2023 Mill River Dissolved Oxygen and Salinity Measurements

The Regional Water Authority (RWA) continued its annual summer dissolved oxygen (DO) and salinity monitoring in the Mill River downstream of the Lake Whitney water supply reservoir in 2023 to help document environmental conditions before and after the Whitney Water Treatment Plant was activated in 2005. Weekly measurements were taken from August through September at three stations prior to daybreak when the 14-day median lake level at Lake Whitney was less than 0.20 feet above spillway elevation, which is approximately equivalent to a spillage flow rate to the river of 40 million gallons per day. In 2023, conditions were generally average. A short period of lower flows occurred in August/September, sampling was conducted on 6 occasions during this period.



2023 Mill River Dissolved Oxygen and Salinity Measurements.

Date	Station	14-day median	Depth (m)	Temp (C)	Salinity (PSS)	рН	DO (mg/L)
		lake level (ft)					
8/4/2023	Spillway	+0.195	0.30	23.80	0.15	7.86	6.64
8/4/2023	Plunge Pool		0.20	23.00	0.15	8.24	8.35
8/4/2023	Footbridge		0.30	22.40	0.15	7.79	5.29
8/4/2023	Footbridge		0.80	22.40	0.15	7.77	5.17
8/11/2023	Spillway	+0.175	0.30	23.20	0.15	8.78	8.78
8/11/2023	Plunge Pool		0.20	22.80	0.15	8.50	8.44
8/11/2023	Footbridge		0.10	22.30	0.15	7.94	5.99
8/11/2023	Footbridge		0.40	22.50	0.15	7.90	5.78
8/18/2023	Spillway	+0.190	0.10	23.60	0.14	8.07	8.56
8/18/2023	Plunge Pool		0.10	23.70	0.14	7.98	9.28
8/18/2023	Footbridge		0.10	23.40	0.14	7.64	6.77
8/18/2023	Footbridge		0.30	23.30	0.14	7.57	6.68
9/1/2023	Spillway	+0.190	0.40	22.50	0.11	8.71	11.36
9/1/2023	Plunge Pool		0.20	21.10	0.10	8.42	8.94
9/1/2023	Footbridge		0.10	20.20	0.11	7.80	7.24
9/1/2023	Footbridge		0.50	20.20	0.11	7.63	6.47
9/8/2023	Spillway	+0.165	0.20	24.90	0.12	8.90	8.41
9/8/2023	Plunge Pool		0.40	25.00	0.12	8.91	8.39
9/8/2023	Footbridge		0.10	25.10	0.59	7.59	4.86
9/8/2023	Footbridge		0.50	26.10	4.18	7.04	3.56
9/15/2023	Spillway	+0.160	0.46	22.10	0.12	7.48	6.92
9/15/2023	Plunge Pool		0.31	21.70	0.12	7.78	8.87
9/15/2023	Footbridge		0.17	21.40	0.12	7.69	7.87
9/15/2023	Footbridge		0.49	21.40	0.12	7.66	7.75