

D. Summary of Water Quality Monitoring

**Table D1. Water quality at WRA
 May 2024**

| Cell No. | Temp. (°C) | pH | Salinity (ppt) | Turb. (NTU) | DO (mg/L) | Water Level (14 May) (cm) | Water Level (21 May) (cm) | Water Level (28 May) (cm) |
|----------|------------|-----|----------------|-------------|-----------|---------------------------|---------------------------|---------------------------|
| 1 | 28.6 | 7.6 | 0.3 | 16.0 | 5.4 | 180 | 180 | 190 |
| 2 | 27.8 | 7.8 | 0.3 | 9.6 | 3.6 | 160 | 155 | 175 |
| 3 | 28.6 | 7.4 | 0.3 | 50.3 | 6.4 | 205 | 185 | 200 |
| 4 | 28.7 | 7.5 | 0.2 | 1.5 | 7.0 | 195 | 155 | 195 |

Jun 2024

| Cell No. | Temp. (°C) | pH | Salinity (ppt) | Turb. (NTU) | DO (mg/L) | Water Level (cm) (11 Jun) | Water Level (cm) (25 Jun) |
|----------|------------|-----|----------------|-------------|-----------|---------------------------|---------------------------|
| 1 | 32.2 | 7.6 | 0.2 | 13.3 | 4.6 | 210 | 205 |
| 2 | 31.6 | 7.8 | 0.2 | 2.9 | 7.4 | 180 | 175 |
| 3 | 31.7 | 7.9 | 0.2 | 13.1 | 6.4 | 220 | 210 |
| 4 | 31.1 | 7.6 | 0.2 | 4.2 | 6.3 | 210 | 210 |

Jul 2024

| Cell No. | Temp. (°C) | pH | Salinity (ppt) | Turb. (NTU) | DO (mg/L) | Water Level (cm) (16 Jul) | Water Level (cm) (30 Jul) |
|----------|------------|-----|----------------|-------------|-----------|---------------------------|---------------------------|
| 1 | 32.5 | 7.5 | 0.2 | 22.0 | 5.0 | 190 | 210 |
| 2 | 31.7 | 7.6 | 0.2 | 12.0 | 3.8 | 180 | 180 |
| 3 | 32.1 | 7.9 | 0.2 | 14.3 | 5.5 | 200 | 220 |
| 4 | 31.7 | 7.7 | 0.2 | 5.3 | 3.8 | 190 | 210 |

Aug 2024

| Cell No. | Temp. (°C) | pH | Salinity (ppt) | Turb. (NTU) | DO (mg/L) | Water Level (cm) (13 Aug) | Water Level (cm) (27 Aug) |
|----------|------------|-----|----------------|-------------|-----------|---------------------------|---------------------------|
| 1 | 32.5 | 7.1 | 0.1 | 51.8 | 7.1 | 210 | 210 |
| 2 | 29.8 | 7.0 | 0.1 | 5.6 | 6.5 | 180 | 180 |
| 3 | 30.9 | 7.0 | 0.1 | 8.0 | 7.6 | 220 | 225 |
| 4 | 31.3 | 7.2 | 0.1 | 1.1 | 6.6 | 215 | 180 |

Sep 2024

| Cell No. | Temp. (°C) | pH | Salinity (ppt) | Turb. (NTU) | DO (mg/L) | Water Level (cm) (3 Sep) | Water Level (cm) (7 Sep) | Water Level (cm) (23 Sep) |
|----------|------------|-----|----------------|-------------|-----------|--------------------------|--------------------------|---------------------------|
| 1 | 26.5 | 7.4 | 0.1 | 106.7 | 3.9 | 200 | 205 | 200 |
| 2 | 27.1 | 7.3 | 0.1 | 15.7 | 2.5 | 180 | 190 | 180 |
| 3 | 26.8 | 7.4 | 0.1 | 52.6 | 3.2 | 215 | 235 | 205 |
| 4 | 27.2 | 7.4 | 0.1 | 16.3 | 2.4 | 205 | 230 | 195 |

Oct 2024

| Cell No. | Temp. (°C) | pH | Salinity (ppt) | Turb. (NTU) | DO (mg/L)* | Water Level (cm) (7 Oct) | Water Level (cm) (29 Oct) |
|----------|------------|-----|----------------|-------------|------------|--------------------------|---------------------------|
| 1 | 31.5 | 7.8 | 0.1 | 23.3 | 8.7 | 200 | 190 |
| 2 | 28.6 | 7.7 | 0.1 | 21.4 | 7.3 | 175 | 150 |
| 3 | 30.1 | 7.7 | 0.1 | 20.5 | 9.0 | 205 | 190 |
| 4 | 28.3 | 7.8 | 0.1 | 19.6 | 4.9 | 200 | 185 |

| 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

* The data has been updated since the corresponding monthly EM&A report

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

| Oct 2024 | | | | | |
|----------------------------|-------------------------|---------------------|-----------------------|--------------------------|-------------------|
| 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 | <0.01 | 0.24 | 12.0 |
| Cell 1-2 | 0.01 | <0.01 | <0.01 | 0.18 | 9.0 |
| Cell 1-3 | 0.01 | <0.01 | <0.01 | 0.19 | 10.0 |
| Cell 2-1 | <0.01 | <0.01 | <0.01 | 0.17 | 10.0 |
| Cell 2-2 | 0.02 | <0.01 | <0.01 | 0.18 | 10.0 |
| Cell 2-3 | <0.01 | <0.01 | <0.01 | 0.17 | 9.0 |
| Cell 3-1 | <0.01 | <0.01 | <0.01 | 0.18 | 10.0 |
| Cell 3-2 | <0.01 | <0.01 | <0.01 | 0.18 | 9.0 |
| Cell 3-3 | <0.01 | <0.01 | <0.01 | 0.18 | 10.0 |
| Cell 4-1 | <0.01 | <0.01 | <0.01 | 0.17 | 8.0 |
| Cell 4-2 | <0.01 | <0.01 | <0.01 | 0.18 | 8.0 |
| Cell 4-3 | 0.01 | <0.01 | <0.01 | 0.19 | 7.0 |
| 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 14 October 2024.

