# Derbal Yirragan

## Swan waterway

## Weekly water quality report

17 August 2026

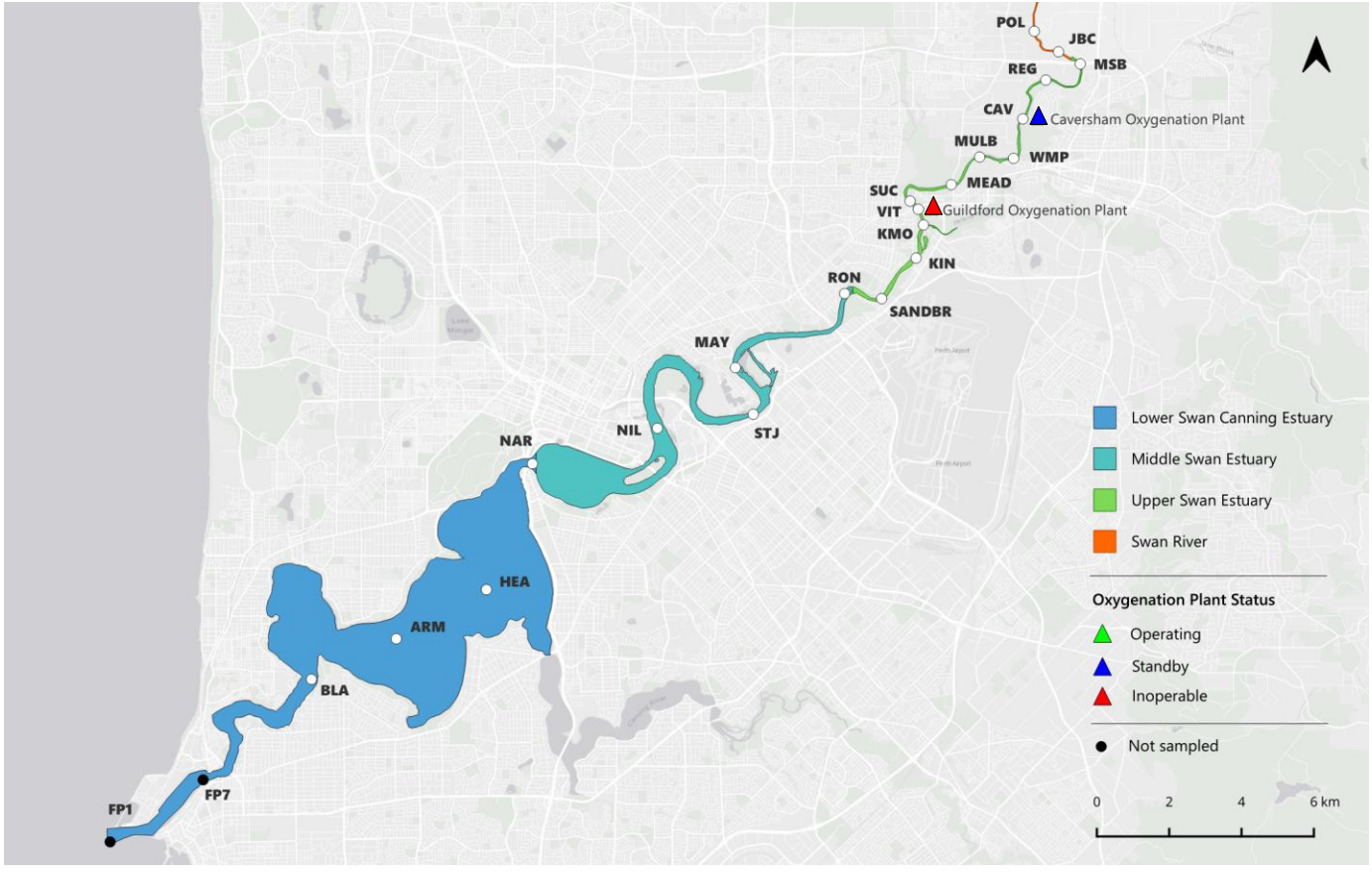
**Monitoring conducted on Whadjuk Noongar Country**

Prepared by:
Rivers and Estuaries Science
Biodiversity and Conservation Science
Department of Biodiversity, Conservation and Attractions

Photo – DBCA

# Derbal Yirragan water quality monitoring sites

17 August 2026



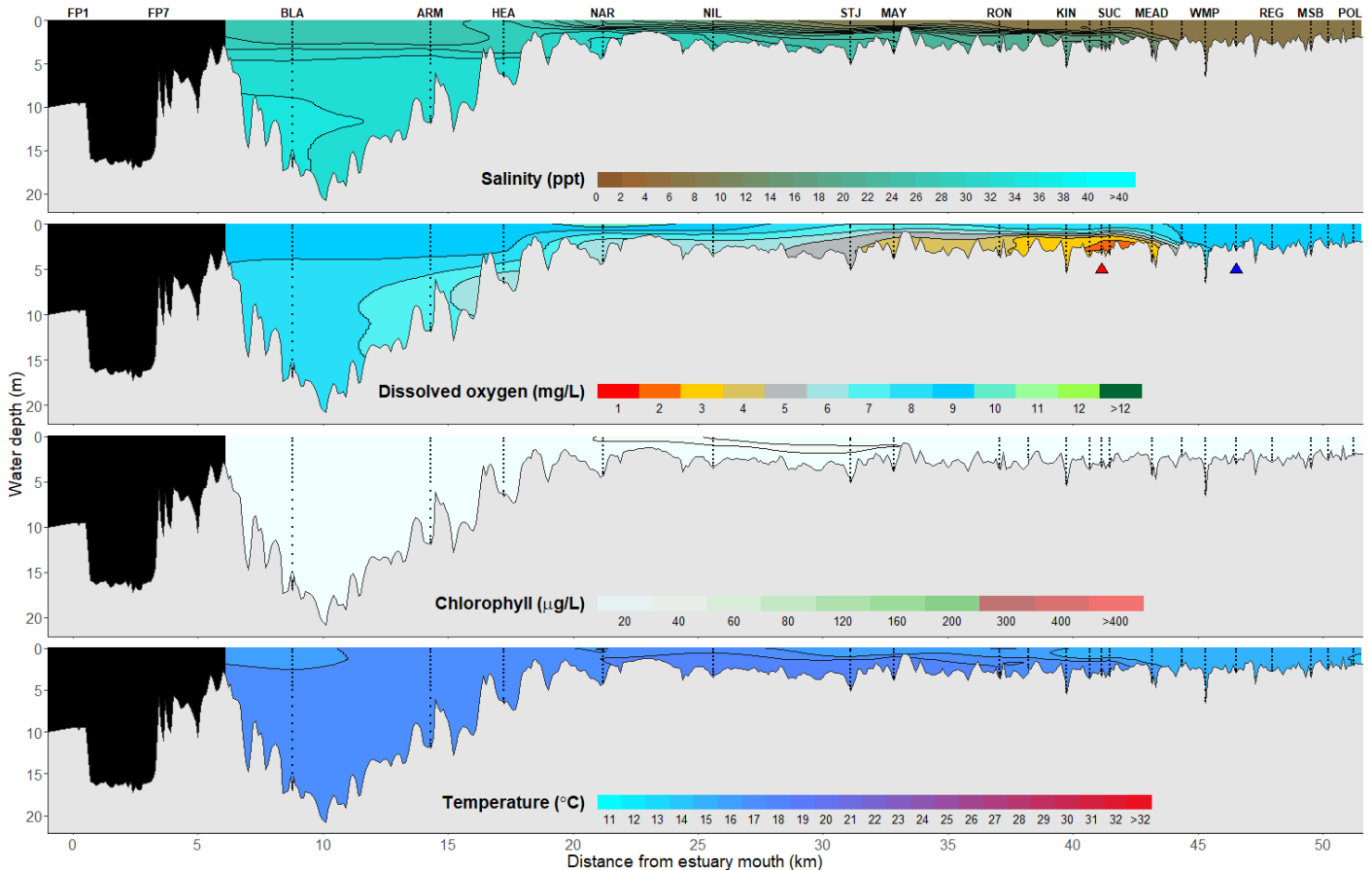
Department of Biodiversity, Conservation and Attractions

GOVERNMENT OF WESTERN AUSTRALIA

Biodiversity and Conservation Science

# Derbal Yirragan water quality profile

17 August 2026




**Note**: Profile plots are visual interpolations of measured parameters only. Detailed data are available at wir.water.wa.gov.au.

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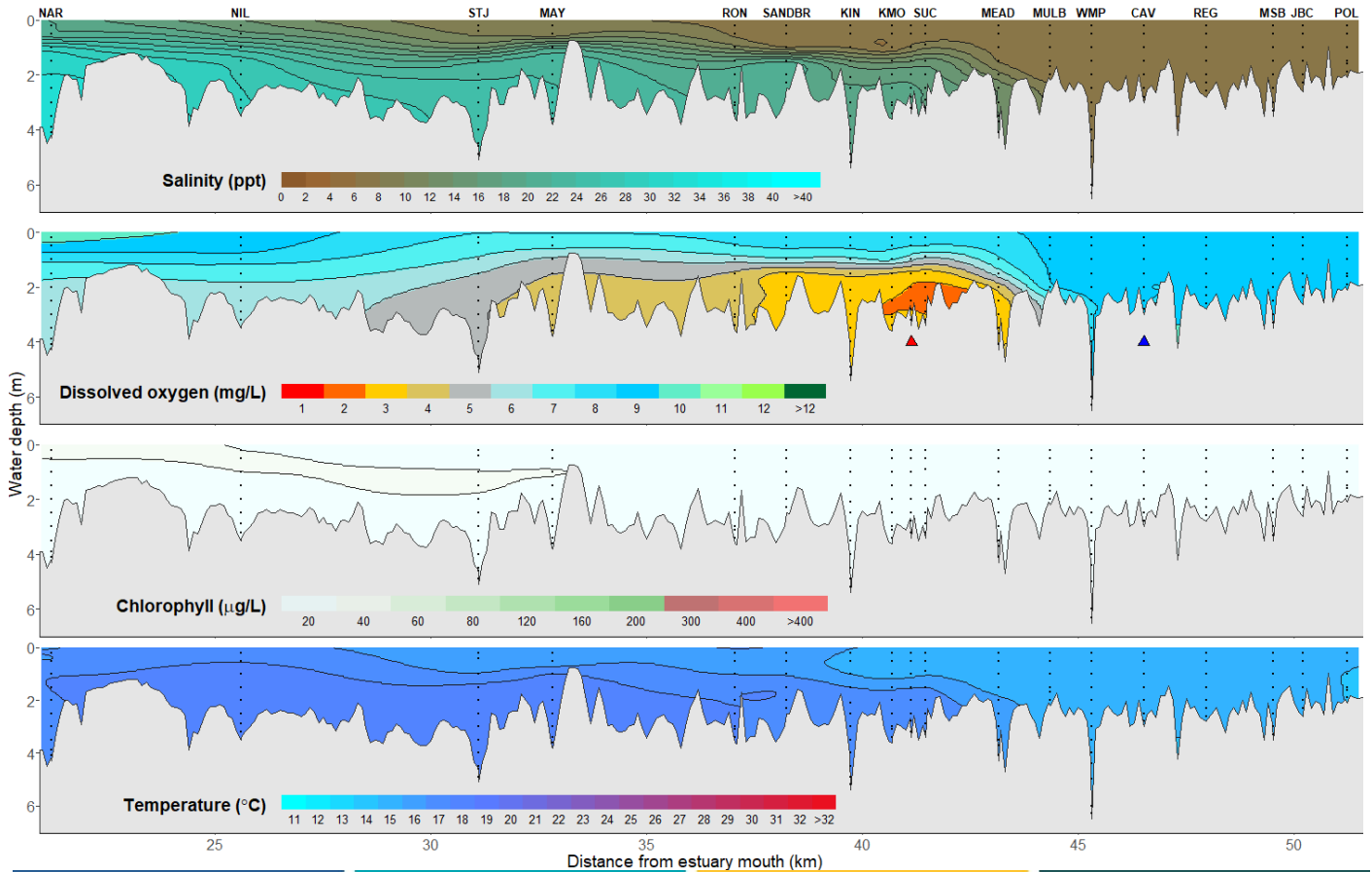


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# Derbal Yirragan water quality summary

17 August 2026

**Lower Swan Canning Estuary:** Seasonal rainfall has caused mild stratification within this zone. Salinity conditions were euhaline with polyhaline surface waters. Chlorophyll fluorescence was low throughout, indicating low phytoplankton activity. Waters were oxygenated or well-oxygenated and water temperatures ranged from 15.9 to 17 °C.

**Middle Swan Estuary:** There was significant stratification across this zone from recent riverine flow. Waters were polyhaline with mesohaline surface waters throughout. There was low oxygen in bottom waters at MAY and RON, where stratification was most prominent. Elsewhere was oxygenated or well oxygenated. Chlorophyll fluorescence was low throughout, and water temperatures ranged from 15.4 to 17.7 °C.

**Upper Swan Estuary and Swan River:** The river was flowing and sites from MULB to POL were well-mixed with well oxygenated, mesohaline waters. Downstream sites from SANDBR to SUC were stratified with polyhaline bottom waters and mesohaline surface waters. These stratified sites were experiencing low oxygen bottom waters, with hypoxic conditions recorded from KMO to SUC. Chlorophyll fluorescence was low throughout, and water temperatures ranged from 14 to 16.9 °C.

| Season | |
|---|---|
| **Djilba** | First spring |

| Predicted tides[1] | | | |
|---|---|---|---|
| **High Tide** | | **Low Tide** | |
| 0.89 m | 11:08 am | 0.78 m | 6:31 pm |

| Recorded weather conditions | |
|---|---|
| **Skies** | Overcast |
| **Wind direction** | N |
| **Wind speed** (max) | 8 knots |
| **Air temperature**[2] (max) | 19.6 °C |
| **Rainfall**[2] (within week prior) | 16.6 mm |

**Definitions**

Salinity (ppt)[3] – fresh: <0.5; oligohaline: 0.5 – 5; mesohaline: >5 – 18; polyhaline: >18 – 30; euhaline: >30 – 40; hyperhaline: >40.
Dissolved oxygen (mg/L)[4] – anoxic: 0; hypoxic: >0 – 2; low oxygen: >2 – 4; oxygenated: >4 – 6; well oxygenated: >6.
Chlorophyll fluorescence (µg/L)[5] – low: <50; moderate: 50 – 150; high: >150 - 400, very high: >400.

**References**

1. DTMI (Department of Transport and Major Infrastructure) (2025) Tide predictions, DTMI, accessed 17 August 2026.
2. BOM (Bureau of Meteorology) (2026) Perth Western Australia Daily Weather Observations, BOM, accessed 17 August 2026.
3. (2003) 'The Venice System for the Classification of Marine Waters According to Salinity', *Limnology and Oceanography*, 3, doi: 10.4319/lo.1958.3.3.0346.
4. DWER (Department of Water and Environmental Regulation) (2018) *Oxygenating the Vasse estuary exit channel: the results of a two year trial 2025 - 2017*, DWER, Government of Western Australian.
5. Chlorophyll definitions were internally developed from historical trends within the Swan Canning Riverpark.

**Recommended reference for this report**

Department of Biodiversity, Conservation and Attractions, 2026. *Swan Water Quality Report, 17 August 2026.* Rivers and Estuaries Science (https://www.dbca.wa.gov.au/management/swan-canning-riverpark/swan-canning-riverpark-water-quality-monitoring)