
Total	53,108	0	1,790,333	83,328	441,362	9,435	0	1,364,097	53,038
Minimum	0	0	514,206	0	116,728	2,828	0	361,097	0
Maximum	44,071	0	660,297	83,328	172,363	3,348	0	561,045	53,038
<b>YTD</b>									
Average	5,928	1	381,159	9,259	92,333	2,859	839	294,295	5,893
Total	53,348	6	3,430,427	83,328	830,994	25,734	7,553	2,648,654	53,038
Minimum	0	0	0	0	1,995	2,155	0	8,393	0
Maximum	44,071	6	660,297	83,328	172,363	3,348	2,225	561,045	53,038

## Pump Run Time

Monthly pump utilization ( $U_m$ ) was calculated as the fraction of total pump hours given the total hours possible if nine<sup>1</sup> pumps ran continuously (i.e., 24 hours per day; equation below, where  $h$  = total hours,  $m$  = given month,  $d$  = days in month). On average, total pump utilization in Q2 was twice as much as in Q1 (Table 4).

$$U_m = \frac{h_m}{9 \times 24 \times d_m} \times 100$$

Table 3 - LAVWMA Quarter 1 (Q1) & Quarter 2 (Q2) & Quarter 3 (Q3) FYE 2024 monthly pump hours by pump and total; quarterly and YTD summaries provided below monthly values

Hours	Pump 1	Pump 2	Pump 3	Pump 4	Pump 5	Pump 6	Pump 7	Pump 8	Pump 9	Pump 10	Total
<b>Q1</b>											
Jul-2023	0	103	30	88	179	5	0	47	104	149	706
Aug-2023	0	0	17	0	387	113	0	97	0	262	875
Sep-2023	0	0	41	0	340	352	0	79	0	279	1,091
<b>Q2</b>											
Oct-2023	111	128	41	273	230	289	5	176	171	5	1,429
Nov-2023	485	9	0	498	0	283	0	11	483	0	1,769
Dec-2023	517	1	0	513	0	433	136	150	364	138	2,251
<b>Q3</b>											
Jan-2024	571	2	0	528	0	285	252	567	288	261	2,755
Feb-2024	528	140	146	482	132	270	189	254	185	498	2,826
Mar-2024	508	0	498	504	504	0	73	0	526	227	2,840
	Pump 1	Pump 2	Pump 3	Pump 4	Pump 5	Pump 6	Pump 7	Pump 8	Pump 9	Pump 10	Total
<b>Q1</b>											
Average Hours	0	34	29	29	302	156	0	74	35	230	890
Std Dev Hours	0.0	59.7	12.4	50.8	108.7	177.4	0.0	25.0	60.2	70.9	192.6
Hours	0	103	88	88	906	469	0	222	104	690	2,671
Min Hours	0	0	17	0	179	5	0	47	0	149	706
Max Hours	0	103	41	88	387	352	0	97	104	279	1,091
<b>Q2</b>											
Average Hours	371	46	14	428	77	335	47	112	339	47	1,816
Std Dev Hours	225.5	71.0	23.9	134.2	133.0	84.9	76.9	88.8	157.7	78.4	413.1
Hours	1,113	137	41	1,284	230	1,004	141	337	1,018	142	5,449
Min Hours	111	1	0	273	0	283	0	11	171	0	1,429
Max Hours	517	128	41	513	230	433	136	176	483	138	2,251
<b>Q3</b>											
Average Hours	536	47	215	505	212	185	171	274	333	329	2,807
Std Dev Hours	32.2	80.6	256.2	23.1	261.5	160.2	91.1	284.1	174.6	147.8	45.3
Hours	1,608	142	644	1,514	637	554	514	821	1,000	986	8,421
Min Hours	508	0	0	482	0	0	73	0	185	227	2,755
Max Hours	571	140	498	528	504	285	252	567	526	498	2,840
Total Average Hours	302	43	86	321	197	225	73	153	236	202	1,838
Total Std Dev Hours	263.6	61.7	161.2	232.7	184.7	151.6	97.2	175.3	193.6	153.4	861.0
Total Hours	2,721	383	774	2,886	1,773	2,028	655	1,381	2,122	1,819	16,541
Total Min Hours	0	0	0	0	0	0	0	0	0	0	706
Total Max Hours	571	140	498	528	504	433	252	567	526	498	2,840

Table 4 - LAVWMA Quarter 1 (Q1) & Quarter 2 (Q2) & Quarter 3 (Q3) FYE 2024 monthly percent pump utilization; quarterly and YTD summaries provided below monthly values

	Pump Utilization
<b>Q1</b>	
Jul-2023	10.5%
Aug-2023	13.1%
Sep-2023	16.8%
<b>Q2</b>	
Oct-2023	21.3%
Nov-2023	27.3%
Dec-2023	33.6%
<b>Q3</b>	
Jan-2024	41.1%
Feb-2024	45.1%
Mar-2024	42.4%
<b>Q1</b>	
Average Pump Utilization	13.5%
Min Pump Utilization	10.5%
Max Pump Utilization	16.8%
<b>Q2</b>	
Average Pump Utilization	27.4%
Min Pump Utilization	21.3%
Max Pump Utilization	33.6%
<b>Q3</b>	
Average Pump Utilization	42.9%
Min Pump Utilization	41.1%
Max Pump Utilization	45.1%
Total Average Pump Utilization	27.9%
Total Min Pump Utilization	10.5%
Total Max Pump Utilization	45.1%

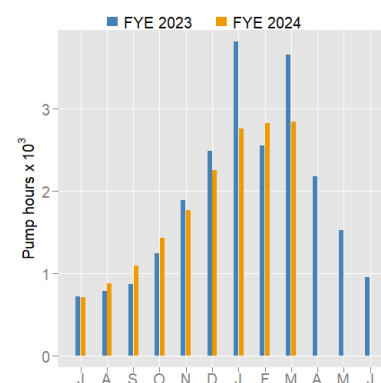


Figure 6- LAVWMA FYE 2023 & FYE 2024 through Mar-2024 monthly pump hours

<sup>1</sup> Ten pumps total, but one in reserve as a back-up to the other nine

## Basin Levels

Table 5 - LAVWMA Quarter 1 (Q1) & Quarter 2 (Q2) & Quarter 3 (Q3) FYE 2024 monthly average levels (ft) by basin and overall (total); quarterly and YTD summaries provided below monthly values

Average	Basin 1	Basin 2	Basin 3	Total
<b>Q1</b>				
Jul-2023	3.08	0.08	1.83	1.66
Aug-2023	3.38	1.36	3.47	2.74
Sep-2023	2.63	0.10	2.72	1.82
<b>Q2</b>				
Oct-2023	3.15	0.10	3.18	2.14
Nov-2023	3.19	0.10	3.82	2.37
Dec-2023	3.84	0.12	3.45	2.47
<b>Q3</b>				
Jan-2024	4.18	0.12	5.26	3.19
Feb-2024	4.65	0.11	6.52	3.76
Mar-2024	4.07	0.10	4.46	2.88
<b>Q3</b>				
Average	4.30	0.11	5.41	3.28
Minimum	4.07	0.10	4.46	2.88
Maximum	4.65	0.12	6.52	3.76
<b>YTD</b>				
Average	3.57	0.24	3.86	2.56
Minimum	2.63	0.08	1.83	1.66
Maximum	4.65	1.36	6.52	3.76

## Export Flow

Combined export flow includes Dublin San Ramon, the City of Livermore, and the City of Pleasanton. Monthly totals do not include flows diverted for recycling use by DERWA and Pleasanton. Budgeted FYE 2024 flow is 3,374 MG at an estimated cost of \$1,084 / MG.

Table 6 - LAVWMA Quarter 1 (Q1) & Quarter 2 (Q2) & Quarter 3 (Q3) FYE 2024 monthly export flows in million gallons (MG) for Dublin San Ramon, Livermore, & Pleasanton; quarterly and YTD summaries provided below monthly values; note totals (quarterly & YTD) provided in with monthly summary

	Dublin San Ramon (MG)	Livermore (MG)	Pleasanton (MG)	Combined Export (MG)
<b>Q1</b>	<b>0.00</b>	<b>327.72</b>	<b>228.90</b>	<b>556.61</b>
Jul-2023	0.00	104.32	46.25	150.57
Aug-2023	0.00	109.72	69.73	179.45
Sep-2023	0.00	113.68	112.92	226.60
<b>Q2</b>	<b>289.72</b>	<b>438.35</b>	<b>468.04</b>	<b>1196.10</b>
Oct-2023	41.42	132.86	138.10	312.38
Nov-2023	97.00	143.96	153.21	394.16
Dec-2023	151.29	161.53	176.74	489.56
<b>Q3</b>	<b>593.25</b>	<b>546.75</b>	<b>651.05</b>	<b>1791.05</b>
Jan-2024	191.65	180.43	204.95	577.03
Feb-2024	208.49	177.84	218.60	604.94
Mar-2024	193.11	188.48	227.50	609.09
<b>Total</b>	<b>763.39</b>	<b>1312.81</b>	<b>1467.57</b>	<b>3543.77</b>
<b>Q3</b>				
Average	197.75	182.25	217.02	597.02
Minimum	191.65	177.84	204.95	577.03
Maximum	208.49	188.48	227.50	609.09
<b>YTD</b>				
Average	98.11	145.87	149.78	393.75
Minimum	0.00	104.32	46.25	150.57
Maximum	208.49	188.48	227.50	609.09

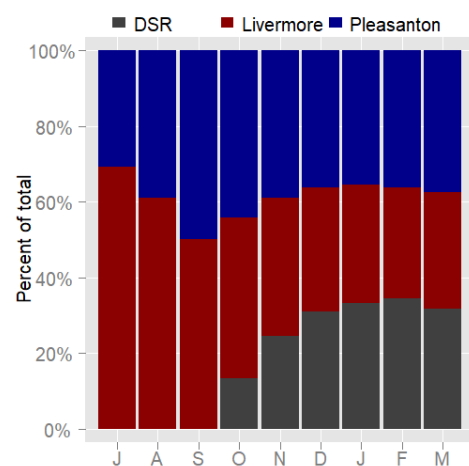


Figure 7- LAVWMA FYE 2024 through Mar-2024 monthly export flows by region as a percent of total DSR = Dublin San Ramon

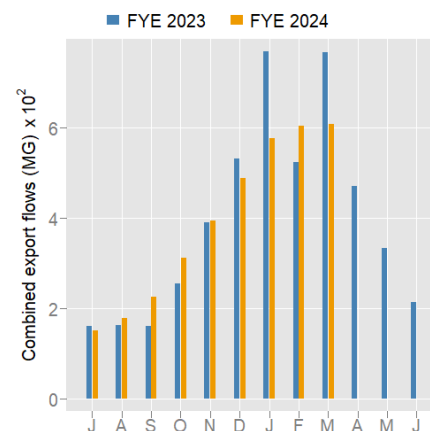


Figure 8 - LAVWMA FYE 2023 & FYE 2024 through Mar-2024 monthly combined export flows (MG)

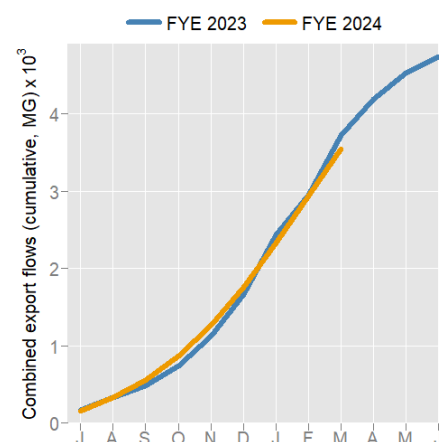


Figure 9 - LAVWMA FYE 2023 & FYE 2024 through Mar-2024 monthly cumulative combined export flows (MG)

## Expenditures & Budget Utilization: Labor & O&M

February 2024 expenses included overhead door repair, and March 2024 expenses included annual permit renewal for BAAQMD and crane inspections. Overall O&M expenses increased in quarter 3 compared to the previous two quarters.

*Table 7 - LAVWMA Quarter 1 (Q1) & Quarter 2 (Q2) & Quarter 3 (Q3) FYE 2024 monthly expenditure for labor, accounts payable (A/P), and overall (O&M); cost per export flow (MG and acre-foot [AF]) provided for reference; quarterly and YTD summaries provided below monthly values; note totals (quarterly & YTD) provided in with monthly summary*

	Labor Expenses	A/P Expenses	O&M Expenses	\$/MG	\$/AF
<b>Q1</b>	<b>\$227,228</b>	<b>\$311,909</b>	<b>\$539,137</b>	<b>\$969</b>	<b>\$316</b>
Jul-2023	\$91,832	\$121,163	\$212,995	\$1,415	\$461
Aug-2023	\$77,175	\$84,902	\$162,077	\$903	\$294
Sep-2023	\$58,221	\$105,844	\$164,065	\$724	\$236
<b>Q2</b>	<b>\$216,483</b>	<b>\$503,613</b>	<b>\$720,095</b>	<b>\$602</b>	<b>\$196</b>
Oct-2023	\$69,729	\$143,058	\$212,786	\$681	\$222
Nov-2023	\$62,952	\$127,632	\$190,584	\$484	\$158
Dec-2023	\$83,802	\$232,923	\$316,725	\$647	\$211
<b>Q3</b>	<b>\$254,355</b>	<b>\$821,655</b>	<b>\$1,076,010</b>	<b>\$601</b>	<b>\$196</b>
Jan-2024	\$71,255	\$226,024	\$297,280	\$515	\$168
Feb-2024	\$77,251	\$311,390	\$388,642	\$642	\$209
Mar-2024	\$105,848	\$284,241	\$390,089	\$640	\$209
<b>Total</b>	<b>\$698,065</b>	<b>\$1,637,177</b>	<b>\$2,335,242</b>	<b>\$659</b>	<b>\$215</b>
<b>Q3</b>					
Average	\$84,785	\$273,885	\$358,670	\$599	\$195
Minimum	\$71,255	\$226,024	\$297,280	\$515	\$168
Maximum	\$105,848	\$311,390	\$390,089	\$642	\$209
<b>YTD</b>					
Average	\$77,563	\$181,909	\$259,471	\$739	\$241
Minimum	\$58,221	\$84,902	\$162,077	\$484	\$158
Maximum	\$105,848	\$311,390	\$390,089	\$1,415	\$461

*Table 8 - LAVWMA Quarter 1 (Q1) & Quarter 2 (Q2) & Quarter 3 (Q3) FYE 2024 YTD expenditures (O&M & labor) with percent budget utilized and budget remaining*

	O&M YTD Expenses	O&M Budget Utilization	O&M Budget Remaining	Labor YTD Expenses	Labor Budget Utilization	Labor Budget Remaining
<b>Q1</b>						
Jul-2023	\$212,995	5.8%	\$3,443,889	\$91,832	7.8%	\$1,091,652
Aug-2023	\$375,072	10.3%	\$3,281,812	\$169,007	14.3%	\$1,014,477
Sep-2023	\$539,137	14.7%	\$3,117,747	\$227,228	19.2%	\$956,256
<b>Q2</b>						
Oct-2023	\$751,923	20.6%	\$2,904,961	\$296,956	25.1%	\$886,528
Nov-2023	\$942,507	25.8%	\$2,714,377	\$359,908	30.4%	\$823,576
Dec-2023	\$1,259,232	34.4%	\$2,397,652	\$443,710	37.5%	\$739,774
<b>Q3</b>						
Jan-2024	\$1,556,512	42.6%	\$2,100,372	\$514,966	43.5%	\$668,518
Feb-2024	\$1,945,153	53.2%	\$1,711,731	\$592,217	50.0%	\$591,267
Mar-2024	\$2,335,242	63.9%	\$1,321,642	\$698,065	59.0%	\$485,419

*Table 9 - LAVWMA Quarter 1 (Q1) & Quarter 2 (Q2) & Quarter 3 (Q3) FYE 2024 billed labor hours and full-time employment equivalent; quarterly and YTD summaries provided below monthly values; note billed labor hour totals (quarterly & YTD) provided with monthly summary*

	Billed Labor Hours	FTE Equivalent
<b>Q1</b>	<b>1,099.0</b>	
Jul-2023	440.0	2.5
Aug-2023	370.0	2.1
Sep-2023	289.0	1.7
<b>Q2</b>	<b>1,043.8</b>	
Oct-2023	378.3	2.2
Nov-2023	287.0	1.7
Dec-2023	378.5	2.2
<b>Q3</b>	<b>1,173.0</b>	
Jan-2024	323.5	1.9
Feb-2024	363.5	2.1
Mar-2024	486.0	2.8
<b>Total</b>	<b>3,315.8</b>	
<b>Q3</b>		
Average	391.0	2.3
Minimum	323.5	1.9
Maximum	486.0	2.8
<b>YTD</b>		
Average	368.4	2.1
Minimum	287.0	1.7
Maximum	486.0	2.8

## Expenditures: Livermore Sole Use Facilities

Table 10 - LAVWMA Quarter 1 (Q1) & Quarter 2 (Q2) & Quarter 3 (Q3) FYE 2024 expenditures (labor & accounts payable [A/P]) for Livermore sole use facilities; quarterly and YTD (Total) summaries provided below monthly values

Expenses	Labor	A/P	Total
<b>Q1</b>			
Jul-2023	\$588	\$608	\$1,196
Aug-2023	\$0	\$1,801	\$1,801
Sep-2023	\$4,042	\$665	\$4,707
<b>Q2</b>			
Oct-2023	\$0	\$220	\$220
Nov-2023	\$0	\$661	\$661
Dec-2023	\$0	\$726	\$726
<b>Q3</b>			
Jan-2024	\$0	\$628	\$628
Feb-2024	\$0	\$803	\$803
Mar-2024	\$2,004	\$821	\$2,826
	Labor	A/P	Total
<b>Q1</b>			
Total	\$4,629	\$3,074	\$7,703
Average	\$1,543	\$1,025	\$2,568
Minimum	\$0	\$608	\$1,196
Maximum	\$4,042	\$1,801	\$4,707
<b>Q2</b>			
Total	\$0	\$1,606	\$1,606
Average	\$0	\$535	\$535
Minimum	\$0	\$220	\$220
Maximum	\$0	\$726	\$726
<b>Q3</b>			
Total	\$2,004	\$2,252	\$4,256
Average	\$668	\$751	\$1,419
Minimum	\$0	\$628	\$628
Maximum	\$2,004	\$821	\$2,826
<b>Total Total</b>	<b>\$6,634</b>	<b>\$6,931</b>	<b>\$13,565</b>
<b>Total Average</b>	<b>\$737</b>	<b>\$770</b>	<b>\$1,507</b>
<b>Total Minimum</b>	<b>\$0</b>	<b>\$220</b>	<b>\$220</b>
<b>Total Maximum</b>	<b>\$4,042</b>	<b>\$1,801</b>	<b>\$4,707</b>

Note: due to an inadvertent typo, Nov-2023 A/P expense was \$100,737 in Q2's report. That value (now \$661) and corresponding descriptive statistics have been corrected (see table above).

## Detailed YTD O&amp;M Budget Comparison to Actual Expenses

LAVWMA

BUDGET COMPARISON TO ACTUAL EXPENSES: GOODS &amp; 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 2023-2024	2023	2023	2023	2023	2023	2023	2024	2024	2024	2024	2024	2024	TOTAL	Budget
<b>Project Total: Labor</b>															
Staff	\$1,183,484	\$91,832	\$77,175	\$58,221	\$69,729	\$62,952	\$83,802	\$71,255	\$77,251	\$105,848				\$698,065	\$887,613
<b>Subtotal</b>	<b>\$1,183,484</b>	<b>\$91,832</b>	<b>\$77,175</b>	<b>\$58,221</b>	<b>\$69,729</b>	<b>\$62,952</b>	<b>\$83,802</b>	<b>\$71,255</b>	<b>\$77,251</b>	<b>\$105,848</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$698,065</b>	<b>\$887,613</b>
<b>Phase Total: Materials &amp; Supplies</b>															
Operations Supplies	\$19,100	17	\$85	\$1,625	\$16,213	\$143	\$153	\$142	\$161	\$17				\$18,554	\$14,325
Mechanical Supplies	\$31,900	\$765	\$1,214	\$138	\$462	\$2,158	\$1,269	\$138	\$7,359	\$129				\$13,631	\$23,925
Electrical Supplies	\$38,900	\$9,515	\$4,167	\$0	\$12	\$5,949	\$468	\$1,034	\$0	\$1,296	\$0	\$0		\$22,441	\$29,175
<b>Subtotal</b>	<b>\$89,900</b>	<b>\$10,297</b>	<b>\$5,466</b>	<b>\$1,763</b>	<b>\$16,687</b>	<b>\$8,249</b>	<b>\$1,890</b>	<b>\$1,313</b>	<b>\$7,520</b>	<b>\$1,441</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$54,627</b>	<b>\$67,425</b>
<b>Analysis: Laboratory Analysis</b>															
Biochemical Oxy	\$11,300	\$896	\$1,120	\$896	\$1,120	\$896	\$896	\$1,120	\$896	\$896				\$8,736	\$8,475
Demand & Total	\$4,900	\$414	\$414	\$414	\$414	\$414	\$414	\$414	\$414	\$414				\$3,726	\$3,675
Langelier Index	\$29,400	\$1,344	\$1,477	\$1,460	\$580	\$1,460	\$1,460	\$1,825	\$1,460	\$1,460	\$0	\$0		\$12,526	\$22,050
<b>Subtotal</b>	<b>\$45,600</b>	<b>\$2,654</b>	<b>\$3,011</b>	<b>\$2,770</b>	<b>\$2,114</b>	<b>\$2,770</b>	<b>\$2,770</b>	<b>\$3,359</b>	<b>\$2,770</b>	<b>\$2,770</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$24,988</b>	<b>\$34,200</b>
<b>Phase Total: Contractual Services</b>															
Sub-surface Repairs	\$15,750													\$0	\$11,813
Street Sweeping	\$5,000													\$0	\$3,750
Cathodic Protection Survey & Repairs	\$47,250													\$0	\$35,438
Underground Service Alert	\$4,800	\$402												\$402	\$3,600
SCADA software maintenance contract	\$14,600													\$0	\$10,950
Remote monitoring annual service for PS and Re	\$1,950					\$110								\$110	\$1,463
Med-voltage switchgear 3-yr PM (FY22, \$18k)	\$0													\$0	\$0
HVAC Maintenance/Repairs	\$800													\$0	\$600
Termite/Pest Control	\$950													\$0	\$713
Landscape/weed maintenance	\$11,200					\$3,758								\$3,758	\$8,400
Smartmeter Covers	\$1,800									\$2,058					\$1,350
Janitorial Service	\$10,000	\$104,76	\$975		\$975	\$1,950		\$975	\$975	\$975				\$6,825	\$7,500
Fire Extinguisher Maintenance	\$200													\$0	\$150
Postage/Shipping Charges	\$0													\$0	\$0
Misc Professional/Contractual Services	\$31,500	\$5,365	\$1,339	\$0	\$9,178	\$9,059	\$0	\$452	\$0	\$866	\$0	\$0		\$26,259	\$23,625
<b>Subtotal</b>	<b>\$145,800</b>	<b>\$8,872</b>	<b>\$2,314</b>	<b>\$0</b>	<b>\$10,153</b>	<b>\$14,877</b>	<b>\$0</b>	<b>\$1,427</b>	<b>\$975</b>	<b>\$3,899</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$42,516</b>	<b>\$109,350</b>
<b>Phase Total: Utilities</b>															
Electricity (PG&E)	\$2,188,700	\$99,254	\$74,026	\$100,626	\$113,816	\$100,737	\$228,051	\$219,383	\$299,746	\$275,410				\$1,411,794	\$1,641,525
Water & Sewer (Pleasanton)	\$1,100			\$334		\$566		\$396		\$336				\$1,632	\$825
Water (EBMUD)	\$1,300			\$233		\$282			\$233	\$240				\$989	\$975
Telephone/communications	\$1,000	\$86	\$85	\$118	\$288	\$150	\$213	\$146	\$146	\$146				\$1,378	\$750
WW Treatment (DSRSD)	\$0													\$0	\$0
<b>Subtotal</b>	<b>\$2,192,100</b>	<b>\$99,340</b>	<b>\$74,111</b>	<b>\$101,311</b>	<b>\$114,104</b>	<b>\$101,736</b>	<b>\$228,264</b>	<b>\$219,925</b>	<b>\$300,125</b>	<b>\$276,131</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$1,515,047</b>	<b>\$1,644,075</b>
<b>Phase Total: Non-Routine</b>															
	\$0													\$0	\$0
<b>Subtotal</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
<b>Monthly Total</b>		<b>\$212,995</b>	<b>\$162,077</b>	<b>\$164,065</b>	<b>\$212,786</b>	<b>\$190,584</b>	<b>\$316,725</b>	<b>\$297,280</b>	<b>\$388,642</b>	<b>\$390,089</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$2,335,242</b>	<b>\$2,742,663</b>
<b>YTD Total</b>	<b>\$3,656,884</b>	<b>\$212,995</b>	<b>\$375,072</b>	<b>\$539,137</b>	<b>\$751,923</b>	<b>\$942,507</b>	<b>\$1,259,232</b>	<b>\$1,556,512</b>	<b>\$1,945,153</b>	<b>\$2,335,242</b>	<b>\$2,335,242</b>	<b>\$2,335,242</b>	<b>\$2,335,242</b>		
<b>Combined Export Flow, mg</b>	<b>3374</b>	<b>151</b>	<b>179</b>	<b>227</b>	<b>312</b>	<b>394</b>	<b>490</b>	<b>577</b>	<b>605</b>	<b>609</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3,543</b>	<b>2,531</b>
<b>Pumping Efficiency</b>															
<b>Monthly Cost, \$/mg</b>		<b>\$1,415</b>	<b>\$903</b>	<b>\$724</b>	<b>\$866</b>	<b>\$484</b>	<b>\$647</b>	<b>\$515</b>	<b>\$642</b>	<b>\$640</b>	<b>-</b>	<b>-</b>	<b>-</b>		
<b>YTD Running Cost, \$/mg</b>	<b>\$1,084</b>	<b>\$1,415</b>	<b>\$1,137</b>	<b>\$969</b>	<b>\$866</b>	<b>\$746</b>	<b>\$719</b>	<b>\$668</b>	<b>\$663</b>	<b>\$659</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>\$659</b>	

Q1 Notes:

Landscaping: July was paid in Aug and Sep expenditure includes both Aug and Sep invoices



## LAVWMA

## BUDGET COMPARISON TO ACTUAL EXPENSES: LABOR

Current FY Period: 7

ACTUAL EXPENSES BILLED TO LAVWMA FOR REGULAR O&M														
FY 2023-2024	Jul 2023	Aug 2023	Sep 2023	Oct 2023	Nov 2023	Dec 2023	Jan 2024	Feb 2024	Mar 2024	Apr 2024	May 2024	Jun 2024	YTD TOTAL	YTD Budget
<i>Estimated Personnel Hours</i>														
<b>Division 51 - FOD</b>	<b>50</b>	-	-	-	-	-	13.00	-	-	-	-	-	13.00	29.17
Water/Wastewater Sys Lead Op	0												-	-
Water/Wastewater Sys OP IV-On Call	0					13.00							13.00	-
Water/Wastewater Sys OP IV	0												-	-
Water/Wastewater Sys OP III	0												-	-
Water/Wastewater Sys OP I/II	43												-	25.08
Maintenance Worker	0												-	-
Supervisor	7												-	4.08
<b>Division 52 - WWTP</b>	<b>2,832</b>	<b>185.50</b>	<b>175.00</b>	<b>127.50</b>	<b>111.75</b>	<b>125.00</b>	<b>137.00</b>	<b>94.50</b>	<b>140.50</b>	<b>218.00</b>	-	-	1,314.75	1,652.00
Process Lead Operator IV/V	289		16.00	3.00	6.00	15.00	29.00		16.00	17.00			102.00	168.58
Senior WWTP Operator III	1,013	37.00	40.00	21.50	35.75	43.50	36.00	22.50	25.50	41.50			303.25	590.92
Operator In Training	0	22.50	39.50	20.00									82.00	-
Operator II	1,431	126.00	79.50	83.00	70.00	63.00	72.00	72.00	99.00	159.50			824.00	834.75
Operator II (SLSS)	0												-	-
Operations Superintendent	99												-	57.75
Ops Director					3.5									
<b>Division 53 - MECH</b>	<b>1,107</b>	<b>145.00</b>	<b>121.00</b>	<b>92.50</b>	<b>141.00</b>	<b>113.00</b>	<b>174.00</b>	<b>126.00</b>	<b>167.00</b>	<b>195.00</b>	-	-	1,274.50	645.75
Senior Mechanic-Crane Cert	54	37.00	46.50	30.00	39.50	27.00	70.00	55.00	29.50	40.00			374.50	31.50
Senior Mechanic - USA	72			12.00	11.50	32.00	6.00		18.00	23.00			102.50	42.00
Maintenance Worker	54					9.00							9.00	31.50
Mechanic I/II	882	36.00	28.00	22.50	35.00	25.00	45.00	71.00	93.50	79.50			435.50	514.50
Mechanic II-Crane Cert	0	25.00	7.00	0.50	21.00	2.50	11.00						67.00	-
Mechanic I/II - USA	0	47.00	39.50	27.00	30.00	24.00	33.00		26.00	52.50			279.00	-
Mechanic II-Crane Cert - USA	0			0.50		2.50							3.00	-
Supervisor	45				4.00								4.00	26.25
<b>Division 54 - ELEC</b>	<b>1,080</b>	<b>88.00</b>	<b>71.00</b>	<b>67.50</b>	<b>121.50</b>	<b>48.00</b>	<b>47.50</b>	<b>98.00</b>	<b>49.50</b>	<b>65.00</b>	-	-	656.00	630.00
Senior Instrument/Controls Tech	45			1.00			3.00	9.00	6.50	6.50			26.00	26.25
Instrumentation & Controls Tech I/II	504	50.00	71.00	39.50	32.50	19.00	24.50	50.50	30.00	50.50			367.50	294.00
Ice Supervisor				1.00			1.00	2.50		3.00			7.50	-
Senior Electrician	45			6.00	11.00	9.00	6.00	25.00	4.00				61.00	26.25
Electrician I/II	441	33.00		20.00	77.00	20	12.00	8.00	8.00				178.00	257.25
Principal Electrical Engineer	45	5.00		1.00			1.00	3.00	1.00	5.00			16.00	26.25
<b>Division 55 - Laboratory</b>	<b>0</b>	-	-	-	-	-	-	-	-	-	-	-	-	-
EC Inspector II-Pretreatment	0												-	-
Laboratory Technician	0												-	-
Supervisor	0												-	-
<b>Division 26 - SAFETY</b>	<b>54</b>	-	-	-	-	-	-	-	-	-	-	-	-	31.50
Safety Officer	54	-	-	-	-	-	-	-	-	-	-	-	-	31.50
<b>Division 40 - ENG</b>	<b>288</b>	<b>21.50</b>	<b>3.00</b>	<b>1.50</b>	<b>4.00</b>	<b>1.00</b>	<b>7.00</b>	<b>5.00</b>	<b>6.50</b>	<b>8.00</b>	-	-	57.50	147.00
Senior Civil Engineer-SME	36	3.00	1.00										-	-
Associate Engineer	108	17.00	2.00	1.50	4.00		7.00	5.00	6.50	8.00			51.00	63.00
Construction Inspector I/II	72	1.50											1.50	42.00
Engineering Technician II	36					1.00							1.00	21.00
GIS Analyst	36												-	21.00
<i>Total Estimated Personnel Hours</i>	<b>5,411</b>													
<i>FTE</i>	<b>2.6</b>													
<b>Total Monthly Hours</b>		<b>440.00</b>	<b>370.00</b>	<b>289.00</b>	<b>378.25</b>	<b>287.00</b>	<b>378.50</b>	<b>323.50</b>	<b>363.50</b>	<b>486.00</b>	<b>-</b>	<b>-</b>	<b>3,315.75</b>	<b>3,135.42</b>

## EBDA Monthly Reports

LAVWMA	January			2024									
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	Instant Min	Instant Max	Daily Average (	Daily Average (Mean)		SM 9221 C,E-2006		Enterolert
MDL			2.0		1.2								
RL			2.0		4.5						2		10
Location	LAVWMA-EXP		LAVWMA-EXP		LAVWMA-EXP	LAVWMA-EXP	LAVWMA-EXP	LAVWMA-EXP	SLSS		SLSS		SLSS
1/1/2024	16.74					7.08	7.28	4.00					
1/2/2024	17.29					7.23	7.34	3.74		<	2		30
1/3/2024	19.47		16		14	7.11	7.29	3.57					
1/4/2024	18.32					7.15	7.32	3.74					
1/5/2024	15.43					6.97	7.30	2.47					
1/6/2024	17.75					7.20	7.30	4.01					
1/7/2024	18.85					7.17	7.29	4.01					
1/8/2024	17.88					7.19	7.32	4.25					
1/9/2024	17.00					7.20	7.34	4.00		<	2	<	10
1/10/2024	16.80		10		11	7.19	7.38	3.68					
1/11/2024	17.59					7.29	7.43	4.22					
1/12/2024	16.37					7.33	8.51	4.03					
1/13/2024	15.89					7.30	7.49	4.08					
1/14/2024	19.57					7.24	7.34	4.39					
1/15/2024	18.93					7.27	7.38	4.43					
1/16/2024	17.60					7.32	7.48	4.51		<	2		30
1/17/2024	18.74		12		13	7.33	7.53	3.79					
1/18/2024	18.82					7.34	7.53	3.47					
1/19/2024	18.54					7.34	7.55	3.30					
1/20/2024	16.75					7.27	7.43	3.19					
1/21/2024	19.46					7.24	7.43	4.68					
1/22/2024	21.96					7.15	7.37	4.55					
1/23/2024	22.07					7.24	7.38	4.30		<	2	<	10
1/24/2024	21.42		9.9		7.2	7.29	7.43	4.69					
1/25/2024	22.24					7.25	7.38	3.30					
1/26/2024	22.00					7.25	7.41	2.79					
1/27/2024	17.45					7.25	7.42	2.34					
1/28/2024	18.38					7.23	7.41	2.70					
1/29/2024	16.71					7.25	7.43	2.55					
1/30/2024	18.84					7.24	7.37	2.62			2		10
1/31/2024	22.17		10		8.2	7.29	7.46	2.84					
Note:													
Column G - pH Minimum; online													
Column H - pH Maximum; online													

FY 2023-2024 Q3: January 2024 to March 2024

LAVWMA	March			2024									
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	Instant Min	Instant Max	Daily Average (Mean)	Daily Average (Mean)		SM 9221 C,E-2006		Enterolert
MDL			2.0		1.2								
RL			2.0		4.5						2		10
Location	LAVWMA-EXP		LAVWMA-EXP		LAVWMA-EXP	LAVWMA-EXP	LAVWMA-EXP	LAVWMA-EXP	SLSS		SLSS		SLSS
3/1/2024	22.13					7.24	7.36	3.75					
3/2/2024	23.68					7.10	7.34	3.48					
3/3/2024	25.36					7.14	7.22	4.00					
3/4/2024	23.55					7.04	7.26	3.43					
3/5/2024	22.79					7.15	7.28	3.64		<	2	<	10
3/6/2024	22.35		6.7		6.6	7.17	7.41	4.31					
3/7/2024	22.89					7.12	7.29	3.71					
3/8/2024	22.78					7.10	7.29	3.75					
3/9/2024	20.97					7.09	7.25	3.46					
3/10/2024	20.19					7.10	7.32	3.06					
3/11/2024	19.57					7.10	7.27	2.97					
3/12/2024	18.42					7.23	7.38	3.13		<	2	<	10
3/13/2024	18.17		9.2		5.5	7.29	7.44	3.75					
3/14/2024	17.97					7.23	7.51	4.05					
3/15/2024	17.85					7.15	7.42	4.80					
3/16/2024	17.89					7.20	7.38	3.65					
3/17/2024	19.00					7.10	7.38	2.43					
3/18/2024	18.19					7.06	7.33	2.31					
3/19/2024	17.29					7.19	7.36	2.14		<	2	<	10
3/20/2024	14.99		10		9.1	7.08	7.36	2.34					
3/21/2024	15.25					7.03	7.46	3.12					
3/22/2024	16.80					7.10	7.33	3.33					
3/23/2024	19.48					7.19	7.30	3.62					
3/24/2024	18.99					7.06	7.25	5.15					
3/25/2024	19.94					7.01	7.14	5.26					
3/26/2024	21.98					7.10	7.41	4.41		<	2	<	10
3/27/2024	15.95					7.30	7.41	3.76					
3/28/2024	16.60		5.0		7.6	7.25	7.46	4.01					
3/29/2024	18.62					7.30	7.42	4.36					
3/30/2024	20.37					7.19	7.43	3.95					
3/31/2024	19.04					7.17	7.33	3.62					
Note:													
Column G - pH Minimum; online													
Column H - pH Maximum; online													

## Langelier Saturation Index Report (Livermore, DSRSD, LAVWMA)

### CITY OF LIVERMORE LIVERMORE WATER RECLAMATION PLANT

#### Livermore - 1st Quarter 2024 Langelier pH Saturation Index

Collection DATE	TDS (mg/L)	Temp (°C)	Ca Hardness (mg/L CaCO <sub>3</sub> )	Alkalinity (mg/L CaCO <sub>3</sub> )	pH (Actual)	pH Saturation	Langlier Index
01/03/24	580	19.0	72	275	7.5	7.7	-0.2
02/07/24	684	19.0	89	324	7.5	7.5	0.0
03/06/24	375	19.0	83	327	7.5	7.5	0.0
MAXIMUM	684	19.0	89	327	7.5	7.7	0.0
MINIMUM	375	19.0	72	275	7.5	7.5	-0.2
AVERAGE	546	19.0	81	309	7.5	7.6	-0.1

### DUBLIN SAN RAMON SERVICES DISTRICT WASTEWATER TREATMENT FACILITY

#### DSRSD -1st Quarter 2024 Langelier pH Saturation Index

Collection DATE	TDS (mg/L)	Temp (°C)	Ca Hardness (mg/L CaCO <sub>3</sub> )	Alkalinity (mg/L CaCO <sub>3</sub> )	pH (Actual)	pH Saturation	Langlier Index
01/09/24	804	19.1	148	354	7.6	7.2	0.4
02/07/24	846	18.0	220	434	7.6	7.0	0.6
03/05/24	745	19.4	148	330	7.5	7.2	0.3
MAXIMUM	846	19.4	220	434	7.6	7.2	0.6
MINIMUM	745	18.0	148	330	7.5	7.0	0.3
AVERAGE	798	18.8	172	373	7.6	7.1	0.4

### DUBLIN SAN RAMON SERVICES DISTRICT WASTEWATER TREATMENT FACILITY

#### LAVWMA - 1st Quarter 2024 Langelier pH Saturation Index

Collection DATE	TDS (mg/L)	Temp (°C)	Ca Hardness (mg/L CaCO <sub>3</sub> )	Alkalinity (mg/L CaCO <sub>3</sub> )	pH (Actual)	pH Saturation	Langlier Index
01/09/24	760	17.8	120	344	7.3	7.3	0.0
02/07/24	758	17.1	190	370	7.5	7.1	0.4
03/05/24	702	19.0	136	306	7.3	7.3	0.0
MAXIMUM	760	19.0	190	370	7.5	7.3	0.4
MINIMUM	702	17.1	120	306	7.3	7.1	0.0
AVERAGE	740	18.0	149	340	7.4	7.2	0.1

**ITEM NO. 10 PROJECT STATUS REPORTS - PURCHASE OF THREE VERTICAL TURBINE PUMPS, THE SAN LEANDRO SAMPLE STATION IMPROVEMENTS PROJECT, AND THE EMERGENCY REPAIR OF THE LIVERMORE INTERCEPTOR PIPELINE**

**Action Requested**

None at this time.

**Summary**

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

Purchase of Three Vertical Turbine Pumps

The first pump was placed in service in October 2023 and was accepted on October 27, 2023. The other two pumps were placed in service in February 2024 and were accepted on February 26, 2024. All three pumps are now in service and operating as designed. The 18-month warranty period began when each pump was accepted after a start up and testing period. The warranty periods are listed below:

Pump Serial Number	Warranty Start Date	Warranty Expiration Date
87722-1-1	October 27, 2023	April 27, 2025
87722-1-2	February 26, 2024	August 26, 2025
87722-1-3	February 26, 2024	August 26, 2025

Progress payments were made as the pumps were accepted. The O&M manual did not meet the specifications and \$50,000 was withheld pending a resolution. The primary issue was extraneous material that did not apply to the pumps. That issue has now been resolved and the final \$50,000 payment is being processed. Total payments to the manufacturer for the pumps is \$356,847.70, which is what was budgeted.

San Leandro Sample Station Improvements Project

HydroScience (HS) serves as both the design engineer and construction manager. The Board awarded the construction contract at a not to exceed value of \$1,394,000 to McGuire and Hester (MH) at the August 16, 2023 Board Meeting. A Notice to Proceed was issued to MH with an effective date of August 28, 2023 and a completion time of 320 days or July 13, 2024. It is now expected that the project will be completed in November 2024 pending weather and shutdowns for equipment installation. Most of the equipment and related items will be completed close to the original completion date. There will not be two periods of construction that requires notification to the Home Owners Association (HOA). A letter to the HOA is in development.

Two change orders have been issued. The first is to install gasketed hatches in the valve and flow meter vaults to help prevent surface water from getting into the vaults. The cost for that change order is \$9,478. The second is to install a sump pump in the meter vault at a cost of \$7,687. The total change order cost is 1.23% of the contract price.

The equipment delays have increased the costs for Construction Management. Please refer to the next agenda item for details on the increase to the HydroScience agreement.

Emergency Repair of the Livermore Interceptor Pipeline

Project construction and site restoration is complete as of April 29, 2024. The original completion date was March 15, 2024 but was extended due to inclement weather and the need for additional time to allow the soil to dry to meet compaction test requirements. The cost to date is \$4,765,385, which does not include the final billing and retention. The total project cost remains at approximately \$6,200,000. This is under the approved budget of \$7,000,000.

The project required two Grants of Easement. The easement with Zone 7 was approved by the County Board of Supervisors on March 26, 2024. As soon as the original documents are received staff will have them recorded with Alameda County. The cost of that easement was \$500.

The easement with City of Livermore is a work in progress. The original valuation was for \$500. Some Livermore staff have expressed the desire for a reevaluation of the easement appraisal, believing it should be on the order of \$40,000. LAVWMA and DSRSD staff have tried to convince Livermore staff that all costs are eventually paid by the City, so any increases or delays just cost the City more money. Easement negotiations are currently on hold until the reevaluation issue is resolved.

Recovery of funding through FEMA and CalOES is ongoing. As of May 8, the CAT B project (the addition of emergency riprap to prevent further damage) has been approved by FEMA and CalOES. They have indicated that all that is needed is LAVWMA approval. The GM transition for signature purposes is nearing a resolution. The total cost of this project was \$25,000. Recovery of 75% of the cost from FEMA and CalOES is possible.

The CAT F project (\$6.2M project described above) is still in development. LAVWMA and DSRSD are waiting for further guidance from FEMA before submitting a revised application for this project. Staffing challenges on pursuing FEMA funding have resulted in LAVWMA and Livermore agreeing to hire a consultant that specializes in FEMA. The first step will be to have the consultant review all files submitted to FEMA thus far and get an opinion on the likelihood of successfully receiving substantial funds from FEMA. This initial effort will be approximately \$15,000.



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Agenda Explanation  
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May 15, 2024

DSRSD Associate Engineer, Karla Castro, has been managing this project since its inception. She presented a PowerPoint presentation, copy attached to the DSRSD Board in March 2024. If she is available she will provide the presentation to the LAVWM Board. If she is not available, LAVWMA staff will provide the presentation.

A discussion with regulatory staff regarding the need for permits with the Regional Water Quality Control Board (Water Board) is ongoing related to the emergency placement of riprap to protect the exposed pipeline from further exposure during the unprecedented winter storms. LAVWMA last responded to the Water Board on February 26, 2024. As of this writing there has not been a response from the Water Board.

**Recommendation**

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

**Attachments**

Presentation on Livermore Pipeline Replacement Project.

# **Livermore-Amador Valley Water Management Agency (LAVWMA)**

## **Livermore Interceptor Pipeline Emergency Repair**



**Dublin San Ramon  
Services District**

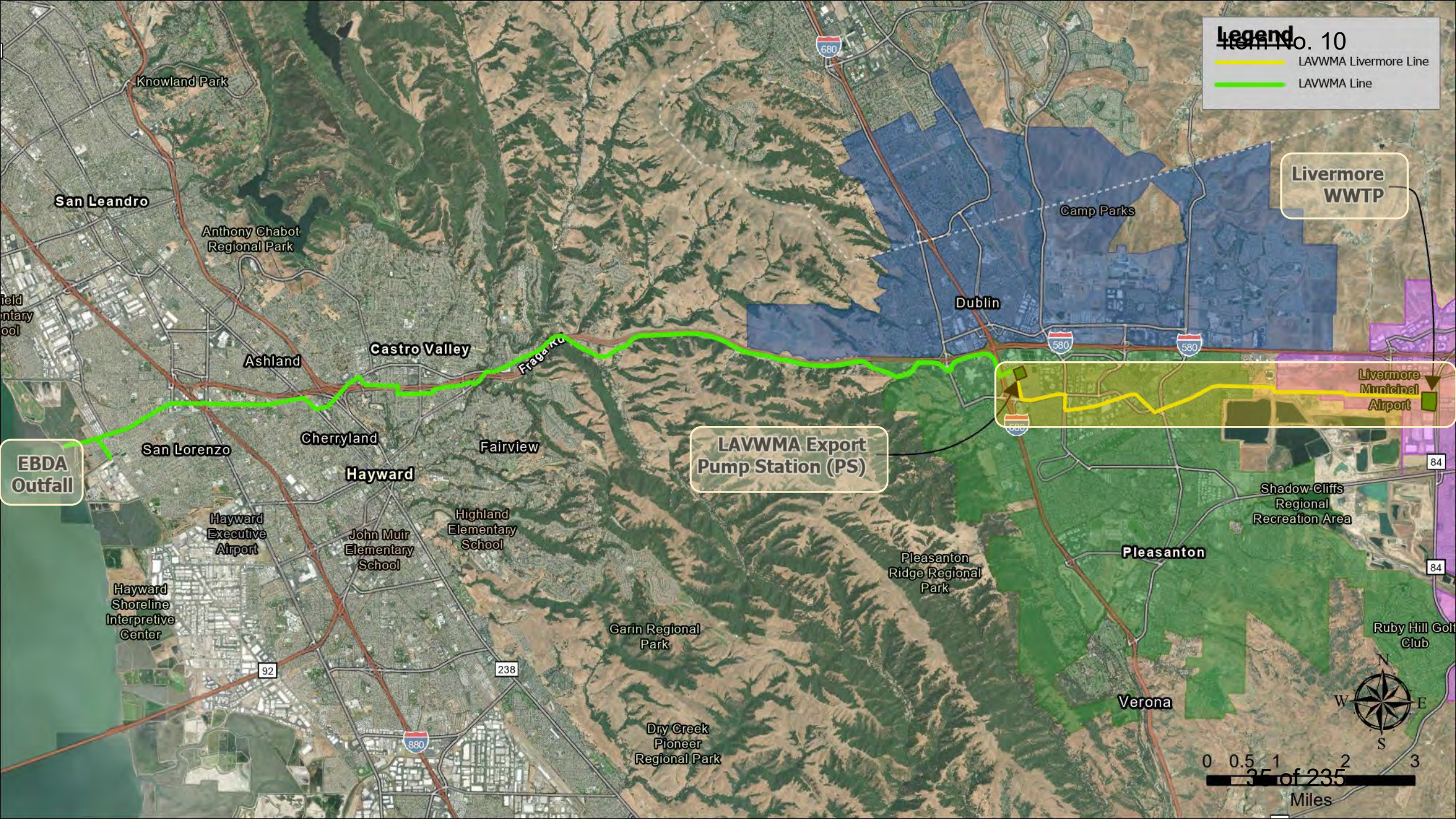
*Water, wastewater, recycled water*

Karla Castro

DSRSD Board of Directors Meeting

*March 19, 2024*





**Legend**  
Item No. 10

- LAVWMA Livermore Line
- LAVWMA Line

Livermore  
WWTP

LAVWMA Export  
Pump Station (PS)

EBDA  
Outfall

Livermore  
Municipal  
Airport

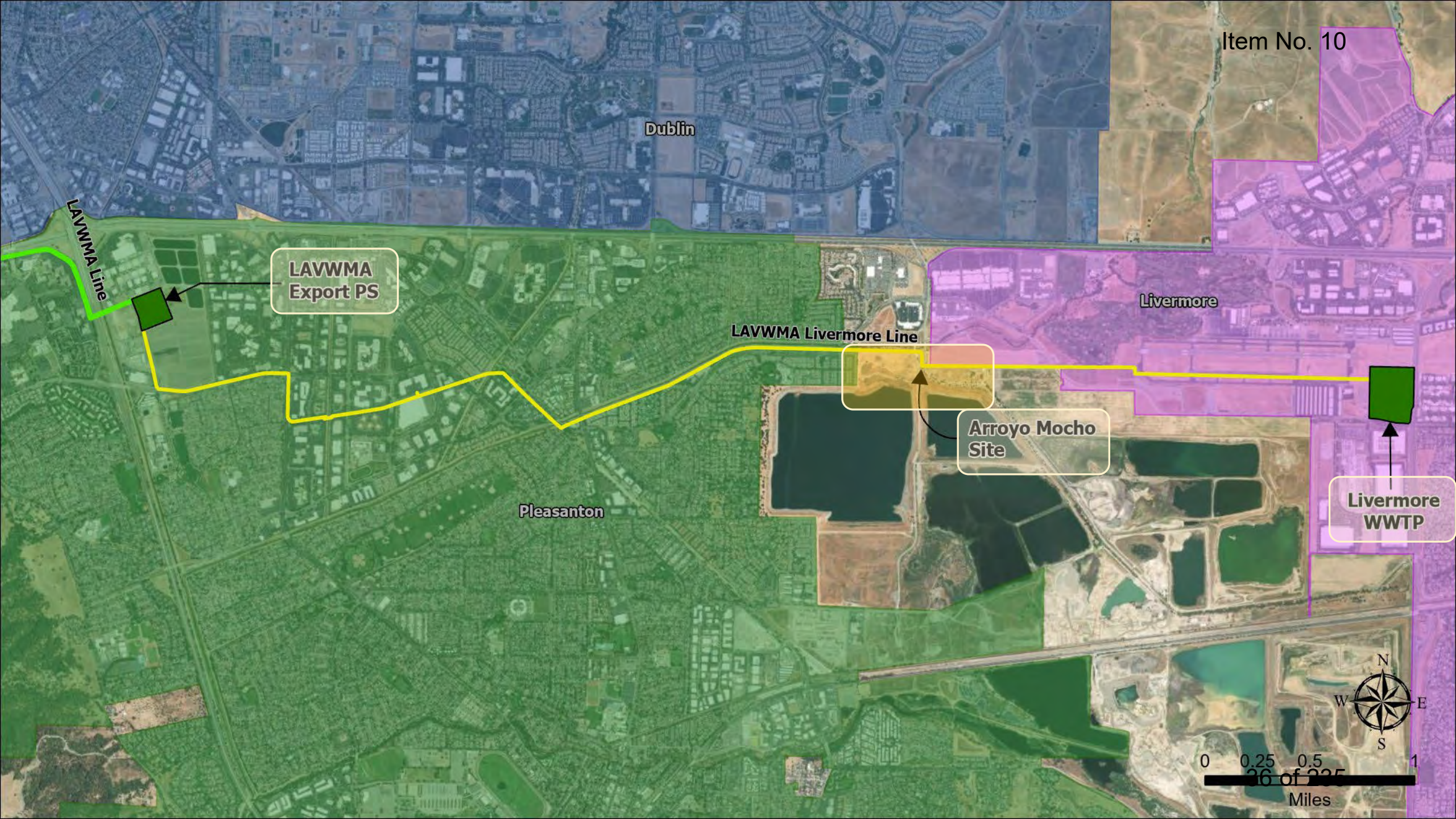
Shadow Cliffs  
Regional  
Recreation Area

Ruby Hill Golf  
Club



0 0.5 1 2 3  
35 of 235  
Miles





Dublin

LAVWMA  
Export PS

LAVWMA Livermore Line

Arroyo Mocho  
Site

Livermore

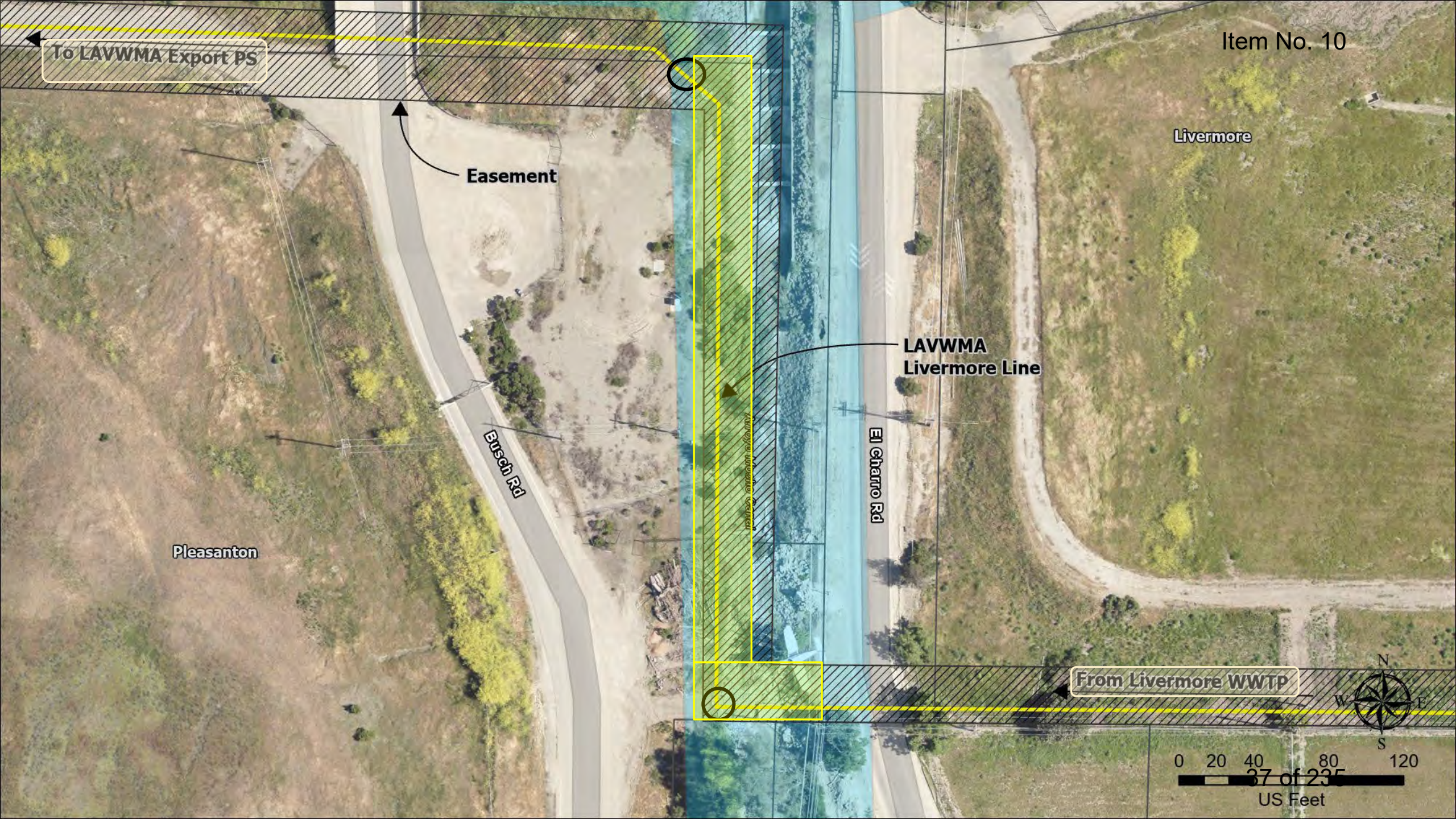
Livermore  
WWTP

Pleasanton



0 0.25 0.5 1  
Miles





To LAVWMA Export PS

Easement

Pleasanton

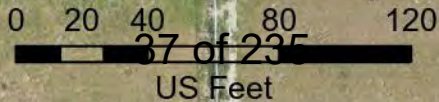
Busch Rd

LAVWMA  
Livermore Line

El Charro Rd

Livermore

From Livermore WWTP





February 2023





March 2023





March 2023





# LAVWMA & DSRSD Declare an Emergency

- » April 2023 DSRSD Engages Carollo on a Pipeline Condition Assessment
- » May 2023 LAVWMA Board Unanimously Approved and Declared an Emergency
- » June 2023 DSRSD's General Manager declared a State of Emergency which is later confirmed by the DSRSD Board.
- » September 2023 Carollo provides LAVWMA a completed design.



# Design Challenges





# Solution





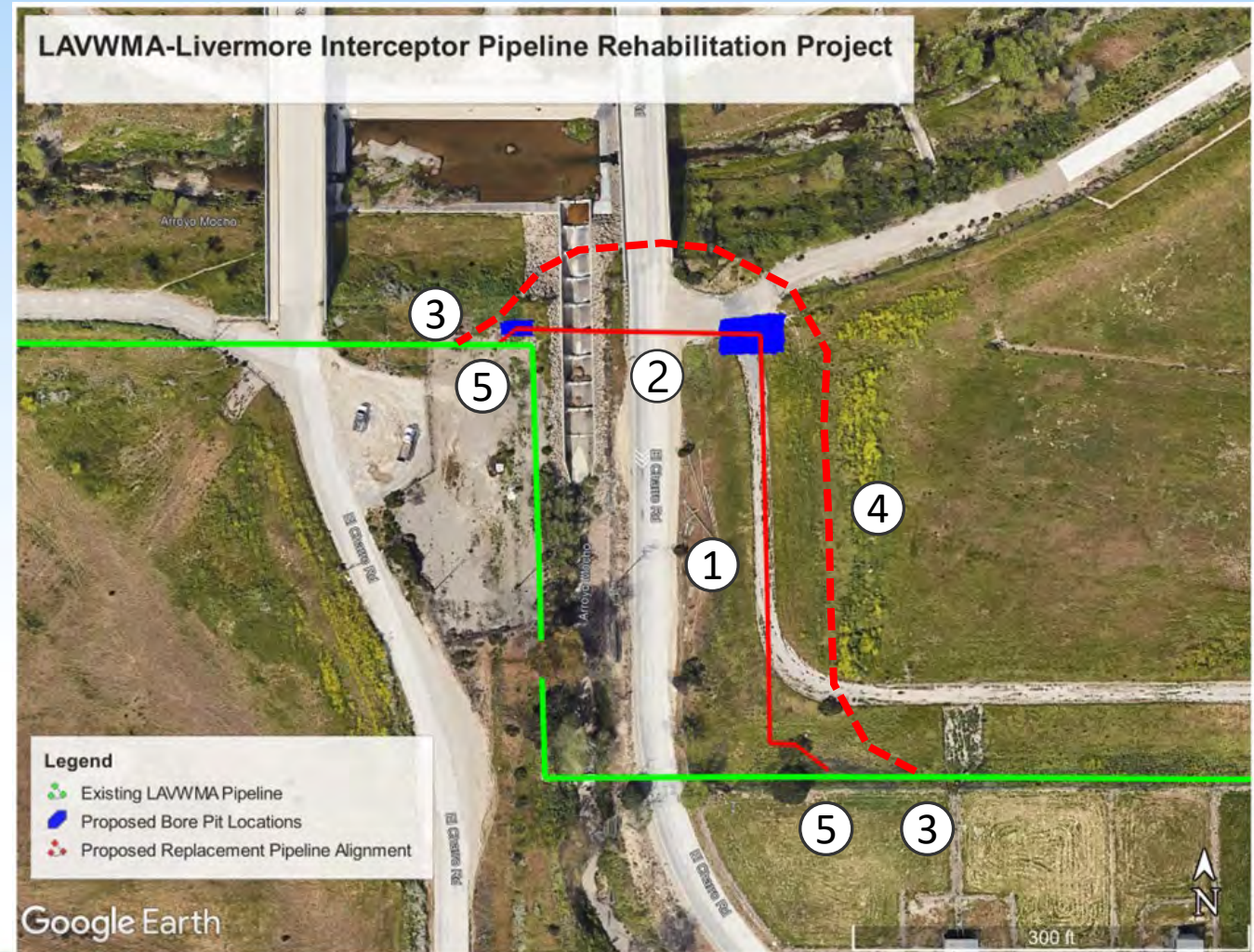
# Construction Begins October 2023





# Order of Construction Work

1. Install Open-Cut Pipeline
2. Install Trenchless Crossing
3. Prepare Line Stops
4. Install Temporary Bypass System
5. Engage Line Stop and Perform Tie-Ins





# 1. Install Open-Cut Pipeline





## 2. Install Trenchless Crossing





### 3. Prepare Line Stops





## 4. Install Temporary Bypass System





## 5. Engage Line Stop and Perform Tie-Ins





# Project Costs & FEMA Funding

Current LAVWMA Pipeline Repair Project costs			
Design			
	*Carollo Project Scope (Based on initial Design)	\$	556,263.00
	*Amendment (to revise alignment)	\$	120,000.00
		<b>Total</b>	<b>\$ 676,263.00</b>
Construction Management (CM) Services			
	*Carollo Scope	\$	215,000.00
	*Amendment to extend CM services	\$	39,776.00
		<b>Total</b>	<b>\$ 254,776.00</b>
Construction			
	*Construction Design Consulting	\$	30,000.00
	*Amendment (to continue through revised alignment)	\$	35,000.00
	*Potholing	\$	70,000.00
	*Material Procurement	\$	950,000.00
	*Guaranteed Maximum Price	\$	3,851,367.52
		<b>Total</b>	<b>\$ 4,936,367.52</b>
DSRSD Staff Time			
	Staff Cost to date	\$	125,785.26
	Staff Cost projected through project completion. **	\$	35,000.00
		<b>Total</b>	<b>\$ 160,785.26</b>
<b>Estimated Project Total (Design, CM Services, Construction, DSRSD Staff Time):</b>			
		<b>\$</b>	<b>6,028,191.78</b>
	5/17/2023 LAVWMA Board Approved Budget	\$	2,000,000.00
	8/16/2023 LAVWMA Board Approved Budget	\$	5,000,000.00
	11/15/2023 LAVWMA Board Approved Budget	\$	7,000,000.00
*PO's have been approved and processed			
**Anticipated staff time through project close out April 2024.			

» \$6,000,000

» Continue working with FEMA and LAVWMA

## Next Steps

- » **Livermore Interceptor Pipeline Emergency Repair Project is substantially complete.**
- » **Finalize Project Closeout**
- » **Continue to work and closeout FEMA Applications**
- » **Terminate Emergency Action**





**Questions?**

Page 1

Agenda Explanation  
Livermore-Amador Valley  
Water Management Agency  
Board of Directors  
May 15, 2024

**ITEM NO. 11 AMENDMENT NO. 3 TO AGREEMENT FOR CONSULTANT SERVICES WITH HYDROSCIENCE FOR THE DESIGN OF THE SAN LEANDRO SAMPLE STATION IMPROVEMENTS PROJECT**

**Action Requested**

It is requested that the Board approve Amendment No. 3 to the Agreement with HydroScience for the Design of the San Leandro Sample Station Improvements Project,

**Summary**

As noted in Agenda Item No. 10, the consulting services for the San Leandro Sample Station (SLSS) Design Improvements Project have expanded since the original agreement with HydroScience was approved August 23, 2021. Items that have been added include the following:

- Security System including cameras and communication from the SLSS to the LAVMWA pump station and DSRSD
- Replacement of an additional pressure relief valve
- Coordination with City of San Leandro and the Heron Bay Homeowners Association
- Corrosion Protection Improvements at several locations.
- Delays in equipment procurement have extended the period for construction management by at least five months.
- An increase in the number of submittals and requests for information and the time required to respond to them are well beyond what was originally expected and budgeted.

The original contract amount was \$185,000 and was amended to \$229,000 on March 21, 2022. This second amendment brought the total to \$284,614. This third amendment will increase the budget by \$86,946 for a new not to exceed total of \$370,560. Please refer to the attached amendment and the May 2, 2024 Amendment Request No. 3 from HydroScience for additional detail.

**Recommendation**

Approve Amendment No. 3 to Agreement

**Attachments**

Third Amendment to Agreement for Consultant Services.

### THIRD AMENDMENT TO AGREEMENT FOR CONSULTANT SERVICES

This amendment (“Third Amendment”) to the Agreement for Consultant Services is entered into and effective this \_\_\_\_ day of May 2024 by and between the Livermore-Amador Valley Water Management Agency (“LAVWMA”), and HydroScience Engineers, Inc., a professional corporation (“Consultant”), with references to the following facts and intentions:

#### RECITALS

- A. On August 23, 2021, LAVWMA and Consultant entered into an Agreement for Consultant Services wherein Consultant agreed to provide engineering design services for LAVWMA’s San Leandro Sample Station Improvements Project; and
- B. The Agreement provides for a not to exceed Cost Ceiling of \$185,000 without prior written authorization by LAVWMA’s General Manager; and
- C. A First Amendment to the Agreement was approved on March 21, 2022, which increased the Cost Ceiling to \$229,800; and
- D. A Second Amendment to the Agreement was approved on August 16, 2023, which increased the Cost Ceiling to \$284,614
- E. The parties wish to further modify the Cost Ceiling in the manner authorized by the Agreement.

#### OPERATIVE PROVISIONS

NOW, THEREFORE, for good and sufficient mutual consideration set forth herein, the Parties do hereby enter into this First Amendment which modifies and amends the Agreement as follows:

#### 1. Amendment.

1.1 Section 2.1 of the Agreement, entitled “Compensation” is hereby amended in its entirety to read as follows:

- 2.1 Compensation.** LAVWMA will compensate Consultant for all Services fully performed in compliance with this Agreement to LAVWMA's satisfaction, as further specified in Exhibit B, Compensation, Exhibit B-1, Rate Schedule, and May 2, 2024, Consultant letter: Amendment Request #3 – Construction Phase Services for San Leandro Sample Station Improvements Project; all of which are attached hereto and incorporated herein. Compensation for the Services will not exceed \$370,560 ("**Cost Ceiling**"), without prior written authorization by LAVWMA's General Manager. Consultant will promptly notify LAVWMA in writing when the total amount it has invoiced meets or exceeds 90 percent of the Cost Ceiling.

**1.2 Exhibit A** San Leandro Sample Station Improvements Scope of Services is hereby amended to include the additional scope described in Consultant’s May 2, 2024 letter, which is attached hereto and incorporated by this reference as if set forth in full.

**2. General Provisions**

**2.1 Remainder Unchanged.** Except as specifically modified and amended in this First Amendment, the Agreement remains in full force and effect and binding upon the parties.

**2.2 Integration.** This First Amendment consists of pages 1 through 2 inclusive, and the modifications to Exhibit A, which constitute the entire understanding and agreement of the parties.

**2.3 Effective Date.** Upon full execution, this First Amendment shall be effective on the date first written above.

**2.4 Applicable Law.** The laws of the State of California shall govern the interpretation and enforcement of this First Amendment.

**2.5 References.** All references to the Agreement include all their respective terms and conditions. All defined terms utilized in this First Amendment have the same meaning as provided in the Agreement, unless expressly stated to the contrary in this First Amendment.

**IN WITNESS WHEREOF**, the Parties have executed this First Amendment to the Agreement as follows.

**LIVERMORE-AMADOR VALLEY WATER MANAGEMENT AGENCY**

By: \_\_\_\_\_  
Levi Fuller, General Manager

Date\_\_\_\_\_

Approved As To Form

By: \_\_\_\_\_  
Alexandra M. Barnhill, General Counsel

Date\_\_\_\_\_

**HYDROSICENCE ENGINEERS, INC.**

By: \_\_\_\_\_  
Bill Slenter, P.E., Project Manager

Date\_\_\_\_\_



**EXHIBIT B****Compensation**

LAVWMA will compensate Consultant for Services satisfactorily performed in compliance with the Agreement based on Consultant's approved hourly rates, as set forth in **Exhibit B-1, Rate Schedule** and authorized reimbursements, as specified below, up to the Cost Ceiling (as defined in Section 2.1 of the Agreement). Consultant is responsible for prudent management of its time and resources to provide the Services on a cost-effective basis. Compensation will be solely based on the following costs, all of which count toward the Cost Ceiling:

1. *Direct Labor.* Consultant's compensation will be based on the total number of hours each employee of Consultant spent performing the Services times the approved hourly rate for each such employee as set forth in Exhibit B-1, Rate Schedule, including any work performed on overtime or on holidays or weekends, unless otherwise required by Laws.
2. *Subconsultant Costs.* Services provided by authorized subconsultants will be compensated based on Consultant's direct cost plus a markup of not more than 10%. A copy of each subconsultant's invoice for Services must be submitted with Consultant's invoice for those Services.
3. *Other Direct Costs.* Consultant will be reimbursed, as set forth below, for certain reasonable, direct costs which are necessarily incurred to perform the Services, but without any additional mark-up and subject to appropriate documentation for costs actually incurred, which must be submitted with the invoice seeking such reimbursement. Consultant will not be entitled to compensation for costs that have not yet been incurred, or for costs that are not reasonable under the circumstances.
  - a. Subject to LAVWMA's prior written authorization, Consultant will be reimbursed for reasonable living and traveling expenses.
  - b. Consultant will be reimbursed for personal vehicle use, at the current IRS approved mileage rate.
  - c. Consultant will be reimbursed for reproduction of Work Product as required under this Agreement, based on reasonable local rates for bulk reproduction or at other reasonable rates approved by LAVWMA.
  - d. Consultant will be reimbursed for special overnight delivery or messenger services.

**EXHIBIT B-1**  
**Rate Schedule**

Pursuant to Section 1 of Exhibit B, Compensation, Consultant will be compensated based on the following hourly rates, which may not be modified, except by a written amendment as specified in Section 7.2, Amendment, of the Agreement.

**HYDROSCIENCE ENGINEERS, INC.**  
**Standard Schedule of Estimated Billing Rates**  
Effective January 1, 2024 through December 31, 2024

Labor Classification	2024 Hourly Rate
Principal	\$305
Engineer IX	\$292
Engineer VIII	\$280
Engineer VII	\$265
Engineer VI	\$253
Engineer V	\$242
Engineer IV	\$231
Engineer III	\$215
Engineer II	\$204
Engineer I	\$187
Engineering Aide	\$110
Construction Professional VI	\$200
Construction Professional V	\$190
Construction Professional IV	\$180
Construction Professional III	\$170
Construction Professional II	\$150
Construction Professional I	\$140
Cross Connection Control Specialist	\$135
CAD Manager	\$160
CAD Designer	\$140
Marketing Professional	\$120
Administrative II	\$110
Administrative	\$95

Hourly billing rates include postage and telephone charges that are normal to the work authorized. Other direct costs for travel, reproduction, mail service, outside services, etc. will be invoiced at 110 percent of the actual cost. Rates for expert witness services shall be billed at the quoted rates plus \$50/hour.

May 2, 2024

**HydroScience Engineers, Inc.**  
 10569 Old Placerville Road  
 Sacramento, CA 95827  
 T: 916.364.1490  
 F: 916.364.1491

Chuck Weir  
 General Manager  
 Livermore-Amador Valley Water Management Agency  
 7051 Dublin Boulevard  
 Dublin, CA 94568

**Subject: Amendment Request #3 – Construction Phase Services for San Leandro Sample Station Improvements Project**

Dear Chuck:

HydroScience is providing construction phase engineering services for the subject project. HydroScience requests a project budget amendment to address out-of-scope work associated with our engineering services during construction (ESDC), construction management (CM), and construction inspection (CI) roles on the Project. The following presents the current budget status, describes the out-of-scope work, and presents the requested amendment amounts.

**Current budget status:**

The table below summarizes the budget status for the HydroScience ESDC, CM, and CI tasks as of the date of this letter. Subconsultant tasks are not included in the table and to date have not been impacted by extra work.

Task	Current Task Budget	Billed + Work in Progress	Budget Remain	Budget % Spent	Budget % Remain	Remain Constr Duration
102 Bid/ESDC (HSE)	\$97,627	\$84,878	\$12,749	87%	13%	53%
103 CM/Insp (HSE)	\$58,637	\$54,080	\$4,557	92%	8%	53%

**Procurement delays and construction contract non-compliance issues:**

Notice to proceed (NTP) was issued to the contractor, McGuire & Hester (M&H) on 8/28/2023. The Project requires procurement of several critical long-lead equipment components. By October 2023 it became apparent that M&H was falling critically behind in providing long-lead equipment submittals and in submitting an acceptable baseline schedule that reflected procurement timelines for this equipment. We became very concerned that M&H could not complete the project in accordance with the Contract Time of Completion.

As a result, HydroScience undertook additional steps to drive resolution of this matter. This included performing outreach to equipment vendors, coordinating with M&H, and reporting status to LAVWMA and DSRSD. We also prepared a letter notifying M&H of contractual non-compliance, received and reviewed M&H's response letter, prepared a response to that letter, coordinated with LAVWMA and DSRSD staff, and held a series of meetings to discuss the issue.

M&H is submitting supporting documentation to request an Extension of Contract Time. HydroScience is reviewing and responding to these requests as well.

May 2, 2024

Amendment Request #3 – Construction Phase Services for San Leandro Sample Station Improvements Project

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This effort required additional staff time that was not originally anticipated in our contractual scope of work and budget. The effort is still ongoing.

**Extended project duration:**

M&H recently submitted a revised schedule showing that, due to procurement delays impacting the Contractual Completion Date, the revised completion date will be November 28, 2024. In our recent experience with similar projects, further delay notices from equipment suppliers are possible. Additionally, with the final months of the work occurring due to wet weather, weather delays may occur. A conservative assumption for the purposes of budgeting would be that project completion will occur on or around January 31, 2025.

Had the project not been delayed, the duration of the construction phase would have been 77% complete as of the date of this letter. Based on the new revised estimated completion date, the duration is only 47% complete, with 53% of the anticipated project days remaining. CM services will need to be extended to cover these additional months including holding progress meetings.

The remaining CM/CI budget covers approximately 20 future hours of CM/CI time. We recommend augmenting this with 55 hrs of additional time to cover both the extended project duration and the project delay matter.

**Two phases of field work:**

Because of these project delays, M&H can no longer complete field work during Summer 2024 as originally anticipated. It will now be spread out between June and November per their current schedule, possibly longer. This affects HydroScience's CI effort because there will need to be more trips to the field and more field days overall. Furthermore, the majority of the CM/CI budget has already been expended dealing with the issues described above, even though none of the field work has yet begun as of the date of this letter.

Based on M&H's latest schedule, showing 69 total working days in the field, and assuming HydroScience is travelling to the site and observing the work 30% of that time, we recommend this amendment include 182 additional field inspection hours.

**Submittal and RFI quantities:**

The contractual budget is based 30 submittals (including resubmittals) and 40 RFIs. To date, we have reviewed 38 submittals and resubmittals and 12 RFIs. The increased submittal count is primarily driven by a higher number of resubmittals from M&H than anticipated, and we expect this pattern may continue.

While the RFI quantity is currently below the budgeted amount, the amount of phone and email support has been higher than anticipated, causing most of the RFI budget to be expended.

We recommend augmenting the budget to cover 20 additional submittals/resubmittals and 15 additional RFIs.

The proposed budgetary amendment to address this additional scope is **\$85,946**. This amendment would increase our total contract amount to \$370,560. **Attachment A** provides a detailed breakdown of the proposed fee and hours to address the above tasks.

May 2, 2024

Amendment Request #3 – Construction Phase Services for San Leandro Sample Station Improvements Project

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We appreciate your consideration of this request. Please contact me at [bslenter@hydroscience.com](mailto:bslenter@hydroscience.com) or (916) 273-6035 with any questions.

Sincerely yours,

**HYDROSCIENCE ENGINEERS**



Bill Slenter, PE  
Project Manager

Attachment A: Amendment Fee Detail

Attachment B: 2024 Schedule of Billing Rates

# ATTACHMENT A

## Amendment Request #3

### LAVWMA Engineering Services for San Leandro Sample Station Improvements Project

May 2, 2024

Task	Description	Curtis Lam PIC & QA/QC	Bill Slenter Project Manager	Eric Jones Project Engineer	Kyle Fooks Design Support & CM/CI	Bya Founas Design Support	Thinh Le Lead Electrical	Drafting	HSE Hours	HSE Fee	Travel and Repro	VE Solutions Structural	BSK Materials Testing	Direct Charges Markup	Expense Subtotal with Markup	Total Fee
		Princ	Princ	E-VI	E-II	E-III	E-VI	CAD Mgr								
		\$305	\$305	\$253	\$204	\$215	\$253	\$160								
<b>3</b>	<b>Bid Support and ESDC Amendment</b>															<b>\$26,376</b>
	General Coordination & PM		16	12					28	<b>\$7,916</b>				\$0	<b>\$0</b>	<b>\$7,916</b>
	Submittal Review		1	10	6	40	2		59	<b>\$13,165</b>				\$0	<b>\$0</b>	<b>\$13,165</b>
	RFI Response		1	4	4	10	4		23	<b>\$5,295</b>				\$0	<b>\$0</b>	<b>\$5,295</b>
<b>4</b>	<b>Construction Mgmt &amp; Inspection Amendment</b>															<b>\$59,570</b>
	Construction Meetings		8	4	25				37	<b>\$8,552</b>				\$0	<b>\$0</b>	<b>\$8,552</b>
	Construction Management		6		55				61	<b>\$13,050</b>				\$0	<b>\$0</b>	<b>\$13,050</b>
	Inspection				182				182	<b>\$37,128</b>	\$800			\$40	<b>\$840</b>	<b>\$37,968</b>
<b>SUBTOTAL</b>		<b>0</b>	<b>32</b>	<b>30</b>	<b>272</b>	<b>50</b>	<b>6</b>	<b>0</b>	<b>390</b>	<b>\$85,106</b>	<b>\$800</b>	<b>\$0</b>	<b>\$0</b>	<b>\$40</b>	<b>\$840</b>	<b>\$85,946</b>

## Change to Contract Total

Original Contract Amount	\$185,000
Amendment #1	\$44,800
Amendment #2	\$54,814
This Amendment #3	\$85,946
<b>Revised Contract Amount</b>	<b>\$370,560</b>

**HYDROSCIENCE ENGINEERS, INC.**  
**Standard Schedule of Estimated Billing Rates**  
Effective January 1, 2024 through December 31, 2024

<b>Labor Classification</b>	<b>2024 Hourly Rate</b>
Principal	\$305
Engineer IX	\$292
Engineer VIII	\$280
Engineer VII	\$265
Engineer VI	\$253
Engineer V	\$242
Engineer IV	\$231
Engineer III	\$215
Engineer II	\$204
Engineer I	\$187
Engineering Aide	\$110
Construction Professional VI	\$200
Construction Professional V	\$190
Construction Professional IV	\$180
Construction Professional III	\$170
Construction Professional II	\$150
Construction Professional I	\$140
Cross Connection Control Specialist	\$135
CAD Manager	\$160
CAD Designer	\$140
Marketing Professional	\$120
Administrative II	\$110
Administrative	\$95

Hourly billing rates include postage and telephone charges that are normal to the work authorized. Other direct costs for travel, reproduction, mail service, outside services, etc. will be invoiced at 110 percent of the actual cost. Rates for expert witness services shall be billed at the quoted rates plus \$50/hour.

**ITEM NO. 12 A RESOLUTION OF THE LIVERMORE-AMADOR VALLEY WATER MANAGEMENT AGENCY TERMINATING AN EMERGENCY ACTION PROCUREMENT FOR REPAIR OF THE LIVERMORE INTERCEPTOR PIPELINE PURSUANT TO PUBLIC CONTRACT CODE SECTION 22050**

**Action Requested**

Approve Resolution No. 24-02 Terminating an Emergency Action Procurement for Repair of the Livermore Interceptor Pipeline.

**Background**

Following the discovery of the Livermore Interceptor Pipeline's exposure due to significant erosion caused by the most recent severe winter storms, Livermore-Amador Valley Water Management Agency (LAVWMA) and Dublin San Ramon Services District (DSRSD) declared States of Emergency to begin the effort to design a repair project. The General Manager is providing an update on the status of that effort and the continuing need for emergency action procurement.

**Discussion**

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. On February 9, 2023, District staff discovered that these storms had left a portion of LAVWMA's Livermore Interceptor Pipeline, and its associated manhole, exposed in the Arroyo Mocho Creek, causing significant erosion in the nearby creek bed and banks.

On May 17, 2023, the LAVWMA Board of Directors approved Resolution No. 23-04, declaring a State of Emergency and approving emergency action procurement by the General Manager for the repair of the LAVWMA Livermore Interceptor Pipeline. Per state law, the Declaration of the LAVWMA State of Emergency shall be reviewed by the Board of Directors at every regular meeting to determine, by a four-fifths vote, that there is a need to continue the emergency action.

Under the emergency authorization, two task orders were issued by DSRSD. A task order, in an amount not to exceed \$556,263, was awarded to Carollo Engineers on June 23, 2023 for engineering design services, including property rights acquisition and permitting support services. A second task order, in an amount not to exceed \$30,000, was awarded to DPI, Inc. on the same date for construction design services including constructability review, material procurement assessments, and construction cost estimating.

An aggressive project and implementation schedule was required. The design work was completed between July and October of this year. DSRSD staff actively engaged with DPI, Inc. on constructability review, material selection and procurement, and construction costs.



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Construction on this project began on October 3, 2023 and was scheduled for substantial completion by March 11, 2024. As conditions required, the design and construction were modified. Rainy weather caused some delays, however, project construction and site restoration was complete as of Monday April 29 and a final site walk occurred on May 1, 2024

In parallel with the design effort, LAVWMA and DSRSD staff and counsel worked with property owners on negotiating property rights for the new pipeline easements and right-of-entry permits, coordinating with respective agencies for the acquisition of environmental permits and encroachment permits, pursuing federal funding through the Federal Emergency Management Agency (FEMA), pursuing state funding through California Office of Emergency Services (Cal OES), and procuring long lead-time materials including large-diameter piping and valves. An easement has been approved by the Zone 7 Board of Directors and was approved by the Alameda County Board of Supervisors on February 27, 2024. Zone 7 Water Agency approved the easement on March 26, 2024. The fee for the easement is \$500, based on the appraisal value. There was also a small fee for Zone 7 staff time. The easement with City of Livermore is nearing completion. The parties are negotiating the value of the easement and applicable fees.

With the exception of finalizing easement agreements with the City of Livermore, the project is complete. Efforts to seek funds from FEMA are ongoing. The member agencies and LAVWMA have agreed that due to staffing changes it is prudent to hire an outside consultant to assist in negotiations and actions with FEMA. This too will ultimately be a Livermore expense. Based on the foregoing, there is no reason in continuing the emergency procurement action.

Therefore, staff recommends the LAVWMA Board terminate the emergency action procurement by approving Resolution No. 24-02.

**Recommendation**

Consider Adopting Resolution No. 24-02 Terminating an Emergency Action Procurement for Repair of the Livermore Interceptor Pipeline.

**Attachments**

Resolution No. 24-02 Terminating an Emergency Action Procurement for Repair of the Livermore Interceptor Pipeline.

**LIVERMORE-AMADOR VALLEY WATER MANAGEMENT AGENCY  
RESOLUTION NO. 24-02**

**RESOLUTION TERMINATING AN EMERGENCY ACTION PROCUREMENT FOR  
REPAIR OF THE LIVERMORE INTERCEPTOR PIPELINE PURSUANT TO PUBLIC  
CONTRACT CODE SECTION 22050**

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 Dublin San Ramon Services District (“DSRSD”) discovered that recent severe winter storms, which brought strong winds and abnormally high precipitation, had left a portion of LAVWMA’s Livermore Interceptor Pipeline and its associated manhole exposed in the Arroyo Mocho Creek and caused significant erosion in the nearby creek bed and banks; and

WHEREAS, the possibility of a Livermore Interceptor Pipeline failure presented a substantial risk to public health and safety, potentially causing discharge of wastewater, interruption of service, and impacts on the creek and environmentally sensitive areas nearby; and

WHEREAS, on May 17, 2023, the LAVWMA Board unanimously approved Resolution No. 23-04, recognizing the need for urgent action, declaring an emergency as defined by Public Contract Code section 1102, and authorizing emergency action procurement for the repair of the exposed Livermore Interceptor Pipeline pursuant to Public Contract Code Section 22050; and

WHEREAS, the design, engineering, property acquisition, repair, and replacement work for the Livermore Interceptor Pipeline commenced promptly thereafter; and

WHEREAS, in compliance with the Public Contract Code, the General Manager reported to the Board the justifications for continuing the emergency action procurement at each of the Board's regularly scheduled meetings; and

WHEREAS, the Board voted to sustain the emergency action procurement through Resolutions 23-04, 23-05, 23-07 and 23-08; and

WHEREAS, the design, engineering, property acquisition, repair and replacement work for the Livermore Interceptor Pipeline has now been successfully documented and completed.

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. The Board of Directors hereby finds, for the reasons noted herein, the necessary repairs and replacements to the Livermore Interceptor Pipeline have been executed in accordance with the emergency provisions of the Public Contract Code, ensuring the continuation of essential services and avoiding risk to life, health, and property.
3. The Board of Directors declares that the emergency action procurement initiated pursuant to Resolution 23-04 is hereby terminated as the Livermore Interceptor Pipeline Project has been successfully completed.

DULY AND REGULARLY ADOPTED by LAVWMA this \_\_\_ day of May, 2024, by the following vote:

AYES:

NOES:

ABSENT:

LIVERMORE-AMADOR VALLEY WATER MANAGEMENT AGENCY

By: \_\_\_\_\_  
Bob Carling, Chair

ATTEST:

By: \_\_\_\_\_  
Levi Fuller Jr., General Manager

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**ITEM NO. 13 UPDATE TO INVESTMENT POLICY****Action Requested**

It is requested that the Board approve Resolution No. 24-03, Approving Investment Policy and rescinding Resolution 18-02.

**Summary**

LAVWMA's Investment Policy was last updated in 2018. At that time, the only modification was to allow investment in the California Asset Management Program (CAMP). Recent changes in DSRSD staffing required that funds invested with Charles Schwab, a non-custodial account, be placed in a custodial account, which provides a higher level of security. Funds in Schwab were returned to LAVWMA's primary bank, Bank of America (BofA). An account was set up with CAMP and efforts were made to move \$7,000,000 to the CAMP account. CAMP's current 7-day yield is 5.43%

However, due to a variety of reasons the transfer could not be made despite LAVWMA's best efforts. Staff did not feel that the level of support from CAMP during this effort was adequate. As a consequence, staff is recommending that the Investment Policy be amended to allow for investment in two other public agency programs as described below.

The first option is California Cooperative Liquid Assets Securities System (CLASS). CLASS is a Joint Powers Authority investment pool, created by CSDA and CalCities, that provides public agencies the opportunity to invest funds on a cooperative basis in rated pools that are managed in accordance with state law with the primary objectives of offering Participants safety, daily and next-day liquidity, and optimized returns. CLASS's current 7-day yield is 5.3851%.

The second option is CalTRUST which is a Joint Powers Authority created by public agencies in 2003 to provide a convenient method for public agencies to pool their assets for investment purposes. CalTRUST is governed by a Board of Trustees made up of experienced local agency treasurers and investment officers. The Board sets overall policies for the program and selects and supervises the activities of the investment manager and other agents. Their current 7-day yield is 5.39%.

All three options have very similar rates of return. Ease of transferring funds and customer service should be key parameters in making a choice for LAVWMA. No specific recommendation is offered at this time. LAVWMA's new Treasurer (refer to the next two agenda items) will work closely with DSRSD staff and Regional Government Services to select the best option for LAVWMA.

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**Recommendation**

Approve Resolution No. 24-03, Approving Investment Policy and rescinding Resolution 18-02.

**Attachments**

Resolution No. 24-03 Approving Investment Policy and rescinding Resolution 18-02.

**LIVERMORE-AMADOR VALLEY WATER MANAGEMENT AGENCY**

**RESOLUTION NO. 24-03**

**RESOLUTION ADOPTING A REVISED INVESTMENT POLICY AND  
RESCINDING RESOLUTION NO. 18-02**

WHEREAS, The Livermore-Amador Valley Water Management Agency (LAVWMA) holds and manages funds related to operations and repair of its facilities; and

WHEREAS, LAVWMA is governed by California Government Code § 53600 *et seq.* in the investment of these funds; and

WHEREAS, LAVWMA previously adopted Resolution No. 18-02 revising the Investment Policy; originally adopted in 2001; and

WHEREAS, in reviewing said Investment Policy staff has determined that it requires revision to reflect the investment types that LAVWMA currently uses and changes to applicable laws regarding review of the policy; and

WHEREAS, additional modifications are recommended based on current investment practices and procedures; and

WHEREAS, LAVWMA staff has developed a revised Investment Policy for these funds that is consistent with the requirements of California Government Code § 53600 *et seq.*; and

WHEREAS, the Policy states that it shall be adopted by resolution of the Board of LAVWMA.

NOW, THEREFORE BE IT RESOLVED that the Board of Directors of the Livermore-Amador Valley Water Management Agency hereby adopts the Investment Policy, which is attached hereto as Exhibit A and incorporated by this reference; and

BE IT FURTHER RESOLVED that the Board of Directors of the Livermore-Amador Valley Water Management Agency hereby rescinds Resolution No. 18-02.

DULY AND REGULARLY ADOPTED by LAVWMA this \_\_\_\_ day of May, 2024, by the following vote:

AYES:

NOES:

ABSENT:

LIVERMORE AMADOR VALLEY WATER MANAGEMENT AGENCY

By: \_\_\_\_\_

Bob Carling, Chair

ATTEST:

By: \_\_\_\_\_

Levi Fuller, General Manager

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## EXHIBIT A

**INVESTMENT POLICY FOR  
LIVERMORE-AMADOR VALLEY WATER MANAGEMENT AGENCY****INTRODUCTION**

Monies not required for immediate expenditure by Livermore-Amador Valley Water Management Agency ("LAVWMA" or "Agency") shall be invested in compliance with governing provisions of law and this policy. LAVWMA will maintain adequate cash availability and strive for a yield on invested funds which is commensurate with the objectives of safety of principal and liquidity.

**SCOPE**

This investment policy applies to all financial assets under direct control of LAVWMA.

This policy does not apply to investment activities of moneys held by a trustee or fiscal agent and pledged to the payment or security of bonds or other indebtedness, or obligations under a lease, installment sale, or certificates of participation in the preceding. Such funds are invested in accordance with the statutory provisions governing the issuance, or in accordance with the ordinance, resolution, indenture, or agreement of LAVWMA which provides for the issuance.

**PRUDENCE**

LAVWMA adheres to the guidance provided by the "prudent person standard," which obligates a fiduciary to ensure that investments shall be made with the exercise of that degree of judgment and care, under circumstances then prevailing, which persons of prudence, discretion, and intelligence exercise in the management of individual business matters, not for speculation but for investment. Exercise of prudence considers the probable safety of capital as well as the probable income to be derived.

This standard of prudence shall be applied in the context of managing an overall portfolio. Investment officials acting in accordance with written procedures and the investment policy and exercising due diligence shall be relieved of personal responsibility for an individual security's credit risk or market price changes, provided that deviations from expectation are reported in a timely fashion, and appropriate action is taken to control adverse developments.

**INTERNAL CONTROL**

The primary objectives, in priority order, of LAVWMA investment activities shall be:

- **Safety** of principal is the primary objective of the investment program. Investments of LAVWMA shall be undertaken in a manner that seeks to ensure that capital losses are avoided, whether they are from credit risk or market risk. To attain this objective, the portfolio will be diversified to avoid incurring unreasonable and avoidable risks



## EXHIBIT A

associated with concentrating investments in specific security types, maturity segments, or in individual financial institutions.

- **Liquidity** of the portfolio guarantees LAVWMA's ability to meet all operating requirements which might reasonably be anticipated.
- **Return on Investment** means LAVWMA's investment portfolio shall be designed with the objective of attaining a market rate of return throughout budgetary and economic cycles, taking into account investment risk constraints and the cash flow characteristics of the portfolio.

### **AUTHORIZED FINANCIAL DEALERS AND INSTITUTIONS**

In order to provide for the optimum yield in the investment of funds, LAVWMA investment procedures shall be designed to encourage competitive bidding on transactions from approved broker/dealers. The Agency shall maintain a listing of approved broker/dealers and financial institutions.

- **Broker/Dealers.** In order to be approved by LAVWMA, the dealer must be a primary dealer reporting to the New York Federal Reserve, unless a comprehensive credit and capitalization analysis shows that the firm is adequately financed to conduct public business; the institution must have an office in California and that office must perform the transactions with LAVWMA; the dealer must be experienced in institutional trading practices and familiar with the California Government Code as related to investments; and other criteria as may be established in the investment procedures. Those broker/dealers who desire to be considered for inclusion on the qualified list must submit a "Broker/Dealer Questionnaire" and related documents.
- **Financial Institutions.** The Agency shall establish selection criteria for pre-approval of institutions to do business with LAVWMA.

Upon adoption, and when changes are made thereafter, LAVWMA shall send a copy of the current investment policy to all parties approved to do business with LAVWMA. Confirmation of receipt of this policy shall be considered evidence that the dealer understands LAVWMA investment policy and intends to show LAVWMA only appropriate investments.

### **AUTHORIZED AND SUITABLE INVESTMENTS**

LAVWMA shall be governed by California Government Code §53600 et seq. LAVWMA's investment portfolio may include the following instruments, subject to the investment limits noted below, and other restrictions and limitations set forth in the Government Code:

## EXHIBIT A

<b>Limit</b>	<b>Authorized Investment</b>
None	Collateralized Certificate of Deposits purchased from banks or savings and loan institutions or other institutions as authorized by statute.
30%	Negotiable Certificates of Deposit
None	U.S. Treasury Bills, Notes, and Bonds
None	Securities of Government Agencies (e.g., Federal Home Loan Bank, Federal National Mortgage Association, Federal Home Loan Mortgage Corporation, Student Loan Marketing Association, Government National Mortgage Association, Federal Farm Credit Bank, Tennessee Valley Authority)
30%	Medium-Term Corporate Notes
20%	Mutual Funds (Shares of beneficial interest issued by diversified management companies who invest in securities authorized by §53601.)
None	Indebtedness issued by LAVWMA or any local agency in California.
Maximum allowed by LAIF	The State of California Local Agency Investment Fund
Maximum allowed by CAMP	The California Asset Management Program (CAMP)
Maximum allowed by California CLASS	California Cooperative Liquid Assets Securities System (CLASS)
Maximum Allowed by Cal Trust	Cal Trust

If the Government Code is amended to allow additional investments or is changed regarding the limits on certain categories, LAVWMA is authorized to conform to the changes in the revised Code, provided that the changes are not specifically prohibited by this policy.

### **COLLATERALIZATION**

Collateralization will be required on two types of investments: certificates of deposit and repurchase (and reverse) agreements. In order to anticipate market changes and provide a level of security for all funds, the collateralization level will be 110% of market value of principal and accrued interest for government securities, or 150% for first trust deeds. Collateral will be held by the independent third party custodian selected by LAVWMA. The right of collateral substitution is granted.

### **SAFEKEEPING AND CUSTODY**

Securities transactions, including collateral for repurchase agreements, shall be executed on a delivery vs. payment (DVP) basis. Funds are not wire-transferred until securities are delivered into safekeeping with LAVWMA's third party custodian. The custodial relationship is subject to an agreement for services which may be separate from the agreement for other banking services. The safekeeping requirement does not apply to LAIF or for the purchase of mutual funds.

**EXHIBIT A****DIVERSIFICATION, MAXIMUM MATURITIES, AND CREDIT QUALITY**

LAVWMA will diversify its investments by security type and institution in order to reduce market and credit risks associated with concentrating investments in specific security types, maturity segments, or in individuals financial institutions.

To the extent possible, LAVWMA will attempt to match its investments with anticipated cash flow requirements. No investment shall be made in any security which, at the time of the investment, has a term remaining to maturity in excess of five years. The LAVWMA Board may grant express authority to exceed this term for individual investments.

Credit quality will be AA or above for fixed income securities and A1/P1 for commercial paper. In the event of credit downgrades after purchase, sale of the security will be evaluated on a case by case basis.

**INTERNAL CONTROL**

The Agency shall establish a system of internal controls. The internal controls shall be reviewed annually by the independent auditor. These controls shall be designed to prevent losses of public funds arising from fraud, employee error, misrepresentation by third parties, unanticipated changes in financial markets, or imprudent actions by employees and officers of LAVWMA.

**DELEGATION OF AUTHORITY**

The Board herein delegates investment authority to: the Treasurer and General Manager. All authorizations must be approved in writing by either the Treasurer or General Manager.

**PERFORMANCE**

LAVWMA's portfolio shall be designed to obtain a market average rate of return during budgetary and economic cycles, taking into account LAVWMA's investment risk constraints, cash flow requirements, state law, local law, ordinances, or resolutions that restrict the placement of short-term funds. The portfolio shall be managed to produce a yield meeting or exceeding the average return on the one year U.S. Treasury Bill, which is considered a benchmark for riskless investment transactions. The investment program shall actively seek to augment returns above this threshold, consistent with risk limitations and prudent investment principles.

**REPORTS OF INVESTMENT ACTIVITIES**

The Treasurer will make a report to the Agency on the status of the LAVWMA's Investment portfolio at each regular Board Meeting. The reports shall include information as to the type of investment, the amount of money invested with various institutions, market value for securities with a maturity of more than 12 months, purchase and maturity dates, rate of interest, statement of portfolio liquidity, compliance with this policy, and the ability of the Agency to meet its expenditures for the next six months, as required by California state law.

## EXHIBIT A

**ETHICS AND CONFLICTS OF INTEREST**

Officers and employees involved in the investment process shall refrain from personal business activity that could conflict with proper execution of the investment program, or which could impair their ability to make impartial investment decisions. Investment officials shall file a Statement of Economic Interests disclosing any material financial interests in financial institutions that conduct business with LAVWMA and they shall further disclose any material personal financial or investment positions that could be related to the performance of LAVWMA's portfolio.

**ADOPTION**

The investment policy shall be adopted by resolution of the Board of LAVWMA and shall remain in effect until subsequent changes are adopted by the Board. The Policy should be reviewed every four years or as often as required due to changes in legislation. Any changes are presented to the Board of Directors for consideration.

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**END OF INVESTMENT POLICY**

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**ITEM NO. 14 AUTHORIZATION TO TERMINATE THE AGREEMENT WITH DSRSD  
FOR TREASURER SERVICES EFFECTIVE JUNE 30, 2024**

**Action Requested**

It is recommended that the Board authorize the General Manager and General Counsel to terminate the Agreement with DSRSD for Treasurer Services effective June 30, 2024. Note that Agenda Item Nos. 15 and 16 are related to this action.

**Summary**

Please refer to the attached letter from DSRSD General Manager, Jan Lee, dated April 30, 2024, Treasurer and Accounting Support Services for DSRSD. The sudden departure of both LAVWMA's Treasurer and Assistant Treasurer from DSRSD employment has led to a series of complex issues that are still in a state of flux. LAVWMA staff has been working diligently with DSRSD staff to develop long-term solutions to resolve LAVMWA's financial management services issues. The first step is to terminate the Treasurer Agreement with DSRSD effective June 30, 2024. Subsequent steps are detailed in Agenda Item No. 15 and 16.

**Recommendation**

Authorize the General Manager and General Counsel to terminate the Agreement with DSRSD for Treasurer Services effective June 30, 2024.

**Attachments**

April 30, 2024 letter from DSRSD General Manager Jan Lee.

April 30, 2024

Mr. Levi Fuller, General Manager  
Livermore-Amador Valley Water Management Agency  
7051 Dublin Boulevard  
Dublin, CA 94568

**Subject: Treasurer and Accounting Support Services for LAVWMA**

Dear Mr. Fuller:

For the past 30 years, the Livermore-Amador Valley Water Management Agency (LAVWMA) has utilized the services of both a third-party consultant and the Dublin San Ramon Services District (DSRSD), a LAVWMA member agency, to provide treasurer and accounting support services to LAVWMA. From 1985 to 2011, LAVWMA contracted directly with Mr. Craig Lawson, an Independent Utility Management Consultant, to serve as Treasurer and provide accounting support services. In June 2011, LAVWMA and DSRSD entered into the *"Agreement for Treasurer Services"* and the LAVWMA Board appointed a DSRSD employee to serve as the LAVWMA Treasurer. This agreement has twice been amended to reflect changes in DSRSD staffing and the addition of a LAVWMA Assistant Treasurer.

DSRSD is experiencing significant staffing changes in our Administrative Services Department and Financial Services Division, including the recent departures of DSRSD staff that were serving as LAVWMA's Treasurer and Assistant Treasurer. The majority of accounting support for LAVWMA is currently provided by a part-time, retired accountant that DSRSD hired in 2023 to solely work on LAVWMA's books, which are maintained using accounting software that is separate and different than the accounting software utilized by DSRSD. This arrangement is likely short-term and DSRSD has limited ability to support LAVWMA should the part-time accountant's availability change in the future.

In light of recent staffing changes, DSRSD recommends that LAVWMA return to the model of utilizing a third-party consultant for financial services and further recommends contracting with Regional Government Services (RGS) for these services. DSRSD has reviewed several financial support options for LAVWMA and found that RGS is uniquely qualified to support LAVWMA. RGS is a California Joint Powers Authority established in 2002 that specializes in providing financial and administrative services to public agencies. RGS currently has over 181 employees serving more than 150 public agencies, including the East Bay Dischargers Authority (EBDA), which is similar to LAVWMA.

RGS offers a menu of financial services, and the contracted services could be custom-tailored to meet LAVWMA's needs. Utilizing the services of a third-party like RGS would provide LAVWMA with a more consistent and durable level of financial support, while also ensuring segregation of accounting duties; something that has challenged DSRSD given the size and structure of our Finance team. Addressing this concern was a key reason DSRSD hired a part-time accountant that is solely dedicated to supporting LAVWMA.

Based on initial discussions with RGS, DSRSD anticipates that RGS' costs will be approximately the same as DSRSD and could even decrease over time as RGS becomes more familiar with LAVWMA's business operations. In contrast to DSRSD, RGS is a virtual government agency with low overhead costs resulting



Treasurer and Accounting Support Services for LAVWMA

April 30, 2024

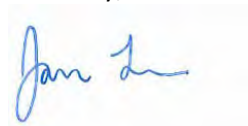
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in lower billing rates and overall costs. Therefore, although RGS' labor hours are expected to be higher in the first year, overall RGS costs are estimated at approximately \$95,000 for a 13-month period from June 1, 2024 through June 30, 2025, which is about the same as DSRSD's projected financial services costs for Fiscal Year 2024.

DSRSD appreciates LAVWMA's willingness to explore options for meeting LAVWMA's long-term financial support needs and is committed to working cooperatively with LAVWMA during this transition period.

If you have any questions, please contact me at (925) 875-2200 or [jlee@dsrsd.com](mailto:jlee@dsrsd.com).

Sincerely,



Jan Lee  
General Manager

CC: DSRSD Board of Directors  
Michelle Gallardo, DSRSD Interim Administrative Services Director  
Michael Yee, DSRSD Interim Financial Services Manager  
Chuck Weir, LAVWMA Interim Treasurer  
Alexandra Barnhill, LAVWMA General Counsel

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Agenda Explanation  
Livermore-Amador Valley  
Water Management Agency  
Board of Directors  
May 15, 2024

**ITEM NO. 15 A RESOLUTION OF THE LIVERMORE-AMADOR VALLEY WATER  
MANAGEMENT AGENCY NAMING LEVI FULLER AS THE TREASURER  
EFFECTIVE JULY 1, 2024**

**Action Requested**

It is recommended that the Board approve Resolution No. 24-04 Naming Levi Fuller as the Treasurer Effective July 1, 2024.

**Summary**

As noted in Agenda Item Nos. 13 – 16, there have been significant changes in DSRSD staffing that led to the loss of LAVWMA's Treasurer and Assistant Treasurer. Retired General Manager Weir has been serving as Interim Treasurer in an effort to transfer signatory authority on various bank and investment accounts to the new General Manager, Levi Fuller. This will be a work in progress and additional action by the Board may be needed in the future. The transfer of LAVWMA's financial operations from DSRSD to Regional Government Services (RSG, Agenda Item No. 16) will require a concerted effort. The first step in this process is to terminate the Treasurer Agreement with DSRSD (Agenda Item No. 14). The second step in the process is to appoint Levi Fuller as Treasurer effective July 1, 2024.

**Recommendation**

Approve Resolution No. 24-04 Naming Levi Fuller as the Treasurer Effective July 1, 2024.

**Attachment**

Resolution No. 24-04 Naming Levi Fuller as the Treasurer Effective July 1, 2024.

**Livermore-Amador Valley Water Management Agency**

**RESOLUTION NO. 24-04**

**RESOLUTION NAMING LEVI FULLER AS THE TREASURER EFFECTIVE  
JULY 1, 2024**

**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 (“JPA”);

**WHEREAS**, Paragraph 10.4 of the JPA provides that the LAVWMA Board shall designate a treasurer;

**WHEREAS**, LAVWMA and DSRSD have agreed to terminate the agreement for Treasurer Services effective June 30, 2024;

**WHEREAS**, Levi Fuller, LAVWMA General Manager has the education and experience to serve as Treasurer; and

**NOW, THEREFORE BE IT RESOLVED** that the Board of Directors of the Livermore-Amador Valley Water Management Agency hereby names Levi Fuller as the Treasurer Effective July 1, 2024.

**DULY AND REGULARLY ADOPTED** by LAVWMA this \_\_\_\_ day of May 2024, by the following vote:

AYES:

NOES:

ABSENT:

\_\_\_\_\_  
Bob Carling, Chair

ATTEST: \_\_\_\_\_  
Levi Fuller, General Manager

**ITEM NO. 16 AUTHORIZATION FOR THE GENERAL MANAGER TO EXECUTE AN AGREEMENT WITH REGIONAL GOVERNMENT SERVICES FOR FINANCE AND ADMINISTRATIVE SERVICES IN AN AMOUNT NOT TO EXCEED \$100,000**

**Action Requested**

It is recommended that the Board authorize the General Manager be authorized to execute an agreement with Regional Government Services for Finance and Administrative Services in an amount not to exceed \$100,000.

**Summary**

As noted in previous agenda items, the agreement between LAVWMA and DSRSD for Treasurer Services is recommended for termination effective June 30, 2024. This creates a need for LAVWMA to develop alternatives for financial management services including:

- accounts payable
- accounts receivable
- general ledger management
- banking and investment management
- financial reporting
- audit assistance
- administrative services
- related items

As noted in DSRSD's April 30, 2024 letter one of the options is to enter into an agreement with Regional Government Services (RGS) for needed services. It is not uncommon for small districts and JPAs to contract out financial services. EBDA and LAVMWA have both done so in the past. RGS is being recommended because of their status as a JPA and understanding of public agency financial protocols and obligations. Please refer to the attached May 5, 2024 Livermore-Amador Valley Water Management Agency Financial Services Proposal. The proposal is for a 13-month period, June 1, 2024 – June 30, 2025, for a not to exceed total of \$92,000. The extra month provides some overlap prior to the termination of the agreement for Treasurer Services to help ensure a smooth transition.

Since there are many unknowns in this switch to RGS, it is recommended that the General Manager be authorized to increase the total costs to \$100,000. It should also be noted that the costs for RGS are comparable to the current costs for DSRSD.

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Agenda Explanation  
Livermore-Amador Valley  
Water Management Agency  
Board of Directors  
May 15, 2024

**Recommendation**

Authorize the General Manager be authorized to execute an agreement with Regional Government Services for Finance and Administrative Services in an amount not to exceed \$100,000.

**Attachment**

RGS Proposal for LAVWMA Financial Services.



May 5, 2024

Mr. Levi Fuller, General Manager  
**Livermore-Amador Valley Water Management Agency**  
 7051 Dublin Boulevard  
 Dublin, CA  
 94568

**SUBJECT: LIVERMORE AMADOR VALLEY WATER MANAGEMENT AGENCY FINANCE SERVICES PROPOSAL**

Dear Mr. Fuller,

Thank you for giving Regional Government Services (RGS) the opportunity to provide this proposal to the Livermore-Amador Valley Water Management Agency (LAVWMA) for the provision finance and project guidance and support. As a public agency that only serves other public agencies, we are confident that RGS is uniquely qualified to make this a successful endeavor.

Regional Government Services (RGS) is a California Joint Powers Authority established in 2002 to serve the needs of cities, counties, special districts, and other governmental entities throughout California. RGS works extensively with public agencies providing a ready source of competent and effective administration and consulting services to meet the needs of our partner agencies.

We currently have over 180 employees throughout California serving more than 150 cities, special districts, counties, other JPAs and special consortiums of government agencies. RGS provides consulting services in the areas of financial and human resource management, organizational development, community engagement, strategic planning, and more specifically to public agencies. RGS has served nearly 400 agencies throughout the state and is proud to have partnered with so many public agencies who benefit from our cost-effective delivery model and open-source access. RGS' expert public sector staff create and share resources and tools to improve internal efficiencies and deliver services to the public.

RGS Executive Director Sophia Selivanoff joined RGS in 2009. Ms. Selivanoff implements the Authority's strategic plan and oversees the day-to-day operations through a staff of professional public agency managers. Working closely with her, Glenn Lazof, Director of Finance Services leads a team of over 35 Finance Specialists providing outsourced public agency Finance Services.

At RGS, we strive to be a partner to the agencies we serve, not simply a consultant or contractor. We believe in relationships that are lasting and mutually respectful and beneficial. The RGS vision is to promote good governance and outstanding community service through providing expertise to public agencies. We value the extensive knowledge required to operate a public agency in today's complex environment and serve public sector agencies with our team of dedicated and experienced public sector leaders. RGS encourages and develops innovative and sustainable services to help each agency meet its operational needs and challenges. We customize solutions to achieve timely provision of the right level and type of service for each agency's unique organizational needs. RGS listens, works with our partner agencies, and perseveres through each challenge, seeking the best outcomes. RGS tracks emerging best practices and shares them with our clients and our advisors. We learn openly from each other's hard-won experience.

At RGS, we know that government agencies are the public's only choice for many services. Public trust must be maintained and used wisely, it is earned, not automatically acquired. RGS will do its part to assist you in improving and maintaining public trust.





## PROPOSED SCOPE OF SERVICES

### BACKGROUND

RGS anticipates succeeding LAVWMA member agency, Dublin San Ramon Services District (DSRSD) in the provision of the Financial Services described below, while DSRSD will continue to provide specific operational, engineering, and administrative services to LAVWMA. It is recognized that productive business workflows will need to be established by these three parties as may be necessary for RGS to provide sound and effective Financial Services to LAVWMA. In addition, specific financial projects, such as completion of FY 2024 Audit and Financial Statements, and ongoing Capital Project planning and support, may also still require limited participation by DSRSD, at least initially.

RGS is not a party to arrangements between Agency and its members, including DSRSD. Compensation or other provision of exchange, for DSRSD services to the Agency, is an exclusive subject of agreement between LAVWMA and DSRSD.

RGS proposes to provide the following services:

#### 1. Initial Transition Period—Collaborative Project Design

- a. During the transition period, tentatively scheduled during June 2024, RGS, LAVWMA, and the Dublin San Ramon Services District will collaborate in the design and implementation of a mutually acceptable, efficient, comprehensive transition of financial services with the objective of maximizing seamless transition of these services.

#### 2. Finance Services may be done either onsite or remotely and may include performing any or all of the functions described below.

- a. Management Consulting:
  - i. Conduct studies and analysis including but not limited to:
  - ii. Capacity to conform to Generally Accepted Accounting Principles for Special Districts.
  - iii. Financial Policy and Procedures review.
  - iv. Workflow analysis to streamline operations and create efficiencies.
  - v. Provide a range of recommendations regarding system controls, separation of duties, fraud prevention, work tools and processes.
  - vi. May facilitate implementation actions for recommended improvements.
- b. Ongoing Financial Services
  - i. Accounts Payable and Receivables, processing of purchase orders
  - ii. Subsidiary Ledger Processes
  - iii. General Ledger Processes
  - iv. Banking activities and Treasury Management
  - v. Capital Improvement Planning activities!
  - vi. Provide project reporting on a mutually agreed schedule to the appropriate Authority project manager!
- c. Additional efforts may include:
  - i. Analyzing financial records as requested.
  - ii. Advise on grant accounting as needed.
  - iii. Be reasonably available to respond to questions or requests for assistance with implementation of recommendations or provide advice about emerging issues.
  - iv. Attend Commission and Committee on requested.

When providing services, RGS Advisors will be reasonably available to perform the services during the normal work week. Our advisors maintain open lines of communication with each other, as well as agency staff and stakeholders utilizing written documentation, video conference calls, phone, and e-mail as needed to accomplish agreed-upon projects.

The RGS Lead Advisor on this project will be the agency single point of contact. They may both perform work and direct projects to qualified RGS staff as needed at Lead Advisor's discretion. Cost-effectiveness of assigned personnel is an objective, and is subject to the Lead Advisor's discretion regarding flexibility of project timing and relevant staff availability.

COST PROJECTION

RGS invoices hourly based on actual hours worked. Current Bill rates are:

RGS TITLE	HOURLY RATE
STRATEGIC SERVICES CONSULTANT	\$186
SENIOR ADVISOR	\$157
ADVISOR	\$135
TECHNICAL SPECIALIST	\$119
ADMINISTRATIVE SPECIALIST	\$106

Based on correspondence with Dublin San Ramon Community Services District, which formerly provided these services to the Agency and RGS experience with similar agencies, RGS has expects the cost for these services for the 13-month period, June 1, 2024 – June 30, 2025, will not exceed \$92,000.

RGS will work closely with LAVWMA to monitor costs, priorities, and projects to ensure proactive communication regarding actual expenditures pursuant to this agreement. Total expenditures against the not to exceed amount will be reported on each monthly invoice.

For your convenience and review, I have attached a sample of RGS' service agreement. This proposal will remain valid for a 90-day period from the date of this submittal. If you have any questions regarding this proposal, please feel free to contact me.

Sincerely,  
*Glenn Lazof*  
Glenn Lazof, Strategic Services Consultant  
(650) 587-7302 or glazof@rgs.ca.gov





### **RGS Is Committed to Reducing Paper Waste by Use of Electronic Processes**

RGS requests your assistance with meeting these waste reduction goals by joining us in the use of digital signature and electronic payment methods during our collaboration to reduce mailing and paper expenses.

As a convenience, RGS offers DocuSign to digitally sign our Agreements, providing a secure and legally binding digital signature process that eliminates the need for printing and distribution of documents.

**Preamble:** The agreement for services described below is also an agreement to engage in a relationship between organizations – Agency partners. In order to establish a mutually respectful relationship as well as a productive one, RGS has adopted the following values and business methods.

### **Our Values**

- **Expert Services:** RGS serves exclusively public sector agencies with its team of public-sector experts.
- **Innovation:** RGS encourages and develops innovative and sustainable services to help each Agency meet its challenges through new modes of service provision.
- **Customer Driven:** RGS customizes solutions to achieve the right level and right kind of service at the right time for each Agency's unique organizational needs.
- **Perseverance:** Sometimes the best solutions are not immediately apparent. RGS listens, works with you, and sticks with it until a good fit with your needs is found.
- **Open Source Sharing:** RGS tracks emerging best practices and shares them, learning openly from each other's hard-won experience.
- **Commitment:** Government agencies are the public's only choice for many services. Public trust is earned and must be used wisely. And RGS will do its part. Each Agency should and will know how RGS sets its rates. RGS' pledge to you is that we will act with honesty, openness, and full transparency.

### **How RGS Does Business**

When you work with RGS you can expect:

- RGS will strive to be explicit up front and put our understandings in writing. Before making assumptions, we hope to talk directly to prevent any misunderstandings.
- Ongoing interaction throughout our relationship to ensure that your needs are being met, and that projects progress appropriately and agreed-upon timelines are met.
- RGS is committed to honest interaction.
- When RGS employees are on your site, we expect them to treat people respectfully and be treated respectfully. If problems arise, we want to communicate early, accurately, and thoroughly to ensure that we find mutually acceptable solutions.
- As a public Agency, partnering is valued. We look out for each Agency's interests consistent with maintaining the public trust.
- To keep expectations realistic, it is important to understand that RGS is a governmental, joint powers authority evolving to meet changing local government needs. RGS has carefully constructed policies and procedures to allow maximum flexibility to meet your needs.

## Agreement for Management and Administrative Services

**This Agreement** for Management Services (“Agreement”) is made and entered into as of the **XX** day of **MONTH** 2023, by and between the **AGENCY**, a municipal agency (“Agency”), and **Regional Government Services Authority** (RGS), a joint powers authority, (each individually a “Party” and, collectively, the “Parties”).

### **RECITALS**

**THIS AGREEMENT** is entered into with reference to the following facts and circumstances:

- A. That Agency desires to engage RGS to render certain services to it;
- B. That RGS is a management and administrative services provider and is qualified to provide such services to the Agency; and
- C. That Agency has elected to engage the services of RGS upon the terms and conditions as hereinafter set forth.

### **TERMS AND CONDITIONS**

**Section 1. Services.** The services to be performed by RGS under this Agreement shall include those services set forth in the attached **Exhibits**, which are incorporated by this reference herein and made a part hereof as though it were fully set forth herein.

Where in conflict, the terms of this Agreement supersede and prevail over any terms set forth in the **Exhibits**.

- 1.1 Standard of Performance.** RGS shall perform all services required pursuant to this Agreement in the manner and according to the standards observed by a competent practitioner of the types of services that RGS agrees to provide in the geographical area in which RGS operates.
- 1.2 Service Advisor.** To ensure quality and consistency for the services provided, RGS also assigns a service advisor to Agency. The service advisor is available to assigned RGS staff and to Agency management and will check in regularly with both to address program/project directives. Typically service advisor time is not billed to Agency, with some exceptions where significant programmatic direction is provided.
- 1.3 Reassignment of Personnel.** Assignment of personnel to provide the services described in the **Exhibits** is at the sole discretion of RGS. In the event that Agency or RGS, at any time during the term of this Agreement, desires the reassignment of personnel, Agency and RGS shall meet and discuss in good faith to address the issue of concern, including but not limited to reassigning such person or persons. For the avoidance of doubt, however, RGS retains sole control as to assignment of its personnel.
- 1.4 Time.** RGS shall devote such time to the performance of services pursuant to this Agreement as may be reasonably necessary to meet the standard of performance described above and to provide the services described in the **Exhibits**.



**Section 2. Term of Agreement and Termination.**

- 2.1** Services shall commence on or about **DATE XX, 2023**, and this Agreement is anticipated to remain in force to **DATE XX, 2024**, at which time services may continue on a month-to-month basis until one party terminates the Agreement or if Section 3 contains a “not to exceed” amount, until RGS charges for services reach the not-to-exceed amount at which point the Agreement will automatically terminate unless amended. Services provided under the month-to-month provision are subject to current RGS staff rates in effect at the time of service. Once this Agreement has converted to a month-to-month basis, it shall automatically terminate upon the ninety-first (91<sup>st</sup>) continuous day with no billable service hours. After the ninety-first (91<sup>st</sup>) day with no billable service hours, RGS shall provide Agency with written notice of the automatic termination of the Agreement.
- 2.2** This Agreement may be terminated by either Party, with or without cause, upon 30 days’ written notice. Agency has the sole discretion to determine if the services performed by RGS are satisfactory to the Agency which determination shall be made in good faith. If Agency determines that the services performed by RGS are not satisfactory, Agency may terminate this Agreement by giving written notice to RGS. Upon receipt of notice of termination by either Party, RGS shall cease performing duties on behalf of Agency on the termination date specified and the compensation payable to RGS shall include only the period for which services have been performed by RGS.

**Section 3. Compensation.** Payment for services under this Agreement shall not exceed \$**XXX** and shall be as provided in the **Exhibits**.

**Section 4. Effective Date.** This Agreement shall become effective on the date first herein above written.

**Section 5. Relationship of Parties.**

- 5.1** It is understood that the relationship of RGS to the Agency is that of an independent contractor and all persons working for or under the direction of RGS are its agents or employees and not agents or employees of Agency. The Agency and RGS shall, at all times, treat all persons working for or under the direction of RGS as agents and employees of RGS, and not as agents or employees of the Agency. Agency shall have the right to control RGS employees only insofar as the results of RGS’ services rendered pursuant to this Agreement. In furtherance of this Section 5.1, the Parties agree as follows:

- 5.1.1** Agency shall not request from RGS or from an RGS employee providing services pursuant to this Agreement an RGS employee’s Social Security Number or other similar personally identifying information.
- 5.1.2** Agency shall not report an RGS employee to a third party as an employee of Agency. For the purposes of this Section 5.1, “third party” means another government agency, private company, or individual.

**5.1.3** In the event that a third-party requests information about an RGS employee—including but not limited to personally identifying information, hours or locations worked, tasks performed, or compensation—Agency shall inform RGS of the request prior to responding. If Agency possesses such information about an RGS employee, the Parties shall confer in good faith about an appropriate and legally compliant response to the request.

**5.2** RGS shall provide services under this Agreement through one or more employees of RGS qualified to perform services contracted for by Agency. The positions of RGS staff that will coordinate services to the Agency are indicated in the **Exhibits**. The Executive Director or assigned supervising RGS staff will consult with Agency on an as-needed basis to assure that the services to be performed are meeting Agency's objectives. At any time the RGS employee may be providing services to one or more RGS clients concurrent with the services being provided under this Agreement.

**5.3** Agency shall not have the ability to direct how services are to be performed, specify the location where services are to be performed, or establish set hours or days for performance of services, except as set forth in the **Exhibits**. Agency confirms that RGS employees are not assuming and are not expected to assume any Agency staff position(s).

**5.4** RGS employees may require access to Agency's computer systems and networks to complete the assigned services. RGS requires its employees to agree to appropriate system usage policies, which include a pledge not to use partner agency electronic equipment for anything other than partner agency work. (These policies can be provided to Agency upon request.)

**5.5** Agency shall not have any right to discharge any employee of RGS from RGS employment.

**5.6** RGS shall, at its sole expense, supply for its employees providing services to Agency pursuant to this Agreement any and all benefits, such as worker's compensation, disability insurance, vacation pay, sick pay, or retirement benefits; obtain and maintain all licenses and permits usual or necessary for performing the services; pay any and all taxes incurred as a result of the employee(s) compensation, including employment or other taxes; and provide Agency with proof of payment of taxes on demand.

**Section 6. General Liability Coverage.** RGS, pursuant to California Government Code Section 990, may satisfy its contractual liabilities with self-insurance and/or participate in a pooled risk purchasing program. RGS has and will continue to maintain a program of liability coverage against claims for injuries to persons or damages to property that may arise from or in connection with the performance of the work hereunder by RGS and its agents, representatives, employees, and subcontractors.

**6.1 Workers' Compensation Coverage.**

**6.1.1 General requirements.** RGS shall, at its sole cost and expense, maintain Workers' Compensation coverage and Employer's Liability coverage with limits of not less than \$1,000,000.00 per occurrence.

**6.1.2 Waiver of subrogation.** The Workers' Compensation coverage shall be endorsed with or include a waiver of subrogation in favor of Agency for all work performed by RGS, its employees, agents, and subcontractors.

## **6.2 Commercial General, Automobile, and Professional Liability Coverages.**

**6.2.1 General requirements.** RGS, at its own cost and expense, shall maintain commercial general and automobile liability coverage for the term of this Agreement in an amount not less than \$2,000,000 per occurrence, combined single limit coverage for risks associated with the work contemplated by this Agreement. RGS shall additionally maintain commercial general liability coverage in an amount not less than \$2,000,000 aggregated for bodily injury, personal injury, and property damage.

**6.2.2 Minimum scope of coverage.** RGS coverage may not be written on ISO forms but will always provide coverage at least as broad as the latest version of the following: (A) *General Liability*: Insurance Services Office Commercial General Liability coverage (occurrence form CG 0001); and (B) *Automobile Liability*: Insurance Services Office Business Auto Coverage form number CA 001, code 1 (any auto).

**6.3 Professional Liability Insurance.** RGS, at its own cost and expense, shall maintain for the period covered by this Agreement professional liability coverage for licensed professionals performing work pursuant to this Agreement in an amount not less than \$2,000,000 covering the licensed professionals' errors and omissions.

## **6.4 All Policies Requirements.**

**6.4.1 Coverage requirements.** Each of the following shall be included in the coverage or added as an endorsement:

- a. Agency and its officers, employees, and agents, shall be covered as additional covered parties with respect to RGS' general commercial, and automobile coverage for claims, demands, and causes of action arising out of or relating to RGS' performance of this Agreement and to the extent caused by RGS' negligent act, error, or omission.
- b. An endorsement to RGS' general commercial and automobile coverages must state that coverage is primary with respect to Agency and its officers, officials, employees and agents.
- c. All coverages shall be on an occurrence or an accident basis, and not on a claims-made basis.

**6.4.2 Acceptability of coverage providers.** All coverages required by this section shall be acquired through providers with a Bests' rating of no less than A: VII or through sources that provide an equivalent level of reliability.



- 6.4.3 Verification of coverage.** Prior to beginning any work under this Agreement, RGS shall furnish Agency with notifications of coverage and with original endorsements effecting coverage required herein. The notifications and endorsements are to be signed by a person authorized to bind coverage on its behalf. Agency reserves the right to require complete, certified copies coverage at any time.
- 6.4.4 Subcontractors.** RGS shall include all subcontractors as insureds under its coverage or shall furnish separate certificates and endorsements for each subcontractor. All coverages for subcontractors shall be subject to all of the requirements stated herein.
- 6.4.5 Variation.** During the term of this Agreement, RGS may change the insurance program in which it participates. RGS will provide reasonable notice of any such change to Agency and replacement copies of Certificates of Coverage and endorsements.
- 6.4.6 Deductibles and Self-Insured Retentions.** RGS shall disclose any self-insured retention if Agency so requests prior to performing services under this Agreement or within a reasonable period of time of a request by Agency during the term of this Agreement.
- 6.4.7 Maintenance of Coverages.** The coverages stated herein shall be maintained throughout the term of this Agreement and proof of coverage shall be available for inspection by Agency upon request.
- 6.4.8 Notice of Cancellation or Reduction in Coverage.** In the event that any coverage required by this section is reduced, limited, or materially affected in any other manner, RGS shall provide written notice to Agency at RGS earliest possible opportunity and in no case later than five business days after RGS is notified of the change in coverage.

## **Section 7. Legal Requirements.**

- 7.1 Governing Law.** The laws of the State of California shall govern this Agreement.
- 7.2 Compliance with Applicable Laws.** RGS and any subcontractors shall comply with all laws applicable to the performance of the work hereunder.
- 7.3 Reporting Requirements.** If there is a statutory or other legal requirement for RGS to report information to another government entity, RGS shall be responsible for complying with such requirements.
- 7.4 Other Governmental Regulations.** To the extent that this Agreement may be funded by fiscal assistance from another governmental entity, RGS and any subcontractors shall comply with all applicable rules and regulations to which Agency is bound by the terms of such fiscal assistance program.

- 7.5 Licenses and Permits.** RGS represents and warrants to Agency that RGS and its employees, agents, and any subcontractors have all licenses, permits, qualifications, and approvals of whatsoever nature that are legally required to provide the services contemplated by this Agreement. RGS represents and warrants to Agency that RGS and its employees, agents, and subcontractors shall, at their sole cost and expense, keep in effect at all times during the term of this Agreement any licenses, permits, and approvals that are legally required to practice their respective professions.
- 7.6 Nondiscrimination and Equal Opportunity.** RGS shall not discriminate on the basis of a person's race, religion, color, national origin, age, physical or mental handicap or disability, medical condition, marital status, sex, or sexual orientation, against any employee, applicant for employment, subcontractor, bidder for a subcontract, or participant in, recipient of, or applicant for any services or programs provided under this Agreement. RGS shall comply with all applicable federal, state, and local laws, policies, rules, and requirements related to equal opportunity and nondiscrimination in employment, contracting, and the provision of any services that are the subject of this Agreement.

## **Section 8. Keeping and Status of Records.**

- 8.1 Records Created as Part of RGS' Performance.** All final versions of reports, data, maps, models, charts, studies, surveys, photographs, memoranda, plans, studies, specifications, records, files, or any other documents or materials, in electronic or any other form, that RGS prepares or obtains pursuant to this Agreement and that relate to the matters covered hereunder shall be the property of Agency. RGS hereby agrees to deliver those documents to Agency upon termination of the Agreement, if requested. It is understood and agreed that the documents and other materials, including but not limited to those described above, prepared pursuant to this Agreement are prepared specifically for Agency and are not necessarily suitable for any future or other use.
- 8.2 Confidential Information.** RGS shall hold any confidential information received from Agency in the course of performing this Agreement in trust and confidence and will not reveal such confidential information to any person or entity, either during the term of the Agreement or at any time thereafter. Upon expiration of this Agreement, or termination as provided herein, RGS shall return materials which contain any confidential information to Agency. For purposes of this paragraph, confidential information is defined as all information disclosed to RGS which relates to Agency past, present, and future activities, as well as activities under this Agreement, which information is not otherwise of public record under California law. Agency shall notify RGS what information and documents are confidential and thus subject to this section 8.2.
- 8.3 RGS Books and Records.** RGS shall maintain any and all ledgers, books of account, invoices, vouchers, canceled checks, and other records or documents evidencing or relating to charges for services or expenditures and disbursements charged to Agency under this Agreement for a minimum of 3 years, or for any longer period required by law, from the date of final payment under this Agreement.

**8.4 Inspection and Audit of Records.** Any records or documents that Section 8.3 of this Agreement requires RGS to maintain shall be made available for inspection, audit, and/or copying at any time during regular business hours, upon oral or written request of Agency. Under California Government Code Section 8546.7, if the amount of public funds expended under this Agreement exceeds \$10,000.00, the Agreement shall be subject to the examination and audit of the State Auditor, at the request of Agency or as part of any audit of Agency, for a period of three years after final payment under the Agreement.

**Section 9. Non-assignment.** This Agreement is not assignable either in whole or in part without the written consent of the other party.

**Section 10. Amendments.** This Agreement may be amended or modified only by written Agreement signed by both Parties.

**Section 11. Validity.** The invalidity, in whole or in part, of any provisions of this Agreement shall not void or affect the validity of any other provisions of this Agreement.

**Section 12. Disputes.** Should any dispute arise out of this Agreement, Agency agrees that it shall only file a legal action against RGS, and shall not file any legal action against any of the public entities that are members of RGS.

**Section 13. Venue/Attorneys' Fees.** Any suit or action initiated by either party shall be brought in Alameda County, California. In the event of litigation between the Parties hereto to enforce any provision of the Agreement, the prevailing Party shall be entitled to reasonable attorney's fees and costs of litigation.

**Section 14. Mediation.** Should any dispute arise out of this Agreement, the Parties shall meet in mediation and attempt to reach a resolution with the assistance of a mutually acceptable mediator. Neither Party shall be permitted to file legal action without first meeting in mediation and making a good faith attempt to reach a mediated resolution. The costs of the mediator, if any, shall be paid equally by the Parties. If a mediated settlement is reached, neither Party shall be deemed the prevailing party for purposes of the settlement and each Party shall bear its own legal costs.

**Section 15. Employment Offers to RGS Staff.** Should Agency desire to offer permanent or temporary employment to an RGS employee who is either currently providing RGS services to Agency or has provided RGS services to Agency within the previous six months, said Agency will be charged a fee equal to the full-time cost of the RGS employee for one month, using the most recent RGS bill rate for the RGS employee's services to Agency. This fee is to recover RGS' expenses in recruiting the former and replacement RGS staff.

**Section 16. Entire Agreement.** This Agreement, including the **Exhibits**, comprises the entire Agreement.

**Section 17. Indemnification.****17.1 RGS' indemnity obligations.**

RGS shall indemnify, defend, and hold harmless Agency and its legislative body, boards and commissions, officers, and employees ("Indemnitees") from and against all claims, demands, and causes of action by third parties, including but not limited to attorneys' fees, arising out of RGS' performance of this Agreement, to the extent caused by RGS' negligent act, error, or omission. Nothing herein shall be interpreted as obligating RGS to indemnify Agency against its own negligence or willful misconduct.

**Training disclaimer**

Agency understands and acknowledges that RGS advisors may, as part of the scope of services under this Agreement, provide training on various matters including human resources, accounting, or management practices. The advice and guidance included in such training does not, and is not intended to, constitute legal advice; instead, all information, content, and materials provided are based on industry best practices, but may not be applicable in all situations. Agency staff should not act or refrain from acting on the basis of the information provided as part of a training without first seeking legal advice from counsel in its relevant jurisdiction and/or appropriate Agency approval. RGS' obligation to indemnify, defend, and hold harmless indemnities pursuant to this section 17.1 for professional errors and omissions shall not exceed \$500,000.

**17.2 Agency's indemnity obligations.** Agency shall indemnify, defend and hold harmless RGS and its officers, directors, employees and agents from any and all claims and lawsuits where such persons are named in the lawsuit solely because of a duty any of them performs in accordance with the services outlined in Exhibit B.

It is the intent of the parties here to define indemnity obligations that are related to or arise out of Agency's actions as a governmental entity. Thus, Agency shall be required to indemnify and defend only under circumstances where a cause of action is stated against RGS, its employees or agents:

- a. which is unrelated to the skill they have used in the performance of the duties delegated to them under this Agreement;
- b. when the allegations in such cause of action do not suggest the active fraud or other misconduct of RGS, its employees, or agents; or
- c. where an Agency employee, if he had been acting in a like capacity, otherwise would be acting within the scope of that employment.

Whenever Agency owes a duty hereunder to indemnify RGS, its employees or agents, Agency further agrees to pay RGS a reasonable fee for all time spent by any RGS employee, or spent by any person who has performed work pursuant to this Agreement, for the purpose of preparing for or testifying in any suit, action, or legal proceeding in connection with the services the assigned employee has provided under this Agreement.

**17.3 Obligations and indemnity related to defined benefit retirement plan participation.**

- a. RGS and Agency acknowledge and agree that, if Agency participates in a defined benefit plan (such as CalPERS, a pension plan, or Social Security) ("Retirement Program"), it is possible that the Retirement Program may find that RGS employees providing services pursuant to this Agreement are employees of Agency and should be registered with the Retirement Program as employees of Agency, which possibility is the same as if Agency were contracting with a private consulting firm. Pursuant to Section 5.1 of this Agreement, Agency has an obligation to treat all persons working for or under the direction of RGS as agents and employees of RGS, and not as agents or employees of Agency. Agency agrees not to ask RGS employees for personally identifying information.
- b. In the event that the Agency's Retirement Program initiates an inquiry that includes examination of whether individuals providing services under this Agreement to Agency are Agency's employees, Agency shall inform RGS within five business days and share all communications and documents from the Retirement Program that it may legally share. In the event that either RGS or Agency files an appeal or court challenge, RGS and Agency each agree to cooperate with each other in responding to the inquiry and any subsequent administrative appeal or court challenge of an adverse determination. Notwithstanding Section 17.1 of this Agreement, RGS and Agency shall each bear their own costs in responding to an inquiry by a Retirement Program, including but not limited to costs of an administrative appeal or court challenge.
- c. In the event that any RGS employee or subconsultant providing services under this Agreement is determined by a court of competent jurisdiction or the Agency's Retirement Program to be eligible for enrollment in the Retirement Program as an employee of the Agency, to the fullest extent of the law, Agency shall indemnify, defend, and hold harmless RGS for any Retirement Program contribution payment that Agency is required as a result to make to the Retirement Program as well as for the payment of any penalties and interest on such payments, if any.

**Section 18. Notices.** All notices required by this Agreement shall be given to Agency and RGS in writing, by first class mail, postage prepaid, or by email transmission addressed as follows:

**Agency:** INFO

**RGS:** Regional Government Services Authority  
P. O. Box 1350  
Carmel Valley, CA 93924  
Email: contracts@rgs.ca.gov



Notice by email transmission shall be deemed given upon verification of receipt if received before 5:00p.m. on a regular business day or else on the next business day.

IN WITNESS WHEREOF, the Parties hereto have caused this Agreement to be executed on the date first written by their respective officers duly authorized on their behalf.

DATED: \_\_\_\_\_

**Agency**

By: \_\_\_\_\_

**AGENCY**

DATED: \_\_\_\_\_

**Regional Government Services Authority**

By: \_\_\_\_\_

Sophia Selivanoff, Executive Director

**Exhibit A****Compensation.**

1. **Fees.** Agency agrees to pay to RGS the hourly rates set forth in the tables below for each RGS employee providing services to Agency, which are based in part on RGS' full cost of compensation and support for the RGS employee(s) providing the services herein described.

RGS and Agency acknowledge and agree that compensation paid by Agency to RGS under this Agreement is based upon RGS' costs of providing the services required hereunder. The Parties further agree adjustments to the hourly bill rate shown below for "RGS Staff" will be made on July 1 of each year, when RGS' hourly bill rates will be adjusted by the percentage change in the Consumer Price Index (Bureau of Labor Statistics, CPI for urban wage earners and clerical workers in the San Francisco-Oakland-San Jose area) ("CPI") for the twelve months through the end of December of the prior year. Irrespective of the movement of the CPI, RGS will not adjust its hourly rates downward; nor will RGS adjust its hourly rates upward in excess of a five percentage (5%) change, excepting instances where there was no increase in the prior year's hourly rates. In that event, RGS will adjust its hourly rates by the full percentage change in the CPI for the twelve months through the end of December of the prior year.

2. **Reimbursement of RGS' Direct Costs.** Agency shall reimburse RGS for direct external costs. Direct external costs, including such expenses as travel or other costs incurred for the exclusive benefit of the Agency are not included in the hourly bill rate and, will be invoiced to Agency when received and without mark-up. These external costs will be due upon receipt.
3. **Terms of Payment.** RGS shall submit invoices monthly for the prior month's services. Invoices shall be sent approximately 10 days after the end of the month for which services were performed and are due and shall be delinquent if not paid within 30 days of receipt. Delinquent payments will be subject to a late payment carrying charge computed at a periodic rate of one-half of one percent per month, which is an annual percentage rate of six percent, which will be applied to any unpaid balance owed commencing 7 days after the payment due date. Additionally, in the event the Agency fails to pay any undisputed amounts due to RGS within 15 days after payment due date, then Agency agrees that RGS shall have the right to consider said default a total breach of this Agreement and the duties of RGS under this Agreement may be terminated by RGS upon 5 working days' advance written notice.

**Payment Process/Address. RGS prefers invoices be paid electronically.**

RGS will reach out to your invoicing contact to establish and provide electronic payment instructions.

However, should you have questions or need other payment options, please contact:

Lindsay Rice, RGSA Accounting Manager  
(650) 587-7300X12 | [lrice@rgs.ca.gov](mailto:lrice@rgs.ca.gov)

***[EXHIBIT A CONTINUES ON FOLLOWING PAGE]***



**AGENCY CONTACTS**

**Agency Billing Contact.** Invoices are sent electronically only. Please provide the contact person to whom invoices should be sent:

NAME	EMAIL

**Agency Insurance Contact.** Please provide the contact person to whom the certificate of coverage should be sent:

NAME	EMAIL

**RGS STAFF RATES**

TITLE	HOURLY RATE*
Strategic Services Consultant	\$176
Senior Advisor	\$150
Advisor	\$128
Technical Specialist	\$114
Administrative Specialist	\$102

*\*The Hourly Rate does not include direct external costs which will be invoiced to Agency with no markup and will fall outside of the not-to-exceed (if established) for services provided.*

**Exhibit B**

**Scope of Services.** Subject to the terms and conditions of this Agreement, Regional Government Services Authority (RGS) shall perform the functions as described below:

- Perform the functions as assigned by the RGS lead advisor.
- Be reasonably available to perform the services during the normal work week.
- Meet regularly and as often as necessary for the purpose of consulting about the scope of work performed with the appropriate Agency project manager and with the RGS lead.
- Perform other duties as are consistent with the services described herein and approved by the RGS lead advisor.
- Perform related work as required as approved by the RGS lead advisor.
- Such employee may perform services at Agency offices available or at other locations.

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Agenda Explanation  
 Livermore-Amador Valley  
 Water Management Agency  
 Board of Directors  
 May 15, 2024

## **ITEM NO. 17 PROPOSED OPERATING AND CAPITAL BUDGET FOR FISCAL YEAR 2024/25**

### **Action Requested**

Approve the proposed Operating and Capital Budget for Fiscal Year 2024/25.

### **Summary**

LAVWMA is required to adopt its fiscal year budget by June 30 each year. The proposed operating budget of \$5,108,294 is a 5.70% increase from the FY2023/24 budget. The total revenue requirement of \$12,155,194 is a 2.29% increase from the FY2023/24 budget. Debt service payments consist of \$2,024,646 for the Repair Project and \$4,622,254 for the Expansion Project. Debt service for the Repair Project and the Expansion Project are a decrease of 0.05%. The debt service will remain at the current levels for the foreseeable future due to the successful refunding process that was completed in 2021.

The annual deposit of \$400,000 to the Renewal & Replacement Fund (R&R) remains the same as last year. R&R Projects total \$4,070,000 and several are being carried over from last year. They are related to design improvements to the San Leandro Sample Station, cathodic protection projects on the pipelines, replacement of valve actuators, additional pipeline inspection and repair, continued efforts on easements and FEMA/CalOES for the emergency Livermore Pipeline Replacement Project. 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 approximately 4%. 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 FY2024/25 are estimates based on data through April 30, 2023 and the expenses for FY2024/25 are as proposed in the budget. PG&E electrical costs are 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 COLA increases

The Proposed Operating and Capital Budget for Fiscal Year 2024/25 is attached. The budget is nearly identical to DSRSD's detailed O&M Budget, which is also included in the attachment. Staff will highlight budget items and answer questions at the Board meeting. The proposed budget has been discussed with the LAVWMA Staff Advisory Group.



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Agenda Explanation  
Livermore-Amador Valley  
Water Management Agency  
Board of Directors  
May 15, 2024

**Recommendation**

It is recommended that the Board approve the proposed Operating and Capital Budget for Fiscal Year 2024/25.

**Attachments**

Operating and Capital Budget for Fiscal Year 2024/25.



# **LIVERMORE-AMADOR VALLEY WATER MANAGEMENT AGENCY OPERATING AND CAPITAL BUDGET**

## **FISCAL YEAR 2024/25**

**Approved by the LAVWMA Board \_\_\_\_\_**

LAVWMA FY2024/25 Budget

LIVERMORE-AMADOR VALLEY WATER MANAGEMENT AGENCY  
OPERATING AND CAPITAL BUDGETS  
FISCAL YEAR 2024/25

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# LAVWMA FY2024/25 Budget

## LIVERMORE-AMADOR VALLEY WATER MANAGEMENT AGENCY OPERATING AND CAPITAL BUDGETS FISCAL YEAR 2024/25

### EXECUTIVE SUMMARY

#### OPERATING BUDGET

The proposed operating budget of \$5,108,294, is a 5.70% increase from the FY2023/24 budget. The total revenue requirement of \$12,155,194 is a 2.29% increase from the FY2023/24 budget. Debt service payments consist of \$2,024,646 for the Repair Project and \$4,622,254 for the Expansion Project for a total of \$7,046,900. The DSRSD budget for LAVWMA includes an increase in labor costs to account for a COLA adjustment as well. In the past, DSRSD estimated costs were typically well below actual expenses and previous budgets reflected those costs. That is no longer the case.

Expenses for PG&E Power and contract services will also exceed the current budget due to extended pumping to manage storm flows and ever increasing PG&E rates.

The FY2023/24 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 9.7%. 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 \$.239/kWh.
- Monitoring costs are above budget due to the costs of conducting the priority pollutant monitoring that is required one time during the five-year permit cycle.
- Management expenses will be above budget due to the General Manager recruitment process, Livermore Pipeline project, and issues related to the transition in Treasurer responsibilities.

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 \$2,257,000 could be justified. However, other estimation methods could also support a budget of \$2,101,000. Since this is so close to DSRSD's estimate of \$2,065,755 that figure is being used for FY2024/25.

The total EBDA O&M budget of \$1,008,140 is 2.42% 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 20.9% as compared to 16.3% last year. It is in LAVWMA's best interest 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

## LAVWMA FY2024/25 Budget

retroactive to July 1, 2021. EBDA costs for FY2024/25 are now based on the new Master Agreement.

The proposed FY2024/25 operating budget considers projected FY2023/24 expenditures and is based on the detailed budget, copy attached, prepared by DSRSD pursuant to the Maintenance Agreement. DSRSD's costs reflect a 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 FY2024/25 Budget include the following:

- PG&E power costs are increasing 9.62% to account for rate increases and actual costs.
- Materials/Supplies and Contractual costs are decreasing to reflect actual costs for this year.
- Permits and insurance are increasing since insurance will be nearly \$145,000 this year.
- EBDA costs are increasing as described below.
- Administrative costs are increasing to include the costs for the new firm that will provide administrative and accounting services.

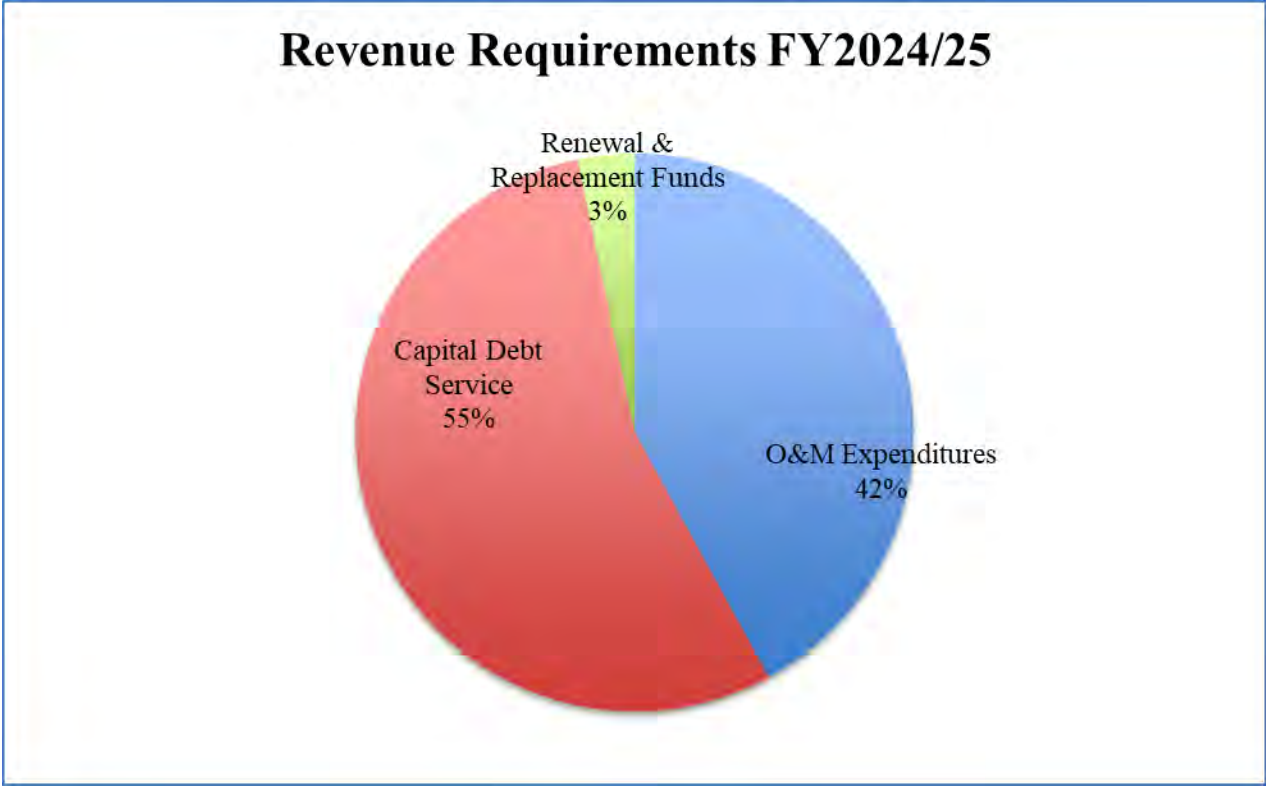
### CAPITAL BUDGET

The FY2023/24 capital budget was \$9,060,000, of which approximately \$7,006,000 is projected to be spent this fiscal year. The FY2024/25 capital budget of \$4,070,000 is for the renewal and replacement of LAVWMA and EBDA facilities and includes design improvements at the San Leandro Sample Station (SLSS), cathodic protection improvements, replacement of valve actuators at the pump station, pipeline inspection, Air/Vac valve assessment near the EBDA connection, and other items. 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 FY2024/25 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. It is assumed that a deposit of approximately \$6,200,000 will come from Livermore for the soleuse pipeline replacement project. The fund value remains at an acceptable level. The following pie chart illustrates the allocation of the \$12,133,194 in total revenue requirements for FY2024/25, which is an increase of 2.29% from last year.

LAVWMA FY2024/25 Budget



**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.



## LAVWMA FY2024/25 Budget

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

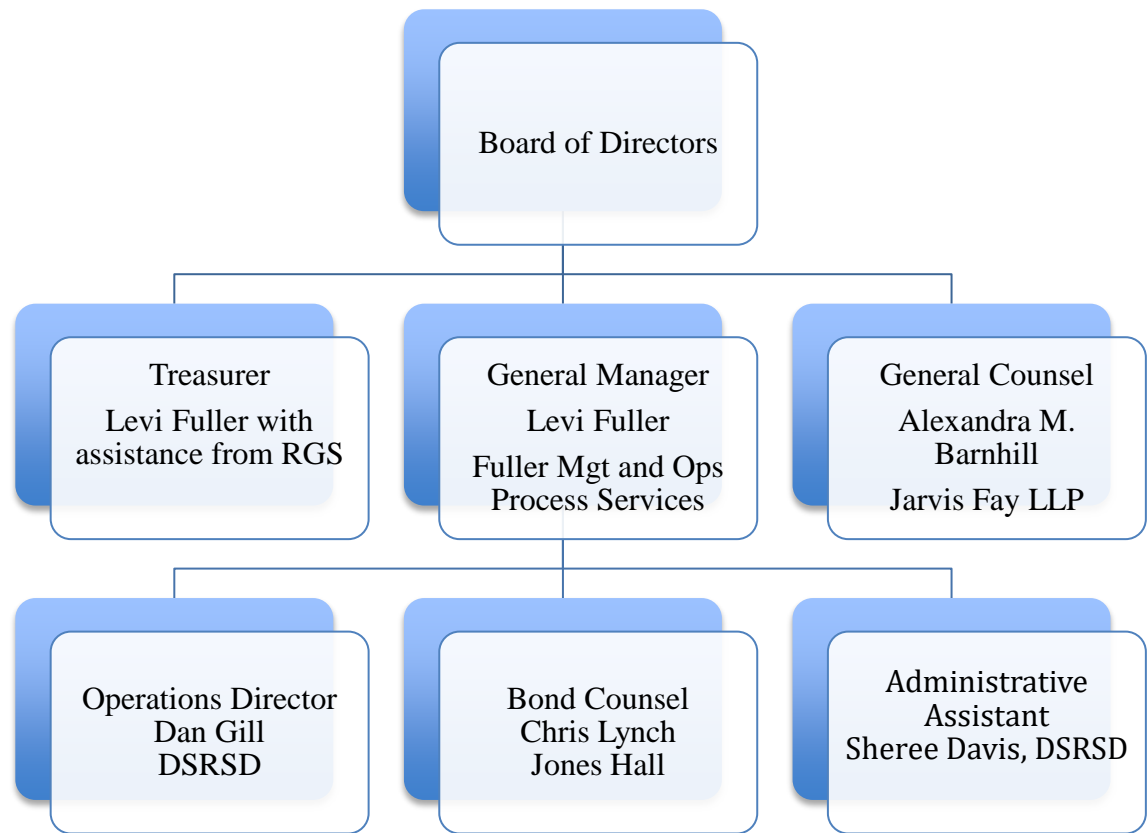
To carry out our Mission, LAVWMA will pursue the following goals:

- **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 FY2024/25 is shown in the following chart.

LAVWMA FY2024/25 Budget



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 FY2024/25 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.

## LAVWMA FY2024/25 Budget

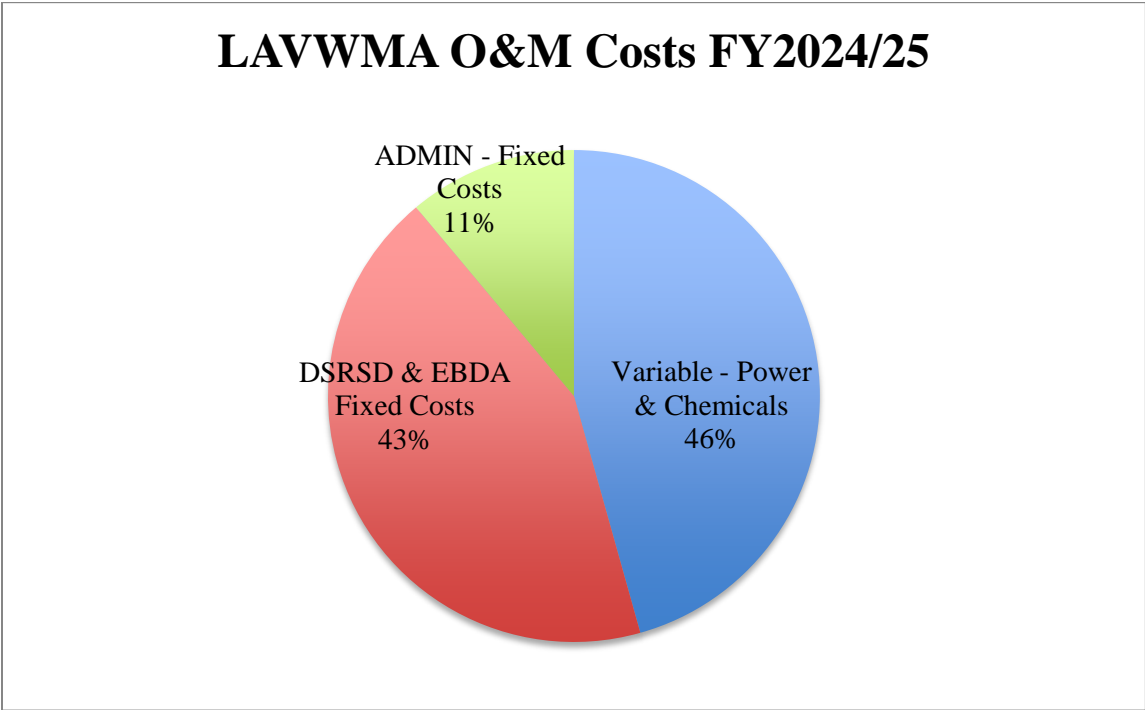
OPERATIONS AND MAINTENANCE					
	<b>VARIABLE COSTS</b>				
	DSRSD Maintenance Agreement (Power)	\$ 1,884,500	\$ 2,067,957	\$ 2,065,755	9.62%
	EBDA O&M (See Table, Section 2.2.1)	243,378	246,362	266,042	9.31%
	Subtotal - O&M Variable Costs	2,127,878	2,314,319	2,331,797	9.58%
	<b>FIXED COSTS</b>				
	DSRSD Maintenance Agreement				
	Labor	1,138,299	930,753	1,182,824	3.91%
	Materials/Supplies	129,250	72,836	92,190	-28.67%
	Contractual	162,350	56,688	144,130	-11.22%
	Monitoring/Testing	35,600	43,317	45,600	28.09%
	Utilities (fixed)	3,150	10,778	3,150	0.00%
	Non Routine	8,000	-	-	-100.00%
	EBDA O&M (See Table, Section 2.2.3)	740,901	742,325	742,098	0.16%
	EBDA Total	984,279	988,686	1,008,140	2.42%
	Subtotal - O&M Fixed Costs	2,217,550	1,856,697	2,209,992	-0.34%
	<b>ADMIN/MGMT</b>				
	Mgr/Treas/Counsel/Board	276,200	346,336	371,500	34.50%
	Services/Supplies/Misc	79,364	61,100	63,000	-20.62%
	Permits/Insurance	132,004	144,642	132,004	0.00%
	Subtotal Admin/Mgmt	487,568	552,078	566,504	16.19%
	Subtotal All Fixed Costs	2,705,118	2,408,775	2,776,496	2.64%
	<b>TOTAL O&amp;M COSTS</b>	<b>\$ 4,832,996</b>	<b>\$ 4,723,094</b>	<b>\$ 5,108,294</b>	<b>5.70%</b>
		FY2023/24	FY2022/23	FY2023/24	Change From
		Proposed	Projected	Proposed	Adopted
		Budget	Actual	Budget	FY2022/23
	<b>CAPITAL PROGRAM FUNDING</b>				
	Replacement Fund	400,000	400,000	400,000	0.00%
	Repair Debt Service	2,025,620	2,025,620	2,024,646	-0.05%
	Expansion Debt Service	4,624,480	4,624,480	4,622,254	-0.05%
	SUBTOTAL	\$ 7,050,100	\$ 7,050,100	\$ 7,046,900	-0.05%
	<b>TOTAL REVENUE REQUIREMENTS</b>	<b>\$11,883,096</b>	<b>\$11,773,194</b>	<b>\$12,155,194</b>	<b>2.29%</b>



# LAVWMA FY2024/25 Budget

## 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 \$2,331,797 and make up 46% of LAVWMA’s total operating budget. Pumping and chemical costs for FY2024/25 are projected to be 9.58% 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 \$0.239 this year as compared with just under \$.212 last year. Both DSRSD and EBDA average \$0.04-\$0.05 more than LAVWMA. PG&E rates could increase another 10% in FY24/25. The FY2024/25 Budget is based on actual and projected costs. The following table details the variable costs for EBDA.

Facility	Variable Cost	LAVWMA Cost, 19.32%
General Administration	\$76,000	\$15,909
Outfall & Forcemains	\$215,000	\$10,036 (22.3%)
Marina Dechlor Facility	\$302,000	\$68.898
Oro Loma Pump Station	\$645,000	\$137,535
Bay & Effluent Monitoring	\$290,000	\$63,225
Total	\$1,801,900	\$295,602

## LAVWMA FY2024/25 Budget

The total estimate for EBDA Variable O&M Costs is 90% of the above total, or \$266,042 for a 9.31 % increase from last year. 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 hypochlorite dosage at their treatment plants. The other increases are due to rising PG&E costs and LAVWMA's increase in variable rate due to higher flows than last year. The Regional Board did approve a blanket permit amendment which allows a modest chlorine residual at the final EBDA discharge, which will save substantial costs in sodium bisulfite, which is used to neutralize chlorine residual.

### 2.2.2 Fixed Costs - DSRSD Maintenance Agreement

Operation and maintenance of LAVWMA facilities for FY2024/254 is estimated by DSRSD to require 5,380 fully burdened labor hours. This is slightly less than last year. Costs for these items are based on projected costs for FY2023/24 and anticipated needs for FY2024/25. DSRSD's budget shows \$1,182,824 for labor, which is above this year's projected costs of \$930,753. The proposed budget includes \$1,182,824 for DSRSD labor, which includes a cost of living adjustment 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 19.4% as compared to 30.1% last year for a total of \$56,999. LAVWMA's share of the permit fee, \$698,899 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 \$54,922. 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 \$11,203.

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 Fixed Cost	Fixed Cost	LAVWMA Percent Cost	LAVMWA Estimated Cost
General Administration	\$1,454,709	26.1%	\$379,679
Outfall & Forcemains	\$5,000	26.1% * 22.3% = 5.8%	\$291
Marina Dechlor Facility	\$8,000	26.1%	\$2,088

## LAVWMA FY2024/25 Budget

<b>Facility and Total Fixed Cost</b>	<b>Fixed Cost</b>	<b>LAVWMA Percent Cost</b>	<b>LAVMWA Estimated Cost</b>
Oro Loma Pump Station	\$15,000	26.1%	\$3,915
Bay & Effluent Monitoring	\$481,994	26.1%	\$131,284
NPDES Permit Fee	\$691,768	26.62%	\$184,172
RMP Fee	\$293,760	30.11%	\$88,445
Nutrients Fee	\$270,608	20.29%	\$54,922
Alternative Monitoring and Reporting	\$33,609	33.33%	\$11,203
<b>Total</b>	<b>\$3,254,448</b>		<b>\$824,554</b>

Historically, EBDA has averaged approximately 90% of budget for the fixed costs listed above. Accordingly, \$742,098 is included in the FY24/25 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 \$566,504 as compared with \$487,568 last year or an increase of 16.19%. The increase is primarily due to costs associated with the transition from DSRSD serving as Treasurer to the LAVWMA General Manager assuming that role. There are also costs associated with using Regional Government Services for administration and accounting. 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 FY2024/25 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 \$4,070,000 cost of capital projects in FY2024/25. City of Livermore will be billed approximately \$6,200,000 for the emergency pipeline replacement project plus interest lost. Reimbursement for part of the pipeline replacement project cost may be recovered from FEMA and CalOES. 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 FY2023/24. The second table lists all recommended projects for FY2024/25. All projects have been recommended and vetted by DSRSD staff.

## LAVWMA FY2024/25 Budget

<b>FY2023/24 Capital Program Expenditures</b>	
Purchase three new pumps and rebuild motors	\$350,000
San Leandro Sample Station Design Improvements	\$150,000
MCCs and Soft Starters	\$164,520
Cathodic Protection Projects	\$650
PLC / SCADA Upgrade at the Pump Station	\$15,000
Pipeline Inspection	\$55,000
Smart Detectors on Ari/Vac and Air Release Valves	\$6,615
LAVWMA Flow Meter Replacements	\$6,000
Livermore Pipeline Replacement	\$6,200,000
Other Misc. LAVWMA	\$40,000
Other Misc. EBDA	\$0
Cip Planning / Management Contingency	\$18,000
<b>Total Expenditures</b>	<b>\$7,005,785</b>

<b>FY2023/24 Capital Program Expenditures</b>		
<b>Project</b>	<b>Description</b>	<b>Cost</b>
San Leandro Sample Station (SLSS) Design Improvements	Discharges from LAVWMA pump station are conveyed to the East Bay Dischargers Authority (EBDA) or the San Lorenzo Creek via the San Leandro sample station (SLSS). The project consists of improvements to the SLSS to improve automation and flow control. The scope of work includes the installation of new flow control valves, pressure relief valves, flow meters, chlorine residual analyzers, miscellaneous instrumentation improvements, and programming modifications to the programmable logic controllers and SCADA system.	\$1,675,000
Cathodic Protection Projects	Treated wastewater is conveyed from the LAVWMA Pump Station to an outfall owned by the East Bay Dischargers 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 the cathodic protection system, including but not limited to, repairs to the existing impressed current system, installation of	\$250,000



## LAVWMA FY2024/25 Budget

<b>FY2023/24 Capital Program Expenditures</b>		
<b>Project</b>	<b>Description</b>	<b>Cost</b>
	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	The wastewater treatment plant's SCADA system replacement project is currently in design. Based on a preliminary construction cost provided by the design build consultant, LAVWMA's share of the project is proportional to the number of LAVWMA programmable logic controllers (PLCs) compared to DSRSD PLCs that will be replaced.	\$600,000
Pipeline Inspection	The project consists of inspection of selected portions of the LAVWMA conveyance pipeline system. The findings of this study will be used to identify sections of the pipeline that are in need of repairs and/or to program future projects to improve and/or rehabilitate these sections of pipe. The project will also incorporate a spot repair of approximately 1000 linear feet of pipeline that was previously identified during the 1st phase of the inspection study (2021). Labor required to support the project is also included in the project budget.	\$850,000
Replace seventeen valve actuators at the pump station	The LAVWMA Pump Station is equipped with valves that are controlled by electric actuators. The electric valve actuators were installed approximately 20 years ago and are nearing the end of their useful life. The project consists of the replacement of 17 valve actuators.	\$95,000
Replace Exposed Section of Livermore Pipeline – A Sole Use Fund Project	The LAVWMA Livermore Pipeline conveys treated effluent from the Livermore wastewater treatment plant 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	\$200,000

## LAVWMA FY2024/25 Budget

<b>FY2023/24 Capital Program Expenditures</b>		
<b>Project</b>	<b>Description</b>	<b>Cost</b>
	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. The project is substantially complete. The budget provides allowance for project closeout work, including but not limited to the acquisition of final property easements, FEMA reimbursements, and other miscellaneous project-related expenses.	
Air/Vac Valve Assessment and Resolution of air 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.	\$100,000
Evaluation of four 600HP pumps and motors	The project consists of the replacement of four 600 HP pumps that are nearing the end of their useful life and the rehabilitation of their respective motors, including the replacement of the motor's resistance temperature detectors (RTDs). In FYE25, the scope of work includes a condition assessment of four (4) pumps. The findings of this condition assessment will identify the improvements that required, the costs to implements these improvements and the recommended timing	\$150,000

## LAVWMA FY2024/25 Budget

<b>FY2023/24 Capital Program Expenditures</b>		
<b>Project</b>	<b>Description</b>	<b>Cost</b>
Backup Power Improvements at the Pump Station	DSRSD staff has determined that there are viable options to set up a contract to rent the necessary step-up transformer and generator and recommends deleting this project.	\$0
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
<b>Total Expenditures</b>		<b>\$4,070,000</b>

**2.3 Changes from FY2023/24 Budget**

FY2023/24 expenditures are projected to come in slightly under budget. The annual reconciliation process will resolve any over or under payments. The FY2024/25 Budget is 2.29% more than FY2023/24 in Total Revenue Requirement. Total O&M costs are 5.70% 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 FYE24 and FYE25.

<b>R &amp; R Fund Balances, 6/30/24</b>	<b>Joint</b>	<b>Dual</b>	<b>Sole</b>	<b>Total</b>
<b>Start of year</b>	14,000,000	433,526	1,621,874	16,055,400
<b>Deposits</b>	400,000	0	0	400,000
<b>Interest Earnings</b>	600,000	1,431	5,352	606,783
<b>ProJected Expenditures</b>	7,005,785	0	0	7,005,785
<b>End of Year, 6/30/24</b>	7,994,215	434,957	1,627,226	10,056,398

## LAVWMA FY2024/25 Budget

<b>R &amp; R Fund Balances, 6/30/25</b>	<b>Joint</b>	<b>Dual</b>	<b>Sole</b>	<b>Total</b>
<b>Start of year</b>	7,994,215	431,863	1,627,226	10,053,304
<b>Deposits</b>	6,800,000	0	0	6,800,000
<b>Interest Earnings</b>	600,000	1,425	5,370	606,795
<b>Projected Expenditures</b>	4,070,000	0	200,000	4,270,000
<b>End of Year, 6/30/25</b>	11,324,215	433,288	1,432,596	13,190,099

As discussed previously, it is recommended that the annual contribution to the R&R Fund be continued at the \$400,000 level. The Sole Use Fund will be reimbursed by City of Livermore. Funds from CalOES/FEMA would be distributed to City of Livermore. The following table for the last several years plus the estimated data for FY2023/24 and recommendations for FY2024/25 show that LAVWMA maintaining the Joint Use R&R Fund at a sustainable level since FY2010/11. The annual contribution should be reviewed annually.

<b>R&amp;R Joint Use History</b>				
<b>Fiscal Year</b>	<b>Contributions</b>	<b>Interest</b>	<b>Expenses</b>	<b>Net</b>
FY2013/14	300,000	51,626	(411,885)	(60,259)
FY2014/15	300,000	45,064	(353,404)	(8,340)
FY2015/16	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	(7,005,785)	(5,955,785)
FY2024/25	400,000	6,680,000	(4,070,000)	3,010,000
<b>Total</b>	<b>4,100,000</b>	<b>2,342,159</b>	<b>(16,690,348)</b>	<b>(3,568,189)</b>

### 3.2 Discussion of Capital Expenditures Proposed for FY2024/25

The following table summarizes \$4,070,000 of anticipated FY2024/25 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.

<b>FY2024/25 Capital Program Expenditures *Carryover</b>	
*San Leandro Sample Station Design Improvements	\$1,675,000
*Cathodic Protection Projects	\$250,000
*SCADA/PLC Upgrade at the Pump Station	\$600,000
*Pipeline Inspection	\$850,000



## LAVWMA FY2024/25 Budget

*Replace 17 Valve Actuators at Pump Station	\$95,000
Evaluation of Four 600 HP Pumps and Motors	\$150,000
*Livermore Pipeline Replacement	\$200,000
*Air/Vac Valve Assessment and Resolution at EBDA line	\$100,000
*Back Up Power Improvements at Pump Station	\$0
Other Misc. LAVWMA Renewal/Replacements	\$50,000
Other Misc. EBDA Renewal/Replacements	\$50,000
CIP Planning/Mgmt/Contingency	\$50,000
<b>Total Expenditures</b>	<b>\$4,070,000</b>

### 4.0 FY2024/25 Member Agency Cost Sharing & Schedule

Member Agency Costs FY2024/25					
	Total	Livermore	DSRSD/Pleasanton	DSRSD	Pleasanton
Variable O&M	\$ 2,331,797	\$ 816,129	\$ 1,515,668		
Fixed O&M	2,751,496	828,201	1,923,296		
Sole Use Fixed O&M	25,000	25,000			
Total O&M	5,108,293	1,669,329	3,438,964		
Replacement Fund	400,000	120,400	279,600		
Repair Debt	2,024,646	808,846	1,215,800		
Expansion Debt	4,622,254	1,040,932	3,581,323		
EBDA Debt	-	-	-		
Total Capital Costs	7,046,900	1,970,178	5,076,723		
<b>Total Revenue Required</b>	<b>\$ 12,155,194</b>	<b>\$ 3,639,507</b>	<b>\$ 8,515,687</b>		
Semi Annual O&M Advance	2,554,147	834,665	1,719,482		
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	\$ 6,079,197	1,820,199	4,258,997		
Total January 1 Advance	\$ 6,079,197	\$ 1,820,199	\$ 4,258,998		
<b>Percentages</b>					
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 – FY2024/25

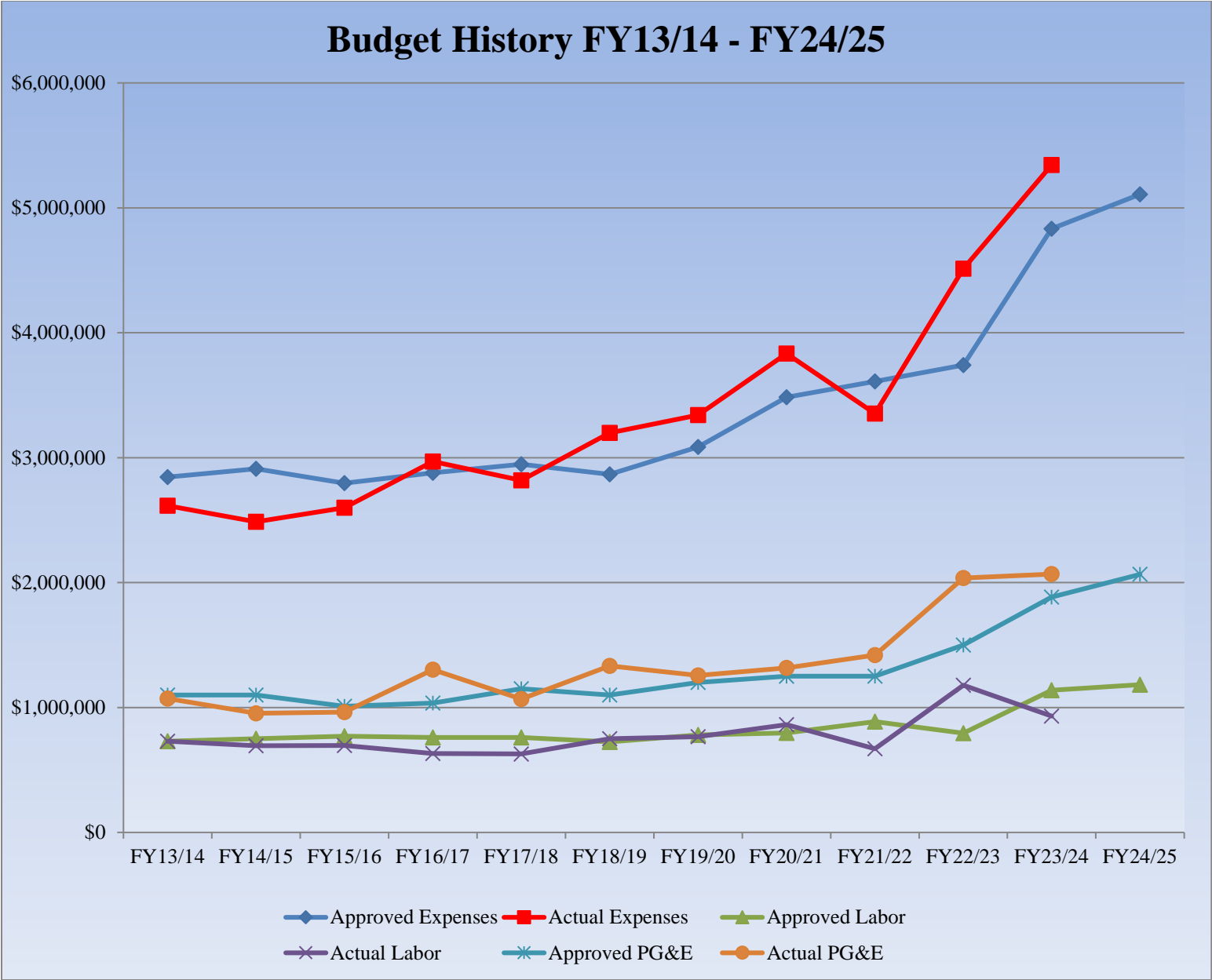
The following charts show expense trends from FY2013/14 through FY2024/25. The charts show the following:

- 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

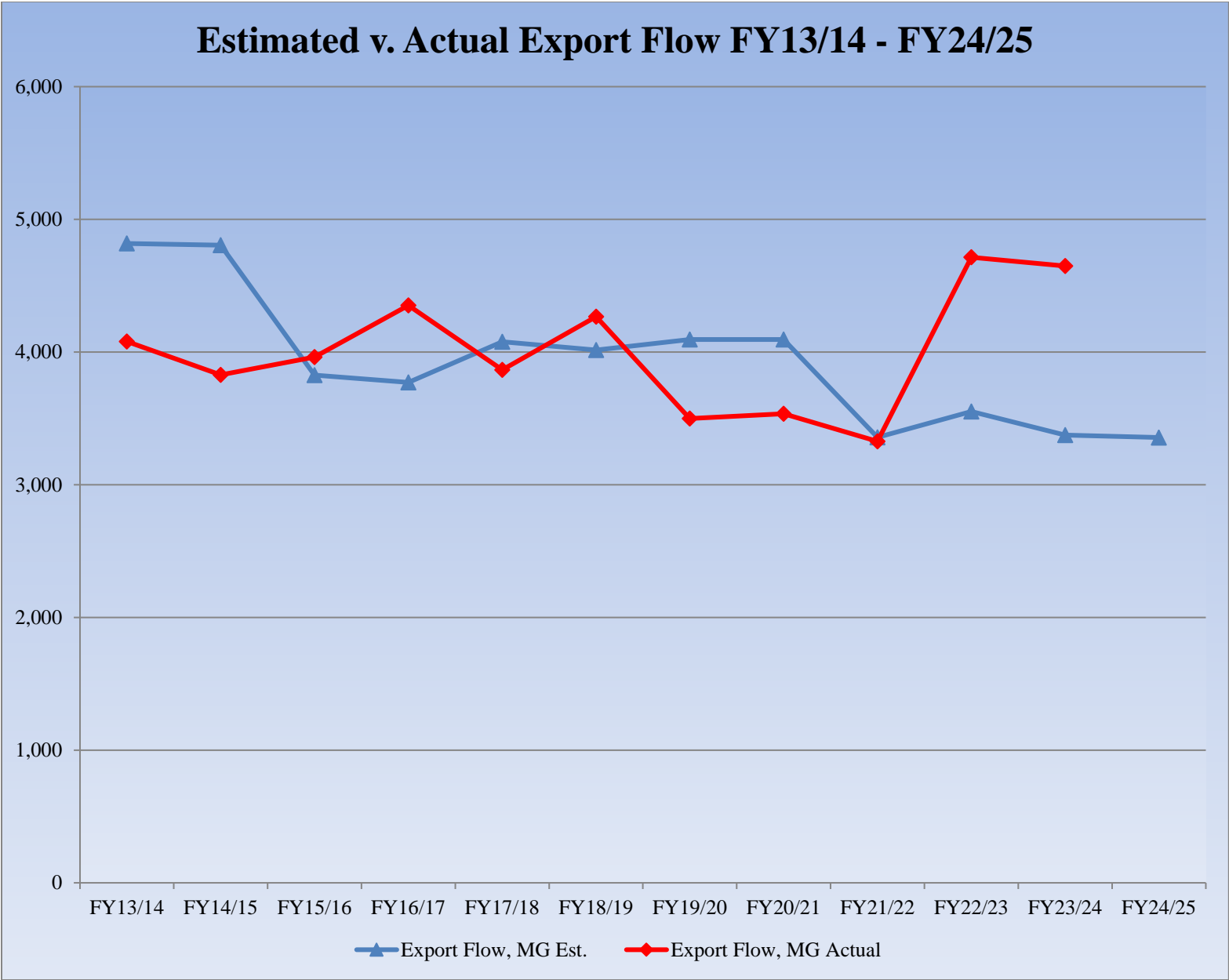
## LAVWMA FY2024/25 Budget

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 estimated to be \$616/MG as compared with \$445/MG last year, while the full disposal cost, including EBDA costs is approximately \$1,522 versus \$1,149 last year. This year's estimated costs are much higher than last year actual due to lower projected flows that 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 storms in the last two years changed that significantly.

LAVWMA FY2024/25 Budget

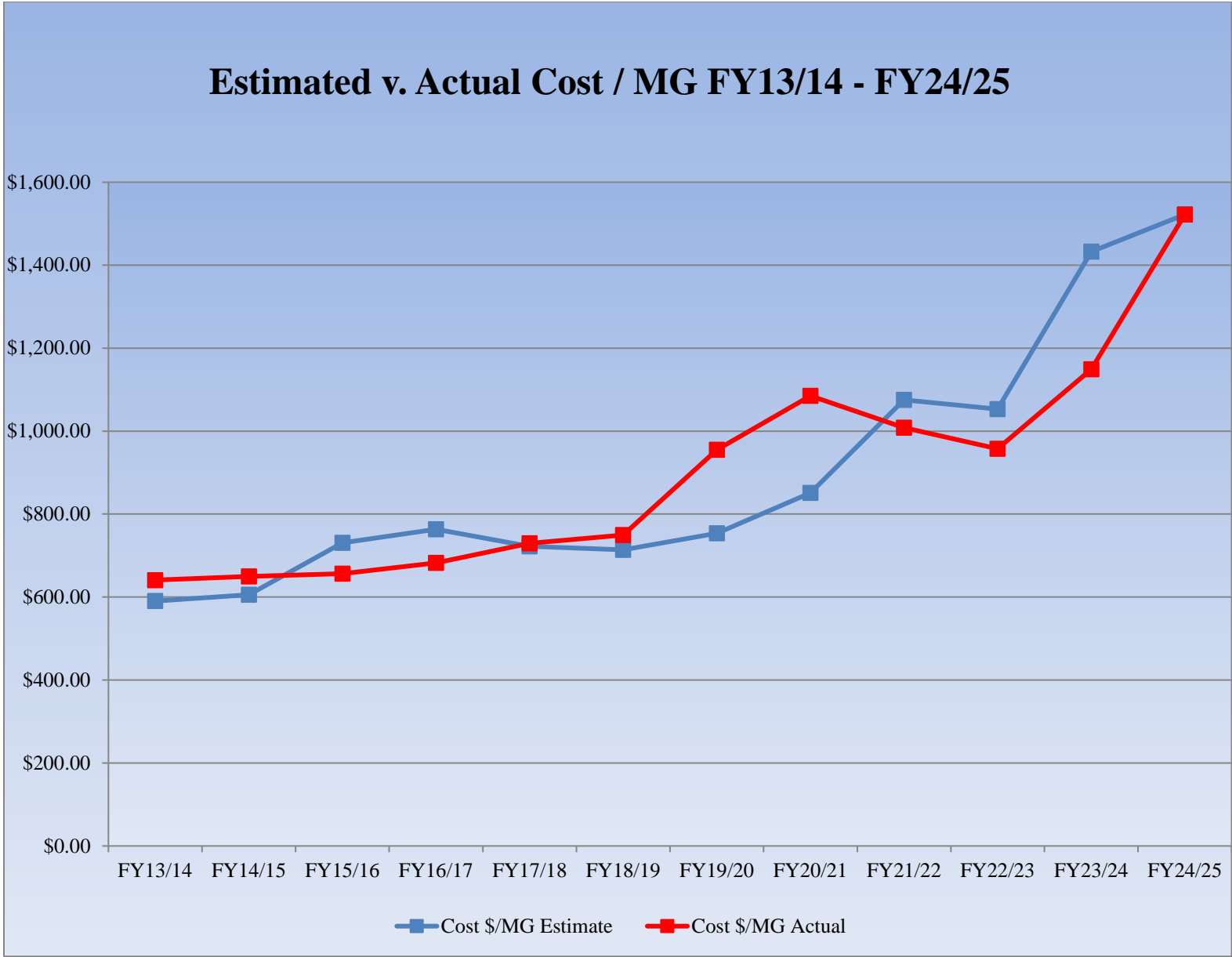


LAVWMA FY2024/25 Budget





LAVWMA FY2024/25 Budget



April 29, 2024

Mr. Levi Fuller  
LAVWMA General Manager  
7501 Dublin Blvd  
Dublin, CA 94568

**Subject: Proposed LAVWMA Fiscal Year 2024-2025 Operation & Maintenance Budgets**

Dear Levi:

Attached is the proposed budget for the operation and maintenance (O&M) of the LAVWMA facilities during Fiscal Year (FY) 2024-2025. DSRSD staff has reviewed the FY 2024-2025 budget proposed as part of the District's two-year budget process last year, and recommends no net changes to the original proposal for FY 2024-2025, which totals \$3,530,500. The proposed budget includes labor, utilities, materials, supplies, laboratory analysis and contractual services. If adopted, the cost to convey treated wastewater from Livermore, Pleasanton and DSRSD customers to the discharge point in San Francisco Bay will be \$1,050 per million gallons (MG), based on an estimated export flow of 3,356 MG.

The proposed FY 2024-2025 budget (Attachment 1) reflects an increase of 4.7 percent (\$158,551) from the current FY 2024 approved budget. The increases are due to the following:

- The proposed FY 2025 labor budget is \$1.18 million and is based on 5,380 billable hours. Minor adjustments to the distribution of labor hours among job classifications are recommended, along with the application of current fully burdened labor rates. Labor costs represent 33% of the proposed O&M budget.
- The proposed FY 2025 electricity budget is \$2.06 million and is based on projected rate increases from Pacific Gas & Electric (PG&E). The FY 2025 budget includes a 10 percent increase (\$178,000) in electricity costs over the current approved budget. Electricity costs represent 58% of the proposed O&M budget.

The labor, materials and supplies components of the proposed budget are submitted as "not to exceed" amounts. Utilities, laboratory analysis, and contractual services are estimated, based on flow projections but may be exceeded based on Article 3, paragraph F of Maintenance Agreement. In particular, utility rates and costs may vary substantially depending on utility rate initiatives and actual flows.

If you have any questions, please do not hesitate to contact me at [dgill@dsrsd.com](mailto:dgill@dsrsd.com) or 925-875-2345.

Sincerely,

Dan Gill  
DSRSD Operations Director

## Attachment 1

## FY 2025 LAVWMA OPERATION &amp; MAINTENANCE BUDGET

SUMMARY:			
	Total	Pumping	Pipeline
DSRSD Labor	\$1,182,824	\$723,103	\$459,721
Materials & Supplies	\$92,190	\$56,215	\$35,975
Laboratory Analysis	\$45,600	\$9,000	\$36,600
Contractual Services	\$144,130	\$51,654	\$92,476
Utilities	\$2,065,755	\$2,056,325	\$9,430
Non-Routine	\$0	\$0	\$0
<b>Total</b>	<b>\$3,530,500</b>	<b>\$2,896,297</b>	<b>\$634,202</b>

Assumptions:	Total	Pumping	Pipeline
Days of operation =	365		
Annual acre feet =	10,301		
Annual million gallons =	<b>3,356</b>		
<b>Unit Costs:</b>			
Cost/AF =	\$343	\$281	\$62
Cost/MG=	<b>\$1,052</b>	\$863	\$189

## Detailed Breakdown:

	Hours	Rate	Labor	Pumping	Pipeline
<b>LABOR</b>					
<b>DIVISION 51 - Field Operations</b>					
Water-Wastewater Systems Operator II	36	\$200	\$7,215	\$0	\$7,215
Water/Wastewater Systems Supervisor	8	\$255	\$2,038	\$0	\$2,038
Subtotal	44		\$9,253	\$0	\$9,253
<b>DIVISION 52 - Plant Operations</b>					
Sr. Process WWTP Operator	280	\$243	\$68,052	\$68,052	\$0
Senior WWTP Operator	1,000	\$220	\$220,460	\$220,460	\$0
WWTP Operator II	1,430	\$200	\$286,615	\$143,307	\$143,307
WWTP Superintendent	100	\$364	\$36,424	\$18,212	\$18,212
Subtotal	2,810		\$611,551	\$450,032	\$161,519
<b>DIVISION 53 - Mechanical Maintenance</b>					
Senior Mechanic	55	\$242	\$13,317	\$6,659	\$6,659
Mechanical Supervisor	72	\$288	\$20,770	\$2,077	\$18,693
Mechanic II	880	\$226	\$198,510	\$47,642	\$150,868
Maintenance Worker II	54	\$190	\$10,263	\$5,131	\$5,131
Mechanical Superintendent	45	\$346	\$15,579	\$7,790	\$7,790
Subtotal	1,106		\$258,440	\$69,299	\$189,140
<b>DIVISION 54 - Instrumentation, Controls &amp; Electrical (ICE)</b>					
Sr. Instrumentation/Controls Technician	90	\$239	\$21,494	\$10,747	\$10,747
Instrumentation/Controls Technician I	504	\$197	\$99,469	\$49,735	\$49,735
Senior Electrician	45	\$221	\$9,962	\$9,962	\$0
Electrician II	441	\$201	\$88,751	\$88,751	\$0
Principal Electrical Engineer	45	\$336	\$15,113	\$15,113	\$0
ICE Supervisor	45	\$287	\$12,896	\$6,448	\$6,448
Subtotal	1,170		\$247,685	\$180,755	\$66,930
<b>DIVISION 56 - Operations Support Services</b>					
EHS Program Administrator	50	\$132	\$6,590	\$3,295	\$3,295
Subtotal	50		\$6,590	\$3,295	\$3,295
<b>DEPARTMENT 40 - Engineering</b>					
Senior Engineer	35	\$307	\$10,735	\$4,294	\$6,441
Associate Engineer	80	\$273	\$21,830	\$8,732	\$13,098
Construction Inspector I	40	\$179	\$7,176	\$2,870	\$4,305
Engineering Technician II	20	\$181	\$3,614	\$1,446	\$2,169
GIS Analyst	25	\$238	\$5,950	\$2,380	\$3,570
Subtotal	200		\$49,306	\$19,722	\$29,584
<b>Total Labor</b>	<b>5,380</b>		<b>\$1,182,824</b>	<b>\$723,103</b>	<b>\$459,721</b>
<b>FTE's</b>	<b>2.6</b>				

Note: FY 2025 labor rates reflect CY 2024 actual labor rates.

## Attachment 1

## FY 2025 LAVWMA OPERATION &amp; MAINTENANCE BUDGET

	<u>Expense</u>	<u>Pumping</u>	<u>Pipeline</u>
<b><u>MATERIALS &amp; SUPPLIES</u></b>			
<b>Operations Supplies</b>			
Calcium Thiosulfate (dechlorinating agent)	\$20,000	\$10,000	\$10,000
Supplies/Expenses (misc)	\$1,400	\$700	\$700
Subtotal	\$21,400	\$10,700	\$10,700
<b>Mechanical Supplies</b>			
Materials and supplies	\$12,440	\$8,400	\$4,040
Pump repair parts	\$11,200	\$11,200	\$0
Air relief valve parts	\$5,250	\$0	\$5,250
Oils, lubricants	\$3,000	\$3,000	\$0
Subtotal	\$31,890	\$22,600	\$9,290
<b>Electrical Supplies</b>			
Instrument parts	\$3,900	\$1,950	\$1,950
Analyzer parts	\$14,450	\$10,115	\$4,335
MCC equipment/parts	\$9,300	\$3,850	\$5,450
SCADA parts	\$6,550	\$5,050	\$1,500
Miscellaneous parts	\$4,700	\$1,950	\$2,750
Subtotal	\$38,900	\$22,915	\$15,985
<b>Total Materials &amp; Supplies</b>	<b>\$92,190</b>	<b>\$56,215</b>	<b>\$35,975</b>
<b><u>LABORATORY ANALYSIS</u></b>			
Compliance Testing	\$11,300	\$9,000	\$2,300
Operational Support Testing	\$4,900	\$0	\$4,900
Special Sampling	\$29,400	\$0	\$29,400
<b>Total Laboratory Analysis</b>	<b>\$45,600</b>	<b>\$9,000</b>	<b>\$36,600</b>
<b><u>CONTRACTUAL SERVICES</u></b>			
Surface and subsurface 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	\$10,000	\$8,500	\$1,500
Remote monitoring service for PS and Rectifier Panels	\$1,950	\$0	\$1,950
HVAC maintenance/repairs	\$800	\$550	\$250
Pest control	\$950	\$950	\$0
Landscape services	\$11,200	\$8,400	\$2,800
Smartmeter Covers	\$1,800	\$0	\$1,800
Janitorial services	\$10,000	\$10,000	\$0
Other services	\$3,130	\$2,504	\$626
Professional services (miscellaneous)	\$31,500	\$15,750	\$15,750
<b>Total Contractual Services</b>	<b>\$144,130</b>	<b>\$51,654</b>	<b>\$92,476</b>
<b><u>UTILITIES</u></b>			
Electricity (PG&E)	\$2,062,355	\$2,053,425	\$8,930
Water & Sewer (Pleasanton)	\$1,100	\$1,100	\$0
Water (EBMUD)	\$1,300	\$1,300	\$0
Telecommunications	\$1,000	\$500	\$500
<b>Total Utilities</b>	<b>\$2,065,755</b>	<b>\$2,056,325</b>	<b>\$9,430</b>
<b><u>NON-ROUTINE</u></b>			
<b>Total Non-Routine</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
<b>TOTAL O&amp;M BUDGET (LABOR, MATERIALS &amp; SERVICES)</b>	<b>\$3,530,500</b>	<b>\$2,896,297</b>	<b>\$634,202</b>



**ITEM NO. 18 APPROVAL OF AGREEMENT WITH NATIONAL PLANT SERVICES TO 1) COMPLETE PHASE 2 OF THE LAVWMA PIPELINE INSPECTION PROJECT, AND 2) REHABILITATE APPROXIMATELY 1,000 LINEAR FEET OF PIPELINE, PREVIOUSLY IDENTIFIED DURING THE PHASE 1 INSPECTION FOR A TOTAL NOT TO EXCEED \$700,000**

**Action Requested**

It is recommended that the Board approve and agreement with National Plant Services to: 1) complete phase 2 of the LAVWMA pipeline inspection project and 2) rehabilitate approximately 1,000 linear feet of pipeline previously identified during the Phase 1 inspection for a total not to exceed \$700,000.

**Summary**

As part of its best management practices, LAVWMA endeavors to perform periodic conditions assessments of the export pipeline. Due to the length of the export pipeline, condition assessments are required to be completed in multiple phases. These assessments, consisting of large pipelines ranging from 27-inches to 36-inches in diameter, require special equipment, requiring LAVWMA to traditionally contract this work to an outside vendor. Phase 1, which included the inspection of approximately 28,000 linear feet, or approximately 20% of the total length of the total length of the export pipeline, was completed in 2021 by National Plant Services, Inc.

The condition assessment for Phase 1, performed by National Plant Services, identified various structural defects. The majority of the structural defects were relatively small, with severity ratings of 3 or less (out of a scale of 1-5, with five being the most severe). However, one structural defect was rated as a category 4 fracture in the pipeline segment between stations 183+00 and 193+08, and was recommended for rehabilitation by 2024. The affected pipeline segment is a 36-inch diameter welded steel pipe. Phase 2 of this project includes the inspection of 16 additional export pipeline segments, totaling approximately 36,241 linear feet, and the rehabilitation/repair of the pipeline segment between stations 183+00 and 193+08, previously identified in Phase 1.

Although competitive bidding is not required because this involves work performed to keep, operate and maintain a publicly owned water or waste disposal system, consistent with best practices to obtain multiple quotes, on February 12, 2024, DSRSD staff solicited proposals from four (4) vendors to provide inspection, condition assessment, and rehabilitation services on the 36,241 linear feet of LAVWMA pipelines. On March 4, proposals were received from three vendors: National Plant Services, Pipe and Plant Solutions, and Redzone Robotics. Proposals were evaluated based upon established criteria including project understanding, project approach and proposed scope of work, company and personnel qualifications, project schedule, and level

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Agenda Explanation  
Livermore-Amador Valley  
Water Management Agency  
Board of Directors  
May 15, 2024

of effort. Based upon these criteria, National Plant Services, Inc. was determined to have the best combination of qualifications, staff, and proposed approach to meet the needs of the project. Completion of the work includes all inspections, assessments and analyses, and final reports. The work is expected to commence in summer 2024 and to be completed within three to four months.

This project was originally budgeted at \$300,000 based on an estimated costs stemming from the first phase. Dewatering costs were an unknown at the time. With the addition of scope items, including the spot repair, dewatering costs and staff time allocations, staff recommends a budget increase of \$550,000 from the existing budget of \$300,000 to \$850,000, which includes DSRSD staff time, to complete the project. DSRSD is recommending that LAVWMA award a contract to National Plant Services in the amount of \$680,970.31, which includes a 10% contingency to cover any unexpected out-of-scope items. Authorization for up to \$700,000 provides an additional small buffer. This project is included in the FY2024/25 Operating and Capital Budget as described in the previous agenda item.

**Recommendation**

It is recommended that the Board approve and agreement with National Plant Services to 1) complete phase 2 of the LAVWMA pipeline inspection project and 2) rehabilitate approximately 1,000 linear feet of pipeline previously identified during the Phase 1 inspection for a total not to exceed \$680,970.31 and that the General Manager be authorized to increase the total to \$700,000.

**Attachment**

Proposal from National Plant Services.



## NATIONAL PLANT SERVICES PROPOSAL FOR THE LAVWMA EXPORT PIPELINE INSPECTION

### **A. TRANSMITTAL LETTER**

March 4, 2024

Dublin San Ramon Services District  
7051 Dublin Boulevard  
Dublin, CA 94568

Attention: Ryan Pendergraft, Project Manager, [pendergraft@dsrsd.com](mailto:pendergraft@dsrsd.com)

**RE: CIP 23-L011: Livermore Amador Valley Water Management Agency (LAVWMA)  
Export Pipeline Inspection – Phase 2**

Dear Mr. Pendergraft,

Founded in 1949, the Carylton Corporation is the largest and oldest environmental services corporation in the United States, with 15 wholly-owned subsidiary companies located throughout the country. If selected for this project, National Plant Services, Inc., one of the Carylton Companies, will complete all planning, traffic planning, dewatering/pumping, and assessment work with our own personnel using our large fleet of in-house cleaning and inspection equipment, PACP/MACP/LACP certified operators and engineering staff.

National Plant Services (NPS) clearly comprehends the project goals and is prepared to perform this work utilizing our Hayward-based fleet of CCTV and jetter/vacuum trucks. **NPS will perform the services and adhere to the requirements described in this RFP CIP 23-L011 issued in February 2024.**

Dublin San Ramon Services District (“DSRSD”) and LAVWMA staff have a tremendous responsibility to maintain LAVWMAs Export Pipeline. The technology and method we propose, combined with the experience of NPS, will provide information that can be used to determine needed repairs, and forecast future expenditures based on pipe condition. The information collected provides an Owner with a thorough understanding of the current state of their most critical conveyance assets.

#### **Qualifications**

NPS has the experience and the resources to perform the field work in a timely manner, to manage and compile the data, and provide a Final Engineering Report with recommendations on the findings. We also have a local service yard in Hayward, CA, from where we will deploy crew personnel and equipment, which will facilitate attendance at any meetings, and provide prompt and thorough Project Management duties. We have multiple inspection platforms that provide us with the ability to inspect, capture, and analyze the data consistently on Sewers from 6”-120”.

We are experts in condition assessment/MSI Inspections, cleaning, traffic planning, engineering, asset management, and trenchless rehabilitation; all in one company! The advantage of having one experienced and qualified company to perform the work translates into: 1. Efficiency in



## NATIONAL PLANT SERVICES PROPOSAL FOR THE LAVWMA EXPORT PIPELINE INSPECTION

scheduling and completing work, 2. Cost savings as there are no markups for subcontractor work, 3. The PACP Inspections will be completed by experts in condition assessment who have assessed, analyzed, and repaired millions of feet of pipelines and related structures, and 4. As a highly experienced maintenance and trenchless rehabilitation company, our engineers can provide recommendations for future District rehabilitation programs. The NPS team is also familiar with LAVWMAs export pipeline and personnel from our multiple projects with the District. NPS is uniquely qualified to perform this current scope of work based on our successful Phase 1 condition assessment work on the same LAVWMA export pipeline, and for the Phase 2 planning work. NPS has created a cost effective and efficient plan to dewater and inspect the project scope of the Phase 2 export pipeline inspection within the limited export pipeline shutdown windows.

### **Data Management and Reporting:**

The data flow is as follows; collected data is delivered daily to NPS Service Yard in Hayward for processing. NPS' Data Manager reviews the CCTV inspections and PACP coded defects to ensure they meet all NASSCO specifications and verifies the quality of the Inspections. Our California Professional Civil Engineer, Michelle Beason, PE, will then prepare a final summary report of the findings, along with repair recommendations. All results will be personally delivered to District staff with a comprehensive on-site, data review presentation and workshop.

We thank you for considering our proposal and we are excited to tackle the challenges of this project. NPS has the bay area based equipment, personnel, and proprietary knowledge and experience to complete this project to the highest standards. I will be the proposal contact person, Professional Engineer, and Project Manager, and my contact information is below.

Sincerely,

Michelle Beason, PE

Regional Manager, National Plant Services Inc.

[mbeason@nationalplant.com](mailto:mbeason@nationalplant.com), 925-262-7366 cell, 510-291-3142 fax

**Mailing Address: Hayward Service Yard: 2159 National Avenue, Hayward, CA 94545**

**Mailing Address Headquarters: 1461 Harbor Avenue, Long Beach, CA 90813**

**CA Contractor #351503**

**DIR # 1000002703**





## NATIONAL PLANT SERVICES PROPOSAL FOR THE LAVWMA EXPORT PIPELINE INSPECTION

### ***B. QUALIFICATIONS, EXPERIENCE AND REFERENCES***

#### **Experience and References:**

NPS has completed over 10 million linear feet of large diameter cleaning and CCTV in the last several years alone, and we pride ourselves on building long-term partnerships with our customers, providing superior engineering and field services. We have a satisfaction guarantee on all of our services. Several recent references that are comparable to this project follow, along with several agency references where more than one project was completed for those agencies. NPS has also performed many CIPP point repair projects. Those references are available upon request. **For all projects, Michelle Beason was the Civil Engineer and Project Manager, Daniel Solano was Fleet Manager, and Dennis Keene managed crew assignments to meet schedules. The days to complete include all pre-work including traffic control planning, permitting, field work, data processing, and reporting.**

#### **PROJECT 1:**

1. LAVWMA Export Pipeline Condition Assessment  
Date of Service: September, 2020
2. Reference Name: Spencer Halliday, DSRSD, [halliday@dsrsd.com](mailto:halliday@dsrsd.com)
3. Scope of Work: Over 11 days in 2020, NPS crews CCTV inspected 28,000 LF of the LAVWMA export pipeline. NPS crews worked in conjunction with DSRSD staff to open bolted lids, and then inspect as many pipe segments as possible each day during the 3 day maximum shutdown windows.

#### **PROJECT 2:**

1. Novato Sanitary District Outfall Inspection Project  
Date of Service:
2. Reference Name: Jeff Boheim, Field Services Manager, [jeffb@novatosan.com](mailto:jeffb@novatosan.com) 415-798-4053
3. Scope of Work: from September 7 through September 23, 2022, NPS dewatered and CCTV inspected 15,872 LF of 48" and 54" RCP outfall piping leading from the NSD WWTP to the San Francisco Bay. Dewatering was challenging due to limited access points, and off-road terrain. Michelle Beason worked for months to create a dewatering and inspection plan that would ensure success. Dewatering included pumping water into other portions of the pipelines using flow-through plugs, pumping into ponds, and land application utilizing big gun sprinklers. As much as 2 million gallons of effluent was dewatered in a single day using multiple pumps and dewatering points so that the CCTV inspection could be completed in one 10 hour WWTP shutdown.

#### **PROJECT 3:**

1. City of Fresno Sewer Assessment Project, Fresno, CA  
Date of Service: 3/8/2022 through Present
2. Bid Amount: \$3,451,120 (multi-year contract)
3. Reference Name: Art Alvarez, [art.alvarez@fresno.gov](mailto:art.alvarez@fresno.gov), 559-994-2854
4. Scope of Work: CCTV including HD video, 3D Laser, and sonar inspections of 89,740 LF of sewer interceptors up to 66-inch diameter. Project included field work, and preparation of



## NATIONAL PLANT SERVICES PROPOSAL FOR THE LAVWMA EXPORT PIPELINE INSPECTION

MSI reports detailing the results from each pipe segment. Also performed flushing of large interceptors to facilitate inspections. Currently in the planning phase for another 85,000 LF of CCTV and MSI.

### **PROJECT 4:**

1. Inland Empire Utilities Agency, Chino, CA

Date of Service: 2020-2022

2. Project Name: Siphon Cleaning and Assessment Project

PROJECT	BID AMOUNT	CONTRACTED DAYS	CHANGE ORDERS	DAYS TO COMPLETE
Siphon Cleaning and Assessment	\$1,838,000	365 days	Time Extension	14 months

3. Reference Name: Ryan Ward, [rward@ieua.org](mailto:rward@ieua.org), 909-519-3603
4. Scope of Work: Cleaning, bypassing, dewatering, and CCTV of 69 siphon barrels up to 42" diameter (single, double, and triple barrel assemblies). Sonar of 3 additional siphon barrels. IBAK Level 2 manhole inspections. GPS coordinate mapping of manholes using Trimble device.

### **PROJECTS 5-8:**

1. City of Sacramento Interceptor Assessment Project (4 Phases), Sacramento, CA

Date of Projects: 4 separate annual CCTV/Laser/Sonar Contracts: July 2015 – November 2020

2. Project Details:

PROJECT	BID AMOUNT	CONTRACTED DAYS	CHANGE ORDERS	DAYS TO COMPLETE
MSI Project 1	\$300,000	None Listed	None	150
MSI Project 2	\$350,000	100 days	None	210
MSI Project 3	\$180,000	132 days	None	113
MSI Project 4	\$1,165,446.20	Two Years	\$39,720.95 for additional work, then extra money to dispose of Class I debris	110 days

3. Reference Name: Rick Matsuo [rmatsuo@cityofsacramento.org](mailto:rmatsuo@cityofsacramento.org) . 916-808-1435

5. Scope of Work: Four annual phases of work totaling 145,047 LF of Multi-Sensor inspection (CCTV, laser, sonar) of 24" to 120" sewer and combined system interceptors. Prepared final summary reports for each project that incorporated the PACP data, visual observations, and the laser and sonar data to determine RUL and provided repair and maintenance recommendations.

### **PROJECTS 9-11:**

1. City of Roseville Interceptor Assessment Project, and Interceptor Cleaning Project

Date of Projects: Three Projects: November 2014 – April 2015, and 2017-2018, July 2019- Dec 2019

2. Project Details:

PROJECT	BID AMOUNT	CONTRACTED DAYS	CHANGE ORDERS	DAYS TO COMPLETE
MSI Project 1	\$130,825	"Time is of the Essence"	None	145 Days



## NATIONAL PLANT SERVICES PROPOSAL FOR THE LAVWMA EXPORT PIPELINE INSPECTION

Cleaning and Post Sonar	\$208,401.50	300 days	None	165 Days
MSI Project 2	\$150,950	"Time is of the Essence"	\$3,132, adding extra footage	5 months

3. Reference Name: Daniel Pruden, [dpruden@roseville.ca.us](mailto:dpruden@roseville.ca.us) , 916-746-1891
4. Scope of Work: Project 1 was 28,000 L.F. of 30" to 66" Multi-Sensor Inspections with CCTV/LIDAR/Sonar. Prepared final report with RUL and repair and maintenance recommendations. The second contract was a cleaning/TV/Sonar project in 33" to 66" sewer pipelines to remove debris discovered by Sonar inspections in the first phase of work. Assessment Project 2: 21,885 LF of 27" to 66" Multi-Sensor Inspections. Prepared final report with RUL and repair and maintenance recommendations.

### **PROJECTS 12-14:**

1. City of Modesto MSI Project, West Trunk CCTV Inspections, 60" Force Main Inspection
2. Projects: Modesto MSI River Trunk Project, West Trunk Project, and force main inspection project all completed in 2023

PROJECT	BID AMOUNT	CONTRACTED DAYS	CHANGE ORDERS	DAYS TO COMPLETE
River Trunk MSI Project	\$163,000	None listed	None	145 Days
West Trunk CCTV Project	\$50,803	None listed	None	60 Days
Force Main Inspection	\$333,000	None Listed	None	14 days

3. Reference Name: Robert Englent, [renglent@modestogov.com](mailto:renglent@modestogov.com) , 209-993-5549
4. Scope of Work: River Trunk MSI project was the multi-sensor inspections using CCTV, HD video, 3D laser, and sonar of 11,400 LF of interceptors up to 66" diameter through off-road easements, and delivered final engineered reports. The West Trunk inspection project was CCTV only of sewer interceptors up to 66-inch diameter through easements, plus IBAK Panoramio SI Manhole inspections. The force main inspection was for a 60-inch force main, dewatering via a pumped bypass, and then an inspection attempt.

### **Qualifications**

NPS has a valid and active "A" Contractors license in California (#351503), and we are experts in the inspection, cleaning, maintenance, and trenchless rehabilitation of pipelines, and have been providing these services since 1980.

NPS is also experienced in an array of trenchless sewer rehab services including injection grouting, CIPP and UV point repairs, lateral lining, and centrifugally cast concrete lining. This breadth of experience makes us not just an inspection company, but true pipe experts, and will allow us to recommend and complete repairs that will extend pipeline life at the lowest cost.

NPS will perform all dewatering and inspection operations, data processing, and final condition assessment report including repair recommendations out of our Hayward, CA, service yard.



## NATIONAL PLANT SERVICES PROPOSAL FOR THE LAVWMA EXPORT PIPELINE INSPECTION

### **Project Manager Qualifications:**

Michelle Beason is a Professional Civil Engineer (CA, NV, Oregon, and Arizona) and a personally-licensed California A & B Contractor based out of our Hayward service yard. She has been a nationally recognized expert in CCTV and multi-sensor inspections (CCTV/Sonar/Laser) of sewer and stormwater lines since 2010. Michelle has over 30 years' experience in water and wastewater asset management, design, engineering, and O&M, and is the Regional Manager for NPS. **She has directed and managed hundreds of complex cleaning and inspection projects in the last 10 years with NPS, including the sample projects listed in the references section.**

**Certifications:** She holds a CA PE License, CA A and B Contractor License, Confined Space Trained, CPR Trained, and is PACP/MACP/LACP Certified.

**Project Tasks:** Ms. Beason will act as Project Manager and Professional Engineer for the duration of this project. She will work with the District to refine the project plan and schedule and track all milestones against the baseline schedule to ensure timeliness, coordinate traffic control planning and all inspection/cleaning work activity, relay important information to District staff, hold regular progress meetings with District staff, ensure deliverables are completed on time, and track project expenditures. She will coordinate data QA/QC and final project summary reports, including recommendations on necessary pipeline repairs and rehabilitation.

**Experience as it Relates to this Project:** Ms. Beason first began her wastewater career with a degree in Civil/Environmental Engineering from Purdue University in 1993. Throughout her career, she has been involved with hundreds of wastewater inspection and improvement projects. She has specialized in cleaning and CCTV inspections of pipelines since 2010. Michelle has acted as a Project Manager during her entire career, and while at EBMUD managed over 60 simultaneous operating and capital projects. She is experienced in traffic control regulations and requirements and has prepared numerous traffic control plans for various projects. She has direct experience in PACP/MACP/LACP coding of pipe defects and has reviewed and QA/QC'd thousands of feet of multi-sensor (CCTV/Sonar/Laser) and conventional CCTV inspections. She has provided engineering services to our customers including Remaining Useful Life and reinspection recommendations for many clients.

Michelle Beason volunteers as one of the elected Board Members of NASSCO, and is the Chair of the NASSCO Infrastructure Assessment Committee (IAC). As Chair of the IAC committee, she managed the effort on the new PACP/MACP/LACP Version 8. She is tasked with ensuring that PACP coding is useful and relevant to our municipalities and contractors throughout the United States and Canada, and to evaluate and recommend improvements to PACP. Michelle has authored several sections in the NASSCO Manual of Practice Including jetter code of practice, MSI Inspections, and CCTV QAQC for Contractors, a best practices guideline available to help cities and contractors achieve a high-level of standard on PACP inspections and other maintenance and rehabilitation work. Michelle is an industry expert in condition assessment, maintenance, and rehabilitation, and has the experience to deliver high quality results to the District.

**Key Personnel Qualifications: All personnel listed below have worked with Michelle Beason on all of the Reference projects included herein:**

### **Dennis Keene: President/Equipment and Personnel Allocation**

Mr. Keene has been employed by the Caryl Corporation since 1972. He has been General Manager of National Plant Services, Inc. since 1980 and has been President since 1987. Mr.





## NATIONAL PLANT SERVICES PROPOSAL FOR THE LAVWMA EXPORT PIPELINE INSPECTION

Keene is responsible for coordinating Caryl Corporation efforts in the 11 Western States. Mr. Keene has performed and has been involved with all aspects of the business. He started as a Laborer and has been, at varying times, Laborer, Technician, Operator/Foreman, Superintendent, Operations Manager and General Manager. He has extensive experience in sonar, laser, and CCTV inspections, as well as cleaning, sewer repairs and rehab, etc.

**Project Tasks:** Mr. Keene will ensure company equipment and personnel are dedicated fully during all phases of this project. He will provide management oversight, crew selection, daily communications with crew, and may attend project meetings.

**Daniel Solano: Operations/Fleet Manager (with NPS 20 years), Long Beach, CA:**

**Role:** Crew Allocation, Operations, Fleet Manager

**Contact Information:** 562-244-1369, [daniel@nationalplant.com](mailto:daniel@nationalplant.com)

**Background:** Mr. Solano has been employed full-time at NPS for 20 years. His areas of direct experience include Cleaning and Inspection services, including PACP coding, for over 10 Million L.F. of sewer mainlines and laterals, including the day-to-day management of many projects.

**Certifications and Memberships:** PACP/MACP/LACP Certification, OSHA Certification, and certified in Traffic Management Procedures.

**Project Tasks:** Mr. Solano will attend site visits and assist in job planning, coordinate equipment and resources needed to complete work, and provide field management oversight.

**Experience as it Relates to this Project:** Direct and managerial experience of over 10 million LF of sewer inspections including: large and small diameter pipe cleaning, Laser/Sonar/HDCCTV Profiling, conventional CCTV, point repairs, grouting, and spray mortar lining. He has significant experience in the operation, deployment, maintenance, and repair of our CCTV and cleaning equipment, and is an expert in traffic control planning.

**Corey Sameron, Operations Manager**

Mr. Sameron has been managing sewer cleaning and CCTV services for the last 8 years. His areas of direct experience includes Cleaning and Inspection services, including PACP coding, for over 5 Million L.F. of sewer mainlines and laterals, including the day-to-day management of the crews working on many simultaneous projects. He has managed many different municipal projects. This includes pre-job planning, traffic control, scheduling, and providing deliverables to the customers.

**Certifications and Memberships:** PACP/MACP/LACP Certification, OSHA10 Certification, confined space, CPR, and first aid certified. Also certified in Traffic Management Procedures and flagging.

**Project Tasks:** Mr. Sameron is based out of our Hayward service yard. He will attend project meetings on occasion, coordinate daily work activities and schedule of the NPS crew, manage all traffic control proceedings, and provide field management oversight.

**John Joseph Figueroa, EIT, Project Engineer**

Mr. Figueroa graduated with a BS in Civil Engineering from University of California, Davis, in 2021. He has detailed knowledge of the LAVWMA export pipeline due to NPS' outage plan study he helped to complete in 2023.

**Certifications and Memberships:** PACP/MACP/LACP Certification.

**Project Tasks:** Mr. Figueroa will assist with field planning and oversight, data QAQC, and maintaining the project schedule.



## NATIONAL PLANT SERVICES PROPOSAL FOR THE LAVWMA EXPORT PIPELINE INSPECTION

### **Esther Amoding, QAQC Project Engineer**

Ms. Amoding has a BS in Civil Engineering from ASU and has 4 years' experience with NPS tracking and managing clean and CCTV inspection projects, smoke testing studies, and injection grouting work for clients in the Western US. She is ArcGIS certified, and NASSCO certified, and has QAQC'd thousands of feet of CCTV inspection data. She has prepared GIS-based deliverables for several projects.

**Certifications and Memberships:** PACP/MACP/LACP Certification, OSHA 30, ArcGIS Certification

**Project Tasks:** Ms. Amoding will assist with tracking of costs, and will perform QAQC of the data and compile the deliverables for all work.

### **PACP Certified Field Staff**

NPS is fortunate to employ 16 CCTV operators who are certified and highly experienced in PACP/MACP/LACP, and most have inspected several million feet of pipelines each. All Operators are experts in the on-site maintenance, troubleshooting, and repair of our inspection technologies, including smoke testing equipment, and have significant expertise in the execution of traffic control per typical and site-specific applications. They also ensure compliance with all confined space entry procedures and requirements. The crew personnel will be assigned before NTP, with their qualifications and PACP certification numbers presented to the District prior to commencement of work.

**Certifications and Memberships:** PACP/MACP/LACP Certification, Confined Space certification, and OSHA Certification.



## NATIONAL PLANT SERVICES PROPOSAL FOR THE LAVWMA EXPORT PIPELINE INSPECTION

### ***C. APPROACH, ORGANIZATION, AND STAFFING***

NPS' approach for each of the Tasks listed in the scope of services is as follows:

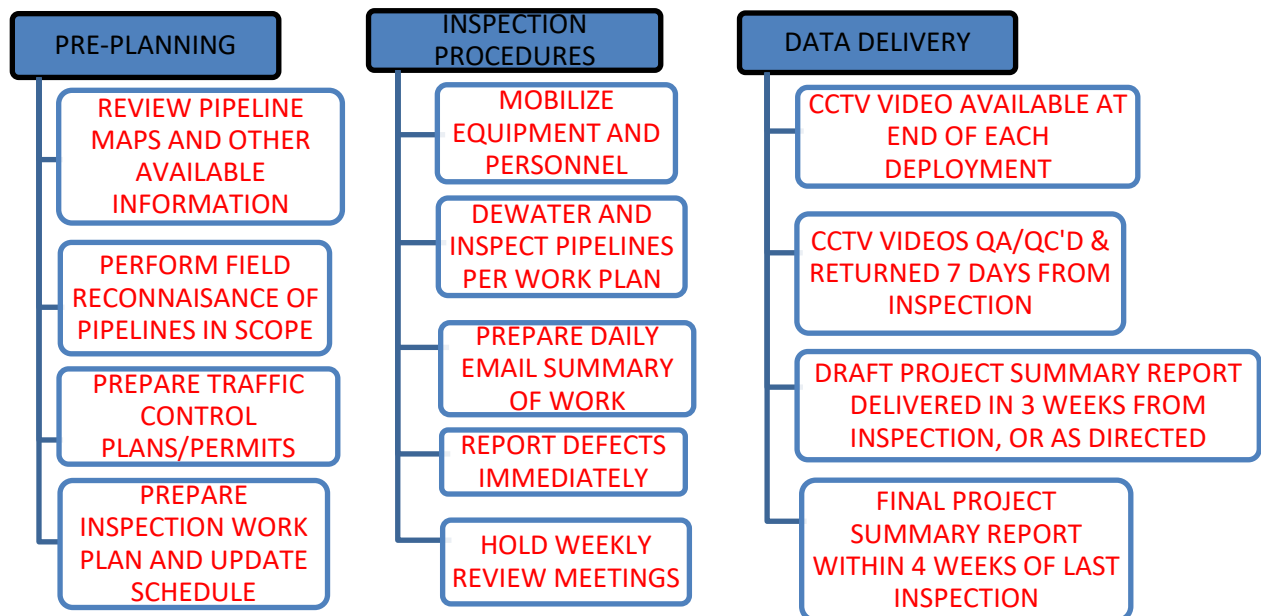
#### **Task 1 and 2: Project Administration/Project Management**

NPS' Hayward service yard is located in close proximity to the export pipeline, which will provide ready deployment of personnel and equipment during all phases of work. The project manager will maintain constant communication with District staff, coordinating all aspects of the project.

The assignment and duties of all key personnel were described fully on Pages 6-8. The project management plan is as follows:

- Michelle Beason will act as Project Manager and Professional Engineer.
- Daily production summary and next day start locations will be prepared and sent via email.
- Weekly progress meetings will be held (via web meeting or in person) each Friday to discuss the project, and the inspection plans and updated schedule for the next week.
- Significant Structural or O&M defects will be reported to the District staff immediately upon discovery.
- Problems with access or pipeline conditions will be reported immediately, with follow-up action decided between the District and NPS.

#### **PROJECT MANAGEMENT PLAN SUMMARY**



#### **Task 3: Preliminary Data Collection and Data Review**

NPS has reviewed all pipeline record drawings, visited all project locations, and has developed a detailed work plan for these pipelines, which we are prepared to execute using our highly trained personnel, and our advanced equipment.



## NATIONAL PLANT SERVICES PROPOSAL FOR THE LAVWMA EXPORT PIPELINE INSPECTION

### **Task 4: Pre-Project Planning and Coordination**

#### ***Permitting and Access***

Traffic plans and permits, where necessary, will be submitted promptly upon NTP. NPS has familiarity with all jurisdictions in the scope area. Our traffic control sub-contractor, D&M Traffic, will prepare detailed traffic plans, which we will submit with the various permit applications.

#### ***Work Plan and Schedule***

NPS is prepared to begin work promptly after NTP. A preliminary schedule is attached in Section F, but a final detailed schedule will be reviewed and developed along with District staff upon NTP.

If NPS is selected for this work, we will update our detailed work plan that was drafted for the District in 2023, and submit to the District for review. When the work plan has been approved, permits obtained, and the assessment work is ready to begin, an updated schedule will be prepared with the District. We will mobilize our dewatering equipment, robotic inspection platform, and crew personnel to the project sites. The work will be completed per the schedule, with dewatering occurring over nighttime hours in some locations in order to be able to dewater and inspect within the 3 day shutdown windows.

All assigned personnel, including the project engineer Michelle Beason, will be dedicated to the project until the project is complete. The project schedule will be updated weekly and compared against the baseline schedule to ensure we are meeting the schedule and project milestones. Any changes to the schedule will be reviewed promptly with the District for approval.

### **Task 5: Inspection and Condition Assessment**

All of the pipelines in scope will require dewatering so that a CCTV inspection can be completed. Equipment will be on site for pipeline cleaning during all work in the event that it is required. NPS has developed a detailed work plan and sequence of work so that we can complete the assessment of as many pipelines as possible during each 3-day shutdown window. The dewatering scenarios and inspection methods are described fully in Section D of this proposal. Immediately after dewatering, a PACP-coded inspection will be completed by our PACP-certified technicians, with QAQC later performed by our office staff to ensure complete and accurate data.

### **Task 6: Rehabilitation of Export Pipeline Segment 183+00 to 193+08**

During the inspection of this segment in 2020, access was made at 193+00, and the subject fracture (FM) that is in need of repair was coded at 415.1 feet downstream of 193+00. There are access points at approximately 183+80 and 193+08. We will have to first dewater the pipeline section, and then thread a tag line between access points, and then use that threaded tag line to pull the point repair packer to the repair location at 415 feet. The repair packer will then be inflated to press the point repair against the pipe walls where it can cure. NPS will deliver specifications to the District for approval, along with the proposed repair work plan. Once approved, a firm cost estimate can be provided. NPS can also install if Weko seal if that is preferred.





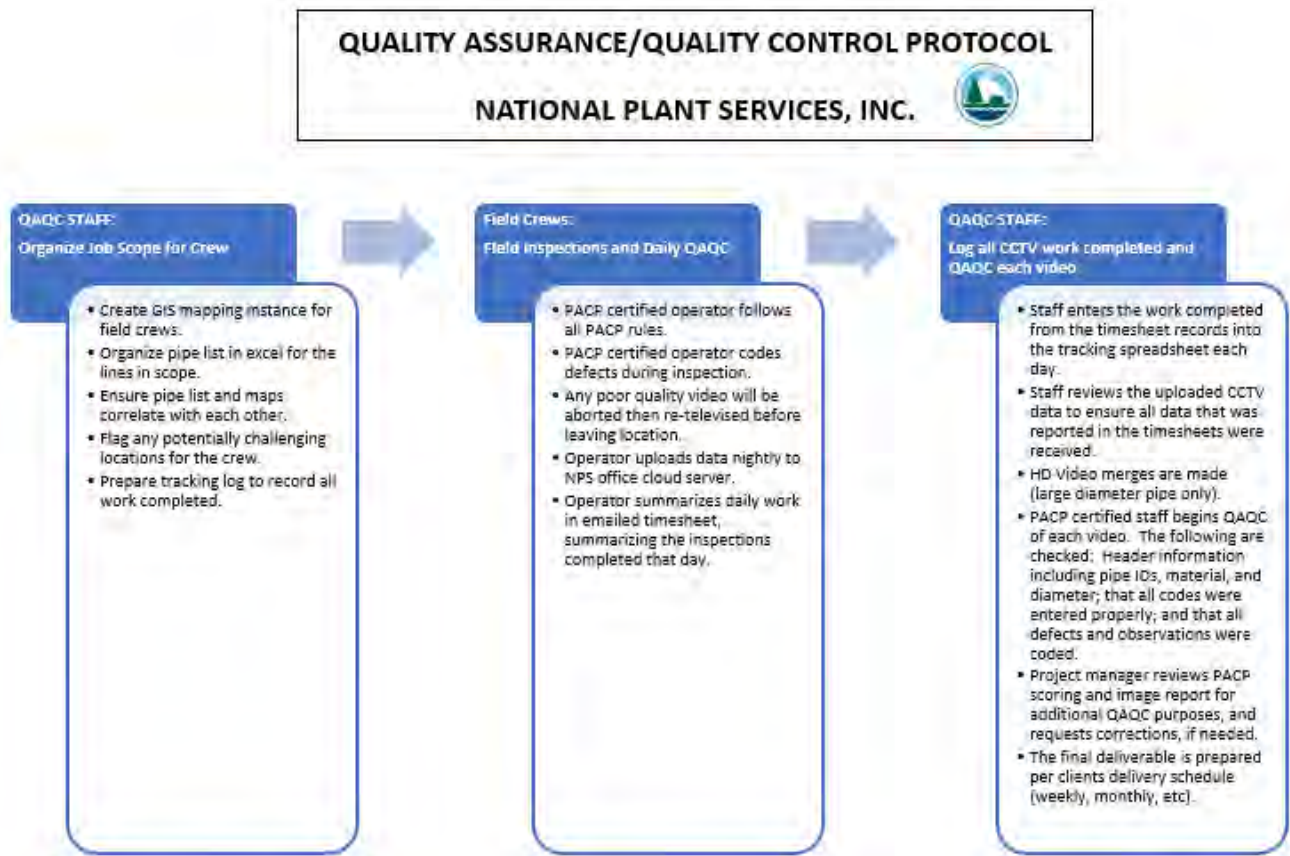
## NATIONAL PLANT SERVICES PROPOSAL FOR THE LAVWMA EXPORT PIPELINE INSPECTION

### Task 7: Report of Findings and Data Quality Assurance/Quality Control

NPS views data integrity and quality as the most important part of any condition assessment project. If the data isn't usable, it's useless. QA/QC starts as soon as we get the asset information from the District, and continues through every step of the project. The operator will ensure a clean and unobstructed image of all CCTV videos, recorded at a high-quality recording setting. If the quality is not acceptable, the operator will abort the inspection, correct the deficiency, and start again. All CCTV inspections are viewed live in the field during each inspection, so any poor-quality video will be immediately corrected and re-televised, as necessary. NPS will deliver the inspections completed on the first deployment day to the District to ensure their satisfaction with the inspection quality and format.

All CCTV videos are PACP coded using NASSCO certified software. We use several coding software systems (Granite, Wincan, ITPipes, POSM), but all work will be delivered as a PACP exchange file, which is able to be imported into any asset management system. This coding work is performed by our PACP certified Operators.

All data from the field is transferred weekly via our internal file share system for QA/QC by our PACP Certified office staff. Any issues are corrected and then a submittal will be prepared for the District. All data is backed up and maintained on the CCTV truck, on an external hard drive, on the shared file transfer server, and then copied and stored in our data safe at our Hayward office. This ensures no data will ever be lost on one of our projects.





## NATIONAL PLANT SERVICES PROPOSAL FOR THE LAVWMA EXPORT PIPELINE INSPECTION

### Final Summary Report with Recommendations

After review all PACP coded inspection data, NPS will prepare a comprehensive final summary report on the project findings. The Final Engineers Report will be prepared and organized throughout the duration of the CCTV inspection project. As inspection data comes in, it will be reviewed, assessed, and prioritized so that the final summary and recommendations report can be delivered soon after completion of all field work.

NPS is experienced in many methods of maintenance and trenchless rehabilitation, and therefore can recommend the latest innovations in pipe rehabilitation, and also simple repair methods that will maintain or improve the level of service at the lowest cost. NPS crews are highly experienced in CIPP point repairs and CIPP connection and mainline lining, injection grouting to stop infiltration, and centrifugally cast concrete pipe structural coatings (CCCP). We will recommend quick and low-cost repairs whenever possible that can go a long way toward restoring structural reliability and integrity of the effluent pipeline.

The condition scores for all assets will be compiled, and components of the Assessment and Recommendations Report will be generated and summarized based on the results of the condition assessment. Michelle Beason, PE, the Project Team Leader and Professional Civil Engineer, is a nationally recognized expert in pipeline inspection and analysis and has been performing sewer and storm pipeline inspection work and the subsequent RUL forecasting and rehabilitation planning for the majority of her 30-year career. Because of her extensive software, GIS, inspection, asset management, and rehabilitation experience, Michelle is uniquely qualified to manage the project and produce the final engineers report.

We also understand that most GIS systems contain errors, and we are diligent in the review and notation of inaccurate asset information that we discover in the field. Crews will record the correct pipeline length, diameter, and material for each inspection. This information will be presented as part of the final summary report, in a discrepancy table, so that the District can update their GIS records and as-builts.

At the project completion, we will provide a final Condition Assessment Workshop at District offices to review the final project results, reports, and recommendations.

### Deliverables:

The list of deliverables that will be provided at the conclusion of all work is as follows:

- PACP Exchange Database including HD videos and defect snapshots
- PACP scoring report
- PACP Summary Report
- Final Summary Report with Recommendations stamped by Michelle Beason, PE
- Record drawings of any pipe section repaired showing repair details
- MACP Level 1 inspections of Access points including photos
- Discrepancy report showing items needing correction in Districts GIS/Mapping
- Final Condition Assessment Review Presentation and Workshop
- Any other items as required or desired by the District.
- *3D lidar and sonar is available as an option, if desired by the District, at an additional cost. This can be discussed and negotiated upon award.*



## NATIONAL PLANT SERVICES PROPOSAL FOR THE LAVWMA EXPORT PIPELINE INSPECTION

### ***D. SCOPE OF WORK***

The LAVWMA Export Pipeline Inspection project presents a challenge due to the limited shutdown windows of 3 days per shutdown. This requires NPS to efficiently dewater and inspect the pipelines in manageable portions, keeping within a strict 3-day timeframe.

By analyzing the pipeline as-built drawings and conducting site visits, NPS has determined the optimal strategy for dewatering at each inspection location, ensuring efficient use of each shutdown window. Through careful assessment of estimated water volumes and thorough site visits, NPS has established a structured work sequence and schedule to successfully complete the inspection of all sections of the LAVWMA Export Pipeline.

Four dewatering methods were evaluated as options for the dewatering phases of work:

1. Vacuum water into trucks and decant into a sanitary sewer, or back into the export pipeline.
2. Pump water into another section of the effluent pipeline using flow-through plugs.
3. Pump above-ground to another access point on the effluent pipeline.
4. Install additional access/dewatering points.

Each segment was evaluated and assigned the most appropriate method to dewater and inspect based on pipeline configuration and access. Manways, CAVs, and blowoffs will be opened as required to dewater each segment. Following dewatering, NPS will perform the PACP-coded CCTV inspection. Upon completion of inspections, equipment will be removed, and NPS will coordinate with DSRSD crews to close each access point.

A detailed description of dewatering methods 1-3 are shown below. Alternative 4 (new access point) is only recommended for line item O as this pipeline is currently unable to be dewatered due to a high HGL.

#### **Dewater Method 1: Vacuum Water Into Trucks and Decant into Effluent Pipeline**

The vacuum truck or jet/vac truck will be used to dewater segments with low volumes of water, water from low points, or if other dewatering options are not feasible. The suction hose will be manually lowered down or threaded using our equipment to reach the invert of the pipe. Water will be suctioned into the truck. When the truck is full, the truck will decant the water into another nearby reach of the export pipeline. Some segments may require continuous pumping of two or more trucks so that an inspection can be completed within the shutdown window.



#### **26" Liquid Ring Industrial Vacuum Truck**

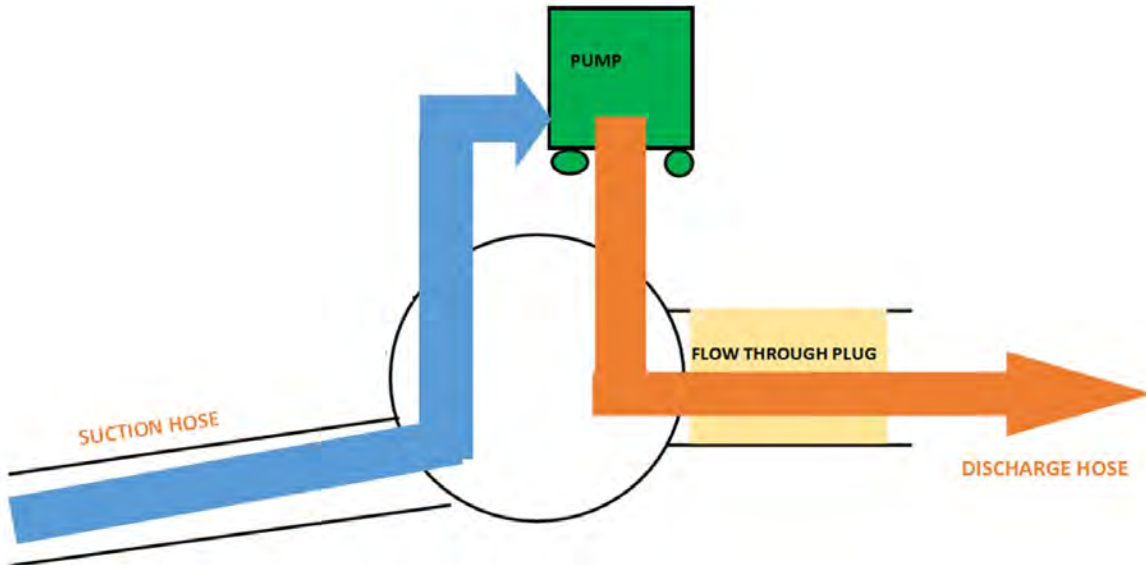
The Guzzler LR Classic is a powerful and efficient industrial vacuum system designed to clean up and recover a full spectrum of materials - from solids and dry bulk powders to liquids, slurries and thick sludge. It's so powerful that it can operate effectively in remote or inaccessible locations more than 1,000 feet away, through suction lines up to 8" in diameter. Wherever you have wet or dry waste or product accumulation that can be reclaimed you need the power of Guzzler.



## NATIONAL PLANT SERVICES PROPOSAL FOR THE LAVWMA EXPORT PIPELINE INSPECTION

### Dewater Method 2: Pump Water into Another Stretch of the Effluent Pipeline Using Flow Through Plugs

In this method, the suction hose will be inserted at the bottom of the section that is to be dewatered, or to a blowoff at the top of a lower manhole lid. The flow-through plug will be set up in the direction the water will be pumped. A bypass pump will be staged above-ground near the access manhole. The intake hose will vacuum the water from the suction hose, through the pump, then through a flow through plug into the adjacent pipe section with available capacity for the pumped water as shown in the diagram below.



### Dewater Method 3: Pump Above-Ground to Another Access Point on the Effluent Pipeline

Due to a particular configuration of the pipeline, above-ground pumping may be the only method to dewater the pipeline. In some cases, 24-hour pumping may be necessary to dewater a stretch of pipeline due to large volumes of water present within a segment.





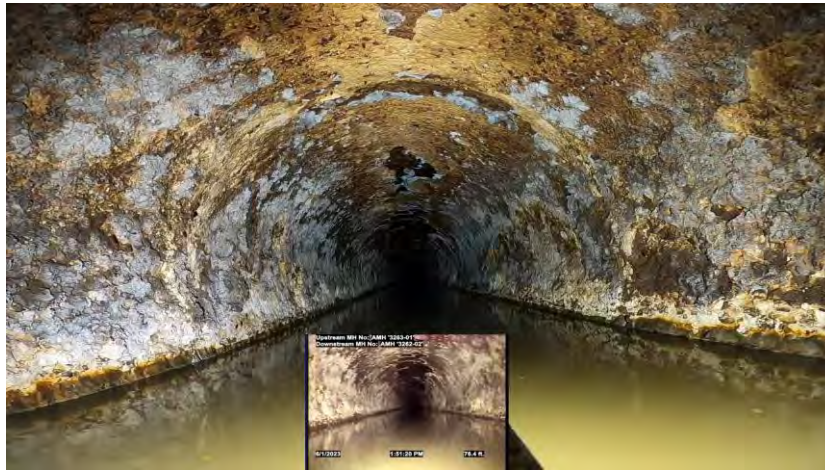


## NATIONAL PLANT SERVICES PROPOSAL FOR THE LAVWMA EXPORT PIPELINE INSPECTION

### **CCTV Inspections:**

For the pipeline inspections, we can inspect both upstream and downstream from an access point. Each 'deployment run' will be deployed in continuous runs of up to 2,000 LF. We will use the appropriate platform (tractor or float), and type of camera for the 36" diameter pipelines that we will inspect. A safety line is attached to the robot, the robot is lowered into the starting manway, and the tractor is allowed to crawl at a controlled speed of no more than 30 feet per minute. Operators will PACP code all pipelines live in the field. If a defect or sharp pipe turn is encountered that prevents completion of an inspection, a reverse inspection will be attempted.

Michelle Beason developed a HD method of pipe inspection for large diameter pipelines that can handle any condition, and which can be utilized on NPS' various platforms. A couple examples from recent projects are included below. The output is a synchronized picture in picture deliverable that will be generated for this project and provided to the District.



### **Cleaning Information:**

As this is a treated water outfall pipeline, we do not expect significant debris. However, if the pipeline is slippery and prevents traction of the CCTV crawler, we can flush the pipe with our combination jetter/vacuum truck that will be on-site to facilitate the inspections.

### **Spot Repairs:**

NPS performs UV and CIPP spot repairs to correct limited structural deficiencies in pipelines. Due to the diameter of this pipeline, the Trelleborg spot repair system would be used. This is a fiberglass mat that is impregnated with non-shrink silicate resin. A technical data sheet will be provided to the District for approval upon award. Weko Seals could also be installed, if preferred. Options will be submitted to the District, then final pricing will be provided.

### **Level of District Support:**

In order to facilitate inspections, it is recommended that DSRSD staff assist with the inspection operations. NPS can complete all tasks themselves, however, utilizing the expertise of District staff will maximize efficiencies during each shutdown, while reducing cost. NPS requests that the District perform the following functions:

- DSRSD staff will open the MH and CAV lids early in the morning so that NPS can start work upon arrival. District staff will reclose lids at the end of each work shift.



## NATIONAL PLANT SERVICES PROPOSAL FOR THE LAVWMA EXPORT PIPELINE INSPECTION

- Additionally, it is requested that DSRSD perform and/or oversee traffic control field operations.

### **NPS Staffing**

Experience is key in the pipeline cleaning and inspection business; knowing the potential issues that we will encounter in the pipelines and having equipment and personnel on-site to handle those situations promptly and safely. NPS has this necessary experience. Our Key Team Leaders and summary qualifications are previously listed in Section B of this proposal. Resumes can be found in Appendix A. All NPS staff will be assigned and dedicated for the duration of the field operations.

The only sub-contractors that we may utilize during this project will be D&M Traffic and Sunbelt Rentals. D&M Traffic will prepare any Traffic Control plans, if needed. They will also perform any major traffic control including flaggers, if necessary. Sunbelt Rentals will supply pump equipment and hoses for the dewatering efforts, and perhaps optional pump watch labor support.

### **Factors that May Obstruct or Complicate the Project Goals**

While we believe that we have a successful approach for the work, there are some unforeseen obstacles that may pose complications during work efforts. Some possible issues, and how we will overcome them, are listed below:

- If the as-built profile is incorrect, including sags, we may not be able to remove the water from the entire pipeline interior. However, our crawlers are able to drive underwater, so we can drive through any sags or low points, resuming the inspection when we get above the water. We can also mount our HD camera higher to ensure the camera is above the height of any standing water.
- Pumping rates may be reduced due to loss of priming in the suction pumps. These are powerful pumps and we usually surcharge the water level over the suction hose to allow for more efficient pumping. As the water level in the pipelines lowers due to dewatering efforts, this will slow the rate of pumping until we may not be able to pump anymore. If this occurs, we can still inspect with the pipe partially full of water.
- If the shutdown window of 3 days has to be shortened by the District due to unanticipated high flow rates at the plant, then some inspection work may have to be postponed until the next shutdown. Constant communications will occur between NPS and the District during each work phase so we can anticipate possible return to service needs, and maximize the work completed before the pipeline is returned to service. One such compromise would be to partially dewater the pipe segment, and then drive the CCTV crawler through quickly before the pipeline must be returned to service, without PACP coding in the field. We could then PACP code later through use of the HD video.
- Segment O from 228+40 to 233+68 cannot be dewatered due to the hydraulic grade line above the manhole elevation, and no blow offs. This segment will need to be evaluated with District staff, and perhaps a new access point or blow off port installed.
- We will sequence the work so that we maximize the CCTV footage able to be obtained from each dewatering phase. Some locations will require us to place two CCTV trucks in order to complete the inspection. Due to our large fleet of equipment, we can send multiple trucks. We also have extra equipment available in Hayward in case equipment goes down during the work to reduce downtime, and maintain our schedule.



## NATIONAL PLANT SERVICES PROPOSAL FOR THE LAVWMA EXPORT PIPELINE INSPECTION

### ***E. SCHEDULE AND WORK PLAN***

NPS has prepared a detailed schedule and work plan to accomplish all work as shown in Figure 1. Engineering review and analysis will take 30 days after completion of field work, then a final review meeting and workshop will be scheduled.

Segments J, A, H, and N can either be dewatered using above-ground pumping, or by dewatering using trucks. Above-ground pumping will be much faster, but may result in excessive costs based on the bypass alignment. If selected, NPS will work with the District, Cities, and bypass contractor to determine the best bypass alignment, and ensure the City where the pipeline is located will accept where the bypass is located, and under what conditions. Costs will then be prepared once that information is established.

Segment O must have a dewatering point (blow off or new access point) to dewater this reach as the hydraulic grade line is above the top of each access point.

A final schedule will be created upon NTP, after permits are obtained, and after a start date is firmly established.

FIGURE 1

Week		Segment	Station Start	Station End	Location	City	Time	Duration (hr)	Duration (min)	Task	Task Notes	Entry MW	Direction of Inspection	Station Inspection Ends	
Project Scope							Schedule					Inspection Strategy			
Week 1	Day 1	B	102+04	111+71.38	Lewelling - West of 880 Crossing	San Leandro	5:00am	3	180	Open Lid	Open MW 101+93 and 111+50, flow through plug upstream, pumping water downstream				
							8:00am	1.5	90.00	Dewater Setup	Flow through plug DS at 101+93, suction hose US, pumping water DS				
							9:30am	0.38	23.00	Dewater					
							10:00am	1.00	60	Dewater Dissassembly					
								1.00	60.00	TV Setup					
							11:00am	1.06	63.54	Inspect	This might not be worth dropping the crawler down for 11 ft	101+93	Upstream	102+04	
												111+50	Downstream	102+08	
							11:15am	0.50	30.00	TV Dissassembly					
							11:45am	2.00	120	Dissassemble and put lids back on					
		1:45pm	Segment Complete												
		C	111+71	128+65	Lewelling - 880 Crossing to Usher	San Leandro	5:00am	3	180	Open Lid	Open MW 111+50 and 128+56.36				
							8:00am	1.5	90	Dewater Setup	Flow through plug DS at 111+50 and suction hose from the US				
							9:30am	1.22	73.06	Dewater					
							10:45am	1.00	60.00	Dewater Dissassembly	Pack equipment and move to segment C				
								1.00	60.00	TV Setup					
							11:45am	1.87	112.34	Inspect		128+56.36	Downstream	111+71.38	
							1:45pm	0.50	30.00	TV Dissassembly	Move to segment C				
							2:15pm	2.00	120	Assemble Lids					
							4:15pm	Segment Ends							
	Day 2	D	128+65	149+60	Lewelling - Ronda to Ashland	Alameda County	5:00am	3	180	Open Lid	Open MW 128+56.36 and 138+95, flow through plug upstream, pumping water downstream				
							8:00am	1.5	90	Dewater Setup	Flow through plug DS at 128+56, suction hose US, pumping water downstream				
							9:30am	3.08	184.95	Dewater					
							12:45pm	1.00	60.00	TV Setup					
								1.00	60.00	Dewater Dissassembly					
							1:45pm	2.32	139.27	Inspect		138+95	Upstream	149+60	
												138+95	Downstream	128+71	
							4:15pm	0.50	30.00	TV Dissassembly					
							4:45pm	2.00	120	Dissassemble and put lids back on					
							6:45pm	Segment Complete							
	Day 3	E	168+24	191+59	Lewelling - BART to Langton Way	Alameda County	5:00am	3	180	Open Lid	Open MW 180+41.32				
							8:00am	1.5	90.00	Dewater Setup	Flow through plug DS at 168+13, suction hose US, pumping water downstream				
							9:30am	2.13	127.87	Dewater	Insert plus DS side of 168+13, insert suction hose US and pump from US to DS.				
							11:45am	1.00	60.00	TV Setup	CCTV				
								1.00	60.00	Dewater Dissassembly					



							12:45pm	1.58	94.60	Inspect		180+41.32	Downstream	168+31
							2:30pm	0.50	30.00	TV Dissasembly		180+41.32	Upstream	182+50
							3:00pm	2.00	120	Dissassemble and put lids back on				
							5:00pm	Segment Complete						
Week 2	Day 1	G	208+03	212+30	Mattox between Mission and Birch	Alameda County	5:00am	3	180	Open Lid, equipment setup	Open lids for 207+92.32 and 211+98			
							8:00am	1.5	90.00	Dewater Setup				
							9:30am	0.61	36.32	Dewater	Flow through plug at 207+92.32 pumping water downstream			
							10:15am	1.00	60.00	TV Setup				
								1.00	60.00	Dewater Dissasembly	Move to segment G			
							11:15am	0.47	28.15	Inspect		211+98	Upstream	212+30
												211+98	Downstream	208+08
							11:45am	0.50	30.00	TV Dissasembly				
							12:15pm	2.00	120	Dissassemble and put lids back on				
							2:15pm	Segment Complete						
	Day 2	F	191+59	192+98	Lewelling and Mission	Alameda County	5:00am	3	180	Open Lid, equipment setup	Open lids for 180+41.32 and 194+91.32			
							11:15am	1.5	90.00	Dewater Setup				
							12:45pm	3.22	193.33	Dewater	Dewater using Trucks at BO 191+59 and discharge to MW 180+41.32			
							3:45pm	1.00	60.00	TV Setup				
								1.00	60.00	Dewater Dissasembly				
							4:45pm	0.38	22.64	Inspect	This is a siphon	194+91.32	Downstream	191+59
							5:15pm	0.50	30.00	TV Dissasembly				
							5:45pm	2.00	120	Dissassemble and put lids back on				
							7:45pm	Segment Complete						
		L	681+97.8	701+96	Dublin Canyon Road Dublin Canyon Creek	Pleasanton	5:00am	3	180	Open Lid, equipment setup	Open CAV 702+74.08			
							8:00am	1.5	90.00	Dewater Setup				
							9:30am	0.59	35.68	Dewater	Dewater using BO 701+84.45 and pump upstream to CAV 702+74.08			
							10:15am	3.00	180.00	Open Lid, setup equipment	Open MW 701+84			
								1.00	60.00	Dewater Dissasembly				
							1:15pm	1.00	60.00	TV Setup				
							2:15pm	0.50	29.79	Inspect		701+84.45	Downstream	697+50
							2:45pm	0.50	30.00	TV Dissasembly				
							3:15pm	2.00	120	Dissassemble and put lids back on				
							5:15pm	Segment Complete						
Day 3	M		718+50	721+66	Dublin Canyon Road Laruel Creek Dr	Pleasanton	5:00am	3	180	Open Lid, equipment setup	Open CAV 721+65.70			
							8:00am	1.5	90.00	Dewater Setup				
							9:30am	0.45	27.01	Dewater	Dewater using BO 721+45 and pump upstream to CAV 721+65.70			
							10:00am	3	180.00	Open Lid, equipment setup	Open MW 721+45			
								1.00	60.00	Dewater Dissasembly	Move to segment L			
							1:00pm	1.00	60.00	TV Setup				
							2:00pm	0.35	21.07	Inspect		721+48	Downstream	718+50
										Might not be worth to inspect 8.7 ft	721+65.70	Downstream	721+57	
							2:30pm	0.50	30.00	TV Dissasembly	Head to segment L			
							3:00pm	2.00	120	Dissassemble and put lids back on				
							5:00pm	Segment Complete						
							5:00am	3	180	Open Lid, equipment setup	Open lid for 134+17			
							11:00am	1.5	90.00	Dewater Setup				

		K	133+00	134+77	Dublin Road @ Dublin Creek	Pleasanton	12:30pm	0.18	10.60	Dewater	Dewater using a flowthrough plug at 134+17, pumping water from downstream to upstream				
							12:45pm	1.00	60.00	Dewater Dissassembly					
							3:00pm	1.00	60.00	TV Setup					
							4:00pm	0.14	8.11	Inspect	This is a siphon	134+17	Downstream	133+00	
							4:15pm	0.50	30.00	TV Dissassembly					
							4:45pm	2.00	120	Dissassemble and put lids back on					
							6:45pm	Segment Complete							
Week 3	Day 1	I	347+46	352+34	Grove Way @ San Lorenzo Creek	Castro Valley	5:00am	3	180	Open Lid, equipment setup	Open MW 335+70 and 351+24				
							8:00am	1.5	90.00	Dewater Setup	shut BFV 351+91				
							9:30am	11.24	674.18	Dewater	Dewater through trucks and discharge at MW 335+70				
							5:00pm	1.00	60.00	Dewater Dissassembly					
							6:00pm	2.00	120	Dissassemble and put lids back on	Partially bolt, both MWs, we will need the next day				
							8:00pm	Dewatering will continue the next day							
							Day 2	I	347+46	352+34	Grove Way @ San Lorenzo Creek	Castro Valley	5:00am	3	180
	8:00am	1.5	90.00	Dewater Setup											
	9:30am	3.74	224.18	Dewater	Continue to dewater										
	1:15pm	1.00	60.00	Dewater Dissassembly											
		1.00	60.00	TV Setup											
	2:15pm	0.50	29.75	Inspect		351+24							Downstream	345+46	
	3:00pm	0.50	30.00	TV Dissassembly		351+24							Upstream	351+91	
	3:30pm	2.00	120	Dissassemble and put lids back on	Dissassemble and put lids back on 335+70 and 351+24										
	5:30pm	Segment Complete													
Week 4	ABOVE GROUND OR DEWATER USING TRUCKS	J	397+80	500+70	E Castro Valley Road Jensen to Eden Canyon	Castro Valley	5:00am	3	180	Use BO 440+45					
							8:00am	15.31	918.60	Dewater	Above Ground Pumping				
										Inspect ( 10296.56 ft )		489+00	Upstream	500+70	
												489+00	Downstream	470+00	
												446+00	Upstream	470+00	
												436+00	Upstream	446+00	
												413+00	Upstream	436+00	
413+00	Downstream	400+00													
	Segment Complete														
Week 5	ABOVE GROUND OR DEWATER USING TRUCKS	A	42+02	76+00	Lewelling - Brunswick to Sedgemen	San Leandro	5:00am	3	180	Open Lid, equipment setup					
							8:00am	4.81	288.60	Dewater	Above Ground Pumping				
										Inspect (2961.55 ft)		49+80.45	Downstream	42+01.66	
												49+80.45	Upstream	64+06.99	
												64+06.99	Upstream	65+06.99	
												81+06	Downstream	74+50	
	Segment Incomplete														
Week 6	BE GROUND OR DEWATER USING TRUCKS	H	258+03	339+13	Greenview Dr to Norbridge Ave	Castro Valley	5:00am	3	180	Open Lid, equipment setup					
							8:00am	57.40	3444.00	Dewater	Only method to dewater this segment is through pumping into trucks.				
									0.00	Inspect ( 8107.68 ft )	Due to the high volumes of water and restrictions to dewater. This segment cannot be inspected enitirely within the 3 Day LAVWMA Shutdown	258+03	Upstream	271+59	
												272+88	Downstream	271+59	
												272+88	Upstream	282+41	
												285+71	Downstream	282+49.65	
285+71	Upstream	318+95													

	ABO											319+14	Upstream	322+50	
								Segment Incomplete							
Week 7	ABOVE GROUND OR DEWATER USING TRUCKS	N	788+20.2	816+25	LAVWMA PS to 680 Crossing	Pleasanton	5:00am	3	180	Open Lid, equipment setup					
							8:00am	4.93	295.80	Dewater	Use BO 809+78 to dewater and above-ground pump into a basin at the plant.				
									0.00	Inspect		791+60	Downstream	788+20.2	
												791+60	Upstream	804+50.26	
												809+88.15	Downstream	804+50.26	
												811+55	Downstream	809+88.15	
												811+55	Upstream	815+91	
								2.00	120	Dissassemble and put lids back on					
	Segment Incomplete														
Week 8	ADD ACCESS POINT	O	228+40	233+68	West of El Charo Rd	Pleasanton	5:00am	3	180	Open Lid, equipment setup					
							8:00am		0.00	Dewater	This segment will not be able to dewater due to the hydraulic grade line. No possilbe ports to dewater segment.				
									0.00	Inspect	Not Inspectable				
								2.00	120	Dissassemble and put lids back on					
								Segment Incomplete							
Week 9	REPAIR ONLY	P	771+90	781+90	North of Workday Site	Pleasanton	8:00am	3	180	Open Lid, equipment setup					
								Point Repair							



## NATIONAL PLANT SERVICES PROPOSAL FOR THE LAVWMA EXPORT PIPELINE INSPECTION

### **F. COST PROPOSAL**

NPS will invoice the District a daily rate for all work, based on the duration we have estimated for the dewatering and inspections as shown in the detailed schedule in Figure 1. The following hourly rates for personnel and equipment will be charged per the work plan, and as meets the District's available budget and approvals:

**Rates:** The following schedule of rates and charges will apply to the performance of this work:

1. Jet/Vac Unit w/Operator @ \$315.00/Hr ST \$365.00/Hr OT \$465.00/Hr PT
2. CCTV Unit w/ Operator @ \$290.00/Hr ST \$340.00/Hr OT \$440.00/Hr PT
3. Additional Tech @ \$250.00/Hr ST \$300.00/Hr OT \$400.00/Hr PT
4. Heavy Industrial Air-Moving Unit (Guzzler) w/Operator @ \$315.00/Hr ST \$365.00/Hr OT \$465.00/Hr PT
5. CIPP Point Repair Crew: Mob \$3,800, \$13,000/day, plus cost of materials and packer @ cost plus 10%
6. Long Range Jetter: Mobilization \$3800, Daily rate of \$5,400/day
7. Grouting Unit w/Operator @ \$350.00/Hr ST \$425.00/Hr OT \$500.00/Hr PT
8. Materials/Supplies @ Cost plus 10% (sandbags, bleach, etc.)
9. Equipment Rentals @ Cost plus 10% (pressure cleaners, boom trucks, arrowboards, etc.)
10. Mobilization/Demobilization Charges - \$7,000 each shutdown
11. Traffic control subcontractor invoiced at Cost plus 10%
12. Out-of-Town Expenses @ \$200/Day/Technician

**Hourly Rates for Engineering, QAQC, and Management Staff are as follows:**

<b><u>KEY PERSONNEL</u></b>	<b><u>HOURLY RATE</u></b>
Michelle Beason, Project Manager/Professional Engineer	\$ 220.00
Dennis Keene, President	\$ 200.00
Corey Sameron, Operations Manager	\$ 180.00
Daniel Solano, General/Fleet Manager	\$ 180.00
Esther Amoding/John Figueroa, Staff Engineers	\$ 150.00
Jodie Ma, Reporting/QA/QC	\$ 80.00

**Bypass Plug Rental** – A 4-week rental of a 36" bypass plug with hoses will cost \$2,185. The plug rental will be invoiced at cost plus 10%. Keep in mind that if the plug is damaged due to insertion or pumping operations, the District will be charged for the purchase of the plug instead of the pump rental, estimated at approximately \$6,800.

**Sunbelt Pump and Equipment Rental** – Sunbelt will supply pumps and dewatering hoses to perform the dewatering activities. They may also perform 24-hour pump watch for longer stretches of the effluent piping that needs dewatering. Sunbelts rates are as follows:

- Pump watch per day (2 man crew, 12 hr shifts) - \$3,422.00
- 6x6 Pump per day rental rate - \$445.50
- 6" hose per ft(daily rental) - \$2.50
- Delivery \$550.00
- Pickup \$550.00
- All subcontractor expenses invoiced at cost plus 10%.





**NATIONAL PLANT SERVICES PROPOSAL FOR THE  
LAVWMA EXPORT PIPELINE INSPECTION**

***APPENDIX A  
RESUMES***



## NATIONAL PLANT SERVICES PROPOSAL FOR THE LAVWMA EXPORT PIPELINE INSPECTION

### Michelle D. Beason, PE Regional Manager

Michelle Beason received a BS in Civil Engineering from Purdue University and is a registered California and Nevada PE with over 30-years' experience in planning, design, construction, and asset management of water, stormwater, and wastewater assets. Michelle has extensive professional engineering and management experience in Public Works projects including: Asset Management practices, planning and design of water and wastewater facilities, pipeline and facility inspection and maintenance, project management, master planning, engineering consulting, and construction of trenchless rehabilitation solutions.

She has worked as a Project Engineer for Black & Veatch, as an Asset Management Engineer with the East Bay Municipal Utility District, she owned her own Engineering & Construction firm for 5 years, and for the last 13 years has specialized in multi-sensor inspections, cleaning, and trenchless rehabilitation of sewer, storm, and water assets. She is currently the Regional Manager for National Plant Services, Inc., covering the 12 Western States, including Hawaii and Alaska. Michelle is also active in many industry organizations. In addition to serving as a Board Member of Western Chapter of NASTT (North American Society of Trenchless Technology), she is a Board Member of NASSCO, and is Chair of the NASSCO Infrastructure Assessment Committee, and is currently managing revisions to NASSCO's PACP/MACP/LACP coding, which will be released as Version 8 in Fall 2023.

#### Regional Manager, National Plant Services, Inc.

National Plant Services specializes in a full array of environmental maintenance and repair services including: multi-sensor robotic inspections using TV/laser/sonar, large and small diameter sewer cleaning, CCTV inspection services, GIS Updates, live water main inspection and leak detection, sewer point repairs, manhole/lateral/mainline rehabilitation (coatings/grouting/CIPP lining, UV/CIPP Point repairs), centrifugally cast concrete pipe lining (CCCP), acoustical inspection services, sewer studies and master planning, smoke testing, digester cleaning, and potholing/vacuum excavation. Michelle has Managed all planning, design, and field work for hundreds of projects over the last 9 years with NPS, and is a nationally recognized sewer condition assessment expert. She has managed and analyzed millions of feet of CCTV and multi-sensor inspection results and provided final recommendation reports including RUL (remaining useful life), rehabilitation recommendations, cleaning and inspection frequencies, and system master planning to her municipal customers.

#### Education

BS Civil Engineering,  
Purdue University, 1993

#### Registration/Certification

Professional Civil Engineer  
CA C55331, NV 031594

PACP/MACP/LACP  
Certification  
U-413-17097

CA General Contractor A, I  
#1010254

#### Honors/Awards

EBMUD Employee  
Excellence Award, 2005

Profiled as one of 5  
Women in the "Women  
Impacting Water" Feature  
Magazine, CWEA, 2017

Cover of Trenchless  
Technology Magazine, July  
2023. "Women in  
Trenchless"





## NATIONAL PLANT SERVICES PROPOSAL FOR THE LAVWMA EXPORT PIPELINE INSPECTION

Item No. 18

### Relevant Project List (partial)

- City of Fresno MSI project of 39 to 66-inch sewers
- West Valley Sanitary District Clean and CCTV inspection projects, various
- West County Sanitation District Clean and CCTV inspection projects, various
- Redwood City Clean and CCTV Inspection Projects, various plus on-call contracts
- EBMUD Field Services Contract, On Call
- EBMUD Consent Decree Advisory Group Project, On Call
- EBMUD Spillway Underdrain Clean and Inspection Projects
- DSRSD Multi-Sensor inspection Project, Clean and CCTV project, Point Repair Project
- Goleta Sanitary District clean and CCTV inspection project
- Eastern Municipal Utility District CCTV inspection project
- IEUA Siphon cleaning and Inspection Project
- Oroville Dam Spill way pipe clean and inspections
- City of Alameda clean and CCTV inspection projects, various
- City of Albany clean and CCTV inspection projects, various
- City of Emeryville clean and CCTV inspection projects, various
- Stege Sanitary District clean and CCTV inspection projects, various
- City of Oakland Clean and CCTV inspection project, smoke testing
- City of Berkeley Smoke testing project
- City of Carlsbad CCTV inspection project
- City of Auburn, WA, large diameter clean and CCTV inspection project
- City of Roseville multi-sensor inspection projects, clean and CCTV projects, various
- Delridge Trunk large diameter cleaning project, King County, WA
- City of Santa Clara clean and CCTV inspection projects, various
- City of Los Angeles CCTV inspection project
- Los Angeles County Flood maintenance project, on-call contract
- Cucamonga Valley Water District lateral lining projects
- Carpinteria Sanitary District clean and CCTV projects, lateral lining project
- City of San Jose Clean and CCTV inspection projects, various
- Shasta County clean and CCTV inspection projects, various
- SFPUC on-call cleaning, CCTV, point repair, and injection grouting project
- City of Sacramento cleaning and multi-sensor inspection projects, various
- City of San Bruno lateral inspection project
- City of Eugene lateral grouting project
- City of Tacoma, WA multi-sensor inspection project
- City of Santa Barbara lateral lining
- Centrifugally Cast Concrete Pipe lining of 84" storm drain, Lihue, Kaua'i
- San Mateo County Centrifugally Cast Concrete pipe lining of 60" storm drains
- SFPUC spray mortar lining of 9' x 6' box sewer
- City of Enumclaw, WA, smoke testing project
- City of Portland lateral lining projects
- LAVMA Effluent line CCTV inspection project
- City of Napa Storm Drain CCTV Assessment Project
- City of Santa Rosa Large Diameter and Siphon clean and CCTV inspection project
- Sacramento Regional Sanitary District CCTV inspection project of 120" interceptors

### Professional Activities

Board Member, NASSCO  
(National Association of Sewer Service Companies), 2018-Present

Chair, NASSCO Infrastructure Assessment Committee, Chair from 2018-Present, Vice Chair from 2016-2018

Board Member, Western Chapter of the North American Society of Trenchless Technology, 2018- Present

Collections Committee Member, CWEA, 2016-Present

### Publications (a sampling of Many publications)

"Stretching our Sewer/Storm Pipeline Cleaning Dollars", Trenchless Technology Magazine, 12/27/19, <https://trenchlesstechnology.com/stretching-our-sewer-storm-pipeline-cleaning-dollars/>

"CCCP to the Rescue! Restoring a Buckling 84-in. CMP Storm Drain on Island of Kaua'i", NASTT, WM-T5-04, 2019.

"NASSCO Manual of Practice", Author of 7 sections, 2018

"The Role of GIS in Asset Management", American Water Works Association, INF53969, June 2001







## NATIONAL PLANT SERVICES PROPOSAL FOR THE LAVWMA EXPORT PIPELINE INSPECTION

### DENNIS KEENE, PRESIDENT

#### NATIONAL PLANT SERVICES, INC.

☎ 310-261-0970 ✉ [dennis@nationalplant.com](mailto:dennis@nationalplant.com)

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#### EDUCATION

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**West Chester State University, PA**  
**B.S.**

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#### CERTIFICATIONS

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RME for National Plant Services Contractor License #351503, Confined Space Training,  
PACP/MACP Certified

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#### EXECUTIVE CAREER HISTORY AND MILESTONES

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##### **NATIONAL PLANT SERVICES, INC, LONG BEACH, CA** **President, 1972 - Present**

- Mr. Keene has been employed by the Carylton Corporation since 1972. He has been General Manager of National Plant Services, Inc. since 1981 and has been President since 1987.
- Responsible for coordinating Carylton Corporation efforts in the 12 Western States.
- Performed and has been involved with all aspects of the business. He started as a Laborer and has been, at varying times, Laborer, Technician, Operator/Foreman, Superintendent, Operations Manager and General Manager. Mr. Keene has hands-on experience with every piece of equipment operated by National Plant Services, Inc. and is NASSCO-certified.
- Surveyed, bid, and managed sewer cleaning and inspections projects in several Western States. He has worked closely with cities and water and sanitary districts throughout California, Oregon, Washington, New Mexico, Utah and Arizona in planning and performing sewer cleaning, closed circuit television inspection and pipe rehabilitation projects. He has a firm understanding of what cities and engineering firms expect from a specialty contractor and has the experience.
- Mr. Keene has been responsible for bidding and managing all work that National Plant Services has including CCTV, multi-sensor inspections, cleaning, smoke testing, injection grouting, lining and point repairs, and structural coatings.





## NATIONAL PLANT SERVICES PROPOSAL FOR THE LAVWMA EXPORT PIPELINE INSPECTION

### DANIEL SOLANO, OPERATIONS/FLEET MANAGER

NATIONAL PLANT SERVICES, INC.

☎ 562-244-1369 ✉ daniel@nationalplant.com

#### CERTIFICATIONS

Confined Space Training, PACP/MACP/LACP Certified, Hazwoper, and OSHA Certified

#### EXECUTIVE CAREER HISTORY AND MILESTONES

**NATIONAL PLANT SERVICES, INC, LONG BEACH, CA**

Operations Manager, 2004 - Present

- Mr. Solano has worked for National Plant Services since 2004. He has functioned in the role of Foreman, Superintendent, Assistant Project Manager and Project Superintendent. He has a full and clear understanding of what cities and sanitary districts expect from their contractors.
- He is an expert in CCTV and multi-sensor inspections, cleaning of sewer and storm pipelines, smoke testing, chemical grouting, lateral lining and point repairs, and structural coatings for pipes and manholes.
- In addition to his work with National Plant Services, Mr. Solano comes with an extensive work experience in municipal and industrial cleaning. Mr. Solano is 40 Hour Hazwoper trained and has received professional training in Confined Space Entry, C.P.R. and First Aid.
- Additionally, Mr. Solano is NASSCO PACP-certified and is an expert with Granite, WinCan, POSM, and IT Pipes CCTV software.

#### **WORK HISTORY:**

##### **1998 -2002: United Pumping, City of industry, CA**

Started as a laborer helping clean catch basins all over Los Angeles. After 8 months was promoted to Supervisor. Duties included closing all major freeways, miles at time, as part of Caltrans projects cleaning storm drains, catch basins, lift stations, manholes, and slot drains. Responsible for cleaning culverts under freeways; installed storm drain devices to prevent debris from entering catch basins in LA county, City of LA, Malibu, Santa Monica, and Lake Tahoe. Duties required on-call work for first responder hazmat spills on freeways for Caltrans.

##### **2002-2004: California Pipeline Inc., Whittier, CA**

Responsible for managing cleaning and CCTV contracts for City of Los Angeles, and the LA basin.

##### **2004-Present: National Plant Services, Inc., Long Beach, CA**

Responsible for managing project Operations and NPS' equipment fleet. Significant experience in cleaning and CCTV of storm and sewer pipelines, smoke testing, CIPP point repairs, injection grouting, and centrifugally cast concrete pipe (CCCP).



# NATIONAL PLANT SERVICES PROPOSAL FOR THE LAVWMA EXPORT PIPELINE INSPECTION

## Esther Okwatum Amoding

[www.linkedin.com/in/Esther-Okwatum-Amoding](http://www.linkedin.com/in/Esther-Okwatum-Amoding)

Oakland, CA || [eamoding@nationalplant.com](mailto:eamoding@nationalplant.com) || (+1) (602) 651-8342

### SUMMARY

Entry Level Civil Engineer who is pursuing a career in Environmental Engineering with a focus in the Wastewater industry. Experience in site supervision and construction works. Capable of working independently with minimum supervision and has strong data management skills.

### EDUCATION

**Bachelor of Science in Engineering, Civil Engineering;** Minor, Construction Management  
Arizona State University; Tempe, AZ

August 2015 - May 2019

### SKILLS

**Software Applications/Tools:** Wincan, GraniteNet, POSM, IT pipes, pipe Logix, AutoCAD, MicroStation and Microsoft Office

### CERTIFICATIONS AND AWARDS

• ArcGIS Certification	2021
• NASSCO Certification	2020
• Traffic Control Training	2019
• 30-HR OSHA training card at Arizona State University	2016
• MasterCard Foundation Scholar at Arizona State University	2015

### WORK EXPERIENCE

**Project Engineer/Manager - National Plant Services, Inc. Hayward, CA**

June 2019-Present

- Manage quality control and quality assurance of daily inspections and regular deliverables on current projects.
- Support development of project specific GIS data collection for field inspections.
- Develop process/workflows to perform inspection data quality control out of local office, reducing both labor hours and delays in data processing.
- Provide field support for the crew on the site including planning for upcoming inspections and daily management of crew tasks, which include generating regular reports for management and clients.
- Ensure all field personnel follow the safety program.
- Work with subcontractors, local county and state officials and the public to address project concerns.

### INTERNSHIPS

**Intern - Ministry of Works and Transport (Kampala, Uganda)**

Summer 2018

- Developed culvert designs with a team of 4 using AutoCAD Civil 3D.
- Collaborated with 4 team members to analyze and design abutments for a bridge.
- Created Excel spreadsheet templates for calculating the reinforcement for the abutment of a bridge.
- Performed detailed site investigations to collect data for a bridge design and Documented the results through detailed reports.

### ACADEMIC PROJECTS

**Structural Analysis and Design**

Spring 2018

- Designed a cost-effective structural model of a building located in Flagstaff, Arizona by successfully calculating the different kind of loads associated with this structure such as dead, live, wind and snow loads using the ASCE-2010 design code.
- Analyzed the acceptability of the final design output using the GS-USA computer program.

**Mechanics and AutoCAD/CIVIL 3D**

Spring 2017 and Spring 2018

- Worked on a MATLAB program to study the applied load on beams, the forces that act on beams such as shear and moment force and to investigate energy of particles as time increases.
- Drafted a roadway and pipeline set for a road and pipe network in a team of two using AutoCAD.

**Construction Safety Research**

Fall 2016

- Explored ways to overcome language barriers in the construction industry for safety enhancement.
- Created a proposal to bridge the gap between 62% of non-English speaking workers and 38% of English-speaking workers.
- Delivered the findings in a written report in a formal presentation to a research team of 60 individuals.

### COMMUNITY INVOLVEMENT

Member - American Society of Civil Engineers

October 2015 - Present

Program Chair -National Society of Black Engineers

April 2017 - April 2018

Scholar Council Representative -MasterCard Scholarship Foundation

April 2018 - April 2019

President - African Students Association

April 2018 - April 2019

ESTIMATED CONTRACT COST								
Week	Day	Work Location	Price	Total Length of Inspection (ft)	Dewater Solution	Pumping Cost	Cost by Line Item	Notes
Mob Fee			\$ 7,000.00		SUNBELT PUMP MONTHLY RENTAL	\$ 4,500.00	\$ 11,500.00	
1	1	Segment B and C	\$ 8,955.00	2668.24	Flow Through Plug	Incl Above	\$ 8,955.00	
	2	Segment D	\$ 8,955.00	2089.05	Flow Through Plug	Incl Above	\$ 8,955.00	
	3	Segment E	\$ 8,955.00	2328.03	Flow Through Plug	Incl Above	\$ 8,955.00	
Demob/Mob			\$ 7,000.00				\$ 7,000.00	
2	1	Segment F and G	\$ 8,955.00	761.78	Truck/Flow Through Plug	Incl Above	\$ 8,955.00	
	2	Segment L	\$ 8,955.00	2012.01	Flow Through Plug	Incl Above	\$ 8,955.00	
	3	Segment M and K	\$ 8,955.00	437.68	Flow Through Plug	Incl Above	\$ 8,955.00	
Demob/Mob			\$ 7,000.00				\$ 7,000.00	
3	1	Segment I	\$ 8,955.00	1279.78	Pumping Into Trucks (11.24 hrs)	Incl Above	\$ 8,955.00	
	2	Segment I	\$ 8,955.00			Incl Above	\$ 8,955.00	
Demob/Mob			\$ 7,000.00				\$ 7,000.00	
4	1	Segment O	\$ 8,955.00	528.00	Pumping Into Trucks ( 10.5 hrs)	Incl Above	\$ 8,955.00	
	2	Segment O	\$ 8,955.00			Incl Above	\$ 8,955.00	
Demob/Mob			\$ 7,000.00		SUNBELT PUMP MONTHLY RENTAL	\$ 4,500.00	\$ 11,500.00	
5	1	Segment J	\$ 8,955.00	10296.56	Ponder ( 15.31 hrs)	\$ 86,145.12	\$ 95,100.12	Ponder will have 4 trucks dewatering in this segment, with 2 dewatering ports (BO). Day 1 will have 1 TV truck on standby. Day 2 and 3 will have 2 TV trucks to inspect.
	2	Segment J	\$ 11,790.00			Incl Above	\$ 11,790.00	
	3	Segment J	\$ 11,790.00			Incl Above	\$ 11,790.00	
Demob/Mob			\$ 7,000.00				\$ 7,000.00	
6	1	Segment A	\$ 8,955.00	2961.55	Ponder (4.81 hrs)	\$ 44,648.28	\$ 53,603.28	Ponder will have 2 trucks dewatering in this segment, with 1 dewatering port (BO).
	2	Segment A	\$ 8,955.00			Incl Above	\$ 8,955.00	
Demob/Mob			\$ 7,000.00				\$ 7,000.00	
7	1	Segment H	\$ 8,955.00	8107.68	Ponder ( 28.7 hrs)	\$ 86,145.12	\$ 95,100.12	Ponder will have 4 trucks dewatering in this segment, with 2 dewatering ports (BO). Day 1 will have 1 TV truck on standby. Day 2 and 3 will have 2 TV trucks to inspect.
	2	Segment H	\$ 11,790.00			Incl Above	\$ 11,790.00	
	3	Segment H	\$ 11,790.00			Incl Above	\$ 11,790.00	
Demob/Mob			\$ 7,000.00		SUNBELT PUMP MONTHLY RENTAL	\$ 4,500.00	\$ 11,500.00	
8	1	Segment N	\$ 8,955.00	2770.87	Ponder ( 4.93 hrs)	\$ 44,648.25	\$ 53,603.25	Ponder will have 2 trucks dewatering in this segment, with 1 dewatering port (BO).
	2	Segment N	\$ 8,955.00			Incl Above	\$ 8,955.00	
Mob CIPP Crew			\$ 3,800.00				\$ 3,800.00	
Demob/Mob			\$ 7,000.00				\$ 7,000.00	
9		Segment P (Repair)	\$ 24,955.00	-	Dewater not needed		\$ 24,955.00	
	1-3	Segment P (Repair)	\$ 16,000.00			-	\$ 16,000.00	
Materials		Plug from Stemar					\$ 5,782.15	
Professional Services		Engineering Planning and Final Report					\$ 40,000.00	
				36,241.23	SUBTOTAL		\$ 619,063.92	
					10% CONTINGENCY		\$ 61,906.39	
					TOTAL		\$ 680,970.31	

1. DEWATERING CONTRACTOR WILL DEWATER J, A, H, AND N, ASSUMES SPACE ON THE ROAD FOR MULTIPLE TRUCK PARKING WHILE FILLING, AND TO DECANT DOWNSTREAM.
2. DURING EACH INSPECTION, CREW WILL INSPECT AS FAR AS POSSIBLE IN EACH DIRECTION.
3. DUE TO 3 DAY WORK WINDOWS, DEMOB AND MOB FEES MUST BE CHARGED AT THE END OF EACH WEEK.
4. DEWATERING CONTRACTOR WILL TAKE 24-48 HOURS TO DEWATER EACH SEGMENT. EITHER SUNBELT OR PONDER WILL BE THE SUBCONTRACTOR.
- RED FONT INCLUDES THE WORST-CASE EXTENDED PRICE. PONDER ENVIRONMENTALS MAXIMUM DEWATERING COST IS INCLUDED.

Segment	Volume of Water (Gal)	Time to Dewater (hr)
A	129834	4.81
H	344414	6.38
J	413496	8.71
N	133169	4.93
Truck	Rate	Storage Size (Gal)
NPS	450	1800
PONDER	450	5040

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Agenda Explanation  
 Livermore-Amador Valley  
 Water Management Agency  
 Board of Directors  
 May 15, 2024

## **ITEM NO. 19 UPDATE AND RESPONSE TO VARIOUS LEGAL AND LEGISLATIVE ISSUES**

### **Action Requested**

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

### **Summary**

**Attachment No. 19.a** is the Bay Area Clean Water Agencies (BACWA) Bulletin for April 2024. This report describes significant permitting and regulatory issues at both a state and federal level that are of interest to Bay Area wastewater treatment agencies. **Attachment No. 19.b** is the BACWA Regulatory Issue Summary Matrix dated May 3, 2024. This document provides a summary of all regulatory issues facing Bay Area wastewater treatment agencies. New information is shown in purple highlighting. The most critical issue currently is the Regional Board's efforts to reissue the Nutrient Watershed Permit. The Tentative Order was issued on April 5, 2024 with a comment deadline of May 8, 2024. The permit requires a 53.3% reduction in total inorganic nitrogen (TIN) from the baseline year of 2022 for the combined discharge for EBDA and LAVWMA agencies. It will apply during the warm weather months of May – October. The TIN limit will apply to the EBDA combined effluent, so it will be up to the EBDA and LAVWMA agencies to manage that limit internally. The most difficult aspect of the permit is the requirement to reach the final limit in ten years. BACWA has estimated that it will cost agencies \$11B over that time and there are serious doubts that projects can be completed within that time. **Attachment No. 19.c** is the comment letter submitted by EBDA on behalf of the EBDA and LAVWMA member agencies. **Attachment No. 19.d** is CASA Connects for May 9, 2024. This document provides updates on California Clean Water News items.

### **Recommendation**

This is an information item only requiring no action by the Commission.

### **Attachments**

- 19.a BACWA Bulletin April 2024
- 19.b BACWA Regulatory Issue Summary Matrix dated May 3, 2024
- 19.c EBDA Comment Letter on the RWQCB Nutrients Watershed Permit
- 19.d CASA Connects for May 9, 2024





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## BACWA Bulletin - April 2024

### Meetings

- BAPPG - Wed 4/3, Virtual
- Lab Committee TNI Training - Tues 4/16, Virtual
- Recycled Water Committee - Tues 4/16, Virtual + Oakland
- Executive Board Meeting - Fri 4/19, Virtual + San Francisco
- Lab Committee - Tues 4/23, Virtual
- Permits Committee - Tues 4/23, Virtual
- [Visit the Calendar for details](#)

### Upcoming Events

- [Post-COVID Wastewater-Based Surveillance Update](#) - 4/2, Virtual
- CWEA Pre-Conference Workshop "[School of Solids](#)" - 4/9, Fairfield
- CWEA Pre-Conference Workshop "[Take Control Using a Process Simulator to Get the Nitrogen Out](#)" - 4/9, Sacramento
- [CWEA Annual Conference](#) 4/9 - 4/12, Sacramento
- [North Bay Watershed Association Conference](#) - 4/19, Rohnert Park

- [CWEA & CASA - Partnering for Impact](#) - 6/4, Irvine
- [WEF Residuals and Biosolids Conference](#) - 6/18 - 6/21, Oklahoma City

[View previous BACWA Bulletins](#)

## Join us for the BACWA Annual Members Meeting on May 3rd!

Each year BACWA hosts an annual meeting for members, with updates on a variety of regulatory and technical topics. The 2024 Annual Members Meeting will be held in-person on Friday, May 3rd at the David Brower Center in Berkeley. You can [register here](#) for this free event. Registration will close on April 24th. The final program will be posted prior to the event, and will include:

- Updates from regulators at the Regional Water Board, State Water Board, EPA, and Bay Area Air Quality Management District
- A panel on workforce development
- Regulatory and technical updates on nutrients

[Register Here for May 3rd Annual Members Meeting](#)

## Anticipating Nutrient Watershed Permit Reissuance, BACWA Member Agencies Host Media Tours on Nutrient Removal Projects

soon as June 2024, BACWA staff and our communications team have been working to highlight the opportunities and challenges of nutrient removal projects in the Bay Area. Recent media tours were held at the City of Palo Alto and Oro Loma Sanitary District. Local coverage includes:

- [\*\*Algae bloom fish kills prompt new Bay Area wastewater treatment plant requirements costing \\$11 billion\*\*](#) - CBS News San Francisco, March 15th
- [\*\*Billions needed to fund upgrades to meet anticipated wastewater regulations\*\*](#) - Mercury News, March 26th
- [\*\*With \\$369M in wastewater upgrades, Palo Alto hopes to help stem algal blooms\*\*](#) - Palo Alto Online, March 28th
- [\*\*Regional Water Board Takes Steps to Avoid Red Tide\*\*](#) - KQED, March 20th

## could cost plants \$11B



Regional Water Quality Control Plant manager, David Allen, talks with a wastewater plant that's being retrofitted in Palo Alto on Thursday. The plant is undergoing a \$200-million upgrade project. New regulations are expected to affect several cities.

Expected stricter regulations at Bay Area facilities to prevent toxic algae blooms and protect fish would cost an average of \$4,000 per household

By Ryan MacCamie

maccamie@mercurynews.com

At least \$11 billion would be needed to upgrade wastewater treatment facilities across the Bay Area if regulators impose anticipated stricter environmental rules, according to a regional water board that seeks to protect the San Francisco Bay.

The upgrades at dozens of sewage treatment plants, needed to prevent toxic algae blooms and protect fish, would cost an average of \$4,000 per household, and engineers may end up funding the improvements. The Bay Area Clean Water Agencies — a group of the five largest wastewater treatment agencies in the Bay Area — said in a statement.

The key culprit? Nitrogen found in urine and fecal matter, which feeds the growth of algae. While algae can be harmful at low levels, excessive growth, which the Bay Area saw in 2022, can be harmful to fish and other marine life. Currently, only 44 of 57 plants across the region are capable of removing adequate amounts of nitrogen.

Sometime this spring, the San Francisco Bay Regional Water Quality Control Board, a key water regulator, is expected to issue an updated wastewater permit — in other words, new regulations that would set new limits on pollutants, including nitrogen, released into the bay.

What does this mean for Bay Area consumers? Without external funding, residents could end up paying for



A worker moves along a walkway over wastewater tanks at the Regional Water Quality Control Plant in Truckee. A couple of new wastewater facilities are being discussed by officials in Palo Alto, ranging from 50% to 100%.

the improvements through increases in their wastewater bills. How much is still unclear.

BACWA estimated total cost for upgrades to the Bay Area's water treatment facilities is \$11 billion. When divided by the number of households, that amounts to \$4,000 per household. The impact on household water bills will depend on how much money can be recovered from other sources to fund the upgrades.

"We are going to try to attract federal and state investment in our region in the form of grants," said Larkins. BACWA, executive director of Bay Area

Clean Water Agencies. "But in the absence of those, wastewater projects are paid for by wastewater rates, which are the bills that the public pays to their agencies. These will have to rise to accommodate the upgrades."

In Palo Alto, officials aren't wishing for regulators to act before upgrading the city's water treatment plant, and residents may see the impact on their bills sooner than in the rest of the Bay Area.

"We're early adopters," said Katie North, Palo Alto's assistant director of public works. The city's plant

WATER • PAGE 3

BACWA will continue public outreach efforts as the Watershed Permit Tentative Order is released.

## How does your agency handle Private Sewer Laterals?

BACWA's Collection System Committee is conducting a Private Sewer Lateral (PSL) survey! Sanitary sewer system agencies are invited to respond by **Friday, April 5**. This survey will compile information about the different private sewer lateral ordinances used by the Bay Area's sanitary sewer systems. As more and more agencies develop inspection and certificate programs for PSLs, BACWA's goal is to share information between agencies about current practices for managing PSL connections. A PDF version of the survey is available [here](#). [\*\*Take the Survey here\*\*](#).

## Private Sewer Lateral Survey

## Central San Hosting Bicycle Tours along the Iron Horse Trail

host a bicycle tour highlighting wastewater infrastructure along the way. This bicycle tour is built on the [Go With The Flow Map](#) designed to help Central San's customers see (and sometimes hear) the flow of wastewater that follows the Iron Horse Trail throughout Contra Costa County. The next tour will be held on Saturday, April 14th. You can [register here](#). To find out more about how Central San organized this unique community event, contact [Ben Lavender](#).



Photo Credit: [Central San](#)

## PFAS Updates

Regulatory and legislative initiatives related to PFAS in recent weeks include:

- USEPA announced details related to a planned [Study of PFAS Influent to POTWs](#), including a [draft questionnaire](#) released for a 60-day comment period. The study is part of the USEPA's [PFAS Strategic Roadmap](#) and is intended to identify potential industrial sources of PFAS to POTWs. Agencies with plant flows greater than 10 MGD would need to fill out the detailed questionnaire, and agencies selected by USEPA would need to collect influent, effluent, biosolids, industrial wastewater and domestic wastewater samples. For more information or to provide comments, contact BACWA's [Mary Cousins](#).
- The Senate Committee on Environment and Public Works' held a [hearing on Examining PFAS as Hazardous Substance](#). Wastewater sector representatives testified on the need for a liability exemption for passive receivers if PFOA and PFOS are designated as hazardous substances



- In late February, State Senator Nancy Skinner [announced](#) the introduction of [SB 903](#), which would prevent the sale and use of products PFAS in California unless the use of the PFAS in the product is necessary and there is not a safer alternative available. [CASA](#) is co-sponsoring this legislation with Natural Resources Defense Council (NRDC), Breast Cancer Prevention Partners (BCPP), Clean Water Action (CWA) and Environmental Working Group (EWG). BACWA has signed onto a CASA coalition letter in support of the bill.

## BACWA 2024 Biosolids Trends Survey Underway

BACWA is continuing to profile biosolids trends in the Bay Area by conducting the [2024 Biosolids Survey](#), covering activities in calendar years 2021, 2022, and 2023. BACWA asks that agencies respond to the survey by Friday, April 19th. A non-fillable PDF version of the survey can be viewed [here](#). BACWA plans to compile results from Bay Area agencies and share them in summer 2024.

## BACWA Meeting Locations

In 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: Palo Alto is Hiring!

The City of Palo Alto's Environmental Services Department is hiring several positions for the [Watershed Protection Group](#):

- [Watershed Protection Project Manager](#)
- [Associate Engineer](#)
- [Industrial Waste Inspector](#)

Learn more about the Regional Water Quality Control Plant at [CleanBay.Org](#).

[Send in](#) updates from your agency to post here!

## What's new in BACWA's Committees

The Asset Management committee is planning an in-person workshop to be held in early June at Central San (Martinez) - stay tuned for details!

### **AIR Committee**

The **March meeting** included a discussion of monitoring requirements for Precursor Organic Compounds (POCs), BAAQMD's planned updates to the Facility Risk Reduction Program (**Rule 11-18**), anticipated changes to BACT for engines greater than 50 hp, and more. The next meeting is scheduled for Wednesday, May 29.

### **BAPPG**

The next meeting is scheduled for Wednesday, April 3rd and will include an update from the **Responsible Flushing Alliance**.

### **Collections Systems Committee**

The committee was recently invited to review draft guidance for updating Sewer System Management Plans (SSMPs) per the reissued statewide **General Order for Sanitary Sewer Systems**. The next committee meeting will be held Thursday, May 9th.

### **Laboratory Committee**

The next TNI training session will be held Tuesday, April 16th. The next regular committee meeting will be held on Tuesday, April 23rd and will include a discussion about chronic toxicity species sensitivity screening studies.

### **Permits Committee**

The next committee meeting will be held on April 23rd.

### **Recycled Water Committee**

The next committee meeting is scheduled for April 16th with an in-person option at EBMUD in downtown Oakland. The meeting will feature a presentation on the South Bay Decentralized Reuse Project.

### **Upcoming Events**

#### **April 2nd: Post-COVID Wastewater-Based Surveillance Update, Virtual**

Join CASA and CWEA for an update on wastewater-based surveillance in a post COVID-19 world. Explore the latest advancements in monitoring for COVID variants and other pathogenic organisms in wastewater. Hear from speakers representing CDC (Amy Kirby), Stanford University (Ali Boehm), California Department of Public Health (Angela Rabe), and Los Angeles County Sanitation Districts (Naoko

**April 9th: CWEA Pre-Conference Workshop "School of Solids" - 4/9, Fairfield**  
Spend the day at Fairfield-Suisun Sewer District (FSSD) and gain an understanding of how biosolids are managed, technology innovations, and how to operate and maintain the equipment. [Register here.](#)

**April 9th: CWEA Pre-Conference Workshop "Take Control Using a Process Simulator to Get the Nitrogen Out," Sacramento**

Are you ready to run a treatment plant on your own? This workshop covers the fundamental concepts of operating an activated sludge plant to achieve nitrogen removal via a combination of lecture material and a hands-on process simulation. Attendees will be led through the computer simulations to demonstrate how the concept is applied to a plant layout using state-of-the-art SimuWorks™ software based on Hatch's GPS-X program. [Register here.](#)

**April 9th - April 12th: CWEA Annual Conference, Sacramento**

The CWEA Annual Conference & Expo will be held in Sacramento from Tuesday 4/9 to Friday 4/12. The conference will feature sessions on nutrient regulations, collection system management, asset management, artificial intelligence, water recycling, and more! [Register here.](#)

**April 19th: North Bay Watershed Association Conference, Rohnert Park**

This year's event will be a dynamic gathering of regional leaders and partners to envision tomorrow's resilient watershed communities and workforce, focusing on the theme "**Imagine Our Future North Bay.**" The conference will unite experts to delve into California's Water Plan Update, explore advancement and funding of natural and built infrastructure initiatives, and foster diverse opportunities for tomorrow's rewarding careers in water. For more information, see the [Conference Website.](#)

**May 22nd: Central Valley Clean Water Association Annual Conference, Sacramento**

CVCWA's Annual Conference will be held at Sac Sewer in Sacramento. This year's conference theme is "***The Future of Water Quality: Adapting to Everchanging Regulatory Challenges.***" Our speakers will focus on relevant regional and statewide issues, such as key Regional Water Board programs (CV-SALTS, Methylmercury, Pyrethroids, etc.), Constituents of Concern, Climate, Biosolids, Recycled water, Collection systems, and more. [Register here.](#)

**June 4th: CWEA & CASA - Partnering for Impact, Irvine**

CASA and CWEA are uniting a community of leaders from water utilities, universities, and industries implementing innovative clean water technologies. Our goal is a meaningful impact on the water environment right now, as well as supporting

**June 18th - 21st: WEF Residuals and Biosolids Conference, Oklahoma City**

Share and discover new technologies, successful innovations, and current best practices from industry professionals who have achieved long-term success designing and managing effective biosolids programs. [Download the program to explore sessions and speakers!](#)

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## KEY REGULATORY ISSUE SUMMARY

Updated May 3, 2024

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
<b>NUTRIENTS IN SAN FRANCISCO BAY</b>			
<ul style="list-style-type: none"> <li>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.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>For FY24, BACWA is contributing \$1.8M to fund scientific research needed to make management decisions for the 3<sup>rd</sup> Watershed Permit. This payment completes the science funding requirement in the 2<sup>nd</sup> Watershed Permit.</li> <li>The focus of current scientific efforts is improving model representation of biogeochemistry, light attenuation, dissolved oxygen, and harmful algal bloom dynamics.</li> <li>The science team is also developing an Assessment Framework for Open Bay habitats and Lower South Bay sloughs.</li> <li>In summer 2022, a harmful algae bloom in San Francisco Bay brought increased public attention to this topic. A smaller bloom recurred in summer 2023. In both cases, the NMS science team modified the science plan to conduct monitoring and assist with data interpretation.</li> </ul>	<ul style="list-style-type: none"> <li><b>Continue to participate in NMS steering committee, Nutrient Technical Workgroup, and planning subcommittee meetings, and provide funding for scientific studies.</b></li> <li>Continue to work with NMS scientists to obtain summaries of scientific accomplishments for public use.</li> <li>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.</li> </ul>	<p>BACWA Nutrients Page: <a href="https://bacwa.org/nutrients/">https://bacwa.org/nutrients/</a></p> <p>NMS FY24 Science Program Plan Materials <a href="https://drive.google.com/drive/folders/16H_sQ8AuogHv-eo9QZx2A9Ph9MTecg5j?usp=drive_link">https://drive.google.com/drive/folders/16H_sQ8AuogHv-eo9QZx2A9Ph9MTecg5j?usp=drive_link</a></p> <p>NMS Work Products <a href="https://sfbaynutrients.sfei.org/books/reports-and-work-products">https://sfbaynutrients.sfei.org/books/reports-and-work-products</a></p> <p><b>BACWA Nutrient Infographic</b> <a href="https://bacwa.org/wp-content/uploads/2024/03/BACWA-Algal-Blooms-Infographic-March-2024.pdf">https://bacwa.org/wp-content/uploads/2024/03/BACWA-Algal-Blooms-Infographic-March-2024.pdf</a></p> <p>2023 SF Bay Algal Bloom <a href="https://bacwa.org/general/2023-algal-bloom-in-sf-bay-updated-8-3-2023/">https://bacwa.org/general/2023-algal-bloom-in-sf-bay-updated-8-3-2023/</a></p>

Background Highlights	Challenges and Recent Updates	Next Steps for BACWA	Links/Resources
<b>SF BAY NUTRIENT WATERSHED PERMIT</b>			
<ul style="list-style-type: none"> <li>• The 1<sup>st</sup> Nutrient Watershed Permit was adopted in 2014, and required a regional study on Nutrient Treatment by Optimization and Upgrades, completed in 2018.</li> <li>• The 2<sup>nd</sup> Nutrient Watershed Permit was adopted in 2019. It includes:               <ul style="list-style-type: none"> <li>◦ Continued individual POTW nutrient monitoring and reporting;</li> <li>◦ Continued group annual reporting;</li> <li>◦ Significantly increased funding for science;</li> <li>◦ Regional assessment of the feasibility and cost for reducing nutrients through nature-based systems and recycled water;</li> <li>◦ 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</li> <li>◦ Recognition of “early actors” who are planning projects that will substantially decrease TIN loads.</li> </ul> </li> <li>• Through the nutrient surcharge levied on permittees, BACWA funds compliance with the following provisions on behalf of its members:               <ul style="list-style-type: none"> <li>◦ Group Annual Reporting</li> <li>◦ Regional Studies on Nature-Based Systems and Recycled Water</li> <li>◦ Support of scientific studies through the Regional Monitoring Program (RMP) with \$11M over the five-year permit term.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Studies related to Recycled Water and Nature-Based Systems were completed in June 2023, as required by the 2<sup>nd</sup> Nutrient Watershed Permit.</li> <li>• 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 2<sup>nd</sup> Watershed Permit is based on a water year (Oct. 1 – Sept. 30).</li> <li>• In response to the summer 2022 algae bloom, Regional Water Board staff plan to include significant TIN load reduction requirements in the 3<sup>rd</sup> Watershed Permit. The NMS modeling team tested several load reduction scenarios to inform the new requirements. Based on this modeling, Regional Water Board staff have proposed dry season load limits that are about 40% lower than actual loads from the 2022 dry season.</li> <li>• The Regional Water Board plans to reissue the Nutrient Watershed Permit in June 2024 and has released a Tentative Order (draft permit). The Tentative Order contains interim limits for dry season TIN loads that are effective immediately and “final limits” that become effective after 10 years. The 10-year clock could be modified in subsequent permits if the “final limits” become more stringent, so the term “final” only applies to this specific permitting action.</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Prepare written and oral comments on the Tentative Order versions of the forthcoming 3<sup>rd</sup> Nutrient Watershed Permit. Written comments are due May 8, and the adoption hearing is scheduled for June 12, 2024.</b></li> <li>• Continue to advocate for sufficient time for agencies to implement nutrient load reduction projects, including those with involving innovative technologies, recycled water, and nature-based solutions.</li> <li>• BACWA continues to convene a Nutrient Strategy Team to develop BACWA’s key tenets for the 3<sup>rd</sup> Watershed Permit, and <b>members are encouraged to participate</b>. The Nutrient Strategy Team is actively engaging with the Regional Water Board to expand upon the key tenets and discuss implementation details for the 3<sup>rd</sup> Watershed Permit, including the magnitude and timing of required load reductions.</li> <li>• Agencies will continue to report nutrient monitoring data both through CIWQS and directly to BACWA.</li> </ul>	<p>2nd Nutrient Watershed Permit:  <a href="http://www.waterboards.ca.gov/sanfranciscobay/board_decisions/adopted_orders/2019/R2-2019-0017.pdf">www.waterboards.ca.gov/sanfranciscobay/board_decisions/adopted_orders/2019/R2-2019-0017.pdf</a></p> <p>Special Studies of Recycled Water and Nature-Based Solutions:  <a href="http://bacwa.org/document-category/2nd-watershed-permit-studies/">bacwa.org/document-category/2nd-watershed-permit-studies/</a></p> <p>BACWA Group Nutrient Annual Reports:  <a href="http://bacwa.org/document-category/nutrient-annual-reports/">bacwa.org/document-category/nutrient-annual-reports/</a></p> <p>Presentations from 2023 BACWA Annual Members Meeting  <a href="http://bacwa.org/document-category/2023-annual-meeting/">bacwa.org/document-category/2023-annual-meeting/</a></p> <p>BACWA Concerns related to Compliance Timelines in the 3<sup>rd</sup> Watershed Permit  <a href="http://bacwa.org/document/bacwa-comments-on-nutrient-removal-timelines-2024-01-29/">bacwa.org/document/bacwa-comments-on-nutrient-removal-timelines-2024-01-29/</a></p> <p>Tentative Order for 3<sup>rd</sup> Nutrient Watershed Permit  <a href="https://www.waterboards.ca.gov/sanfranciscobay/board_info/agendas/2024/June/nutrients/Nutrients%20Tentative%20Order-final.pdf">https://www.waterboards.ca.gov/sanfranciscobay/board_info/agendas/2024/June/nutrients/Nutrients%20Tentative%20Order-final.pdf</a></p>

Background Highlights	Challenges and Recent Updates	Next Steps for BACWA	Links/Resources
<b>CHLORINE RESIDUAL COMPLIANCE</b>			
<ul style="list-style-type: none"> <li>The Basin Plan effluent limit for residual chlorine is 0.0 mg/L. Prior to 2024, residual chlorine was the most frequent parameter for violations for Bay Area 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%).</li> <li>Prior to 2024, agencies were overdosing their effluent with the dechlorination agent, sodium bisulfite, to prevent chlorine violations, a practice which cost the region approximately \$2 million each year.</li> <li>Regional Water Board staff and BACWA have worked together for more than decade to modify the effluent limit for chlorine residual.</li> </ul>	<ul style="list-style-type: none"> <li>In November 2023, the Regional Water Board adopted an NPDES Permit Amendment that modifies effluent limits for residual chlorine for most dischargers. The revised limits are based on a translation of the Basin Plan’s existing narrative toxicity objective. The NPDES Permit Amendment includes:               <ul style="list-style-type: none"> <li>Limits calculated based on a 0.013 mg/L water quality objective in marine and estuarine waters, and incorporating dilution for deep water dischargers. The limits are applied as a 1-hour average.</li> <li>A Minimum Level of 0.05 mg/L for online continuous monitoring systems.</li> </ul> </li> <li>The NPDES Permit Amendment requires most dischargers to prepare a Chlorine Process Control Plan targeting a chlorine residual of 0.0 mg/L at discharge points. The Chlorine Process Control Plan is part of the Operation and Maintenance Manual; updates are to be summarized with annual self-monitoring reports.</li> </ul>	<ul style="list-style-type: none"> <li><b>Comply with new effluent limits for residual chlorine, new reporting requirements, and new Chlorine Process Control Plan requirements beginning January 1, 2024.</b></li> <li>BACWA has prepared a guidance document for agencies to use to meet the new chlorine process control requirement.</li> </ul>	<p>Blanket NPDES Permit Amendment, Effective January 1, 2024:  <a href="http://www.waterboards.ca.gov/sanfranciscobay/board_decisions/adopted_orders/2023/R2-2023-0023.pdf">www.waterboards.ca.gov/sanfranciscobay/board_decisions/adopted_orders/2023/R2-2023-0023.pdf</a></p> <p>BACWA Guidance on Complying with Amended NPDES Permit Requirements for Residual Chlorine  <a href="http://bacwa.org/document/complying-with-amended-npdes-permit-requirements-for-residual-chlorine-2023-12-20/">bacwa.org/document/complying-with-amended-npdes-permit-requirements-for-residual-chlorine-2023-12-20/</a></p>

Background Highlights	Challenges and Recent Updates	Next Steps for BACWA	Links/Resources
<b>PESTICIDES</b>			
<ul style="list-style-type: none"> <li>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.</li> <li>EPA reviews all registered pesticides at least once every 15 years. Each review allows opportunity for public comment.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>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 FY24 is \$69k.</li> <li>The Regional Water Board leverages BACWA's efforts to provide their own comment letters.</li> <li>The August 2023 version of the BAPPG/BACWA Pesticide Watch List added indoor uses of Quaternary Ammonia Compounds, whose usage has been increasing in recent years.</li> <li>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. CalDPR is also pursuing a significant increase to the "Mill Fee," a tax on pesticide sales, to fund some activities identified in the Roadmap. The proposed tax increase was included with the Governor's State Budget Proposal for FY25 and would be applicable to all pesticides, including sodium hypochlorite.</li> <li>Baywise.org has flea and tick control messaging for pet owners and veterinarians. In addition, the BACWA website offers toolkits for conducting outreach to pet owners and veterinary offices.</li> </ul>	<ul style="list-style-type: none"> <li><b>BACWA members can conduct public and veterinary office outreach using the newly available flea and tick outreach toolkits.</b></li> <li>Advocate for implementation of specific actions from the Sustainable Pesticide Management Roadmap.</li> <li>Continue to comment on EPA pesticide re-registrations and CalDPR actions.</li> <li>Engage with EPA on proposed changes to the regulatory approval process for pesticides.</li> <li>Work with veterinary associations on messaging with respect to flea and tick control alternatives.</li> <li>Continue to develop summaries of EPA actions on pesticides.</li> <li>Look for opportunities to work with CalDPR on pesticides research.</li> <li>Work with other regional associations, such as CASQA to collaborate on funding pesticide regulatory outreach.</li> </ul>	<p>BACWA Pesticide Regulatory Support Page:  <a href="https://bacwa.org/bappg-pesticides/">bacwa.org/bappg-pesticides/</a></p> <p>Flea and Tick Outreach Toolkits:  <a href="https://bacwa.org/bappg-pesticides/flea-and-tick-outreach-toolkits/">bacwa.org/bappg-pesticides/flea-and-tick-outreach-toolkits/</a></p> <p>Baywise flea and tick pages:  <a href="https://baywise.org/residential/for_your_pets/">baywise.org/residential/for_your_pets/</a></p> <p>CalDPR Sustainable Pest Management Roadmap  <a href="https://www.cdpr.ca.gov/docs/sustainable_pest_management_roadmap/">www.cdpr.ca.gov/docs/sustainable_pest_management_roadmap/</a></p> <p>BACWA coalition letter on modernizing the pesticide approval process  <a href="https://bacwa.org/document/bacwa-nacwa-coalition-comments-on-fda-epa-pesticide-modernization-2023-04-25/">bacwa.org/document/bacwa-nacwa-coalition-comments-on-fda-epa-pesticide-modernization-2023-04-25/</a></p> <p>BAPPG/BACWA Pesticides Watch List  <a href="https://bacwa.org/wp-content/uploads/2023/08/FINAL-BACWA-Pesticides-Watch-List-Aug-2023.pdf">bacwa.org/wp-content/uploads/2023/08/FINAL-BACWA-Pesticides-Watch-List-Aug-2023.pdf</a></p>



Background Highlights	Challenges and Recent Updates	Next Steps for BACWA	Links/Resources
<b>MERCURY AND PCBs</b>			
<ul style="list-style-type: none"> <li>• The Mercury &amp; PCBs Watershed Permit is based on Total Maximum Daily Loads (TMDLs) for San Francisco Bay for each of these pollutants.</li> <li>• The Mercury &amp; PCBs Watershed Permit was most recently reissued in December 2022, and it continues to require discharger support for risk reduction activities. BACWA is funding risk reduction activities on behalf of its members to comply with this permit provision. For FY24, BACWA has budgeted \$12,500 to support risk reduction activities related to fish consumption.</li> <li>• Aggregate mercury and PCBs loads have been well below waste load allocations through 2022, the last year for which data have been compiled.</li> <li>• EPA Method 1668C for measuring PCB Congeners has not been promulgated by EPA. Effluent limitations are based on PCB Aroclors quantified using EPA Methods 625.1 or 608.3.</li> <li>• 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.</li> </ul>	<ul style="list-style-type: none"> <li>• 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.</li> <li>• BACWA supported risk reduction programming by two grantees to fulfill requirements of the 2017 Mercury &amp; PCBs Watershed Permit. In 2023, BACWA arranged for the grantees to present their work to Regional and State Water Board staff.</li> <li>• Through 2026, State Water Board and Regional Water Board staff are working on a Bioaccumulation Monitoring Program Realignment effort in the San Francisco Bay region. BACWA intends to support risk reduction activities related to this effort, which may include public outreach related to subsistence fishing.</li> <li>• In January 2022, monitoring requirements for mercury were reduced for most dischargers by a blanket NPDES Permit amendment (Order R2-2021-0028). Revised monitoring frequencies are also reflected in the reissued permit.</li> <li>• Recent consolidations among contract laboratory providers of PCB analysis via EPA Method 1668C has led to difficulties with electronic reporting.</li> </ul>	<ul style="list-style-type: none"> <li>• BACWA Lab and Permits Committee members are working to facilitate smoother electronic reporting of PCB congeners via EPA Method 1668C.</li> <li>• Continue to 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 2022 permit.</li> <li>• 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.</li> <li>• 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.</li> <li>• Participate in the Regional Water Board's 2024 Triennial Review process, which will impact the prioritization of Basin Plan amendments, including designation of new beneficial uses. The Regional Water Board is accepting input on candidate projects through May 24, 2024.</li> </ul>	<p>2022 Mercury &amp; PCBs Watershed Permit (Effective Feb. 1, 2023)  <a href="https://www.waterboards.ca.gov/sanfranciscobay/board_decisions/adopted_orders/2022/R2-2022-0038.pdf">https://www.waterboards.ca.gov/sanfranciscobay/board_decisions/adopted_orders/2022/R2-2022-0038.pdf</a></p> <p>Risk Reduction Materials (Updated August 2023)  <a href="https://bacwa.org/mercurypcb-risk-reduction-materials/">https://bacwa.org/mercurypcb-risk-reduction-materials/</a></p> <p>NPDES Permit Amendment for Monitoring and Reporting  <a href="https://www.waterboards.ca.gov/sanfranciscobay/board_decisions/adopted_orders/2021/R2-2021-0028.pdf">https://www.waterboards.ca.gov/sanfranciscobay/board_decisions/adopted_orders/2021/R2-2021-0028.pdf</a></p> <p>Mercury and PCB Load Trends 2013- 2022 (Updated July 2023)  <a href="https://www.waterboards.ca.gov/sanfranciscobay/board_info/agency/2023/July/6_ssr.pdf">https://www.waterboards.ca.gov/sanfranciscobay/board_info/agency/2023/July/6_ssr.pdf</a></p> <p>2024 Triennial Review of the Basin Plan  <a href="https://www.waterboards.ca.gov/sanfranciscobay/basin_planning.html#triennialreview">https://www.waterboards.ca.gov/sanfranciscobay/basin_planning.html#triennialreview</a></p>

Background Highlights	Challenges and Recent Updates	Next Steps for BACWA	Links/Resources
<b>STATE WATER BOARD TOXICITY PROVISIONS</b>			
<ul style="list-style-type: none"> <li>• The State Water Board adopted the Statewide Toxicity Provisions in October 2021 as state policy for water quality control for all inland surface waters and estuaries. The Provisions establish:               <ul style="list-style-type: none"> <li>○ Use of Test of Significant Toxicity (TST) as statistical method to determine toxicity, replacing EC25/IC25;</li> <li>○ Numeric limits for chronic toxicity for POTWs &gt;5 MGD and with a pretreatment program; smaller POTWs will receive effluent targets and only receive limits if Reasonable Potential is established;</li> <li>○ Regional Water Board discretion on whether to require RPAs for acute toxicity</li> <li>○ For POTWs with <i>Ceriodaphnia dubia</i> as most sensitive species, numeric targets rather than limits were initially in effect until completion of a statewide quality assurance study in December 2023.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• EPA approved the Statewide Toxicity Provisions in May 2023, and they became effective on June 1, 2023. Individual NPDES permits reissued in the San Francisco Bay Region are implementing the Toxicity Provisions and requiring use of the TST for chronic toxicity testing. Reissued permits no longer require acute toxicity monitoring.</li> <li>• EPA has not yet approved the Alternate Test Procedure for whole effluent toxicity testing. Until the Alternate Test Procedures are approved, the Regional Water Board has advised that dischargers should use the full five-concentration series for all tests, including routine monitoring and Species Sensitivity Screening Studies.</li> <li>• 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 are now required by the provisions to do sensitive species screening once every 15 years.</li> <li>• The State Water Board collaborated with stakeholders on a special study to improve the quality of <i>Ceriodaphnia dubia</i> testing. The multi-laboratory study of toxicity testing was completed and presented to the State Water Board in 2023. The State Water Board has compiled resources related to the study for dischargers that plan to use <i>Ceriodaphnia dubia</i> for chronic toxicity monitoring.</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Begin conducting toxicity testing using the Statewide Toxicity Provisions.</b> All member agencies with individual NPDES permits reissued after August 2022 have transitioned to the new toxicity testing requirements.</li> <li>• <b>Plan to conduct a species sensitivity screening</b> 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. The BACWA laboratory committee has compiled some tips related to sensitivity screening studies for member agencies' use.</li> <li>• Members hiring a contract laboratory to perform testing using <i>Ceriodaphnia dubia</i> should utilize the <i>Ceriodaphnia dubia</i> Quality Assurance Guidance Recommendations from the multi-laboratory study, including the performance metrics listed in Appendix E of the report.</li> </ul>	<p>SWRCB Toxicity Page:  <a href="http://www.swrcb.ca.gov/water_issues/programs/state_implementation_policy/tx_ass_cntrl.shtml">http://www.swrcb.ca.gov/water_issues/programs/state_implementation_policy/tx_ass_cntrl.shtml</a></p> <p>Regional Water Board presentation on implementation of Statewide Toxicity Provisions from December 2020:  <a href="https://bacwa.org/wp-content/uploads/2021/01/Slides-from-RWQCB-Regarding-R2-Tox-Language-in-NPDES-Permits-2020-12-08.pdf">https://bacwa.org/wp-content/uploads/2021/01/Slides-from-RWQCB-Regarding-R2-Tox-Language-in-NPDES-Permits-2020-12-08.pdf</a></p> <p>EPA Approval of Statewide Toxicity Provisions  <a href="https://bacwa.org/wp-content/uploads/2023/05/05.01.2023-EPA-CWA-303c-Approval-of-California-Toxicity-Provisions.pdf">https://bacwa.org/wp-content/uploads/2023/05/05.01.2023-EPA-CWA-303c-Approval-of-California-Toxicity-Provisions.pdf</a></p> <p><i>Ceriodaphnia dubia</i> Study Resources, including link to Quality Assurance Guidance Recommendations  <a href="https://www.waterboards.ca.gov/water_issues/programs/state_implementation_policy/docs/ceriodaphnia-dubia-study-resources.pdf">https://www.waterboards.ca.gov/water_issues/programs/state_implementation_policy/docs/ceriodaphnia-dubia-study-resources.pdf</a></p> <p>CASA Webinar on Lessons from <i>Ceriodaphnia</i> Study  <a href="https://casaweb.org/resources/speaker-presentations/">https://casaweb.org/resources/speaker-presentations/</a></p>

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<b>COMPOUNDS OF EMERGING CONCERN (CECS)</b>			
<ul style="list-style-type: none"> <li>Pharmaceuticals and other trace compounds of emerging concern (CECs) are ubiquitous in wastewater at low concentrations and have unknown effects on aquatic organisms.</li> <li>The State Water Board has formed a Pretreatment and CECs Unit.</li> <li>The San Francisco Bay region'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 the Bay Area through the RMP.</li> </ul>	<ul style="list-style-type: none"> <li>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.</li> <li>Bay dischargers are continuing to provide supplemental funding for RMP CECs studies through the NPDES Permit Amendment adopted in 2021 by the Regional Water Board (R2-2021-0028).</li> <li>The State Water Board has recently increased its focus on CECs. In April 2023, 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.</li> <li>In the Bay Area, the RMP has designated organophosphate esters (OPEs) and PFAS as CECs of "high" concern include. CECs of "moderate" concern include alkylphenols and alkylphenol ethoxylates, bisphenols, fipronil and its degradates, imidacloprid, and microplastics.</li> </ul>	<ul style="list-style-type: none"> <li>Continue to participate in the RMP Emerging Contaminants Workgroup.</li> <li>Participate in RMP studies by collecting wastewater samples at member facilities. In 2024, the RMP is funding a study of organophosphate esters (OPEs), bisphenols, and other plastic additives.</li> <li>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.</li> </ul>	<p>RMP Emerging Contaminant Workgroup:  <a href="https://www.sfei.org/rmp/">https://www.sfei.org/rmp/</a></p> <p>BACWA CECs White Paper:  <a href="https://bacwa.org/document/bacwa-cec-white-paper-updated-june-2020/">https://bacwa.org/document/bacwa-cec-white-paper-updated-june-2020/</a></p> <p>NPDES Permit Amendment for Monitoring and Reporting  <a href="https://www.waterboards.ca.gov/sanfranciscobay/board_decisions/adopted_orders/2021/R2-2021-0028.pdf">https://www.waterboards.ca.gov/sanfranciscobay/board_decisions/adopted_orders/2021/R2-2021-0028.pdf</a></p> <p>State Water Board CECs webpage:  <a href="https://www.waterboards.ca.gov/water_issues/programs/cec/index.html">https://www.waterboards.ca.gov/water_issues/programs/cec/index.html</a></p>

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<b>MICROPLASTICS</b>			
<ul style="list-style-type: none"> <li>• Microplastic pollution is a environmental threat with the potential to impact wastewater disposal and reuse, as well as biosolids end uses.</li> <li>• 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.</li> </ul>	<ul style="list-style-type: none"> <li>• 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.</li> <li>• OPC is funding a study of microplastic removal through wastewater treatment processes. The study commenced in 2021 with a pilot study involving BACWA member agency participation. Full-scale sampling and analysis of influent, effluent, and biosolids was completed in 2023.</li> <li>• The 2024 California Integrated Report (303(d) List) was adopted by the State Water Board in February 2024 and has been submitted to EPA. The Integrated Report notes that San Francisco Bay is “potentially threatened” by microplastics. Due to data limitations, the Bay was <u>not</u> listed as an impaired water body during this listing cycle.</li> <li>• Additional research to improve scientific understanding of microplastics in aquatic ecosystems will be needed to support a future impairment determination for the Bay. The Water Boards and OPC are supporting allocation of funding towards these research efforts.</li> <li>• Ongoing microplastics investigations by the RMP are focused on tire particles in stormwater.</li> </ul>	<ul style="list-style-type: none"> <li>• Continue to participate in the RMP Microplastics Workgroup.</li> <li>• Review and share the final report for the OPC-funded microplastics study, which is expected in May 2024. Three BACWA member agencies participated in the OPC-funded microplastic study. CASA has also funded the study team at the Southern California Coastal Water Research Project (SCCWRP) to complete add-on work comparing results between different sampling methods, including use of an autosampler. The add-work will be completed later in 2024.</li> <li>• Continue tracking State Water Board and Ocean Protection Council actions via the CASA Microplastics Workgroup.</li> </ul>	<p>BACWA Microplastics Fact Sheet:  <a href="https://bacwa.org/wp-content/uploads/2019/09/BACWA-Microplastics-flyer.pdf">https://bacwa.org/wp-content/uploads/2019/09/BACWA-Microplastics-flyer.pdf</a></p> <p>SFEI Microplastics project:  <a href="https://www.sfei.org/projects/microplastics">https://www.sfei.org/projects/microplastics</a></p> <p>Ocean Protection Council Microplastics Strategy:  <a href="https://www.opc.ca.gov/webmaster/ftp/pdf/agenda_items/20220223/Item_6_Exhibit_A_Statewide_Microplastics_Strategy.pdf">https://www.opc.ca.gov/webmaster/ftp/pdf/agenda_items/20220223/Item_6_Exhibit_A_Statewide_Microplastics_Strategy.pdf</a></p> <p>2024 California Integrated Report / 303(d) List  <a href="https://www.waterboards.ca.gov/water_issues/programs/water_quality_assessment/2024-integrated-report.html">https://www.waterboards.ca.gov/water_issues/programs/water_quality_assessment/2024-integrated-report.html</a></p>



Background Highlights	Challenges and Recent Updates	Next Steps for BACWA	Links/Resources
<b>PER- AND POLYFLUOROALKYL SUBSTANCES (PFAS)</b>			
<ul style="list-style-type: none"> <li>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.</li> <li>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.</li> <li>All PFAS are persistent in the environment, can accumulate within the human body, and have demonstrated toxicity at relatively low concentrations.</li> <li>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.</li> <li>In 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.</li> <li>In 2021, EPA formed a Council on PFAS, then released a PFAS Strategic Roadmap.</li> <li></li> </ul>	<ul style="list-style-type: none"> <li>In April 2024, EPA finalized Maximum Contaminant Levels for PFOA, PFOS, PFHxS, PFNA, and HFPO-DA (commonly referred to as GenX Chemicals), and mixtures containing two or more specific PFAS compounds. By design, these MCLs are very close to the current limits of quantification.</li> <li>California has finalized public health goals for PFOA and PFAS and has adopted notification and response levels for four PFAS compounds in drinking water, but has not yet adopted Maximum Contaminant Levels.</li> <li>Drinking water limits will not be applicable to wastewater discharges to the Bay, but they could be used in NPDES permits for inland dischargers.</li> <li>In April 2024, EPA designated PFOA and PFOS as hazardous substances under CERCLA (the Superfund law). EPA simultaneously released a memo stating that it intends to focus enforcement on PFAS manufacturers, not on public agencies.</li> <li>EPA is conducting pretreatment standards rulemaking for three types of industrial users: Metal Finishing, Organic Chemicals, Plastics and Synthetic Fibers, and landfills.</li> <li>EPA is planning to conduct a POTW Influent PFAS Study to collect nationwide data on industrial and domestic sources of PFAS.</li> </ul>	<ul style="list-style-type: none"> <li><b>Continue to share the results of BACWA's Regional PFAS Study</b>, which was conducted by SFEI in two phases in 2020 and 2022. The study found that residential areas and industrial laundries are potential sources of PFAS. BACWA has prepared a PFAS Study Summary for members' use.</li> <li><b>Use Clean Water Act methods (EPA Method 1633 or 1621) for use in pretreatment programs or monitoring effluent.</b></li> <li><b>Review the draft questionnaire for EPA's POTW Influent Study.</b> BACWA plans to provide comments by the May 28<sup>th</sup> due date.</li> <li>Continue tracking developments at the federal, state and regional level, in particular to understand the impact of the CERCLA designation on biosolids reporting.</li> <li>Continue to support PFAS source control efforts by participating in monitoring studies, and by supporting regulatory and legislative efforts to limit the use of PFAS. For example, BACWA has expressed support for SB 903 (Skinner) restricting the sale of PFAS-containing products in California.</li> </ul>	<p>BACWA PFAS Study Summary  <a href="https://bacwa.org/wp-content/uploads/2024/02/BACWA-PFAS-Study-Summary-2024-02-07.pdf">bacwa.org/wp-content/uploads/2024/02/BACWA-PFAS-Study-Summary-2024-02-07.pdf</a></p> <p>SWRCB PFAS Resources:  <a href="http://www.waterboards.ca.gov/pfas/">www.waterboards.ca.gov/pfas/</a></p> <p>EPA PFAS Resources  <a href="http://www.epa.gov/pfas">www.epa.gov/pfas</a></p> <p>EPA Drinking Water Limits  <a href="https://www.epa.gov/sdwa/and-polyfluoroalkyl-substances-pfas">https://www.epa.gov/sdwa/and-polyfluoroalkyl-substances-pfas</a></p> <p>EPA letter on enforcement discretion for CERCLA  <a href="https://www.epa.gov/system/files/documents/2024-04/pfas-enforcement-discretion-settlement-policy-cercla.pdf">https://www.epa.gov/system/files/documents/2024-04/pfas-enforcement-discretion-settlement-policy-cercla.pdf</a></p> <p>EPA POTW Influent Study  <a href="https://www.epa.gov/eg/study-pfas-influent-potws">https://www.epa.gov/eg/study-pfas-influent-potws</a></p> <p>EPA NPDES Permitting Guidance (Dec. 2022)  <a href="http://www.epa.gov/system/files/documents/2022-12/NPDES_PFAS_State%20Memo_December_2022.pdf">www.epa.gov/system/files/documents/2022-12/NPDES_PFAS_State%20Memo_December_2022.pdf</a></p> <p>Presentation on BACWA's Regional PFAS Study at RMP 2023 Annual Meeting  <a href="http://www.sfei.org/projects/rmp-annual-meeting">www.sfei.org/projects/rmp-annual-meeting</a></p>

Background Highlights	Challenges and Recent Updates	Next Steps for BACWA	Links/Resources
<b>SANITARY SEWER SYSTEMS GENERAL ORDER</b>			
<ul style="list-style-type: none"> <li>• In 2022, the State Water Board reissued the statewide Sanitary Sewer Systems General Order (SSS-WDR). The reissued order replaced the 2006 Order and the 2013 Monitoring and Reporting Program.</li> <li>• The State Water Board's goals for the update were:               <ul style="list-style-type: none"> <li>○ Updating the 2006 Order</li> <li>○ Clarifying compliance expectations and enhancing enforceability</li> <li>○ Addressing system resiliency, including climate change impacts</li> <li>○ Identifying valuable data and eliminating non-valuable reporting requirements</li> </ul> </li> <li>• The reissued order became effective on June 5, 2023.</li> <li>• The first annual reports due under the reissued order were due April 1, 2024.</li> </ul>	<ul style="list-style-type: none"> <li>• The reissued SSS-WDR contains numerous new and modified requirements, such as:               <ul style="list-style-type: none"> <li>○ A prohibition on discharges to groundwater;</li> <li>○ Reduced spill reporting requirements for small spills (spills from laterals or &lt;50 gallons);</li> <li>○ New spill monitoring requirements such as photo documentation and faster water quality sampling;</li> <li>○ New requirements for preparation of Sewer System Management Plans (SSMPs), including a focus on system resiliency, prioritizing corrective actions, and coordinating with stormwater agencies;</li> <li>○ Modified annual reporting requirements;</li> <li>○ New mapping requirements; and</li> <li>○ 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).</li> </ul> </li> <li>• Maintaining an updated SSMP continues to be a core requirement of the SSS-WDR. Beginning in May 2025, SSMP updates will be required every six years (instead of five) and must contain the 11 updated elements described in the reissued SSS-WDR.</li> </ul>	<ul style="list-style-type: none"> <li>• Continuing working through the Collections System Committee to update a guidance document for Sewer System Management Plans (SSMPs). BACWA has hired a consultant to assist with this task, and work is underway. A draft SSMP guidance document was circulated in March 2024 and will be finalized in the coming months.</li> <li>• Complete a member survey of sewer lateral ordinances in the region. Prompted by changes to the reissued SSS-WDR and ongoing concerns about infiltration and inflow (I&amp;I), some agencies are considering changes to their practices regarding sewer lateral maintenance and replacement.</li> <li>• Continue to coordinate with CASA and CWEA on training opportunities for members as they transition to enrollment under the new SSS-WDR.</li> </ul>	<p>State Water Board SSS-WDR page:  <a href="https://www.waterboards.ca.gov/water_issues/programs/ssso/">https://www.waterboards.ca.gov/water_issues/programs/ssso/</a></p> <p>Reissued SSS-WDR (General Order 2022-0103-DWQ), Effective June 5, 2023  <a href="https://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2022/wqo_2022-0103-dwq.pdf">https://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2022/wqo_2022-0103-dwq.pdf</a></p> <p>Materials from Clean Water Summit Partners Webinars on Reissued SSS-WDR  <a href="https://casaweb.org/ssss-wdr/">https://casaweb.org/ssss-wdr/</a></p> <p>SSMP and Audit Due Dates Lookup Tool from State Water Board  <a href="https://www.waterboards.ca.gov/water_issues/programs/ssso/lookup/">https://www.waterboards.ca.gov/water_issues/programs/ssso/lookup/</a></p>

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<b>LABORATORY ACCREDITATION</b>			
<ul style="list-style-type: none"> <li>• In May 2020, the State Water Board adopted new comprehensive regulations for the Environmental Laboratory Accreditation Program.</li> <li>• Adoption of the new regulations was required by AB 1438, legislation that became effective in 2018.</li> <li>• The new ELAP regulations replaced the previous state-specific accreditation standards with a national laboratory standard established by The NELAC Institute (TNI).</li> <li>• Compliance with TNI standards was required beginning <b>January 1, 2024</b>.</li> </ul>	<ul style="list-style-type: none"> <li>• The TNI standards apply to every ELAP-certified laboratory, regardless of certificate expiration date and regardless of location. Some laboratories have not yet been assessed to the TNI standard. Starting January 1, 2024, ELAP will be sending laboratories a written request asking for information about assessment plans and requesting a TNI-compliant Quality Assurance manual.</li> <li>• The TNI standards pose a particular challenge to small laboratories, many of which are closing because they cannot economically meet the new standards. ELAP has reported a 15% reduction in the number of accredited laboratories in California since 2020, and a 25% reduction since 2015. This reduction is contributing to significantly higher ELAP fees for the remaining laboratories. ELAP fees increased by 30% in FY24. ELAP is investigating fee structure options that would reduce impacts on small laboratories. Fee restructuring may occur as soon as FY25.</li> <li>• ELAP is now implementing EPA's 2021 Method Update Rule, and has advised labs to update any outdated methods by February 2024.</li> <li>• In April 2024, EPA finalized the 2023 Method Update Rule. The 2023 Method Update Rule will be implemented by ELAP at a later date.</li> </ul>	<ul style="list-style-type: none"> <li>• The BACWA Lab Committee will host the last Q&amp;A session on the TNI on June 18, 2024. The free virtual training sessions have been underway since 2021 and are open to BACWA members holding a valid copy of the 2016 TNI Standard. Diane Lawver of Quality Assurance Solutions, LLC, is providing the training. BACWA's TNI training sessions are recorded, and a link is available upon request.</li> <li>• Participate in discussions with ELAP staff and other stakeholders regarding fee restructuring.</li> <li>• Review the 2023 Method Update Rule and share notable changes with BACWA members.</li> <li>• Continue to work through BACWA's Laboratory Committee to support members as they navigate laboratory accreditation under the new TNI standards.</li> <li>• Publicize training opportunities offered by consultants, ELAP, and others.</li> </ul>	<p>State Water Board's 'Roadmap to ELAP Accreditation' page:  <a href="https://www.waterboards.ca.gov/drinking_water/certlic/labs/roadmap_to_elap_accreditation.html">https://www.waterboards.ca.gov/drinking_water/certlic/labs/roadmap_to_elap_accreditation.html</a></p> <p>State Water Board's ELAP regulations page:  <a href="https://www.waterboards.ca.gov/drinking_water/certlic/labs/">https://www.waterboards.ca.gov/drinking_water/certlic/labs/</a></p> <p>ELAP Timeline Guidance Tool:  <a href="https://www.waterboards.ca.gov/drinking_water/certlic/labs/docs/2023/elap-scheduler_002.xlsx">https://www.waterboards.ca.gov/drinking_water/certlic/labs/docs/2023/elap-scheduler_002.xlsx</a></p> <p>ELAP Implementation of 2021 Method Update Rule:  <a href="https://www.waterboards.ca.gov/drinking_water/certlic/labs/mur.html">https://www.waterboards.ca.gov/drinking_water/certlic/labs/mur.html</a></p> <p>2023 Method Update Rule:  <a href="https://www.epa.gov/cwa-methods/methods-update-rules">https://www.epa.gov/cwa-methods/methods-update-rules</a></p>

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<b>BIOSOLIDS</b>			
<ul style="list-style-type: none"> <li>Regulatory drivers are leading to the phase-out of biosolids used as alternative daily cover (ADC) or disposed in landfills. SB 1383, adopted in September 2016 requires organics diversion:             <ul style="list-style-type: none"> <li>-50% by 2020 (relative to 2014)</li> <li>-75% by 2025 (relative to 2014)</li> </ul>             CalRecycle is the state agency responsible for implementation.           </li> <li>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:             <ul style="list-style-type: none"> <li>Diverted biosolids must be anaerobically digested and/or composted to qualify as landfill reduction.</li> <li>CalRecycle is accepting applications to qualify other specific treatment technologies as landfill reduction (per Article 2 of SB 1383).</li> <li>Local ordinances restricting land application are disallowed.</li> </ul> </li> <li>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.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>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.</li> <li>In 2023, Sutter County revised its ordinance to allow land application of Class A biosolids, reversing its previous ban. The change was made to conform to SB 1383. CalRecycle and biosolids stakeholders continue to conduct outreach to counties with restrictive ordinances.</li> <li>CalRecycle reviewed the first application under Article 2 ("H Cycle"), and determined it conditionally qualifies as equivalent to landfill diversion/reduction. CalRecycle has also been providing clarification on technologies that <i>already</i> comply with SB 1383, and need not apply under Article 2 (e.g., land application of biosolids that have not been anaerobically digested).</li> <li>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 apply to biosolids treated via pyrolysis.</li> <li>New York and Michigan are imposing restrictions on land application of biosolids with levels of PFAS &gt;20 ppb for PFOA or PFOS. Based on the recently completed regional study of PFAS, few BACWA members are likely to exceed those thresholds for land-applied biosolids.</li> </ul>	<ul style="list-style-type: none"> <li>BACWA's next Biosolids Trends Survey Report is underway, and will cover 2021-2023. The survey has been circulated, and responses will be compiled in summer 2024. This version will replace the previous (2021) version covering 2018-2020.</li> <li><b>Review the draft questionnaire for EPA's POTW Influent Study</b> (see PFAS page), which also functions as a nationwide biosolids survey. BACWA plans to provide comments by the May 28<sup>th</sup> due date.</li> <li>Continue to follow emerging science and regulatory developments regarding PFAS in biosolids (see page 9).</li> <li>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.</li> <li>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.</li> <li>Meet with BAAQMD regularly in 2024 to discuss alignment of state and local regulations.</li> </ul>	<p>BACWA 2021 Biosolids Trends Survey Report:  <a href="https://bacwa.org/wp-content/uploads/2021/12/BACWA-2021-Biosolids-Trends-Survey-Report.pdf">https://bacwa.org/wp-content/uploads/2021/12/BACWA-2021-Biosolids-Trends-Survey-Report.pdf</a></p> <p>BABC website:  <a href="http://www.bayareabiosolids.com">http://www.bayareabiosolids.com</a></p> <p>CASA White Paper on SB 1383 Implementation:  <a href="https://bacwa.org/document/summary-of-sb-1383-and-its-implementation-casa-2020/">https://bacwa.org/document/summary-of-sb-1383-and-its-implementation-casa-2020/</a></p> <p>CalRecycle - Short-Lived Climate Pollutant Reduction Strategy  <a href="https://www.calrecycle.ca.gov/organics/slcp">https://www.calrecycle.ca.gov/organics/slcp</a></p> <p>CalRecycle Procurement FAQ (Updated by AB 1985)  <a href="https://calrecycle.ca.gov/organics/slcp/faq/recycledproducts/">https://calrecycle.ca.gov/organics/slcp/faq/recycledproducts/</a></p> <p>SB1383 Article 2 Determination  <a href="https://calrecycle.ca.gov/organics/slcp/recyclingfacilities/article2/">https://calrecycle.ca.gov/organics/slcp/recyclingfacilities/article2/</a></p> <p>SB 1383 Procurement FAQ (including interim rules for POTWs)  <a href="https://calrecycle.ca.gov/organics/slcp/faq/recycledproducts/">https://calrecycle.ca.gov/organics/slcp/faq/recycledproducts/</a></p> <p>EPA POTW Influent Study  <a href="https://www.epa.gov/eg/study-pfas-influent-potws">https://www.epa.gov/eg/study-pfas-influent-potws</a></p>



Background Highlights	Challenges and Recent Updates	Next Steps for BACWA	Links/Resources
<b>CLIMATE CHANGE MITIGATION</b>			
<ul style="list-style-type: none"> <li>• 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:               <ul style="list-style-type: none"> <li>◦ Short-lived climate pollutants</li> <li>◦ Carbon sequestration on Natural and Working Lands</li> <li>◦ Largest emitters (transportation, electricity, and industrial sectors)</li> </ul> </li> <li>• SB 1383 (Short-Lived Climate Pollutant Reduction) calls for:               <ul style="list-style-type: none"> <li>◦ 40% methane reduction by 2030</li> <li>◦ 75% diversion of organic waste from landfills by January 1, 2025</li> <li>◦ Policy / regulatory development encouraging production/use of biogas</li> </ul> </li> <li>• BAAQMD developed a Clean Air Plan requiring GHG emissions supporting CARB's 2050 target (80% below 1990 levels).</li> <li>• 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 in 2024.</li> <li>• 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.</li> </ul>	<ul style="list-style-type: none"> <li>• CARB is pursuing rapid fleet conversion to zero-emission vehicles (ZEVs), including medium and heavy-duty vehicles, through the Advanced Clean Fleet rule.</li> <li>• AB 1594, adopted in 2023, authorizes wastewater and other "public agency utilities" to purchase traditional replacements for medium- and heavy-duty vehicles. In March 2024, CARB re-opened the Advanced Clean Fleet regulations to incorporate requirements of AB 1594. The rulemaking process is expected to be complete by early 2025 and is focused on ZEV purchase and daily usage exemptions. CASA is working with CARB on recommended language.</li> <li>• In addition to pushing for ZEVs, CARB is proposing changes to the Low Carbon Fuel Standard to emphasize hydrogen rather than biomethane as a transportation fuel. Proposed changes to the Low Carbon Fuel Standard were released in early 2024, and CARB intends to vote on a final version in early 2025.</li> <li>• Due to a 2022 CPUC mandate for the state's four largest gas utilities, PG&amp;E now has an active biomethane procurement program.</li> <li>• In 2023, EPA finalized updates to its Renewable Fuel Standard Set Rule allowing apportionment of renewable identification numbers (RINs) or "Credits for food-waste-based (D5) or sludge-based (D3) biogas.</li> </ul>	<ul style="list-style-type: none"> <li>• Continue to track implementation of the Advanced Clean Fleet rule. This includes modifications to the rule being developed in 2024 that will exempt some traditional utility-specialized vehicles used by public agency utilities, per AB 1594.</li> <li>• Continue to advocate for changes to the Low Carbon Fuel Standards to maintain a viable pathway for biomethane used as CNG in vehicles. In 2024, CARB will continue to develop proposed changes to the Low Carbon Fuel Standards based on written comments and public workshops.</li> <li>• Closely follow rule development of Proposed Regulation 13 (climate pollutants), which BAAQMD may revisit in 2024.</li> <li>• Look for ways to inform BAAQMD on opportunities and challenges related to climate change mitigation by Bay Area POTWs, including education about anaerobic digesters and POTW operations.</li> <li>• Work with PG&amp;E and BAAQMD to explore options for POTWs to inject biogas into PG&amp;E pipelines.</li> </ul>	<p>Climate Change Scoping Plan, including 2022 Update: <a href="https://ww2.arb.ca.gov/our-work/programs/ab-32-climate-change-scoping-plan">https://ww2.arb.ca.gov/our-work/programs/ab-32-climate-change-scoping-plan</a></p> <p>CARB Low Carbon Fuel Standard: <a href="https://ww2.arb.ca.gov/our-work/programs/low-carbon-fuel-standard">https://ww2.arb.ca.gov/our-work/programs/low-carbon-fuel-standard</a></p> <p>CARB Advanced Clean Fleet Rule: <a href="https://ww2.arb.ca.gov/our-work/programs/advanced-clean-fleets">https://ww2.arb.ca.gov/our-work/programs/advanced-clean-fleets</a></p> <p>SB 1383: <a href="https://www.calrecycle.ca.gov/organics/slcip">https://www.calrecycle.ca.gov/organics/slcip</a></p> <p>BAAQMD Regulation 13: <a href="http://www.baaqmd.gov/rules-and-compliance/rules/regulation-13-climate-pollutants">http://www.baaqmd.gov/rules-and-compliance/rules/regulation-13-climate-pollutants</a></p> <p>EPA Renewable Fuel Standards: <a href="https://www.epa.gov/renewable-fuel-standard-program/final-renewable-fuels-standards-rule-2023-2024-and-2025">https://www.epa.gov/renewable-fuel-standard-program/final-renewable-fuels-standards-rule-2023-2024-and-2025</a></p> <p>PG&amp;E Procurement: <a href="http://www.pge.com/rngro">http://www.pge.com/rngro</a>, &amp; <a href="https://casaweb.org/wp-content/uploads/2023/11/PGE-at-CASA-Webinar.pdf">https://casaweb.org/wp-content/uploads/2023/11/PGE-at-CASA-Webinar.pdf</a></p>

Background Highlights	Challenges and Recent Updates	Next Steps for BACWA	Links/Resources
<b>CLIMATE CHANGE ADAPTATION</b>			
<ul style="list-style-type: none"> <li>Climate change and water resilience are strategic priorities of both the State Water Board and Regional Water Board.</li> <li>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.</li> <li>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.</li> <li>In April 2022, the State released a Climate Adaptation Strategy, including an updated climate change assessment for the Bay Area region.</li> <li>The California Coastal Commission's November 2021 <i>Sea Level Rise Planning Guidance</i> recommends that agencies "understand and plan" for 2.7 feet of sea level rise (SLR) by 2050.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>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. In April 2024, the Regional Water Board released a revised version of this Basin Plan amendment for public comment.</li> <li>Separately from the Basin Plan amendment, the NDPES division has released information regarding permitting of nature-based solutions.</li> <li>Shallow groundwater response to SLR 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.</li> <li>The Bay Conservation and Development Commission (BCDC) is developing regional SLR adaptation planning guidelines for the Bay Area as part of the Regional Shoreline Adaptation Plan. The guidelines must be adopted by Dec 31, 2024, to comply with SB 272, signed by the Governor in Oct. 2023. SB 272 requires cities and counties to develop regional sea level rise adaptation plans by 2034.</li> <li>The Ocean Protection Council (OPC) has issued a draft 2024 SLR guidance update reflecting the latest projections. Previous projections for extreme SLR (i.e., H++ scenario) have been removed, and the range of projections has narrowed considerably, especially for 2050.</li> </ul>	<ul style="list-style-type: none"> <li><b>Begin using the OPC's updated Sea Level Rise Guidance when it becomes available later in 2024.</b> BACWA submitted comments on the draft guidance in March 2024. OPC plans to consider adoption of the updated guidance at its meeting on June 4, 2024. Updates to the Coastal Commission's "Critical Infrastructure at Risk" SLR planning guidance are expected to follow.</li> <li>Continue to develop webinars on technical topics related to climate change, such as sea level rise projections and changes in precipitation. The BACWA Climate Change Community of Practice will provide a forum to discuss these topics.</li> <li>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.</li> <li>Prepare for engagement with the Regional Water Board on expectations for SLR planning.</li> <li>Continue to work with Regional Water Board and other resource agencies to look for regulatory solutions to encourage wetlands projects for shoreline resiliency.</li> </ul>	<p>Regional Water Board Basin Plan Amendment on Climate Change and Aquatic Habitat  <a href="https://www.waterboards.ca.gov/sanfranciscobay/water_issues/pr/ograms/climate_change/">https://www.waterboards.ca.gov/sanfranciscobay/water_issues/pr/ograms/climate_change/</a></p> <p>OPC 2024 Draft Sea Level Rise Guidance  <a href="https://opc.ca.gov/2024/01/draft-slr-guidance-2024/">https://opc.ca.gov/2024/01/draft-slr-guidance-2024/</a></p> <p>California Coastal Commission's <i>Critical Infrastructure at Risk</i>  <a href="https://documents.coastal.ca.gov/assets/slr/SLR%20Guidance_Critical%20Infrastructure_12.6.2021.pdf">https://documents.coastal.ca.gov/assets/slr/SLR%20Guidance_Critical%20Infrastructure_12.6.2021.pdf</a></p> <p>BayCAN Funding Tracker  <a href="https://www.baycanadapt.org/">https://www.baycanadapt.org/</a></p> <p>Bay Adapt Joint Platform (includes Regional Shoreline Adaptation Planning info)  <a href="https://www.bayadapt.org/">https://www.bayadapt.org/</a></p> <p>NPDES Permitting for Nature-Based Solutions  <a href="https://bacwa.org/wp-content/uploads/2022/08/NPDES-Permitting-for-Nature-Based-Solutions-5.pdf">https://bacwa.org/wp-content/uploads/2022/08/NPDES-Permitting-for-Nature-Based-Solutions-5.pdf</a></p> <p>2023 Report on Shallow Groundwater Response  <a href="https://www.sfei.org/projects/shallow-groundwater-response-sea-level-rise">https://www.sfei.org/projects/shallow-groundwater-response-sea-level-rise</a></p>

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<b>TOXIC AIR CONTAMINANTS</b>			
<ul style="list-style-type: none"> <li>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.</li> <li>Per the Rule, BAAQMD will conduct site-specific Health Risk Screening Analyses and determine each facility's prioritization score (PS). BAAQMD will conduct Health Risk Assessments (HRAs) for all facilities with a cancer PS&gt;10 or non-cancer PS&gt;1. 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).</li> <li>AB 617 (Community Air Protection Program) – requires CARB to harmonize community air monitoring, reporting, &amp; 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.</li> <li>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 &gt;500 to &gt;1,700.</li> </ul>	<ul style="list-style-type: none"> <li>In April 2024, BAAQMD finalized updated Implementation Procedures for Rule 11-18 describing how BAAQMD will conduct HRAs. It also establishes rules for vendors or contractors to conduct HRAs, if allowed by BAAQMD.</li> <li>In the <i>Final Statement of Reasons</i> 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). CASA is directing the statewide two-step process pooled emissions study with consultant support from Yorke Engineering. Many BACWA members are participating in the study by providing financial contributions. In FY25, BACWA will collect funds from participating BACWA member agencies.</li> <li>In 2021, BAAQMD amended Rule 2-5 to reduce allowable levels of toxic air contaminants in new source permitting. In 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.</li> <li>In July 2023, the EPA announced a proposal to revise its Air Emissions Reporting Requirements (AERR). CARB has applied to submit information on behalf of California facilities.</li> </ul>	<ul style="list-style-type: none"> <li><b>Review and understand the updated Rule 11-18 Implementation Procedures.</b> For most POTWs with a relatively low prioritization score, the HRAs will not occur right away. These POTWs will likely be able to use updated emissions factors from the statewide pooled emissions study, as described below.</li> <li><b>Report “business as usual” for air toxics through 2028 (through year 2027 data).</b> CARB is preparing a message to Air Districts confirming POTWs can delay reporting new compounds until the pooled emissions study is complete. The wastewater sector has until 2028 to perform the statewide “two-step process” pooled emissions study.</li> <li>Continue participating in the BAAQMD workgroup to discuss toxic air contaminants, rule development, and related air quality regulatory issues.</li> </ul>	<p>BAAQMD Facility Risk Reduction Program Updates (Rule 11-18):  <a href="https://www.baaqmd.gov/community-health/facility-risk-reduction-program">https://www.baaqmd.gov/community-health/facility-risk-reduction-program</a></p> <p>BAAQMD Rule 2-5  <a href="https://www.baaqmd.gov/rules-and-compliance/rules/reg-2-permits?rule_version=2021%20Amendments">https://www.baaqmd.gov/rules-and-compliance/rules/reg-2-permits?rule_version=2021%20Amendments</a></p> <p>CARB page on AB 617 and AB 2588:  <a href="https://www2.arb.ca.gov/our-work/programs/criteria-and-toxics-reporting">https://www2.arb.ca.gov/our-work/programs/criteria-and-toxics-reporting</a>  <i>Final Statement of Reasons</i>  <a href="https://www3.arb.ca.gov/board/15day/ctr/fsor.pdf">https://www3.arb.ca.gov/board/15day/ctr/fsor.pdf</a></p> <p>Timing of Rule 11-18 vs. Process for AB 617  <a href="https://bacwa.org/document/baaqmd-rule-11-18-vs-carb-two-step-process-for-ab-617-feb-2023/">https://bacwa.org/document/baaqmd-rule-11-18-vs-carb-two-step-process-for-ab-617-feb-2023/</a></p> <p>EPA Air Emissions Reporting Requirements  <a href="https://www.epa.gov/air-emissions-inventories/air-emissions-reporting-requirements-aerr">https://www.epa.gov/air-emissions-inventories/air-emissions-reporting-requirements-aerr</a></p>

Background Highlights	Challenges and Recent Updates	Next Steps for BACWA	Links/Resources
<b>RECYCLED WATER</b>			
<ul style="list-style-type: none"> <li>Approximately 10 percent of the municipal wastewater of Bay Area POTWs is currently recycled. Expansion of recycled water projects is a goal of many BACWA members, but implementation is slowed by high costs and administrative requirements.</li> <li>In 2018, the State Water Board adopted uniform water recycling criteria for two types of Indirect Potable Reuse: surface water augmentation and groundwater augmentation.</li> <li>In December 2023, the State Water Board adopted uniform water recycling criteria for two types of Direct Potable Reuse: raw water augmentation and treated water augmentation.</li> <li>As of 2020, virtually all recycled water in the Bay Area was produced at centralized facilities using municipal wastewater, and was treated to meet standards for non-potable reuse. There are not yet any Indirect or Direct Potable Reuse projects in the Bay Area, although several are in the planning stage.</li> </ul>	<ul style="list-style-type: none"> <li>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. The rulemaking process for onsite non-potable reuse is slated to begin around June 2024 with a projected Board adoption later in 2024.</li> <li>In June 2023, BACWA completed a Regional Evaluation of Potential Nutrient Discharge Reduction by Water Recycling, as required by the 2<sup>nd</sup> Nutrient Watershed Permit.</li> <li>The State Water Board has launched a “Strike Team” to assess how California will meet new recycled water goals listed in California’s Water Supply Strategy: 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, such as funding.</li> <li>In December 2023, the Regional Water Board approved a Basin Plan Amendment that will allow greater flexibility for NPDES permitting of reverse osmosis concentrate discharges to San Francisco Bay. In April 2024, the Basin Plan Amendment was approved by the State Water Board. The Basin Plan Amendment must be approved by the Office of Administrative Law and EPA before it goes into effect.</li> </ul>	<ul style="list-style-type: none"> <li>Review draft regulations for Onsite Non-Potable Reuse when they are released by State Water Board staff, which is expected as soon as June 2024.</li> <li>Continue to provide members with technical resources related to interagency coordination, such as cost-sharing agreements and permitting. These topics are based on feedback from the September 2023 workshop on interagency collaboration in which wastewater and water agency representatives convened to discuss challenges and opportunities for expanding water recycling in the Bay Area.</li> <li>Continue to track the role of recycled water projects in diverting nutrient loads from San Francisco Bay. Load reductions are expected to be a requirement of the 2024 Nutrient Watershed Permit (see page 2).</li> <li>Track California legislation with potential impacts on recycled water funding, mandates, or regulations.</li> </ul>	<p>Water Boards Recycled Water Policy and Regulations  <a href="http://www.waterboards.ca.gov/water_issues/programs/recycled_water/">www.waterboards.ca.gov/water_issues/programs/recycled_water/</a></p> <p>Direct Potable Reuse Regulations  <a href="http://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/dpr-regs.html">www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/dpr-regs.html</a></p> <p>Onsite Nonpotable Reuse Regulations  <a href="http://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/onsite_nonpotable_reuse_regulations.html">www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/onsite_nonpotable_reuse_regulations.html</a></p> <p>BACWA Special Studies of Recycled Water and Nature-Based Systems:  <a href="http://bacwa.org/document-category/2nd-watershed-permit-studies/">bacwa.org/document-category/2nd-watershed-permit-studies/</a></p> <p>California’s Water Supply Strategy (August 2022)  <a href="http://Resources.ca.gov/-/media/CNRA-Website/Files/Initiatives/Water-Resilience/CA-Water-Supply-Strategy.pdf">Resources.ca.gov/-/media/CNRA-Website/Files/Initiatives/Water-Resilience/CA-Water-Supply-Strategy.pdf</a></p> <p>December 2023 Basin Plan Amendment  <a href="http://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/planningtmdls/amendments/NPDES_corrections.html">www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/planningtmdls/amendments/NPDES_corrections.html</a></p>

Previously covered issues with no updates can be found in previous [BACWA issues summaries](#).



**ACRONYMS**

ADC	Alternate Daily Cover	PCB	Polychlorinated Biphenyl
BAAQMD	Bay Area Air Quality Management District	PFAS	Per- and Polyfluoroalkyl Substances
BACT	Best Available Control Technology	PFHxS	Perfluorohexane Sulfonic Acid
BCDC	Bay Conservation and Development Commission	PFNA	Perfluorononanoic Acid
BTU/SCF	British thermal units per standard cubic foot	PFOA	Perfluorooctanoic Acid
CalDPR	California Department of Pesticide Registration	PFOS	Perfluorooctane Sulfonic Acid
CARB	California Air Resources Board	POTW	Publicly-Owned Treatment Works
CASA	California Association of Sanitation Agencies	PS	Prioritization Score
CAP	Criteria Air Pollutant	RMP	Regional Monitoring Program
CEC	Compound of Emerging Concern	RPA	Reasonable Potential Analysis
CIWQS	California Integrated Water Quality System	SCAP	Southern California Alliance of POTWs
CVCWA	Central Valley Clean Water Agencies	SF Bay	San Francisco Bay
CWEA	California Water Environment Association	SFEI	San Francisco Estuary Institute
EC25/IC25	25% Effect Concentration/25% Inhibition Concentration	SLR	Sea Level Rise
ELAP	Environmental Laboratory Accreditation Program	SSMP	Sewer System Management Plan
ELTAC	Environmental Laboratory Technical Advisory Committee	TMDL	Total Maximum Daily Load
EPA	United States Environmental Protection Agency	TIN	Total Inorganic Nitrogen
FIFRA	Federal Insecticide, Fungicide, and Rodenticide Act	TNI	The NELAC Institute
FY	Fiscal Year	TST	Test of Significant Toxicity
GHG	Greenhouse Gas	WQO	Water Quality Objective
HFPDA-DA	Hexafluoropropylene Oxide (HFPO) Dimer Acid, also known as GenX	ZEV	Zero-Emission Vehicle
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		



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May 8, 2024

RE: Tentative Order Regulating Nutrients in Discharges from Municipal Wastewater Treatment Facilities to San Francisco Bay (NPDES Permit CA0038873)

Dear Mr. Schlipf:

The East Bay Dischargers Authority (EBDA) appreciates this opportunity to comment on the Tentative Order (TO) for the third Watershed Permit for Nutrients (Nutrient Permit). This letter is submitted on behalf of EBDA and our members and partners – City of San Leandro, City of Hayward, Castro Valley Sanitary District, Oro Loma Sanitary District, Union Sanitary District (USD), Dublin San Ramon Services District (DSRSD), and City of Livermore (together, “EBDA Agencies”). On behalf of these agencies, EBDA efficiently and reliably manages the wastewater resources of one million East Bay residents and thousands of businesses to protect human and environmental health. Along with our partners in the Bay Area Clean Water Agencies (BACWA), EBDA has been an active participant in and advocate for the Nutrient Management Strategy since its inception. Our agencies believe strongly in collaborative, science-based decision-making. We appreciate the challenge the Regional Water Quality Control Board (Water Board) is facing in crafting a permit that is responsive to the 2022 Harmful Algal Bloom and protective of the Bay going forward, while acknowledging the magnitude of investments that will be required to meaningfully reduce nutrient discharges and the progress that is already being made.

The proposed Order requires the largest investment in wastewater infrastructure in the Bay Area since the Clean Water Act of the 1970’s. Unlike the Clean Water Act improvements, there is no state or federal financial assistance associated with these required upgrades, placing the entirety of the cost burden on the region’s rate payers. Given that, it is extremely important that we collectively get this right.

The collaborative Nutrient Management Strategy (NMS) has been a model framework for addressing the challenge of nutrient enrichment in the nation’s waterways. As noted by the

CHAIR	VICE-CHAIR	COMMISSIONER	COMMISSIONER	COMMISSIONER	GENERAL MANAGER
Anjali Lathi	Fred Simon	Ralph Johnson	Bryan Azevedo	Angela Andrews	Jacqueline T. Zipkin
Union S.D.	Oro Loma S.D.	Castro Valley S.D.	City of San Leandro	City of Hayward	LEGAL COUNSEL
					Eric S. Casher

National Association of Clean Water Agencies in presenting the NMS with a National Environmental Achievement Award:

The NMS program's regional collaborative approach benefits the environment by developing the appropriate regulatory response to the nutrient challenge; benefits the utilities by fully evaluating the alternatives to arrive at the best overall solution; and benefits the community by spending cost-effectively to reduce the financial burden to individual households, while ensuring protection of the Bay. The approach identifies nutrient management solutions that are well-suited to the unique set of scientific, regulatory, and economic challenges in San Francisco Bay and serves as a model for other watersheds nationwide.

Unfortunately, EBDA believes that the current TO abandons that promise of better outcomes through collaboration, and in doing so risks becoming a national model for the wrong reasons.

Water Board staff, Baykeeper, and the wastewater community agree that nutrient reductions should be made as expeditiously as possible to protect the Bay from future algal blooms. We all further agree that given the magnitude of expenditures that is required to make meaningful reductions, we should focus on projects that are synergistic with other wastewater infrastructure needs and that provide multiple benefits such as enhancing water supply and providing sea level rise resilience. Finally, the parties agree that given financial, logistical, and practical constraints, most agencies will not be able to complete sufficient nutrient reduction projects, especially those with multiple benefits, in ten years. However, rather than creating a compliance pathway that honors these three facts, the TO sets up a framework in which despite spending billions of dollars and working collaboratively toward the vision that we all share, public wastewater agencies will be in violation of effluent limits in 2035. While the Water Board states in the TO that they will use available regulatory mechanisms to provide more time, the idea of receiving a cease-and-desist order or other "enforcement discretion" provides cold comfort to an agency that has done everything asked of it and more, and raised rates significantly on vulnerable communities to do so.

EBDA believes that it does not serve our communities or the Bay to adopt a permit that ignores the fact that despite best efforts, its limits cannot be achieved by its deadline. We acknowledge that the Water Board has certain legal hurdles that have driven staff to structure the TO in this form. Accordingly, **EBDA strongly urges the Water Board to commit via resolution to creating a legal framework that provides more time for nutrient reduction projects. We further request that the Water Board employ a Best Management Practice (BMP)-based approach to establishing water quality-based effluent limits in this permit to allow for adaptive management.** A BMP-based approach allows our agencies to continue to make prudent investments in nutrient reduction without the threat of violating the permit, and it avoids boxing all parties into a set of numbers that we all acknowledge are likely to change given the nascent stage of scientific understanding and the infeasibility of determining numerical limits.

EBDA echoes the comments submitted by BACWA. In addition, our detailed comments and suggestions on the TO are included on the following pages. These comments outline our requests to provide additional flexibility and a regulatory framework that actively supports rather than

disincentivizes actions that meet our mutual goals. As described in further detail in the following pages, the EBDA Agencies have invested heavily in actions that the Water Board and other stakeholders purport to support including water recycling, nature-based solutions, and early action upgrades. It is in our collective interest for our efforts to be recognized and for the permit not to place us in compliance jeopardy despite these proactive investments. Our comments and suggestions are crafted with the intent of providing regulatory support for our shared vision.

**Comment 1. Concurrent with the Adoption of this Order, the Water Board Should Adopt a Resolution Committing to Creating a Regulatory Framework that Allows for Additional Implementation Time.**

EBDA requests that concurrent with the adoption of this Order, the Water Board approve a Resolution committing staff to amending applicable compliance schedule requirements to allow a compliance schedule that is longer than ten years for nutrient management in the San Francisco Bay region. The Resolution would also state that if this is found to be infeasible, Water Board staff would draft a Basin Plan Amendment extending compliance timelines to support region-wide strategic nutrient reduction that takes into account competing environmental priorities and affordability concerns.

As we have proven through our early actions, which are further outlined below, EBDA is committed to reducing nutrient discharges and to being effective stewards of the San Francisco Bay. However, we strongly believe that adopting a permit with final numeric effluent limits and a ten-year compliance schedule is the most expensive way to meet Bay-wide nutrient reduction goals, creates a race to single-benefit solutions, and endangers other environmental priorities, including addressing aging infrastructure and making our systems more resilient to climate change.

Significant capital projects at wastewater treatment plants take significant time. While ten years may sound like a long runway, in reality, agencies need several years for options analysis and conceptual design, then another couple of years for final design. During this process, agencies also need to develop and implement a funding strategy in the absence of (or at a minimum, to supplement) state and federal assistance. Permitting can also be a lengthy process, with simple air permits for generators recently taking up to two years. Once funding, permits, and design are in place, construction can commence, but that phase brings its own challenges. Care is needed to phase improvements such that site-constrained facilities can continue to treat wastewater 24/7 while undergoing upgrades. In addition, lead times for certain equipment, particularly electrical components, has spanned multiple years in recent times. For example, USD began the order process for a large transformer in 2021 to power its upgrades currently underway; it is currently scheduled to arrive in 2025. The City of Hayward similarly awarded an electrical upgrade project in 2022. Knowing that there were long lead times for the electrical equipment, they had planned completion for July 2025. Due to further delays in the fabrication and delivery of the transformer, they are now scheduled to complete the project in August 2026. These factors combine to create project schedules that span over a decade. If many agencies in the Bay Area are driven to undergo



major upgrades at the same time, these factors will be multiplied by the fact that there are limited consultant and contractor resources to get all the work done.

Multi-benefit approaches such as nature-based solutions and recycled water projects are further complicated by the fact that they require complex, sometimes novel permitting strategies as well as multi-agency agreements. DSRSD's partnership with East Bay Municipal Utility District to serve recycled water to the San Ramon Valley has been a huge success in diverting nutrients from the Bay and providing sustainable water supply. It should be noted that it took about a decade from project initiation until recycled water distribution actually commenced. Similarly, EBDA has been working for the past five years to advance the First Mile Horizontal Levee project at Oro Loma Marsh, which will provide additional effluent nutrient reduction while enhancing habitat and building shoreline resilience and flood protection. In those five years, we have engaged stakeholders, including East Bay Regional Park District, who owns the land, and many others. We have begun conversations with the Bay Restoration and Regulatory Integration Team (BRRIT) about permitting pathways and mitigation requirements, and we have developed a 30% design for the levee. We are still a long way from completing the project, with the next phase anticipated to include 60% and then final design, developing a governance structure for the project, identifying funding for construction and for ongoing maintenance, and submitting permit applications and securing environmental approvals, before finally embarking on construction. Ten years is simply not enough time to see these projects through completion, and the notion of going through all of this effort to then be faced with a compliance order does not seem appropriate.

Thoughtful regional planning is needed to understand the strategies to be employed around the Bay for nutrient reduction and the best way to phase and stagger them to maximize benefits and avoid exacerbating affordability concerns. For this reason, BACWA proposed, and the Water Board incorporated in the TO, a requirement to develop a Regional Plan. The benefits of this plan are negated by a ten-year compliance schedule and prescriptive milestone requirements. However, with a more open and adaptive approach, this Regional Plan could create a roadmap for regional nutrient reduction and establish a realistic timeline for achieving nutrient reduction goals.

EBDA understands that the Water Board believes it is limited by current policy to a ten-year compliance schedule. The main legal hurdle Water Board staff has identified is that Section 4.7.6 of the San Francisco Bay Region Basin Plan (Basin Plan) and the 2008 Compliance Schedule Policy state that compliance schedules in permits must not exceed ten years. Normally, this ten-year limitation applies when a permit contains new numeric limits. As a result, the Tentative Order includes final numeric effluent limits for nitrogen, which, in turn, allows staff to provide dischargers with ten-year compliance schedules. The TO approach, as currently drafted, results in enforcement orders at the end of the ten years, which even if handled in a friendly, cooperative manner, are not justified.

To ensure that sufficient time is available to effectively implement nutrient reduction projects, EBDA requests that the Water Board commit to finding a legal framework that allows for that time. We assert that there are several legal approaches to directly address the issues described above outside of the enforcement context:

- Amend applicable compliance schedule requirements in the Basin Plan and the State's Compliance Schedule Policy to allow a compliance schedule that is longer than ten years.
- Amend the Basin Plan to include adoption of new, revised, or newly interpreted water quality objectives that provide a compliance deadline that will not take effect until a date far enough in the future to allow completion of nutrient management projects or to support a ten-year compliance schedule following the compliance schedule under Section 6.3.3 of the permit. Basin Plans may include schedules of compliance. (Clean Water Act §303(c)(3)(F), 33 U.S.C. §1313(c)(3)(F).) Further, CWA section 301(b)(1)(C) authorizes water-quality based effluent limits (WQBELs) to comply with schedules of compliance. A compliance schedule specific to the biostimulatory substances water quality objective could be incorporated in this manner.
- Amend the Basin Plan to adopt a Water Quality Attainment Strategy that includes a realistic implementation plan for nutrient reductions. Basin Plan section 4.1.1 indicates that the Water Board will establish Water Quality Attainment Strategies (WQAS) including Total Maximum Daily Loads (TMDLs) where necessary and appropriate to ensure attainment and maintenance of water quality standards. WQAS are development and implementation actions associated with implementing (attaining) water quality standards. The Basin Plan further states that "The Water Board will establish WQAS including TMDLs at the level (the Estuary, smaller segments within the Estuary, or individual watersheds) deemed most appropriate in terms of effectiveness and efficiency relative to the applicable water quality standard, types and locations of pollutant sources, and type and scale of implementation actions."

Any of these strategies would be acceptable to EBDA. We understand that significant staffing resources would be needed for a Basin Plan Amendment, particularly one that involves a WQAS. As this is the most impactful action that the Water Board is likely to take in a generation, we believe that allocating staffing support for these actions is appropriate, particularly at a time when EPA Region 9 is in the process of prioritizing use of its newly established San Francisco Bay Program Office resources. If the Water Board can commit to pursuing these avenues, EBDA and our partners at BACWA will work with the Water Board and other stakeholders to identify resources to support the effort.

As explained in Comment 4, EBDA continues to believe that BMPs are a superior, appropriate, and permissible approach, but if the Water Board will not accept that suggestion, the Water Board could issue the Nutrient Watershed Permit as proposed, with the final numeric effluent limitation for nitrogen, so long as the Water Board adds a provision that commits to a regulatory mechanism to provide Dischargers more time for compliance. Under this approach, interim numeric limits would still apply, and an enforcement order is avoided.

If final numeric effluent limitations are included in the Nutrient Permit, it is our understanding from Water Board staff that the final effluent limitations are not subject to anti-backsliding because they are not effective until a future compliance date in 2034. If the Water Board continues to agree, the final Nutrient Permit should acknowledge this expressly. EPA has stated, "The Agency's

interpretation of the CWA is that the antibacksliding requirements of section 402(o) of the CWA do not apply to revisions to effluent limitations made before the scheduled date of compliance for those limitations." (69 Fed. Reg. 41720 (July 9, 2004).) Additionally, in a 1988 Interim Guidance Memo<sup>1</sup>, there is a statement: "The restrictions on backsliding do not apply to limits with a delayed implementation date . . ."

We propose the following revisions to the TO:

Page 7 - Section 2.2:

This Order requires Dischargers to take steps to comply with the 40 percent load reduction requirement within 10 years, while maintaining at least current performance in the interim. ~~If a Discharger cannot comply~~ Because Dischargers have demonstrated that compliance within 10 years is not feasible for all Dischargers, the Regional Water Board ~~will consider~~ shall, prior to issuance of the next nutrient permit, use available regulatory mechanisms ~~as warranted and as available to grant more time (see specified in~~ Fact Sheet sections 6.3.5 and 6.3.6) to provide more time to comply. This Order particularly recognizes that multi-benefit solutions, such as nature-based treatment or water recycling, ~~may take longer are projected by Dischargers to require more~~ than 10 years to implement, and that Early Actors will also need additional time to comply, as described in Fact Sheet section 6.3.6. ~~and t~~ The Regional Water Board ~~will~~ shall use ~~any~~ available regulatory mechanisms to allow more time for these projects to be implemented.

Page 17 – Section 6.3.5:

**Multi-Benefit Solutions for Load Reductions.** Dischargers ~~that~~ shall identify long-term multi-benefit solutions<sup>4</sup> (e.g., water recycling, organics codigestion, or nature-based solutions) ~~that cannot be completed by the effective date of the final effluent limitations in Table 4 shall identify such projects by July 1, 2025,~~ and their intent to pursue and implement them, as part of the Regional Plan report required by Provision 6.3. 4.3.2.1. If these projects result in total inorganic nitrogen loads at or below the individual final effluent limitations in Table 4, Recognizing that multi-benefit solutions are projected by Dischargers to require more than 10 years to implement, the Regional Water Board ~~will consider~~ shall, prior to issuance of the next nutrient permit, use available regulatory mechanisms to provide more time to comply as explained in the Fact Sheet.

<sup>4</sup>Multi-benefit solutions refer to initiatives that incorporate nature-based solutions, such as horizontal levees, open water treatment wetlands, organics codigestion, or wastewater recycling (both potable and non-potable). These projects are designed to provide benefits such as ~~reduce~~

<sup>1</sup> <https://www3.epa.gov/npdes/pubs/owm0354.pdf>

~~nutrient loads while also providing other benefits, such as~~ enhancing flood control, increasing water supply, reducing greenhouse gas emissions, or improving habitat quality.

Page F-36 – Section 6.3.5:

**Multi-Benefit Solutions for Load Reductions.** Multi-benefit projects will take longer to complete than conventional projects due to additional challenges associated with interagency agreements, multi-agency permitting, and land acquisition. This provision requires Dischargers that identify long-term ~~multi-benefit solutions (i.e., water recycling or nature-based solutions)~~ nutrient management strategies that cannot be completed by the compliance date (October 1, 2034) for the final effluent limitations to identify such projects and their intent to pursue them. The Regional Water Board encourages Dischargers to pursue ~~these long-term strategies~~ multi-benefit solutions (i.e., water recycling or nature-based solutions) when feasible because they are likely to result in a greater benefit to the community and the environment relative to treatment plant improvements alone. ~~The~~ To enhance the affordability and implementation of these projects, the Regional Water Board ~~will consider~~ shall, prior to reissuance of the permit, use available regulatory mechanisms to provide more time to comply to Dischargers that identify ~~multi-benefit~~ long-term nutrient management projects likely to result in total inorganic nitrogen loads at or below the final WQBELs ~~more time to comply~~. Available regulatory mechanisms ~~may include, for example, amending the Basin Plan to include a water quality attainment strategy for biostimulatory substances; finding that a new compliance schedule under the Compliance Schedule Policy is justified based on~~ are, as follows:

- (a) amend applicable compliance schedule requirements to allow for compliance schedules of more than 10 years for nutrient management projects by amending Section 4.7.6 of the Basin Plan, requesting that the State Water Resources Control Board amend the 2008 Compliance Schedule Policy, or using other regulatory means;
- (b) amend the Basin Plan to include adoption of new, revised, or newly interpreted water quality objectives; ~~or imposing a time schedule under a time schedule order or cease and desist order.~~ for biostimulatory substances in order to specify that the new objective will not take effect until a date far enough in the future to allow completion of nutrient management projects or to support a 10-year compliance schedule following the compliance schedule under Section 6.3.3 of this permit; or



(c) amend the Basin Plan to include a water quality attainment strategy for biostimulatory substances with a compliance schedule of more than 10 years.

EBDA further requests that, concurrent with the adoption of the Nutrient Permit, the Water Board approve a Resolution committing staff to amend the applicable compliance schedule requirements to allow more time for nutrient management programs in the San Francisco Bay region. The Resolution would also state that if this is found to be infeasible, Water Board staff would draft a Basin Plan Amendment extending compliance timelines to support region-wide strategic nutrient reduction that takes into account competing environmental priorities and affordability concerns. EBDA supports the example Resolution provided by BACWA.

The EBDA Agencies and our fellow dischargers around the Bay need more time to achieve nutrient reductions, and we need a roadmap that provides us with certainty as we plan and implement reduction projects. We believe that the Regional Plan that BACWA will develop under this permit can provide that roadmap if it is paired with a legal framework that allows for adequate time.

**Comment 2. Agencies that have taken Early Action need a Compliance Pathway**

The EBDA Agencies have taken the vulnerability of the Bay to nutrients seriously and have invested in an “all of the above” approach to reducing our loads within the current permit term and beyond. Through water recycling and plant upgrades, EBDA has already reduced loads by 1000 kg/d from 2019 levels. These load reductions create an important bridge that provides ongoing environmental value while other agencies finalize their nutrient reduction strategies. In addition, the EBDA Agencies have significant projects underway – both traditional upgrades and multi-benefit projects – that will result in additional reductions during the next permit term.

The previous Watershed Permit was issued with an incentive clause for early actions (Early Actor Clause) based on the understanding that after implementing their planned projects, the EBDA Agencies and other Early Actors would be moved to the “back of the line” and not asked to make further upgrades until other agencies made reductions. The EBDA Agencies went above and beyond what was required of us. The cost of these projects approaches \$1 billion, and the agencies have fully leveraged their financial resources to make them happen. We made design decisions based on the best information at the time, adding nutrient reduction to planned upgrade projects. Yet according to this TO, our best efforts are still not enough. EBDA shared with Water Board staff that *after* our major projects have been completed, our dry season total inorganic nitrogen load (TIN) is estimated to be 6,300 kg/d. This estimate incorporates population growth, which the Association of Bay Area Governments (ABAG) estimates at 1.2% annually for EBDA’s service area (see Comment 9). Including all feasible optimization measures and using “best case” assumptions for what the project designs can achieve and for recycled water demand, EBDA estimates our load could potentially get as low as 5,000 kg/d by 2034. However, this is still shy of the TO’s effluent limit for EBDA of 4,200 kg/d, and therefore, would put us in violation.

While we are very willing to take additional steps to further reduce nutrient loads beyond these projects, we simply will not have the financial capacity to do so within a ten-year compliance

schedule. Acknowledgement of this reality was the impetus behind the Early Actor Clause in the previous Watershed Permit.

EBDA appreciates the inclusion of new early action language in the TO in response to our comments on the Administrative Draft. We believe this is necessary but not sufficient, and as noted in Comment 1, we implore the Water Board to expeditiously pursue amendments to compliance schedule requirements, a Basin Plan Amendment, or other legal mechanism that will allow for more time. EBDA takes our long record of permit compliance incredibly seriously. Our elected officials view it as their role to ensure consistent compliance, and they made difficult political decisions to increase rates and proceed with projects before they were required to on the basis that those proactive efforts would provide some measure of regulatory certainty, moving them to the back of the line. Instead, the TO largely disregards EBDA's efforts because the Water Board is not implementing its prior commitment under the Early Action Clause. The Water Board has advised that after the ten-year compliance schedule in the TO, the Water Board will most likely issue a cease-and-desist order or other enforcement order to provide the additional time that everyone today knows will be needed for full nutrient reduction implementation. To receive a time schedule order, cease and desist order, consent decree, or any other type of enforcement order would be seen as failure and would naturally lead the EBDA Agencies to question the value of acting early in the future.

With respect to the TO language, we request the following edits:

Page 17 – Section 6.3.6:

**Recognition of Early Actors.** Dischargers that have already completed or begun construction or implementation of projects to reduce total inorganic nitrogen discharges to San Francisco Bay by the effective date of this Order ~~may~~ will qualify as early actors. These Dischargers shall provide updates with each Annual Nutrients Report required by MRP section 5.2.2. Upon completion of these projects, if a Discharger's total inorganic nitrogen loads are above the individual final effluent limitations in Table 4, the Regional Water Board shall, prior to issuance of the next nutrient permit, use ~~will consider~~ all available regulatory mechanisms to provide more time to comply as explained in Fact Sheet section 6.3.~~5~~6.

Page F-37 – Section 6.3.6:

**Recognition of Early Actors.** The previous order encouraged Dischargers to make early investments in nutrient reductions in the absence of nutrient load limitations. Fact Sheet section II.E of the previous order identified several Dischargers that planned to take early actions to reduce total inorganic nitrogen loads to San Francisco Bay. Once complete, these projects were expected to result in effluent total inorganic nitrogen concentrations below 20 mg/L. Because of these investments, nutrient loads from these Dischargers to San Francisco Bay will be realized well before those of other Dischargers that have yet to undertake such investments.

[For example, the six agencies that discharge through the East Bay Dischargers Authority's combined outfall have each taken significant steps to implement nutrient reduction projects prior to the adoption of this Order. The table below summarizes these efforts.](#)

<u>Agency</u>	<u>Plant Upgrade</u>	<u>Water Recycling</u>	<u>Nature-based Solutions</u>
<u>Oro Loma/Castro Valley Sanitary Districts</u>	<u>\$20M Nutrient Optimization Project was placed into operation in 2020. Oro Loma's load in 2022 was 304 kg/d. Using their 2022 flows and pre-upgrade concentrations, their load would have been 1388 kg/d - a reduction of over 1000 kg/d that potentially decreased the severity of the algal bloom.</u>	<u>Recycled Water provided to former Skywest Golf Course during dry season.</u>	<u>The pioneering Oro Loma Horizontal Levee Demonstration Project has provided the data and framework to support many projects around the Bay that will achieve water quality improvement while also enhancing habitat and offering flood protection. EBDA is also continuing to pursue the First Mile Horizontal Levee Project, which was recently funded for final design and permitting and would receive Oro Loma effluent.</u>
<u>Union Sanitary District</u>	<u>Currently in construction on a \$509M upgrade, designed to achieve a 50% nutrient load reduction. Expected project completion in 2029.</u>	<u>Participating in Regional Purified Water Pilot Project with Alameda County Water District, Zone 7, San Francisco PUC, Dublin San Ramon Services District, and others.</u>	<u>Horizontal levee project being evaluated in cooperation with South Bay Salt Ponds as part of continuing work by BACWA assessing Nature-Based Solutions for Nutrient Removal.</u>
<u>City of Hayward</u>	<u>Currently in design on a \$300M upgrade, designed to achieve a 30% nutrient load reduction. Expected project completion in 2029.</u>	<u>Currently send 1-2 MGD of recycled water to Russel City Energy Center year-round (subject to RCEC's demands). An additional ~0.5 MGD is provided to irrigation customers.</u>	<u>Feasibility studies completed and design underway for a treatment wetland and horizontal levee at the former Hayward Oxidation Ponds.</u>
<u>City of San Leandro</u>	<u>Currently evaluating optimization strategies and sidestream treatment options with a goal of achieving Level 2 concentration.</u>	<u>Recycled water provided to Monarch Bay Golf Course for irrigation.</u>	<u>Construction expected to commence this summer on a treatment wetland at the plant site. Studies will begin this Spring on expanded treatment wetland concepts on additional land owned by the City.</u>
<u>Dublin San Ramon Services District (DSRSD)</u>		<u>DSRSD maximizes water recycling during the dry season. At times, recycled water demands exceed available influent wastewater flows, resulting in no flow (or corresponding nutrient load) being sent to EBDA. DSRSD has invested \$240M in this program.</u>	
<u>City of Livermore</u>		<u>Livermore has invested \$100M in its recycled water program, which diverts approximately 1/3 of Livermore's flow and load in the dry season.</u>	



This provision requires Dischargers that have already completed or begun construction or implementation of their projects by the effective date of this Order and that seek to be recognized as early actors to provide updates with each Annual Nutrients Report required by MRP section 5.2.2. Because early actions to reduce total inorganic nitrogen loads to San Francisco Bay will make excessive algae blooms less likely sooner, the Regional Water Board ~~will consider~~ shall, prior to issuance of the next nutrient permit, use available regulatory mechanisms to provide more time to comply to any such Dischargers that ~~are unable to~~ need more time to comply with final WQBELs upon completion of their projects ~~more time to comply.~~ Available regulatory mechanisms are as follows:

- (a) amend applicable compliance schedule requirements to allow for compliance schedules of more than 10 years for nutrient management projects by amending Section 4.7.6 of the Basin Plan, requesting that the State Water Resources Control Board amend the 2008 Compliance Schedule Policy, or using other regulatory means;
- (b) amend the Basin Plan to include adoption of new, revised, or newly interpreted water quality objectives for biostimulatory substances in order to specify that the new objective will not take effect until a date far enough in the future to allow completion of nutrient management projects or to support a 10-year compliance schedule following the compliance schedule under Section 6.3.3 of this permit; or
- (c) amend the Basin Plan to include a water quality attainment strategy for biostimulatory substances with a compliance schedule of more than 10 years.

### **Comment 3. NMS Science Work has been Misapplied in Setting the Effluent Limits**

EBDA has been an active participant in the NMS since its inception, and we are proud of the collaborative joint fact finding that has been advanced through the NMS Science Program. However, we believe that the Water Board has overstated its confidence in the science and modeling as a basis for imposing final numeric effluent limits. The April 2, 2024 Water Board memo outlining the numeric translation of the narrative objective for biostimulatory substances relies on a series of model runs performed by the NMS Science Team, in collaboration with key stakeholders, including EBDA. However, the San Francisco Estuary Institute (SFEI) memo (Contribution #1175<sup>2</sup>) summarizing this underlying science and modeling was only made publicly available by request in late April, and only in draft form.

EBDA has significant concerns with the TO's reliance on these documents as the bases for final numeric effluent limits. As was conceded in the Water Board's memo (p. 5): "The model was developed and validated to simulate the typical long-term ambient conditions observed in the Bay, and it performs reasonably well in predicting algae growth and dissolved oxygen levels under those

<sup>2</sup> SFEI, 2024, Simulations of Load Reduction Scenarios to Inform Nutrient Management Planning for San Francisco Bay April 2024 – DRAFT, SFEI Contribution#1195

conditions. However, it was not developed to simulate HAB-like events similar to the one observed in 2022 so we did not use the NMS model to predict algae growth and dissolved oxygen for our analysis.”

As noted in that memo, there were multiple “worst case assumptions” included in the sequence of “back of the envelope” calculations used to derive the proposed 40 percent overall loading reductions. SFEI’s analysis involved multiple variables including 1) three different modeling approaches for calculating dissolved inorganic nitrogen (DIN), 2) three different ambient pre-bloom dissolved oxygen (DO) concentrations (8, 9, 10 mg/L) and 3) year-round vs. seasonal loading reductions.

Each of the three modeling approaches yielded moderately to significantly different results, with the greatest differences seen in the Lower South Bay (LSB) and South Bay. The SFEI report noted that one of the known limitations/uncertainties of the existing model is that it overestimates DIN for the LSB and lower portion of the South Bay. This is a critical uncertainty that needs to be resolved prior to adopting final loading reductions with uncertain benefits to DIN concentrations and resultant DO conditions, should a July/August 2022 type algal bloom reoccur.

Contribution #1175 Section 3.3 – Overview of Uncertainties – acknowledged that “There are clearly major unknowns that remain about the factors that triggered the August 2022 HAB event, and about mechanisms/factors that influenced the bloom’s progression” and that “HAB events are notoriously challenging to accurately simulate.” Section 3.3 also noted that “Fully characterizing these uncertainties was beyond the scope of this project, however, quantifying/constraining these uncertainties will be pursued as part of on-going modeling work.” EBDA supports this important need for further modeling work to address the limitations and uncertainties noted above and to improve the level of scientific confidence in the water quality outcomes of proposed nutrient loading reductions.

SFEI modeling efforts prior to the 2022 bloom had been focused on long-term trends and not on the more challenging effort to predict or even to identify and track the myriad of potential conditions necessary to trigger a short-term “acute” bloom. This is also the first use of the SFEI model for running load reduction scenarios. The approach and results have not been independently validated or peer reviewed, for example by the Model Advisory Group. It is problematic that the first time the model was ever used to conduct scenario runs, it was used to inform the very significant and impactful load reduction requirements included in the TO.

The known limitations of the “back-of-the-envelope” approach used for deriving the proposed loading reductions highlights the critical need for an open and comprehensive evaluation of these uncertainties prior to adopting numeric final limits. We remind the Water Board that the established numeric limits will drive over \$11B in regional infrastructure investments, which will impact ratepayers and necessitate prioritization over other infrastructure needs. Given this level of consequence, EBDA believes that we need an adaptive management approach that allows the science to continue to evolve before we lock ourselves into numeric limits. It would be prudent public policy, given the magnitude of public resource commitments involved, to modify the TO as requested in Comment 4 to utilize a BMP-based approach until further science and modeling

development is able to provide a greater level of confidence in the likely benefits of loading reductions on a given subembayment.

EBDA applauds the advances in understanding that have been made as part of the NMS Science Program, and we believe that it is in all stakeholders' interest to allow the science to advance and incorporate future learnings as we continue to reduce nutrient loads. The current level of scientific uncertainty necessitates an iterative, adaptive management-focused approach to nutrient management. An ideal regulatory approach would require us to be closely monitoring the Bay and improving the model, while our nutrient management investments should be no-regrets via strategic use of existing facilities, synergistic upgrades at our facilities, and a focus on multi-benefit projects. As discussed in Comment 4, we recommend that the Water Board find that as in Puget Sound, the science currently does not allow for the establishment of numeric WQBELs, and in so finding, establish BMP-based limits.

**Comment 4. The Permit Should Employ a Best Management Practices-based Approach to Effluent Limits.**

As asserted in Comment 3, flexibility is needed to reflect the current state of the science and the need to adapt to new information while continuing to progress nutrient reduction projects. Luckily, the Clean Water Act provides the Water Board discretion to decide how to formulate final effluent limitations in an NPDES permit. EBDA believes that the best means to achieve needed flexibility in permitting is to require best management practices (BMPs) as final effluent limits. Effluent limits include any restriction on the concentration of pollutants (40 CFR §122.2) and may consist of narrative or numeric limitations. BMPs may be used in lieu of a numeric effluent limit when numeric effluent limitations are infeasible (40 CFR §122.44(k)(3)). BMPs may also be used in lieu of numeric effluent limits when the practices are reasonably necessary to achieve effluent limitations and standards or to carry out the purposes and intent of the Clean Water Act (40 CFR §122.44(k)(4)).

In the Puget Sound region in Washington State, the Washington Department of Ecology made the finding that based on the state of the science, it was not feasible to calculate Water Quality-Based Effluent Limits. Instead of implementing numeric limits, they required dischargers to implement BMPs.<sup>3</sup> It should be noted that the Salish Sea numerical model used in Puget Sound is significantly more advanced than the current model under development for the San Francisco Bay. EBDA believes that rather than calculating numeric water quality-based effluent limits (WQBELs), the Water Board could instead make a similar finding and require dischargers to implement actions aimed at reducing nutrient loadings by 40% from 2022 loads via BMPs.

A BMP-based approach for the Nutrient Watershed Permit would rely on specific actions in lieu of numeric limits. The Nutrient Permit would include BMP milestones that are achievable within ten years and would put us on the path to attaining the narrative water quality standard. EBDA and other dischargers would document the projects we have completed and nutrient reductions those projects have realized, as well as additional projects that we are planning, along with their design goals. An adaptive management approach to nutrient management would allow us to course-

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<sup>3</sup> <https://ecology.wa.gov/regulations-permits/permits-certifications/nutrient-permit>

correct as we get more information about the impact of nutrients on the Bay as we move forward into future permits. BMPs in lieu of numeric limits would allow more flexibility when effluent limits inevitably change in response to new scientific developments (see Comment 3). BMPs would also provide protection against mandatory minimum penalties for Early Actors and other agencies who are diligently working toward nutrient reduction.

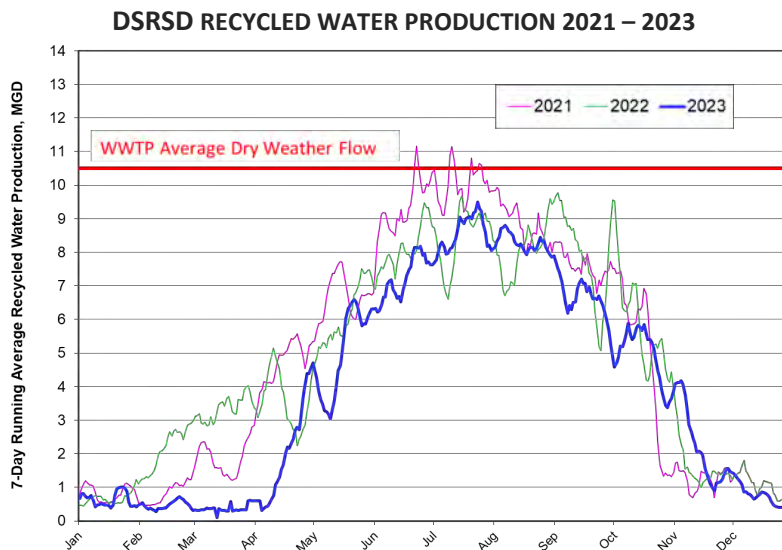
Importantly, a BMP-based approach can also be implemented consistent with the 2008 Compliance Schedule Policy. For the Compliance Schedule Policy to apply, the policy requires new or newly interpreted limits in a permit. Section 1e of the Compliance Schedule Policy defines “[n]ewly interpreted water quality objective or criterion in a water quality standard” to include “a narrative water quality objective or criterion that . . . results in a numeric permit limitation more stringent than the limit in the prior NPDES permit . . .” Notably, the policy does not state that the numeric limitation must be an effluent limitation. The Water Board, therefore, does not need to issue a permit with a final numeric effluent limitation. The Water Board could impose numeric limitations as numeric targets that are implemented via BMP limits in the Nutrient Watershed Permit. These targets stem from the narrative biostimulatory objective and would be included in the Nutrient Permit as numeric permit limitations more stringent than the prior NPDES permit.

We submit that a BMP-based effluent limitation is the only type of limitation appropriate for the Nutrient Permit. The Reasonable Potential Analysis under 40 CFR§122.44(d)(1)(vi) requires an effluent limit that assures it will achieve a water quality standard. At this time, actions that can feasibly be taken within ten years provide the best set of restrictions on pollutants to achieve the water quality standard, with some potential project completions as early as 2025 to reduce nitrogen loads. EBDA supports BACWA’s proposed edits to the TO that would implement the BMP-based approach.

#### **Comment 5. Compliance Flexibility is Needed to Account for Recycled Water Demand Variability**

The EBDA Agencies have been leaders in water recycling. DSRSD serves as a model for the region and is exploring agreements to take on additional agencies’ effluent to meet peak summer demands, and Hayward, San Leandro, and Livermore also have significant long-standing programs. Continuing to support and expand water recycling as a strategy for dry season nutrient load diversion is a stated priority for the wastewater community, environmental NGO community, and the Water Board. However, recycled water demands are not within wastewater agencies’ control, and are highly variable. Nutrient diversion via recycled water is not possible when recycled water demand decreases. For example, a very wet spring can significantly depress recycled water demand in May, leading temporarily to higher nutrient discharges. As illustrated in the figure below, recycled water demands reached their maximum in 2021, followed by two years of decline due to wet weather. Recycled water demands were notably lower in May 2023 following a historically wet winter (25% lower compared to 2021).





Additionally, non-seasonal factors can temporarily impact agencies' ability to divert nutrients via recycled water. For example, if a school or park irrigation customer elects to replace their field with turf, or if a power station that uses recycled water curbs production, agencies will need time to identify other customers to make up those demands. Additionally, unplanned outages of the recycled water treatment plant due to PG&E or process issues can be unavoidable at times.

EBDA believes it is counter to our common goals to penalize agencies for temporary demand decreases and force investment in plant upgrades, diverting financial resources from expanding water recycling programs. DSRSD estimates that adding nutrient reduction at its wastewater treatment plant could cost approximately \$54 million and divert future funding away from expanding the recycled water program. In contrast, expansion of DSRSD's recycled water program, which would include diversion of wastewater from neighboring agencies to meet recycled water peak demands, would reduce nutrient loads to the Bay overall.

To address this inherent variability and incentivize expansion of recycled water programs, EBDA requests several revisions to the TO:

- **Exclude the month of May** which historically has the largest variation in recycled water demand. Wet hydrologic conditions result in lower demand and risk of algal blooms. Drier hydrologic conditions naturally result in higher recycled water demands and increased nutrient reductions.
- Base compliance with final seasonal limitations on a **3-year rolling average** of from discharges from June 1 – September 30.
- **Allow agencies to exclude data points** where recycled water demands have been impacted due to factors beyond an agency's control from compliance calculations.

EBDA appreciates staff's addition of Footnote 1 to Table E-4, which we assume was intended to address our concerns related to the impacts of wet weather on recycled water diversion. We believe as currently written, the provision is impractical to implement, and we would prefer the

opportunity to exclude data points rather than refrain from sample collection. We suggest the following modifications:

Samples need only to be collected when discharging (i.e., seasonal Dischargers shall collect samples only during the discharge season). For compliance monitoring (between May 1 and September 30), samples shall be representative of dry season conditions. ~~and shall not be collected if~~ effluent flows are higher than normal due to ~~unseasonal wet weather that increases flows to the treatment plant or results in~~ reduced recycled water demand, such as following periods of unseasonably wet weather, the Discharger ~~is unable to collect representative samples at the monitoring frequency required by Table E-4, it shall exclude such data from reported averages for the purpose of compliance determination and shall~~ include documentation in the transmittal letter of its monthly self-monitoring report that explains effluent flows during that period were ~~higher than normal due to wet weather not representative.~~

**Comment 6. Flexibility Should be Provided for Temporary Excursions Due to Employment of Innovative Strategies**

As agencies work toward achieving the ambitious nutrient load reductions contemplated by this TO, they necessarily will be seeking innovative strategies to optimize their processes and/or employ new technologies. This is particularly true for the EBDA Agencies, who will have largely completed major upgrades and will be looking to squeeze incrementally more nitrogen removal out of their plants. EBDA requests that the permit include a mechanism to acknowledge this necessary and encouraged process of trial and error. We suggest that the permit state, perhaps also in Footnote 1 to Table E-4, that an agency may exclude a data point that is non-representative due to optimization efforts or trial of innovative technology and explain its reasons for doing so in its monthly self-monitoring report.

**Comment 7. Load Allocations Should be Based on Influent Flows to Appropriately Recognize Recycled Water Diversions**

On pages F-25 and F-26 of the Fact Sheet, Water Board staff outlines their use of modeling to determine a total aggregate load of total inorganic nitrogen to the Bay that would have been protective during the 2022 algal bloom. EBDA's concerns with the uncertainties in establishing this aggregate number are highlighted in Comment 3. However, presuming that number is correct, the Water Board has significant discretion in allocating that load among Bay dischargers to develop individual final effluent limits. The Fact Sheet notes that "individual WQBELs are based on the concentration that, when the various flows are considered, results in loads summing to the total aggregate average load of 26,700 kg/day, assuming 2022 dry season flows."

As discussed in Comment 2, EBDA Agencies have been diverting significant flows from the Bay via water recycling since long before 2022. In selecting a load limit based on 2022 effluent flows, the Water Board has penalized these efforts, giving EBDA and other water recyclers a much lower effective concentration limit. Use of influent flows would set a more even playing field among dischargers, incentivizing reuse by giving credit for load diversion. Use of influent in the allocation is also fairer to agencies like the City of San Leandro that have significant contributing industries such as food processing in their service areas.

Having run the numbers, EBDA recognizes that switching to an influent-based calculation would not significantly change EBDA's final effluent limit. However, we believe that if incentivizing water recycling is a policy objective, the basis for load allocations should reflect that, not run counter to it. EBDA therefore recommends reconsidering the load allocation methodology and employing influent flow as a basis.

**Comment 8. Moving to a Year-round Limit would Upend all Current Nutrient Reduction Efforts**

As discussed above, one of the EBDA Agencies' primary strategies for dry season nutrient reduction is diversion through non-potable water recycling. This strategy works because seasonal demand for recycled water in the Bay Area coincides with the dry season that has been determined so far to be most critical to preventing algal blooms. Other nutrient reduction strategies such as optimization rely on use of available tankage during the dry season for implementing biological nutrient removal. Nature-based solutions are also most effective during the dry season when flows through the system can be carefully managed. Lastly, upgrades currently in design or construction, including those being implemented by USD and Hayward, have been designed to achieve dry season load reductions.

For these reasons, we are greatly concerned by the language on page 8 of the TO, which states, "For the permit reissuance scheduled for 2029, the Regional Water Board will consider any new information available (e.g., observational data, improved load response modeling, and other scientific updates generated by the Nutrient Science Program) to reassess and refine the final limits in this Order to ensure that they remain appropriate to protect San Francisco Bay beneficial uses. This may involve adjusting the magnitude of the required load reductions, the spatial scale for the load reductions (e.g., by subembayment instead of baywide), *or the time-period used to evaluate nitrogen loading (e.g., year-round versus seasonal)*." (emphasis added)

While we understand the need to adjust the regulatory framework over time as new science is developed and absolutely support adaptive management, this must be balanced with some level of regulatory certainty. A change so fundamental and consequential as the seasonality of the limits would require extensive stakeholder discussions and an even longer time horizon for compliance.

We believe this very uncertainty inherent in the current science points to why it is unnecessary and counter-productive to include final numeric effluent limits in this permit (see Comment 4). That said, we request at a minimum that the explicit reference to potentially changing the time period for nitrogen loading limits be struck from this permit.

**Comment 9. The Permit Should Acknowledge Population Growth**

EBDA wishes to highlight that while the Water Board is characterizing the load cap as a 40% reduction over 2022 levels, the actual reductions required to meet load limits will be far higher over time due to population growth. As shown in the table below, Plan Bay Area 2050<sup>4</sup> estimates

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<sup>4</sup> <https://planbayarea.org/>

growth in EBDA's service area to be 1.2% annually, with the Tri-Valley area growing at 1.7% per year.

	Primary Jurisdictions	Households		Growth	Total % Growth	Annual Growth
		2015	2050			
East Alameda County	Dublin, Livermore, Pleasanton	72,000	132,000	60,000	83%	1.7%
South Alameda County	Newark, Fremont, Union City	105,000	152,000	47,000	45%	1.1%
Central Alameda County	San Leandro, Hayward	120,000	160,000	40,000	33%	0.8%
Total		297,000	444,000	147,000	49%	1.2%

Because influent nitrogen load is almost entirely driven by population, this growth means that the EBDA Agencies and dischargers around the Bay will need to target load reductions beyond what's reflected in the Fact Sheet and will need to continue to find additional ways to reduce loads as population continues to grow. As currently written, this permit is effectively a moratorium on growth without significant infrastructure investment, which is contrary to the region and States priority of creating more affordable housing.

#### **Comment 10. Co-digestion Projects should be Considered Multi-Benefit**

Organic waste in landfills releases 20% of California's methane, a climate super pollutant 84 times more potent than carbon dioxide. In 2016, the legislature adopted SB 1383, requiring organics to be diverted from landfills. By codigesting food scraps with wastewater solids in digesters, the state can take advantage of available digestion capacity rather than building new facilities, create renewable energy critical to our transition from fossil fuel, and create soil amendment to complete the cycle. In recognition of this opportunity, Bay Area wastewater agencies are under increasing pressure to accept diverted organics for codigestion to assist the state in meeting climate goals. Adding food scraps to a wastewater digester increases nitrogen loads from the solids sidestream. This additional nitrogen can be removed, but additional time will be needed to add sidestream treatment or other nutrient reduction strategies. EBDA therefore requests that codigestion be added as another example of a multi-benefit project that can be afforded additional time for compliance through available regulatory mechanisms. EBDA's specific proposed revisions to the TO are reflected in our markup in Comment 1.

#### **Comment 11. Reporting Provisions should be Streamlined and Clarified**

The Tentative Order includes two major regional reports: The "Group Annual Report" and the "Regional Planning Report." EBDA suggests the Water Board differentiate these two reports more clearly, avoid duplicative content, and remove overly prescriptive requirements:

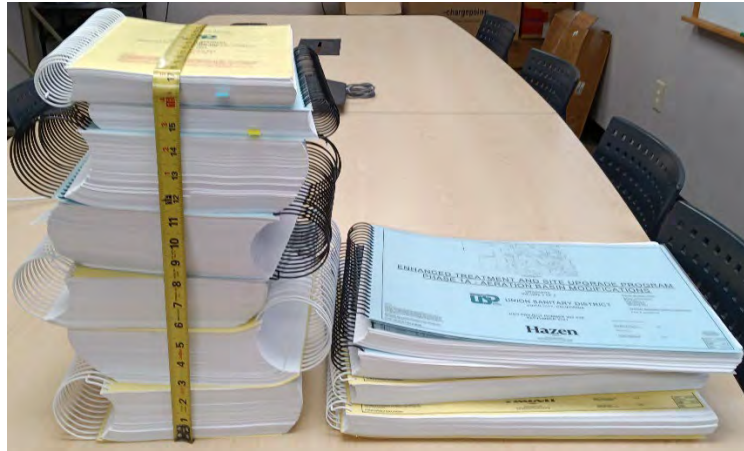
- The **Group Annual Report** is a data-focused report that is mainly concerned with tracking compliance and regional trends in nutrient loading to the Bay. As an annual report for the entire region, it is a good place to capture high-level information about nutrient load reduction efforts, and to report on the completion of major project milestones, including those listed in Section 6.3.3.2 of the TO. Longer-term plans would be captured in the Regional Planning Study. Since the Group Annual Report will now contain additional narrative information about projects, EBDA requests an extension of the due date of the annual deadline from February 1 to April 1.



- The **Regional Planning Study**, a one-time report that will be developed over several years, is the best location for more detailed descriptions of projects, including those with longer planning timeframes. As described in Comment 1, ideally the Regional Planning Study is the vehicle to lay out a regional roadmap for nutrient reductions required in this permit and beyond and associated timelines.

EBDA is also concerned that as written, the reporting requirements in the TO would put an undue strain on agencies as they diligently work on nutrient reduction projects, would provide the Water Board with detailed information they are unlikely to need or use, and would make it difficult for smaller agencies to compete for limited engineering resources. Further, the proposed deadlines will stifle innovation and the ability for agencies to pursue desired multi-benefit projects. EBDA requests that Water Board staff work with BACWA to revise Section 6.3.3.2. Additional detail supporting this recommendation is as follows:

- **Due date alignment will strain resources.** In Section 6.3.3.2, the imposition of standardized due dates for major deliverables such as “Final Design Drawings” would unwittingly exacerbate the regional strain on resources such as engineers, construction contractors, and financing. Smaller agencies including the City of San Leandro are already finding that upon the release of the Administrative Draft of this permit, consultants with expertise in nutrient removal became increasingly difficult to get ahold of as agencies vie for their support in developing and implementing nutrient reduction strategies. Standardizing due dates only exacerbates this competition for limited resources. EBDA proposes to retain the list of major project milestones within the Group Annual Report, and to report annually on those milestones that are already completed or for which estimated completion dates are available. The remainder of Section 6.3.3.2 is duplicative with the Regional Planning Report, which already states that it can be developed individually or in collaboration with other stakeholders.
- **Document submittal requirements are impractical.** Several of the proposed deliverables in Section 6.3.3.2 do not conform to typical practice at public agencies. For example, the term “Preliminary Design Report” is preferable to “Draft Design Report,” because a draft document would be unsuitable for submittal to the Water Board. “Final Design Drawings” may contain sensitive information that agencies would not want to submit to the Water Board in the midst of a bidding process. Additionally, the documentation that the Water Board is requesting is voluminous. The photo below illustrates Final Design Drawings and Specifications of the type required in Section 6.3.3.2.5 for Phase 1 of 3 of the USD Enhanced Treatment and Site Upgrade Project. On a regional basis, the Water Board would be receiving over 100 times this amount of paper (3 phases x 37 dischargers), which doesn’t seem practical or useful.



EBDA would be happy to provide the date of completion of various deliverables in the Group Annual Report rather than providing entire documents. The documents would be readily available upon request from specific dischargers.

- **Load reductions are an unwieldy measurement.** Throughout this section, EBDA proposes to remove reporting requirements that refer to “load reductions.” This metric is poorly suited for projects with variable load reductions (e.g. process upgrades) or where the baseline is unclear. This is particularly true for agencies such as EBDA’s that have been diverting nutrients via recycled water diversion for many years or who have completed early action projects. In EBDA’s experience, it is difficult to track or forecast compliance using the metric of “load reductions,” whereas it is comparatively straightforward to track actual loads.
- **The due date for identifying multi-benefit projects is too early, and the definition of multi-benefit projects is too constrained.** The TO identifies July 1, 2025 as the due date for identifying multi-benefit projects in order for them to be considered eligible for extended timelines. This early due date disincentivizes multi-benefit projects by providing an inadequate planning horizon. EBDA proposes that agencies identify such projects in the Group Annual Report due in early 2028. This deadline would also allow projects to be included in the final Regional Planning Report due March 31, 2029.

**Comment 12. Environmental Justice and Public Outreach Must consider Rate Impacts on Vulnerable Communities**

Thus far, the Water Board’s environmental justice outreach has not considered economic impacts, which is particularly relevant given the magnitude of public resources required to meet the permit, as written. We, therefore, urge the Water Board to re-consider its conclusion on page F-40 of the Fact Sheet that economic impacts need not be evaluated.

Water Code sections 189.7 and 13149.2 and other statutory and regulatory provisions and guidance require specific outreach and findings related to potential environmental justice, tribal impact, and racial equity considerations for reissued permits that include time schedules for achieving compliance with water quality objectives. The Water Board held a workshop to engage with

interested groups on March 5, 2024. However, it is our understanding that the significant costs associated with implementing the proposed requirements, and the impact associated rate increases will have on disadvantaged communities, were not highlighted. EBDA believes this oversight is a fundamental flaw in the outreach that must be rectified. Of course, when presented with information on how nutrient reductions will reduce the likelihood and severity of future algal blooms, community groups are likely to express support. However, to leave out information on rate increases that will disproportionately affect the most vulnerable Bay Area residents is misleading and irresponsible. Section 25.4(b)(2) of the Code of Federal Regulations in Title 40 requires that “social, economic, and environmental consequences of proposed decisions shall be clearly stated in [informational materials].”

In order to fully satisfy State Water Resources Control Board Resolution No. 2021-0050 and Water Code §§ 189.7, 13149.2, the Water Board must conduct additional required outreach and make findings required under the Water Code § 13149.2 showing how it considered the impact of the compliance schedule on disadvantaged communities.

State and federal law require the Water Board to conduct environmental justice review and outreach to meet requirements set out by California Assembly Bill 2108. AB 2108 was enacted to require “outreach to identify issues of environmental justice [that] needs to begin as early as possible in...permitting processes.” (Wat. Code § 189.7(a).) The Water Board is required to “engage in equitable, culturally relevant community outreach to promote meaningful civil engagement from potentially impacted communities of proposed discharges of waste that may have disproportionate impacts on water quality in disadvantaged communities.” (Wat. Code § 189.7(a)(1).) Culturally relevant community outreach is defined to include “[s]eeking out and facilitating the involvement of people potentially affected by the decisions and taking into account community concerns.” (*Id.*, subd. (d).) Further, Water Code § 13149.2 requires that the Water Board facilitate the development of analyses and findings that apply environmental justice objectives, goals, and policies in a transparent and inclusive manner. The Water Board must (a) prepare a concise summary of the anticipated water quality impact in disadvantaged communities as a result of the permitted activity and (b) identify measures to address the impacts of the permitted activity or facility in a disadvantaged or tribal community.

In addition, State Water Resources Control Board Resolution 2021-0050 (the Racial Equity Resolution) acknowledges that in the past “Water Boards had not explicitly acknowledged the role racism has played in creating inequities in affordability and access to clean and safe water and in the allocation and protection of water resources.” (SWRCB Res. No. 2021-0050, Findings ¶ 7.) Paragraph 10 of the resolution mandates that Water Board staff must provide “accessible, open and transparent opportunities for people to participate in our public meetings, hearings, and workshops” and that staff meet “people in their communities and spaces to seek out their perspectives.”

U.S. EPA’s 2016 and 2023 guidance recommends consideration of any economic challenges that may be exacerbated by the regulatory action for relevant population groups of concern. The guidance states: “[I]f costs are unevenly distributed such that low-income households bear a larger

relative share, it is possible that they may experience net costs even after accounting for environmental improvements.”<sup>5</sup>

Particularly when combined with other resource demands associated with aging infrastructure, nutrient requirements will result in skyrocketing wastewater rates in the coming years. As discussed previously, forcing nutrient upgrades into a ten-year compliance schedule will further exacerbate these economic pressures by driving up construction costs in a contractor-limited market and overburdening state and federal funding programs. EBDA and our wastewater partners have advised Water Board staff that the environmental justice impacts of the draft Order are too severe for a compressed ten-year compliance schedule, and that the brunt of this burden will be borne by the most vulnerable communities. Under Prop 218, utilities do not have the ability to provide discounts or otherwise shift costs based on affordability.

These concerns are consistent with recent studies. The January 27, 2023 Bay Area Equity Atlas report found that “nearly half of all residents in the nine-county Bay Area are either low income or very low income” and “Black and Latinx residents make up a disproportionate amount of the very low-income residents in the nine-county Bay Area.”<sup>6</sup> The Water/Color 2023 study found Black communities “suffer disproportionately from water unaffordability.”<sup>7</sup>

EBDA disagrees that with the Water Board’s conclusion on page F-40 that “cost concerns are beyond the scope of Water Board section 131949.2. To the contrary, the second consideration under section 13149.29(b)(2) of the Water Code is to “address *impacts of the permitted activity* or facility in a disadvantaged or tribal community.” (Emphasis added.) Impacts are not limited to “water quality impact[s]” as in they are in subdivision (b)(1), reflecting that the Legislature purposefully chose not to limit considerations only to “water quality impacts” but generally to “impacts of the permitted activity.” We further disagree that Finding 2.2 adequately considers economic impacts. It merely lists total costs, not how disadvantaged communities must bear portions of those costs.

EBDA believes that a legal framework for providing more time, as is described in Comment 1, is necessary to prevent undue burden on the Bay Area’s environmental justice communities. The Water Board should not adopt this permit unless or until such a commitment is made and appropriate outreach to affected communities is conducted.

### **Comment 13. EBDA Requests the Following Edits to Fact Sheet Language Regarding Nature-based Solutions.**

Page F-11:

<sup>5</sup> See 2016 U.S. EPA Technical Guidance for Assessing Environmental Justice at p. 57, available at [https://www.epa.gov/sites/default/files/2016-06/documents/ejtg\\_5\\_6\\_16\\_v5.1.pdf](https://www.epa.gov/sites/default/files/2016-06/documents/ejtg_5_6_16_v5.1.pdf) and draft 2023 guidance available at <https://www.epa.gov/environmental-economics/epa-draft-revision-technical-guidance-assessing-environmental-justice>.

<sup>6</sup> See “Who is Low Income and Very Low Income in the Bay Area? (An Updated Look), January 27, 2023, available at <https://bayareaequityatlas.org/distribution-of-incomes#:~:text=More%20than%20half%20of%20the,the%20nine%2Dcounty%20Bay%20Area>

<sup>7</sup> See Legal Defense Fund “Water/Color 2023” available at <https://tminstitutelfd.org/water-color-2023/#:~:text=We%20are%20in%20a%20national,suffer%20disproportionately%20from%20water%20unaffordability>



**Union Sanitary District. [In conjunction with South Bay Salt Pond Restoration Project.](#)**

The district explored the feasibility of building a horizontal levee on adjacent land. Although the district does not own the land, it has pledged support for the concept and will assist with moving the project forward. The [Union Sanitary District](#) plans to significantly reduce nutrient discharges with treatment plant upgrades. Construction started in 2022 and is expected to be completed by 2029.

**Comment 14. EBDA Requests that Table F-3 Break Out Individual EBDA Dischargers.**

To better highlight the significant recycled water programs operated by several of the EBDA agencies, we request that the following additions be made to Table F-3. Current and Projected Water Recycling.

Page F-12 - Table F-3:

Discharger	Average Daily Discharge Oct 2019-Sept 2020	2020 Water Recycled (MGD)	2020 Fraction Recycled	2025 Projected Water Recycled (MGD)	2030 Projected Water Recycled (MGD)
East Bay Dischargers Authority (EBDA)	62.1	6.0	0.10	6.5	6.8
Dublin San Ramon Services District	10.25	3.5	0.34	3.7	3.7
City of Hayward	10.9	0.8	0.07	1.1	1.2
City of Livermore	4.08	1.4	0.35	1.5	1.5
Oro Loma Sanitary District	11.2	0.03	0.00	0.0	0.0
City of San Leandro	5.0	0.3	0.05	0.3	0.3
Union Sanitary District	23.0	0	-	0	0

**Conclusion**

The EBDA Agencies have done everything that has been expected of us and more. We have invested significant capital in treatment plant upgrades to remove nutrients. We have maximized water recycling to provide water supply and nutrient diversion. We have pioneered multi-benefit nature-based approaches to nutrient removal. We might be able to do more – further optimize our processes, explore sidestream treatment, expand water recycling – but we need more time.

Given the state of the science, the monumental investments that are needed regionally to achieve necessary nutrient reductions, the desire of all stakeholders to have those investments go further through multi-benefit projects, the impacts to environmental justice communities if we compress those investments into too short a window, and the good faith efforts that have been made by the wastewater community to both advance the science and make meaningful nutrient reductions in the absence of requirements, an adaptive management framework is in everyone's interest. It does not make sense to box ourselves into numeric limits and a ten-year compliance schedule when we have other viable options. We respectfully request that the Water Board employ a BMP-based

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approach and commit to extending the compliance schedule to ensure that agencies that are engaged in multi-benefit projects and those that have implemented early action will not be held in violation in 2034 and that as a region, we can adapt to new information. With this slight course-correction, we have an opportunity through this permit to continue to be the beacon of science-based, collaborative, and practical regulation of nutrients that the San Francisco Bay region is known for.

We welcome your questions and continued collaboration on these challenging issues. You can reach me at (510) 278-5910 or [jzipkin@ebda.org](mailto:jzipkin@ebda.org).

Sincerely,



Jackie Zipkin, P.E.  
General Manager

Cc:

Eileen White, Tom Mumley, Bill Johnson – Regional Water Board  
Ellen Blake, Peter Kozelka – USEPA Region 9  
Lorien Fono, Mary Cousins – Bay Area Clean Water Agencies  
Jon Rosenfield, Ian Wren – San Francisco Baykeeper  
EBDA Agencies

**chuckweir@sbcglobal.net**

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**From:** CASA <cmackelvie@casaweb.org>  
**Sent:** Thursday, May 9, 2024 3:01 PM  
**To:** chuckweir@sbcglobal.net  
**Subject:** Your Water and Wastewater Updates for May 9, 2024

**Flag Status:** Flagged



**CASA**  
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*For questions about CASA News, please contact [Alyssa Downs](#).*

**Get to Know the CASA Staff: Greg Kester**  
Greg serves as CASA's Director of Renewable Resource Programs and has been CASA's subject matter expert on all matters pertaining to renewable resources for nearly two decades. He manages emerging issues at the local, state and federal level and within the private sector on all biosolids, renewable energy, and related issues. Prior to joining CASA, he served as the state biosolids coordinator for the Wisconsin Department of Natural Resources, where he represented all states in the nation, by their election, to the USEPA



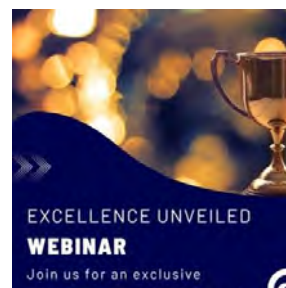
on biosolids issues. Greg holds a BS in Civil and Environmental Engineering from the University of Wisconsin and is a registered professional engineer.

**Greg beyond the office:**

- *What's the most unusual or interesting thing you've ever eaten? Perhaps frog legs or escargot? I grew up in the shadow of New York City and while in early high school was in French Club. We had a field trip to New York which included eating at a French bistro. I decided to do as the French would and ordered both frog legs and escargot! To my surprise, I loved them both and continue to eat them whenever they are on the menu!*
- *What is something people would not know about you that is unique? As a 16-year-old, I attended the Woodstock Music and Arts festival and stayed for an entire week. I was working on the boardwalk on the shore in Seaside Heights New Jersey and wasn't able to take off for the Newport Folk Festival in July which was my first intention. But I was aware of the annual Woodstock festival in August and sent for tickets to the 3-day festival. It was only after securing them that I saw it advertised in the NY Times and realized how many great performers would be there. It was a positive life changing event for which I have only great memories!*
- *Do you have a favorite musician? Why are they your favorite? Bob Dylan. My brother came home from college in 1965 with a copy of Highway 61 Revisited and upon listening I heard a voice that spoke directly to me and have been a devoted fan ever since. I think he is the best writer and singer from whom all my musical knowledge derives (past, present, and future). Even at 83, I look forward to seeing him at the Shoreline Amphitheater in August (with Willie Nelson).*
- *What's the best piece of advice you've ever received, and did you follow it? When I was 35 and had been driving an 18-wheel semi-truck for 10 years, hauling biosolids to agricultural fields for Madison MSD, I decided to use my mind and return to college. I was planning to major in creative writing because I always wanted to be a writer. My wife (of 50 years this October), questioned this since I had not written anything in the 15 years we had been together! Rather she said my memorization of all baseball statistics from the 1950's on, was not normal and I should be in the math and science field. A lightbulb went off and I majored in civil and environmental engineering which proved to be the second-best choice of my life (after marrying her)!*

### **Excellence Unveiled: A Webinar Showcasing CASA Award-Winning Projects**

Join us on June 25 from 11:00am – 12:15pm for an exclusive webinar as we delve into past CASA Awards of Excellence winning projects. This virtual event offers a unique opportunity to gain invaluable insights directly from the minds behind these exceptional projects. From harnessing biomethane as a renewable energy source to engaging the public through effective outreach and education programs, each project offers a unique perspective and important lessons for other CASA agencies. Our esteemed presenters, each a recipient of the CASA Awards of Excellence, will take you on a journey through their innovative projects, sharing the challenges and triumphs that defined their process.



For those of you who have seen our Awards of Excellence presented at the CASA Annual Conference and wanted to know more about the projects being honored, now is your opportunity! This webinar promises to be a rich source of knowledge and inspiration, with plenty of time to engage with the presenters during the Q&A period. Keep an eye out for registration information. You won't want to miss it!

### **Deadline Approaching: CASA Education Foundation Scholarships**

Does your local college or university know about CASA's financial aid to students interested in a career in water? The CASA Education Foundation helps energize the future of the clean water sector by awarding scholarships to promising students on a path to serving the environmental community. The Foundation is accepting scholarship applications through **May 17, 2024**. For information on how to apply, who is eligible and the scholarship guidelines, visit the [website](#).



### **CASA Annual Conference: Registration Open!**

CASA is thrilled to announce the upcoming 2024 Annual Conference, set to take place from July 31 to August 2 at the Monterey Marriott. This year, our conference theme is "Empowering Through Collaboration," highlighting the importance of working together to achieve our shared mission. Our program will feature an array of speakers and panels geared towards providing our agencies with the necessary tools and information to foster collaboration and achieve our common goals. We will also host three different tracks this year with opportunities for high-level policy discussions as well as deep technical dives, and some excellent networking opportunities as well! As always, our committee leaders and subject matter experts will be on hand to provide all the latest information on legislative and regulatory proposals that will impact your agency.



Also, new to this year's event will be an extended keynote session featuring the esteemed Mabel Miguel from UNC Kenan-Flagler Business School. Mabel will lead an interactive session with breakouts and small group engagement that will be sure to captivate and inspire. Additionally, we're offering an exclusive tour of Monterey One Water, but space is limited, so be sure to sign up early! Stay tuned for updates on speakers and the official program. Trust us, you won't want to miss out on what we have in store. [Register](#) early and make your reservations to lock in the best hotel rates. We hope to see you this summer in Monterey!



### In Memoriam: Wyatt L. Troxel

On April 18, 2024, with the passing of Wyatt L. Troxel, the CASA community lost a visionary leader, an inspirational “solutioneer,” a compassionate teacher, a talented musician, and a loyal friend. Wyatt passed suddenly and far too early, and is survived by his wife Kathy, two sons, Evan and Andrew, and four grandchildren, Leighton, Jackson, Landon, and Marlin. Wyatt will be remembered by his water and wastewater colleagues as a passionate, intelligent, caring, and giving man, committed to helping our industry “do better,” as he liked to say.



READ MORE

### FEDERAL UPDATE

*If you have questions related to federal updates, please contact [Sarah Sapirstein](#).*

### USEPA Finalizes PFAS CERCLA Designation Rulemaking

Last month, the [U.S. Environmental Protection Agency \(USEPA\)](#) finalized its [Designation of Perfluorooctanoic Acid \(PFOA\) and Perfluorooctanesulfonic Acid \(PFOS\) as CERCLA Hazardous Substances](#). The rule goes into effect on July 8, 2024. Upon the final rule’s announcement, USEPA also published its [PFAS Enforcement Discretion and Settlement Policy Under CERCLA](#) outlining how the Agency intends to enforce the rule.



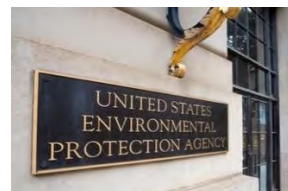
Under the final rule, covered entities are required to report a release of PFOA or PFOS at or above pound within 24-hours of the release to the National Response Center. The seven categories of entities that the rule identifies that may be subject to the rule are the following:

- Manufacturers of PFOA and/or PFOS
- Processors of PFOA and/or PFOS
- Manufacturers of products containing PFOA and/or PFOS
- Downstream users PFOA and/or PFOS products
- Waste management facilities
- Wastewater treatment facilities

READ MORE

## Congressional Outreach Requested

CASA is requesting that our members take action in response to the recent USEPA PFOA and PFOS Hazardous Substances CERCLA Designation Final Rule. Unfortunately, the final rule lacks explicit liability protections for public water and wastewater utilities, as well as biosolids management. As a result, we urge all members to take a proactive stance by sending letters to your respective congressional House delegations, advocating for support of [H.R. 7944, the Water Systems PFAS Liability Protection Act](#). You can access a template letter tailored for CASA members [here](#). If you have any inquiries or need assistance, please don't hesitate to reach out to [Sarah Sapirstein](#). We thank you in advance for your engagement!



## New Cybersecurity Memorandum for Wastewater and other Critical Infrastructure Sectors

Last week, the President released the [Security Memorandum on Critical Infrastructure Security and Resilience](#). The memorandum updates the federal government's strategy on managing the cybersecurity of the nation's critical infrastructure to ensure robust security standards are established that prevent, respond to, and mitigate against cybersecurity threats. In addition to strengthening U.S. critical infrastructure, the memorandum includes measures to address the increasing interdependencies among and between the nation's critical infrastructure sectors. The memorandum's directives and subsequent activities are effective immediately and governed by identified deadlines.



READ MORE

## ▶ REGULATORY UPDATE

### Sign up for CASA's Regulatory Updates

CASA's Regulatory Workgroup regularly puts together a comprehensive e-newsletter to share all regulatory updates on key issues and workgroup initiatives with the CASA membership. If you are interested in receiving these regulatory updates, please contact [Jared Voskuhl](#). The latest edition is available [here](#).



## ▶ IN CASE YOU MISSED IT



## 2024 Spring Recruitment Campaign

Last month, CASA, along with the California Water Environment Association, the Association of Clean Water Agencies and the Water Energy Education Alliance launched a new public outreach campaign **"Your Future is Clear"** aimed to increased recruitment and highlight careers available in the world of water. As you know well, many California water and wastewater agencies have seen significant turnover in recent years. More than half of our workforce is retiring in large waves, a trend some call the 'silver tsunami.' We've refilled our reservoirs but need to refill the water workforce pipeline! Please join the 2024 Spring Recruitment Campaign and spread the word about the stable, well-paid, high-quality, inclusive career opportunities. Let's share the news far and wide - water is hiring! **Factsheet, logo, resources, social media artwork and more are available [here](#).**



## ▶ UPCOMING EVENTS

### National Public Works Week

May 19 – 25 is National Public Works Week! This year, the American Public Works Association announced the theme "Advancing Quality of Life for All". Public works contributes to advancing and enhancing our quality of life, no matter where we live in the world. Public works professionals provide essential services that lead to healthier, happier, more vibrant communities. The "Advancing Quality of Life for All" theme shines a spotlight on the way public works professionals advance our quality of life!



We look forward to another opportunity to celebrate our CASA members who work hard to safeguard our quality of life every single day!

### Just Around the Corner: 2024 Special Districts Legislative Days

As the California State Legislature wrestles with a projected \$73 billion budget deficit and the courts and voters contemplate major constitutional actions on funding for essential services and infrastructure, Special Districts Legislative Days will once again provide a venue for all types of special districts to come together to understand and influence our shared public policy challenges. Attendees on May 21 and 22, will be grouped with special districts from your region to advocate for special districts and the communities we collectively serve. CASA is a proud supporter of this event and we encourage our members to attend if possible. [Register now!](#)



### Save the Date - PFI Event

The CWEA and CASA [Partnering for Impact \(PFI\)](#) event is just around the corner! Happening on June 4, 2024, from 8:00am – 4:30pm in Irvine, CA, PFI is a one-day, highly focused, interactive meeting of thought-leaders, practitioners, academics, and regulators from throughout the wastewater sector. These sector leaders strive daily to advance technology and innovation through various local and regional partnerships. At PFI 2024,



you will discuss innovation and collaboration as it applies to recycled water as a future potable water resource and explore new advancements in PFAS management. The workshop will include dynamic speakers, panel discussions, and roundtable interaction designed to foster input through facilitated idea sharing with fellow attendees.

PFI 2024 includes technological leaders from various research universities, as well as innovative State and Federal regulators, who are involved in utility partnerships that propel technology and innovation forward. Each participant is provided key take-away information, and our closing keynote speaker will facilitate a call-to-action for us all.

[Register today!](#)



Visit CASA's [Job Board](#).



CASA represents more than 135 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](#)

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**ITEM NO. 20 A RESOLUTION RECOGNIZING CHARLES V. WEIR FOR HIS TEN YEARS OF SERVICE TO THE LIVERMORE-AMADOR VALLEY WATER MANAGEMENT AGENCY AND HIS CONTRIBUTIONS TO THE WASTEWATER INDUSTRY**

**Action Requested**

It is requested that the Board approve a Resolution Recognizing Charles V. Weir for his ten years of service to the Livermore-Amador Valley Water Management Agency and his Contributions to the Wastewater Industry.

**Summary**

Please refer to the Attached Resolution No. 24-05.

**Recommendation**

Approve a Resolution Recognizing Charles V. Weir for his ten years of service to the Livermore-Amador Valley Water Management Agency and his Contributions to the Wastewater Industry.

**Attachments**

Resolution No. 24-05.



**LIVERMORE-AMADOR VALLEY WATER MANAGEMENT AGENCY**

**RESOLUTION NO. 24-05**

**RESOLUTION RECOGNIZING CHARLES V. WEIR FOR HIS TEN YEARS OF SERVICE TO  
THE LIVERMORE-AMADOR VALLEY WATER MANAGEMENT AGENCY AND HIS  
CONTRIBUTIONS TO THE WASTEWATER INDUSTRY**

**WHEREAS**, the Livermore-Amador Valley Water Management Agency (“LAVWMA”) is a joint powers agency formed in 1974 by the cities of Livermore and Pleasanton and the Dublin San Ramon Services District (collectively, “Member Agencies”) for the purpose of discharging treated wastewater to the San Francisco Bay; and

**WHEREAS**, Charles V. Weir has worked in the water quality industry for 50 years; and

**WHEREAS**, Mr. Weir served as the General Manager for East Bay Dischargers Authority (“EBDA”) for 19 years from 1989 until his retirement in 2008; and

**WHEREAS**, Mr. Weir served in leadership roles on the boards of prominent industry organizations including Bay Area Clean Water Agencies (“BACWA”), California Water Environment Association (“CWEA”), and Water Environment Federation (“WEF”) where he assisted in addressing water quality standards such as the establishment of the Regional Monitoring Program (“RMP”) and pollution limitations for mercury, polychlorinated biphenyls (“PCBs”), and dioxins; and

**WHEREAS**, Mr. Weir served LAVWMA as the General Manager for ten years from April 17, 2014 until his retirement on April 14, 2024; and

**WHEREAS**, during his tenure, Mr. Weir worked cooperatively with the Staff Advisory Group, comprised of the wastewater managers from the Member Agencies, to ensure that LAVWMA’s operations ran efficiently and its capital improvement projects were implemented as designed; and

**WHEREAS**, Mr. Weir leveraged his relationships forged over the course of his career with other agencies, regulators, and industry groups to find collaborative solutions and advocate for policy changes, which proved to be a valuable asset to LAVWMA; and

**WHEREAS**, Mr. Weir’s attention to detail in preparing the Board reports and streamlined agenda presentations assisted the Board in its policy-setting and decision-making role; and

**WHEREAS**, Mr. Weir’s passion, responsiveness, and diligence helped LAVWMA overcome challenging issues such as leaking conductor cables, defective vertical turbine pumps, non-wet weather discharge events, the coronavirus pandemic, and contentious negotiations with EBDA; and

**WHEREAS**, Mr. Weir’s commitment and dedication has helped protect the health and safety of the Member Agencies’ customers and of the residents living in the East Bay and beyond.

**NOW, THEREFORE, BE IT RESOLVED** that the Board of Directors of the Livermore-Amador Valley Water Management Agency hereby proclaims its sincere appreciation to Charles V. Weir for his outstanding service to LAVWMA since 2014 and wishes him the best of luck in his retirement.

**BE IT FURTHER RESOLVED** that the Chair of the Board is authorized to sign this Resolution on behalf of this Board and LAVWMA.

**DULY AND REGULARLY ADOPTED** by LAVWMA this \_\_\_\_ day of \_\_\_\_\_, 2024, by the following vote:

AYES:

NOES:

ABSENT:

LIVERMORE-AMADOR VALLEY WATER MANAGEMENT AGENCY

By: \_\_\_\_\_

Bob Carling, Chair

ATTEST:

By: \_\_\_\_\_

Alexandra M. Barnhill, General Counsel

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## **ITEM NO. 22 GENERAL MANAGER'S REPORT**

### **Action Requested**

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

### **Summary – Levi Fuller**

The General Manager (GM) agreement is for a term of two years and began on April 01, 2024. There is a limitation of 1,000 hours per fiscal year. For the fiscal year ending June 30, 2024 the GM has billed LAVWMA 40 hours.

### **Summary – Chuck Weir**

The Former General Manager's (FGM) 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, 2024 the FGM has billed LAVWMA approximately 650 hours, which is normal due to the number of capital projects, including the Livermore pipeline project.

In addition to the brief descriptions below, there are several items of interest for the Board's review:

#### **1. Asset Management.**

LAVWMA continues to follow the lead of DSRSD. Work associated with asset management directly involving LAVWMA has been focused on data cleanup and labeling of assets. The Mechanical group assigned to LAVWMA was trained on using the GPS unit. Staff wants to do more GPS work as they are doing PM's on the Air Release Valves.

#### **2. FYE24 Capital Project Planning**

Please refer to the Action Item List, **Attachment 22.a** for a status report on all capital projects for FYE24. The FGM worked 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**

This project is complete with the hiring of Levi Fuller as the new GM. His agreement became effective on April 15, 2024. Succession planning took an unexpected turn with the departure of the Treasurer and Assistant Treasurer from DSRSD. The FGM assumed the role of interim treasurer to fill in the void until issues could be resolved. Note that pursuant to Board action taken on February 21, 2024, General Counsel, Alexandra Barnhill, has been delegated the

authority to extend the FGM's agreement as needed through June 30, 2024 to facilitate this transition.

#### **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 22.b** is a summary of all PG&E costs for FYE23. It is presented in tabular and chart form. The average kWh cost for the FYE24 is \$0.2392/kWh. Continued wet weather and reduced water recycling results in estimated total costs of \$2,068,000 for the full fiscal year as compared to the budgeted amount of \$1,884,500.

#### **5. Modifications to the Joint Powers Agreement**

There has been no action on this item since the last report.

#### **6. Modifications to the Agreement for Maintenance of Agency Facilities with DSRSD**

There has been no action on this item since the last report.

---

Following is a brief description of major activities since the February 21, 2024 Board meeting:

- Attended LAVWMA O&M meetings with DSRSD, Livermore and Pleasanton staff.
- Updated Capital Project Planning and Action Item List.
- Drafted 21, 2024 minutes and sent out for review. Updated based on comments received.
- Prepared items for the May 15, 2024 Board meeting and prepared the packet for distribution. Made updates to website as needed for files and legal requirements.
- Managed various capital projects, including reviewing all documents, for the pump purchase, SLSS improvements project, and Livermore Interceptor Pipeline Replacement Project.
- Monitored the status of the pump replacement and Livermore Interceptor Pipeline Replacement project with frequent site visits and photo documentation.
- Continued working with DSRSD staff for pipeline inspection project to begin late summer 2024.
- Logged into DSRSD system to review and approve invoices and review and respond to emails.
- Worked with DSRSD staff, Carollo Engineers, Defreitas Pipeline Incorporated on the Livermore Pipeline repair project. Attended weekly project meetings with DSRSD and Carollo staff. Met several times with General Counsel and DSRSD staff to discuss easement issues and language. Worked with General Counsel and Downey Brand to assist with legal issues regarding permit requirements.
- Attended weekly meetings with FEMA, CalOES, and DSRSD staff.
- Visited the pipeline replacement project several times per week to document progress through photos and observations.

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- Reviewed DSRSD's 3rd quarter O&M report.
- 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.
- Kept SAG members informed on various issues and projects. Jointly hosted SAG meeting on May 8, 2024.
- 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, Livermore pipeline repair, and other projects for payment by DSRSD.
- Continued to Discuss Asset Management issues with DSRSD staff. LAVWMA continues to follow their lead.
- 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.
- Met with Levi Fuller and Sheree Davis in person and via Zoom to assist with transition activities.
- Assumed the role of Interim Treasurer and worked with DSRSD staff to 1) close the Schwab account; 2) transfer funds to BofA, 3) set up an account with CAMP, attempted transfers of funds from BofA to CAMP with no success, 4) attended numerous meetings and email discussions with DSRSD and CAMP staff in an effort to resolve issues, 5) made changes to users on the BofA account, but could not approve them without a token (had a token that died several years ago), 6) worked with DSRSD staff and BofA to get a new token delivered to DSRSD, 7) researched alternatives to CAMP, including CLASS and Cal Trust as alternatives to CAMP, worked with new GM and DSRSD staff to resolve numerous financial issues, 8) worked with DSRSD staff on terminating the treasurer agreement and alternatives for financial services, 9) reviewed and commented on the proposal from Regional Government Services
- Attended EBDA Managers Advisory Committee (MAC) meetings. Made notes of same and shared with SAG members.
- Continued reviewing EBDA issues of concern including permit, bacteriological testing results, and nutrient permitting.
- 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.



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- 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 21, 2024, at the DSRSD Board Room.

**Recommendation**

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

**Attachments**

- 22.a Action Item List
- 22.b PG&E Costs Summary

## LAVWMA Action Item List

Month: May 2014

SAG Task	Responsible Party	Due Date	Status	Completion Date
Final Export Pump Station RFP	Weir	7/9/2014	Final Version to Board for approval on July 16, 2014	
Comments on Export Pump Station RFP; finalize list of consultants to receive the RFP	SAG	6/11/2014	Revised version distributed May 18, 2014. Items still needed: Equipment list review, Hydraulic Profile, Pump Curves, PG&E data, Flow data, Insurance Review; final list of consultants, other items based on SAG review	
Items for RFP: equipment list review, hydraulic profile, pump curves, flow data, PG&E data	Fuller, Biagtan, O&M staff	6/11/2014	Equipment list spreadsheet sent to DSRSD to have O&M staff review; PG&E bill includes last twelve months usage history. Have Feb 2014 - March 2014. Use April and or May back 12 months when available.	
RFP Insurance review	Barnhill	6/11/2014	Reconciling language in consultant template and RFP	
Operations Coordination Committee Task	Responsible Party	Due Date	Status	Completion Date
Export Pumps Replacement	SAG/O&M	To be determined	Pending outcome of Pump Station RFP and Report	
Cathodic Protection Systems: status of repair work to be performed at the foot of Lewelling Street	Zavadil, Portugal, Atendido			
ARV Replacements: status of replacing the last ten (10) cast iron ARVs on the original pipe climbing Dublin Grade	Portugal, Gallagher, Weir		Approximate cost of \$12,000 needs to be approved	
LAVWMA access vault improvements: status of replacing additional heavy cast iron lids with composite covers	Smith		covers on hand; to be scheduled as they require cutting into surrounding asphalt to replace support ring	
Belvedere Homes and Garden Creek Circle: notification letters for annual backyard inspections	Gallagher	5/15/2014	Draft letters completed; field staff will follow up once letters have been sent	
EBDA: confusion over who owns the old vault through which LAVWMA's pipe connects with EBDA	Gallagher, Fuller		there are two vaults and each agency owns their own vault.	
YTD O&M Expenses compared to budget	Gallagher, Weir	Ongoing	Reviewed at every Operations Coordination Meeting	

## PG&amp;E Energy Cost Summary for FYE24

## 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
06/13 - 07/13/2023	31	Days	\$ 64.36706	\$1,995.36		kW		\$0.00		kW		\$0.00	\$0.00		kW	\$ -		kW
07/14 - 08/13/2023	31	Days	\$ 71.71405	\$2,223.14		kW				kW					kW	\$ -		kW
08/14 - 09/12/2023	30	Days	\$ 73.24377	\$2,197.31		kW				kW				24	kW	\$ 7.34000	\$ 105.70	kW
09/13 - 10/12/2023	30	Days	\$ 75.53835	\$2,266.15		kW				kW					kW			kW
10/13 - 11/12/2023	31	Days	\$ 75.53835	\$2,341.69	362	kW	\$2.57000	\$930.34		kW		\$930.34			kW			kW
11/13 - 12/12/2023	30	Days	\$ 75.53835	\$2,266.15		kW				kW		\$0.00	\$0.00		kW			kW
12/13 - 01/11/2024	30	Days	\$ 87.26920	\$2,618.08		kW		\$0.00		kW		\$0.00	\$0.00		kW			kW
01/12 - 02/12/2024	32	Days	\$ 107.53150	\$3,441.01	749	kW	\$3.03000	\$2,269.47		kW		\$2,269.47			kW			kW
02/12 - 03/13/2024	30	Days	\$ 108.11225	\$3,243.37	731	kW	\$3.03000	\$1,255.13	732	kW	\$3.03000	\$961.12	\$2,216.24		kW			kW
03/14 - 04/13/2024	32	Days	\$ 111.03368	\$3,553.08		kW		\$0.00		kW			\$0.00		kW			kW
	Days			\$0.00		kW				kW					kW			kW
	Days			\$0.00		kW		\$0.00		kW		\$0.00	\$0.00		kW			kW
<b>TOTALS</b>	307			\$26,145.33	1842				732			\$5,416.05		24				0

## Meter B Rate Schedule B20S - Business High Use

												Total							
Month	Customer Charge			Demand Charge Max Peak								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
06/13 - 07/13/2023	31	Days	\$ 64.36706	\$1,995.36	25	kW	\$32.86000	\$477.00	26	kW	\$35.58000	\$387.94	\$864.94	24	kW	\$ 6.56000	\$91.42	31	kW
07/14 - 08/13/2023	31	Days	\$ 71.71405	\$2,223.14	25	kW	\$35.58000	\$889.50		kW		\$0.00	\$889.50	24	kW	\$ 7.34000	\$176.16		kW
08/14 - 09/12/2023	30	Days	\$ 73.24377	\$2,197.31	96	kW	\$35.58000	\$2,049.41	24	kW	\$36.41000	\$349.54	\$2,398.94	25	kW	\$ 7.34000	\$110.10	24	kW
09/13 - 10/12/2023	30	Days	\$ 75.53835	\$2,266.15	24	kW	\$36.41000	\$524.30	36	kW	\$2.57000	\$37.01	\$561.31	90	kW	\$ 7.58000	\$409.32		kW
10/13 - 11/12/2023	31	Days	\$ 75.53835	\$2,341.69	904	kW	\$2.57000	\$2,323.28		kW			\$2,323.28		kW				kW
11/13 - 12/12/2023	30	Days	\$ 75.53835	\$2,266.15	84	kW	\$2.57000	\$215.88		kW		\$0.00	\$215.88		kW				kW
12/13 - 01/11/2024	30	Days	\$ 87.26920	\$2,618.08	33	kW	\$2.57000	\$53.71	34	kW	\$3.03000	\$37.77	\$91.49		kW				kW
01/12 - 02/12/2024	32	Days	\$ 107.53150	\$3,441.01	36	kW	\$3.03000	\$109.08		kW			\$109.08		kW				kW
02/12 - 03/13/2024	30	Days	\$ 108.11225	\$3,243.37	33	kW	\$3.03000	\$56.66	36	kW	\$3.03000	\$47.27	\$103.93		kW				kW
03/14 - 04/13/2024	32	Days	\$ 111.03368	\$3,553.08	31	kW	\$3.03000	\$52.84	31	kW	\$3.03000	\$41.09	\$93.93		kW				kW
	Days			\$0.00		kW		\$0.00		kW			\$0.00		kW				kW
	Days			\$0.00		kW		\$0.00		kW		\$0.00	\$0.00		kW				kW
TOTALS	307			\$26,145.33	1291				187			\$7,652.28		163				55	

## Meters A &amp; 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		
06/13 - 07/13/2023	31	Days		\$ 3,990.73		25	kW					\$0.00		24	kW		\$ 91.42		31	kW
07/14 - 08/13/2023	31	Days		\$ 4,446.27		25	kW	\$35.58000	\$528.14			\$0.00	\$889.50	24	kW		\$ 176.16		0	kW
08/14 - 09/12/2023	30	Days		\$ 4,394.63		96	kW					\$0.00	\$349.54	49	kW		\$ 215.80		24	kW
09/13 - 10/12/2023	30	Days		\$ 4,532.30		24	kW	\$36.41000	\$524.30	36	kW	\$2.57000	\$37.01	90	kW	\$ 7.58000	\$ 409.32		0	kW
10/13 - 11/12/2023	31	Days		\$ 4,683.38		1266	kW		\$0.00			\$0.00	\$3,253.62	0	kW		\$ -		0	kW
11/13 - 12/12/2023	30	Days		\$ 4,532.30		84	kW					\$0.00	\$215.88	0	kW		\$ -		0	kW
12/13 - 01/11/2024	30	Days		\$ 5,236.15		33	kW		\$0.00			\$37.77	\$91.49	0	kW		\$ -		0	kW
01/12 - 02/12/2024	32	Days		\$ 6,882.02		785	kW		\$0.00			\$0.00	\$2,378.55	0	kW		\$ -		0	kW
02/12 - 03/13/2024	30	Days		\$ 6,486.73		764	kW					\$1,008.38	\$2,320.17	0	kW		\$ -		0	kW
03/14 - 04/13/2024	32	Days		\$ 7,106.16		31	kW					\$41.09	\$93.93	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	307			\$52,290.66		3133				36			\$13,068.33	187					55	

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	Cost	Number P1	Unit	Unit Cost	Cost	Number P2	Unit	Unit Cost		
	\$0.00		kW	\$0.00		kW	\$0.00	\$0.00		kWh		\$ -		kWh			
	\$0.00	741	kW	\$ 33.08000		kW	\$0.00	\$24,512.28		kWh				kWh			
	\$105.70	1124	kW	\$ 33.08000	1124	kW	\$34.08000	\$15,322.37		kWh				kWh			
		1240	kW	\$ 34.08000	1124	kW	\$34.08000	\$15,322.37		kWh		\$ -		kWh			
		603	kW	\$ 34.08000		kW		\$20,550.24	240	kWh	\$ 0.18388	\$ 44.13		kWh			
		758	kW	\$ 34.08000		kW	\$0.00	\$25,832.64		kWh				kWh			
		1124	kW	\$ 34.08000	1124	kW	\$40.38000	\$16,641.94		kWh		\$ -		kWh			
		1128	kW	\$ 40.38000		kW		\$45,548.64	44071	kWh	\$ 0.20393	\$ 8,987.40		kWh			
		1502	kW	\$ 40.38000	1475	kW	\$40.55000	\$25,918.21	3651	kWh	\$ 0.20393	\$ 744.55	5386	kWh	\$ 0.20295		
		1473	kW	\$ 40.55000	1098	kW	\$41.84000	\$20,098.89		kWh		\$ -		kWh			
			kW	\$0.00		kW		\$0.00		kWh				kWh			
	\$0.00		kW	\$0.00		kW	\$0.00	\$0.00		kWh		\$ -		kWh			
\$105.70		9693				5945				\$349,639.64				47962		5386	

Total Monthly Cost			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					
\$ 7.34000	\$95.42	\$186.84	1412	kW	\$ 29.78000	\$24,415.76	1348	kW	\$33.08000	\$18,699.80	\$43,115.56	1233	kWh	\$ 0.20656	\$254.69	922	kWh	\$ 0.20674				
		\$176.16	99	kW	\$ 33.08000	\$3,274.92		kW		\$0.00	\$3,274.92	2471	kWh	\$ 0.20674	\$510.85		kWh					
\$ 7.58000	\$72.77	\$182.87	96	kW	\$ 33.08000	\$1,905.41	92	kW	\$34.08000	\$1,254.14	\$3,159.55	1683	kWh	\$ 0.20674	\$347.94	1052	kWh	\$ 0.20674				
		\$409.32	92	kW	\$ 34.08000	\$1,881.22	92	kW	\$34.08000	\$1,254.14	\$3,135.36	1427	kWh	\$ 0.20674	\$295.02	1059	kWh	\$ 0.18388				
			977	kW	\$ 34.08000	\$33,296.16		kW			\$33,296.16	3335	kWh	\$ 0.18388	\$613.24		kWh					
			998	kW	\$ 34.08000	\$34,011.84		kW		\$0.00	\$34,011.84	3117	kWh	\$ 0.18388	\$573.15		kWh					
			975	kW	\$ 34.08000	\$21,044.40	990	kW	\$40.38000	\$14,657.94	\$35,702.34	2080	kWh	\$ 0.18388	\$382.47	1268	kWh	\$ 0.20393				
			1446	kW	\$ 40.38000	\$58,389.48		kW			\$58,389.48	3259	kWh	\$ 0.20393	\$664.61		kWh					
			996	kW	\$ 40.38000	\$22,790.47	996	kW	\$40.55000	\$17,501.38	\$40,291.85	1530	kWh	\$ 0.20393	\$312.01	1298	kWh	\$ 0.20295				
			1366	kW	\$ 40.55000	\$31,157.61	1357	kW	\$41.84000	\$24,839.89	\$55,997.49	1469	kWh	\$ 0.20295	\$298.13	1142	kWh	\$ 0.20235				
	\$0.00	\$ -		kW		\$0.00		kW			\$0.00		kWh		\$0.00		kWh					
				kW		\$0.00		kW		\$0.00	\$0.00		kWh		\$0.00		kWh					
\$955.18			8457				4875				\$310,374.56				21604				6741			

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	\$	186.84		1412	kW	\$	-		1348	kW	\$18,699.80	\$	43,115.56		1233	kWh	\$	254.69		922	kWh	
	\$0.00	\$	176.16		840	kW	\$	-		0	kW	\$0.00	\$	27,787.20		2471	kWh	\$	510.85		0		
		\$	288.56		1220	kW	\$	-		1216	kW	\$16,576.51	\$	40,791.07		1683	kWh	\$	347.94		1052		
		\$	409.32		1332	kW	\$	-		1216	kW	\$16,576.51	\$	43,813.25		1427	kWh	\$	295.02		1059		
		\$	-		1580	kW	\$	-		0	kW	\$0.00	\$	53,846.40		3575	kWh	\$	657.37		0		
		\$	-		1756	kW	\$	-		0	kW	\$0.00	\$	59,844.48		3117	kWh	\$	573.15		0		
		\$	-		2099	kW	\$	-		2114	kW	\$31,299.88	\$	76,604.70		2080	kWh	\$	382.47		1268		
		\$	-		2574	kW	\$	-		0	kW	\$0.00	\$	103,938.12		47330	kWh	\$	9,652.01		0		
		\$	-		2498	kW				2471	kW	\$43,419.59	\$	100,578.82		5181	kWh	\$	1,056.56		6684		
		\$	-		2839	kW				2455	kW	\$44,938.78	\$	109,694.59		1469	kWh	\$	298.13		1142		
		\$	-		0	kW				0	kW	\$0.00	\$	-		0	kWh	\$	-		0		
		\$	-		0	kW				0	kW	\$0.00	\$	-		0	kWh	\$	-		0		
\$1,060.88				18150				10820				\$660,014.20				69566				12127			

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	
			kWh		\$ -		kWh		\$0.00	\$0.00	276136	kWh	\$ 0.13807	\$38,126.10			kWh		\$ -	\$38,126.10	
		6	kWh	\$ 0.16837	\$ 1.01		kWh			\$1.01	198413	kWh	\$ 0.13807	\$27,394.88	163225	kWh	\$ 0.13807	\$22,536.48	\$49,931.36		
\$0.00			kWh				kWh				244150	kWh	\$ 0.13807	\$33,709.79	207810	kWh	\$ 0.13783	\$28,642.45	\$62,352.24		
\$44.13			kWh				kWh				183254	kWh	\$ 0.13783	\$25,257.90			kWh			\$25,257.90	
\$0.00	\$0.00		kWh				kWh				367106	kWh	\$ 0.13783	\$50,598.22			kWh		\$ -	\$50,598.22	
\$0.00	\$0.00		kWh				kWh				310456	kWh	\$ 0.13783	\$42,790.15	203750	kWh	\$ 0.14954	\$30,468.78	\$73,258.93		
	\$8,987.40		kWh				kWh				615830	kWh	\$ 0.14954	\$92,091.22			kWh			\$92,091.22	
\$ 1,093.09	\$1,837.64		kWh				kWh				423606	kWh	\$ 0.14954	\$63,346.04	236691	kWh	\$ 0.14856	\$35,162.81	\$98,508.86		
	\$0.00		kWh				kWh				234060	kWh	\$ 0.14856	\$34,771.95	179958	kWh	\$ 0.14796	\$26,626.59	\$61,398.54		
			kWh				kWh					kWh		\$0.00			kWh			\$0.00	
\$0.00	\$0.00		kWh				kWh		\$0.00	\$0.00		kWh		\$0.00			kWh		\$ -	\$0.00	
\$10,869.17		6				0				\$1.01		2853011		\$408,086.25		991434		\$551,523.36			

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		
\$190.61	\$445.30	1111	kWh	\$0.16819	\$186.86	830	kWh	\$0.16837	139.75	\$326.61		224387	kWh	\$0.13789	\$30,940.72	135720	kWh	\$0.13807	\$18,738.86	\$49,679.58	
\$0.00	\$510.85	2123	kWh	\$0.16837	\$357.45		kWh			\$357.45		8393	kWh	\$0.13807	\$1,158.82		kWh		\$0.00	\$1,158.82	
\$217.49	\$565.43	1360	kWh	\$0.16837	\$228.98	865	kWh	\$0.16837	145.64	\$374.62		5683	kWh	\$0.13807	\$784.65	3383	kWh	\$0.13807	\$467.09	\$1,251.74	
\$194.73	\$489.75	1264	kWh	\$0.16837	\$212.82		kWh			\$212.82		4794	kWh	\$0.13807	\$661.91	4485	kWh	\$0.13783	\$618.17	\$1,280.08	
	\$613.24		kWh				kWh					445239	kWh	\$0.13783	\$61,367.29		kWh			\$61,367.29	
\$0.00	\$573.15		kWh				kWh					452473	kWh	\$0.13783	\$62,364.35		kWh		\$0.00	\$62,364.35	
\$258.58	\$641.05		kWh				kWh					279381	kWh	\$0.13783	\$38,507.08	162574	kWh	\$0.14954	\$24,311.32	\$62,818.40	
	\$664.61		kWh				kWh					561045	kWh	\$0.14954	\$83,898.67		kWh			\$83,898.67	
\$263.43	\$575.44		kWh				kWh					210169	kWh	\$0.14954	\$31,428.67	150928	kWh	\$0.14856	\$22,421.86	\$53,850.54	
\$231.08	\$529.22		kWh				kWh					220493	kWh	\$0.14856	\$32,756.44	154983	kWh	\$0.14796	\$22,931.28	\$55,687.72	
	\$0.00		kWh				kWh						kWh		\$0.00		kWh			\$0.00	
\$0.00	\$0.00		kWh				kWh		0.00	\$0.00			kWh		\$0.00		kWh		\$0.00	\$0.00	
\$5,608.05		5858				1695				\$1,271.50		2412057		\$343,868.61		612073		\$433,357.20			

Total Monthly Cost			Energy Charges Part Peak								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				
\$190.61	\$	445.30	1111	kWh		\$ 186.86	830	kWh		\$0.00	\$326.61	224387	kWh	\$ -	135720	kWh		\$ 18,738.86				
\$0.00	\$	510.85	2123	kWh		\$ 357.45	0	kWh		\$0.00	\$357.45	284529	kWh	\$ -	0	kWh		\$ -				
\$217.49	\$	565.43	1366	kWh		\$ 229.99	865	kWh			\$375.63	204096	kWh	\$ -	166608	kWh		\$ 23,003.57				
\$194.73	\$	489.75	1264	kWh		\$ 212.82	0	kWh			\$212.82	248944	kWh	\$ -	212295	kWh		\$ 29,260.62				
\$0.00	\$	657.37	0	kWh		\$ -	0	kWh			\$0.00	628493	kWh	\$ -	0	kWh		\$ -				
\$0.00	\$	573.15	0	kWh		\$ -	0	kWh			\$0.00	819579	kWh	\$ -	0	kWh		\$ -				
\$258.58	\$	641.05	0	kWh		\$ -	0	kWh			\$0.00	589837	kWh	\$ -	366324	kWh		\$ 54,780.09				
\$0.00	\$	9,652.01	0	kWh		\$ -	0	kWh			\$0.00	1176875	kWh	\$ -	0	kWh		\$ -				
\$1,356.52	\$	2,413.08	0	kWh		\$ -	0	kWh			\$0.00	633775	kWh		387619	kWh		\$ 57,584.68				
\$231.08	\$	529.22	0	kWh		\$ -	0	kWh			\$0.00	454553	kWh		334941	kWh		\$ 49,557.87				
\$0.00	\$	-	0	kWh		\$ -	0	kWh			\$0.00	0	kWh		0	kWh		\$ -				
\$0.00	\$	-	0	kWh		\$ -	0	kWh			\$0.00	0	kWh		0	kWh		\$ -				
\$16,477.22			5864				1695				\$1,272.51				5265068				\$0.00			
															1603507				\$984,880.55			



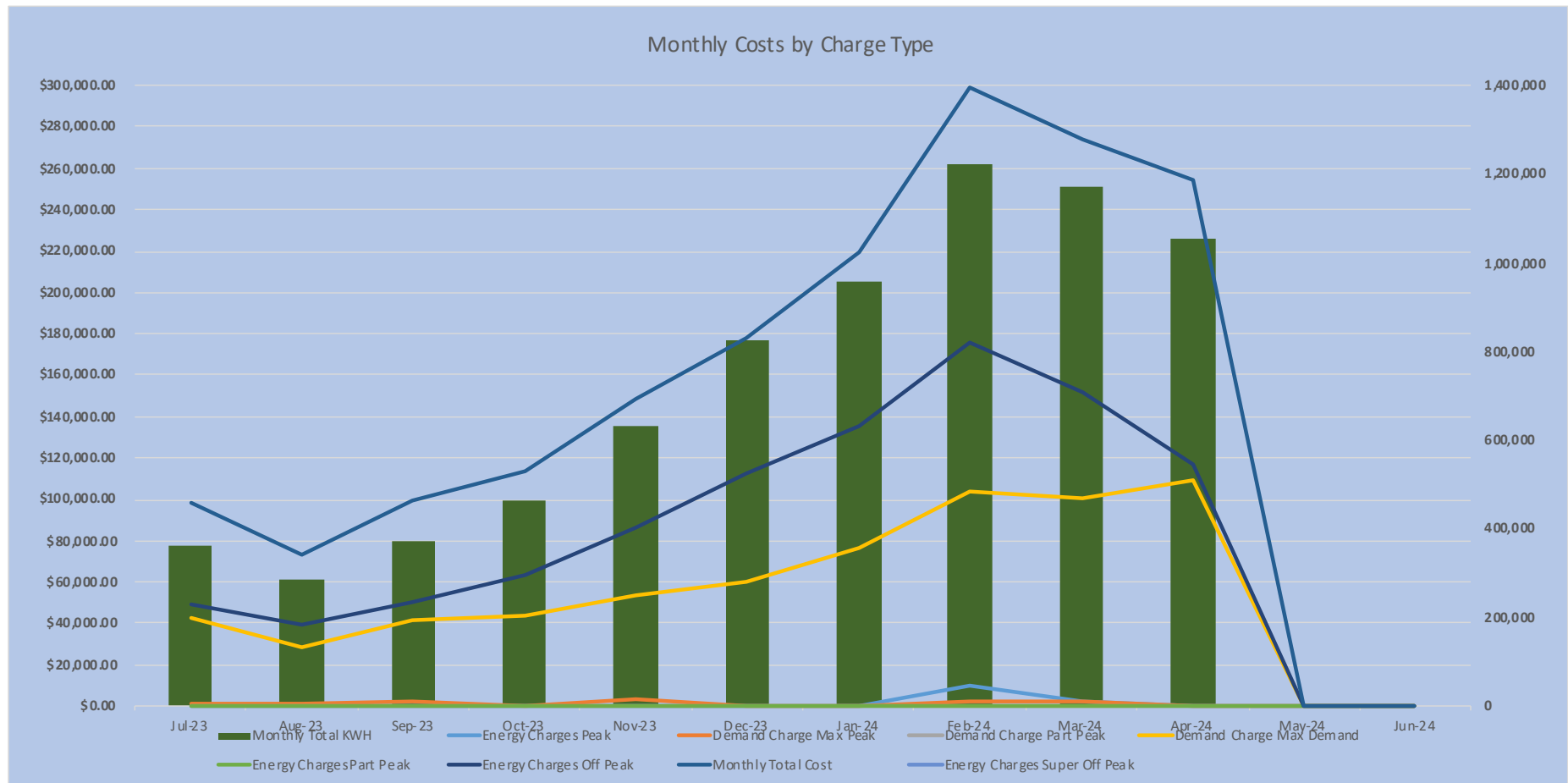
Energy Charges Super Off Peak								Total Monthly Cost	Power Factor Adjustment	Energy Commission Tax	PDP Program Credits	Total Monthly Cost	Total kWh	Average \$/kWh
Number P1	Unit	Unit Cost	Cost	Number P2	Unit	Unit Cost	Cost							
	kWh		\$0.00		kWh			\$0.00				\$1,995.36	0	NA
	kWh		\$0.00		kWh			\$0.00	(\$110.45)	\$82.84		\$64,833.91	276136	\$0.23479
	kWh		\$0.00		kWh			\$0.00	(\$144.66)	\$108.50	(\$14.11)	\$89,816.63	361644	\$0.24836
	kWh		\$0.00		kWh			\$0.00	(\$203.38)	\$135.59		\$105,228.49	451960	\$0.23283
	kWh		\$0.00		kWh			\$0.00	(\$100.92)	\$55.05		\$49,078.43	183494	\$0.26747
	kWh		\$0.00		kWh			\$0.00	(\$128.49)	\$110.13		\$78,678.65	367106	\$0.21432
	kWh		\$0.00		kWh			\$0.00	(\$205.68)	\$154.27		\$116,727.95	514206	\$0.22701
	kWh		\$0.00		kWh			\$0.00	(\$263.96)	\$197.97		\$152,271.75	659901	\$0.23075
	kWh		\$0.00	83328 kWh	\$0.07569	\$ 6,307.10	\$6,307.10		(\$263.43)	\$225.80		\$172,362.55	752662	\$0.22900
76688 kWh	\$0.07569	\$5,804.51		56347 kWh	\$0.07509	\$ 4,231.10	\$10,035.61		(\$218.82)	\$164.11		\$128,629.62	547053	\$0.23513
	kWh		\$0.00		kWh			\$0.00				\$0.00		#DIV/0!
	kWh		\$0.00		kWh			\$0.00				\$0.00		#DIV/0!
76688		\$5,804.51		139675			\$16,342.71		(\$1,639.79)	\$1,234.26	(\$14.11)	\$959,623.33	4114162	\$0.23325
												\$0.00		

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		\$0.00		kWh		\$0.00	\$0.00	(\$72.84)	\$109.26		\$96,650.61	364203	\$0.26538
	kWh		\$0.00		kWh		\$0.00	\$0.00	\$10.39	\$3.90		\$8,605.13	12987	\$0.66260
	kWh		\$0.00		kWh			\$0.00	\$9.82	\$4.21		\$10,144.50	14026	\$0.72326
	kWh		\$0.00		kWh		\$0.00	\$0.00	\$9.12	\$3.91		\$8,367.82	13029	\$0.64225
	kWh		\$0.00		kWh			\$0.00		\$134.57		\$100,076.23	448574	\$0.22310
	kWh		\$0.00		kWh		\$0.00	\$0.00		\$136.68		\$99,568.06	455590	\$0.21855
	kWh		\$0.00		kWh		\$0.00	\$0.00	\$22.26	\$133.59		\$102,027.21	445303	\$0.22912
	kWh		\$0.00		kWh			\$0.00		\$169.29		\$146,672.14	564304	\$0.25992
	kWh		\$0.00	53038 kWh	\$0.07569	\$4,014.45	\$4,014.45		\$20.84	\$125.09		\$102,225.50	416963	\$0.24517
76941 kWh	\$0.07569	\$5,823.66		50773 kWh	\$0.07509	\$3,812.54	\$9,636.21			\$151.74		\$125,649.38	505801	\$0.24842
	kWh		\$0.00		kWh			\$0.00				\$0.00		#DIV/0!
	kWh		\$0.00		kWh			\$0.00				\$0.00		#DIV/0!
76941		\$5,823.66		103811			\$13,650.66		(\$0.41)	\$972.24	\$0.00	\$799,986.58	3240780	\$0.24685

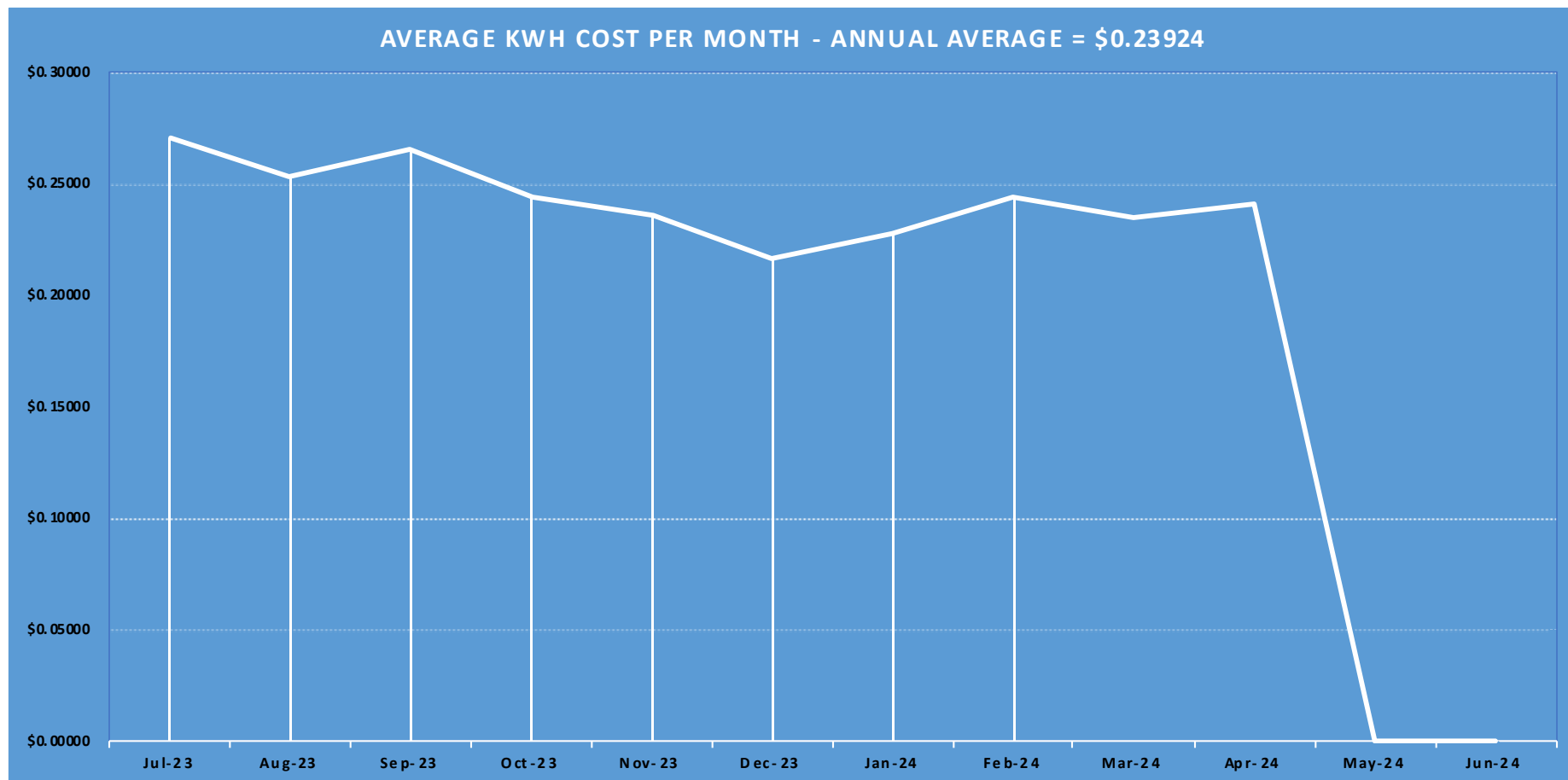
Energy Charges Off Peak								Total Monthly Cost	Power Factor Adjustment	Energy Commission Tax	PDP Program Credits	Total Monthly Cost	Total kWh	Average \$/kWh
Number P1	Unit	Unit Cost	Cost	Number P2	Unit	Unit Cost	Cost							
0 kWh	\$ -			0 kWh		\$0.00	\$0.00		(\$72.84)	\$ 109.26	\$0.00	\$98,645.98	364,203	\$0.27085
0 kWh	\$ -			0 kWh		\$0.00	\$0.00		(\$100.06)	\$ 86.74	\$0.00	\$73,439.04	289,123	\$0.25401
0 kWh	\$ -			0 kWh		\$0.00	\$0.00		(\$134.84)	\$ 112.71	(\$14.11)	\$99,961.13	375,670	\$0.26609
0 kWh	\$ -			0 kWh		\$0.00	\$0.00		(\$194.26)	\$ 139.50		\$113,596.31	464,989	\$0.24430
0 kWh	\$ -			0 kWh		\$0.00	\$0.00		(\$100.92)	\$ 189.62	\$0.00	\$149,154.66	632,068	\$0.23598
0 kWh	\$ -			0 kWh		\$0.00	\$0.00		(\$128.49)	\$ 246.81	\$0.00	\$178,246.71	822,696	\$0.21666
0 kWh	\$ -			0 kWh		\$0.00	\$0.00		(\$183.42)	\$ 287.86	\$0.00	\$218,755.16	959,509	\$0.22799
0 kWh	\$ -			0 kWh		\$0.00	\$0.00		(\$263.96)	\$ 367.26	\$0.00	\$298,943.89	1,224,205	\$0.24419
0 kWh				136366 kWh		\$10,321.54	\$10,321.54		(\$242.59)	\$ 350.89	\$0.00	\$274,588.05	1,169,625	\$0.23477
153629 kWh				107120 kWh		\$8,043.64	\$19,671.82		(\$218.82)	\$ 315.85	\$0.00	\$254,279.01	1,052,854	\$0.24151
0 kWh				0 kWh		\$0.00	\$0.00		\$0.00	\$ -	\$0.00	\$0.00	0	#DIV/0!
0 kWh				0 kWh		\$0.00	\$0.00		\$0.00	\$ -	\$0.00	\$0.00	0	#DIV/0!
153629		\$0.00		243486			\$29,993.36		(\$1,640.20)	\$2,206.50	(\$14.11)	\$1,759,609.92	7,354,942	\$0.23924

## PG&amp;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-23	\$3,990.73	\$864.94	\$186.84	\$43,115.56	\$445.30	\$326.61	\$49,679.58	\$0.00	(\$72.84)	\$109.26	\$0.00	\$98,645.98	364,203	\$0.27085
Aug-23	\$4,446.27	\$889.50	\$176.16	\$27,787.20	\$510.85	\$357.45	\$39,284.92	\$0.00	(\$100.06)	\$86.74	\$0.00	\$73,439.03	289,123	\$0.25401
Sep-23	\$4,394.63	\$2,398.94	\$288.56	\$40,791.07	\$565.43	\$375.63	\$51,183.10	\$0.00	(\$134.84)	\$112.71	(\$14.11)	\$99,961.13	375,670	\$0.26609
Oct-23	\$4,532.30	\$561.31	\$409.32	\$43,813.25	\$489.75	\$212.82	\$63,632.32	\$0.00	(\$194.26)	\$139.50	\$0.00	\$113,596.31	464,989	\$0.24430
Nov-23	\$4,683.38	\$3,253.62	\$0.00	\$53,846.40	\$657.37	\$0.00	\$86,625.19	\$0.00	(\$100.92)	\$189.62	\$0.00	\$149,154.66	632,068	\$0.23598
Dec-23	\$4,532.30	\$215.88	\$0.00	\$59,844.48	\$573.15	\$0.00	\$112,962.57	\$0.00	(\$128.49)	\$246.81	\$0.00	\$178,246.71	822,696	\$0.21666
Jan-24	\$5,236.15	\$91.49	\$0.00	\$76,604.70	\$641.05	\$0.00	\$136,077.32	\$0.00	(\$183.42)	\$287.86	\$0.00	\$218,755.16	959,509	\$0.22799
Feb-24	\$6,882.02	\$2,378.55	\$0.00	\$103,938.12	\$9,652.01	\$0.00	\$175,989.89	\$0.00	(\$263.96)	\$367.26	\$0.00	\$298,943.88	1,224,205	\$0.24419
Mar-24	\$6,486.73	\$2,320.17	\$0.00	\$100,578.82	\$2,413.08	\$0.00	\$152,359.39	\$10,321.54	(\$242.59)	\$350.89	\$0.00	\$274,588.05	1,169,625	\$0.23477
Apr-24	\$7,106.16	\$93.93	\$0.00	\$109,694.59	\$529.22	\$0.00	\$117,086.26	\$19,671.82	(\$218.82)	\$315.85	\$0.00	\$254,279.01	1,052,854	\$0.24151
May-24	\$0.00	\$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-24	\$0.00	\$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!
<b>Total</b>	\$52,290.66	\$13,068.33	\$1,060.88	\$660,014.20	\$16,477.22	\$1,272.51	\$984,880.55	\$29,993.36	(\$1,640.20)	\$2,206.50	(\$14.11)	\$1,759,609.91	7,354,942	\$0.23924



Month	Average KWH Cost per Month Annual Average = \$0.23886
Jul-23	\$0.27085
Aug-23	\$0.25401
Sep-23	\$0.26609
Oct-23	\$0.24430
Nov-23	\$0.23598
Dec-23	\$0.21666
Jan-24	\$0.22799
Feb-24	\$0.24419
Mar-24	\$0.23477
Apr-24	\$0.24151
May-24	#DIV/0!
Jun-24	#DIV/0!
Average	\$0.23924

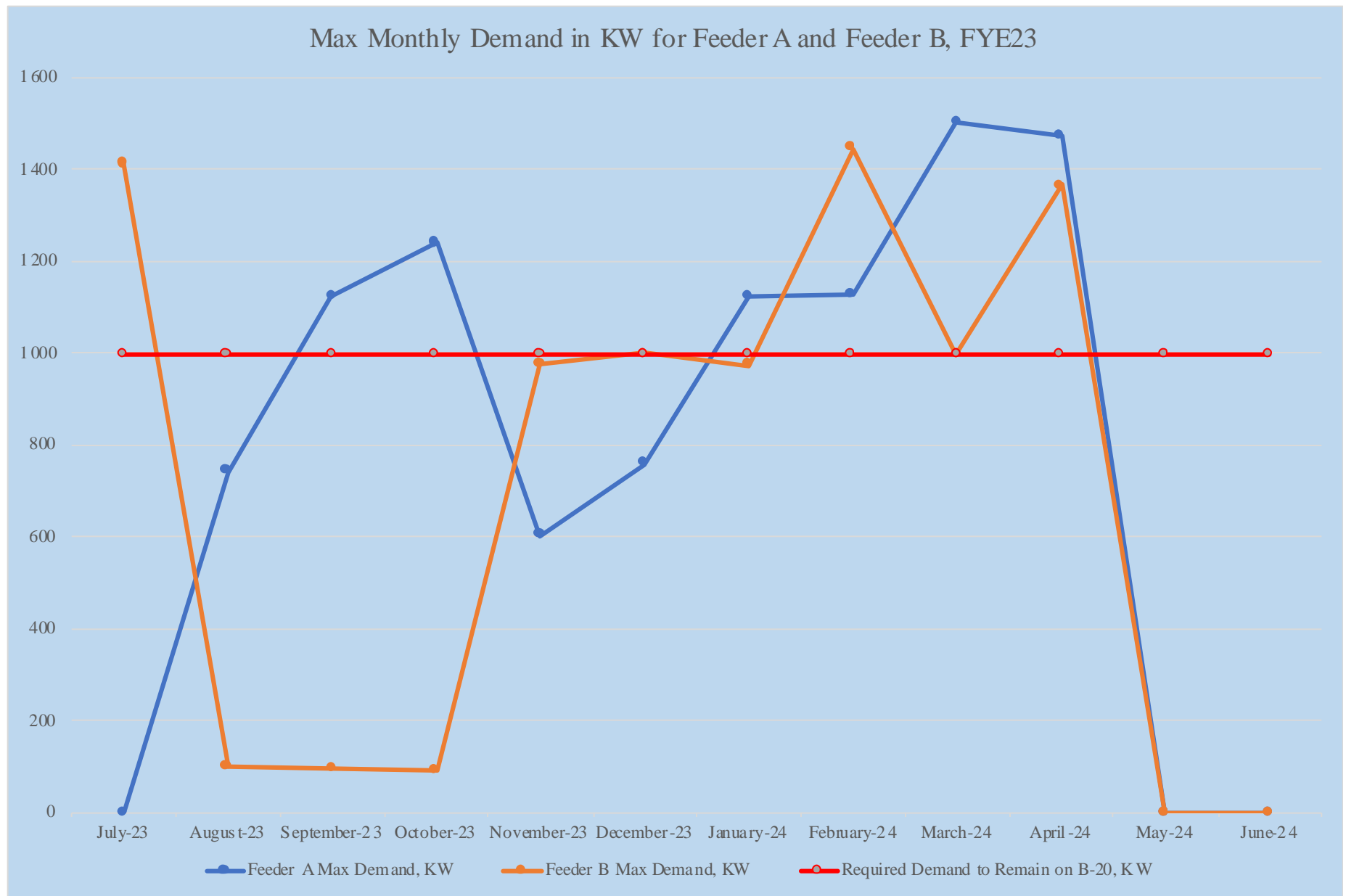




Month	Feeder A Max Demand, KW	Feeder B Max Demand, KW	Required Demand to Remain on B- 20, KW
July-23	0	1412	999
August-23	741	99	999
September-23	1124	96	999
October-23	1240	92	999
November-23	603	977	999
December-23	758	998	999
January-24	1124	975	999
February-24	1128	1446	999
March-24	1502	996	999
April-24	1473	1366	999
May-24	0	0	999
June-24	0	0	999
(1) No. > 999	6	3	

(2) 3 consecutive  
months

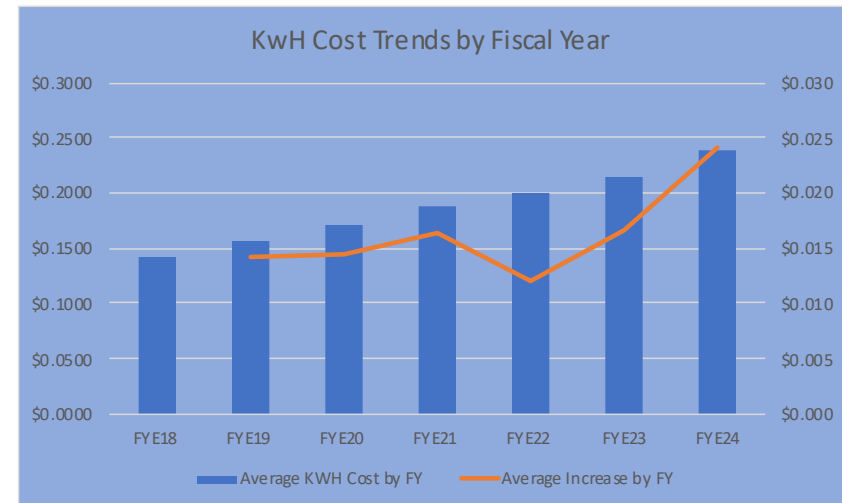
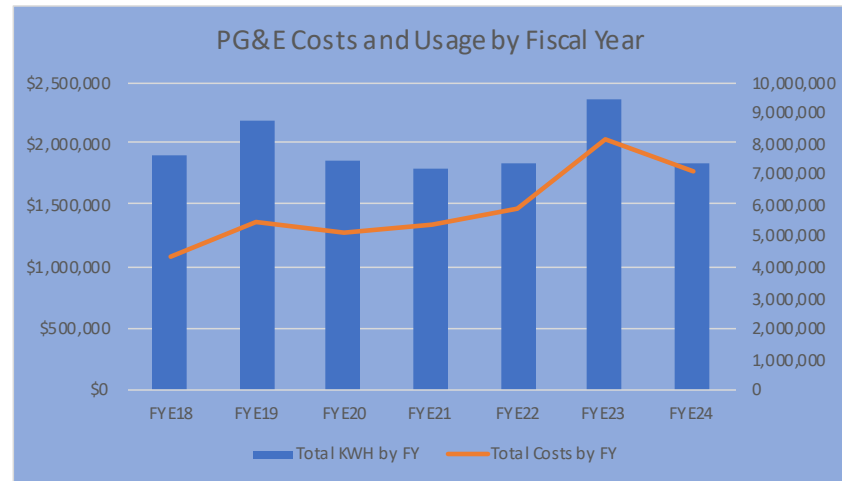
***Transfers Off of Schedule B-20:*** PG&E will review its Schedule E-20 accounts annually. A customer will be eligible for continued service on Schedule B-20 if its maximum demand has either: (1) Exceeded 999 kilowatts for at least 5 of the previous 12 billing months; or (2) Exceeded 999 kilowatts for 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.



## Fiscal Year Trends

Month	Actual Monthly Total Cost	Actual Monthly Total KWH	Average KWH Cost
Jul-23	\$98,645.98	364,203	\$0.27085
Aug-23	\$73,439.03	289,123	\$0.25401
Sep-23	\$99,961.13	375,670	\$0.26609
Oct-23	\$113,596.31	464,989	\$0.24430
Nov-23	\$149,154.66	632,068	\$0.23598
Dec-23	\$178,246.71	822,696	\$0.21666
Jan-24	\$218,755.16	959,509	\$0.22799
Feb-24	\$298,943.88	1,224,205	\$0.24419
Mar-24	\$274,588.05	1,169,625	\$0.23477
Apr-24	\$254,279.01	1,052,854	\$0.24151
May-24	\$0.00	0	#DIV/0!
Jun-24	\$0.00	0	#DIV/0!
Total	#####	7,354,942	\$0.2392
Average	\$146,634.16	612,912	

Fiscal Year	Total KWH by FY	Total Costs by FY	Average KWH Cost by FY	Average Increase by FY	Percent Increase
FYE18	7,619,866	\$1,077,759	\$0.1414		
FYE19	8,710,960	\$1,355,726	\$0.1556	\$0.0142	10.0%
FYE20	7,454,749	\$1,267,923	\$0.1701	\$0.0144	9.3%
FYE21	7,132,800	\$1,329,898	\$0.1864	\$0.0164	9.6%
FYE22	7,333,592	\$1,455,980	\$0.1985	\$0.0121	6.5%
FYE23	9,426,618	\$2,027,090	\$0.2150	\$0.0165	8.3%
FYE24	7,354,942	\$1,759,610	\$0.2392	\$0.0242	11.3%
Average	7,861,932	\$1,467,712	\$0.1866	\$0.0163	9.2%



## Straight Line

Projection	KWH	Cost
FYE24		
Projections	8825930.4	\$2,111,532

Assume May and June KWH usage is same as last year, due to rainfall totals

May	781579	\$186,986
June	507274	\$121,361
FYE24 Est	8,643,795	\$2,067,957

FYE25 Est = assume FYE24 cost of \$2,067,957 plus average percent increase of 9.2%

FYE24 Cost	\$2,067,957
FYE25 Est	\$2,257,490

Estimate using average KWH per year times projected \$/KWH cost

## Average KWH

FYE18	7619866
FYE19	8710960
FYE20	7454749
FYE21	7132800
FYE22	7333592
FYE23	9426618
FYE24	8643795
Average	8046054 KWH/Year
Estimated Rate	\$0.26117 \$/KWH
FYE25 Est	\$2,101,379 Recommended Budge