

LAVWMA

Prepared by



Dublin San Ramon
Services District

Water, wastewater, recycled water

QUARTERLY REPORT OF OPERATIONS

FY 2025-2026, 1st Quarter



Quarterly Report of Operations

LAVWMA Pumping and Conveyance System

Table of Contents

Executive Summary	2
Current Quarter Metrics	3
Operations	5
Maintenance	5
Electrical.....	5
Instrumentation & Controls	5
Mechanical.....	5
Operations.....	5
Laboratory.....	6
Electrical Usage, Efficiency, & Cost	6
Pump Run Time	8
Basin Levels	9
Export Flow	10
Expenditures & Budget Utilization: Labor & O&M	11
Expenditures: Livermore Sole Use Facilities.....	12
Detailed YTD O&M Budget Comparison to Actual Expenses	13
EBDA Monthly Reports	15
Langelier Saturation Index Report (Livermore, DSRSD, LAVWMA).....	18

Executive Summary

For the first quarter in fiscal year 2026 (Q1 FY 2026), the Livermore-Amador Valley Water Management Agency (LAVWMA) export conveyance system experienced no major outages or disruptions while pumping 631 million gallons (MG) of fully treated secondary effluent to the 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).

This quarter the overall efficiency of the pumping system averaged 71.1% (Table 1; quarterly range FYs 2024 & 2025 [n=8]: 72.6% to 75.3%), with an average electrical cost of \$570 per MG, or \$186 per acre-foot (AF; Table 1 or section Electrical Usage, Efficiency, & Cost for more details). Preventative maintenance (PM) work orders outnumbered corrective maintenance (CM) work orders 23.09 to 1 (quarterly range FYs 2024 & 2025 [n=8]: 13.87 to 32.29; section Maintenance for more details).

For convenience, some year-to-date (YTD) values compared to budgeted are shown below (section Expenditures & Budget Utilization: Labor & O&M for more details).

- Overall costs: YTD \$678,338; Budget \$3,600,735
- Utilities costs: YTD \$304,772; Budget \$2,025,350
- Labor costs: YTD \$348,034; Budget \$1,249,300
- Labor hours: YTD 1,526.25; Budget 5,480
- WOs last quarter: 286.5 hours 257 PMs and 67.5 hours 15 CMs
- WOs this quarter: 262.5 hours 254 PMs and 53.0 hours 11 CMs
- Pump Efficiency: Jul-70.6% | Aug-71.5% | Sep-74.0%

Current Quarter Metrics

Monthly export flows were consistent with normal operations (Figure 1). Pump efficiency ranged from about 70% to 74%.

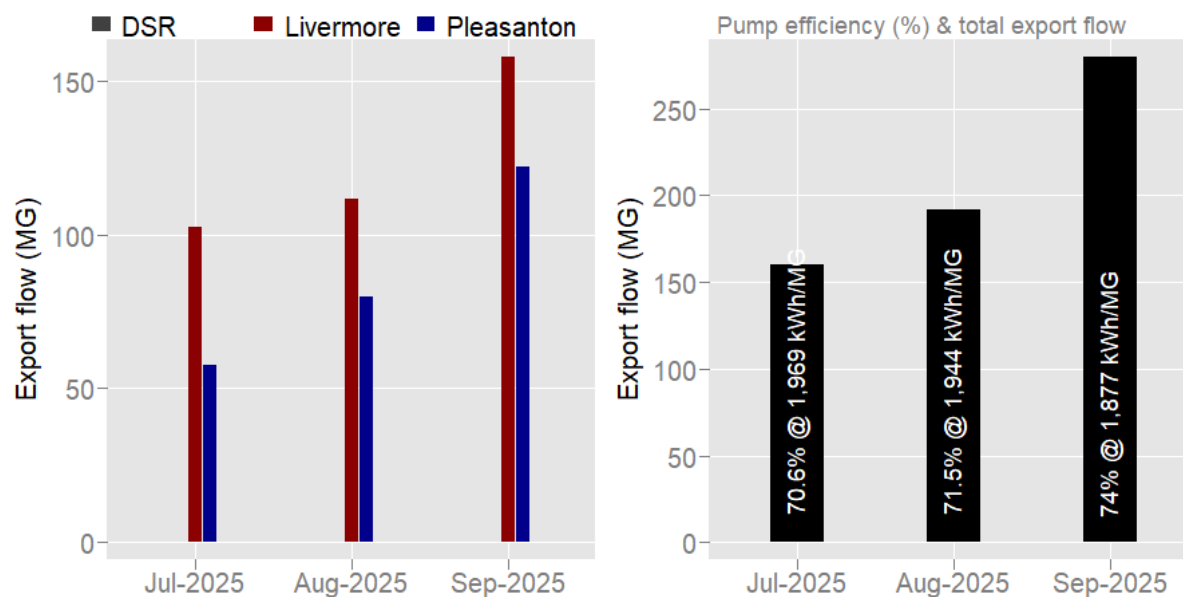


Figure 1 - LAVWMA Q1 FY 2026 export flows for Jul-2025, Aug-2025, & Sep-2025; monthly flows shown by source (left plot) and as total (right plot) with pump efficiency (%) at noted kilowatt hour (kWh) per million gallons (MG); NOTE: flow & pump efficiency data displayed by calendar month, not PG&E billing period

Most power usage (as kWh) for feeders A & B was during off-peak hours (Figure 2).

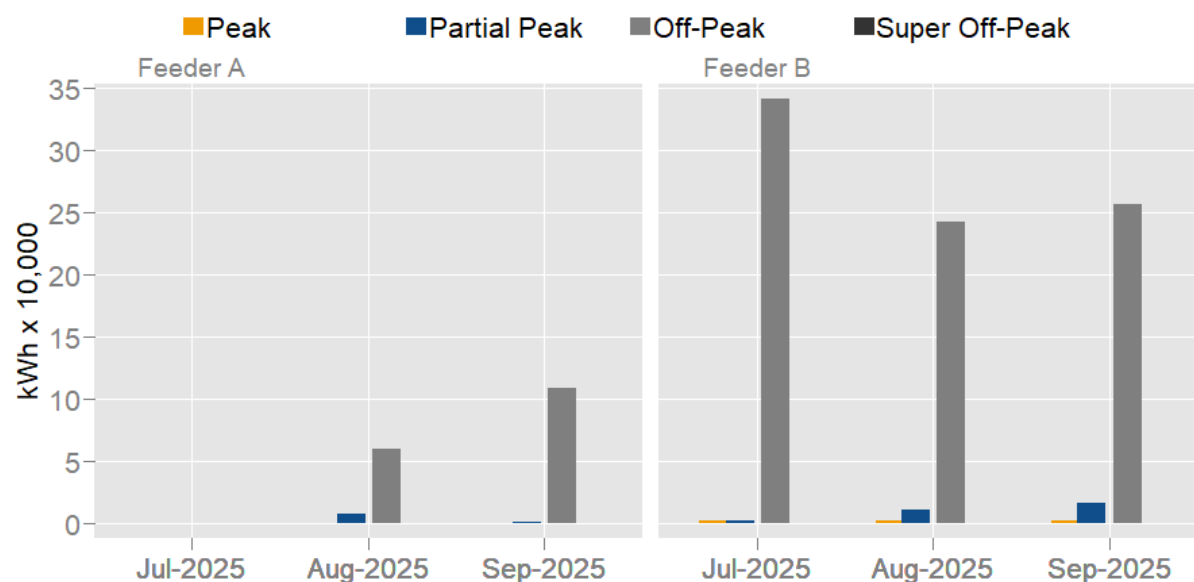


Figure 2 - LAVWMA Q1 FY 2026 electric usage as kilowatt hour (kWh) for PG&E billing cycles Jul-2025, Aug-2025, & Sep-2025; billing cycle usage displayed separately for feeder A (left) & feeder B (right) by time of use: peak, partial peak, off-peak; & super off-peak

Labor and utilities covered the largest fraction of overall cost in Q1 FY 2026 (Figure 3, 3 left-most plots). There were no expenses for non-routine work this quarter.

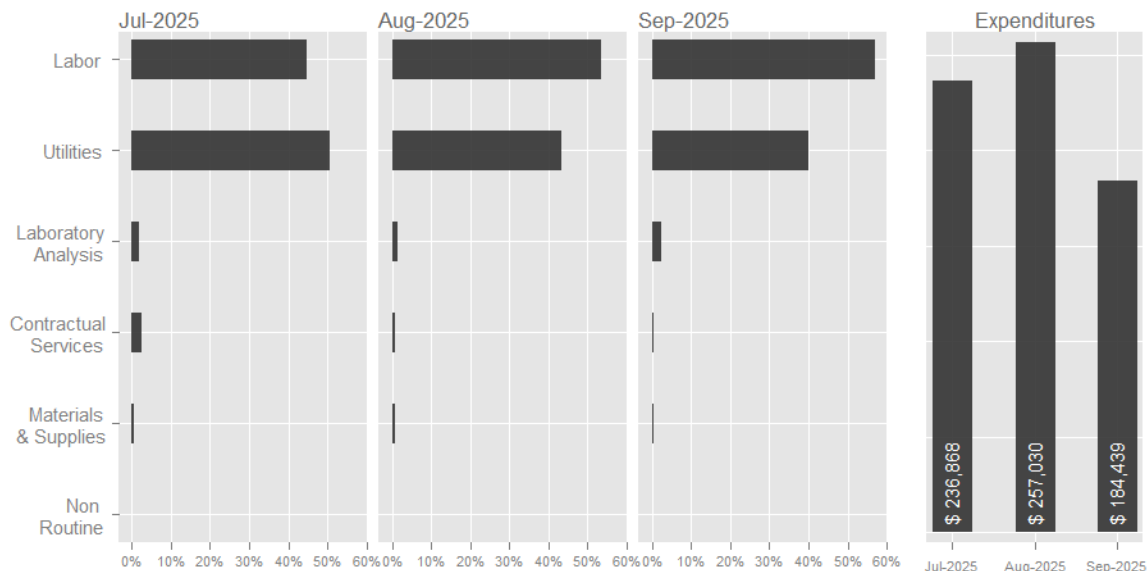


Figure 3 - LAVWMA Q1 FY 2026 expenditures for Jul-2025, Aug-2025, & Sep-2025 as percent of total cost by type (labor, utilizes, laboratory analysis, contractual services, materials & supplies, & non routine; left plot) and as monthly total (right plot)

There were no major equipment failures in Q1 FY 2026, the pipeline and pumping plant ran without issue. Preventative maintenance (PM) work orders exceeded corrective maintenance (CM) work orders each month during Q1 FY 2026 (Figure 4, right plot).

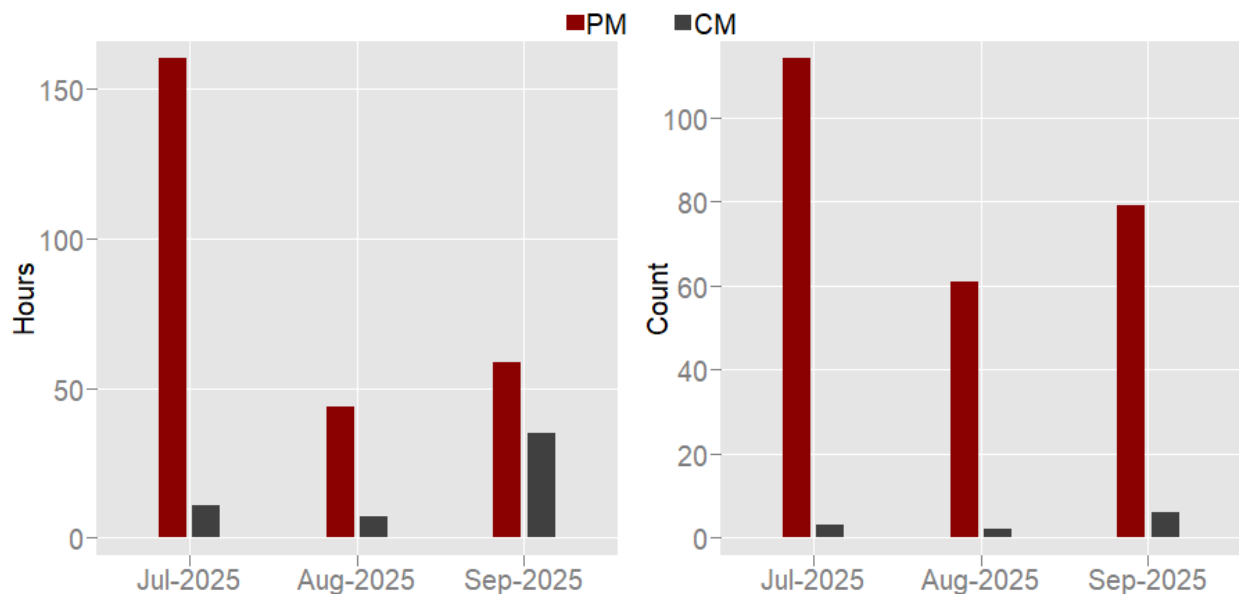


Figure 4 - LAVWMA Q1 FY 2026 preventative maintenance (PM) & corrective maintenance (CM) work order hours (left plot) and count (right plot) for Jul-2025, Aug-2025, & Sep-2025

Operations

Of the ~631 MG of effluent conveyed through the LAVWMA system during this quarter, 0 MG (0%) came from Dublin San Ramon (DSR), 372 MG (58.9%) from the City of Livermore, and 259 MG (41.1%) 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 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 262.5 hours completing 254 preventative maintenance (PM) work orders and 53.0 hours completing 11 corrective maintenance (CM) work orders on LAVWMA equipment and systems. Refer to Figure 4 for monthly breakdown (work order data updated 21-Oct-2025).

The refurbished export pump and motor No. 7 were commissioned in July 2025. During commissioning, staff identified noise and vibration issues with the pump and motor. Pump No. 7 is currently off, and staff are working toward resolving these issues. Pump No. 4 is currently out of service for repair, and a new motor is on order with expected delivery in December 2025.

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

Electrical

- Junction Structure Emergency Bypass Gate Actuator replaced
- Completed replacement of 17 actuators, stem covers, and screen protectors for CIP 23-L013 LAVWMA Valve Actuator project
- Supported CIP 23-L005 SLSS Design Improvements project, assisted Operations with LOTO

Instrumentation & Controls

- Worked with Operations and Lab to standardize on CL2 residual testing
- Supported CIP 23-L005 SLSS Design Improvements project:
 - Wired up Bypass Flowmeter (FIT-1101) and CL2 Analyzer (AIT-1109)
 - Programmed PLC for both signals and Modbus for flowmeter

Mechanical

- Completed the LAVWMA export pipeline inspection, with only one remaining section pending final inspection

Operations

- Tested and evaluated LAVWMA export isolation valves for leaks to ensure system integrity and reliable performance

- Coordinated shutdown activities to facilitate contractor installation of multiple WEKO seals along both the pressure and gravity sides of the export pipeline
- Installed, tested, and placed the new LAVWMA hypochlorite addition system into service to improve chlorine residuals and mitigate bacteriological regrowth to address EBDA concerns
- Supported SLSS construction activities

Laboratory

- Normal business operations

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 FY 2026 quarterly 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
Q1									
Jul-2025	33	345,610	175	1,972.36	70.5%	\$118,807	\$0.34	\$678	\$221
Aug-2025	29	321,405	165	1,948.91	71.3%	\$110,252	\$0.34	\$669	\$218
Sep-2025	30	384,737	198	1,945.93	71.4%	\$72,144	\$0.19	\$365	\$119
Q1									
Average		350,584	179	1,956	71.1%	\$100,401	\$0.29	\$570	\$186
Total	92	1,051,752	538	5,867		\$301,203			
Minimum		321,405	165	1,946	70.5%	\$72,144	\$0.19	\$365	\$119
Maximum		384,737	198	1,972	71.4%	\$118,807	\$0.34	\$678	\$221
YTD									
Average		350,584	179	1,956	71.1%	\$100,401	\$0.29	\$570	\$186
Total	92	1,051,752	538	5,867		\$301,203			
Minimum		321,405	165	1,946	70.5%	\$72,144	\$0.19	\$365	\$119
Maximum		384,737	198	1,972	71.4%	\$118,807	\$0.34	\$678	\$221

Table 2 - LAVWMA FY 2026 quarterly 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)	Cost (\$)
Q1										
Jul-2025	0	0	0	0	\$3,822	2,105	1,928	341,577	0	\$114,985
Aug-2025	0	7,127	59,482	0	\$30,986	1,962	10,724	242,110	0	\$79,267
Sep-2025	0	1,290	108,787	0	\$34,095	2,119	16,103	256,439	0	\$38,049
Q1										
Average	0	2,806	56,090	0	\$22,967	2,062	9,585	280,042	0	\$77,434
Total	0	8,417	168,269	0	\$68,902	6,186	28,755	840,126	0	\$232,301
Minimum	0	0	0	0	\$3,822	1,962	1,928	242,110	0	\$38,049
Maximum	0	7,127	108,787	0	\$34,095	2,119	16,103	341,577	0	\$114,985
YTD										
Average	0	2,806	56,090	0	\$22,967	2,062	9,585	280,042	0	\$77,434
Total	0	8,417	168,269	0	\$68,902	6,186	28,755	840,126	0	\$232,301
Minimum	0	0	0	0	\$3,822	1,962	1,928	242,110	0	\$38,049
Maximum	0	7,127	108,787	0	\$34,095	2,119	16,103	341,577	0	\$114,985

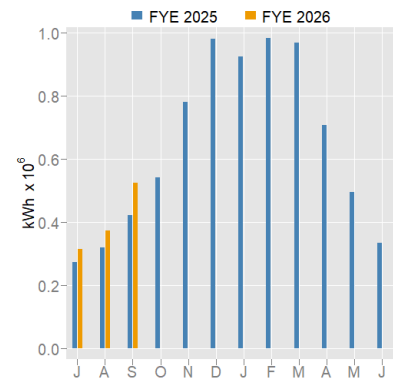


Figure 5 - LAVWMA monthly kWh usage FY 2025 & FY 2026 through Sep-2025; note: plotted kWh values by calendar month, not PG&E based billing cycle

Pump Run Time

Monthly pump utilization (U_m) was calculated as the fraction of total pump hours given the total hours possible if nine¹ pumps ran continuously (i.e., 24 hours per day; equation below, where h = total hours, m = given month, d = days in month). Pump utilization remained between 10% and 21% in Q1 (Table 4).

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

Table 3 - LAVWMA FY 2026 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
Q1											
Jul-2025	71	334	0	0	0	0	1	0	291	0	697
Aug-2025	178	292	58	0	61	0	0	0	283	0	872
Sep-2025	257	117	215	0	354	3	0	84	106	220	1,356
Q1											
Average Hours	169	248	91	0	138	1	0	28	227	73	975
Std Dev Hours	92.9	115.0	111.2	0.0	189.5	1.7	0.4	48.5	104.6	127.2	341.3
Hours	506	743	273	0	415	3	1	84	680	220	2,925
Min Hours	71	117	0	0	0	0	0	0	106	0	697
Max Hours	257	334	215	0	354	3	1	84	291	220	1356
Total Average Hours	169	248	91	0	138	1	0	28	227	73	975
Total Std Dev Hours	92.9	115.0	111.2	0.0	189.5	1.7	0.4	48.5	104.6	127.2	341.3
Total Hours	506	742.9	273	0	415	3	1	84	680	220	2,925
Total Min Hours	71	117	0	0	0	0	0	0	106	0	697
Total Max Hours	257	333.9	215	0	354	3	1	84	291	220	1356

Table 4 - LAVWMA FY 2026 monthly percent pump utilization; quarterly and YTD summaries provided below monthly values

	Pump Utilization
Q1	
Jul-2025	10.4%
Aug-2025	13.0%
Sep-2025	20.9%
Q1	
Average Pump Utilization	14.8%
Min Pump Utilization	10.4%
Max Pump Utilization	20.9%
Total Average Pump Utilization	14.8%
Total Min Pump Utilization	10.4%
Total Max Pump Utilization	20.9%

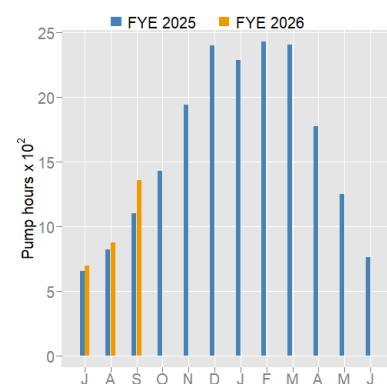


Figure 6- LAVWMA FY 2025 & FY 2026 monthly total pump hours through Sep-2025

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

Basin Levels

Table 5 - LAVWMA FY 2026 monthly average levels (in feet) by basin and overall (total); current quarter and YTD summaries provided below monthly values

Average				
	Basin 1	Basin 2	Basin 3	Total
Q1				
Jul-2025	2.54	0.73	3.66	2.31
Aug-2025	4.80	0.18	5.90	3.63
Sep-2025	4.77	1.02	5.38	3.72
Q1				
Average	4.03	0.65	4.98	3.22
Minimum	2.54	0.18	3.66	2.31
Maximum	4.80	1.02	5.90	3.72
YTD				
Average	4.03	0.65	4.98	3.22
Minimum	2.54	0.18	3.66	2.31
Maximum	4.80	1.02	5.90	3.72

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 FY 2026 flow is 4,520 MG at an estimated cost of \$797/MG.

Table 6 - LAVWMA FY 2026 monthly export flows in million gallons (MG) for Dublin San Ramon, Livermore, & Pleasanton; current quarter 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)
Q1	0.00	371.96	259.49	631.45
Jul-2025	0.00	102.33	57.51	159.84
Aug-2025	0.00	111.79	79.96	191.75
Sep-2025	0.00	157.84	122.03	279.87
Total	0.00	371.96	259.49	631.45
Q1				
Average	0.00	123.99	86.50	210.48
Minimum	0.00	102.33	57.51	159.84
Maximum	0.00	157.84	122.03	279.87
YTD				
Average	0.00	123.99	86.50	210.48
Minimum	0.00	102.33	57.51	159.84
Maximum	0.00	157.84	122.03	279.87

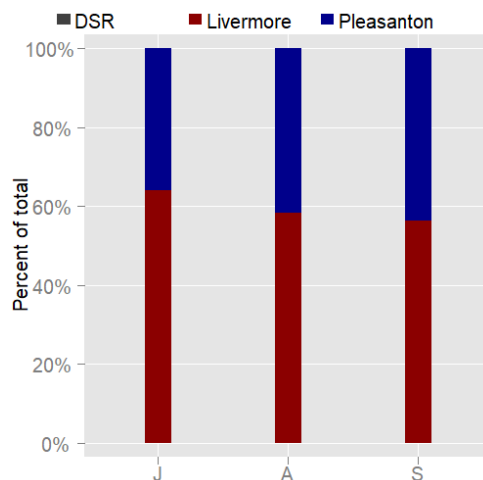


Figure 7- LAVWMA FY 2026 through Sep-2025 monthly export flows by region as a percent of total; DSR = Dublin San Ramon

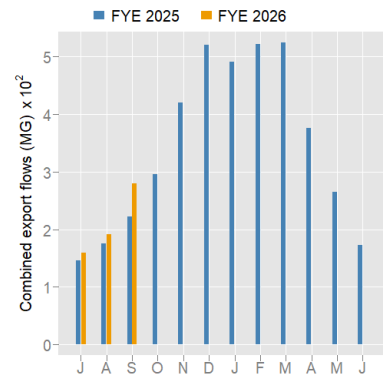


Figure 8 - LAVWMA FY 2025 & FY 2026 through Sep-2025 monthly combined export flows (MG)

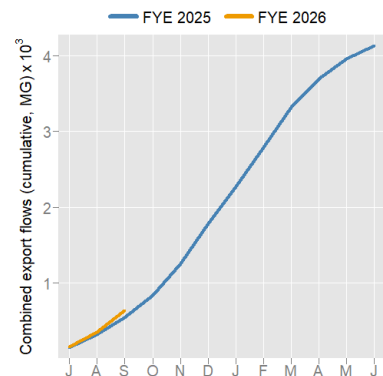


Figure 9 - LAVWMA FY 2025 & FY 2026 through Sep-2025 monthly cumulative combined export flows (MG)

Expenditures & Budget Utilization: Labor & O&M

Expenses this quarter included backflow testing and routine crane inspection. Overall O&M expenses decreased this quarter compared to Q4 FY 2025.

Table 7 - LAVWMA FY 2026 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
Q1	\$348,034	\$330,304	\$678,338	\$1,074	\$350
Jul-2025	\$105,587	\$131,282	\$236,868	\$1,482	\$483
Aug-2025	\$137,544	\$119,487	\$257,030	\$1,340	\$437
Sep-2025	\$104,903	\$79,536	\$184,439	\$659	\$215
Total	\$348,034	\$330,304	\$678,338	\$1,074	\$350
Q1					
Average	\$116,011	\$110,101	\$226,113	\$1,160	\$378
Minimum	\$104,903	\$79,536	\$184,439	\$659	\$215
Maximum	\$137,544	\$131,282	\$257,030	\$1,482	\$483
YTD					
Average	\$116,011	\$110,101	\$226,113	\$1,160	\$378
Minimum	\$104,903	\$79,536	\$184,439	\$659	\$215
Maximum	\$137,544	\$131,282	\$257,030	\$1,482	\$483

Table 8 - LAVWMA FY 2026 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
Q1						
Jul-2025	\$236,868	6.6%	\$3,363,867	\$105,587	8.5%	\$1,143,713
Aug-2025	\$493,899	13.7%	\$3,106,836	\$243,131	19.5%	\$1,006,169
Sep-2025	\$678,338	18.8%	\$2,922,397	\$348,034	27.9%	\$901,266

Table 9 - LAVWMA FY 2026 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
Q1	1,526.3	
Jul-2025	465.5	2.7
Aug-2025	607.8	3.5
Sep-2025	453.0	2.6
Total	1,526.3	
Q1		
Average	508.8	2.9
Minimum	453.0	2.6
Maximum	607.8	3.5
YTD		
Average	508.8	2.9
Minimum	453.0	2.6
Maximum	607.8	3.5

Expenditures: Livermore Sole Use Facilities

Table 10 - LAVWMA FY 2026 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
Q1			
Jul-2025	\$410	\$1,556	\$1,966
Aug-2025	\$0	\$670	\$670
Sep-2025	\$0	\$756	\$756
	Labor	A/P	Total
Q1			
Total	\$410	\$2,982	\$3,392
Average	\$137	\$994	\$1,131
Minimum	\$0	\$670	\$670
Maximum	\$410	\$1,556	\$1,966
Total Total	\$410	\$2,982	\$3,392
Total Average	\$137	\$994	\$1,131
Total Minimum	\$0	\$670	\$670
Total Maximum	\$410	\$1,556	\$1,966

Detailed YTD O&M Budget Comparison to Actual Expenses

LAVWMA BUDGET COMPARISON TO ACTUAL EXPENSES: GOODS & SERVICES																	
															Current FY Period:		3
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 2025-2026	2025	2025	2025	2025	2025	2025	2026	2026	2026	2026	2026	2026	TOTAL	Budget	
Project Total: lavcost LAVWMA	Labor																
	Staff	\$1,249,300	\$105,587	\$137,544	\$104,903										\$348,034	\$312,325	
	Subtotal	\$1,249,300	\$105,587	\$137,544	\$104,903	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$348,034	\$312,325	
Phase Total: supply	Materials & Supplies																
	Operations Supplies	\$24,100	130	\$466	\$671										\$1,267	\$6,025	
	Mechanical Supplies	\$35,250	\$1,080	\$1,859	\$17										\$2,957	\$8,813	
	Electrical Supplies	\$40,000	\$0	\$0	\$0										\$0	\$10,000	
	Subtotal	\$99,350	\$1,210	\$2,325	\$689	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$4,224	\$24,838	
Analysis Biochemical Oxy Demand & Total Langelier Index	Laboratory Analysis																
	Compliance Testing	\$12,000	\$1,465	\$1,172	\$1,172											\$3,000	
	Operational Support Testing	\$5,050	\$321	\$0	\$0											\$1,263	
	Special Sampling	\$30,300	\$2,541	\$2,340	\$2,925											\$7,575	
	Subtotal	\$47,350	\$4,327	\$3,512	\$4,097	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$11,936	\$11,838	
Phase Total: cservi	Contractual Services																
	Sub-surface Repairs	\$16,225													\$0	\$4,056	
	Street Sweeping	\$5,150													\$0	\$1,288	
	Cathodic Protection Survey & Repairs	\$48,700													\$0	\$12,175	
	Underground Service Alert	\$5,200	\$626												\$626	\$1,300	
	SCADA software maintenance contract	\$15,000	\$5,365												\$5,365	\$3,750	
	Remote monitoring annual service for PS and Re	\$2,500													\$0	\$625	
	HVAC Maintenance/Repairs	\$1,200													\$0	\$300	
	Termite/Pest Control	\$1,100													\$0	\$275	
	Landscape/weed maintenance	\$11,550													\$0	\$2,888	
	Smartmeter Covers	\$1,860														\$465	
	Janitorial Service	\$11,700		\$1,950	\$975										\$2,925	\$2,925	
	Fire Extinguisher Maintenance	\$200													\$0	\$50	
	Misc Professional/Contractual Services	\$34,000		\$457											\$457	\$8,500	
	Subtotal	\$154,385	\$5,991	\$2,407	\$975	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$9,373	\$38,596	
Phase Total: utilit	Utilities																
	Electricity (PG&E)	\$2,019,250	\$119,608	\$110,922	\$72,900										\$303,430	\$504,813	
	Water & Sewer (Pleasanton)	\$2,500			\$202										\$202	\$625	
	Water (EBMUD)	\$1,600			\$483										\$483	\$400	
	Telephone/communications	\$2,000	\$146	\$321	\$190										\$657	\$500	
	WW Treatment (DSRSD)	\$0													\$0	\$0	
	Subtotal	\$2,025,350	\$119,754	\$111,243	\$73,775	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$304,772	\$506,338	
Phase Total: nonrou	Non-Routine																
		\$25,000													\$0	\$6,250	
	Subtotal	\$25,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$6,250	
Monthly Total			\$236,868	\$257,030	\$184,439	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$678,338	\$900,184	
YTD Total		\$3,600,735	\$236,868	\$493,899	\$678,338	\$678,338	\$678,338	\$678,338	\$678,338	\$678,338	\$678,338	\$678,338	\$678,338	\$678,338			
Combined Export Flow, mg		4520	160	192	280										631	1,130	
Pumping Efficiency			70.6%	71.5%	74.0%												
Monthly Cost, \$/mg			\$1,482	\$1,340	\$659	-	-	-	-	-	-	-	-	-			
YTD Running Cost, \$/mg		\$797	\$1,482	\$1,405	\$1,074	-	-	-	-	-	-	-	-	-	\$1,074		

LAVWMA															
BUDGET COMPARISON TO ACTUAL EXPENSES: LABOR															
													Current FY Period:	3	
ACTUAL EXPENSES BILLED TO LAVWMA FOR REGULAR O&M															
	FY 2025-2026	Jul 2025	Aug 2025	Sep 2025	Oct 2025	Nov 2025	Dec 2025	Jan 2026	Feb 2026	Mar 2026	Apr 2026	May 2026	Jun 2026	YTD TOTAL	YTD Budget
Estimated Personnel Hours															
Division 51 - FOD	44	-	10.00	-	-	-	-	-	-	-	-	-	-	10.00	11.00
Water/Wastewater Sys Lead Op	0													-	-
Water/Wastewater Sys OP IV-On Call	0													-	-
Water/Wastewater Sys OP IV	0													-	-
Water/Wastewater Sys OP III	0													-	-
Water/Wastewater Sys OP I/II	36		10.00											10.00	9.00
Maintenance Worker	0													-	-
Supervisor	8													-	2.00
Division 52 - WWTP	2,605	218.50	367.75	272.00	-	-	-	-	-	-	-	-	-	858.25	601.25
Senior Process WWTP Operator	40	32.00	74.50	30.00										136.50	10.00
Senior WWTP Operator	1,950	61.00	80.75	51.00										192.75	487.50
WWTP Supervisor	200	10.00	17.00	39.00										66.00	
Operator In Training	0													-	-
WWTP Operator II	415	115.50	194.50	151.00										461.00	103.75
WWTP Operator II (SLSS)	0													-	-
Operations Superintendent	0		1.00	1.00										2.00	-
Operations Director	0													-	-
Division 53 - MECH	1,580	188.00	159.00	129.00	-	-	-	-	-	-	-	-	-	476.00	395.00
Senior Mechanic	500	68.00	51.00	52.00										171.00	125.00
Senior Mechanic - USA	0	17.00	10.00	23.00										50.00	
Maintenance Worker II	40													-	10.00
Mechanic I	0	19.50	35.50	25.50										80.50	-
Mechanic II	1,000	17.00	33.00	8.00										58.00	250.00
Mechanic I- USA	0	57.50	21.50	5.50										84.50	-
Mechanic II- USA	0	9.00	8.00	15.00										32.00	-
Mechanical Supervisor	40													-	10.00
Mechanical Superintendent	0													-	-
Division 54 - ELEC	1,079	57.00	67.00	48.00	-	-	-	-	-	-	-	-	-	172.00	269.75
Senior Instrument/Controls Tech	90	9.00	14.50	7.00										30.50	22.50
Instrumentation & Controls Tech I/II	504	19.00	24.00	21.00										64.00	126.00
Ice Supervisor	45	0.50	7.00	4.00										11.50	11.25
Senior Electrician	90	9.00	10.00	6.00										25.00	22.50
Electrician I/II	305	15.00	10.00	9.00										34.00	76.25
Principal Electrical Engineer	45	4.50	1.50	1.00										7.00	11.25
Division 55 - Laboratory	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EC Inspector II-Pretreatment	0													-	-
Laboratory Technician	0													-	-
Supervisor	0													-	-
Division 26 - SAFETY	54	-	-	-	-	-	-	-	-	-	-	-	-	-	13.50
Safety Officer	54	-	-	-	-	-	-	-	-	-	-	-	-	-	13.50
Division 40 - ENG	118	2.00	4.00	4.00	-	-	-	-	-	-	-	-	-	10.00	27.00
Senior Civil Engineer-SME	10													-	-
Associate Engineer	60	2.00	4.00	4.00										10.00	15.00
Construction Inspector I/II	8													-	2.00
Engineering Technician II	20													-	5.00
GIS Analyst	20													-	5.00
Total Estimated Personnel Hours	5,480														
FTE	2.6														
Total Monthly Hours		465.50	607.75	453.00	-	-	-	-	-	-	-	-	-	1,526.25	1,317.50

EBDA Monthly Reports

Parameter	Flow	CBOD Qual	CBOD	TSS Qual	TSS	pH	pH	Total Residual Chlorine	Total Residual Chlorine	Fecal Qual	Fecal Coliforms	Entero Qual	Enterococci	Total Kjeldahl Nitrogen	Total Inorganic Nitrogen	Total Inorganic Nitrogen	Flow	Flow
Units	MGD		mg/L		mg/L	SU	SU	mg/L	mg/L		MPN/100mL		MPN/100mL	mg/L	mg/L	mg/L	MGD	MGD
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	SM 4500-E	Calculation: NO2 + NO3			Daily Average (Mean)	Daily Average (Mean)
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	INF-002F	EFF-002F	EFF-002F			INF-002F	EFF-002F
7/1/2025	4.66					7.22	7.37			14	<	10					11.52	1.09
7/2/2025	5.25		2.6		6.2	7.06	7.38										11.63	1.50
7/3/2025	3.46					7.29	7.47						59			37.4	11.52	0.80
7/4/2025	3.43					7.28	7.43										11.20	1.13
7/5/2025	6.00					7.24	7.47										11.11	4.52
7/6/2025	6.49					7.24	7.43										11.46	3.08
7/7/2025	5.93					7.22	7.36										11.80	1.06
7/8/2025	3.89					7.25	7.42					<	10				11.41	2.09
7/9/2025	5.84		2.7		5	7.15	7.41									32.5	11.28	3.43
7/10/2025	5.63					6.99	7.37										11.64	1.86
7/11/2025	2.24					7.11	7.18										11.93	0.07
7/12/2025	5.26					7.17	7.36										11.49	3.09
7/13/2025	6.13					7.14	7.29										11.57	1.35
7/14/2025	3.84					7.03	7.27										12.02	0.77
7/15/2025	4.65					7.19	7.33			33	<	10					11.82	1.12
7/16/2025	5.17		3.2		5.9	6.89	7.33										11.68	1.28
7/17/2025	4.05					7.06	7.32										11.49	3.04
7/18/2025	5.72					6.96	7.29										11.64	1.70
7/19/2025	5.80					7.18	7.29										11.43	2.78
7/20/2025	5.68					7.16	7.29										11.63	2.81
7/21/2025	6.04					6.75	7.19										11.66	2.22
7/22/2025	5.50					7.00	7.25			6	<	10					11.61	3.47
7/23/2025	0.93		3.3		6.2	7.20	7.25										11.70	2.75
7/24/2025	0.34					7.20	7.34										11.39	1.72
7/25/2025	9.29					7.12	7.32										11.42	3.11
7/26/2025	9.53					7.09	7.24										11.49	5.00
7/27/2025	9.49					7.08	7.37										11.61	5.01
7/28/2025	9.01					7.06	7.22										12.05	4.66
7/29/2025	9.33					7.12	7.28			<	2	<	10				11.50	5.85
7/30/2025	1.29		4.4		6.1	7.10	7.18										11.58	0.26
7/31/2025	0.00					7.17	7.29										11.40	0.06
Note:																		
Column G - pH Minimum; online																		
Column H - pH Maximum; online																		

Parameter	Flow	CBOD Qual	CBOD	TSS Qual	TSS	pH	pH	Total Residual Chlorine	Total Residual Chlorine	Fecal Qual	Fecal Coliforms	Entero Qual	Enterococci	Total Kjeldahl Nitrogen	Total Inorganic Nitrogen	Total Inorganic Nitrogen	Flow	Flow	Total Residual Chlorine
Units	MGD		mg/L		mg/L	SU	SU	mg/L	mg/L		MPN/100mL		MPN/100mL	mg/L	mg/L	mg/L	MGD	MGD	mg/L
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	SM 4500-N	Calculation: NO2 + NO3		Daily Average (Mean)	Daily Average (Mean)	Field
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	INF-002F	EFF-002F	EFF-002F	INF-002F	EFF-002F	SLSS
8/1/2025	0.00					7.20	7.33	0.01									11.38	0.25	
8/2/2025	7.14					7.15	7.34	0.00									11.37	2.57	
8/3/2025	10.47					7.10	7.29	0.32									11.80	3.21	
8/4/2025	11.43					7.08	7.22	2.21									11.59	5.84	
8/5/2025	10.08					6.99	7.25	3.73			8	<	10				11.32	8.62	0.05
8/6/2025	4.78		5.1		9.1	7.03	7.23	2.08						48		29.4	13.76	1.10	
8/7/2025	0.00					7.17	7.25	0.33									12.95	0.03	
8/8/2025	0.00					7.24	7.32	0.00									11.85	0.00	
8/9/2025	3.66					7.05	7.37	0.00									11.87	1.56	
8/10/2025	11.43					6.94	7.12	0.07									12.22	3.85	
8/11/2025	10.27					6.91	7.13	0.65									12.06	2.53	
8/12/2025	9.53					6.99	7.19	0.50			2	<	10				11.90	4.01	0.05
8/13/2025	3.23		4.9		10.0	7.15	7.24	1.34								26.4	11.92	0.10	
8/14/2025	0.78					7.24	7.30	2.89									11.73	1.43	
8/15/2025	9.31					7.04	7.32	0.40									11.92	2.57	
8/16/2025	8.94					6.98	7.18	1.95									12.01	3.21	
8/17/2025	6.00					6.99	7.20	0.99									12.26	3.51	
8/18/2025	8.50					6.99	7.24	1.19									12.00	3.35	
8/19/2025	7.60					6.84	7.24	1.01			33		20				11.66	4.09	0.05
8/20/2025	5.58		3.4		5.8	6.48	7.09	0.68									11.75	1.18	
8/21/2025	3.12					6.67	6.82	0.39									11.63	2.57	
8/22/2025	1.40					6.75	6.92	0.48									11.93	1.62	
8/23/2025	10.04					6.92	7.32	0.03									12.84	2.73	
8/24/2025	8.65					7.25	7.51	1.41									12.73	3.30	
8/25/2025	5.49					7.22	7.48	5.35									12.11	2.88	
8/26/2025	7.11					6.99	7.42	5.53			8	<	10				11.88	1.84	0.05
8/27/2025	2.77		4.3		5.2	7.24	7.41	2.60									11.76	1.84	
8/28/2025	1.67					6.36	7.89	1.92									11.55	3.43	
8/29/2025	9.04					7.24	7.44	0.41									11.67	0.76	
8/30/2025	9.28					7.23	7.36	1.07									11.80	2.98	
8/31/2025	4.46					7.10	7.25	2.40									11.19	3.12	

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

Parameter	Flow	CBOD Qual	CBOD	TSS Qual	TSS	pH	pH	Total Residual Chlorine	Total Residual Chlorine	Fecal Qual	Fecal Coliforms	Entero Qual	Enterococci	Total Kjeldahl Nitrogen	Total Inorganic Nitrogen	Total Inorganic Nitrogen	Flow	Flow	Total Residual Chlorine
Units	MGD		mg/L		mg/L	SU	SU	mg/L	mg/L		MPN/100mL		MPN/100mL	mg/L	mg/L	mg/L	MGD	MGD	mg/L
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	SM 4500-N	Calculation: NO2 + NO3		Daily Average (Mean)	Daily Average (Mean)	Field
MDL		2.0		1.2															
RL		2.0		4.5									10						
Location	LAVWMA-EXP		LAVWMA-EXP		LAVWMA-EXP	LAVWMA-EXP	LAVWMA-EXP	SLSS		SLSS		SLSS		INF-002F	EFF-002F	EFF-002F	INF-002F	EFF-002F	SLSS
9/1/2025	7.83					7.20	7.30	2.78									12.05	1.69	
9/2/2025	5.95					7.00	7.30	2.61			23	<	10				11.92	2.12	0.08
9/3/2025	5.88		3.7		4.2	7.20	7.30	3.01									11.85	2.51	
9/4/2025	8.10					7.00	7.40	4.34						56		26.9	11.69	1.96	
9/5/2025	2.92					7.10	7.40	4.59									11.52	1.93	
9/6/2025	9.30					7.00	7.40	4.42									11.53	5.07	
9/7/2025	10.56					7.20	7.40	3.37									11.92	5.56	
9/8/2025	9.36					7.00	7.40	3.01									11.73	4.73	
9/9/2025	11.64					7.00	7.30	1.72			33	<	10				11.54	4.11	0.09
9/10/2025	3.68		5.8		5.3	7.00	7.20	0.98								22.8	11.52	1.86	
9/11/2025	5.74					7.10	7.40	0.14									11.56	3.28	
9/12/2025	4.33					7.30	7.40	0.50									11.61	2.50	
9/13/2025	13.47					7.20	7.40	3.58									11.68	4.35	
9/14/2025	13.48					6.90	7.40	1.00									12.07	6.91	
9/15/2025	13.44					7.00	7.60	1.37									11.71	4.25	
9/16/2025	7.08					6.90	7.10	0.91			23		10				11.60	3.53	0.05
9/17/2025	13.16		4.4		5.3	6.80	7.20	0.53									11.72	3.32	
9/18/2025	13.48					6.80	7.10	1.21									11.52	4.37	
9/19/2025	9.73					6.90	7.30	2.11									11.40	3.64	
9/20/2025	10.78					7.10	7.40	2.70									11.40	7.34	
9/21/2025	11.44					7.00	7.30	4.23									11.65	6.54	
9/22/2025	12.17					6.80	7.30	3.93									11.63	3.94	
9/23/2025	9.15					6.80	7.30	2.93			17	<	10				11.46	2.94	0.04
9/24/2025	9.04		5.9		7.4	6.90	7.40	2.56									11.34	1.98	
9/25/2025	9.55					6.80	7.30	2.29									11.39	4.07	
9/26/2025	9.48					7.10	7.50	2.49									11.26	5.13	
9/27/2025	10.68					7.20	7.50	2.10									11.52	6.97	
9/28/2025	9.26					7.20	7.50	2.01									11.62	5.41	
9/29/2025	9.76					7.20	7.50	1.91									11.57	5.16	
9/30/2025	9.42					7.10	7.50	1.95			7	<	10				11.33	5.09	0.07

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

Langelier Saturation Index Report (Livermore, DSRSD, LAVWMA)

The Langelier Saturation index is used to predict corrosion potential on the export pipeline. Keeping a Langelier index between -0.5 – 0.5 is a good target.

Langelier pH Saturation Index (Jul-25 through Sep-25)								
Agency	Collection Date	TDS (mg/L)	Temp (°C)	Ca Hardness (mg/L CaCO ₃)	Alkalinity (mg/L CaCO ₃)	pH Actual	pH Saturation	Langelier Index
Livermore	08/06/25	519	23.0	56	208	7.3	7.8	-0.5
DSRSD	07/07/25	630	26.0	96	313	7.55	7.3	0.2
LAVWMA	07/07/25	630	24.4	88	297	7.55	7.4	0.1