

Water and Sediment Monitoring Data - Booragoon Lake

Water Quality Monitoring Results

Date	pH	Electrical Conductivity (µS/cm)	Dissolved Oxygen (%)	Total Phosphorus (mg/L)	Ammonia (mg/L)	Nitrate (mg/L)	Total Nitrogen (mg/L)	NOx (mg/L)	Soluble Reactive Phosphorus (mg/L)	Total Suspended Solids (mg/L)
08/2022	6.99	1063	25.3	1.8	2.3	0.19	4.9	0.25	0.9	-
09/2022	6.99	133.1	37.5	3.8	1.3	0.45	5	0.52	2	14
18/07/2023	7.67	1775	18.3	2.2	1.2	0.19	4.5	0.23	1.4	7
18/10/2023	7.6	2019	37	8.3	2.3	0.11	6.4	0.17	6.4	<5
24/07/2024	3.51	2206	31.3	0.17	LOR	0.0062	1.3	0.011	0.023	<5
21/10/2024	-	-	-	1.2	1.7	0.11	5.1	0.11	0.4	8
19/12/2024	7.4	2786	63.3	6.4	0.014	<0.050	13	<0.050	4.2	34
05/08/2025	3.67	12.73	31.9	0.7	0.0062	0.062	1.1	0.064	0.017	32
22/10/2025	6.62	917	17.4	2.3	2.3	<0.050	4.6	<0.050	2	<5
26/02/2026	7.92	2176	-	8.4	0.008	<0.050	7.5	<0.050	4.4	55
27/03/2026	7.89	2567	72.3	0.26	0.19	0.24	2.1	0.25	<0.005	-

LOR = Below laboratory limit of reporting.

'-' indicates no result reported.

Sediment Chemistry Results (29 May 2025)

Sample	Arsenic (mg/kg)	Cadmium (mg/kg)	Chromium (mg/kg)	Copper (mg/kg)	Lead (mg/kg)	Mercury (mg/kg)	Nickel (mg/kg)	Zinc (mg/kg)	Moisture (%)	CRS (% w/w)
1	<4.0	<0.40	24	51	900	0.28	7.2	110	71	0.054
2	16	<0.40	46	12	55	0.1	8.2	92	73	0.053
3	62	<0.40	65	30	11	<0.10	40	83	70	0.044
4	5.1	0.82	14	2.5	14	<0.10	3.1	220	51	0.032

Sediment Screening Summary

Parameter	Screening Level	Samples Exceeding Guideline
Arsenic	20 mg/kg	Sample 3
Cadmium	1.5 mg/kg	None
Chromium	80 mg/kg	None
Copper	65 mg/kg	None
Lead	50 mg/kg	Samples 1 & 2
Mercury	0.15 mg/kg	Sample 1
Nickel	21 mg/kg	Sample 3
Zinc	200 mg/kg	Sample 4

Interpretation

Sediment guideline values are screening criteria. Exceedances indicate where further assessment may be warranted and do not necessarily represent an unacceptable environmental or human health risk. Results should be interpreted in the context of site conditions, contaminant distribution and potential exposure pathways.