

D. Summary of Water Quality Monitoring

Table D1. Water quality at WRA

May 2021

Cell No.	Temp. (°C)	pH	Salinity (ppt)	Turb. (NTU)	DO (mg/L)	Water Level (14 May) (cm)	Water Level (26 May) (cm)
1	32.1	8.2	1.5	24.4	7.5	80	90
2	32.9	8.4	1.7	32.7	7.4	40	50
3	32.4	8.5	1.4	31.3	6.4	80	110
4	33.2	8.6	1.3	15.4	6.7	100	110

Jun 2021

Cell No.	Temp. (°C)	pH	Salinity (ppt)	Turb. (NTU)	DO (mg/L)	Water Level (8 Jun) (cm)	Water Level (23 Jun) (cm)	Water Level (29 Jun) (cm)
1	30.6	7.1	0.6	31.1	6.3	90	90	140
2	31.4	7.3	0.8	35.7	6.2	70	100	130
3	30.9	7.4	0.5	36.1	5.3	120	130	170
4	31.7	7.5	0.4	21.4	5.5	120	140	150

Jul 2021

Cell No.	Temp. (°C)	pH	Salinity (ppt)	Turb. (NTU)	DO (mg/L)	Water Level (13 Jul) (cm)	Water Level (27 Jul) (cm)
1	31.3	7.3	0.4	8.9	6.7	130	170
2	32.1	7.4	0.5	11.6	6.5	130	170
3	31.6	7.4	0.4	8.3	5.4	170	210
4	32.4	7.6	0.3	6.9	5.9	150	210

Aug 2021

Cell No.	Temp. (°C)	pH	Salinity (ppt)	Turb. (NTU)	DO (mg/L)	Water Level (10 Aug) (cm)	Water Level (24 Aug) (cm)
1	30.9	7.4	0.3	7.5	6.8	200	210
2	31.7	7.5	0.3	8.2	6.7	180	180
3	31.2	7.5	0.3	6.9	5.6	220	210
4	32.0	7.8	0.4	4.3	6.0	220	210

Sep 2021

Cell No.	Temp. (°C)	pH	Salinity (ppt)	Turb. (NTU)	DO (mg/L)	Water Level (7 Sep) (cm)	Water Level (21 Sep) (cm)
1	34.9	7.8	0.3	12.6	4.1	200	210
2	36.0	8.3	0.3	5.8	4.8	180	190
3	34.1	7.4	0.3	12.4	5.2	200	210
4	34.2	7.8	0.3	0.9	3.8	200	210

Oct 2021

Cell No.	Temp. (°C)	pH	Salinity (ppt)	Turb. (NTU)	DO (mg/L)	Water Level (5 Oct) (cm)	Water Level (11 Oct) (cm)	Water Level (15 Oct) (cm)
1	25.1	8.0	0.2	7.2	4.6	210	220	220
2	24.2	8.1	0.2	2.9	2.5	190	210	210
3	24.1	7.7	0.2	5.0	3.7	210	230	230
4	24.0	7.6	0.2	9.0	3.0	210	230	230

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 2021					
Monitoring Location	Ammonia-N (mg/L)	NOx-N (mg/L)	Total P (mg/L)	Reactive P (mg/L)	BOD (mg/L)
Cell 1-1	<0.01	<0.01	0.71	0.54	6.0
Cell 1-2	0.03	<0.01	0.70	0.50	4.0
Cell 1-3	0.04	<0.01	0.65	0.51	5.0
Cell 2-1	<0.01	<0.01	0.53	0.33	5.0
Cell 2-2	<0.01	<0.01	0.54	0.33	5.0
Cell 2-3	<0.01	<0.01	0.55	0.35	5.0
Cell 3-1	<0.01	<0.01	0.50	0.34	4.0
Cell 3-2	<0.01	<0.01	0.50	0.36	4.0
Cell 3-3	<0.01	<0.01	0.50	0.35	4.0
Cell 4-1	<0.01	<0.01	0.50	0.35	4.0
Cell 4-2	<0.01	<0.01	0.50	0.35	4.0
Cell 4-3	<0.01	<0.01	0.50	0.35	4.0
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 22 October 2021.