

**CITY OF WEST KELOWNA**

# Monthly Water Quality Report



**Powers Creek Water Service Area**

**July 2025**

# WATER SUPPLY AND TREATMENT





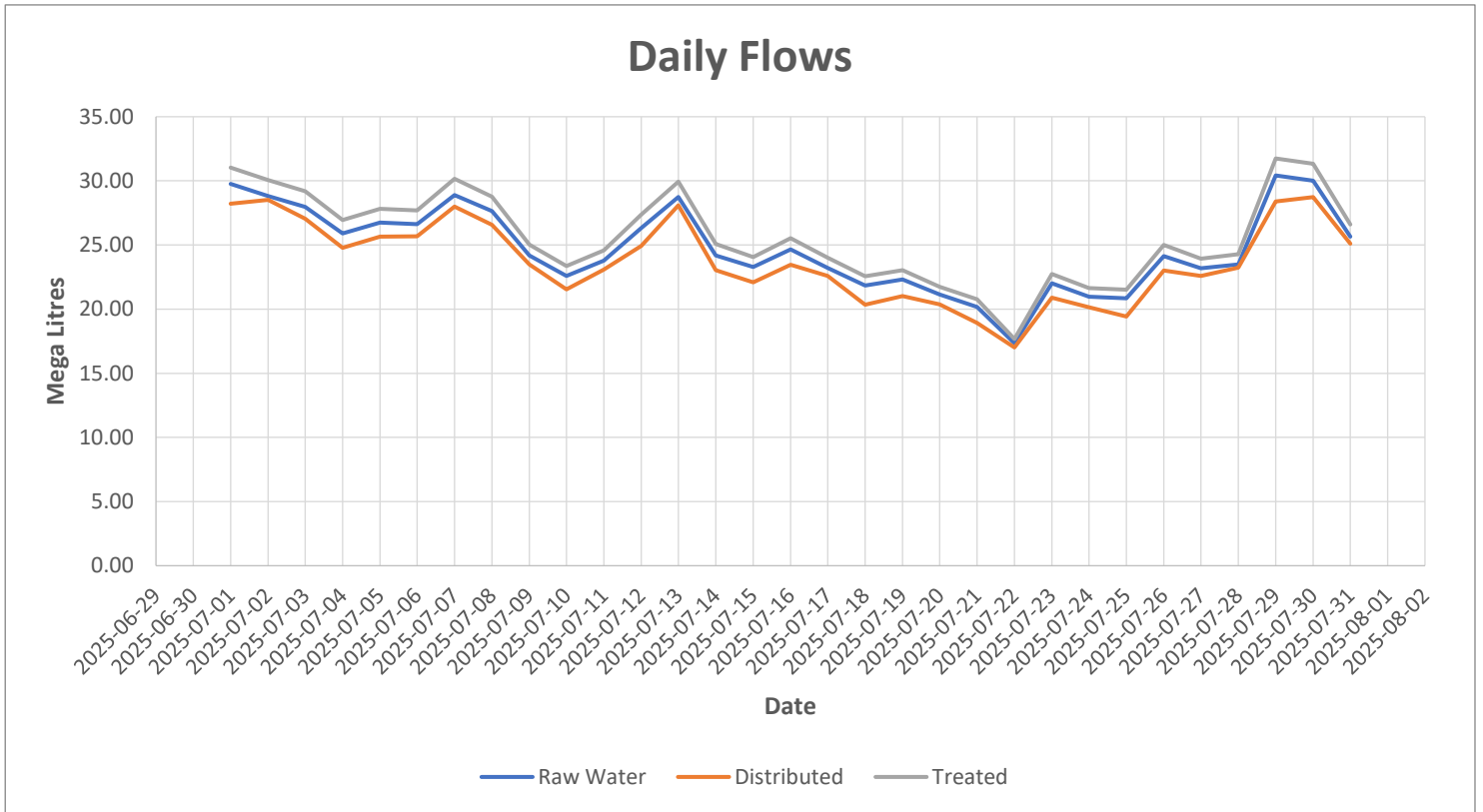
# Powers Creek Water Treatment Plant Monthly Water Quality Summary

2025-08-08

**July, 2025**

## Flow Demand:

	<b>Total for Month</b>
Raw Processed Water:	766.84 ML
Treated Water :	795.18 ML
Distributed Water :	735.99 ML
Backwash Water :	26.67 ML



## Notes:

## Raw Water Specifications:

Date	Raw Turbidity (NTU)			Raw pH		
	Min	Max	Average	Min	Max	Average
2025-07-01	0.49	1.10	0.58	7.36	7.71	7.52
2025-07-02	0.55	1.74	0.66	7.25	7.69	7.46
2025-07-03	0.64	1.31	0.87	7.30	7.69	7.50
2025-07-04	0.68	1.49	0.77	7.25	7.68	7.50
2025-07-05	0.74	2.51	0.88	7.30	7.60	7.46
2025-07-06	0.77	2.49	0.87	7.18	7.40	7.31
2025-07-07	0.74	4.58	0.93	7.13	7.66	7.37
2025-07-08	0.40	5.04	0.70	7.15	7.67	7.45
2025-07-09	0.38	4.99	0.52	7.15	7.47	7.34
2025-07-10	0.41	0.91	0.49	7.34	7.96	7.66
2025-07-11	0.38	2.57	0.45	7.49	7.98	7.81
2025-07-12	0.41	1.17	0.48	7.72	8.00	7.84
2025-07-13	0.43	3.22	0.53	7.61	7.93	7.75
2025-07-14	0.44	2.46	0.69	7.53	7.76	7.66
2025-07-15	0.16	2.43	0.53	7.70	7.97	7.81
2025-07-16	0.32	3.07	0.41	7.73	8.01	7.85
2025-07-17	0.32	1.16	0.45	7.65	8.00	7.82
2025-07-18	0.28	2.05	0.39	7.42	7.78	7.65
2025-07-19	0.26	2.89	0.35	7.59	7.91	7.76
2025-07-20	0.27	2.23	0.33	7.74	7.93	7.83
2025-07-21	0.29	1.22	0.36	7.74	8.02	7.86
2025-07-22	0.41	1.70	0.55	7.67	7.95	7.79
2025-07-23	0.31	1.53	0.41	7.73	7.97	7.84
2025-07-24	0.23	2.55	0.31	7.73	7.98	7.83
2025-07-25	0.18	2.23	0.26	7.64	7.90	7.78
2025-07-26	0.22	2.03	0.29	7.40	7.82	7.68
2025-07-27	0.13	0.46	0.21	7.48	7.72	7.61
2025-07-28	0.14	3.07	0.42	7.47	7.98	7.71
2025-07-29	0.56	1.56	0.68	7.39	7.99	7.76
2025-07-30	0.71	1.69	0.88	7.57	7.90	7.73
2025-07-31	0.65	3.04	0.79	7.38	7.97	7.69

Notes:

## Raw Water Specifications (Continued):

Date	Raw Temp (°C)			Raw DOC (mg/L)		
	Min	Max	Average	Min	Max	Average
2025-07-01	14.14	21.70	16.93	11.70	12.38	12.09
2025-07-02	13.99	21.55	17.04	11.86	13.22	12.82
2025-07-03	13.42	16.39	14.70	12.82	13.61	13.32
2025-07-04	13.08	21.33	16.12	13.25	13.65	13.42
2025-07-05	16.47	21.77	20.58	12.69	17.98	13.06
2025-07-06	21.10	22.14	21.58	12.60	13.32	12.93
2025-07-07	13.60	21.95	18.04	12.35	13.16	12.84
2025-07-08	14.47	22.64	18.53	10.83	13.59	12.30
2025-07-09	15.83	22.53	17.99	12.04	12.98	12.58
2025-07-10	14.79	17.60	15.63	12.22	13.73	12.52
2025-07-11	13.23	19.47	15.80	12.09	53.42	12.33
2025-07-12	15.54	20.88	17.36	11.88	12.68	12.34
2025-07-13	18.98	23.77	21.05	12.10	12.57	12.31
2025-07-14	16.29	19.86	17.21	12.05	13.92	12.92
2025-07-15	14.57	17.31	15.94	12.53	116.18	13.06
2025-07-16	14.13	18.38	15.94	13.06	13.81	13.46
2025-07-17	15.30	18.32	17.10	12.97	13.91	13.51
2025-07-18	14.79	17.82	15.84	13.06	13.88	13.53
2025-07-19	14.34	15.97	15.16	13.37	14.37	13.96
2025-07-20	14.65	16.08	15.43	13.64	14.17	13.93
2025-07-21	14.61	16.89	15.68	???	15.78	13.42
2025-07-22	15.09	17.06	15.98	13.16	14.70	14.16
2025-07-23	14.69	17.35	16.13	13.85	14.69	14.43
2025-07-24	15.06	18.18	16.62	13.53	13.77	13.63
2025-07-25	15.57	18.41	16.73	13.41	13.90	13.60
2025-07-26	16.26	22.43	19.99	12.65	19.01	13.33
2025-07-27	21.61	22.03	21.84	12.40	13.69	13.06
2025-07-28	14.65	21.82	17.94	???	116.13	11.29
2025-07-29	15.38	21.21	17.58	10.18	10.67	10.41
2025-07-30	16.17	22.70	19.13	10.72	11.32	11.15
2025-07-31	16.48	23.26	19.62	10.97	11.29	11.17

### Notes:

July 21st & July 28th - Min values displaying question marks due to analyzer maintenance. Minimum values for that day were displayed at -48 which anything below 0 records an incorrect value. -48 for 1 second.

## Raw Water Specifications (Continued):

Date	Raw Cond ( $\mu\text{S}/\text{cm}$ )			Streaming Current		
	Min	Max	Average	Min	Max	Average
2025-07-01	102.41	103.48	102.91	-56.62	153.79	-24.13
2025-07-02	99.68	102.93	101.52	???	27.33	-21.00
2025-07-03	96.77	100.96	99.89	-18.69	40.06	2.67
2025-07-04	76.75	103.89	99.76	-20.83	37.37	8.62
2025-07-05	98.63	111.35	102.59	-15.11	49.57	14.41
2025-07-06	98.94	112.83	107.19	-17.09	41.28	11.72
2025-07-07	-0.03	103.67	99.91	-9.15	70.15	20.26
2025-07-08	85.29	103.72	101.52	-21.98	57.54	18.06
2025-07-09	91.93	102.36	101.34	-23.84	134.02	-1.87
2025-07-10	-0.29	101.35	99.92	-18.78	36.08	1.26
2025-07-11	-0.13	106.95	102.19	-45.65	31.43	2.10
2025-07-12	100.05	102.56	101.89	-27.82	29.45	2.66
2025-07-13	101.41	102.75	102.13	-15.14	22.77	2.76
2025-07-14	95.05	103.35	99.79	-18.76	47.74	14.24
2025-07-15	96.88	100.55	99.39	-39.60	52.39	10.24
2025-07-16	69.28	101.00	100.29	-48.97	-5.77	-26.66
2025-07-17	-0.02	100.91	100.28	???	-18.64	-31.19
2025-07-18	100.76	104.04	101.31	-31.82	-13.92	-22.68
2025-07-19	98.96	102.08	100.58	-35.47	-11.20	-21.77
2025-07-20	97.84	100.38	99.61	-34.73	-13.11	-21.66
2025-07-21	-0.28	102.28	100.30	-30.54	-7.84	-19.40
2025-07-22	42.66	101.54	98.86	-45.58	-7.05	-20.40
2025-07-23	101.47	102.98	102.26	-27.91	-13.99	-22.28
2025-07-24	-0.30	102.88	102.21	-29.85	-13.90	-22.47
2025-07-25	100.71	102.67	101.79	-32.64	-11.84	-20.63
2025-07-26	97.22	101.04	100.41	-29.85	-5.74	-18.64
2025-07-27	98.83	105.70	101.83	-30.63	-9.96	-17.75
2025-07-28	99.18	102.82	100.18	-30.58	-1.59	-16.71
2025-07-29	99.00	101.43	100.47	-35.54	-17.02	-28.25
2025-07-30	96.56	98.54	97.81	-33.85	-21.79	-28.75
2025-07-31	91.63	100.00	98.22	???	-22.53	-32.70

### Notes:

July 2nd, 17th & 31st - Flushing on the streaming current happend these days which resulted in a -748 value. The historian records data in between -500 to + 500. Anything outside of these ranges will display question marks.

## Raw Water Specifications (Continued):

Date	Coagulated pH			Coagulated Temp (°C)		
	Min	Max	Average	Min	Max	Average
2025-07-01	7.19	7.29	7.24	14.37	17.68	15.72
2025-07-02	7.10	7.30	7.19	14.21	29.18	15.40
2025-07-03	7.09	7.19	7.16	13.41	15.28	14.45
2025-07-04	7.08	7.21	7.14	12.92	15.57	14.37
2025-07-05	7.11	7.16	7.13	13.98	16.03	14.99
2025-07-06	7.11	7.19	7.16	14.17	16.24	15.23
2025-07-07	7.09	7.20	7.13	13.57	16.44	15.11
2025-07-08	7.10	7.19	7.14	14.41	17.42	15.90
2025-07-09	7.13	7.20	7.16	15.63	16.84	16.06
2025-07-10	6.61	7.40	7.11	???	20.45	15.45
2025-07-11	7.02	7.09	7.07	13.30	16.06	14.75
2025-07-12	7.05	7.09	7.08	14.88	17.43	16.09
2025-07-13	7.07	7.11	7.09	15.89	18.91	17.19
2025-07-14	6.93	7.11	7.00	16.42	17.70	16.78
2025-07-15	7.00	7.13	7.04	14.80	17.08	15.89
2025-07-16	7.13	7.24	7.17	14.05	16.84	15.54
2025-07-17	7.08	7.22	7.15	15.36	29.95	16.18
2025-07-18	7.12	7.18	7.15	14.74	15.94	15.47
2025-07-19	7.15	7.27	7.19	14.78	16.22	15.45
2025-07-20	7.16	7.23	7.18	15.56	16.81	16.10
2025-07-21	7.08	7.21	7.14	14.77	16.54	16.04
2025-07-22	7.05	7.12	7.08	15.12	16.86	15.91
2025-07-23	7.13	7.21	7.17	15.02	17.30	16.09
2025-07-24	7.08	7.23	7.16	15.11	17.77	16.59
2025-07-25	7.15	7.18	7.17	15.99	17.21	16.62
2025-07-26	7.14	7.22	7.18	16.81	19.02	17.72
2025-07-27	7.11	7.17	7.14	18.68	21.80	20.87
2025-07-28	7.16	7.21	7.18	14.82	21.58	17.84
2025-07-29	7.13	7.26	7.19	15.55	18.12	16.98
2025-07-30	7.15	7.21	7.18	16.46	19.02	17.61
2025-07-31	7.12	7.20	7.17	17.45	30.39	18.42

### Notes:

July 10th - Analyzer maintenance on the pH which resulted in an incorrect temp reading.

**Train 1 Filter Turbidity (NTU):**

Date	Filter 1			Filter 2			Filter 3		
	Min	Max	Average	Min	Max	Average	Min	Max	Average
2025-07-01	0.02	0.03	0.02	0.02	0.07	0.03	0.01	0.02	0.01
2025-07-02	0.02	0.05	0.02	0.02	0.05	0.03	0.01	0.06	0.02
2025-07-03	0.02	0.03	0.02	0.02	0.08	0.03	0.01	0.02	0.01
2025-07-04	0.02	0.05	0.02	0.01	0.05	0.02	0.01	0.06	0.02
2025-07-05	0.02	0.03	0.02	0.02	0.06	0.03	0.01	0.02	0.01
2025-07-06	0.02	0.05	0.02	0.02	0.03	0.03	0.01	0.05	0.01
2025-07-07	0.02	0.02	0.02	0.02	0.08	0.03	0.01	0.02	0.01
2025-07-08	0.02	0.04	0.02	0.00	0.06	0.03	0.01	0.05	0.01
2025-07-09	0.02	0.03	0.02	0.02	0.07	0.03	0.00	0.02	0.01
2025-07-10	0.02	0.05	0.02	0.00	0.06	0.03	0.00	0.05	0.01
2025-07-11	0.02	0.03	0.02	0.01	0.08	0.03	0.00	0.02	0.01
2025-07-12	0.02	0.05	0.02	0.01	0.07	0.02	0.00	0.06	0.01
2025-07-13	0.01	0.03	0.02	0.02	0.08	0.03	0.00	0.03	0.01
2025-07-14	0.02	0.05	0.03	0.00	0.09	0.03	0.00	0.03	0.00
2025-07-15	0.02	0.03	0.02	0.02	0.07	0.03	0.00	0.00	0.00
2025-07-16	0.02	0.05	0.02	0.02	0.03	0.02	0.00	0.05	0.01
2025-07-17	0.02	0.02	0.02	0.02	0.08	0.02	0.01	0.01	0.01
2025-07-18	0.02	0.05	0.02	0.02	0.03	0.02	0.01	0.04	0.01
2025-07-19	0.02	0.03	0.02	0.02	0.07	0.02	0.01	0.01	0.01
2025-07-20	0.02	0.05	0.02	0.02	0.02	0.02	0.01	0.05	0.01
2025-07-21	0.02	0.02	0.02	0.02	0.07	0.03	0.01	0.01	0.01
2025-07-22	0.02	0.05	0.02	0.02	0.04	0.03	0.01	0.04	0.01
2025-07-23	0.02	0.04	0.02	0.01	0.07	0.03	0.01	0.01	0.01
2025-07-24	0.01	0.05	0.02	0.02	0.03	0.02	0.01	0.04	0.01
2025-07-25	0.02	0.02	0.02	0.02	0.07	0.02	0.01	0.01	0.01
2025-07-26	0.02	0.03	0.02	0.01	0.06	0.02	0.01	0.03	0.01
2025-07-27	0.01	0.02	0.02	0.02	0.07	0.03	0.01	0.01	0.01
2025-07-28	0.02	0.04	0.02	0.02	0.04	0.02	0.01	0.04	0.01
2025-07-29	0.01	0.05	0.02	0.02	0.07	0.03	0.01	0.01	0.01
2025-07-30	0.02	0.05	0.02	0.02	0.03	0.02	0.01	0.04	0.01
2025-07-31	0.02	0.03	0.02	0.02	0.06	0.03	0.01	0.01	0.01

Notes:

## Train 2 Filter Turbidity (NTU)

Date	Filter 4			Filter 5			Filter 6		
	Min	Max	Average	Min	Max	Average	Min	Max	Average
2025-07-01	0.02	0.02	0.02	0.02	0.04	0.03	0.02	0.03	0.02
2025-07-02	0.02	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.02
2025-07-03	0.02	0.02	0.02	0.02	0.04	0.02	0.02	0.04	0.02
2025-07-04	0.02	0.05	0.02	0.02	0.03	0.02	0.02	0.04	0.02
2025-07-05	0.02	0.07	0.02	0.03	0.05	0.03	0.01	0.04	0.02
2025-07-06	0.02	0.05	0.02	0.02	0.02	0.02	0.01	0.04	0.02
2025-07-07	0.02	0.04	0.02	0.02	0.03	0.02	0.02	0.03	0.02
2025-07-08	0.02	0.05	0.02	0.02	0.02	0.02	0.02	0.03	0.02
2025-07-09	0.02	0.03	0.02	0.02	0.04	0.03	0.02	0.04	0.02
2025-07-10	0.02	0.05	0.02	0.02	0.03	0.03	0.02	0.03	0.02
2025-07-11	0.02	0.02	0.02	0.03	0.05	0.03	0.02	0.05	0.02
2025-07-12	0.02	0.05	0.02	0.03	0.03	0.03	0.02	0.03	0.02
2025-07-13	0.02	0.02	0.02	0.02	0.04	0.03	0.01	0.05	0.02
2025-07-14	0.01	0.03	0.02	0.03	0.03	0.03	0.01	0.02	0.02
2025-07-15	0.02	0.02	0.02	0.03	0.05	0.03	0.02	0.05	0.02
2025-07-16	0.02	0.09	0.03	0.03	0.04	0.03	0.02	0.03	0.02
2025-07-17	0.02	0.04	0.03	0.03	0.05	0.03	0.02	0.05	0.03
2025-07-18	0.02	0.08	0.04	0.03	0.06	0.03	0.02	0.02	0.02
2025-07-19	0.03	0.04	0.03	0.02	0.05	0.03	0.02	0.06	0.02
2025-07-20	0.03	0.10	0.04	0.03	0.03	0.03	0.02	0.03	0.02
2025-07-21	0.03	0.05	0.04	0.03	0.05	0.03	0.02	0.06	0.02
2025-07-22	0.04	0.08	0.04	0.02	0.03	0.02	0.02	0.03	0.02
2025-07-23	0.03	0.04	0.04	0.03	0.06	0.03	0.02	0.05	0.02
2025-07-24	0.03	0.08	0.04	0.02	0.03	0.02	0.02	0.02	0.02
2025-07-25	0.03	0.04	0.03	0.03	0.05	0.03	0.02	0.05	0.02
2025-07-26	0.03	0.08	0.03	0.03	0.03	0.03	0.02	0.03	0.02
2025-07-27	0.03	0.04	0.03	0.02	0.06	0.03	0.02	0.05	0.02
2025-07-28	0.03	0.04	0.03	0.03	0.04	0.03	0.02	0.02	0.02
2025-07-29	0.03	0.04	0.03	0.03	0.06	0.03	0.02	0.05	0.02
2025-07-30	0.03	0.07	0.03	0.03	0.03	0.03	0.02	0.02	0.02
2025-07-31	0.03	0.03	0.03	0.03	0.10	0.04	0.02	0.04	0.02

Notes:

**UV Treatment:**

Date	Average Flow (L/s)	Avg Validated Dose (mj/cm2)	UV Availability (%)
2025-07-01	327.80	20.80	99.06
2025-07-02	296.78	0.00	11.60
2025-07-03	310.46	20.94	68.37
2025-07-04	353.26	20.90	99.93
2025-07-05	346.46	20.70	99.93
2025-07-06	328.79	21.40	99.93
2025-07-07	424.55	20.66	99.93
2025-07-08	421.13	21.00	99.65
2025-07-09	380.35	21.26	99.85
2025-07-10	212.21	25.08	99.11
2025-07-11	341.48	20.76	99.93
2025-07-12	320.76	20.40	99.93
2025-07-13	341.33	21.46	99.93
2025-07-14	447.58	20.90	99.93
2025-07-15	216.86	24.70	99.86
2025-07-16	268.93	20.90	99.92
2025-07-17	260.40	21.64	98.76
2025-07-18	246.18	21.20	99.93
2025-07-19	208.23	23.76	99.93
2025-07-20	208.91	23.50	99.93
2025-07-21	209.90	23.90	99.93
2025-07-22	207.26	24.34	99.93
2025-07-23	245.77	20.56	99.93
2025-07-24	272.03	20.46	99.93
2025-07-25	312.17	20.36	99.93
2025-07-26	187.19	26.92	99.93
2025-07-27	294.30	21.04	99.93
2025-07-28	232.37	22.94	99.93
2025-07-29	396.75	99.93	99.93
2025-07-30	425.76	99.93	99.93
2025-07-31	303.33	99.93	99.93

**Notes:**

Power bump on the July 1st, resulting in lower than normal validated dose and availability displayed on July 2nd data.

**UV Transmittance %:**

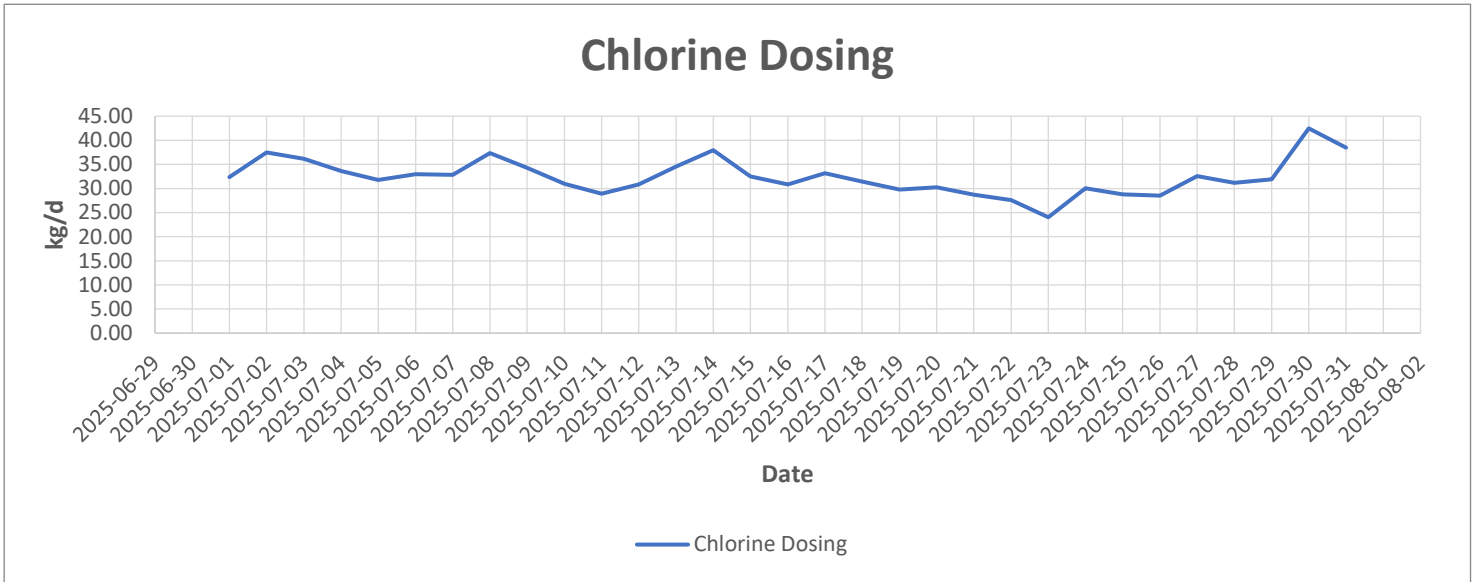
Date	Min	Max	Average
2025-07-01	35.40	92.00	90.94
2025-07-02	90.40	91.20	90.68
2025-07-03	90.00	91.10	90.57
2025-07-04	90.10	90.80	90.43
2025-07-05	90.00	91.70	90.55
2025-07-06	90.10	91.30	90.65
2025-07-07	90.20	91.20	90.67
2025-07-08	89.70	91.40	90.59
2025-07-09	89.90	91.50	90.21
2025-07-10	89.80	90.80	90.24
2025-07-11	89.60	91.30	90.29
2025-07-12	89.50	90.50	90.06
2025-07-13	89.60	90.50	90.03
2025-07-14	89.70	90.50	90.00
2025-07-15	88.80	91.00	89.94
2025-07-16	88.80	92.30	89.42
2025-07-17	88.90	89.90	89.52
2025-07-18	89.10	90.40	89.81
2025-07-19	89.10	90.10	89.51
2025-07-20	89.10	89.90	89.47
2025-07-21	89.30	90.20	89.68
2025-07-22	89.00	90.60	89.81
2025-07-23	88.70	90.40	89.15
2025-07-24	88.80	89.90	89.44
2025-07-25	88.90	89.90	89.72
2025-07-26	89.60	90.80	90.17
2025-07-27	89.70	90.60	90.09
2025-07-28	89.70	90.80	90.16
2025-07-29	89.70	90.70	90.33
2025-07-30	89.30	90.70	89.94
2025-07-31	89.30	90.20	89.75

**Notes:**

# Chemical Demand:

Chlorine Used:

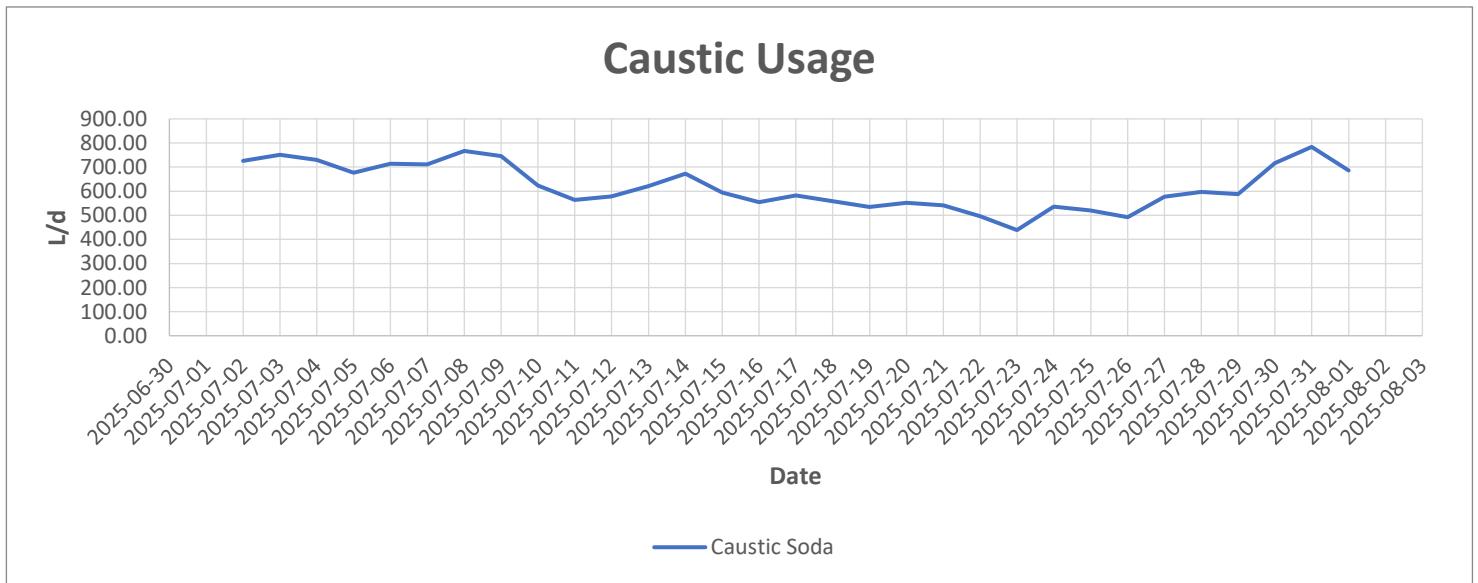
Total for Month  
1004.29 Kgs



Notes:

Caustic Soda Used:

Total for Month  
19227.71 Litres

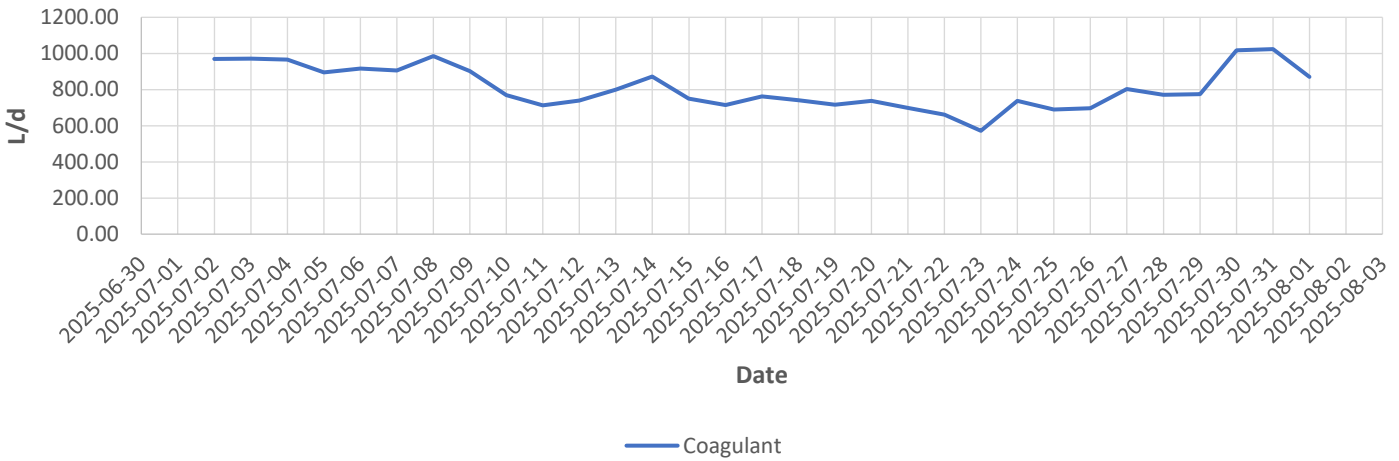


Notes:

**Coagulant Used:**

**Total for Month**  
25138.11 Litres

### Coagulant Usage



**Notes:**

**DAF & Residual DAF Neat Polymer**

**Total for Month**  
518.20 L

**Centrifuge Neat Polymer**

**Total for Month**  
729.64 L

**Chlorine Dose**

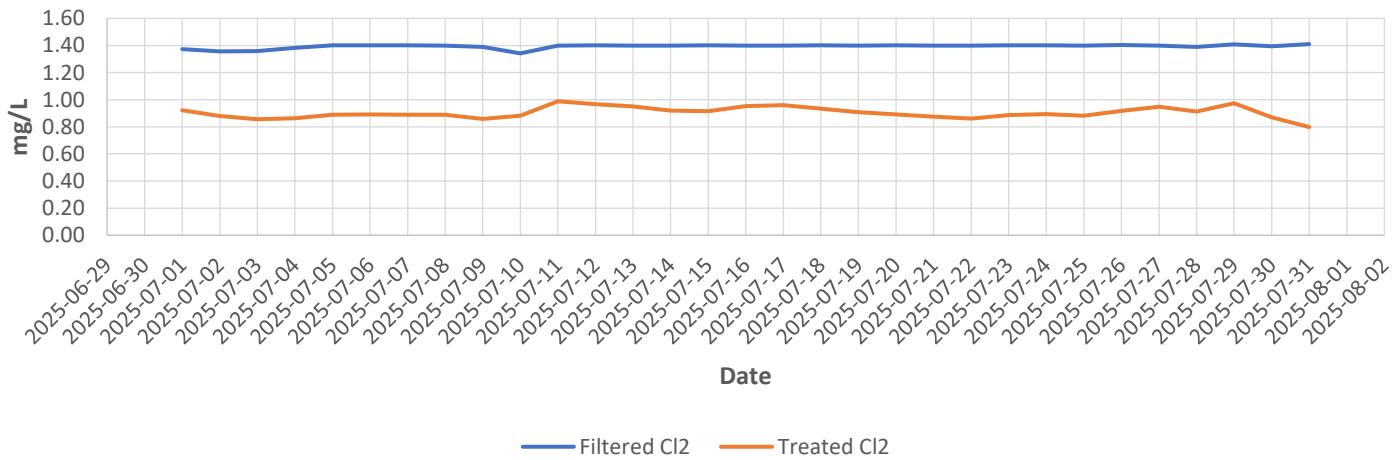
Filtered Water Residual Cl<sub>2</sub> Average (mg/L):

1.39 mg/L

Treated Water (Distributed) Cl<sub>2</sub> Average (mg/L):

0.90 mg/L

### Average Residual Cl<sub>2</sub> Content

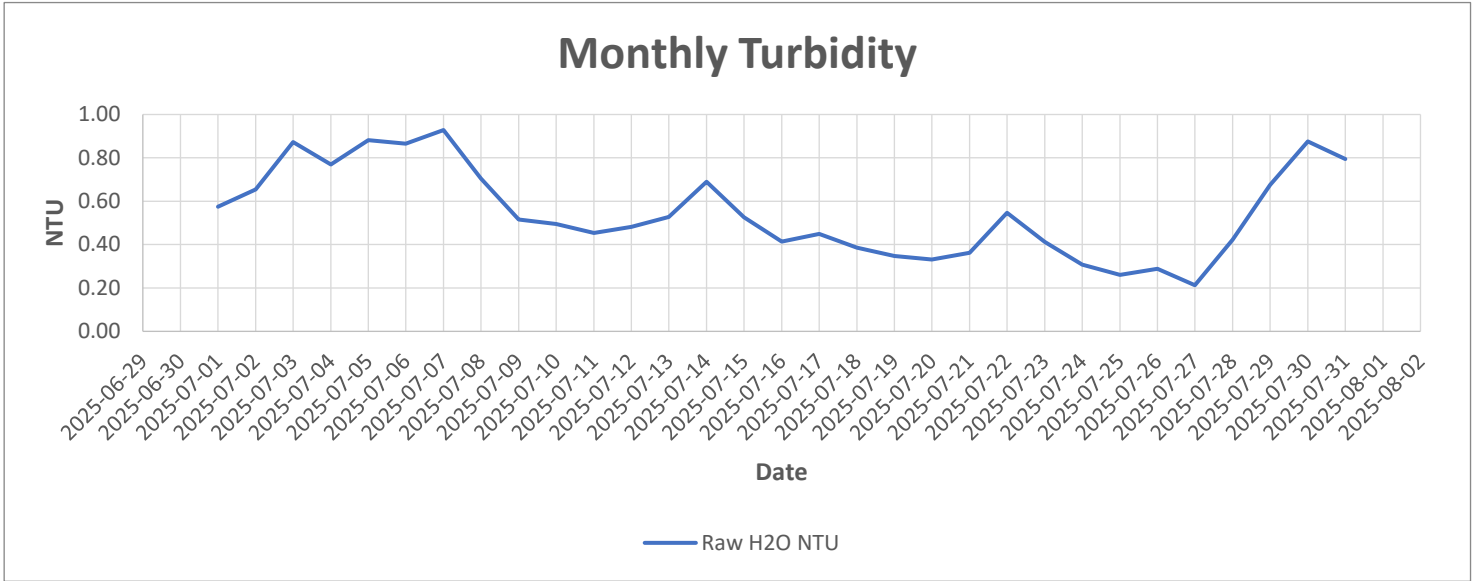


# Water Quality Analytics:

## Turbidity

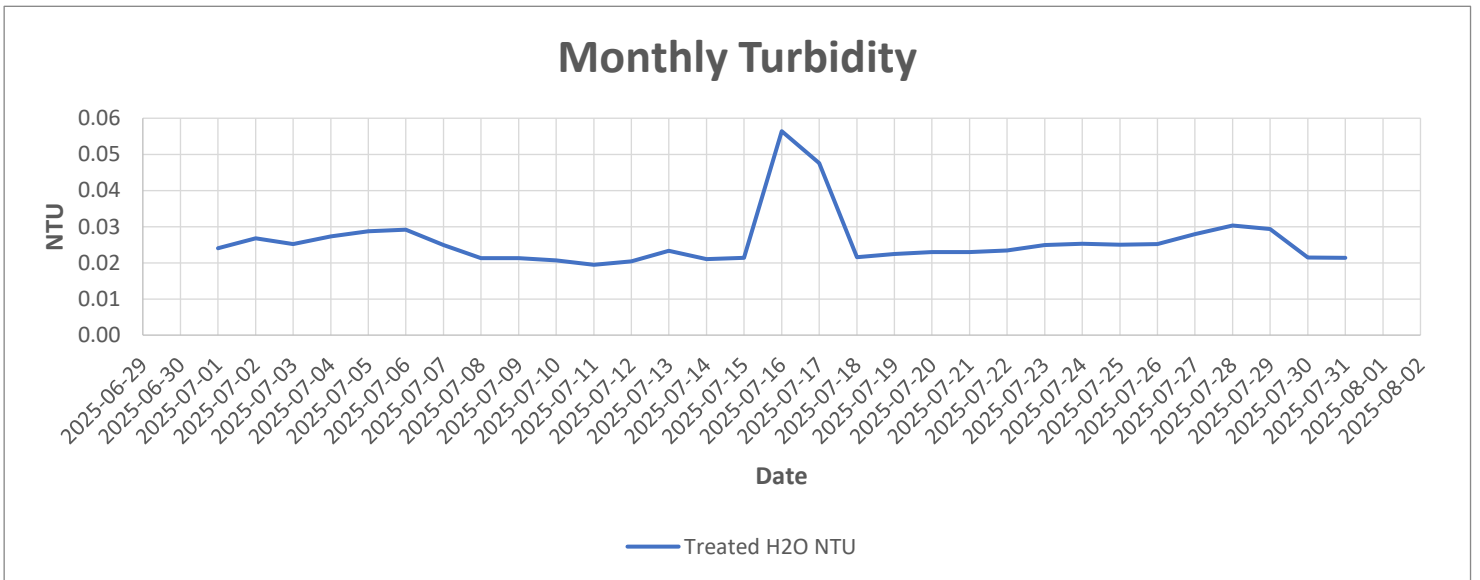
Raw Water Monthly Average:

0.55 NTU



Treated Water Monthly Average:

0.03 NTU



## Notes:

July 16th - Hot tap work on the treated water main to install the new hypochlorite trim line resulted in elevated NTU for a brief period of time. Explained further below in ops highlights.

July 17th - Hot tap work was not fully completed resulting in elevated NTU's to distribution explained further in ops highlights.

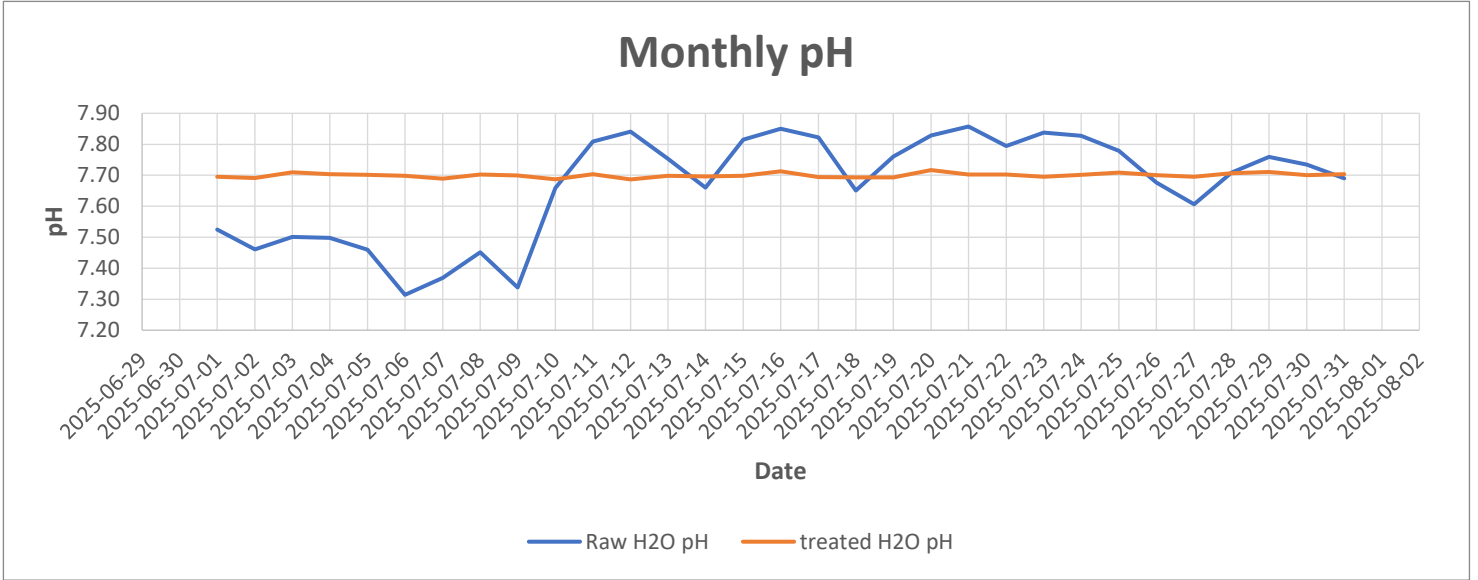
**pH**

Raw Water Monthly Average:

7.67 pH

Treated Water Monthly Average:

7.70 pH



**Notes:**

## **Powers Creek WTP Operational Highlights:**

### **Ongoing Hypochlorite Project by contractor, all month**

July 1st - power bump - restart plant completed

July 3rd - UPS in Chlorine tonner room replaced

July 3rd - clean & rinse centrifuge poly make down system

July 3rd - instrument air dryer issues, bypassed for weekend, repaired July 7th

July 9th - greased screens

July 9th - swapped tonner and charged July 10th

July 10th - flush & rinse pH's and NTU analyzer

July 14th-18th - intake road mowing

July 14th - installed new NTU analyzer on DAF #3

July 14th - installed new gasket on centrifuge

July 14th - Chemical (polymer) totes delivery for centrifuge and DAF

July 16th - Hot tap on treated water main to install Trim line for Hypochlorite upgrade. 0807-0815 1.8NTU maximum, 0928-0951 1.8NTU Max

July 16th - changed tubing & flushed chlorine and NTU analyzers leaving reservoir due to increased NTU witnessed. Back down to 0.03 after cleaning.

July 16th - Chemical (Chlorine tonners) delivery

July 17th - Hot tap work recommenced 11:04 - 11:23 NTU above 1NTU max 1.8; restored back to normal levels at 12:47 to 0.03 NTU.

July 17th - Stage 2 watering restrictions put in place by CWK

July 21st - Chemical (AluPAC 4000B) bulk load delivery

July 21st - changed tubing on raw water analyzers

July 23rd - residual DAF skimmers tightened

July 26th - UV alarms, system stopped & restarted

July 28th - treated water & filtered water NTU analyzers maintenance

July 28th - cleaned DOC vial, coagulant dose changes as a result

July 29th - Chlorine tonner swap

July 29th - finished treated water analyzer maintenance

July 30th - Chlorine tonner change out

July 30th - install new CPU for Delta V (Centrix)

July 30th - adjusted scaling for Hypo pumps (Centrix)

July 31st - new chlorine tonner online

July 31st - increased chlorine setpoint (1.4 - 1.42)

## Power Creek Watershed Operational Highlights:

### Lambly

Weekly Dam inspections

Jul 2<sup>nd</sup> 3163.9ML

Jul 29<sup>th</sup> 2835.7ML

### Jackpine

Weekly Dam inspections

Jul 2<sup>nd</sup> 1212ML

Jul 29<sup>th</sup> 1191.5ML

### Paynter

Weekly Dam inspections

Jul 2<sup>nd</sup> 473.7ML

Jul 9<sup>th</sup> opened to 1000usgpm

Jul 29<sup>th</sup> 366.3ML

Jul 31<sup>st</sup> increased flow to 1700usgpm

### Horseshoe

Weekly Dam inspections

Jul 3<sup>rd</sup> 995.4ML spilling 1" over sill

Jul 17<sup>th</sup> opened to 2000usgpm

Jul 29<sup>th</sup> 942.4ML

### Dobbin

Weekly Dam inspection

Jul 2<sup>nd</sup> 609.3ML low level outlet is at 3000usgpm

Jul 29<sup>th</sup> 435.4ML

Jul 31<sup>st</sup> increased flow to 3500usgpm

### Tadpole

Weekly Dam inspections

Jul 2<sup>nd</sup> 3601.8ML low level outlet is at 1500usgpm

Jul 9<sup>th</sup> increased flow to 1800usgpm

Jul 17<sup>th</sup> increased flow to 3000usgpm

Jul 31<sup>st</sup> 3356.3ML increased flow to 3500usgpm

## Definitions:

**UV Availability (%)** - Calculated daily percentage of the time the UV is in operation divided by the time where there is flow going through the UV reactor. (Note: SCADA performing this calculation has a small error based on the time the values are pulled which does not allow the UV Availability to show 100% when the Reactor was operating for a full day without interruption (i.e. 99.93% represents a full day running without issue).

# WATER DISTRIBUTION



# Power's Creek Water Service Area – Distribution System Monitoring

July 2025

## Water Quality Data Review

- Based on the Powers Creek Water Service Area Distribution System grab-sample data, it appears the results for turbidity and bacteriological have met the Water Quality Objectives during the month of July.
- July Bacteriological Sampling Summary:
  - 16 samples to CARO for analysis
  - 12 samples analyzed in-house at RWWTTP
  - All bacteriological sample results appear to have indicated <1 CFU/100mL for Total Coliforms and <1 CFU/100mL for E.coli.
- July 2 & 3, 2025 – Lateral 1 Pump Station pH probe and temperature sample line was discovered to be airlocked and representative values were unavailable on these dates before returning to service.
- July 4, 2025 – Smith Creek Reservoir online FCR analyzer calibration adjustment 0.15mg/L increase.
- July 9, 2025 – Smith Creek Reservoir was dosed with sodium hypo in effort to increase the FCR to 0.55mg/L.
- July 11, 2025 – Smith Creek Pump Station online FCR analyzer calibration adjustment 0.11mg/L in
- July 11, 2025 – Smith Creek Reservoir was dosed with sodium hypo in effort to increase the FCR to by 0.2mg/L.
- July 14, 2025 – Smith Creek Reservoir was dosed with sodium hypo in effort to increase the FCR to by 0.40mg/L.
- July 15, 2025 – Lateral-One Max 1 hour Turbidity value temporarily noted at 1.19NTU and appears to have been correlated with a common transmitter issue shared with pH and temperature all providing erroneous reading at that time. The 24-hour average for July 15<sup>th</sup> was 0.16NTU and the issue with the common transmitter appears to have resolved.
- July 15, 2025 – Smith Creek Reservoir online FCR analyzer appeared to be on hold at 0.00mg/L however, when tested the with the FCR digital test kit the FCR was measured to confirm there was 0.18mg/L. The online analyser was adjusted by a 0.05mg/L increase was returned into service.
- July 16, 2025 – Smith Creek Reservoir was dosed with sodium hypo in effort to increase the FCR by 0.20mg/L.
- July 18, 2025 – Smith Creek Reservoir grab sample FCR indicated 0.16mg/L and was dosed to increase the FCR by 0.40mg/L.
- July 22, 2025 – Smith Creek Reservoir grab sample FCR indicated 0.15mg/L and was dosed to increase the FCR by 0.40mg/L. Reservoir fill setpoints adjusted to trigger a pump run in effort to promote mixing in the reservoir.
- July 22, 2025 – Smith Creek Reservoir online FCR calibration adjustment of 0.30mg/L decrease.
- July 22, 2025 – Smith Creek Reservoir online pH analyzer tow point calibration verified pH at 7.0 required no adjustment and at pH 4.0, a 0.06 decrease was made.
- July 24, 2025 – Smith Creek Reservoir grab sample FCR indicated 0.15mg/L and was dosed to increase the FCR by 0.40mg/L. Dixie Reservoir back feed cycle was implemented in effort to promote mixing in the Smith Creek Reservoir with re-chlorinated water.

- July 25, 2025 – Smith Creek Reservoir grab sample FCR indicated 0.20mg/L and was dosed to increase the FCR by 0.40mg/L. Reservoir fill setpoints adjusted to trigger a pump run in effort to promote mixing in the reservoir.
- July 28, 2025 – – Smith Creek Reservoir grab sample FCR indicated 0.20mg/L and was dosed to increase the FCR by 0.40mg/L. Reservoir fill setpoints adjusted to trigger a pump run in effort to promote mixing in the reservoir.
- Smith Creek Reservoir flow paths being investigated to verify the functionality of the non-return-valves potentially affecting the turnover of water in the individual reservoir cells. Updates relating to the low FCR values are anticipated in August.

## Operational System Improvements/Events

- July 4, 2025 – Repaired leaking service at 1060 Devon Crt.
- July 14, 2025 – Repaired leaking service at 2594 Neufeld Cres.
- July 16, 2025 – Smith Creek Reservoir FCR probe was cleaned and verified with digital grab sample analyzer indicating no adjustment necessary.

## WQ Field and SCADA Data

Sampling Location Table:

Sample Name	Civic Address	Pressure Zone	WQ Sampling Rationale
<b>Lateral One PS</b>	3188 Shetler Dr	630	1 <sup>st</sup> Customer water quality check.
<b>Glenrosa PS</b>	3149 Coventry Cres	673	Mid system water quality check. Water quality distributed throughout Glenrosa area.
<b>Glenrosa Res</b>	3313 Glenrosa Rd	673	Mid system water quality check on reservoir. Re-chlorination occurring at this location.
<b>Smith Creek PS &amp;Res</b>	2802 Smith Creek Rd	630	Mid system water quality check. Water quality distributed throughout Smith Creek and downtown Westbank area.
<b>Dixie Res</b>	2850 Dixie Rd	630	Mid system water quality check. Re-chlorination occurring at this location.
<b>End-of-Line WQS</b>	4119 Gellatly Rd	449	End system water quality check.
<b>Mclver SS</b>	3036 Mclver Rd	626	Mid system water quality check.
<b>Bulk Water Stn</b>	3020 Shannon Lake Rd	583	End system water quality check. Water quality for bulk water filling and free water available to public.

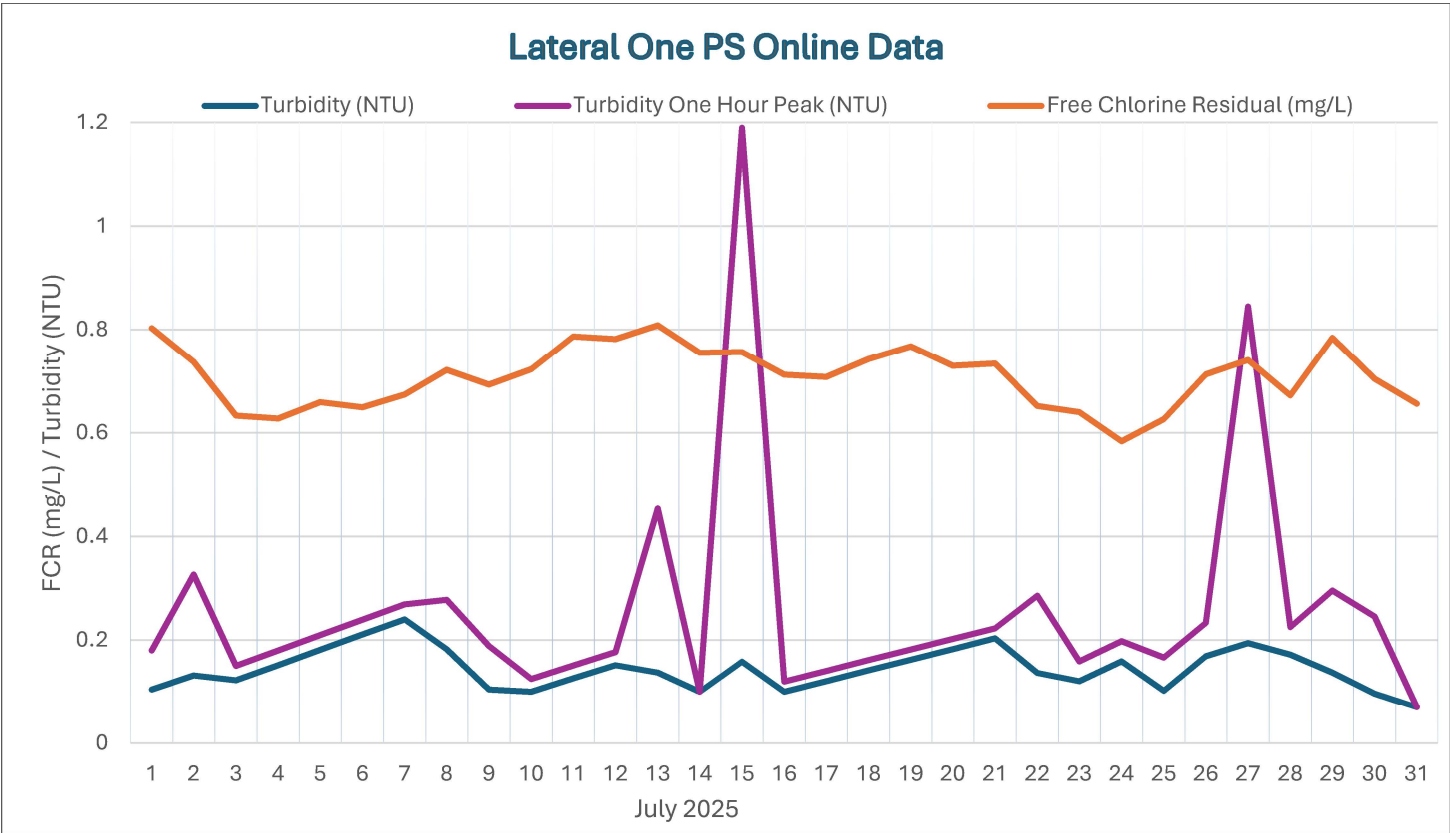
- **PS** = Pump Station
- **SS**= Sample Station
- **Res** = Reservoir
- **WQS** = Water Quality Station

**Note:** Water Quality (WQ) field data results reflect that of the noted location within the distribution system at the time of the grab sample collection.

## Lateral One PS

Lateral One PS Online Data							
Date	pH	Turbidity	Turbidity (Peak 1 Hr)	Temp	FCR		
	Avg (pH)	Avg (NTU)	Max Based On 1 Hr Avg	Avg (°C)	Min (mg/L)	Max (mg/L)	Avg (mg/L)
<b>July 2025</b>							
1	7.23	0.10	0.18	17.34	0.68	0.92	0.80
2		0.13	0.33		0.67	0.86	0.74
3		0.12	0.15		0.53	0.74	0.63
4	7.18	0.15	0.18	17.09	0.53	0.76	0.63
5	7.18	0.18	0.21	17.29	0.53	0.76	0.66
6	7.17	0.21	0.24	18.04	0.55	0.76	0.65
7	7.16	0.24	0.27	17.95	0.57	0.79	0.67
8	7.15	0.18	0.28	17.15	0.57	0.81	0.72
9	7.10	0.10	0.19	17.65	0.55	0.74	0.69
10	7.08	0.10	0.12	16.61	0.54	0.84	0.72
11	7.14	0.13	0.15	16.06	0.54	0.87	0.79
12	7.14	0.15	0.18	16.82	0.65	0.84	0.78
13	7.14	0.14	0.45	17.99	0.65	0.86	0.81
14	7.14	0.10	0.10	18.70	0.60	0.84	0.76
15	7.39	0.16	1.19	18.83	0.63	0.83	0.76
16	7.28	0.10	0.12	17.28	0.43	0.98	0.71
17	7.12	0.12	0.14	18.10	0.57	0.82	0.71
18	7.11	0.14	0.16	17.59	0.58	0.87	0.74
19	7.11	0.16	0.18	16.56	0.60	0.88	0.77
20	7.11	0.18	0.20	16.91	0.60	0.86	0.73
21	7.11	0.20	0.22	16.91	0.58	0.84	0.73
22	7.14	0.14	0.29	18.82	0.53	0.79	0.65
23	7.15	0.12	0.16	19.34	0.53	0.82	0.64
24	7.18	0.16	0.20	21.24	0.47	0.81	0.58
25	7.16	0.10	0.17	20.31	0.54	0.79	0.63
26	7.17	0.17	0.23	19.26	0.57	0.87	0.71
27	7.17	0.19	0.85	18.86	0.60	0.90	0.74
28	7.20	0.17	0.23	19.92	0.59	0.87	0.67
29	7.18	0.14	0.30	18.93	0.65	0.98	0.78
30	7.16	0.10	0.25	18.62	0.55	0.77	0.70
31	7.35	0.07	0.07	20.46	0.50	0.73	0.66
<b>Average</b>	7.17	0.14		18.16	0.57	0.83	0.71
<b>Min</b>	7.08	0.07		16.06	0.43	0.73	0.58
<b>Max</b>	7.39	0.24	1.19	21.24	0.68	0.98	0.81

- July 2 & 3, 2025 – Lateral 1 Pump Station pH probe and temperature sample line was discovered to be airlocked and representative values were unavailable.
- July 15, 2025 – Lateral-One Max 1 hour Turbidity value temporarily noted at 1.19NTU and appears to have been correlated with a common transmitter issue shared with pH and temperature all providing erroneous reading at that time. The 24-hour average for July 15<sup>th</sup> was 0.16NTU and the issue with the common transmitter appears to have resolved.



Lateral One PS Water Quality						
Date	Turbidity		Temp	FCR		pH
	Grab (NTU)	Online (NTU)	Grab (°C)	Grab (mg/L)	Online (mg/L)	
02-Jul-25	0.11	0.08	20.2	0.69	0.69	7.69
08-Jul-25	0.11	0.15	17.2	0.93	0.79	7.56
15-Jul-25	0.16	0.08	16.4	0.78	0.84	7.81
22-Jul-25	0.1	0.09	17.1	1.05	0.69	7.58
31-Jul-25	0.1	0.09	18.5	0.78	0.77	7.10
# of Samples	5	5	5	5	5	5
Average	0.116	0.098	17.88	0.846	0.756	7.548
Range	0.10-0.16	0.08-0.15	16.4-20.2	0.69-1.05	0.69-0.84	7.10-7.81

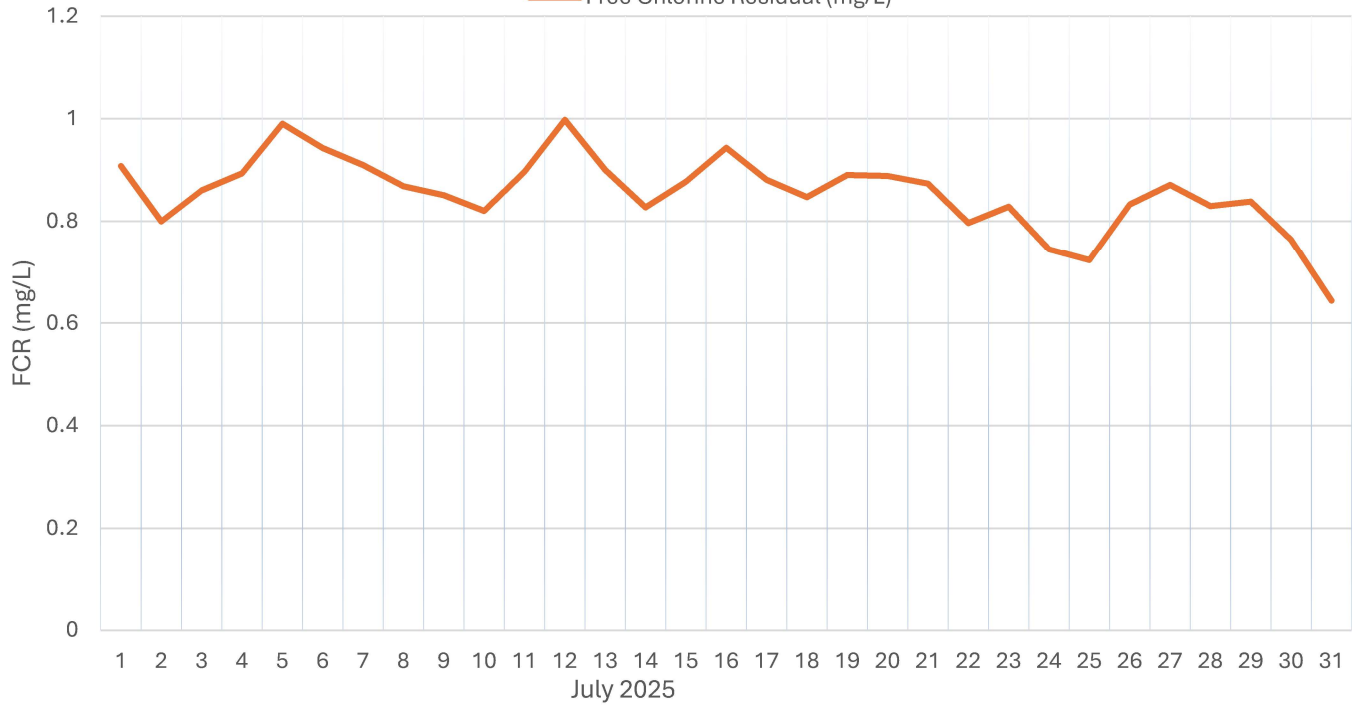
- July 15, 2025 – Lateral-One Max 1 hour Turbidity value temporarily noted at 1.19NTU and appears to have been correlated with a common transmitter issue shared with pH and temperature all providing erroneous reading at that time. The 24-hour average for July 15<sup>th</sup> was 0.16NTU and the issue with the common transmitter appears to have resolved.

## Glenrosa PS & Reservoir

Glenrosa PS & Reservoir Online Data					
Date	Flow Total From PS	Peak Flow From PS	Reservoir pH	Reservoir Temp	FCR
	(ML)	Max (ML/Day)	Avg (pH)	Avg (°C)	Avg (mg/L)
<b>July 2025</b>					
1	3.95	8.67	8.09	14.43	0.91
2	3.87	8.69	8.08	14.90	0.80
3	3.69	8.91	8.10	14.79	0.86
4	3.57	5.01	8.10	14.56	0.89
5	3.89	8.92	8.11	14.77	0.99
6	4.17	5.07	8.10	14.91	0.94
7	3.62	8.96	8.10	14.96	0.91
8	3.93	5.00	8.11	15.38	0.87
9	3.52	8.89	8.10	15.86	0.85
10	3.46	5.00	8.10	15.66	0.82
11	3.62	5.00	8.10	15.28	0.90
12	4.04	8.93	8.10	15.62	1.00
13	4.55	8.95	8.08	16.30	0.90
14	3.26	5.00	8.09	16.52	0.83
15	3.51	4.99	8.10	16.06	0.88
16	3.89	4.99	8.17	15.87	0.94
17	3.52	8.77	8.11	16.17	0.88
18	3.39	5.01	8.09	16.11	0.85
19	3.49	5.01	8.09	15.78	0.89
20	3.65	5.03	8.09	15.57	0.89
21	3.07	5.01	8.09	15.58	0.87
22	3.04	5.01	8.08	15.76	0.80
23	3.52	5.03	8.08	15.84	0.83
24	3.50	5.01	8.08	16.08	0.74
25	3.21	8.97	8.07	16.45	0.72
26	3.82	5.01	8.08	16.06	0.83
27	3.87	8.99	8.08	16.07	0.87
28	3.51	5.04	8.09	15.81	0.83
29	3.79	8.86	8.09	16.22	0.84
30	4.04	8.96	8.08	16.68	0.76
31	7.31	5.05	8.07	17.21	0.64
<b>Total</b>	113				
<b>Average</b>	3.78	6.64	8.09	15.72	0.86
<b>Min</b>	3.04	4.99	8.07	14.43	0.64
<b>Max</b>	7.31	8.99	8.17	17.21	1.00

# Glenrosa Reservoir Online Data

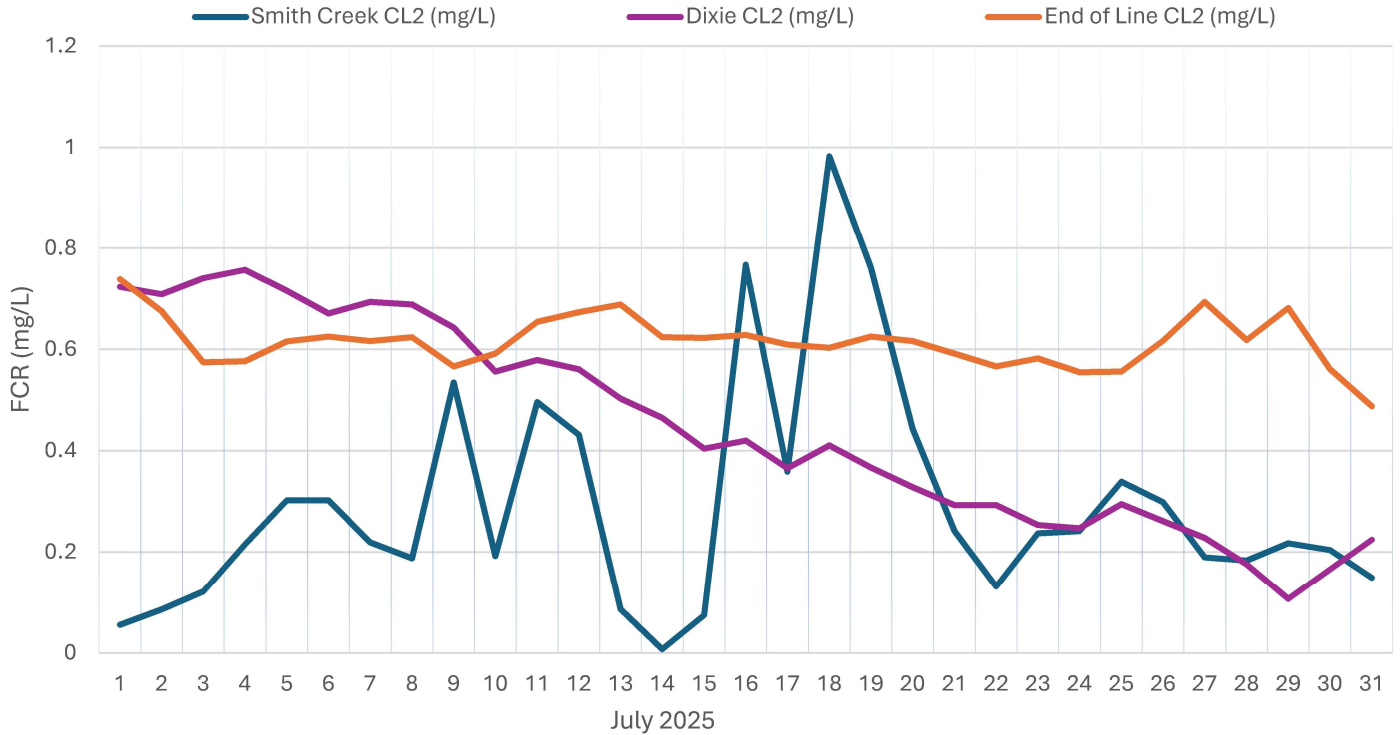
Free Chlorine Residual (mg/L)



# Smith Creek Reservoir/Pump Station, Dixie Reservoir & End-of-Line WQS

Date	Smith Creek Reservoir FCR Online Data			Dixie Reservoir FCR Online Data			End-of-The Line FCR Online Data		
	Min (mg/L)	Max (mg/L)	Avg (mg/L)	Min (mg/L)	Max (mg/L)	Avg (mg/L)	Min (mg/L)	Max (mg/L)	Avg (mg/L)
<b>July 2025</b>									
1	0.02	0.10	0.06	0.68	0.76	0.72	0.68	0.81	0.74
2	0.01	0.37	0.09	0.65	0.75	0.71	0.55	0.77	0.68
3	0.03	0.42	0.12	0.68	0.79	0.74	0.54	0.62	0.58
4	0.03	0.44	0.21	0.73	0.78	0.76	0.55	0.62	0.58
5	0.30	0.32	0.30	0.67	0.75	0.72	0.57	0.67	0.62
6	0.30	0.32	0.30	0.62	0.72	0.67	0.60	0.74	0.63
7	0.01	0.39	0.22	0.61	0.72	0.69	0.58	0.66	0.62
8	0.01	0.75	0.19	0.64	0.73	0.69	0.61	0.66	0.62
9	0.01	1.45	0.53	0.59	0.68	0.64	0.50	0.64	0.57
10	0.05	0.47	0.19	0.50	0.61	0.56	0.55	0.61	0.59
11	0.03	1.57	0.50	0.43	0.65	0.58	0.55	0.71	0.65
12	0.21	0.79	0.43	0.50	0.61	0.56	0.64	0.72	0.67
13	0.00	0.23	0.09	0.48	0.53	0.50	0.62	0.82	0.69
14	0.01	0.01	0.01	0.43	0.50	0.47	0.57	0.69	0.62
15	0.00	0.41	0.07	0.36	0.46	0.40	0.58	0.65	0.62
16	0.02	2.92	0.77	0.36	0.48	0.42	0.58	0.67	0.63
17	0.07	0.76	0.36	0.32	0.42	0.37	0.55	0.67	0.61
18	0.00		0.98	0.32	0.48	0.41	0.58	0.64	0.60
19	0.43	1.16	0.76	0.30	0.42	0.37	0.58	0.72	0.63
20	0.15	1.12	0.44	0.26	0.39	0.33	0.57	0.67	0.62
21	0.00	0.69	0.24	0.23	0.35	0.29	0.56	0.63	0.59
22	0.01	0.35	0.13	0.21	0.35	0.29	0.50	0.61	0.57
23	0.18	0.28	0.24	0.19	0.32	0.25	0.53	0.63	0.58
24	0.14	2.32	0.24	0.18	0.34	0.25	0.52	0.61	0.56
25	0.19	0.68	0.34	0.24	0.34	0.29	0.52	0.60	0.56
26	0.22	0.43	0.30	0.23	0.32	0.26	0.58	0.69	0.62
27	0.15	0.22	0.19	0.19	0.26	0.23	0.61	0.92	0.69
28	0.14	0.53	0.18	0.13	0.21	0.18	0.57	0.68	0.62
29	0.18	0.26	0.22	0.06	0.13	0.11	0.64	0.75	0.68
30	0.15	0.32	0.20	0.04	0.32	0.17	0.50	0.65	0.56
31	0.08	0.21	0.15	0.16	0.28	0.22	0.46	0.56	0.49
<b>Average</b>	0.10	0.68	0.29	0.39	0.50	0.45	0.57	0.68	0.62
<b>Min</b>	0.00	0.01	0.01	0.04	0.13	0.11	0.46	0.56	0.49
<b>Max</b>	0.43	2.92	0.98	0.73	0.79	0.76	0.68	0.92	0.74

## Smith Creek Reservoir/Dixie Reservoir/End-of-Line WQS Online Data



**Note:**

- The Smith Creek FCR analyser sample location is situated on a section of the piping affected by intermittent flows and efforts are being made to relocate the sensor to a more effective point to best represent the water provided to the upper pressure zone including the Dixie Reservoir and re-chlorination system.
- An additional online water quality analyser is planned to be installed at the inlet of the Smith Creek Reservoir in effort to provide more data to support the water-age management of this network.

<b>End-of-Line WQS Water Quality</b>					
<b>Date</b>	<b>Turbidity</b>	<b>Temp</b>	<b>FCR</b>		<b>pH</b>
	Grab (NTU)	Grab (°C)	Grab (mg/L)	Online (mg/L)	
02-Jul-25	0.19	18	0.64	0.68	7.72
08-Jul-25	0.22	17.3	0.66	0.66	7.51
15-Jul-25	0.12	18.9	0.62	0.61	7.86
22-Jul-25	0.15	17.1	0.55	0.58	7.6
31-Jul-25	0.13	19.5	0.45	0.47	7.62
# of Samples	5	5	5	5	5
Average	0.162	18.16	0.584	0.6	7.662
Range	0.12-0.22	17.1-19.5	0.45-0.66	0.47-0.68	7.51-7.86

# WQ Field Data

## Mclver SS

Mclver SS Water Quality				
Date	Turbidity	Temp	FCR	pH
	Grab (NTU)	Grab (°C)	Grab (mg/L)	
02-Jul-25	0.15	17	0.69	7.76
08-Jul-25	0.09	16.3	0.87	7.53
15-Jul-25	0.19	17.6	0.58	7.87
22-Jul-25	0.17	17.5	0.63	7.57
31-Jul-25	0.12	18.8	0.55	7.56
# of Samples	5	5	5	5
Average	0.144	17.44	0.664	7.658
Range	0.09-0.19	16.3-18.8	0.55-0.87	7.53-7.87

## Bulk Water Station (Stn)

Bulk Water Station Water Quality				
Date	Turbidity	Temp	FCR	pH
	Grab (NTU)	Grab (°C)	Grab (mg/L)	
02-Jul-25	0.16	18	0.77	7.76
08-Jul-25	0.13	18.6	0.45	7.52
15-Jul-25	0.42	17.2	0.77	7.82
22-Jul-25	0.15	17.2	0.58	7.55
31-Jul-25	0.12	19.5	0.31	7.58
# of Samples	5	5	5	5
Average	0.196	18.1	0.576	7.646
Range	0.12-0.42	17.2-19.5	0.31-0.77	7.52-7.82