

LAKE ARROWHEAD COMMUNITY SERVICES DISTRICT

MEMORANDUM

DATE: NOVEMBER 12, 2019

TO: BOARD OF DIRECTORS
Lake Arrowhead Community Services District

FROM: 
MATT BROOKS, Operations Manager

SUBJECT: OPERATIONS MANAGER'S REPORT

A. RECOMMENDATION

This is an information item.

B. REASON FOR RECOMMENDATION

This is an information item.

C. BACKGROUND INFORMATION

This report is to give an update on water delivered in 2019, along with any other key mentionables within the Operations Department.

D. FISCAL IMPACT

This is an information item.

E. ENVIRONMENTAL IMPACT

This is an information item.

F. ATTACHMENTS

- 2019 Monthly Report
- 2018 Monthly Report
- October 2019 Water Delivered Annual Analysis and Project Status Updates

**ARROWHEAD WOODS MONTHLY DATA
ACRE FEET**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
2019 MONTH	TRANSFER TO GV LAKE	WELLS TO SYSTEM	BERNINA PLANT	CEDAR GLEN PLANT	COMBINED PLANT	COMBINED PLANT BACKWASH	BERNINA RECYCLE	CLAWA PURCHASE (a)	ROTW CLAWA PURCHASE (a)	BRENTWOOD CLAWA PURCHASE (a)	LAKE DRAW (b)	DELIVERED TO DISTRIBUTION (c)	METERED WATER	STORAGE VOLUME (e)	STORAGE VOLUME CHANGE +/-	UN-METERED WATER (d)
JANUARY	0.00	13.17	0.00	60.63	60.63	4.33	0.00	0.00	0.00	0.00	60.63	69.47	56.45	23.82	0.80	12.22
FEBRUARY	0.00	15.90	1.38	55.11	56.49	4.54	0.00	0.00	0.00	0.00	56.49	67.85	53.02	24.62	2.09	12.74
MARCH	0.00	18.62	11.93	34.18	46.11	3.84	0.29	0.00	0.00	0.00	46.11	61.18	50.91	26.71	-0.28	10.55
1ST QUARTER	0.00	47.69	13.31	149.92	163.23	12.71	0.29	0.00	0.00	0.00	163.23	198.50	160.38	75.15	2.61	35.51
APRIL	0.00	19.37	51.07	0.00	51.07	4.56	2.37	0.00	0.00	0.00	51.07	68.25	57.30	26.43	0.00	10.95
MAY	0.00	17.66	83.86	0.00	83.86	6.93	4.26	0.00	0.00	0.00	83.86	98.85	84.74	26.37	1.78	12.33
JUNE	0.00	16.72	120.37	0.00	120.37	9.54	6.42	0.00	2.34	2.34	120.37	136.31	121.85	28.15	-3.44	17.90
2ND QUARTER	0.00	53.75	255.30	0.00	255.30	21.03	13.05	0.00	2.34	2.34	255.30	303.41	263.89	80.95	-1.66	41.18
SEMI-ANNUAL	0.00	101.44	288.61	149.92	418.53	33.74	13.34	0.00	2.34	2.34	418.53	501.91	424.27	156.10	0.95	76.69
JULY	0.00	17.38	114.45	53.40	167.85	14.46	5.79	0.00	7.63	7.63	167.85	184.19	169.40	24.71	3.29	11.50
AUGUST	0.00	16.93	78.28	59.14	137.42	11.49	5.69	0.00	31.19	31.19	137.42	179.74	165.47	28.00	-1.97	16.24
SEPTEMBER	0.00	15.91	65.75	78.89	144.64	9.98	3.96	0.00	5.49	5.49	144.64	160.02	144.37	26.03	0.90	14.75
3RD QUARTER	0.00	50.22	258.48	191.43	449.91	35.93	15.44	0.00	44.31	44.31	449.91	523.95	479.24	78.74	2.22	42.49
OCTOBER	0.00	16.17	72.36	41.78	114.14	12.70	1.71	0.00	0.00	0.00	114.14	119.32	105.48	26.93	0.00	13.84
NOVEMBER	0.00				0.00					0.00	0.00	0.00			0.00	0.00
DECEMBER	0.00				0.00					0.00	0.00	0.00				0.00
4TH QUARTER	0.00	16.17	72.36	41.78	114.14	12.70	1.71	0.00	0.00	0.00	114.14	119.32	105.48	26.93	0.00	13.84
ANNUAL TOTAL	0.00	167.83	599.45	383.13	982.58	82.37	30.49	0.00	46.65	46.65	982.58	1145.18	1008.99	261.77	3.17	133.02

(a) CLAWA consumption numbers are based upon monthly billing statements provided by CLAWA. CLAWA reads these meters *on or near the 24th of each month*, so the numbers may not be an actual representation of water consumed for said calendar month.

(b) Lake Draw = (1) + (5)

(c) Delivered to Distribution = (2) + (5) - (6) + (7) + (10)

(d) Un-Metered Water = ((12) - (13)) - (15)

(e) Storage Volume calculated 8:00 am the 1st of every month.

**ARROWHEAD WOODS MONTHLY DATA
ACRE FEET**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
2018 MONTH	TRANSFER TO GV LAKE	WELLS TO SYSTEM	BERNINA PLANT	CEDAR GLEN PLANT	COMBINED PLANT	COMBINED PLANT BACKWASH	BERNINA RECYCLE	CLAWA PURCHASE (a)	ROTW CLAWA PURCHASE (a)	BRENTWOOD CLAWA PURCHASE (a)	LAKE DRAW (b)	DELIVERED TO DISTRIBUTION (c)	METERED WATER	STORAGE VOLUME (e)	STORAGE VOLUME CHANGE +/-	UN-METERED WATER (d)
JANUARY	0.00	11.57	0.00	32.93	32.93	1.57	0.00	19.68	0.00	19.68	32.93	62.61	51.30	27.73	-1.69	13.00
FEBRUARY	0.00	10.12	0.00	52.02	52.02	2.43	0.00	0.00	0.00	0.00	52.02	59.71	48.50	26.04	1.26	9.95
MARCH	0.00	11.29	0.00	49.63	49.63	1.69	0.00	0.00	0.00	0.00	49.63	59.23	48.48	27.30	-0.22	10.97
1ST QUARTER	0.00	32.98	0.00	134.58	134.58	5.69	0.00	19.68	0.00	19.68	134.58	181.55	148.28	81.07	-0.65	33.92
APRIL	0.00	11.74	0.00	53.17	53.17	3.35	0.00	0.00	5.56	5.56	53.17	67.12	58.56	27.08	-0.84	9.40
MAY	0.00	10.66	0.00	88.24	88.24	5.38	0.00	0.00	26.83	26.83	88.24	120.35	107.30	26.24	-0.90	13.95
JUNE	0.00	11.78	0.00	92.50	92.50	6.17	0.00	16.61	40.51	57.12	92.50	155.23	142.44	25.34	2.37	10.42
2ND QUARTER	0.00	34.18	0.00	233.91	233.91	14.90	0.00	16.61	72.90	89.51	233.91	342.70	308.30	78.66	0.63	33.77
SEMI-ANNUAL	0.00	67.16	0.00	368.49	368.49	20.59	0.00	36.29	72.90	109.19	368.49	524.25	456.58	159.73	-0.02	67.69
JULY	0.00	11.50	9.40	99.83	109.23	9.96	0.00	55.46	19.89	75.35	109.23	186.12	170.23	27.71	-2.07	17.96
AUGUST	0.00	13.97	131.55	48.47	180.02	16.04	6.83	1.90	0.07	1.97	180.02	181.94	170.15	25.64	2.25	9.54
SEPTEMBER	0.00	13.54	9.19	84.19	93.38	8.19	0.54	60.52	0.00	60.52	93.38	159.79	149.19	27.89	-4.66	15.26
3RD QUARTER	0.00	39.01	150.14	232.49	382.63	34.19	7.37	117.88	19.96	137.84	382.63	527.85	489.57	81.24	-4.48	42.76
OCTOBER	0.00	13.07	0.00	75.67	75.67	6.96	0.00	31.73	0.00	31.73	75.67	113.51	102.84	23.23	1.00	9.67
NOVEMBER	0.00	12.56	0.00	72.33	72.33	5.71	0.00	0.00	0.00	0.00	72.33	79.18	65.62	24.23	-0.63	14.19
DECEMBER	0.00	12.04	0.00	66.31	66.31	4.59	0.00	0.00	0.00	0.00	66.31	73.76	60.03	23.60	0.22	13.51
4TH QUARTER	0.00	37.67	0.00	214.31	214.31	17.26	0.00	31.73	0.00	31.73	214.31	266.45	228.49	71.06	0.59	37.37
ANNUAL TOTAL	0.00	143.84	150.14	815.29	965.43	72.04	7.37	185.90	92.86	278.76	965.43	1318.55	1174.64	312.03	-3.91	147.82

(a) CLAWA consumption numbers are based upon monthly billing statements provided by CLAWA. CLAWA reads these meters *on or near the 24th of each month*, so the numbers may not be an actual representation of water consumed for said calendar month.

(b) Lake Draw = (1) + (5)

(c) Delivered to Distribution = Bernina System Input Meter + (4) + (8)

(d) Un-Metered Water = ((12) - (13)) - (15)

(e) Storage Volume calculated 8:00 am the 1st of every month.

November 12, 2019

October 2019 Water Delivered Annual Analysis

- In October 2019 (119.32 AF), consumption was up 5.1% when compared to October 2018 (113.51 AF). Through 10 months of 2019 consumption is down 1.7% (1145.18 AF) compared to the 1st 10 months of 2018 (1165.61 AF). These numbers are based off of column (12) on the Report, and only counts water delivered to the Distribution System.
- October 2019 Lake Draw = 114.14 AF vs October 2018 = 75.67 AF. Through 10 months of 2019 lake withdrawals are up 18.8% (982.58 AF) compared to the 1st 10 months of 2018 (826.79 AF).
- October 2019 Wells to System = 16.17 AF vs October 2018 = 13.07 AF. Through 10 months of 2019 “Wells To System” is up 40.7% (167.83 AF) when compared to the 1st 10 months of 2018 (119.24 AF).
- October 2019 total CLAWA purchase = 0 AF vs October 2018 = 31.73 AF. Through 10 months of 2019 CLAWA purchase = 46.65 AF compared to the 1st 10 months of 2018 = 278.76 AF.
- October 2019 Recycled Water delivered = 22.49 AF vs October 2018 = 10.52 AF. Through 10 months of 2019 Recycled Water delivered = 200.84 AF compared to the 1st 10 months of 2018 = 250.40 AF.

Operations Department Project Status Updates

- **“Consequence of Failure Analysis”, Phase 2 of a Comprehensive Wastewater System Analysis** – District staff has been working with the engineering firm, Dudek, in finishing up the 2nd phase of a comprehensive wastewater system analysis that includes both wastewater treatment plants and five of the District’s largest wastewater lift stations. This second phase is called a “Consequence of Failure Analysis” and the contract was awarded on October 9, 2018 at the regular scheduled Board meeting. The District just received a draft of the analysis for review and is scheduled to meet with Dudek on October 14 to discuss it in more detail. A copy will be made available for the Board once it has been finalized.
- **Grass Valley WWTP Operations Building Upgrade Project # 201** – This project was awarded on September 24, 2019 at the regular scheduled Board meeting and commenced on October 24, 2019. This project will create a safer, more efficient work environment and will also improve the level of professionalism and aesthetics at the Grass Valley WWTP. The project is anticipated to be completed in December 2019.