

LAVWMA

Prepared by



Dublin San Ramon  
Services District

*Water, wastewater, recycled water*

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%.

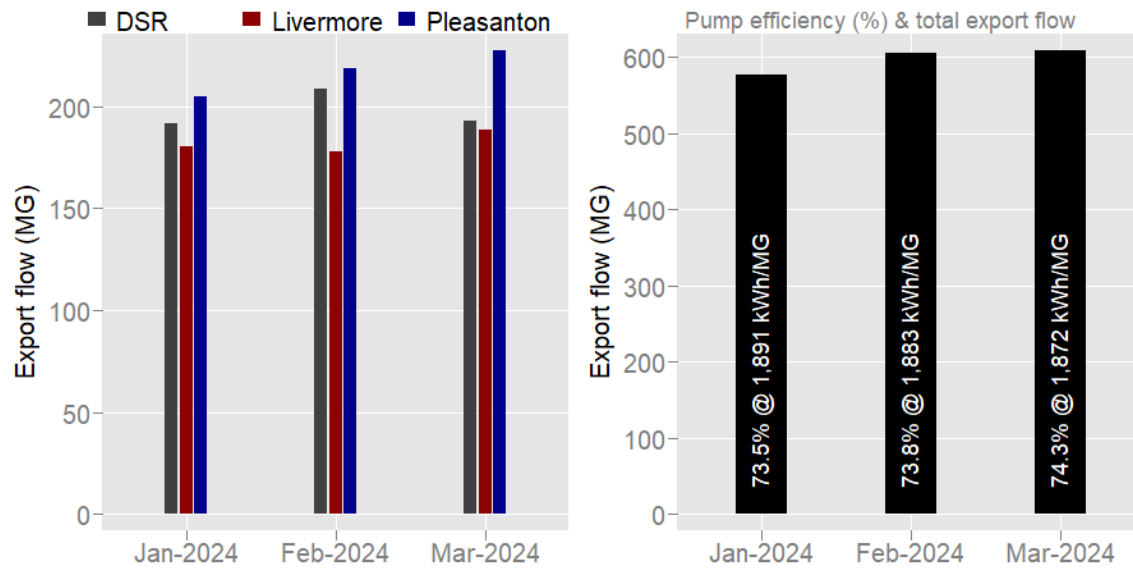


Figure 1 - LAVWMA Quarter 3 FYE 2024 export flows for Jan-2024, Feb-2024, & Mar-2024; monthly flows shown by source (left plot) and as total (right plot) with pump efficiency (%) at noted kilowatt hour (kWh) per million gallons (MG)

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.

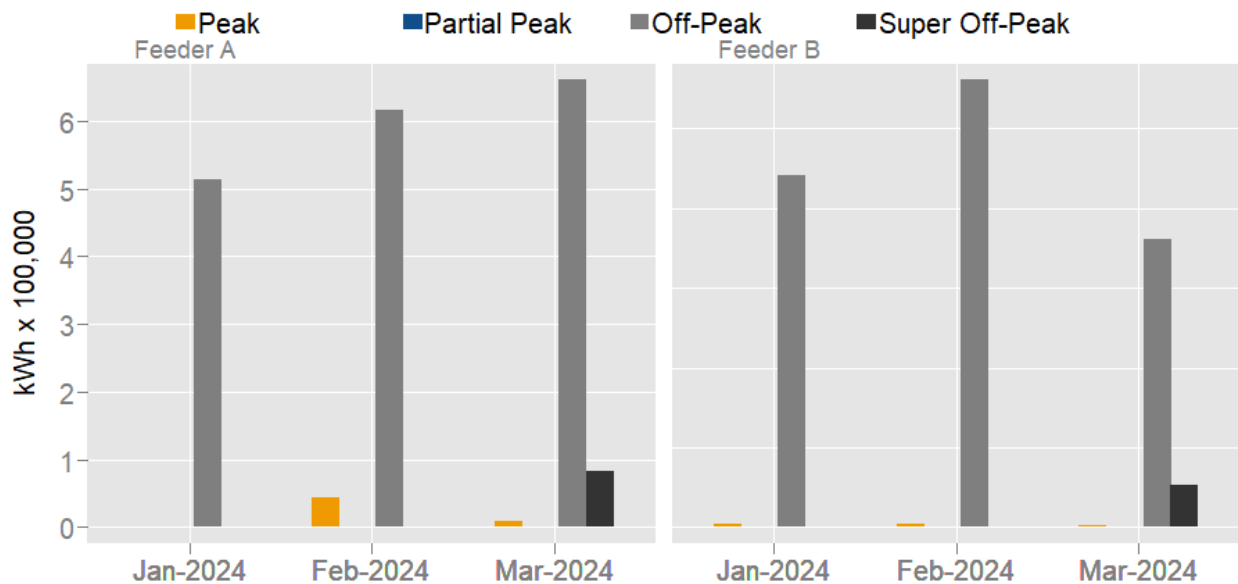


Figure 2 - LAVWMA Quarter 3 FYE 2024 electric usage as kilowatt hour (kWh) for Jan-2024, Feb-2024, & Mar-2024; monthly usage displayed separately for feeder A (left) & feeder B (right) by time of use: peak, partial peak, off-peak; & super off-peak

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.

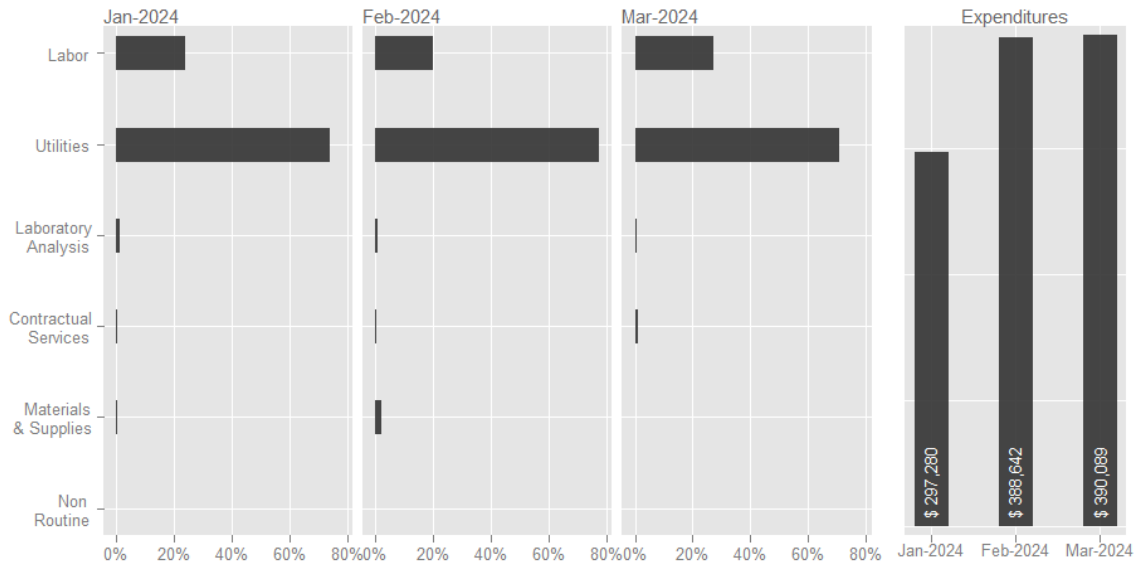


Figure 3 - LAVWMA Quarter 3 FYE 2024 expenditures for Jan-2024, Feb-2024, & Mar-2024 as percent of total cost by type (labor, utilizes, laboratory analysis, contractual services, materials & supplies, & non routine; left plot) and as monthly total (right plot)

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).

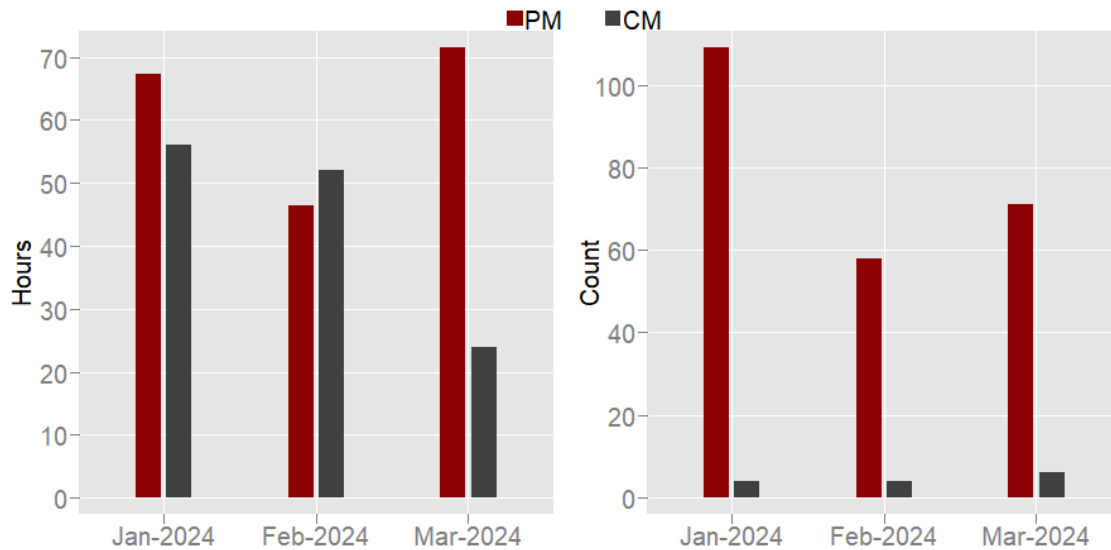


Figure 4 - LAVWMA Quarter 3 FYE 2024 preventative maintenance (PM) & corrective maintenance (CM) work order hours (left plot) and count (right plot) for Jan-2024, Feb-2024, & Mar-2024

## 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

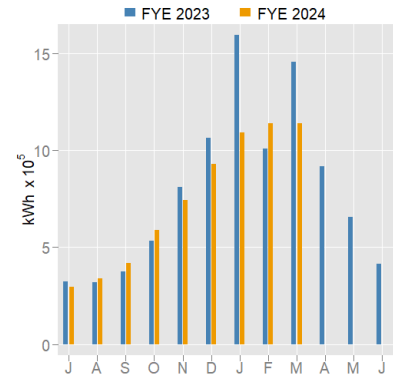


Figure 5 - LAVWMA monthly kWh usage FYE 2023 & FYE 2024 through Mar-2024

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)	Peak Cost (\$)	Partial Peak (kWh)	Off-Peak (kWh)	Super Off-Peak (kWh)	Peak Cost (\$)	
<b>Q1</b>										
Jul-2023	0	0	0	0	\$1,995	2,155	1,941	360,107	0	\$96,651
Aug-2023	0	0	276,136	0	\$64,834	2,471	2,123	8,393	0	\$8,605
Sep-2023	0	6	361,638	0	\$89,817	2,735	2,225	9,066	0	\$10,145
<b>Q2</b>										
Oct-2023	0	0	451,960	0	\$105,228	2,486	1,264	9,279	0	\$8,368
Nov-2023	240	0	183,254	0	\$49,078	3,335	0	445,239	0	\$100,076
Dec-2023	0	0	367,106	0	\$78,679	3,117	0	452,473	0	\$99,568
<b>Q3</b>										
Jan-2024	0	0	514,206	0	\$116,728	3,348	0	441,955	0	\$102,027
Feb-2024	44,071	0	615,830	0	\$152,272	3,259	0	561,045	0	\$146,672
Mar-2024	9,037	0	660,297	83,328	\$172,363	2,828	0	361,097	53,038	\$102,226
<b>Q3</b>										
Average	17,703	0	596,778	27,776	147,121	3,145	0	454,699	17,679	116,975
Total	53,108	0	1,790,333	83,328	441,362	9,435	0	1,364,097	53,038	350,925
Minimum	0	0	514,206	0	116,728	2,828	0	361,097	0	102,027
Maximum	44,071	0	660,297	83,328	172,363	3,348	0	561,045	53,038	146,672
<b>YTD</b>										
Average	5,928	1	381,159	9,259	92,333	2,859	839	294,295	5,893	74,926
Total	53,348	6	3,430,427	83,328	830,994	25,734	7,553	2,648,654	53,038	674,337
Minimum	0	0	0	0	1,995	2,155	0	8,393	0	8,368
Maximum	44,071	6	660,297	83,328	172,363	3,348	2,225	561,045	53,038	146,672

## 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%

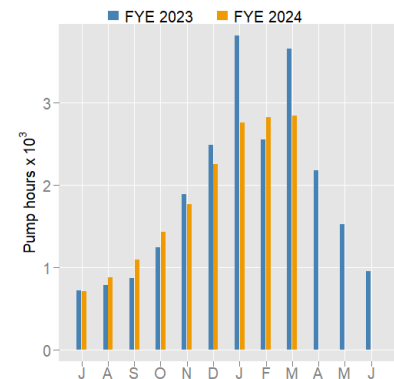


Figure 6- LAVWMA FYE 2023 & FYE 2024 through Mar-2024 monthly pump hours

<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

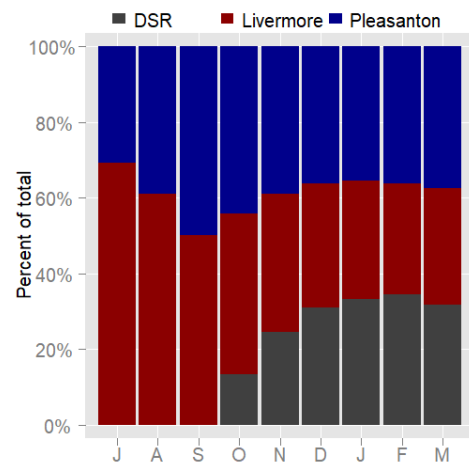


Figure 7- LAVWMA FYE 2024 through Mar-2024 monthly export flows by region as a percent of total DSR = Dublin San Ramon

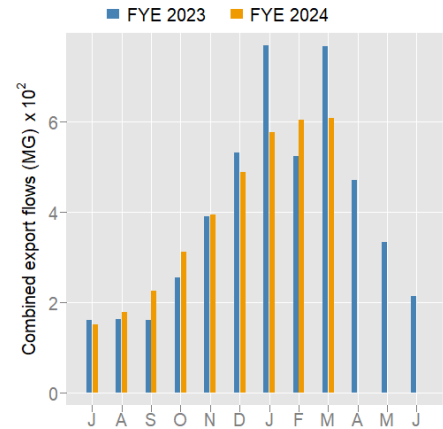


Figure 8 - LAVWMA FYE 2023 & FYE 2024 through Mar-2024 monthly combined export flows (MG)

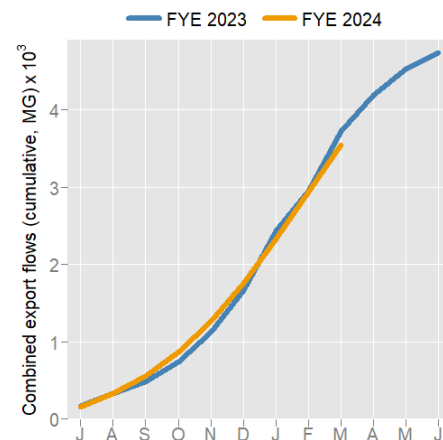


Figure 9 - LAVWMA FYE 2023 & FYE 2024 through Mar-2024 monthly cumulative combined export flows (MG)

## 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 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

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

# 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&M Budget Comparison to Actual Expenses

LAVWMA  
BUDGET COMPARISON TO ACTUAL EXPENSES: GOODS & SERVICES

Current FY Period: 9

		ACTUAL EXPENSES BILLED TO LAVWMA FOR REGULAR O&M													YTD	YTD
		Budget	July	August	September	October	November	December	January	February	March	April	May	June	TOTAL	Budget
		FY 2023-2024	2023	2023	2023	2023	2023	2023	2024	2024	2024	2024	2024	2024		
<b>Project Total:</b>	<b>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:</b>	<b>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</b>	<b>Laboratory Analysis</b>															
Biochemical Oxy	Compliance Testing	\$11,300	\$896	\$1,120	\$896	\$1,120	\$896	\$896	\$1,120	\$896	\$896				\$8,736	\$8,475
Demand & Total	Operational Support Testing	\$4,900	\$414	\$414	\$414	\$414	\$414	\$414	\$414	\$414	\$414				\$3,726	\$3,675
Langelier Index	Special Sampling	\$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:</b>	<b>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
	Termites/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	\$2,058				\$6,825	\$7,500
	Fire Extinguisher Maintenance	\$200									\$975				\$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:</b>	<b>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:</b>	<b>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>\$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>\$2,335,242</b>	<b>\$2,742,663</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>-</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>	<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>	2.6													
<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>-</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



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 (	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