

# LAVWMA

QUARTERLY REPORT OF OPERATIONS

4th Quarter, FY 2020-2021

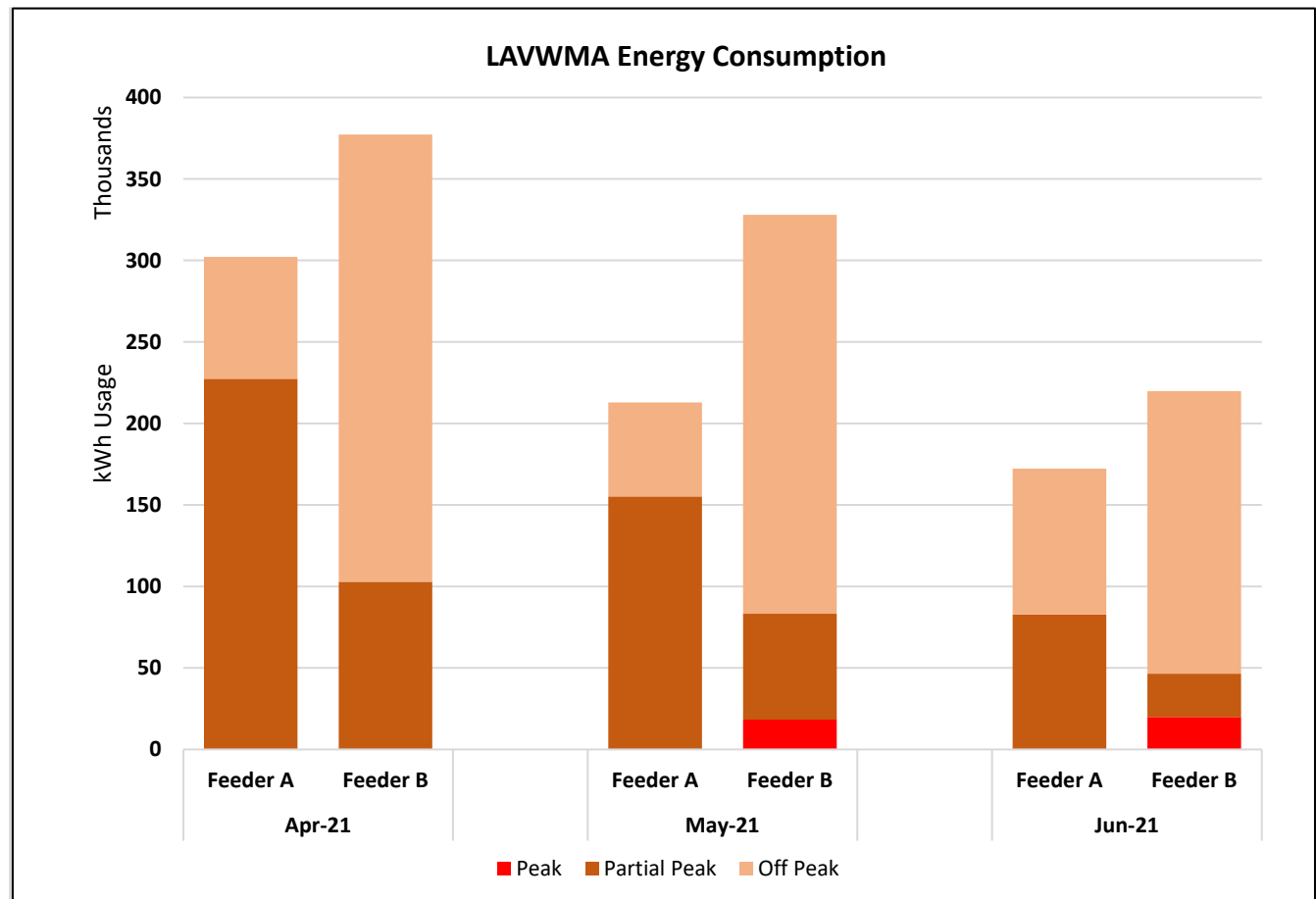
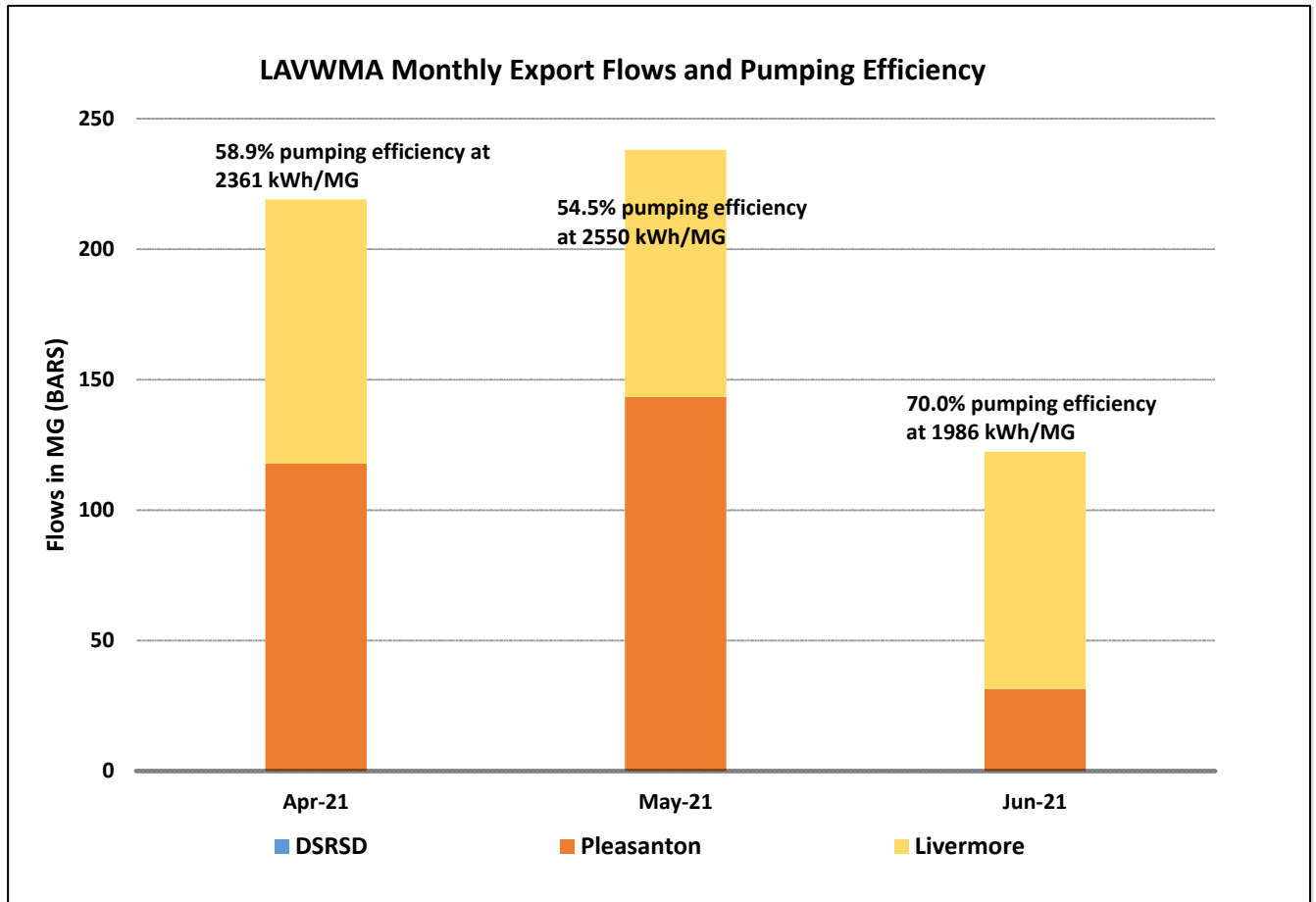


**Dublin San Ramon  
Services District**  
*Water, wastewater, recycled water*

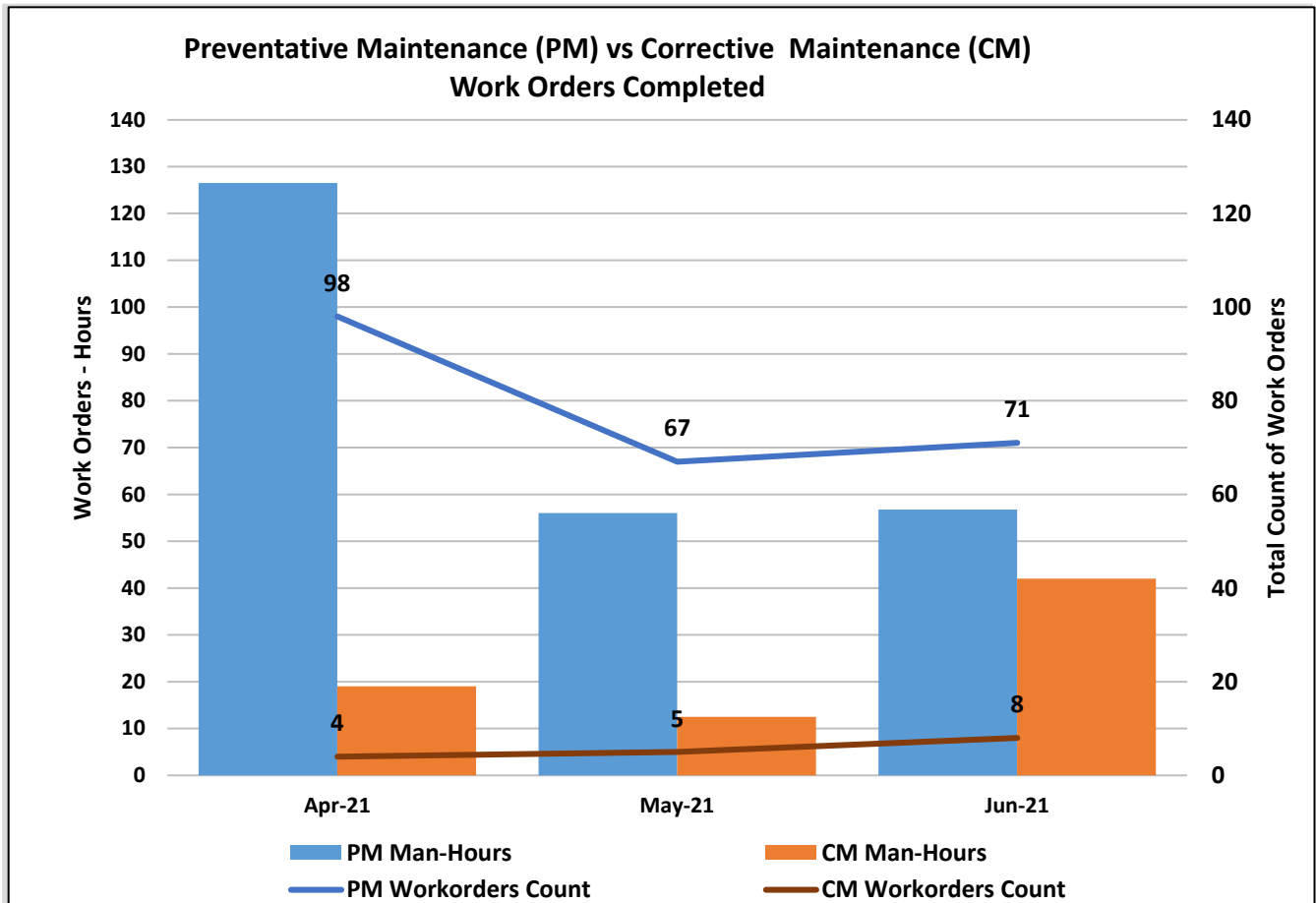
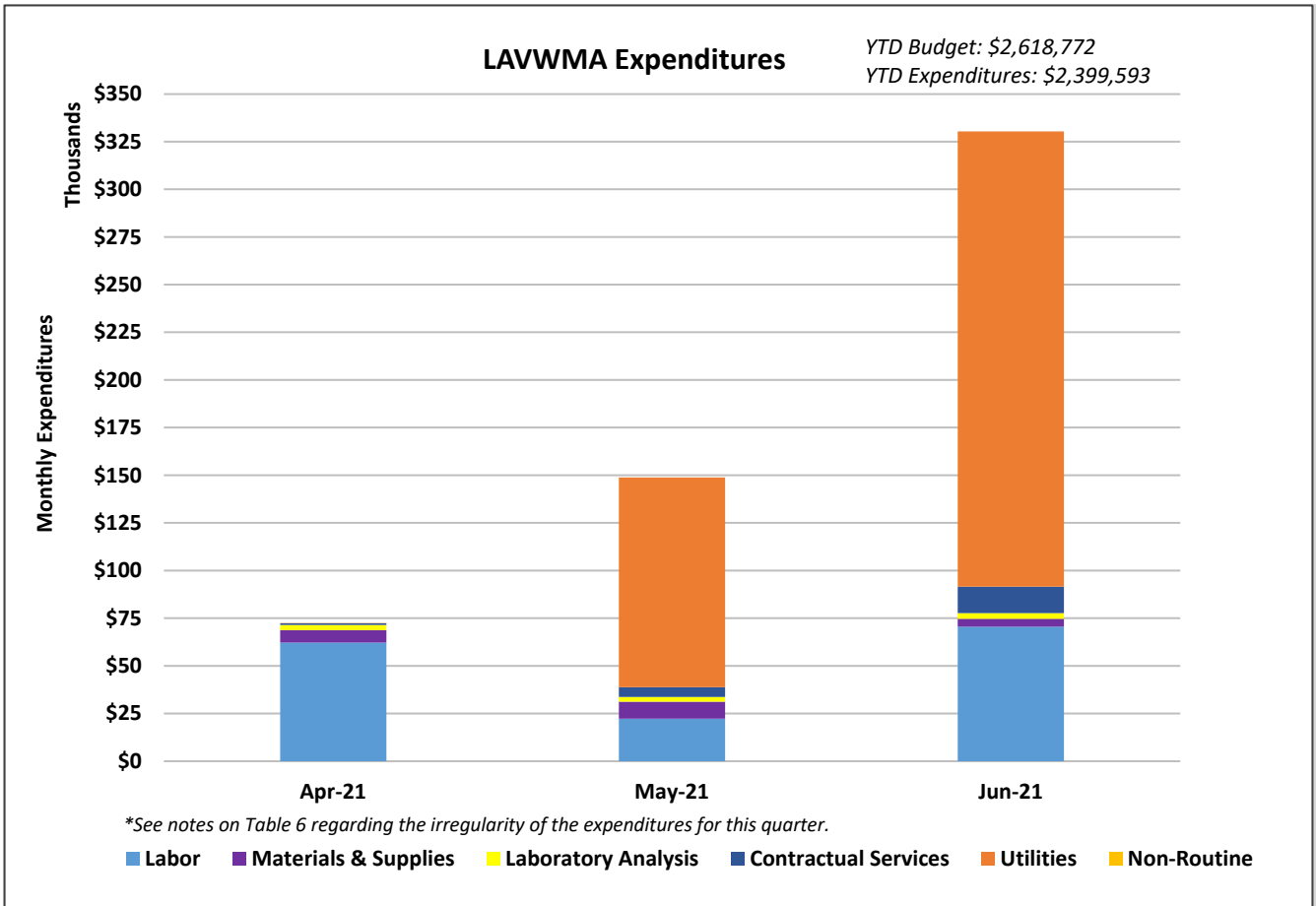
**QUARTERLY REPORT OF OPERATIONS  
LAVWMA PUMPING AND CONVEYANCE SYSTEM  
4th Quarter FY 2020-2021: April to June 2021**

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LAVWMA FYE 2021 FOURTH QUARTER AT A GLANCE



LAVWMA FYE 2021 FOURTH QUARTER AT A GLANCE



**QUARTERLY REPORT OF OPERATIONS**  
**LAVWMA PUMPING AND CONVEYANCE SYSTEM**  
***4th Quarter FY 2020-2021: April to June 2021***

**1. EXECUTIVE SUMMARY**

The Livermore-Amador Valley Water Management Agency (LAVWMA) pumping and effluent conveyance system operated normally during the fourth quarter of FY 2020-2021. During the quarter, a total of 579 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 61%, with an average electrical cost of \$514 per million gallons, or \$167 per acre-foot.

For the full fiscal year, the total operations and maintenance (O&M) expense is \$2,399,593 or 91.6% of the O&M annual budget amount of \$2,618,772. The overall cost of operation is \$713 per million gallons pumped (or \$232 per acre-foot) for the 3,364 million gallons of fully treated secondary effluent 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 64.4%, with an average electrical cost of \$436 per million gallons, or \$142 per acre-foot.

**2. OPERATIONS**

Of the 3,364 million gallons of effluent conveyed through the LAVWMA system for the fiscal year, approximately 1,327 million gallons was from the City of Livermore, 1,477 million gallons from City of Pleasanton and 560 million gallons 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.

The following are some noteworthy operations activities during the quarter:

- Laboratory staff are on target for accreditation by the Environmental Laboratory Accreditation Program (ELAP) for E.coli testing during DSRSD's next certification renewal cycle.
- Laboratory staff have passed their annual performance testing. ELAP has provided DSRSD with an updated certificate for all fields of accreditation. The certificate is set for expiration on 8/31/2022.
- Laboratory staff are currently engaged with a consultant to update SOPs to The National Environmental Laboratory Committee Institute (TNI) standards. This is a new requirement imposed by the State. TNI standards define uniform technical criteria, methods, or practices for a laboratory to follow. ELAP felt that adopting TNI standards was an important factor in establishing the quality of environmental data and ensuring that the data are adequate for the intended purpose is a consistent, stringent, comprehensive and yet practical accreditation program. The impact of implementing TNI on DSRSD affects, laboratory operating procedures, management quality systems, non-analytical procedures, purchasing, and defining laboratory roles.
- No Zone 7 brine flow this quarter due to the Zone 7 facility undergoing maintenance work.

**3. MAINTENANCE**

During the quarter, 239 hours were spent to complete 236 preventative maintenance work orders and 74 hours to complete 17 corrective maintenance work orders on LAVWMA equipment and

systems. For the full fiscal year, 872 hours were spent to complete 960 preventative maintenance work orders and 385 hours to complete 64 corrective maintenance work orders.

The following are some noteworthy maintenance activities during the quarter:

Electrical:

- SLSS 30" ball valve to EBDA actuator replacement and repair.
- Troubleshoot PG&E transformer issues; worked with PG&E to repair a blown fuse.

Instrumentation and Controls:

- Monitored the re-programming of the control system for the new PG&E Time of Use schedule that took effect March 1, 2021. Modified the programming to automatically adjust for partial peak period for June, July, August, and September, then revert to off peak for the other months. Verified that the modified programming worked as expected on June 1. Will monitor for automatic change to off peak on September 1.
- Finished researching possible replacements to the Samsara cloud remote monitoring system for the 14 rectifier panels and the Pump Station for wet weather remote monitoring. A demonstration unit and test will be purchased in August/September.
- Finished researching and shortlisted a new software that can be hosted in-house for the Pump Station wet weather remote monitoring and sharing SCADA data with outside agencies. Will be installing and testing this new software in the upcoming months and have something in place prior to wet weather season.
- Troubleshoot and correct programming for pump level control and motor current alarms.
- Alarm dialer software and server upgrade.
- SCADA computer and server Windows updates.
- SLSS Thiosulfate level instrument replacement.
- Troubleshoot DSRSD to LAVWMA flow meter. Replaced a blown fuse.
- Installed a new power switch for SLSS SCADA computer so an operator can restart the computer without having to open the control panel.

Mechanical:

- A sump pump failed at SLSS vault with the 30" valve which required replacement of the sump pump and repairs to the valve actuator.
- Smart detectors were installed on three vaults one each at Mattox Road, Greenview Drive and Lewelling Blvd to monitor air valve water releases in vaults.
- DSRSD's on-call contractor repaired a small diameter pipeline leak which serves the LAVWMA washdown system near holding basins #1 and #3.

## **5. BUDGET VARIANCE AND EXPENSES**

Fourth quarter labor expenses totaled \$155,079 for 922 man-hours of effort, an average of 1.8 full time equivalents (FTEs). O&M expenses for the quarter including labor, supplies, laboratory analysis, contractual services, and utilities totaled \$551,625 for an average cost of \$952 per million gallons pumped or \$310 per acre-foot. The total expense for the Livermore sole use pipeline for the quarter was \$514.

For the fiscal year, the total O&M expenses including labor, supplies, laboratory analysis, contractual services, and utilities totaled \$2,399,593 for an average cost of \$713 per million gallons pumped or \$232 per acre-foot. The total expense for the Livermore sole use pipeline for the quarter was \$9,561.

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

**6. ITEMS OF INTEREST**

On June 21, 2021, DSRSD began diverting sewage from the Central Contra Costa Sanitary District (CCCSD) Temporary Diversion Project to supplement recycled water flows during peak irrigation season under the terms of an agreement with DERWA. The agreement allows up to 1 MGD of CCCSD sewage flows to be diverted to DSRSD for beneficial reuse. In June, 7.27 MG was diverted for the start-up and testing. The full benefits of the temporary diversion will be seen in the peak months of July and August.

As noted in last quarter's report, new PG&E Time of Use (TOU) schedule changes started on March 1, 2021. LAVWMA system continued to operate in the modified control system programming with the hours of pumping aligned with the new PG&E Time-of Use (TOU) schedules: continue the practice of running the pumps during off-peak hours year-round observing new TOU by avoiding running the pumps from 4pm to 9pm for Spring and Fall/Winter unless faced with required high flows due to extreme wet weather conditions; also avoid running pumps between 2 pm and 11 pm in Summer (June, July, August and September). There has been no pumping in June during partial and peak periods between 2 pm and 11 pm, and two pumps run during the off-peak period. There was one PG&E peak day pricing event during the quarter on June 16.

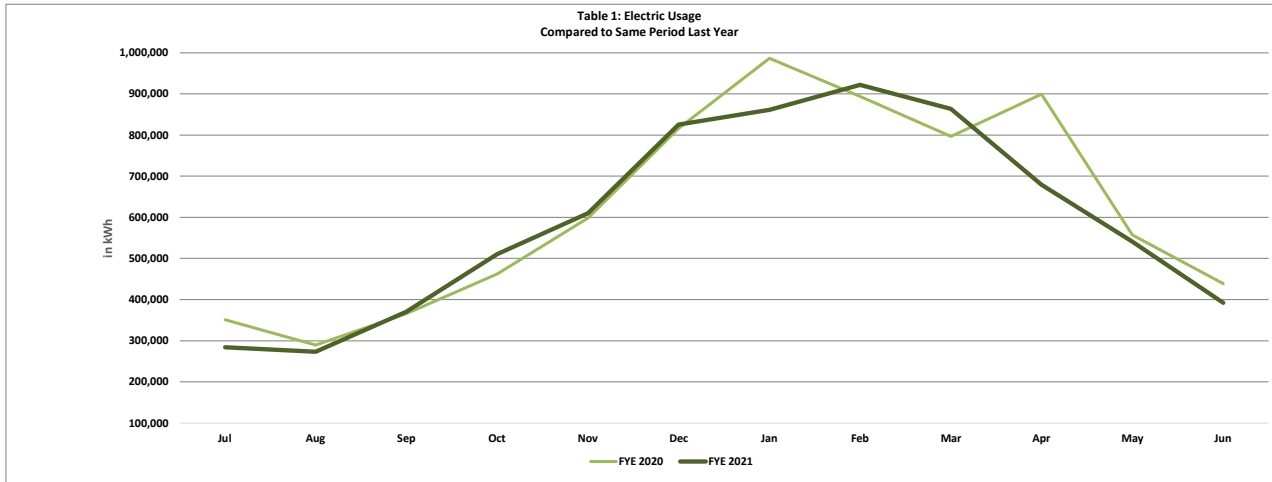
**6. CAPITAL PROJECTS**

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 2020-2021, 4th Quarter

PG&E Service Accounts: Rate Schedule E20S for January and February; B20 starting March 2021															Total	Pumping				
Month	Acct # 8482061923-1					Acct # 8440395259-5					Billing Days	Total			Flow <sup>1</sup> MG	Energy kWh/MG	Cost		Efficiency %	
	kWh	Peak	Partial Peak	Off Peak	\$	kWh	Peak	Partial Peak	Off Peak	\$		kWh	\$/kWh	\$			\$/MG	\$/AF		
Jul-20	857	0	0	857	\$9,287	282,971	1,659	1,992	279,320	\$48,872	29	283,828	\$0.20	\$58,159	130	2,179	\$446	\$145	63.8%	
Aug-20	95,667	0	0	95,667	\$24,743	177,763	1,638	1,982	174,143	\$34,043	30	273,430	\$0.21	\$58,786	129	2,117	\$455	\$148	65.7%	
Sep-20	182,479	0	0	182,479	\$37,167	187,983	1,786	2,220	183,977	\$37,682	32	370,462	\$0.20	\$74,849	153	2,428	\$490	\$160	57.3%	
Oct-20	214,120	5,517	11,933	196,670	\$61,606	296,646	10,944	18,465	267,237	\$80,824	30	510,766	\$0.28	\$142,430	206	2,475	\$690	\$225	56.2%	
Nov-20	212,107	0	30,325	181,782	\$44,606	398,055	1,101	63,096	333,858	\$71,165	30	610,162	\$0.19	\$115,771	313	1,952	\$370	\$121	71.2%	
Dec-20	368,516	0	138,067	230,449	\$59,869	456,806	0	150,494	306,312	\$68,169	31	825,322	\$0.16	\$128,038	436	1,893	\$294	\$96	73.5%	
Jan-21	385,680	0	151,049	234,631	\$56,707	475,245	0	169,374	305,871	\$75,072	30	860,925	\$0.15	\$131,779	449	1,919	\$294	\$96	72.5%	
Feb-21	342,192	0	139,961	202,231	\$51,596	579,793	0	243,637	336,156	\$88,770	30	921,985	\$0.15	\$140,366	449	2,054	\$313	\$102	67.7%	
Mar-21	272,999	0	76,652	196,347	\$46,031	590,744	0	169,340	421,404	\$86,561	32	863,743	\$0.15	\$132,592	386	2,235	\$343	\$112	62.2%	
<b>Apr-21</b>	<b>302,163</b>	<b>0</b>	<b>227,403</b>	<b>74,760</b>	<b>\$46,372</b>	<b>377,248</b>	<b>0</b>	<b>102,822</b>	<b>274,426</b>	<b>\$62,771</b>	<b>30</b>	<b>679,411</b>	<b>\$0.16</b>	<b>\$109,144</b>	<b>288</b>	<b>2,361</b>	<b>\$379</b>	<b>\$124</b>	<b>58.9%</b>	
<b>May-21</b>	<b>212,810</b>	<b>0</b>	<b>155,159</b>	<b>57,651</b>	<b>\$57,947</b>	<b>327,931</b>	<b>18,279</b>	<b>64,933</b>	<b>244,719</b>	<b>\$66,781</b>	<b>29</b>	<b>540,741</b>	<b>\$0.23</b>	<b>\$124,728</b>	<b>212</b>	<b>2,550</b>	<b>\$588</b>	<b>\$192</b>	<b>54.5%</b>	
<b>Jun-21</b>	<b>172,249</b>	<b>0</b>	<b>82,749</b>	<b>89,500</b>	<b>\$33,970</b>	<b>219,776</b>	<b>19,879</b>	<b>26,585</b>	<b>173,312</b>	<b>\$79,285</b>	<b>32</b>	<b>392,025</b>	<b>\$0.29</b>	<b>\$113,255</b>	<b>197</b>	<b>1,986</b>	<b>\$574</b>	<b>\$187</b>	<b>70.0%</b>	
<b>Quarter</b>																				
Average	229,074				\$46,096	308,318				\$69,613	30	537,392	\$0.23	\$115,709	232	2,299	\$514	\$167	61.1%	
Total	687,222				\$138,289	924,955				\$208,838	91	1,612,177		\$347,127	697	6,897				
Minimum	172,249				\$33,970	219,776				\$62,771	29	392,025	\$0.16	\$109,144	197	1,986	\$379	\$124	54.5%	
Maximum	302,163				\$57,947	377,248				\$79,285	32	679,411	\$0.29	\$124,728	288	2,550	\$588	\$192	70.0%	
<b>YTD</b>																				
Average	230,153				\$44,159	364,247				\$66,666	30	594,400	\$0.20	\$110,825	279	2,179	\$436	\$142	64.4%	
Total	2,761,839				\$529,902	4,370,961				\$799,996	365	7,132,800		\$1,329,898	3,348	26,148				
Minimum	857				\$9,287	177,763				\$34,043	29	273,430	\$0.15	\$58,159	129	1,893	\$294	\$96	54.5%	
Maximum	385,680				\$61,606	590,744				\$88,770	32	921,985	\$0.29	\$142,430	449	2,550	\$690	\$225	73.5%	



**NOTES:**

1) To calculate pumping efficiency, read dates, electric usage, and export flows are **matched to PG&E billing periods:** 3/15 - 4/14 for April, 4/15 - 5/13 for May, and 5/14 - 6/14 for June.

2) 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).

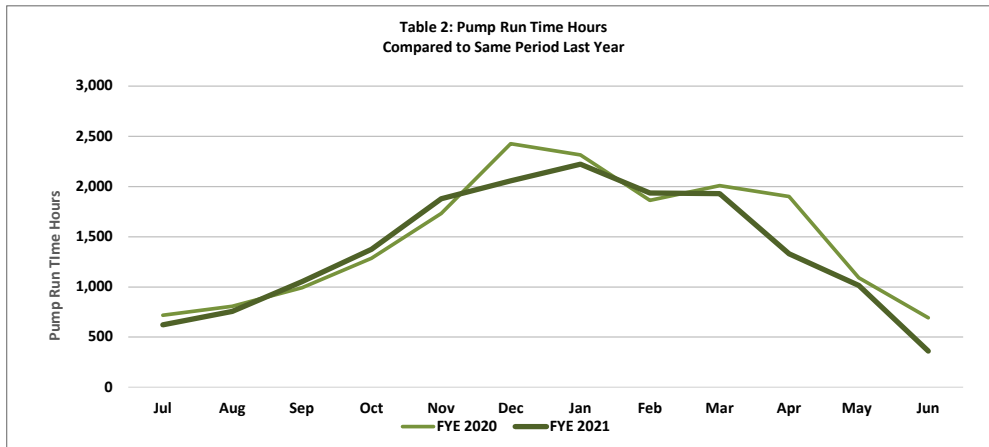
3) Low pumping efficiency in October is related to the pipeline inspection when the system was pumping at odd times and also repumping water due to the need to drain the lines to allow inspection.



**TABLE 2 - Pump Run Time Hours**

LAVWMA SYSTEM: Fiscal Year 2020-2021, 4th Quarter

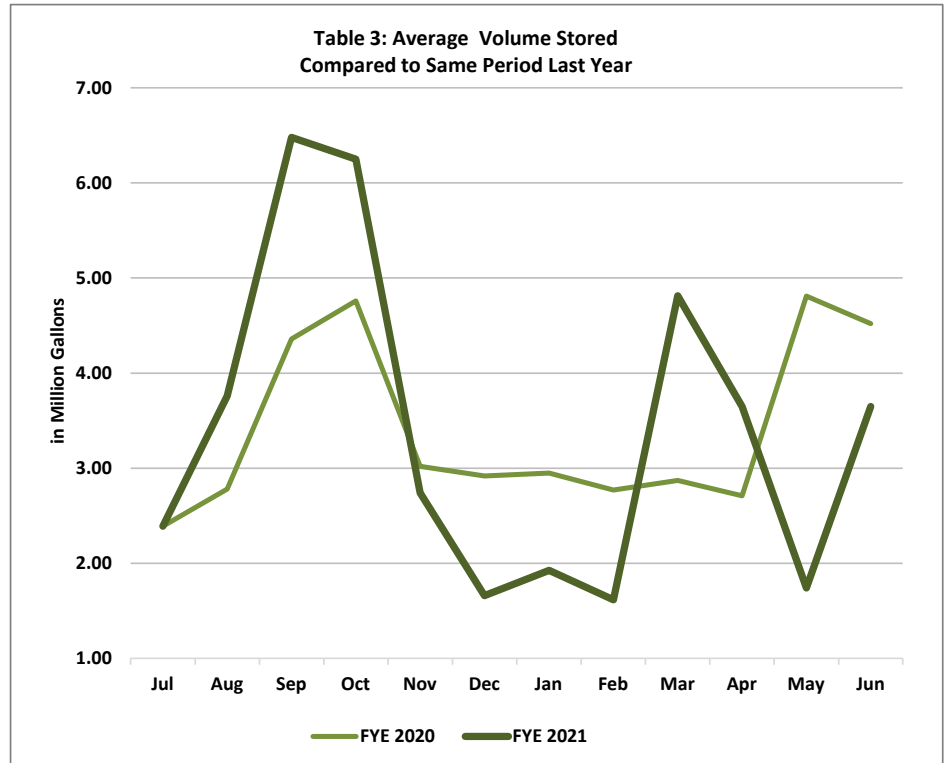
Month	Pump	Pump	Pump	Pump	Pump	Pump	Pump	Pump	Pump	Pump	TOTAL	
	No. 1	No. 2	No. 3	No. 4	No. 5	No. 6	No. 7	No. 8	No. 9	No. 10	Run	Utilization
Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	%
Jul-20	1	165	71	0	1	8	329	37	0	11	623	8.4%
Aug-20	112	1	230	1	0	1	312	0	97	1	755	10.1%
Sep-20	48	1	256	96	0	181	99	78	229	66	1,054	14.6%
Oct-20	129	14	127	282	0	90	280	24	273	154	1,374	18.5%
Nov-20	0	8	404	435	0	131	360	324	213	4	1,879	26.1%
Dec-20	0	0	496	383	0	60	314	381	329	91	2,056	27.6%
Jan-21	0	0	581	527	0	0	532	197	59	326	2,221	29.9%
Feb-21	0	312	149	123	303	14	482	5	486	60	1,934	28.8%
Mar-21	0	167	269	382	135	92	244	326	169	143	1,927	25.9%
<b>Apr-21</b>	<b>0</b>	<b>2</b>	<b>322</b>	<b>328</b>	<b>12</b>	<b>6</b>	<b>91</b>	<b>189</b>	<b>244</b>	<b>137</b>	<b>1,330</b>	<b>18.5%</b>
<b>May-21</b>	<b>0</b>	<b>112</b>	<b>169</b>	<b>135</b>	<b>98</b>	<b>87</b>	<b>126</b>	<b>147</b>	<b>134</b>	<b>8</b>	<b>1,015</b>	<b>13.6%</b>
<b>Jun-21</b>	<b>0</b>	<b>0</b>	<b>360</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>360</b>	<b>5.0%</b>
<b>Quarter</b>												
Average	0	38	284	154	36	31	72	112	126	48	902	12.4%
Total	0	114	851	463	109	94	217	336	377	145	2,705	
Minimum	0	0	169	0	0	0	0	0	0	0	360	5.0%
Maximum	0	112	360	328	98	87	126	189	244	137	1,330	18.5%
<b>YTD</b>												
Average	24	65	286	224	46	56	264	142	186	83	1,377	18.9%
Total	289	781	3,435	2,693	548	672	3,169	1,708	2,233	1,001	16,528	
Minimum	0	0	71	0	0	0	0	0	0	0	360	5.0%
Maximum	129	312	581	527	303	181	532	381	486	326	2,221	29.9%



### TABLE 3 - Monthly Average Storage Basin Levels and Volume

LAVWMA SYSTEM: Fiscal Year 2020-2021, 4th Quarter

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-20	2.51	0.14	2.22	2.39	18	13.3%
Aug-20	3.54	0.07	4.11	3.76	18	20.9%
Sep-20	4.68	1.23	6.97	6.48	18	36.0%
Oct-20	3.36	0.87	7.40	6.25	18	34.7%
Nov-20	4.86	0.22	0.69	2.74	18	15.2%
Dec-20	0.36	1.20	2.02	1.66	18	9.2%
Jan-21	1.88	1.97	0.07	1.93	18	10.7%
Feb-21	1.83	0.96	0.72	1.62	18	9.0%
Mar-21	2.93	2.47	3.75	4.81	18	26.7%
<b>Apr-21</b>	<b>2.01</b>	<b>0.19</b>	<b>2.37</b>	<b>3.65</b>	<b>18</b>	<b>20.3%</b>
<b>May-21</b>	<b>1.57</b>	<b>0.19</b>	<b>2.00</b>	<b>1.74</b>	<b>18</b>	<b>9.7%</b>
<b>Jun-21</b>	<b>3.35</b>	<b>0.22</b>	<b>3.74</b>	<b>3.65</b>	<b>18</b>	<b>20.3%</b>
<b>Quarter</b>						
Average	2.31	0.20	2.70	3.01		0.17
Minimum	1.57	0.19	2.00	1.74		0.10
Maximum	3.35	0.22	3.74	3.65		0.20
<b>YTD</b>						
Average	2.74	0.81	3.01	3.39		18.8%
Minimum	0.36	0.07	0.07	1.62		9.0%
Maximum	4.86	2.47	7.40	6.48		36.0%

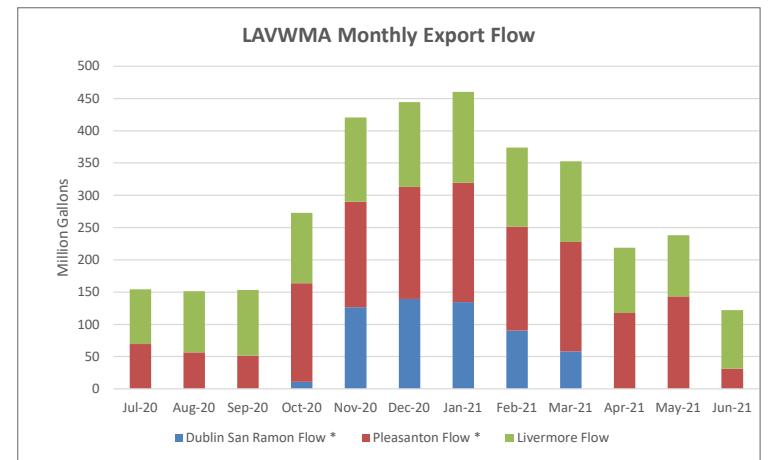
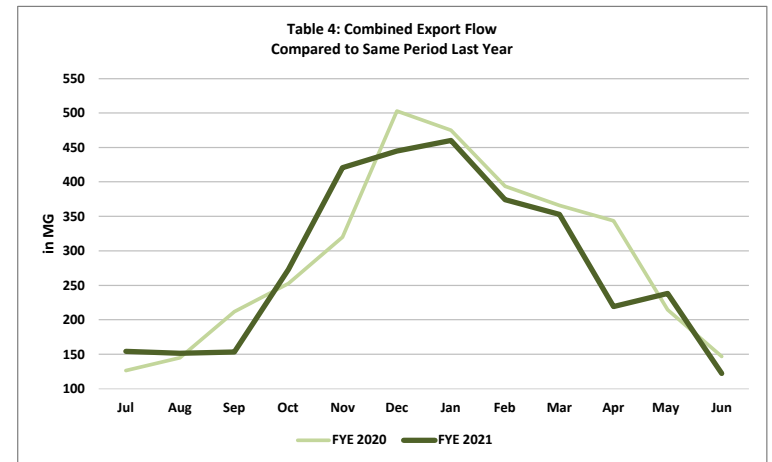


**Note:** Total available storage volume is 18 million gallons.

## TABLE 4 - Monthly Export Flow

LAVWMA SYSTEM: Fiscal Year 2020-2021, 4th Quarter

Month	Dublin San Ramon	Pleasanton	Livermore	Combined Export	Total for Quarter
	Flow * MG	Flow * MG	Flow MG	Flow MG	
Jul-20	0.00	69.47	84.98	154.45	
Aug-20	0.00	56.45	94.98	151.43	
Sep-20	0.00	51.96	101.32	153.28	459.16
Oct-20	10.97	152.95	108.95	272.87	
Nov-20	126.72	163.35	130.65	420.72	
Dec-20	139.31	173.70	131.57	444.58	1,138.17
Jan-21	134.42	185.25	140.49	460.16	
Feb-21	90.27	161.26	122.56	374.09	
Mar-21	58.15	169.70	124.84	352.69	1,186.93
<b>Apr-21</b>	<b>0.00</b>	<b>117.76</b>	<b>101.29</b>	<b>219.05</b>	
<b>May-21</b>	<b>0.00</b>	<b>143.37</b>	<b>94.70</b>	<b>238.07</b>	
<b>Jun-21</b>	<b>0.00</b>	<b>31.43</b>	<b>90.82</b>	<b>122.25</b>	<b>579.37</b>
<b>Quarter</b>					
Total	0.00	292.56	286.81	579.37	
Average	0.00	97.52	95.60	193.12	
Minimum	0.00	31.43	90.82	122.25	
Maximum	0.00	143.37	101.29	238.07	
<b>YTD</b>					
Total	559.84	1,476.65	1,327.15	3,363.64	
Average	46.65	123.05	110.60	280.30	
Minimum	0.00	31.43	84.98	122.25	
Maximum	139.31	185.25	140.49	460.16	



\* 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 2020-2021, 4th Quarter

FY Labor Budget \$1,010,492

Month	Billed	FTE Equiv	Labor Invoice	YTD	Budget Utilization	Labor	Export Flow	
	Labor Hours			Labor Expense		Labor Budget Remaining	MG	AF
Jul-20	420.0	2.4	\$62,233	\$62,233	6.2%	\$948,259	154.45	474
Aug-20	498.5	2.9	\$77,098	\$139,331	13.8%	\$871,161	151.43	465
Sep-20	466.5	2.7	\$73,335	\$212,667	21.0%	\$797,825	153.28	470
Oct-20	788.3	4.5	\$129,096	\$274,900	27.2%	\$668,730	272.87	837
Nov-20	684.5	3.9	\$99,804	\$337,133	33.4%	\$568,926	420.72	1,291
Dec-20	396.0	2.3	\$64,670	\$399,366	39.5%	\$504,256	444.58	1,364
Jan-21	445.0	2.6	\$74,538	\$461,599	45.7%	\$429,718	460.16	1,412
Feb-21	431.0	2.5	\$73,341	\$523,832	51.8%	\$356,378	374.09	1,148
Mar-21	376.5	2.2	\$63,901	\$586,065	58.0%	\$292,476	352.69	1,082
<b>Apr-21</b>	<b>378.0</b>	<b>2.2</b>	<b>\$62,228</b>	<b>\$648,298</b>	<b>64.2%</b>	<b>\$230,248</b>	<b>219.05</b>	<b>672</b>
<b>May-21</b>	<b>131.5</b>	<b>0.8</b>	<b>\$22,263</b>	<b>\$710,531</b>	<b>70.3%</b>	<b>\$207,985</b>	<b>238.07</b>	<b>731</b>
<b>Jun-21</b>	<b>412.8</b>	<b>2.4</b>	<b>\$70,588</b>	<b>\$772,764</b>	<b>76.5%</b>	<b>\$137,397</b>	<b>122.25</b>	<b>375</b>
<b>QUARTER</b>								
Total	<b>922.3</b>		<b>\$155,079</b>				579.37	1,778
Average	307.4	<b>1.8</b>	\$51,693				193.12	593
Minimum	131.5	0.8	\$22,263				122.25	375
Maximum	412.8	2.4	\$70,588				238.07	731
<b>YTD</b>								
Total YTD	5,428.5		\$873,095		<b>86.4%</b>	\$137,397	3,363.64	10,323
Average YTD	452.4	2.6	\$72,758				280.30	860
Minimum	131.5	0.8	\$22,263				122.25	375
Maximum	788.3	4.5	\$129,096				460.16	1,412

Notes: May labor expenses included \$25,968 credit for O&M hours from September and October that were taken out and re-coded as CIP project labor costs.

## TABLE 6 - O&M Expenditures and Budget Utilization

LAVWMA SYSTEM: Fiscal Year 2020-2021, 4th Quarter

Total O&M Budget: **\$2,618,772**

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-20	\$62,233	\$62,664	\$124,897	\$124,897	4.8%	\$2,493,875	\$809	\$263	154.45	474
Aug-20	\$77,098	\$106,542	\$183,640	\$308,537	11.8%	\$2,310,235	\$1,213	\$395	151.43	465
Sep-20	\$73,335	\$43,140	\$116,475	\$425,012	16.2%	\$2,193,760	\$760	\$248	153.28	470
Oct-20	\$129,096	\$60,246	\$189,341	\$614,353	23.5%	\$2,004,419	\$694	\$226	272.87	837
Nov-20	\$99,804	\$207,370	\$307,174	\$921,527	35.2%	\$1,697,245	\$730	\$238	420.72	1,291
Dec-20	\$64,670	\$214,508	\$279,178	\$1,200,705	45.8%	\$1,418,067	\$628	\$205	444.58	1,364
Jan-21	\$74,538	\$137,351	\$211,888	\$1,412,593	53.9%	\$1,206,179	\$460	\$150	460.16	1,412
Feb-21	\$73,341	\$156,659	\$230,000	\$1,642,593	62.7%	\$976,179	\$615	\$200	374.09	1,148
Mar-21	\$63,901	\$141,473	\$205,375	\$1,847,967	70.6%	\$770,805	\$582	\$190	352.69	1,082
<b>Apr-21</b>	<b>\$62,228</b>	<b>\$10,227</b>	<b>\$72,455</b>	<b>\$1,920,423</b>	<b>73.3%</b>	<b>\$698,349</b>	<b>\$331</b>	<b>\$108</b>	<b>219.05</b>	<b>672</b>
<b>May-21</b>	<b>\$22,263</b>	<b>\$126,533</b>	<b>\$148,796</b>	<b>\$2,069,219</b>	<b>79.0%</b>	<b>\$549,553</b>	<b>\$625</b>	<b>\$204</b>	<b>238.07</b>	<b>731</b>
<b>Jun-21</b>	<b>\$70,588</b>	<b>\$259,786</b>	<b>\$330,374</b>	<b>\$2,399,593</b>	<b>91.6%</b>	<b>\$219,179</b>	<b>\$2,702</b>	<b>\$881</b>	<b>122.25</b>	<b>375</b>
<b>QUARTER</b>										
Total	\$155,079	\$396,546	<b>\$551,625</b>				<b>\$952</b>	<b>\$310</b>	579.37	1,778
Average	\$51,693	\$132,182	\$183,875						193.12	593
Minimum	\$22,263	\$10,227	\$72,455				\$331	\$108	122.25	375
Maximum	\$70,588	\$259,786	\$330,374				\$2,702	\$881	238.07	731
<b>YTD</b>										
Total YTD	\$873,095	\$1,526,498	<b>\$2,399,593</b>		<b>91.6%</b>	<b>\$219,179</b>	<b>\$713</b>	<b>\$232</b>	<b>3,363.64</b>	<b>10,323</b>
Average YTD	\$72,758	\$127,208	\$199,966							
Minimum	\$22,263	\$10,227	\$72,455				\$331	\$108	151.43	465
Maximum	\$129,096	\$259,786	\$330,374				\$2,702	\$881	460.16	1,412

Q1 Note: August expenditure of \$31K is for the rectifier repair that will be reimbursed by insurance.

Q2 Notes: a) Landscaping invoices (\$1561) for April and May not paid until October; b) AT&T invoices for Sep, Oct and Nov were all paid in November; c) PG&E invoices for Feeder A and Feeder B (\$142,430) were paid in November

Q4 Notes: a) April PG&E invoices total \$109,638 were paid late in May which explains why utilities expenses were low in April; b) May PG&E invoices for Feeder A and Feeder B total \$124,728 were paid in June together with June PG&E invoices \$114,106 which explains why utilities expenses in June were doubly high; c) May labor expenses included \$25,968 credit for O&M hours from September and October that were taken out and re-coded as CIP project labor costs.

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

LAVWMA SYSTEM: Fiscal Year 2020-2021, 4th Quarter

<b>Livermore Sole Use Facilities</b>			
Month	Labor Expenses	A/P Expenses	Total Expenses
Jul-20	\$0	\$0	\$0
Aug-20	\$194	\$342	\$536
Sep-20	\$0	\$171	\$171
Oct-20	\$2,527	\$0	\$2,527
Nov-20	\$389	\$163	\$552
Dec-20	\$0	\$274	\$274
Jan-21	\$0	\$244	\$244
Feb-21	\$1,849	\$403	\$2,252
Mar-21	\$2,297	\$194	\$2,491
<b>Apr-21</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
<b>May-21</b>	<b>\$0</b>	<b>\$183</b>	<b>\$183</b>
<b>Jun-21</b>	<b>\$0</b>	<b>\$331</b>	<b>\$331</b>
<b><u>Quarter</u></b>			
Total	\$0	\$514	\$514
Average	\$0	\$171	\$171
Minimum	\$0	\$0	\$0
Maximum	\$0	\$331	\$331
<b><u>YTD</u></b>			
YTD Total	\$7,256	\$2,305	\$9,561
YTD Average	\$605	\$192	\$797
YTD Minimum	\$0	\$0	\$0
YTD Maximum	\$2,527	\$403	\$2,527

**TABLE 8**

**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 2020-2021	2020	2020	2020	2020	2020	2020	2021	2021	2021	2021	2021	2021	TOTAL	Budget
<b>Labor</b>															
Staff	\$1,010,492	\$62,233	\$77,098	\$73,335	\$129,096	\$99,804	\$64,670	\$74,538	\$73,341	\$63,901	\$62,228	\$22,263	\$70,588	\$873,095	\$1,010,492
Subtotal	\$1,010,492	\$62,233	\$77,098	\$73,335	\$129,096	\$99,804	\$64,670	\$74,538	\$73,341	\$63,901	\$62,228	\$22,263	\$70,588	\$873,095	\$1,010,492
<b>Materials &amp; Supplies</b>															
Operations Supplies	\$12,200		\$300	\$9	\$115	\$13,533	\$134	\$153	\$9	\$94	\$178		\$68	\$14,593	\$12,200
Mechanical Supplies	\$25,000	\$132	\$2,977	\$393	\$16,885	\$17	\$407		\$11,222	\$6,192	\$8,940	\$3,800	\$50,963	\$25,000	
Electrical Supplies	\$25,500		\$31,159	\$110	\$12	\$340	\$15	\$116	\$572	\$98		\$200	\$32,623	\$25,500	
Subtotal	\$62,700	\$132	\$34,436	\$402	\$17,110	\$13,562	\$881	\$168	\$11,347	\$666	\$6,468	\$8,940	\$4,068	\$98,179	\$62,700
<b>Laboratory Analysis</b>															
Compliance Testing	\$11,300	\$965	\$772	\$965	\$772	\$772	\$965	\$792	\$792	\$990	\$792	\$792	\$990	\$10,359	\$11,300
Operational Support Testing	\$4,000	\$356	\$356	\$356	\$356	\$356	\$356	\$366	\$366	\$366	\$366	\$366	\$366	\$4,332	\$4,000
Special Sampling	\$15,000	\$1,570	\$1,256	\$1,256	\$1,570	\$1,256	\$1,570	\$1,288	\$1,288	\$1,288	\$1,610	\$1,288	\$1,610	\$16,850	\$15,000
Subtotal	\$30,300	\$2,891	\$2,384	\$2,577	\$2,698	\$2,384	\$2,891	\$2,446	\$2,446	\$2,644	\$2,768	\$2,446	\$2,966	\$31,541	\$30,300
<b>Contractual Services</b>															
Sub-surface Repairs	\$5,000												\$8,376	\$8,376	\$5,000
Street Sweeping	\$5,000		\$493	\$394	\$400	\$500	\$400	\$400		\$800		\$1,100	\$800	\$5,287	\$5,000
Cathodic Protection Survey & Repairs	\$30,000													\$0	\$30,000
Underground Service Alert	\$3,800		\$3,517											\$3,517	\$3,800
SCADA software maintenance contract	\$10,000		\$4,673											\$4,673	\$10,000
HVAC Maintenance/Repairs	\$750													\$0	\$750
Termite/Pest Control	\$900													\$0	\$900
Landscape/weed maintenance	\$8,000			\$980	\$1,561		\$1,960			\$2,941			\$3,921	\$11,364	\$8,000
Janitorial Service	\$3,000	\$495	\$495	\$795	\$795	\$795	\$795	\$795	\$795	\$795	\$795	\$795	\$795	\$8,940	\$3,000
Fire Extinguisher Maintenance	\$200													\$0	\$200
Postage/Shipping Charges	\$250													\$0	\$250
Professional Services, misc	\$10,000		\$59				\$6,884			\$356		\$3,264		\$10,563	\$10,000
Subtotal	\$76,900	\$495	\$9,236	\$2,169	\$2,756	\$1,295	\$10,040	\$1,195	\$795	\$4,892	\$795	\$5,159	\$13,892	\$52,719	\$76,900
<b>Utilities</b>															
Electricity (PG&E)	\$1,420,300	\$58,803	\$59,710	\$37,629	\$37,682	\$187,477	\$199,944	\$132,438	\$140,929	\$133,272		\$109,792	\$238,834	\$1,336,512	\$1,420,300
Water & Sewer (Pleasanton)	\$1,000	\$157		\$166		\$162		\$154						\$639	\$1,000
Water (EBMUD)	\$880	\$186		\$197		\$250		\$197			\$197	\$197		\$1,223	\$880
Telephone/communications	\$4,500		\$775			\$2,239	\$752	\$753	\$1,142				\$26	\$5,687	\$4,500
WW Treatment (DSRSD)	\$2,500													\$0	\$2,500
Subtotal	\$1,429,180	\$59,146	\$60,485	\$37,992	\$37,682	\$190,129	\$200,696	\$133,542	\$142,071	\$133,272	\$197	\$109,989	\$238,861	\$1,344,060	\$1,429,180
<b>Non-Routine</b>															
Corrosion Studies/ Inspections	\$500													\$0	\$500
Time delay switches for electrical switchgear	\$8,000													\$0	\$8,000
Subtotal	\$8,500	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$8,500
<b>Monthly Total</b>		\$124,897	\$183,640	\$116,475	\$189,341	\$307,174	\$279,178	\$211,888	\$230,000	\$205,375	\$72,455	\$148,796	\$330,374	\$2,399,593	\$2,618,072
<b>YTD Total</b>	\$2,618,072	\$124,897	\$308,537	\$425,012	\$614,353	\$921,527	\$1,200,705	\$1,412,593	\$1,642,593	\$1,847,967	\$1,920,423	\$2,069,219	\$2,399,593		
<b>Combined Export Flow, mg</b>	3,524	154	151	153	273	421	445	460	374	353	219	238	122	3,363	3,524
<b>Pumping Efficiency</b>	63.8%	65.7%	57.3%	56.2%	71.2%	73.5%	72.5%	67.7%	62.2%	58.9%	54.5%	70.0%			
<b>Monthly Cost, \$/mg</b>		\$809	\$1,213	\$760	\$694	\$730	\$628	\$460	\$615	\$582	\$331				
<b>YTD Running Cost, \$/mg</b>	\$743	\$809	\$1,009	\$926	\$839	\$799	\$752	\$687	\$676	\$664	\$639	\$638	\$713	\$713	

**TABLE 8**

**LAVWMA  
BUDGET COMPARISON TO ACTUAL EXPENSES: LABOR**

Current FY Period: 12

ACTUAL EXPENSES BILLED TO LAVWMA FOR REGULAR O&M														
FY 2020-2021	Jul 2020	Aug 2020	Sep 2020	Oct 2020	Nov 2020	Dec 2020	Jan 2021	Feb 2021	Mar 2021	Apr 2021	May 2021	Jun 2021	YTD TOTAL	YTD Budget
<i>Estimated Personnel Hours</i>														
<b>Division 50 - Ops Admin</b>	0	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Division 51 - FOD</b>	72	-	-	18.00	-	-	4.00	5.50	-	-	-	8.75	36.25	72.00
Water/Wastewater Sys Lead Op	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Water/Wastewater Sys OP IV-On Call	0	-	-	7.25	-	-	2.00	-	-	-	-	-	9.25	-
Water/Wastewater Sys OP IV	64	-	-	-	-	-	-	-	-	-	-	-	-	64.00
Water/Wastewater Sys OP III	0	-	-	10.75	-	-	2.00	5.50	-	-	-	-	18.25	-
Water/Wastewater Sys OP II	0	-	-	-	-	-	-	-	-	-	-	8.75	8.75	-
Maintenance Worker	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Supervisor	8	-	-	-	-	-	-	-	-	-	-	-	-	8.00
<b>Division 52 - WWTP</b>	2,996	207.50	225.00	204.00	254.25	280.50	164.00	195.00	171.00	174.00	167.50	180.50	144.50	2,367.75
Process Lead Operator IV/V	200	1.00	4.00	15.00	9.00	7.00	7.00	6.00	6.00	5.00	6.50	11.00	1.00	78.50
Senior WWTP Operator III	2,746	41.50	45.00	29.00	38.50	74.50	43.00	30.00	27.00	37.00	19.00	42.50	31.50	458.50
Operator In Training	0	160.00	90.00	50.00	12.00	4.00	10.00	10.00	10.00	10.00	58.00	-	-	414.00
Operator II	0	-	80.00	102.00	190.75	181.00	96.00	142.00	117.00	114.00	76.00	115.00	104.00	1,317.75
Operator II (SLSS)	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Operations Superintendent	50	5.00	6.00	8.00	4.00	14.00	8.00	7.00	11.00	8.00	8.00	12.00	8.00	99.00
<b>Division 53 - MECH</b>	1,741	120.00	228.00	183.00	459.50	226.50	115.00	122.50	115.00	139.50	160.00	(113.50)	178.00	1,933.50
Senior Mechanic-Crane Cert	380	-	-	-	-	1.00	14.00	33.50	35.00	22.00	61.50	(12.00)	97.50	252.50
<b>Senior Mechanic - USA</b>	82	-	-	-	-	-	19.00	20.00	20.00	25.00	26.00	19.00	2.00	131.00
Maintenance Worker	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Mechanic I/II	1,229	34.00	90.00	67.00	284.50	30.00	4.00	-	9.00	9.00	(80.00)	9.00	456.50	1,229.00
Mechanic II-Crane Cert	0	46.50	103.50	71.00	152.50	127.00	69.50	51.50	49.50	70.50	50.50	(65.00)	-	727.00
<b>Mechanic I/II - USA</b>	0	23.50	25.50	32.00	9.50	26.00	-	-	-	4.00	2.00	63.75	186.25	-
<b>Mechanic II-Crane Cert - USA</b>	0	16.00	9.00	13.00	13.00	42.50	12.50	13.50	10.50	13.00	9.00	22.50	5.75	180.25
Supervisor	50	-	-	-	-	-	-	-	-	-	-	-	-	50.00
<b>Division 54 - ELEC</b>	924	86.00	32.00	76.50	40.50	171.50	102.00	118.50	124.00	31.00	43.00	59.50	79.50	964.00
Senior Instrument/Controls Tech	12	-	-	-	-	-	-	-	-	-	-	-	-	12.00
Instrument Tech	480	29.00	25.00	55.50	9.50	44.50	14.50	13.00	1.00	23.00	46.50	30.50	292.00	480.00
OPS Control Sys Spec	144	1.00	-	2.00	-	69.00	87.00	62.00	52.00	-	-	-	273.00	144.00
Senior Electrician	36	-	-	-	-	-	-	1.00	-	-	-	-	1.00	36.00
Electrician I/II	240	50.00	7.00	17.00	31.00	54.00	15.00	41.00	53.00	26.00	20.00	11.00	48.00	373.00
Senior Electrical Engineer-Supervisory	12	6.00	-	2.00	-	4.00	-	1.00	5.00	4.00	-	2.00	1.00	25.00
<b>Division 26 - SAFETY</b>	48	-	-	-	-	-	-	-	-	-	-	-	-	48.00
Safety Officer	48	-	-	-	-	-	-	-	-	-	-	-	-	48.00
<b>Division 40 - ENG</b>	100	6.50	13.50	3.00	16.00	6.00	15.00	5.00	15.50	32.00	7.50	5.00	2.00	127.00
Senior Engineer-Supervisory	-	-	-	-	-	-	-	-	3.00	-	-	-	-	-
Associate/Senior Civil Engineer-SME	100	6.50	13.50	3.00	16.00	6.00	8.00	4.50	12.50	32.00	7.50	5.00	2.00	116.50
Construction Inspector I	-	-	-	-	-	-	7.00	0.50	-	-	-	-	-	7.50
<i>Total Estimated Personnel Hours</i>														
<b>5,881</b>														
<i>FTE</i>														
<b>2.83</b>														
<b>Total Monthly Hours</b>	<b>420.00</b>	<b>498.50</b>	<b>466.50</b>	<b>788.25</b>	<b>684.50</b>	<b>396.00</b>	<b>445.00</b>	<b>431.00</b>	<b>376.50</b>	<b>378.00</b>	<b>131.50</b>	<b>412.75</b>	<b>5,428.50</b>	<b>5,881.00</b>

Notes: May labor expenses included 113 hours credit for from September and October that were taken out and re-coded as CIP project hours



**TABLE 9**

**April 2021 LAVWMA Monthly Report**

Date	Flow	CBOD	TSS	pH Min	pH Max	Total Chlorine	Total Chlorine	Fecal Coliform	Enterococcus
	MGD	mg/L	mg/L	Std Unit	Std Unit	Residual	Residual	MPN/100ml	MPN/100ml
	LAVWMA	LAVWMA	LAVWMA	LAVWMA	LAVWMA	LAVWMA	SLSS	SLSS	SLSS
4/1/2021	7.40			7.56	7.69	2.822	0.001	4	10
4/2/2021	6.29			7.58	7.67	2.615	0.001		
4/3/2021	6.60			7.61	7.67	2.837	0.001		
4/4/2021	11.72			7.60	7.71	2.661	0.001		
4/5/2021	8.21			7.61	7.76	2.511	0.001		
4/6/2021	7.90	5.0	10.7	7.63	7.75	2.834	0.001		
4/7/2021	7.88			7.62	7.76	2.860	0.001		
4/8/2021	5.25			7.61	7.70	3.013	0.001	11	<10
4/9/2021	7.91			7.61	7.70	3.198	0.517		
4/10/2021	7.05			7.60	7.70	3.000	0.573		
4/11/2021	8.49			7.58	7.71	3.386	0.419		
4/12/2021	7.43			7.58	7.70	3.297	0.227		
4/13/2021	8.01	7.1	12.0	7.61	7.70	2.908	0.151		
4/14/2021	8.05			7.59	7.68	2.587	0.083		
4/15/2021	6.87			7.60	7.66	2.593	0.045	17	<10
4/16/2021	6.60			7.59	7.67	2.437	0.019		
4/17/2021	5.47			7.56	7.70	2.251	0.003		
4/18/2021	7.52			7.54	7.65	2.159	0.001		
4/19/2021	6.62			7.55	7.65	2.311	0.001		
4/20/2021	6.67	6.0	11.8	7.58	7.64	2.019	0.001		
4/21/2021	8.59			7.58	7.66	2.161	0.001		
4/22/2021	7.37			7.60	7.69	2.621	0.001	<2	<10
4/23/2021	8.06			7.57	7.67	2.730	0.039		
4/24/2021	6.00			7.60	7.67	2.853	0.026		
4/25/2021	9.46			7.58	7.67	2.478	0.014		
4/26/2021	8.11			7.55	7.67	2.614	0.007		
4/27/2021	5.33	6.2	9.7	7.57	7.65	2.623	0.012		
4/28/2021	5.92			7.61	7.67	2.685	0.007		
4/29/2021	6.42			7.55	7.68	2.398	0.001	80	<10
4/30/2021	5.87			7.58	7.64	1.947	0.001		

**Note:**

LAVWMA - LAVWMA Export Pump Station

SLSS - San Leandro Sampling Station

**TABLE 9**

**May 2021 LAVWMA Monthly Report**

Date	Flow	CBOD	TSS	pH Min	pH Max	Total Chlorine	Total Chlorine	Fecal Coliform	Enterococcus
	MGD LAVWMA	mg/L LAVWMA	mg/L LAVWMA	Std Unit LAVWMA	Std Unit LAVWMA	Residual mg/L LAVWMA	Residual mg/L SLSS	MPN/100ml SLSS	MPN/100ml SLSS
5/1/2021	9.90			7.59	7.67	1.883	0.001		
5/2/2021	9.36			7.57	7.69	2.298	0.001		
5/3/2021	10.68			7.54	7.67	2.319	0.001		
5/4/2021	11.02			7.53	7.61	1.977	0.001		
5/5/2021	6.57	5.4	7.5	7.53	7.63	2.121	0.001		
5/6/2021	5.97			7.58	7.67	2.256	0.001	80	<10
5/7/2021	6.64			7.60	7.69	2.442	0.001		
5/8/2021	5.43			7.58	7.70	2.721	0.001		
5/9/2021	6.41			7.60	7.67	2.339	0.001		
5/10/2021	9.40			7.59	7.73	2.160	0.001		
5/11/2021	10.51			7.58	7.69	2.195	0.001		
5/12/2021	5.20	4.8	6.4	7.61	7.70	2.025	0.001		
5/13/2021	6.13			7.61	7.71	2.216	0.001	300	<10
5/14/2021	5.10			7.56	7.74	2.479	0.001		
5/15/2021	6.37			7.65	7.77	1.755	0.001		
5/16/2021	6.93			7.63	7.72	2.257	0.001		
5/17/2021	7.29			7.62	7.73	2.407	0.016		
5/18/2021	11.49			7.61	7.71	2.241	0.024		
5/19/2021	8.93	4.7	6.0	7.65	7.72	2.393	0.007		
5/20/2021	9.51			7.56	7.73	2.164	0.003	4	
5/21/2021	7.56			7.61	7.70	3.593	0.001	21	<10
5/22/2021	8.11			7.59	7.69	3.086	0.001		
5/23/2021	6.03			7.60	7.69	2.751	0.001		
5/24/2021	6.40			7.59	7.70	2.798	0.001		
5/25/2021	9.14			7.62	7.72	2.644	0.001		
5/26/2021	9.50	8.8	9.9	7.58	7.70	2.238	0.001		
5/27/2021	7.82			7.63	7.74	2.039	0.001	7	<10
5/28/2021	7.63			7.61	7.69	2.462	0.001		
5/29/2021	4.75			7.63	7.71	1.931	0.001		
5/30/2021	5.62			7.58	7.69	1.827	0.001		
5/31/2021	6.64			7.57	7.64	1.864	0.001		

**Note:**

LAVWMA - LAVWMA Export Pump Station

SLSS - San Leandro Sampling Station

Enterococcus was not reported for SLSS sample collected on 5/20/21 due to incubator failure.

Re-sample was done on 5/21/21.

**TABLE 9**

June		2021		LAVWMA Monthly Report					
Date	Flow	CBOD	TSS	pH Min	pH Max	Total Chlorine	Total Chlorine	Fecal Coliform	Enterococcus
	MGD	mg/L	mg/L	Std Unit	Std Unit	Residual	Residual	MPN/100ml	MPN/100ml
	LAVWMA	LAVWMA	LAVWMA	LAVWMA	LAVWMA	LAVWMA	SLSS	SLSS	SLSS
6/1/2021	3.88			7.58	7.69	1.510	0.001		
6/2/2021	4.21	4.5	7.8	7.63	7.74	1.177	0.001		
6/3/2021	4.00			7.63	7.74	1.671	0.001	4	<10
6/4/2021	3.89			7.61	7.74	1.609	0.001		
6/5/2021	3.33			7.61	7.73	1.335	0.001		
6/6/2021	4.76			7.63	7.68	2.029	0.001		
6/7/2021	3.98			7.65	7.72	1.617	0.001		
6/8/2021	5.11			7.67	7.74	1.133	0.001		
6/9/2021	5.12	5.0	5.9	7.66	7.74	0.708	0.001		
6/10/2021	5.09			7.62	7.71	0.536	0.001	<2	<10
6/11/2021	5.07			7.60	7.68	1.014	0.001		
6/12/2021	5.06			7.64	7.92	0.665	0.001		
6/13/2021	5.04			7.74	7.88	0.153	0.001		
6/14/2021	3.93			7.68	7.84	0.146	0.001		
6/15/2021	4.86			7.63	7.74	0.343	0.001		
6/16/2021	3.88			7.55	7.66	0.213	0.001		
6/17/2021	3.66	4.6	8.0	7.49	7.62	0.66	0.001	8	<10
6/18/2021	2.60			7.49	7.60	1.031	0.001		
6/19/2021	1.76			7.53	7.63	1.034	0.001		
6/20/2021	2.45			7.54	7.64	0.960	0.001		
6/21/2021	3.96			7.54	7.65	1.011	0.00		
6/22/2021	3.05			7.61	7.69	1.510	0.001		
6/23/2021	3.46	3.5	5.8	7.55	7.64	1.628	0.001	14	<10
6/24/2021	5.06			7.54	7.62	1.267	0.001		
6/25/2021	4.02			7.54	7.62	1.208	0.001		
6/26/2021	4.64			7.52	7.61	1.084	0.001		
6/27/2021	4.88			7.51	7.60	1.138	0.001		
6/28/2021	3.87			7.51	7.65	1.108	0.001		
6/29/2021	4.87			7.59	7.68	1.219	0.035		
6/30/2021	2.74	3.6	5.2	7.53	7.64	2.795	0.001	7	<10

**Note:**

LAVWMA - LAVWMA Export Pump Station

SLSS - San Leandro Sampling Station

TABLE 10

*DUBLIN SAN RAMON SERVICES DISTRICT  
WASTEWATER TREATMENT FACILITY*

LAVWMA - 2nd Quarter 2021

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
04/20/21	840	22.2	152	404	7.5	7.1	0.4
05/18/21	724	22.4	102	358	7.6	7.3	0.3
06/08/21	858	22.7	138	394	7.7	7.1	0.6
MAXIMUM	858	22.7	152	404	7.7	7.3	0.6
MINIMUM	724	22.2	102	358	7.5	7.1	0.3
AVERAGE	807	22.4	131	385	7.6	7.2	0.4

TABLE 10

*DUBLIN SAN RAMON SERVICES DISTRICT  
WASTEWATER TREATMENT FACILITY*

DSRSD - 2nd Quarter 2021

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
04/20/21	882	22.5	164	444	7.2	7.0	0.2
05/25/21	968	23.2	172	428	7.5	7.0	0.5
06/08/21	892	23.8	180	422	7.6	7.0	0.6
MAXIMUM	968	23.8	180	444	7.6	7.0	0.6
MINIMUM	882	22.5	164	422	7.2	7.0	0.2
AVERAGE	914	23.2	172	431	7.5	7.0	0.4

**TABLE 10**

**CITY OF LIVERMORE  
LIVERMORE WATER RECLAMATION PLANT**

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
04/07/21	760	22.0	97	370	7.7	7.4	0.3
05/05/21	710	25.0	88	345	7.6	7.4	0.2
06/02/21	690	25.0	98	404	7.7	7.7	0.0
MAXIMUM	760	25.0	98	404	7.7	7.7	0.3
MINIMUM	690	22.0	88	345	7.6	7.4	0.0
AVERAGE	720	24.0	94	373	7.7	7.5	0.2

TABLE 11

## LAVWMA Action Item List

Month: Aug-21

SAG Task	Responsible Party	Due Date	Status	Completion Date
Items for August 18, 2021 LAVWMA Board Meeting.	SAG	NA	Due to the short time frame between the continued July 26, 2021 and the August 18, 2021 meeting no SAG meeting was held. SAG members were part of the review process for the SLSS project. They also reviewed the pump bids and Trillium's lowest responsive, responsible bid. They were notified of the plan to modify the budget and award Trillium the pump purchase project. No comments were received.	
Operations Coordination Committee Task	Responsible Party	Due Date	Status	Completion Date
<b>FYE21 Replacement Projects: See Items Below</b>	Weir/Zavadil/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 proceeding on schedule. All submittals and RFIs have been addressed. Royal Electric moved on site July 6, 2021. The MCCs are currently being manufactured. Maurice Atendido and Diep Nguyen visited the Eaton manufacturing plant in Ashville NC on July 14, 2021. Tests were successful. Change order issued to replace the wiring for the actuators on the pump deck. There has been a delay in delivery of capacitors for the MCCs. A decision has been made to go ahead and ship the MCCs and have the capacitors installed in the field. They are not critical to the operation of the MCCs. Each subunit can be shut down to install the capacitors one at a time.	
Purchase Three New Pumps and Rebuild Two Associated Motors. Estimated cost has increased to \$460,000	Weir/Quinlan	6/30/2022	Bid packet was posted and distributed on July 6, 2021. A mandatory prebid meeting was held on July 15, 2021 and was attended by four pump vendors. Addendum No. 1 was issued on August 2, 2021. Four bids were received by the deadline of August 5, 2021. Bids ranged from \$357,057 to \$941,200. Trillium submitted the low bid. References have been contacted and have been positive. Budget Modification No. 1 to increase the project cost and award the contract to Trillium will be considered by the Board on August 18, 2021. Trillium submitted extraneous material and requested significant modifications to the contract, which is nonnegotiable. As of August 17, 2021 Trillium has been given an ultimatum to accept the contract as is or their bid will be deemed nonresponsive and the next bidder will be considered.	
Resealing of all Three Storage Basins. Estimated cost \$200,000	Quinlan	12/31/2020	Project is complete.	5/1/2021
San Leandro Sample Station Design Improvements. Estimated cost \$670,000	Weir	6/30/2022	RFP for engineering services was posted to the website on June 28, 2021. A non-mandatory site visit is scheduled for June 13, 2021. Proposals were due 5:00 p.m. Monday, July 26, 2021. HydroScience (HS) was the only one to submit a bid. SAG members reviewed and rated the proposal; average score of 81.5 out of 90. HydroScience has been notified on the intent to award the project to them. They are preparing a detailed scope of work to attach to the agreement. Their cost estimate is \$173,545 and the budget for engineering services is \$185,000. A detailed scope of work was submitted by HS as Exhibit A of the agreement. It was reviewed and slightly modified by LAVWMA and the member agencies. That resulted in the possibility of some additional engineering being required. The scope was modified and the cost ceiling in the agreement will be \$185,000 to provide some contingency funds. The agreement should be fully executed by August 20, 2021.	
Road Drainage Improvements at the Pump Station. Estimated cost \$35,000	TBD	12/31/2020	To be combined with similar projects at DSRSD.	
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. They are in the process of scheduling their work.	
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 are being held.	
Pipeline Inspection. Estimated cost \$100,000	TBD	6/30/2021	Scope will be based on the results and recommendations of the HydroScience (National Plant Services) inspection project. Inspection site selection will begin soon.	
Smart Detectors on High Maintenance Air/Vac and Air Release Valves. Estimated cost \$40,000	TBD	6/30/2021	The smart detectors are intended to help prevent leaks from the valves along the forcemain system. Three have been installed for testing and have proven to be beneficial.	
Rewiring the actuators on the pump deck. Estimated cost \$50,000.	Atendido	12/31/2021	Royal Electric provided a change order estimate of \$10,500, which has been issued.	
<b>Other Items</b>				
Wet Weather Issues	Sevilla	10/31/2020	Meeting will be scheduled soon.	
Live test of SLSS system	Sevilla/Atendido	TBD	Conducted in April 2019. No significant issues. Has been impossible to plan for a test due to COVID-19 restrictions.	
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	6/30/2019	Gate is in good shape but won't fully close. No date set, perhaps this winter.	
EBDA Enterococcus Issue	Sevilla		No issues at this time.	
YTD O&M Expenses compared to budget	Carson, Weir	Ongoing		

