



LAVWMA

QUARTERLY REPORT OF OPERATIONS

FY 2022-2023, 1st Quarter



Prepared by



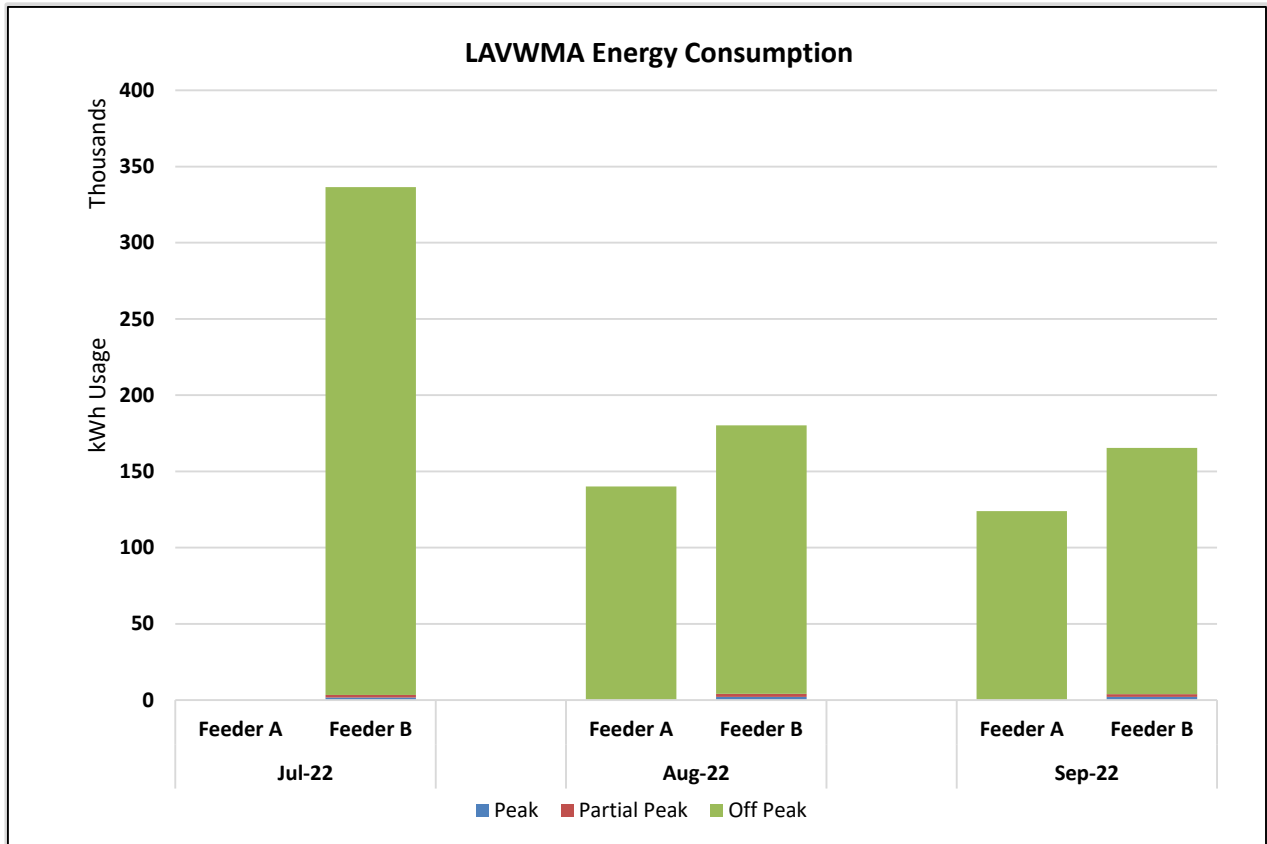
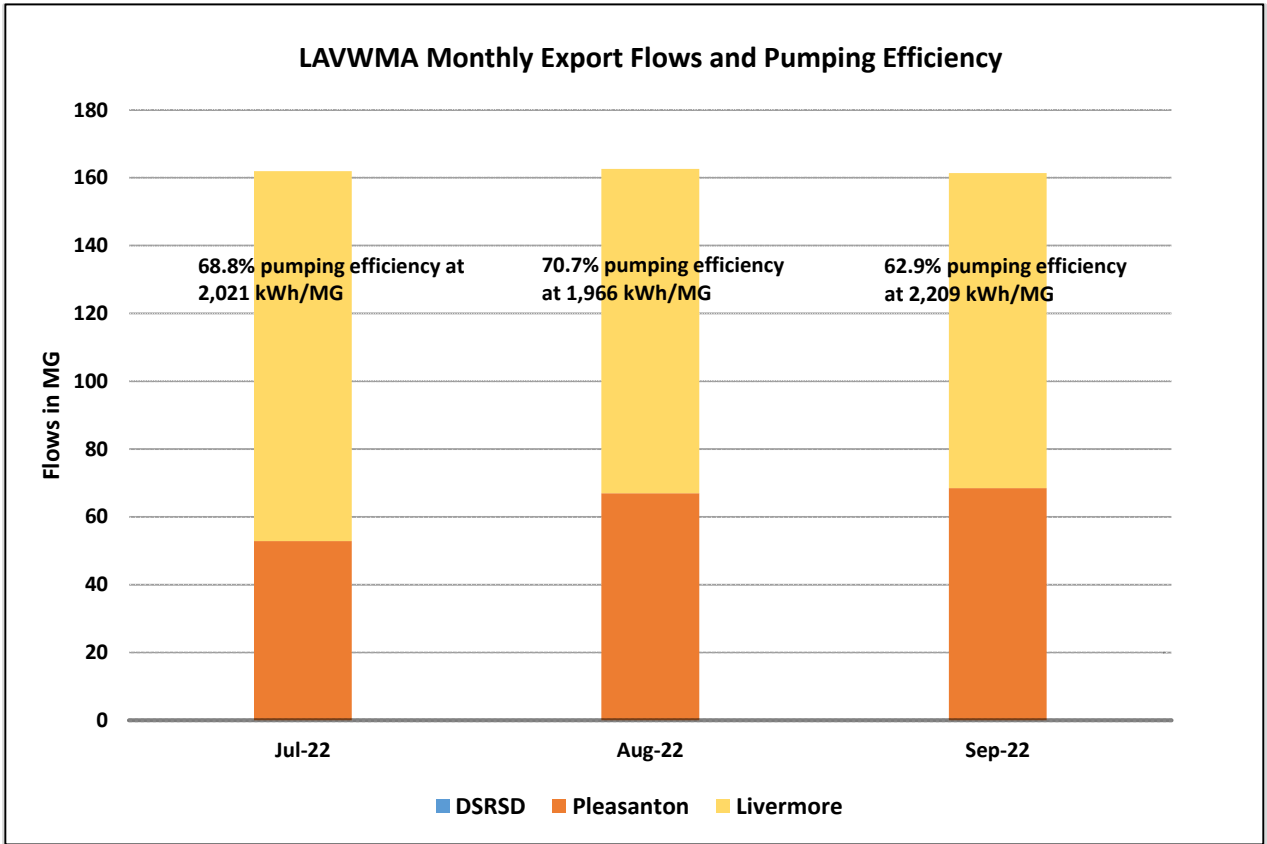
**Dublin San Ramon
Services District**

Water, wastewater, recycled water

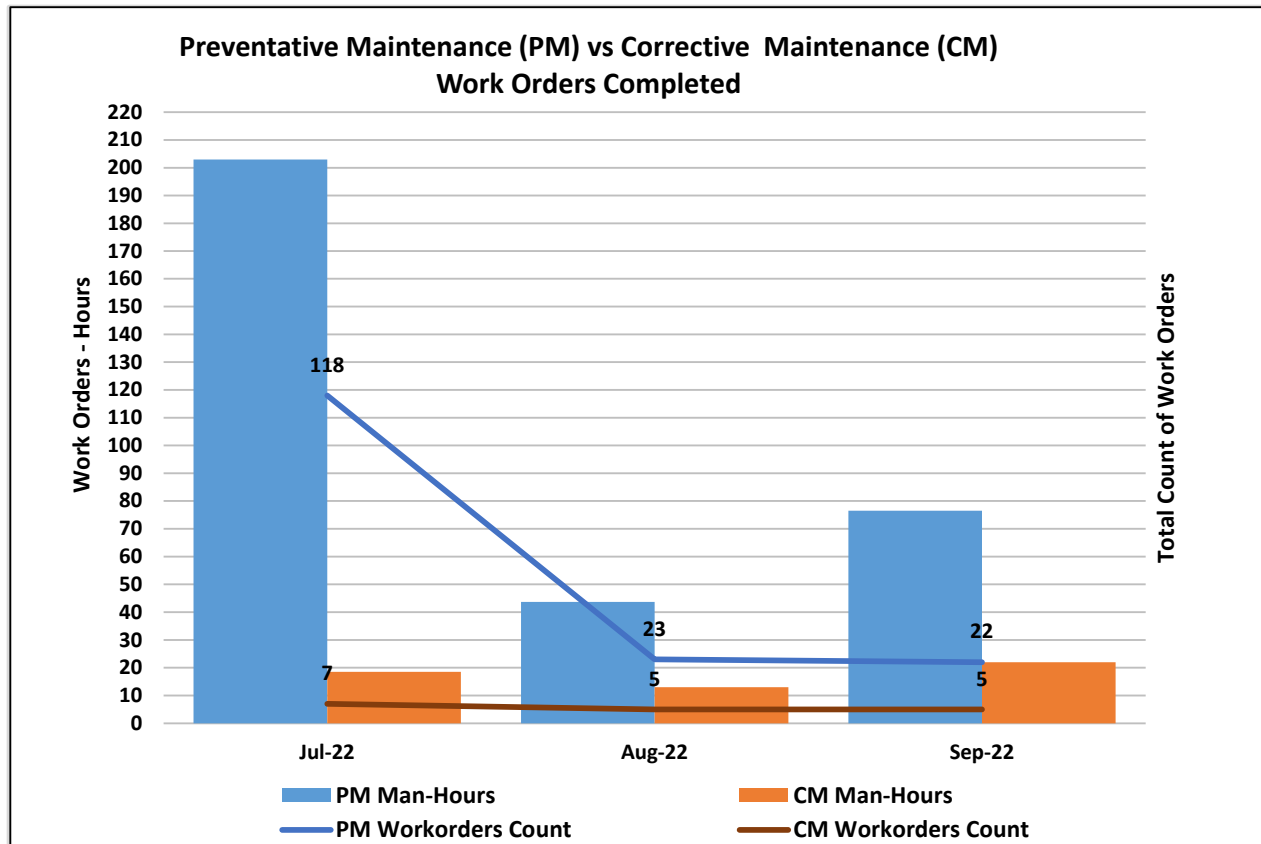
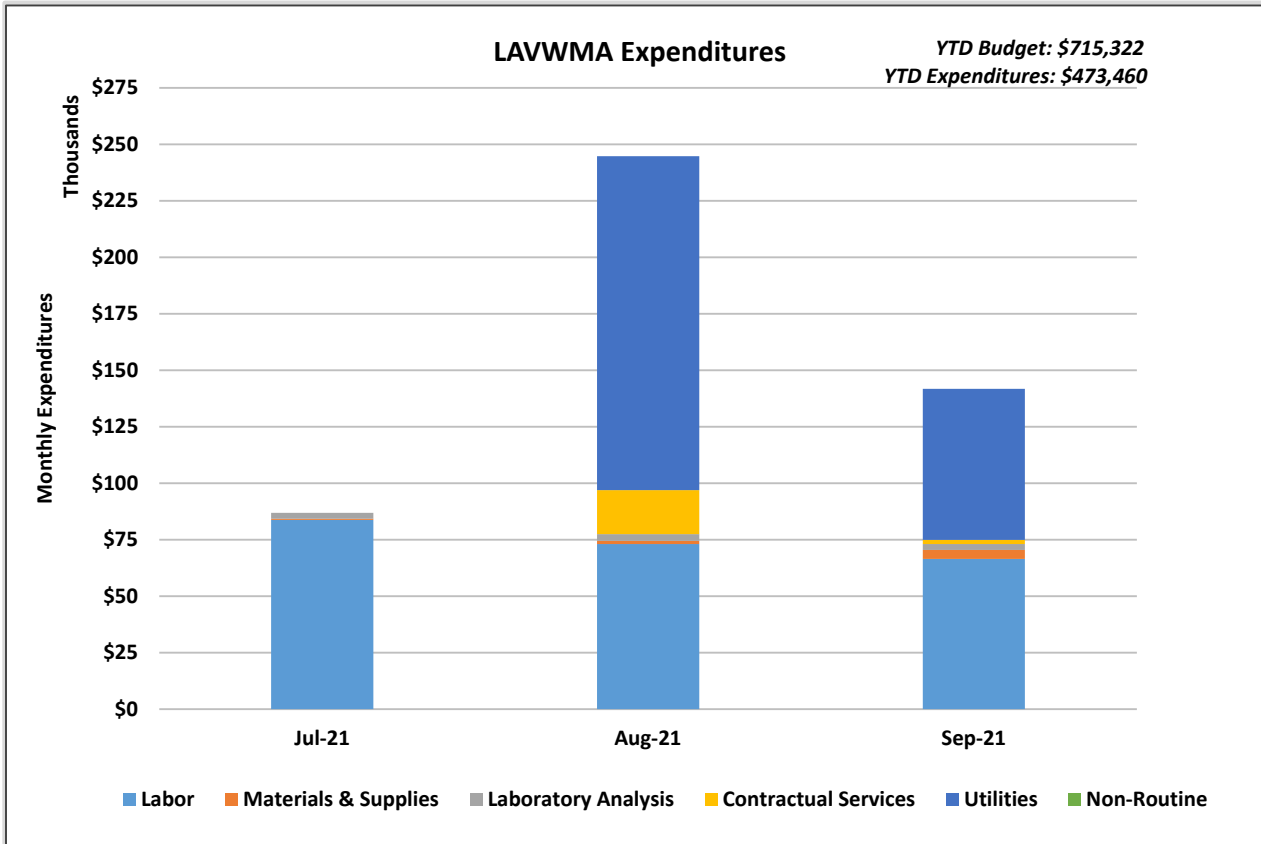
**QUARTERLY REPORT OF OPERATIONS
LAVWMA PUMPING AND CONVEYANCE SYSTEM
1st Quarter FY 2022-2023: July to September 2022**

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LAVWMA FYE 2023 FIRST QUARTER AT A GLANCE



LAVWMA FYE 2023 FIRST QUARTER AT A GLANCE



QUARTERLY REPORT OF OPERATIONS
LAVWMA PUMPING AND CONVEYANCE SYSTEM
1st Quarter FY 2022-2023: July to September 2022

1. EXECUTIVE SUMMARY

The Livermore-Amador Valley Water Management Agency (LAVWMA) pumping and effluent conveyance system operated normally during the first quarter of FY 2022-2023. During the quarter, a total of 485.94 million gallons of fully treated secondary effluent were pumped to San Francisco Bay via the East Bay Dischargers Authority (EBDA) outfall diffuser and San Leandro Sample Station (SLSS); the overall efficiency of the pumping system averaged 67.5%, with an average electrical cost of \$463 per million gallons, or \$151 per acre-foot.

Total year-to-date operations and maintenance (O&M) expense is \$473,460 or 17% of the O&M annual budget amount of \$2,861,290 and the overall cost of operation is \$974 per million gallons pumped or \$317 per acre-foot.

2. OPERATIONS

Of the 485.94 million gallons of effluent conveyed through the LAVWMA system, approximately 298 million gallons was from the City of Livermore, 188 million gallons from City of Pleasanton and none from DSRSD. Monthly export flow summary is shown on Table 4. Monthly reports sent to EBDA which detail daily export flows and monitoring analysis of the treated effluent during the quarter are shown on Table 9.

Currently PG&E implements a rate plan – broken down into peak, partial peak, off peak, and seasonal super off peak periods – that increases rates for energy used during certain periods of the day, based on energy demand across the energy grid. Throughout the reporting period, staff utilized an enhanced Operations Strategy, implementing an efficient pumping plan and avoided pumping during partial peak and peak PG&E energy demand periods where feasible.

In the past quarter, DSRSD staff continued to strategically manage LAVWMA’s holding basins to minimize the number of pumps running during a given billing cycle, based on anticipated flow from the City of Livermore and DSRSD’s wastewater treatment facilities. As a result, energy use was minimal, as is depicted by the LAVWMA Energy Consumption table on page 2.

As part of the Operations Energy Strategy, DSRSD staff continued to minimize demand costs by alternating Feeder operating pumps during the dry weather period. This may be more complicated at times during wet weather but is manageable during much of the year.

DSRSD’s Asset Management program is quickly growing in technology capable of predictive maintenance and risk reduction. The LAVWMA pipeline is equipped with over 60 vaults designed to protect the pipeline from damage. The vaults have equipment that releases air or lets air in, depending on the location. Historically the equipment malfunctions and the treated effluent water overfills the vault and is released to the environment due to the reaction time staff received a call and responds. The pilot of new water level watchdog devices in the vaults has been very successful. During the quarter there was one incident where smart detectors installed along the LAVWMA line alerted staff of potential overflow situations. As a result, staff were able to quickly respond and resolve the emergency before an overflow took place.

3. MAINTENANCE

During the quarter, 323 hours were spent to complete 163 preventative maintenance work orders and 54 hours to complete 17 corrective maintenance work orders on LAVWMA equipment and systems.

The following are some noteworthy maintenance activities during the quarter:

Electrical:

- Assisted with LAVWMA MCC during system outage requests
- Updated LAVWMA MCC install switches and relay settings
- Replaced LAVWMA MCC handles and tested pumps to ensure optimal operation
- Conducted repairs and replacements for the Uninterruptible Power Supply (UPS)
- Replaced damaged light pole on LAVWMA property

Instrumentation and Controls:

- Ongoing procurement of hardware to upgrade the remote monitoring equipment for all CP rectifier panels
- Completed training for new pump station operational dashboard
- Corrected issues with alarm notification software and mobile phones
- Added vibration sensor and monitoring equipment into the SCADA historian and developed a trend screen
- Repaired a comms issue with the security system and the front gate
- Provided energy and power data for Energy Master Plan consultant
- Corrected Remote I/O issues with LAVMWA RTU
- Installed Windows updates on LAVWMA SCADA server
- Replaced pH monitoring sensor on DSRSD influent and effluent pipelines

Mechanical:

- Assigned asset ID numbers at junction structure
- Replaced DSRSD sample pump inside junction structure
- Responded to smart detector alerts and repaired air release equipment on two occasions

4. BUDGET VARIANCE AND EXPENSES

Fourth quarter labor expenses totaled \$223,370 for 1,121 man-hours of effort, an average of 2.2 full time equivalents (FTEs). O&M expenses for the quarter including labor, supplies, laboratory analysis, contractual services, and utilities totaled \$473,460 for an average cost of \$974 per million gallons pumped or \$317 per acre-foot. The total expense for the Livermore sole use pipeline for the quarter was \$802.

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

5. ITEMS OF INTEREST

On July 2, the Wastewater Treatment Plant experienced two unplanned power outages which affected LAVWMA facilities. Fortunately, in both instances there was sufficient reservoir storage available to withstand the outage and power was restored the same day.

A heat wave took place September 1 - 9, with 7 days exceeding 100 degrees F and a maximum temperature recorded at 111.2 degrees F. LAVWMA production was not impacted by the weather event.

PG&E peak day pricing events were called for the following days throughout the quarter: July 11, July 18, July 21, August 16, August 17, August 19, September 1, September 5, September 6, and September 7. DSRSD staff achieved the Operational Strategy and ensured that no LAVWMA pumps were run during the affected hours.

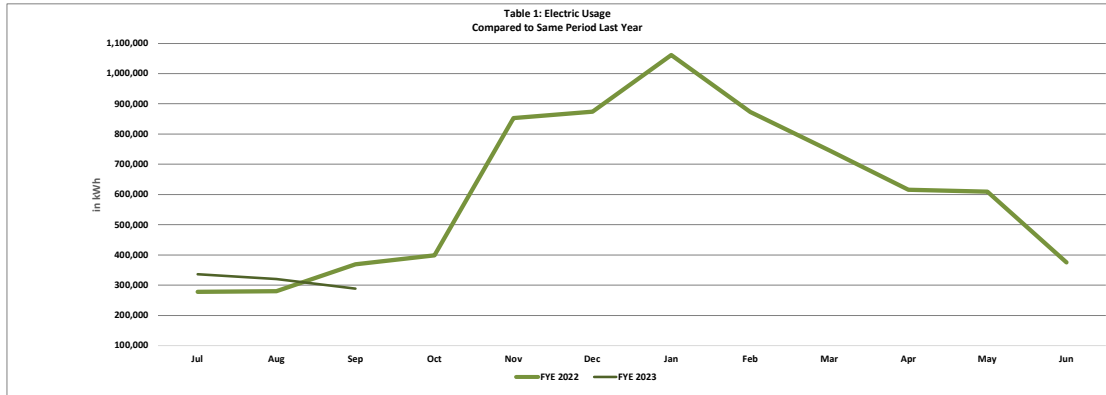
6. CAPITAL PROJECTS

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

TABLE 1 - Electric Usage, Efficiency and Costs

LAVWMA SYSTEM: Fiscal Year 2022-2023, Quarterly Report

Month	PG&E Service Accounts: Rate Schedule B20 starting March 2021												Billing Days	Total kWh	\$/kWh	Total \$	Total Export Flow ¹ MG	Pumping			
	Acct # 8482061923-1 Service A						Acct # 8440395259-5 Service B											Energy kWh/MG	Cost		Efficiency %
	kWh	Peak	Partial Peak	Off Peak	Super Off Peak	\$	kWh	Peak	Partial Peak	Off Peak	Super Off Peak	\$							\$/MG	\$/AF	
Jul-22	0	0	0	0	0	\$1,807	336,556	1,732	1,635	333,189	0	\$72,791	31	336,556	\$0.22	\$74,598	167	2,021	\$448	\$146	68.8%
Aug-22	140,062	0	44	140,018	0	\$30,882	180,226	2,139	1,914	176,173	0	\$40,618	32	320,288	\$0.22	\$71,500	163	1,966	\$439	\$143	70.7%
Sep-22	123,902	0	0	123,902	0	\$28,070	165,391	2,105	1,813	161,473	0	\$37,727	30	289,293	\$0.23	\$65,797	131	2,209	\$502	\$164	62.9%
Oct-22																	114	0	\$0	\$0	n/a
Nov-22																	0	n/a	n/a	n/a	n/a
Dec-22																	0	n/a	n/a	n/a	n/a
Jan-23																	0	n/a	n/a	n/a	n/a
Feb-23																	0	n/a	n/a	n/a	n/a
Mar-23																	0	n/a	n/a	n/a	n/a
Apr-23																	0	n/a	n/a	n/a	n/a
May-23																	0	n/a	n/a	n/a	n/a
Jun-23																	0	n/a	n/a	n/a	n/a
Quarter																					
Average	87,988					\$20,253	227,391					\$50,378	31	315,379	\$0.22	\$70,632	153	2,065	\$463	\$151	67.5%
Total	263,964					\$60,760	682,173					\$151,135	93	946,137		\$211,895	460	6,196			
Minimum	0					\$1,807	165,391					\$37,727	30	289,293	\$0.22	\$65,797	131	1,966	\$439	\$143	62.9%
Maximum	140,062					\$30,882	336,556					\$72,791	32	336,556	\$0.23	\$74,598	167	2,209	\$502	\$164	70.7%
YTD																					
Average	87,988					\$20,253	227,391					\$50,378	31	315,379	\$0.22	\$70,632	48	1,549	\$347	\$113	67.5%
Total	263,964					\$60,760	682,173					\$151,135	93	946,137		\$211,895	575	6,196			
Minimum	0					\$1,807	165,391					\$37,727	30	289,293	\$0.22	\$65,797	0	0	\$0	\$0	62.9%
Maximum	140,062					\$30,882	336,556					\$72,791	32	336,556	\$0.23	\$74,598	167	2,209	\$502	\$164	70.7%



NOTES:

- 1) This Table 1 does not reflect what was the actual expenditures paid for the month and may not match what is in Table 8 Expenditures. The primary purpose of Table 1 is to show the electric usage and efficiency for the month it actually occurred.
- 2) To calculate pumping efficiency, read dates, electric usage, and export flows are matched to PG&E billing periods: 6/13 - 7/13 for July, 7/14 - 8/14 for August, and 8/15 - 9/13 for September.
- 3) Pumping efficiency is based on continuous average flows and a TDH of 442.8 feet, including static lift of 408.8 feet and piping losses of 34 feet (per Charlie Joyce, B&C, 2/12/07).

TABLE 2 - Pump Run Time Hours

LAVWMA SYSTEM: Fiscal Year 2022-2023, Quarterly Report

Month	Pump	Pump	Pump	Pump	Pump	Pump	Pump	Pump	Pump	Pump	TOTAL	
	No. 1	No. 2	No. 3	No. 4	No. 5	No. 6	No. 7	No. 8	No. 9	No. 10	Pump Run Hours	Pump Utilization %
Jul-22	0	14	0	338	0	1	0	1	182	183	719	9.7%
Aug-22	0	1	95	296	0	1	93	1	0	298	784	10.5%
Sep-22	0	79	87	124	118	1	125	23	188	124	869	12.1%
Oct-22											0	0.0%
Nov-22											0	0.0%
Dec-22											0	0.0%
Jan-23											0	0.0%
Feb-23											0	0.0%
Mar-23											0	0.0%
Apr-23											0	0.0%
May-23											0	0.0%
Jun-23											0	0.0%
Quarter												
Average	0	31	61	253	40	1	73	8	124	202	791	10.8%
Total	0	93	182	758	119	2	218	24	371	605	2,373	
Minimum	0	1	0	124	0	1	0	1	0	124	719	9.7%
Maximum	0	79	95	338	118	1	125	23	188	298	869	12.1%
YTD												
Average	0	31	61	253	40	1	73	8	124	202	198	2.7%
Total	0	93	182	758	119	2	218	24	371	605	2,373	
Minimum	0	1	0	124	0	1	0	1	0	124	0	0.0%
Maximum	0	79	95	338	118	1	125	23	188	298	869	12.1%

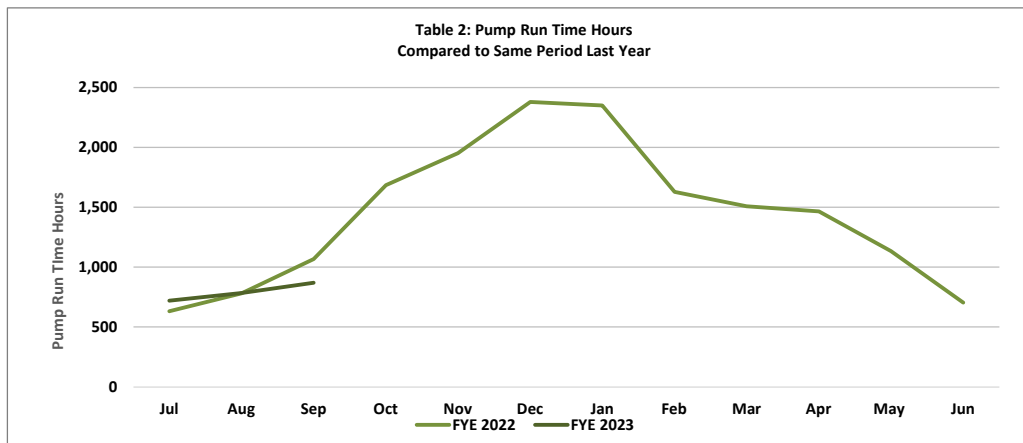
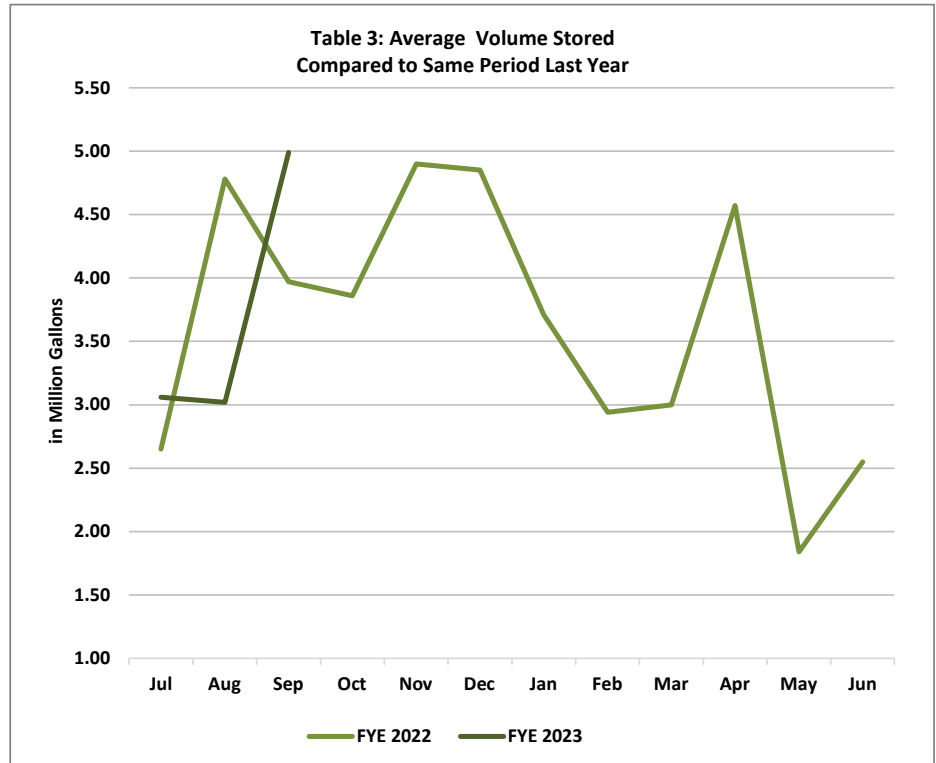


TABLE 3 - Monthly Average Storage Basin Levels and Volume

LAVWMA SYSTEM: Fiscal Year 2022-2023, Quarterly Report

Month	Average Daily Volume			Average Volume Stored MG	Average Storage Available MG	Storage Basin Utilization %
	Basin No. 1	Basin No. 2	Basin No. 3			
	Feet	Feet	Feet			
Jul-22	1.58	0.21	4.24	3.06	18	17.0%
Aug-22	2.17	0.22	3.82	3.02	18	16.8%
Sep-22	3.18	1.52	5.08	4.99	18	27.7%
Oct-22					18	0.0%
Nov-22					18	0.0%
Dec-22					18	0.0%
Jan-23					18	0.0%
Feb-23					18	0.0%
Mar-23					18	0.0%
Apr-23					18	0.0%
May-23					18	0.0%
Jun-23					18	0.0%
Quarter						
Average	2.68	0.87	4.45	3.69		0.21
Minimum	2.17	0.22	3.82	3.02		0.17
Maximum	3.18	1.52	5.08	4.99		0.28
YTD						
Average	2.68	0.87	4.45	3.69		5.1%
Minimum	2.17	0.22	3.82	3.02		0.0%
Maximum	3.18	1.52	5.08	4.99		27.7%

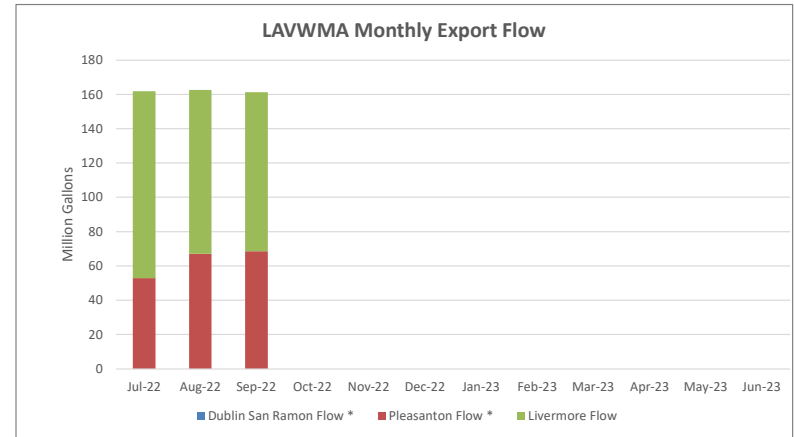
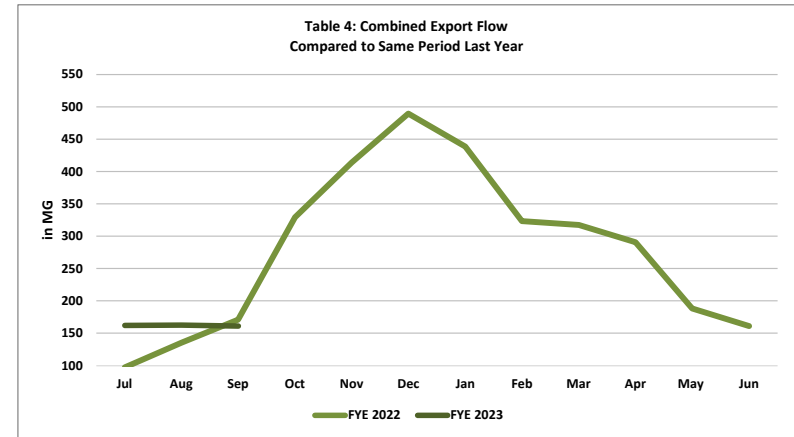


Note: Total available storage volume is 18 million gallons.

TABLE 4 - Monthly Export Flow

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

Month	Dublin San Ramon Flow * MG	Pleasanton Flow * MG	Livermore Flow MG	Combined Export Flow MG	Total for Quarter	PGE tab
Jul-22	0.00	52.86	109.08	161.93		161.93
Aug-22	0.00	66.98	95.65	162.62		162.62
Sep-22	0.00	68.48	92.90	161.38	485.94	161.38
Oct-22	0.00	0.00				0.00
Nov-22	0.00	0.00				0.00
Dec-22	0.00	0.00			0.00	0.00
Jan-23	0.00	0.00				0.00
Feb-23	0.00	0.00				0.00
Mar-23	0.00	0.00			0.00	0.00
Apr-23	0.00	0.00				0.00
May-23	0.00	0.00				0.00
Jun-23	0.00	0.00			0.00	88.82
Quarter						
Total	0.00	188.31	297.63	485.94		
Average	0.00	62.77	99.21	161.98		
Minimum	0.00	52.86	92.90	161.38		
Maximum	0.00	68.48	109.08	162.62		
YTD						
Total	0.00	188.31	297.63	485.94		Budgeted Flow: 3552
Average	0.00	15.69	99.21	161.98		
Minimum	0.00	0.00	92.90	161.38		
Maximum	0.00	68.48	109.08	162.62		



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

TABLE 5 - Labor Effort, Expenditures, and Budget Utilization

LAVWMA SYSTEM: Fiscal Year 2022-2023, Quarterly Report

FY Labor Budget \$1,161,350

Month	Billed	FTE Equiv	Labor Invoice	YTD	Budget Utilization	Labor	Export	
	Labor Hours			Labor Expense		Budget Remaining	Flow	
-----	-----	-----	-----	-----	-----	-----	MG	AF
Jul-22	433.0	2.5	\$83,781	\$83,781	7.2%	\$1,077,569	161.93	497
Aug-22	345.0	2.0	\$73,088	\$156,869	13.5%	\$1,004,481	162.62	499
Sep-22	343.0	2.0	\$66,501	\$223,370	19.2%	\$937,980	161.38	495
Oct-22								
Nov-22								
Dec-22								
Jan-23								
Feb-23								
Mar-23								
Apr-23								
May-23								
Jun-23								
<u>QUARTER</u>								
Total	1,121.0		\$223,370				485.94	1,491
Average	373.7	2.2	\$74,457				161.98	497
Minimum	343.0	2.0	\$66,501				161.38	495
Maximum	433.0	2.5	\$83,781				162.62	499
<u>YTD</u>								
Total YTD	1,121.0		\$223,370		19.2%	\$937,980	485.94	1,491
Average YTD	373.7	2.2	\$74,457				161.98	497
Minimum	343.0	2.0	\$66,501				161.38	495
Maximum	433.0	2.5	\$83,781				162.62	499

Notes:

TABLE 6 - O&M Expenditures and Budget Utilization

LAVWMA SYSTEM: Fiscal Year 2022-2023, Quarterly Report

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

Month	Labor Expenses	A/P Expenses	Total O&M Expenses	YTD O&M Expenses	Budget Utilization	O&M Budget Remaining	Overall O&M Cost		Export Flow	
							\$/MG	\$/AF	MG	AF
Jul-22	\$83,781	\$3,146	\$86,927	\$86,927	3.0%	\$2,774,362	\$537	\$175	161.93	497
Aug-22	\$73,088	\$171,670	\$244,757	\$331,684	11.6%	\$2,529,605	\$1,505	\$490	162.62	499
Sep-22	\$66,501	\$75,275	\$141,776	\$473,460	16.5%	\$2,387,829	\$879	\$286	161.38	495
Oct-22										
Nov-22										
Dec-22										
Jan-23										
Feb-23										
Mar-23										
Apr-23										
May-23										
Jun-23										
<u>QUARTER</u>										
Total	\$223,370	\$250,090	\$473,460				\$974	\$317	485.94	1,491
Average	\$74,457	\$83,363	\$157,820						161.98	497
Minimum	\$66,501	\$3,146	\$86,927				\$537	\$175	161.38	495
Maximum	\$83,781	\$171,670	\$244,757				\$1,505	\$490	162.62	499
<u>YTD</u>										
Total YTD	\$223,370	\$250,090	\$473,460		16.5%	\$2,387,829	\$974	\$317	485.94	1,491
Average YTD	\$74,457	\$83,363	\$157,820							
Minimum	\$66,501	\$3,146	\$86,927				\$537	\$175	161.38	495
Maximum	\$83,781	\$171,670	\$244,757				\$1,505	\$490	162.62	499

Notes:

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

LAVWMA SYSTEM: Fiscal Year 2022-2023, Quarterly Report

Livermore Sole Use Facilities			
Month	Labor Expenses	A/P Expenses	Total Expenses
-----	-----	-----	-----
Jul-22	\$0	\$0	\$0
Aug-22	\$0	\$545	\$545
Sep-22	\$0	\$257	\$257
Oct-22	\$0	\$0	\$0
Nov-22	\$0	\$0	\$0
Dec-22	\$0	\$0	\$0
Jan-23	\$0	\$0	\$0
Feb-23	\$0	\$0	\$0
Mar-23	\$0	\$0	\$0
Apr-23	\$0	\$0	\$0
May-23	\$0	\$0	\$0
Jun-23	\$0	\$0	\$0
<u>Quarter</u>			
Total	\$0	\$802	\$802
Average	\$0	\$267	\$267
Minimum	\$0	\$0	\$0
Maximum	\$0	\$545	\$545
<u>YTD</u>			
YTD Total	\$0	\$802	\$802
YTD Average	\$0	\$67	\$67
YTD Minimum	\$0	\$0	\$0
YTD Maximum	\$0	\$545	\$545

TABLE 8

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 2022-2023	2022	2022	2022	2022	2022	2022	2023	2023	2023	2023	2023	2023	TOTAL	Budget
Labor															
Staff	\$1,161,350	\$83,781	\$73,088	\$66,501										\$223,370	\$290,338
Subtotal	\$1,161,350	\$83,781	\$73,088	\$66,501	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$223,370	\$290,338
Materials & Supplies															
Operations Supplies	\$13,650	\$74	\$12	\$12										\$99	\$3,413
Mechanical Supplies	\$27,300	\$432	\$238	\$249										\$919	\$6,825
Electrical Supplies	\$48,447	\$19	\$1,188	\$3,675										\$4,882	\$12,112
Subtotal	\$89,397	\$526	\$1,438	\$3,936	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$5,900	\$22,349
Laboratory Analysis															
Compliance Testing	\$10,500	\$848	\$1,060	\$848										\$2,756	\$2,625
Operational Support Testing	\$4,200	\$392	\$392	\$392										\$1,176	\$1,050
Special Sampling	\$23,100	\$1,380	\$1,490	\$1,380										\$4,250	\$5,775
Subtotal	\$37,800	\$2,620	\$2,942	\$2,620	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$8,182	\$9,450
Contractual Services															
Sub-surface Repairs	\$15,750													\$0	\$3,938
Street Sweeping	\$5,250													\$0	\$1,313
Cathodic Protection Survey & Repairs	\$31,500													\$0	\$7,875
Underground Service Alert	\$4,725													\$0	\$1,181
SCADA software maintenance contract	\$17,850		\$5,052											\$5,052	
Remote monitoring annual service for PS and Rec	\$5,250													\$0	
Med voltage switchgear 3-yr PM (FY22, \$18k)														\$0	
HVAC Maintenance/Repairs	\$788													\$0	\$197
Termite/Pest Control	\$945													\$0	\$236
Landscape/weed maintenance	\$10,500			\$980										\$980	\$2,625
Janitorial Service	\$9,975	paid in July	\$440	\$880										\$1,320	\$2,494
Fire Extinguisher Maintenance	\$210													\$0	\$53
Postage/Shipping Charges	\$0													\$0	\$0
Misc Professional/Contractual Services	\$31,500		\$14,008											\$14,008	\$7,875
Subtotal	\$134,243	\$0	\$19,499	\$1,860	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$21,359	\$33,561
Utilities															
Electricity (PG&E)	\$1,430,205	paid in Aug	\$147,188	\$66,310										\$213,498	\$357,551
Water & Sewer (Pleasanton)	\$945		\$396	\$327										\$722	\$236
Water (EBMUD)	\$1,050		\$207	\$222										\$429	\$263
Telephone/communications	\$6,300													\$0	\$1,575
WW Treatment (DSRSD)	\$0													\$0	\$0
Subtotal	\$1,438,500	\$0	\$147,790	\$66,859	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$214,650	\$359,625
Non-Routine															
	\$0													\$0	\$0
	\$0													\$0	\$0
Subtotal	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Monthly Total		\$86,927	\$244,757	\$141,776	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$473,460	\$715,323
YTD Total	\$2,861,290	\$86,927	\$331,684	\$473,460	\$473,460	\$473,460	\$473,460	\$473,460	\$473,460	\$473,460	\$473,460	\$473,460	\$473,460	\$473,460	
Combined Export Flow, mg	3552	162	163	161										486	888
Pumping Efficiency															
Monthly Cost, \$/mg		\$537	\$1,505	\$879	-	-	-	-	-	-	-	-	-	-	-
YTD Running Cost, \$/mg	\$805	\$537	\$1,022	\$974	-	-	-	-	-	-	-	-	-	\$974	

Q1 Notes:
PG&E bills for Feeder A and B for July were actually paid in August (processed late due to MUNIS transition issues)
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: 3

ACTUAL EXPENSES BILLED TO LAVWMA FOR REGULAR O&M														
FY 2022-2023	Jul 2022	Aug 2022	Sep 2022	Oct 2022	Nov 2022	Dec 2022	Jan 2023	Feb 2023	Mar 2023	Apr 2023	May 2023	Jun 2023	YTD TOTAL	YTD Budget
<i>Estimated Personnel Hours</i>														
Division 51 - FOD	40	-	-	-	-	-	-	-	-	-	-	-	-	10.00
Water/Wastewater Sys Lead Op	0												-	-
Water/Wastewater Sys OP IV-On Call	0												-	-
Water/Wastewater Sys OP IV	30												-	7.50
Water/Wastewater Sys OP III	0												-	-
Water/Wastewater Sys OP II	10												-	2.50
Maintenance Worker	0												-	-
Supervisor	0												-	-
Division 52 - WWTP	3,080	133.00	121.50	171.00	-	-	-	-	-	-	-	-	425.50	770.00
Process Lead Operator IV/V	150		24.00	1.00									25.00	37.50
Senior WWTP Operator III	720	37.00	73.50	79.50									190.00	180.00
Operator In Training	400	59.50	9.00	79.50									148.00	100.00
Operator II	1,700	36.50	15.00	11.00									62.50	425.00
Operator II (SLSS)	0												-	-
Operations Superintendent	110												-	27.50
Division 53 - MECH	1,230	149.50	171.00	138.50	-	-	-	-	-	-	-	-	459.00	307.50
Senior Mechanic-Crane Cert	60	44.00	70.50	69.00									183.50	15.00
Senior Mechanic - USA	80		16.50	29.50									46.00	20.00
Maintenance Worker	60												-	15.00
Mechanic I/II	980	20.50	29.00	28.00									77.50	245.00
Mechanic II-Crane Cert	0	68.50	43.00	10.00									121.50	-
Mechanic I/II - USA	0		4.00	2.00									6.00	-
Mechanic II-Crane Cert - USA	0	16.50	8.00										24.50	-
Supervisor	50												-	12.50
Division 54 - ELEC	1,130	136.00	44.00	31.00	-	-	-	-	-	-	-	-	211.00	282.50
Senior Instrument/Controls Tech	30	18.00		1.00									19.00	7.50
Instrumentation & Controls Tech I/II	300	55.00	35.00	8.50									98.50	75.00
OPS Control Sys Spec	300												-	75.00
Senior Electrician	30												-	7.50
Electrician I/II	440	63.00	7.00	19.50									89.50	110.00
Principal Eleltrical Engineer	30		2.00	2.00									4.00	7.50
Division 55 - Laboratory	0	-	-	-	-	-	-	-	-	-	-	-	-	-
EC Inspector II-Pretreatment	0	-											-	-
Laboratory Technician	0	-											-	-
Supervisor	0	-											-	-
Division 26 - SAFETY	60	-	-	-	-	-	-	-	-	-	-	-	-	15.00
Safety Officer	60	-											-	15.00
Division 40 - ENG	260	14.50	8.50	2.50	-	-	-	-	-	-	-	-	25.50	65.00
Senior Engineer-Supervisory	0												-	-
Associate/Senior Civil Engineer-SME	100	14.50	4.50	2.50									21.50	25.00
Construction Inspector I/II	80		4.00										4.00	20.00
Engineering Technician II	40												-	10.00
GIS Analyst	40												-	10.00
<i>Total Estimated Personnel Hours</i>	5,800													
<i>FTE</i>	2.8													
Total Monthly Hours	433.00	345.00	343.00	-	-	-	-	-	-	-	-	-	1,121.00	1,450.00

Notes:

TABLE 9

LAVWMA July 2022



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

Parameter	Flow	CBOD	TSS	pH	pH	Total Residual Chlorine	Total Residual Chlorine	Fecal Coliforms	Enterococci
Units	MGD	mg/L	mg/L	SU	SU	mg/L	mg/L	MPN/100mL	MPN/100mL
Test Method	Daily Average (Me	SM 5210 B-2011	SM 2540 D-2011	SM 4500-H+B-2011	SM 4500-H+B-2011	Daily Average (M	Daily Average	SM 9221 C,E-2006	Enterolert
MDL									
RL		2.0	4.5					2	10
Location	LAVWMA-EXP	LAVWMA-EXP	LAVWMA-EXP	LAVWMA-EXP	LAVWMA-EXP	LAVWMA-EXP	SLSS	SLSS	SLSS
7/1/2022	4.76			7.53	7.74	5.80	0.001		
7/2/2022	6.75			7.58	7.72	5.64	0.001		
7/3/2022	5.04			7.65	7.70	4.34	0.001		
7/4/2022	6.65			7.56	7.68	3.47	0.001		
7/5/2022	6.63			7.53	7.65	3.20	0.001	<2	<1
7/6/2022	6.61	6.5		7.54	7.67	3.39	0.001		
7/7/2022	6.69			7.58	7.67	2.70	0.001		
7/8/2022	6.68			7.53	7.64	2.24	0.001		
7/9/2022	6.73			7.58	7.69	2.04	0.001		
7/10/2022	6.72			7.58	7.69	1.84	0.001		
7/11/2022	5.71			7.53	7.67	1.69	0.001		
7/12/2022	2.11			7.45	7.74	0.96	0.001		
7/13/2022	6.61			7.55	7.82	0.54	0.000	2	1
7/14/2022	2.43	7.0	7.2	7.54	7.71	0.45	0.000		
7/15/2022	5.62			7.56	7.70	0.41	0.000		
7/16/2022	6.46			7.56	7.68	0.15	0.000		
7/17/2022	6.61			7.51	7.70	0.17	0.000		
7/18/2022	3.91			7.45	7.68	0.22	0.000		
7/19/2022	4.30			7.45	7.74	0.92	0.000	9	1
7/20/2022	3.54	3.0	4.5	7.53	7.85	2.85	0.000		
7/21/2022	4.56			7.58	7.74	3.45	0.000		
7/22/2022	4.35			7.54	7.70	3.35	0.000		
7/23/2022	5.56			7.58	7.75	3.93	0.000		
7/24/2022	4.09			7.56	7.77	4.15	0.000		
7/25/2022	4.41			7.51	7.78	3.63	0.000		
7/26/2022	4.66			7.53	7.78	3.43	0.000	11	3.1
7/27/2022	3.53	2.9	5.5	7.58	7.80	2.94	0.000		
7/28/2022	3.41			7.54	7.81	2.86	0.000		
7/29/2022	4.69			7.54	7.77	3.13	0.000		
7/30/2022	5.72			7.61	7.73	2.18	0.000		
7/31/2022	6.40			7.61	7.68	3.45	0.000		



Parameter	Flow	CBOD	TSS	pH	pH	Total Residual Chlorine	Total Residual Chlorine	Fecal Coliforms	Enterococci
Units	MGD	mg/L	mg/L	SU	SU	mg/L	mg/L	MPN/100mL	MPN/100mL
Test Method	Daily Average	SM 5210 B-2011	SM 2540 D-20	SM 4500-H+B	SM 4500-H+B	Daily Average	Daily Average (Mea	SM 9221 C,E-2006	Enterolert
MDL									
RL		2.0	4.5					2	10
Location	LAVWMA-EXP	LAVWMA-EXP	LAVWMA-EXP	LAVWMA-EXP	LAVWMA-EXP	LAVWMA-EXP	SLSS	SLSS	SLSS
8/1/2022							No data for the whole month. Online analyzer was out of service.		
8/2/2022									
8/3/2022									
8/4/2022									
8/5/2022									
8/6/2022									
8/7/2022									
8/8/2022									
8/9/2022									
8/10/2022									
8/11/2022									
8/12/2022									
8/13/2022									
8/14/2022									
8/15/2022									
8/16/2022								Water bath temperature exceeded the acceptable range. Result was invalidated.	
8/17/2022		Ave. MB=0.20mg/L							
8/18/2022									
8/19/2022									
8/20/2022									
8/21/2022									
8/22/2022									
8/23/2022									
8/24/2022									
8/25/2022									
8/26/2022									
8/27/2022									
8/28/2022									
8/29/2022									
8/30/2022									



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

Parameter	Flow	CBOD	TSS	pH	pH	Total Residual Chlorine	Total Residual Chlorine	Fecal Coliforms	Enterococci
Units	MGD	mg/L	mg/L	SU	SU	mg/L	mg/L	MPN/100mL	MPN/100mL
Test Method	Daily Average (Me	SM 5210 B-2011	SM 2540 D-2011	SM 4500-H+B-2011	SM 4500-H+B-2011	Daily Average (M	Daily Average	SM 9221 C,E-2006	Enterolert
MDL		N/A	1.4					N/A	N/A
RL		2.0	4.5					2	1
Location	LAVWMA-EXP	LAVWMA-EXP	LAVWMA-EXP	LAVWMA-EXP	LAVWMA-EXP	LAVWMA-EXP	SLSS	SLSS	SLSS
9/1/2022	3.72			7.39	7.72	1.71			
9/2/2022	3.29			7.40	7.68	2.22			
9/3/2022	3.74			7.42	7.63	1.55			
9/4/2022	3.63			7.37	7.56	2.47			
9/5/2022	4.28			7.34	7.53	1.91			
9/6/2022	3.04			7.34	7.52	1.48		17	<1
9/7/2022	3.55	3.7	7.0	7.28	7.49	0.78			
9/8/2022	3.77			7.26	7.54	0.70			
9/9/2022	2.72			7.41	7.55	0.49			
9/10/2022	2.24			7.36	7.59	0.65			
9/11/2022	3.89			7.49	7.52	0.77			
9/12/2022	4.74			7.47	7.86	0.66			
9/13/2022	4.38			7.44	7.61	0.61		50	48
9/14/2022	4.03	3.6	7.9	7.51	7.70	0.53			
9/15/2022	4.77			7.53	7.61	0.47			
9/16/2022	4.72			7.49	7.69	0.85			
9/17/2022	4.76			7.54	7.62	0.54			
9/18/2022	5.10			7.39	7.61	0.73			
9/19/2022	6.91			7.49	7.64	0.54			
9/20/2022	8.91			7.44	7.60	0.65		4	<1
9/21/2022	9.00	3.4	9.2	7.49	7.78	0.85			
9/22/2022	8.80			7.51	7.64	0.66			
9/23/2022	8.90			7.51	7.61	0.52			
9/24/2022	9.17			7.47	7.59	0.71			
9/25/2022	8.81			7.47	7.63	0.74			
9/26/2022	5.70			7.44	7.66	0.79			
9/27/2022	7.70			7.34	7.62	0.41		<2	<1
9/28/2022	6.01	4.8	10.0	7.32	7.59	1.15			
9/29/2022	5.20			7.35	7.56	1.66			
9/30/2022	5.90			7.39	7.53	1.72			

TABLE 10

*DUBLIN SAN RAMON SERVICES DISTRICT
WASTEWATER TREATMENT FACILITY*

LAVWMA - 3rd Quarter 2022

Langelier pH Saturation Index

Collection DATE	TDS (mg/L)	Temp (°C)	Ca Hardness (mg/L CaCO ₃)	Alkalinity (mg/L CaCO ₃)	pH (Actual)	pH Saturation	Langlier Index
07/23/22	864	25.2	154	422	7.5	7.0	0.5
08/06/22	815	24.6	138	400	7.5	7.1	0.4
09/10/22	654	26.8	86	300	7.4	7.4	0.0
MAXIMUM	864	26.8	154	422	7.5	7.4	0.5
MINIMUM	654	24.6	86	300	7.4	7.0	0.0
AVERAGE	778	25.5	126	374	7.5	7.2	0.3

*DUBLIN SAN RAMON SERVICES DISTRICT
WASTEWATER TREATMENT FACILITY*

DSRSD - 3rd Quarter 2022

Langelier pH Saturation Index

Collection DATE	TDS (mg/L)	Temp (°C)	Ca Hardness (mg/L CaCO ₃)	Alkalinity (mg/L CaCO ₃)	pH (Actual)	pH Saturation	Langlier Index
07/23/22	890	24.6	164	434	7.6	7.0	0.6
08/06/22	866	24.6	164	424	7.5	7.0	0.5
09/10/22	710	26.7	120	348	7.4	7.2	0.2
MAXIMUM	890	26.7	164	434	7.6	7.2	0.6
MINIMUM	710	24.6	120	348	7.4	7.0	0.2
AVERAGE	822	25.3	149	402	7.5	7.1	0.4

Note:

On 9/10/22, the field pH reading was inadvertently missed. The pH value was taken from SCADA.

CITY OF LIVERMORE
LIVERMORE WATER RECLAMATION PLANT

Langelier pH Saturation Index

Collection DATE	TDS (mg/L)	Temp (°C)	Ca Hardness (mg/L CaCO ₃)	Alkalinity (mg/L CaCO ₃)	pH (Actual)	pH Saturation	Langlier Index
07/06/22	656	25.0	75	362	7.6	7.4	0.2
08/03/22	690	28.0	96	368	7.7	7.3	0.4
09/07/22	600	28.0	87	336	7.4	7.3	0.1
MAXIMUM	690	28.0	96	368	7.7	7.4	0.4
MINIMUM	600	25.0	75	336	7.4	7.3	0.1
AVERAGE	649	27.0	86	355	7.6	7.3	0.2

TABLE 11

LAVWMA Action Item List

Month: Nov-22

SAG Task	Responsible Party	Due Date	Status	Completion Date
Items for August 2022 LAVWMA Board Meeting.	SAG	NA	Several items this month. Updates on current capital projects, continuing with remote meetings, FYE22 Audit Report, moving money from LAIF to treasuries to improve return by up to 3% over LAIF, approval of Regional Purified Water Pilot Memorandum of Agreement (MOA) for Phase 2 (Public Outreach and Monitoring of Grant Funding Opportunities), legal and legislative issues, and the GM report.	
Operations Coordination Committee Task	Responsible Party	Due Date	Status	Completion Date
FYE21 Replacement Projects: See Items Below	Weir/Delight	Various dates	Refer to information below.	
MCC and Soft Starter Replacement Project. Carryover from FYE20 and into FYE21. Estimated design cost \$250,000. Project now includes Electrical Improvements to the Main Switchgear at the Pump Station. Total estimated cost \$2,300,000 - \$2,500,000.	Weir/Atendido	12/31/2021	Project is complete. The Notice of Completion with Alameda County will be filed within the next week.	11/30/2022
Resealing of all Three Storage Basins. Estimated cost \$200,000	Quinlan	12/31/2020	Project is complete. Some issues due to water getting under some of the seal areas. A few areas are being resealed.	6/30/2021
San Leandro Sample Station Design Improvements. Estimated cost \$1,000,000 plus engineering costs of \$230,000 for a total of \$1,230,000	Weir	12/31/2022	Final plans and specs are nearing completion. A meeting with HydroScience and DSRSD staff was held on November 7, 2022 to resolve remaining issues. Lead time on some major items is up to one year.	12/31/2023
Cathodic Protection Projects. Estimated cost \$185,000	Weir/Atendido	12/31/2020	Corrpro has completed most items that did not require any excavation. Permits have been received for three projects needing excavation and were provided to Corrpro. We have heard nothing from Corrpro in several months. Will likely cancel their contract and have another firm do it. Will return to full system inspection this fiscal year.	6/30/2023
PLC Upgrade at the Pump Station. Estimated cost \$300,000	TBD	6/30/2021	Will be included in DSRSD SCADA project, which is design build. Project has begun. Scoping meetings with staff have been held and the project is progressing.	
Pipeline Inspection. Estimated cost \$100,000	TBD	6/30/2021	DSRSD has outlined a plan for an inspection in the Fall time frame. May need to be delayed due to other priorities.	
Smart Detectors on High Maintenance Air/Vac and Air Release Valves. Estimated cost \$40,000	Quinlan	6/30/2022	Project is complete for six smart detectors. They have already prevented several spills due to advance notice to DSRSD staff.	6/30/2022
Replace three flow meters at the junction structure. Estimated cost is \$250,000.	TBA	6/30/2023	The three flowmeters at the junction structure are at the end of their useful lives and are no longer as accurate as required for reporting purposes. The project will include replacing all three and then determine if further modifications, such as, snorkels, are required for the flow measurement accuracy required. The cost of the project includes the three meters plus installation and testing costs.	
Replace 17 valve actuators at the pump station. Estimated cost is \$255,555.	Quinlan	6/30/2023	There are seventeen valves that have electric actuators at the pump station. All of the valves actuators were installed when the pump station was upgraded twenty years ago and they are at the end of their useful lives. The actuators will be replaced with the newest technology and will match the style that are commonly used at DSRSD. The actuators cost approximately \$9,000 each and will be installed by DSRSD staff. The total cost includes staff time for the installation.	
PG&E Reliability and Solar/Battery storage. This is a new project and no cost has yet been identified.	Weir	TBD	Recent PG&E outages during the summer have resulted in concern that the same could occur during wet weather and result in unpermitted discharges. The Board also asked about solar/battery systems to offset demand charges and reduce energy costs. DTN Engineers has prepared a draft report recommending a 1.5MW standby generator that would run at least two large pumps for at least 24 hours during a PG&E outage. Not certain that is adequate. Will use unused funds from agreement with Woodard & Curran to do additional flow modeling (recall EBDA "pick a flow") to assist in determining standby power needs. Not yet ready to make recommendations to the Board.	TBD
Other Items				
Wet Weather Issues	Sevilla	10/31/2020	Rainfall in October and November 2022 has not created any problems.	
Live test of SLSS system	Sevilla/Atendido	TBD	A test was conducted on November 3, 2021. There were no significant issues encountered during the test. The SLSS design engineer was on site and gathered valuable information that will assist in the upgrade design.	
Live test of Alamo Canal discharge during wet weather	Carson/Sevilla	TBD	Test postponed due to COVID-19. Was planning on this winter, but will likely be delayed until 2022 due to COVID-19.	
Wet Well Isolation Gates	Quinlan	6/30/2023	Gate is in good shape but won't fully close. No date set, perhaps this winter. May be coordinated with replacement of the valve actuators.	
EBDA Enterococcus Issue	Sevilla		No issues at this time.	
YTD O&M Expenses compared to budget	Carson, Weir	Ongoing	No issues at this time.	

