LAVWMA

Prepared by

Dublin San Ramon Services District

Water, wastewater, recycled water

QUARTERLY REPORT OF OPERATIONS

FY 2024-2025, 4th Quarter

Quarterly Report of Operations
LAVWMA Pumping and Conveyance System

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Executive Summary

For the fourth quarter fiscal year ending (FYE) 2025, the Livermore-Amador Valley Water Management Agency (LAVWMA) export conveyance system experienced no major outages or disruptions while pumping 814 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 74.6% (Table 1; quarterly range FYEs 2023 & 2024 [n=8]: 66.0% to 74.0%), with an average electrical cost of $399 per MG, or $130 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 17.13 to 1 (quarterly range FYEs 2023 & 2024 [n=8]: 9.57 to 23.45; 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 $3,120,924; Budget $3,530,500
- Utilities costs: YTD $1,816,787; Budget $2,065,755
- Labor costs: YTD $1,146,900; Budget $1,182,824
- Labor hours: YTD 5,149.3; Budget 5,411
- WOs last quarter: 177.5 hours 226 PMs and 17.0 hours 7 CMs
- WOs this quarter: 286.5 hours 257 PMs and 67.5 hours 15 CMs
- Pump Efficiency: Apr-73.9% | May-74.4% | Jun-71.7%

Current Quarter Metrics

Monthly export flows were consistent with normal operations (Figure 1). Pump efficiency ranged from about 71% to 74%.

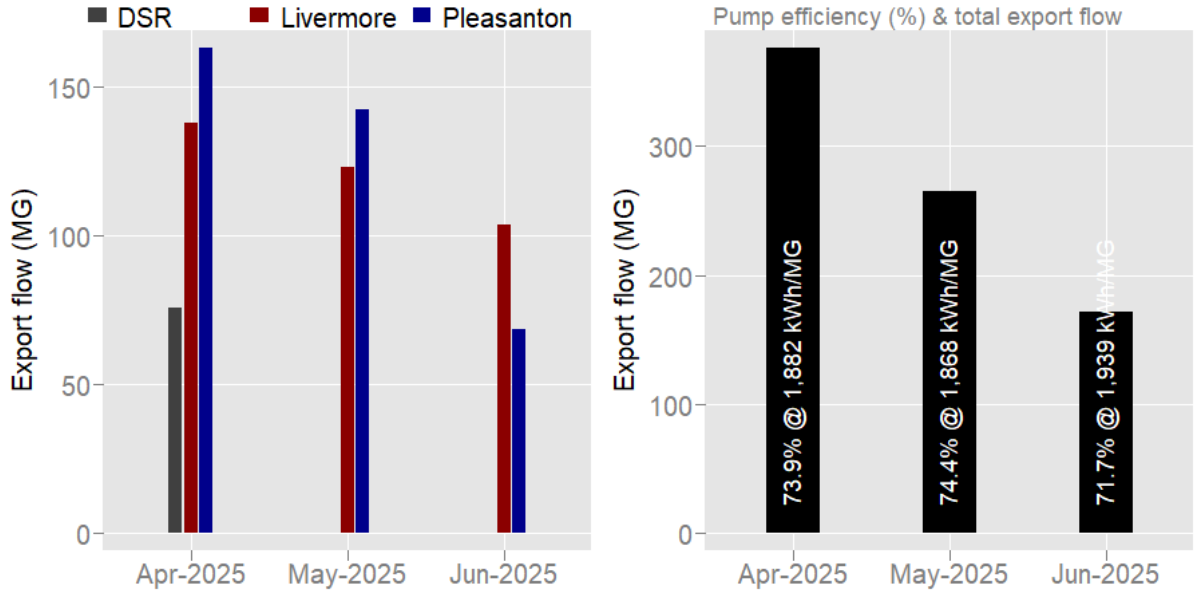

Figure 1 - LAVWMA Quarter 4 FYE 2025 export flows for Apr-2025, May-2025, & Jun-2025; monthly flows shown by source (left plot) and as total (right plot) with pump efficiency (%) at noted kilowatt hour (kWh) per million gallons (MG); NOTE: flow & pump efficiency data displayed by calendar month, not PG&E billing period

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

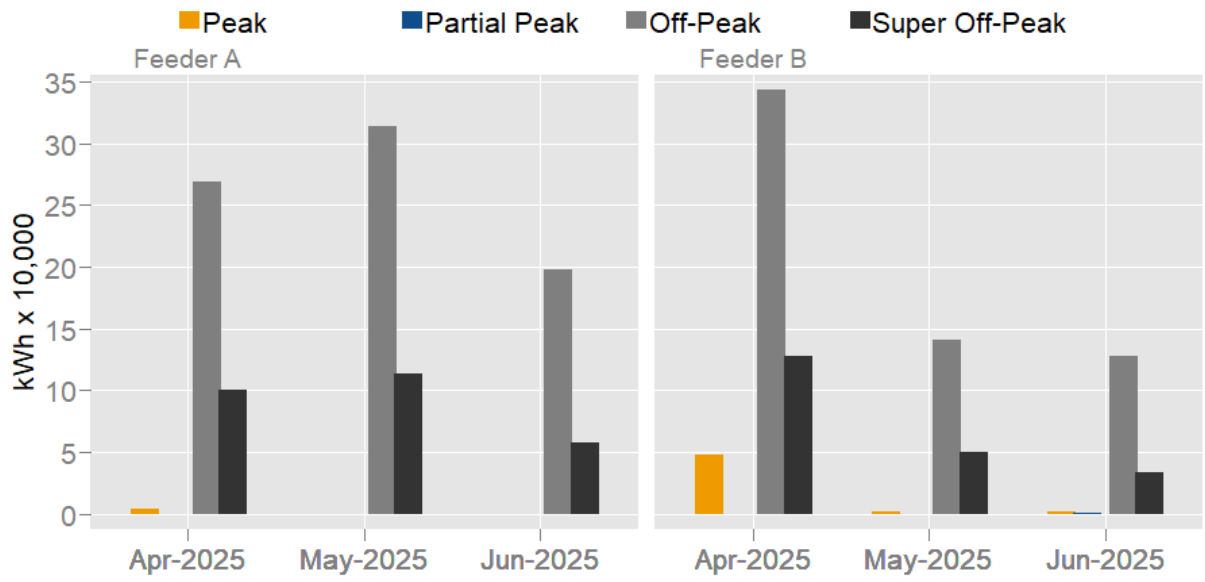

Figure 2 - LAVWMA Quarter 4 FYE 2025 electric usage as kilowatt hour (kWh) for PG&E billing cycles Apr-2025, May-2025, & Jun-2025; billing cycle usage displayed separately for feeder A (left) & feeder B (right) by time of use: peak, partial peak, off-peak; & super off-peak

Labor and utilities covered the largest fraction of overall cost in Q4 FYE 2025 (Figure 3, 3 left-most plots). There were no expenses for non-routine work this quarter.

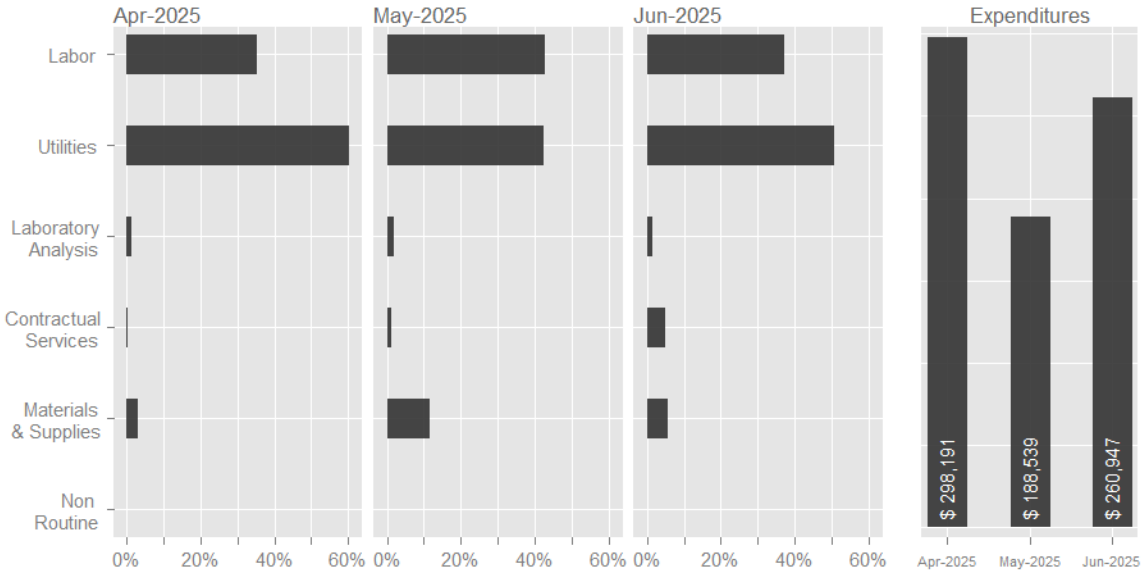

Figure 3 - LAVWMA Quarter 4 FYE 2025 expenditures for Apr-2025, May-2025, & Jun-2025 as percent of total cost by type (labor, utilizes, laboratory analysis, contractual services, materials & supplies, & non routine; left plot) and as monthly total (right plot)

There were no major equipment failures in Q4 FYE 2025, the pipeline and pumping plant ran without issue. Preventative maintenance (PM) work orders exceeded corrective maintenance (CM) work orders each month during Q4 FYE 2025 (Figure 4, right plot). The were no CM workorders in Apr-2025.

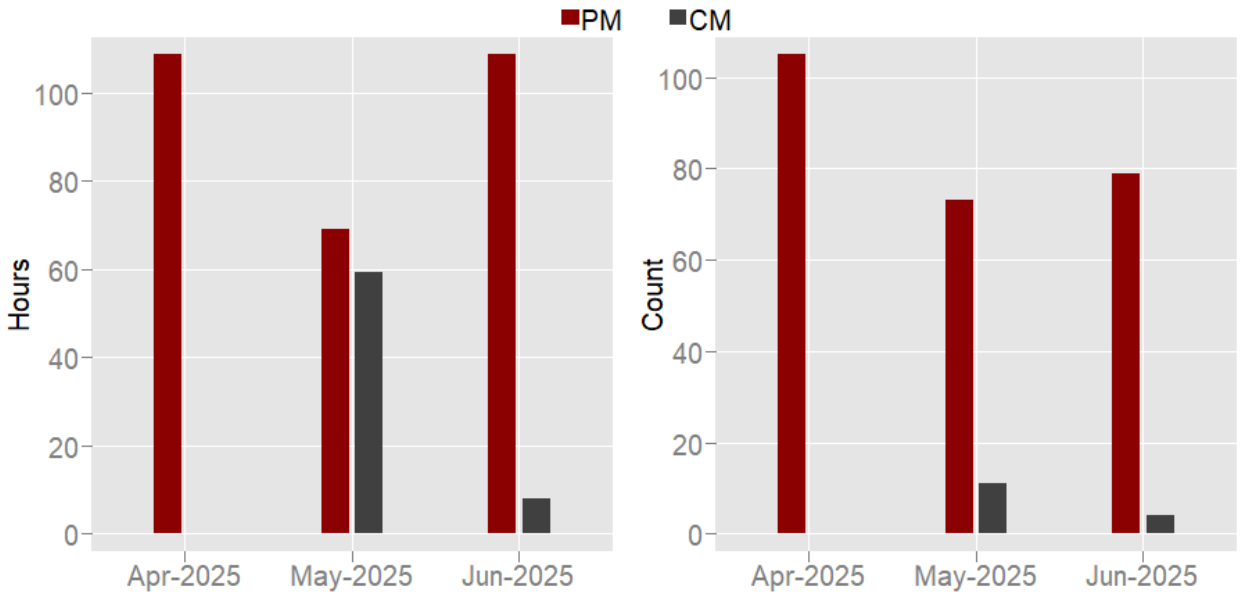

Figure 4 - LAVWMA Quarter 4 FYE 2025 preventative maintenance (PM) & corrective maintenance (CM) work order hours (left plot) and count (right plot) for Apr-2025, May-2025, & Jun-2025

Operations

Of the ~814 MG of effluent conveyed through the LAVWMA system during the third quarter, 76 MG (9.3%) came from Dublin San Ramon (DSR), 364 MG (44.8%) from the City of Livermore, and 374 MG (45.9%) 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 286.5 hours completing 257 preventative maintenance (PM) work orders and 67.5 hours completing 15 corrective maintenance (CM) work orders on LAVWMA equipment and systems. Refer to Figure 4 for monthly breakdown (work order data updated 16-Jul-2025).

Recently refurbished pump motor number 7 was installed (May 2025). During commission, staff identified issues with the motor. Pump number 7 is currently off, and staff are working toward resolving these issues. Pump number 4 was sent for repairs (May 2025).

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

Electrical

- Competitively bid new washdown pump motor
- Replaced washdown pump motor feeder wires
- Completed replacement of 10 out of 17 actuators after receiving re-machined stem nuts
- Pump Station Motor #7 wired up and ready to commission
- Pump Station Motor #4 sent out for overhaul

Instrument & Controls

- Connected Zone 7 brine flow into LAVWMA at TO2 PLC to collect data for HMI display
- Troubleshot Chlorine and pH sensors at Junction Structure for Livermore and DSRSD sample locations
- Rebuilt Junction Structure Chlorine sensor
- Rebuilt Combined Effluent Chlorine sensor

Mechanical

- Completed two of three recommendations per the Air Entrapment Study
    - Added a 6-inch vent in the EBDA tie-in vault
    - Upsized EBDA air release valve from 4-inch to 8-inch

Operations

- Normal business operations

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

- $\overline{GPM} = \frac{Export\ Flow\ (MG) \times 10^6}{d \times 1440\ min/d}$
- *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 FYE 2025 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-2024	31	299,594	160	1,876.20	74.1%	$105,687	$0.35	$662	$216
Aug-2024	31	286,133	153	1,874.75	74.2%	$81,928	$0.29	$537	$175
Sep-2024	30	336,042	187	1,792.35	77.6%	$99,963	$0.30	$533	$174
Q2									
Oct-2024	29	441,763	229	1,932.11	72.0%	$116,266	$0.26	$509	$166
Nov-2024	32	642,764	355	1,809.32	76.8%	$163,208	$0.25	$459	$150
Dec-2024	30	836,322	444	1,882.69	73.8%	$194,743	$0.23	$438	$143
Q3									
Jan-2025	32	1,058,935	562	1,882.99	73.8%	$234,691	$0.22	$417	$136
Feb-2025	29	875,559	464	1,886.51	73.7%	$201,510	$0.23	$434	$141
Mar-2025	30	1,005,207	534	1,881.26	73.9%	$217,135	$0.22	$406	$132
Q4									
Apr-2025	29	891,676	481	1,853.47	75.0%	$179,491	$0.20	$373	$122
May-2025	31	619,496	332	1,867.53	74.4%	$78,588	$0.13	$237	$77
Jun-2025	30	418,754	224	1,870.60	74.3%	$131,506	$0.31	$587	$191
Q4									
Average		643,309	346	1,864	74.6%	$129,862	$0.21	$399	$130
Total	90	1,929,926	1,037	5,592		$389,585			
Minimum		418,754	224	1,853	74.3%	$78,588	$0.13	$237	$77
Maximum		891,676	481	1,871	75.0%	$179,491	$0.31	$587	$191
YTD									
Average		642,687	344	1,867	74.5%	$150,393	$0.25	$466	$152
Total	364	7,712,245	4,125	22,410		$1,804,717			
Minimum		286,133	153	1,792	72.0%	$78,588	$0.13	$237	$77
Maximum		1,058,935	562	1,932	77.6%	$234,691	$0.35	$662	$216

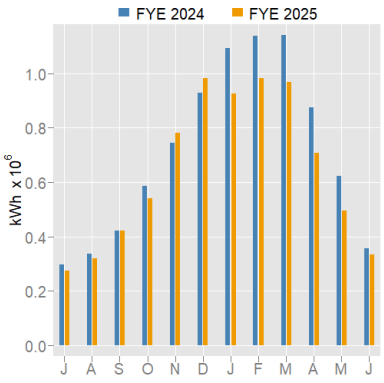

Figure 5 - LAVWMA monthly kWh usage FYE 2024 & FYE 2025 through Jun-2025; note: plotted kWh values by calendar month, not PG&E based billing cycle

Table 2 - LAVWMA FYE 2025 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-2024	0	0	110,784	0	$34,670	2,028	1,778	185,003	0	$71,017
Aug-2024	0	0	127,927	0	$35,306	2,160	0	154,258	1,788	$46,622
Sep-2024	0	0	325,319	0	$90,559	2,056	1,689	6,978	0	$9,404
Q2										
Oct-2024	0	0	430,837	0	$106,617	2,166	1,214	7,546	0	$9,649
Nov-2024	0	0	562,453	0	$126,340	2,387	0	77,924	0	$36,868
Dec-2024	0	0	375,946	0	$85,202	7,354	0	453,022	0	$109,542
Q3										
Jan-2025	0	0	552,309	0	$120,927	23,247	0	483,380	0	$113,765
Feb-2025	0	0	487,036	0	$108,480	3,034	0	385,489	0	$93,030
Mar-2025	16,495	0	477,026	48,975	$115,132	25,026	0	403,259	34,425	$102,003
Q4										
Apr-2025	3,645	0	268,558	99,933	$74,024	47,824	0	343,468	128,249	$105,467
May-2025	0	0	313,231	113,365	$52,120	1,820	0	141,093	49,986	$26,469
Jun-2025	0	0	197,564	57,509	$100,781	1,730	548	128,193	33,209	$30,725
Q4										
Average	1,215	0	259,784	90,269	$75,641	17,125	183	204,251	70,481	$54,220
Total	3,645	0	779,353	270,807	$226,924	51,374	548	612,754	211,444	$162,661
Minimum	0	0	197,564	57,509	$52,120	1,730	0	128,193	33,209	$26,469
Maximum	3,645	0	313,231	113,365	$100,781	47,824	548	343,468	128,249	$105,467
YTD										
Average	1,678	0	352,416	26,649	87,513	10,069	436	230,801	20,638	62,880
Total	20,140	0	4,228,990	319,782	1,050,156	120,832	5,229	2,769,613	247,657	754,560
Minimum	0	0	110,784	0	34,670	1,730	0	6,978	0	9,404
Maximum	16,495	0	562,453	113,365	126,340	47,824	1,778	483,380	128,249	113,765

Pump Run Time

Monthly pump utilization (U_m) was calculated as the fraction of total pump hours given the total hours possible if nine[1] 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 34% and 40% in Q3 (Table 4).

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

Table 3 - LAVWMA FYE 2025 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-2024	108	0	144	28	94	2	13	1	263	1	654
Aug-2024	313	0	135	1	213	8	10	16	119	6	820
Sep-2024	102	0	93	0	97	261	0	277	0	271	1,102
Q2											
Oct-2024	272	0	266	18	279	195	0	179	24	195	1,428
Nov-2024	511	0	172	165	504	0	158	0	431	0	1,942
Dec-2024	519	0	289	544	438	72	0	0	537	0	2,398
Q3											
Jan-2025	469	0	487	427	436	0	0	0	464	0	2,282
Feb-2025	477	0.5	478	498	483	0	0	0	490	0	2,427
Mar-2025	555	0	182	585	513	1	0	1	566	1	2,406
Q4											
Apr-2025	433	412	267	42	425	13	0	1	175	3	1,771
May-2025	128	374	377	0	371	0	0	0	0	0	1,249
Jun-2025	0	357	89	0	86	0	0	0	229	0	761
	Pump 1	Pump 2	Pump 3	Pump 4	Pump 5	Pump 6	Pump 7	Pump 8	Pump 9	Pump 10	Total
Q1											
Average Hours	174	0	124	10	134	90	7	98	127	93	859
Std Dev Hours	120.3	0.0	27.1	16.2	67.7	147.9	6.6	155.5	131.7	154.6	226.4
Hours	523	0	372	29	403	271	22	294	382	279	2,576
Min Hours	102	0	93	0	94	2	0	1	0	1	654
Max Hours	313	0	144	28	213	261	13	277	263	271	1102
Q2											
Average Hours	434	0	242	242	407	89	53	60	330	65	1923
Std Dev Hours	140.3	0.0	61.8	271.4	116.0	98.6	91.5	103.5	270.5	112.7	485.2
Hours	1,302	0	726	727	1,221	267	158	179	991	195	5,768
Min Hours	272	0	172	18	279	0	0	0	24	0	1428
Max Hours	519	0	289	544	504	195	158	179	537	195	2398
Q3											
Average Hours	500	0.2	382	503	477	0.4	0	0.4	507	0.4	2372
Std Dev Hours	47.6	0.3	173.4	79.5	38.6	0.7	0.0	0.8	53.1	0.7	78.2
Hours	1,501	0.5	1,147	1,510	1,432	1	0	1	1,520	1	7,115
Min Hours	469	0	182	427	436	0	0	0	464	0	2282
Max Hours	555	0.5	487	585	513	1	0	1	566	1	2427
Q4											
Average Hours	187	381	244	14	294	4	0	0	135	1	1260
Std Dev Hours	222.6	28.3	145.5	24.5	182.1	7.5	0.0	0.4	119.6	1.5	505.4
Hours	561	1,143	732	42	882	13	0	1	404	3	3,781
Min Hours	0	357	89	0	86	0	0	0	0	0	761
Max Hours	433	412	377	42	425	13	0	1	229	3	1771
Total Average Hours	324	95	248	192	328	46	15	40	275	40	1603
Total Std Dev Hours	196.5	172.7	138.9	243.9	167.0	88.5	45.4	90.7	215.4	91.8	686.9
Total Hours	3,887	1,143.4	2,978	2,309	3,939	552	181	475	3,298	478	19,239
Total Min Hours	0	0	89	0	86	0	0	0	0	0	654
Total Max Hours	555	412.2	487	585	513	261	158	277	566	271	2427

Table 4 - LAVWMA FYE 2025 monthly percent pump utilization; quarterly and YTD summaries provided below monthly values

	Pump Utilization
Q1	
Jul-2024	9.8%
Aug-2024	12.2%
Sep-2024	17.0%
Q2	
Oct-2024	21.3%
Nov-2024	30.0%
Dec-2024	35.8%
Q3	
Jan-2025	34.1%
Feb-2025	40.1%
Mar-2025	35.9%
Q4	
Apr-2025	27.3%
May-2025	18.7%
Jun-2025	11.7%
Q1	
Average Pump Utilization	13.0%
Min Pump Utilization	9.8%
Max Pump Utilization	17.0%
Q2	
Average Pump Utilization	29.0%
Min Pump Utilization	21.3%
Max Pump Utilization	35.8%
Q3	
Average Pump Utilization	36.7%
Min Pump Utilization	34.1%
Max Pump Utilization	40.1%
Q4	
Average Pump Utilization	19.2%
Min Pump Utilization	11.7%
Max Pump Utilization	27.3%
Total Average Pump Utilization	24.5%
Total Min Pump Utilization	9.8%
Total Max Pump Utilization	40.1%

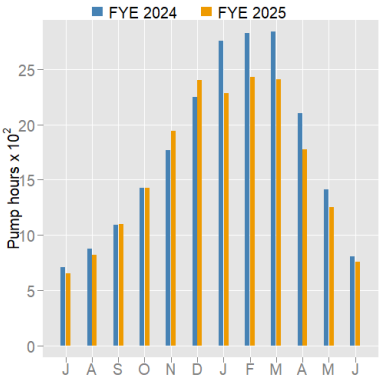

Figure 6- LAVWMA FYE 2024 & FYE 2025 monthly total pump hours through Jun-2025

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

Basin Levels

Table 5 - LAVWMA FYE 2025 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-2024	2.01	0.08	2.38	1.49
Aug-2024	3.35	0.08	3.48	2.31
Sep-2024	3.09	0.09	3.21	2.13
Q2				
Oct-2024	2.87	0.09	2.95	1.97
Nov-2024	3.75	0.11	3.30	2.39
Dec-2024	4.78	0.11	4.19	3.03
Q3				
Jan-2025	2.72	0.11	4.05	2.30
Feb-2025	5.51	0.34	4.50	3.45
Mar-2025	5.31	0.25	3.35	2.97
Q4				
Apr-2025	2.38	0.21	3.60	2.06
May-2025	1.68	0.20	2.38	1.42
Jun-2025	2.49	0.21	2.59	1.76
Q4				
Average	2.18	0.21	2.86	1.75
Minimum	1.68	0.20	2.38	1.42
Maximum	2.49	0.21	3.60	2.06
YTD				
Average	3.33	0.16	3.33	2.27
Minimum	1.68	0.08	2.38	1.42
Maximum	5.51	0.34	4.50	3.45

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 2025 flow is 3,356 MG at an estimated cost of $1,052/MG.

Table 6 - LAVWMA FYE 2025 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**	**325.05**	**219.24**	**544.29**
Jul-2024	0.00	103.27	42.54	145.81
Aug-2024	0.00	108.55	67.49	176.04
Sep-2024	0.00	113.23	109.21	222.44
Q2	**287.21**	**452.93**	**495.59**	**1,235.72**
Oct-2024	16.60	134.64	143.90	295.15
Nov-2024	108.50	149.06	162.55	420.11
Dec-2024	162.11	169.22	189.14	520.47
Q3	**466.22**	**492.09**	**578.39**	**1,536.70**
Jan-2025	147.95	163.03	179.81	490.79
Feb-2025	165.77	160.47	195.52	521.76
Mar-2025	152.50	168.60	203.05	524.15
Q4	**75.53**	**364.43**	**373.73**	**813.69**
Apr-2025	75.53	137.89	162.96	376.38
May-2025	0.00	123.08	142.14	265.22
Jun-2025	0.00	103.46	68.63	172.09
Total	828.95	1,634.50	1,666.95	4,130.40
Q4				
Average	25.18	121.48	124.58	271.23
Minimum	0.00	103.46	68.63	172.09
Maximum	75.53	137.89	162.96	376.38
YTD				
Average	69.08	136.21	138.91	344.20
Minimum	0.00	103.27	42.54	145.81
Maximum	165.77	169.22	203.05	524.15

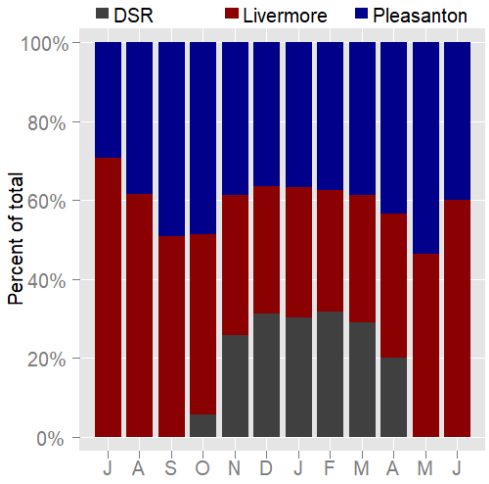

Figure 7- LAVWMA FYE 2025 through Jun-2025 monthly export flows by region as a percent of total; DSR = Dublin San Ramon

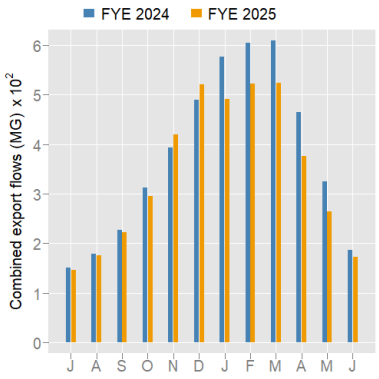

Figure 8 - LAVWMA FYE 2024 & FYE 2025 through Jun-2025 monthly combined export flows (MG)

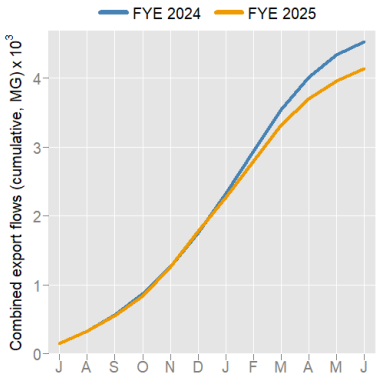

Figure 9 - LAVWMA FYE 2024 & FYE 2025 through Jun-2025 monthly cumulative combined export flows (MG)

Expenditures & Budget Utilization: Labor & O&M

Expenses this quarter included crane testing and landscape/weed maintenance (Nov-Jun). Overall O&M expenses decreased in Q4 compared to Q3.

Table 7 - LAVWMA FYE 2025 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	**$297,739**	**$324,092**	**$621,831**	**$1,142**	**$372**
Jul-2024	$84,522	$118,392	$202,915	$1,392	$453
Aug-2024	$105,323	$88,786	$194,109	$1,103	$359
Sep-2024	$107,893	$116,914	$224,807	$1,011	$329
Q2	**$249,426**	**$501,993**	**$751,418**	**$608**	**$198**
Oct-2024	$63,070	$125,457	$188,527	$639	$208
Nov-2024	$101,340	$170,910	$272,250	$648	$211
Dec-2024	$85,015	$205,626	$290,641	$558	$182
Q3	**$317,223**	**$682,774**	**$999,997**	**$651**	**$212**
Jan-2025	$82,215	$245,849	$328,064	$668	$218
Feb-2025	$92,307	$208,453	$300,760	$576	$188
Mar-2025	$142,701	$228,472	$371,173	$708	$231
Q4	**$282,512**	**$465,165**	**$747,677**	**$919**	**$299**
Apr-2025	$104,897	$193,294	$298,191	$792	$258
May-2025	$80,408	$108,132	$188,539	$711	$232
Jun-2025	$97,207	$163,740	$260,947	$1,516	$494
Total	$1,146,900	$1,974,024	$3,120,924	$756	$246
Q4					
Average	$94,171	$155,055	$249,226	$1,006	$328
Minimum	$80,408	$108,132	$188,539	$711	$232
Maximum	$104,897	$193,294	$298,191	$1,516	$494
YTD					
Average	$95,575	$164,502	$260,077	$860	$280
Minimum	$63,070	$88,786	$188,527	$558	$182
Maximum	$142,701	$245,849	$371,173	$1,516	$494

Table 8 - LAVWMA FYE 2025 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-2024	$202,915	5.7%	$3,327,584	$84,522	7.1%	$1,098,302
Aug-2024	$397,024	11.2%	$3,133,475	$189,846	16.1%	$992,978
Sep-2024	$621,831	17.6%	$2,908,668	$297,739	25.2%	$885,085
Q2						
Oct-2024	$810,358	23.0%	$2,720,141	$360,809	30.5%	$822,015
Nov-2024	$1,082,608	30.7%	$2,447,891	$462,149	39.1%	$720,675
Dec-2024	$1,373,250	38.9%	$2,157,250	$547,164	46.3%	$635,660
Q3						
Jan-2025	$1,701,314	48.2%	$1,829,185	$629,380	53.2%	$553,444
Feb-2025	$2,002,074	56.7%	$1,528,425	$721,686	61.0%	$461,138
Mar-2025	$2,373,246	67.2%	$1,157,253	$864,387	73.1%	$318,437
Q4						
Apr-2025	$2,671,438	75.7%	$859,061	$969,285	81.9%	$213,539
May-2025	$2,859,977	81.0%	$670,522	$1,049,693	88.7%	$133,131
Jun-2025	$3,120,924	88.4%	$409,575	$1,146,900	97.0%	$35,924

Table 9 - LAVWMA FYE 2025 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	**1,349.5**	
Jul-2024	383.5	2.2
Aug-2024	471.5	2.7
Sep-2024	494.5	2.9
Q2	**1,138.0**	
Oct-2024	286.5	1.7
Nov-2024	464.0	2.7
Dec-2024	387.5	2.2
Q3	**1,394.8**	
Jan-2025	358.0	2.1
Feb-2025	409.8	2.4
Mar-2025	627.0	3.6
Q4	**1,267.0**	
Apr-2025	475.0	2.7
May-2025	352.5	2.0
Jun-2025	439.5	2.5
Total	5,149.3	
Q4		
Average	422.3	2.4
Minimum	352.5	2.0
Maximum	475.0	2.7
YTD		
Average	429.1	2.5
Minimum	286.5	1.7
Maximum	627.0	3.6

Expenditures: Livermore Sole Use Facilities

Table 10 - LAVWMA FYE 2025 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-2024	$0	$745	$745
Aug-2024	$0	$609	$609
Sep-2024	$0	$686	$686
Q2			
Oct-2024	$401	$0	$401
Nov-2024	$1,203	$657	$1,860
Dec-2024	$401	$812	$1,213
Q3			
Jan-2025	$0	$786	$786
Feb-2025	$0	$747	$747
Mar-2025	$0	$815	$815
Q4			
Apr-2025	$0	$88	$88
May-2025	$0	$743	$743
Jun-2025	$1,640	$697	$2,338
	Labor	A/P	Total
Q1			
Total	$0	$2,040	$2,040
Average	$0	$680	$680
Minimum	$0	$609	$609
Maximum	$0	$745	$745
Q2			
Total	$2,004	$1,469	$3,474
Average	$668	$490	$1,158
Minimum	$401	$0	$401
Maximum	$1,203	$812	$1,860
Q3			
Total	$0	$2,349	$2,349
Average	$0	$783	$783
Minimum	$0	$747	$747
Maximum	$0	$815	$815
Q4			
Total	$1,640	$1,528	$3,168
Average	$547	$509	$1,056
Minimum	$0	$88	$88
Maximum	$1,640	$743	$2,338
Total Total	$3,645	$7,385	$11,030
Total Average	$304	$615	$919
Total Minimum	$0	$0	$88
Total Maximum	$1,640	$815	$2,338

Detailed YTD O&M Budget Comparison to Actual Expenses

	LAVWMA															
	BUDGET COMPARISON TO ACTUAL EXPENSES: GOODS & SERVICES														Current FY Period:	12
	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 2024-2025	2024	2024	2024	2024	2024	2024	2025	2025	2025	2025	2025	2025	TOTAL	Budget
Project Total: lavcost LAVWMA	**Labor**															
	Staff	$1,182,824	$84,522	$105,323	$107,893	$63,070	$101,340	$85,015	$82,215	$92,307	$142,701	$104,897	$80,408	$97,207	$1,146,900	$1,182,824
	Subtotal	**$1,182,824**	**$84,522**	**$105,323**	**$107,893**	**$63,070**	**$101,340**	**$85,015**	**$82,215**	**$92,307**	**$142,701**	**$104,897**	**$80,408**	**$97,207**	**$1,146,900**	**$1,182,824**
Phase Total: supply	**Materials & Supplies**															
	Operations Supplies	$21,400	546	$679	$242	$20	$26	$140	$144	$162	$157	$1,274	$515	$4,174	$8,079	$21,400
	Mechanical Supplies	$31,890	$527	$911	$294	$863	$1,530	$263	$4,048	$99	$541	$4,942	$8,143	$1,811	$23,971	$31,890
	Electrical Supplies	$38,900	$15		$10,743	$2,112		$372			$2,153	$2,866	$13,314	$8,641	$40,218	$38,900
	Subtotal	**$92,190**	**$1,088**	**$1,589**	**$11,279**	**$2,995**	**$1,556**	**$775**	**$4,192**	**$261**	**$2,852**	**$9,083**	**$21,972**	**$14,626**	**$72,268**	**$92,190**
Analysis Biochemical Oxy Demand & Total Langelier Index	**Laboratory Analysis**															
	Compliance Testing	$11,300	$1,435	$1,148	$1,148	$1,317	$1,148	$1,148	$1,465	$1,172	$1,172	$1,172	$1,172	$1,172	$14,669	$11,300
	Operational Support Testing	$4,900	$628	$628	$628	$628	$628	$628	$642	$0	$0	$0	$642	$0	$5,052	$4,900
	Special Sampling	$29,400	$2,485	$788	$2,288	$2,860	$2,288	$2,288	$1,956	$2,340	$1,938	$2,340	$1,956	$2,340	$25,867	$29,400
	Subtotal	**$45,600**	**$4,548**	**$2,564**	**$4,064**	**$4,805**	**$4,064**	**$4,064**	**$4,063**	**$3,512**	**$3,110**	**$3,512**	**$3,770**	**$3,512**	**$45,588**	**$45,600**
Phase Total: cservi	**Contractual Services**															
	Sub-surface Repairs	$15,750													$0	$15,750
	Street Sweeping	$5,000													$0	$5,000
	Cathodic Protection Survey & Repairs	$47,250													$0	$47,250
	Underground Service Alert	$4,800	$610												$610	$4,800
	SCADA software maintenance contract	$10,000	$5,365												$5,365	$10,000
	Remote monitoring annual service for PS and Re	$1,950					$115		$502						$617	$1,950
	HVAC Maintenance/Repairs	$800													$0	$800
	Termite/Pest Control	$950													$0	$950
	Landscape/weed maintenance	$11,200						$3,854						$7,709	$11,563	$11,200
	Smartmeter Covers	$1,800									$2,118					$1,800
	Janitorial Service	$10,000		$1,950		$975	$975	$975	$975	$975	$975	$975	$2,125	$1,950	$12,849	$10,000
	Other Services	$3,130							$47		$548				$595	$3,130
	Misc Professional/Contractual Services	$31,500			$317	$270				$1,302	$317		$317	$3,142	$5,664	$31,500
	Subtotal	**$144,130**	**$5,976**	**$1,950**	**$317**	**$1,245**	**$1,090**	**$4,829**	**$1,523**	**$2,277**	**$3,958**	**$975**	**$2,442**	**$12,800**	**$39,382**	**$144,130**
Phase Total: utilit	**Utilities**															
	Electricity (PG&E)	$2,062,355	$106,398	$82,537	$100,649	$116,266	$163,865	$195,556	$235,477	$202,257	$217,950	$179,579	$79,331	$132,203	$1,812,069	$2,062,355
	Water & Sewer (Pleasanton)	$1,100			$195		$190		$184		$201		$207	$201	$1,177	$1,100
	Water (EBMUD)	$1,300	$236		$264			$256	$264		$256		$264	$251	$1,791	$1,300
	Telephone/communications	$1,000	$146	$146	$146	$146	$146	$146	$146	$146	$146	$146	$146	$146	$1,750	$1,000
	WW Treatment (DSRSD)	$0													$0	$0
	Subtotal	**$2,065,755**	**$106,780**	**$82,683**	**$101,254**	**$116,412**	**$164,200**	**$195,958**	**$236,071**	**$202,403**	**$218,552**	**$179,724**	**$79,948**	**$132,801**	**$1,816,787**	**$2,065,755**
Phase Total: nonrou	**Non-Routine**															
		$0													$0	$0
		$0													$0	$0
	Subtotal	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
	Monthly Total		**$202,915**	**$194,109**	**$224,807**	**$188,527**	**$272,250**	**$290,641**	**$328,064**	**$300,760**	**$371,173**	**$298,191**	**$188,539**	**$260,947**	**$3,120,924**	**$3,530,499**
	YTD Total	**$3,530,499**	**$202,915**	**$397,024**	**$621,831**	**$810,358**	**$1,082,608**	**$1,373,250**	**$1,701,314**	**$2,002,074**	**$2,373,246**	**$2,671,438**	**$2,859,977**	**$3,120,924**		
	Combined Export Flow, mg	**3356**	**146**	**176**	**222**	**295**	**420**	**520**	**491**	**522**	**524**	**376**	**265**	**172**	**4,130**	**3,356**
	Pumping Efficiency		**74.1%**	**76.7%**	**73.2%**	**75.8%**	**74.8%**	**73.8%**	**73.8%**	**73.8%**	**75.3%**	**73.9%**	**74.4%**	**71.7%**		
	Monthly Cost, $/mg		**$1,392**	**$1,103**	**$1,011**	**$639**	**$648**	**$558**	**$668**	**$576**	**$708**	**$792**	**$711**	**$1,516**		
	YTD Running Cost, $/mg	**$1,052**	**$1,392**	**$1,234**	**$1,142**	**$965**	**$860**	**$771**	**$749**	**$717**	**$716**	**$723**	**$723**	**$756**	**$756**	

LAVWMA
BUDGET COMPARISON TO ACTUAL EXPENSES: LABOR

														Current FY Period:	12
		ACTUAL EXPENSES BILLED TO LAVWMA FOR REGULAR O&M													
		Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	YTD	YTD
FY 2024-2025		2024	2024	2024	2024	2024	2024	2025	2025	2025	2025	2025	2025	TOTAL	Budget
Estimated Personnel Hours															
Division 51 - FOD	50	20.00	-	-	-	38.00	-	-	-	4.00	34.25	-	-	96.25	50.00
Water/Wastewater Sys Lead Op	0													-	-
Water/Wastewater Sys OP IV-On Call	0					17.00					8.75			25.75	-
Water/Wastewater Sys OP IV														-	-
Water/Wastewater Sys OP III	0													-	-
Water/Wastewater Sys OP I/II	43	20.00				21.00				4.00	25.50			70.50	43.00
Maintenance Worker	0													-	-
Supervisor	7													-	7.00
Division 52 - WWTP	2,832	148.00	176.50	251.50	164.00	172.00	180.00	192.00	202.75	285.75	190.75	165.50	195.00	2,323.75	2,832.00
Process Lead Operator IV/V	289	15.00	32.00	33.00	13.00	13.00	24.00	16.00	21.00	38.00	32.00	16.00	22.00	275.00	289.00
Senior WWTP Operator III	1,013	45.00	46.50	67.50	52.50	49.00	34.00	43.50	47.00	71.25	50.25	48.00	47.00	601.50	1,013.00
WWTP Supervisor		3.50						6.00	9.00	8.50	7.00	4.00	6.50	44.50	
Operator In Training	0													-	-
Operator II	1,431	84.50	98.00	151.00	98.50	110.00	122.00	116.50	122.25	166.00	101.50	97.50	116.50	1,384.25	1,431.00
Operator II (SLSS)	0													-	-
Operations Superintendent	99							9.00		2.00			3.00	14.00	99.00
Ops Director								1	3.5						
Division 53 - MECH	1,107	176.00	250.50	155.00	85.00	213.50	174.50	125.50	160.50	251.75	194.50	137.50	148.00	2,072.25	1,107.00
Senior Mechanic-Crane Cert	54	41.50	85.00	53.00	24.50	78.00	43.00	50.00	61.00	102.50	45.00	51.50	54.50	689.50	54.00
Senior Mechanic - USA	72	4.00	9.00	21.00	20.00	11.00	18.00	22.00	29.00	26.00	17.00	23.00	17.00	217.00	72.00
Maintenance Worker	54													-	54.00
Mechanic I/II	882	111.50	141.00	59.50	28.00	99.00	88.50	36.00	49.50	86.00	108.50	51.50	65.00	924.00	882.00
Mechanic II-Crane Cert	0													-	-
Mechanic I/II - USA	0	19.00	15.50	21.50	12.50	25.50	25.00	17.50	21.00	37.25	24.00	11.50	11.50	241.75	-
Mechanic II-Crane Cert - USA	0													-	-
Supervisor	45													-	45.00
Division 54 - ELEC	1,080	34.50	42.50	88.00	34.50	37.50	32.00	40.50	45.50	80.00	53.00	47.50	95.00	630.50	1,080.00
Senior Instrument/Controls Tech	45	7.50	6.00	9.00	10.50	4.50	7.50	7.50	6.50	12.00	8.00	7.50	4.00	90.50	45.00
Instrumentation & Controls Tech I/II	504	17.00	12.50	31.00	16.00	20.50	16.50	26.00	26.00	26.00	21.00	26.50	21.00	260.00	504.00
Ice Supervisor		2.00	3.50	2.00	1.00	1.00		1.00		3.00			2.00	15.50	-
Senior Electrician	45	3.00	11.00	4.00	1.00	4.00	2.00		9.00	15.00		4.00	13.00	66.00	45.00
Electrician I/II	441	4.00	5.00	36.00	4.00	6	6.00		3.00	18.00	19.00	4.00	54.00	159.00	441.00
Principal Eletrical Engineer	45	1.00	4.50	6.00	2.00	1.50		6.00	1.00	6.00	5.00	5.50	1.00	39.50	45.00
Division 55 - Laboratory	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EC Inspector II-Pretreatment	0													-	-
Laboratory Technician	0													-	-
Supervisor	0													-	-
Division 26 - SAFETY	54	-	-	-	-	-	-	-	-	-	-	-	-	-	54.00
Safety Officer	54	-	-	-	-	-	-	-	-	-	-	-		-	54.00
Division 40 - ENG	288	5.00	2.00	-	3.00	3.00	1.00	-	1.00	5.50	2.50	2.00	1.50	26.50	252.00
Senior Civil Engineer-SME	36														-
Associate Engineer	108	5.00	2.00		3.00	3.00	1.00		1.00	5.50	2.50	2.00	1.50	26.50	108.00
Construction Inspector I/II	72													-	72.00
Engineering Technician II	36													-	36.00
GIS Analyst	36													-	36.00
Total Estimated Personnel Hours	5,411														
FTE	2.6														
Total Monthly Hours		383.50	471.50	494.50	286.50	464.00	387.50	358.00	409.75	627.00	475.00	352.50	439.50	5,149.25	5,375.00

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
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
4/1/2025	14.98					7.01	7.09	2.18			2		10
4/2/2025	15.06		6.1		11.0	6.72	7.43	2.20					
4/3/2025	18.37					7.43	7.79	2.20					
4/4/2025	15.16					7.33	7.53	1.94					
4/5/2025	15.13					7.29	7.48	1.92					
4/6/2025	15.13					7.27	7.43	2.91					
4/7/2025	13.55					7.29	7.43	2.08					
4/8/2025	10.80					7.27	7.46	1.81			2	<	10
4/9/2025	13.82		4.7		6	7.25	7.47	1.69					
4/10/2025	15.07					6.70	7.55	1.75					
4/11/2025	9.97					7.24	7.55	1.76					
4/12/2025	10.87					7.25	7.43	1.39					
4/13/2025	14.55					7.15	7.43	1.99					
4/14/2025	11.88					7.06	7.32	1.84					
4/15/2025	10.58					7.06	7.38	1.64		<	1.8	<	10
4/16/2025	12.17		4.5		5.4	7.06	7.38	1.54					
4/17/2025	13.20					6.87	7.17	2.08					
4/18/2025	9.91					6.90	7.29	1.73					
4/19/2025	14.13					7.05	7.36	1.75					
4/20/2025	12.54					7.15	7.32	1.65					
4/21/2025	9.93					7.00	7.39	1.31					
4/22/2025	12.52		4.5		6.0	7.05	7.33	1.43			2	<	10
4/23/2025	9.64					7.17	7.36	1.48					
4/24/2025	11.62					7.21	7.44	1.41					
4/25/2025	8.90					7.30	7.44	1.69					
4/26/2025	11.41					7.12	7.44	1.54					
4/27/2025	11.84					7.19	7.36	2.07					
4/28/2025	11.37					7.17	7.52	1.79					
4/29/2025	10.58					7.15	7.51	1.89		<	1.8	<	10
4/30/2025	11.71		5.2		7.0	7.19	7.49	1.63					

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
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
5/1/2025	7.81					7.24	7.46						
5/2/2025	7.35					7.29	7.47						
5/3/2025	10.76					7.34	7.51						
5/4/2025	11.22					7.24	7.46						
5/5/2025	9.83					7.10	7.38						
5/6/2025	11.46					7.10	7.49			<	2		10
5/7/2025	6.81		7.2		9.2	7.29	7.71						
5/8/2025	9.05					7.49	8.06						
5/9/2025	7.24					6.72	8.22						
5/10/2025	9.51					7.28	7.65						
5/11/2025	11.39					7.29	7.51						
5/12/2025	9.24					7.38	7.57						
5/13/2025	9.47					7.22	8.03					<	10
5/14/2025	7.15		4.1		9.1	7.25	7.47						
5/15/2025	10.44					7.30	7.43						
5/16/2025	7.00					7.04	7.37						
5/17/2025	8.43					7.30	7.41						
5/18/2025	9.93					7.25	7.41						
5/19/2025	8.08					7.18	7.36						
5/20/2025	9.00					7.20	7.33				17	<	10
5/21/2025	6.86		6		7.0	7.15	7.29						
5/22/2025	6.97					7.23	7.32						
5/23/2025	6.11					7.13	7.41						
5/24/2025	7.37					7.27	7.38						
5/25/2025	8.39					7.27	7.38						
5/26/2025	9.10					7.10	7.34						
5/27/2025	11.27					7.22	7.36				9		10
5/28/2025	11.31		9.2		20.0	7.28	7.39						
5/29/2025	5.13					7.13	7.34						
5/30/2025	4.04					6.16	7.32						
5/31/2025	7.52					7.10	7.28						

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
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
6/1/2025	5.34					7.23	7.34						
6/2/2025	7.13					7.15	7.37						
6/3/2025	6.27					7.15	7.36				8	<	10
6/4/2025	4.74		4.8		7	7.14	7.32						
6/5/2025	5.78					7.01	7.34						
6/6/2025	5.25					7.19	7.36						
6/7/2025	5.71					7.27	7.34						
6/8/2025	9.02					7.25	7.36						
6/9/2025	6.86					7.22	7.87						
6/10/2025	4.95					7.29	7.46				8		40
6/11/2025	4.57		4.5		5.2	7.22	7.39						
6/12/2025	5.22					7.24	7.38						
6/13/2025	2.71					7.27	7.39						
6/14/2025	5.74					7.27	7.39						
6/15/2025	6.50					7.18	7.36						
6/16/2025	6.33					7.25	7.41						
6/17/2025	6.51					7.22	7.34				23	<	10
6/18/2025	6.52		4.7		9.6	7.22	7.32						
6/19/2025	6.52					6.94	7.37						
6/20/2025	5.23					7.20	7.34						
6/21/2025	5.08					7.24	7.36						
6/22/2025	6.54					7.25	7.33						
6/23/2025	6.44					7.25	7.39						
6/24/2025	6.38					7.19	7.36			<	2	<	10
6/25/2025	5.08		5.2		7.4	7.19	7.36						
6/26/2025	4.29					7.23	7.44						
6/27/2025	5.04					7.20	7.38						
6/28/2025	6.05					7.14	7.33						
6/29/2025	6.48					7.13	7.29						
6/30/2025	3.82					7.12	7.37						

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 (Apr-25 through Jun-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	04/01/25	600	20.0	72	309	7.6	7.6	0
Livermore	05/05/25	560	17.0	72	310	7.6	7.7	-0.1
DSRSD	05/13/25	720	23.0	108	349	7.5	7.3	0.2
LAVWMA	05/13/25	686	23.0	104	354	7.32	7.3	0