

**LAKE ARROWHEAD COMMUNITY SERVICES DISTRICT**

**MEMORANDUM**

**DATE:** NOVEMBER 13, 2018

**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 2018.

**D. FISCAL INFORMATION**

This is an information item.

**E. ATTACHMENTS**

- 2018 Monthly Report
- 2017 Monthly Report
- October 2018 Water Delivered Annual Analysis

**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 GVL LAKE	WELLS TO SYSTEM	BERNINA PLANT	CEDAR GLEN PLANT	COMBINED PLANT	COMBINED PLANT BACKWASH	BERNINA RECYCLE	CLAWA PURCHASE (a)	ROTW PURCHASE (a)	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				0.00					0.00	0.00	0.00		24.23		0.00
DECEMBER	0.00				0.00					0.00	0.00	0.00				0.00
4TH QUARTER	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	47.46	1.00	9.67
ANNUAL TOTAL	0.00	119.24	150.14	676.65	826.79	61.74	7.37	185.90	92.86	278.76	826.79	1165.61	1048.99	288.43	-3.50	120.12

(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.

**ARROWHEAD WOODS MONTHLY DATA  
ACRE FEET**

2017 MONTH	(1) TRANSFER TO GVLAKE	(2) WELLS TO SYSTEM	(3) BERNINA PLANT	(4) CEDAR GLEN PLANT	(5) COMBINED PLANT	(6) COMBINED PLANT BACKWASH	(7) BERNINA RECYCLE	(8) CLAWA PURCHASE (a)	(9) ROTW CLAWA PURCHASE (a)	(10) BRENTWOOD CLAWA PURCHASE (a)	(11) LAKE DRAW (b)	(12) DELIVERED TO DISTRIBUTION (c)	(13) METERED WATER	(14) STORAGE VOLUME (e)	(15) STORAGE VOLUME CHANGE +/-	(16) UN-METERED WATER (d)
JANUARY	0.00	8.58	0.00	8.76	8.76	0.48	0.00	60.76	0.00	60.76	8.76	77.62	52.64	20.36	2.84	22.14
FEBRUARY	0.00	11.07	21.85	13.02	34.87	3.81	0.73	27.64	0.00	27.64	34.87	70.50	48.04	23.20	4.24	18.22
MARCH	0.00	12.96	63.44	0.00	63.44	5.07	2.90	0.00	0.00	0.00	63.44	74.23	51.23	27.44	0.46	22.54
1ST QUARTER	0.00	32.61	85.29	21.78	107.07	9.36	3.63	88.40	0.00	88.40	107.07	222.35	151.91	71.00	7.54	62.90
APRIL	0.00	12.78	67.70	0.00	67.70	5.00	4.02	0.00	0.00	0.00	67.70	79.50	56.31	27.90	-1.07	24.26
MAY	0.00	18.55	115.13	0.00	115.13	7.71	5.59	0.00	1.06	1.06	115.13	132.62	103.13	26.83	1.04	28.45
JUNE	0.00	16.04	163.95	0.00	163.95	9.89	7.20	0.00	2.46	2.46	163.95	179.76	143.71	27.87	0.51	35.54
2ND QUARTER	0.00	47.37	346.78	0.00	346.78	22.60	16.81	0.00	3.52	3.52	346.78	391.88	303.15	82.60	0.48	88.25
SEMI-ANNUAL	0.00	79.98	432.07	21.78	453.85	31.96	20.44	88.40	3.52	91.92	453.85	614.23	455.06	153.60	8.02	151.15
JULY	0.00	15.74	162.62	36.11	198.73	13.31	5.63	0.00	0.00	0.00	198.73	206.79	174.02	28.38	-0.05	32.82
AUGUST	0.00	13.67	119.47	66.13	185.60	11.63	6.05	0.00	0.00	0.00	185.60	193.69	166.28	28.33	0.48	26.93
SEPTEMBER	0.00	13.57	20.99	61.37	82.36	7.22	1.32	13.14	41.56	54.70	82.36	144.73	123.03	28.81	-3.00	24.70
3RD QUARTER	0.00	42.98	303.08	163.61	466.69	32.16	13.00	13.14	41.56	54.70	466.69	545.21	463.33	85.52	-2.57	84.45
OCTOBER	0.00	14.87	0.00	45.53	45.53	2.06	0.00	58.42	0.00	58.42	45.53	116.76	101.27	25.81	-1.34	16.83
NOVEMBER	0.00	12.71	0.00	33.11	33.11	1.73	0.00	30.82	0.00	30.82	33.11	74.91	66.17	24.47	0.06	8.68
DECEMBER	0.00	13.38	0.00	72.89	72.89	3.54	0.00	0.00	0.00	0.00	72.89	82.73	66.31	24.53	3.20	13.22
4TH QUARTER	0.00	40.96	0.00	151.53	151.53	7.33	0.00	89.24	0.00	89.24	151.53	274.40	233.75	74.81	1.92	38.73
ANNUAL TOTAL	0.00	163.92	735.15	336.92	1072.07	71.45	33.44	190.78	45.08	235.86	1072.07	1433.84	1152.14	313.93	7.37	274.33

27.73

(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.

November 13, 2018

## October 2018 Water Delivered Annual Analysis

- In October 2018 (113.51 AF), consumption was very similar when compared to October 2017 (116.76 AF). Through the 1<sup>st</sup> 10 months of 2018 consumption is down 8.7% (1165.61 AF) compared to the 1<sup>st</sup> 10 months of 2017 (1276.20 AF). These numbers are based off of column (12) on the Report, and only counts water delivered to the Distribution System.
- October 2018 Lake Draw = 75.67 AF vs October 2017 = 45.53 AF. Through the 1<sup>st</sup> 10 months of 2018 lake withdrawals are down 14.4% (826.79 AF) compared to the 1<sup>st</sup> 10 months of 2017 (966.07 AF).
- October 2018 Wells to System = 13.07 AF vs October 2017 = 14.87 AF. Through the 1<sup>st</sup> 10 months of 2018 "Wells To System" is down 13.5% (119.24 AF) when compared to the 1<sup>st</sup> 10 months of 2017 (137.83 AF).
- October 2018 total CLAWA purchase = 31.73 AF vs October 2017 = 58.42 AF. Through the 1<sup>st</sup> 10 months of 2018 CLAWA purchase = 278.76 AF compared to the 1<sup>st</sup> 10 months of 2017 = 205.04 AF.
- October 2018 Recycled Water delivered = 10.52 AF vs October 2017 = 16.58 AF. Through the 1<sup>st</sup> 10 months of 2018 Recycled Water delivered = 250.40 AF compared to the 1<sup>st</sup> 10 months of 2017 = 211.52 AF.