

D. Summary of Water Quality Monitoring

Table D1. Water quality at WRA

May 2023

Cell No.	Temp. (°C)	pH	Salinity (ppt)	Turb. (NTU)	DO (mg/L)	Water Level (cm) (18 May)	Water Level (cm) (30 May)
1	26.2	7.2	0.3	15.0	8.1	150	150
2	26.7	7.0	0.3	21.9	8.6	140	140
3	26.9	6.9	0.2	12.4	5.7	185	205
4	26.2	6.9	0.2	8.2	5.2	170	165

Jun 2023

Cell No.	Temp. (°C)	pH	Salinity (ppt)	Turb. (NTU)	DO (mg/L)	Water Level (cm) (7 Jun)	Water Level (cm) (26 Jun)
1	33.3	7.9	0.2	16.2	10.0	170	190
2	31.9	7.6	0.2	12.5	10.6	155	175
3	33.1	7.9	0.3	40.2	9.2	205	220
4	32.4	7.8	0.2	12.0	7.2	195	210

Jul 2023

Cell No.	Temp. (°C)	pH	Salinity (ppt)	Turb. (NTU)	DO (mg/L)	Water Level (cm) (5 Jul)	Water Level (cm) (18 Jul)	Water Level (cm) (25 Jul)
1	31.4	7.6	0.2	6.9	4.4	185	190	185
2	31.3	7.6	0.2	4.9	3.7	175	185	175

Cell No.	Temp. (°C)	pH	Salinity (ppt)	Turb. (NTU)	DO (mg/L)	Water Level (cm) (5 Jul)	Water Level (cm) (18 Jul)	Water Level (cm) (25 Jul)
3	31.6	7.7	0.2	8.9	4.1	220	225	215
4	32.0	7.7	0.2	2.1	5.5	220	210	200

Aug 2023

Cell No.	Temp. (°C)	pH	Salinity (ppt)	Turb. (NTU)	DO (mg/L)	Water Level (cm) (10 Aug)	Water Level (cm) (24 Aug)
1	30.9	7.8	0.2	9.5	6.3	190	190
2	29.8	7.7	0.2	12.4	5.7	170	180
3	30.6	7.7	0.2	8.8	6.5	220	230
4	31.0	7.6	0.2	1.7	5.1	210	220

Sep 2023

Cell No.	Temp. (°C)	pH	Salinity (ppt)	Turb. (NTU)	DO (mg/L)	Water Level (cm) (3 Sep)	Water Level (cm) (9 Sep)	Water Level (cm) (12 Sep)	Water Level (cm) (26 Sep)
1	31.4	7.4	0.1	7.0	8.8	195	195	195	185
2	29.9	7.3	0.1	5.6	8.4	185	190	180	180
3	30.0	7.3	0.1	16.4	7.5	230	240	230	220
4	30.2	7.4	0.1	1.2	5.2	220	240	220	210

Oct 2023

Cell No.	Temp. (°C)	pH	Salinity (ppt)	Turb. (NTU)	DO (mg/L)	Water Level (cm) (3 Oct)	Water Level (cm) (9 Sept)	Water Level (cm) (10 Oct)	Water Level (cm) (24 Oct)
1	26.3	7.9	0.1	12.8	9.4	180	200	185	190
2	25.1	7.9	0.1	7.0	8.1	175	190	180	180
3	26.3	7.9	0.1	11.7	8.7	215	235	220	220
4	26.2	7.8	0.1	3.7	7.7	205	230	215	215
Action / Limit Level	Temp. (°C)	pH	Salinity (ppt)	Turb. (NTU)	DO (mg/L)	Water Level (cm)			
Action Level	-	<6.5 or >8.0	>2	-	<2	<150 or >250			
Limit Level	-	<6.0 or >8.5	>5	-	<1	-			

Notes: Values highlighted in **bold** indicate that action level is reached; whereas values in **bold and underlined** indicate that limit level is reached
 Additional water level monitoring was conducted

Table D2. Water quality monitoring (Laboratory Testing) at WRA

Oct 2023					
Monitoring Location	Ammonia-N (mg/L)	NOx-N (mg/L)	Total P (mg/L)	Reactive P (mg/L)	BOD (mg/L)
Cell 1-1	0.02	<0.01	0.18	<0.01	6.0
Cell 1-2	0.04	<0.01	0.17	<0.01	5.0
Cell 1-3	0.03	<0.01	0.17	<0.01	7.0
Cell 2-1	0.03	<0.01	0.13	<0.01	4.0
Cell 2-2	0.02	<0.01	0.12	<0.01	5.0
Cell 2-3	0.02	<0.01	0.18	<0.01	4.0
Cell 3-1	0.03	<0.01	0.50	0.15	12.0
Cell 3-2	0.02	<0.01	0.40	0.13	13.0
Cell 3-3	0.02	<0.01	0.50	0.13	13.0
Cell 4-1	0.04	0.07	0.30	0.05	<2.0
Cell 4-2	0.04	0.06	0.30	0.05	<2.0
Cell 4-3	0.03	0.07	0.30	0.05	<2.0
Action Level	>3	>5	>5	-	-
Limit Level	>6	>10	>10	-	-

Note: Values highlighted in **bold** indicate that action level is reached; whereas values in **bold and underlined** indicate that limit level is reached.
 The additional water samples for ex-situ laboratory analysis were collected on 13 October 2023.