

Derbal Yirragan

Swan waterway

Weekly water quality report

3 August 2026

Monitoring conducted on Whadjuk Noongar Country

Prepared by:

Rivers and Estuaries Science

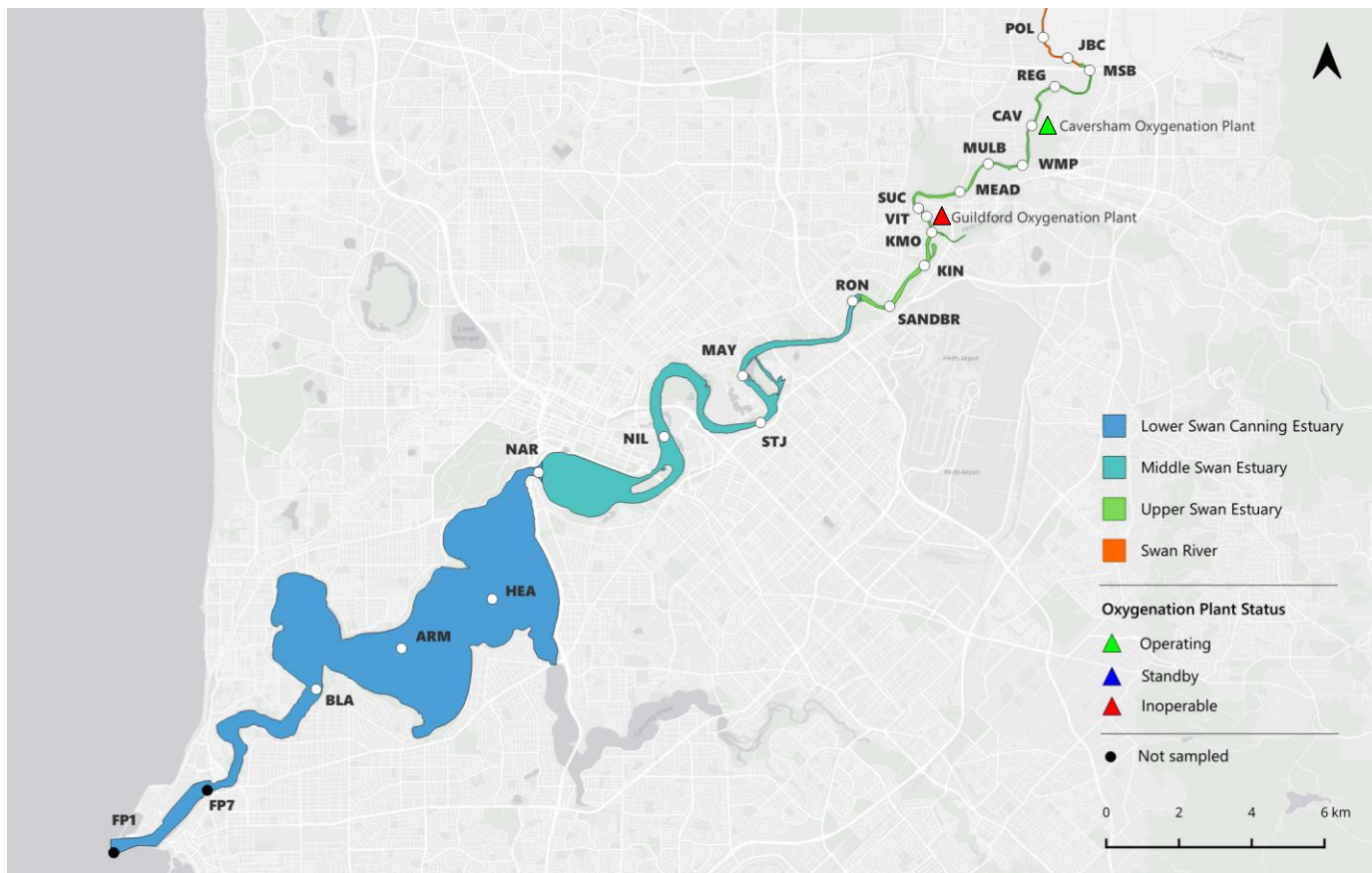
Biodiversity and Conservation Science

Department of Biodiversity, Conservation and Attractions

Photo – DBCA

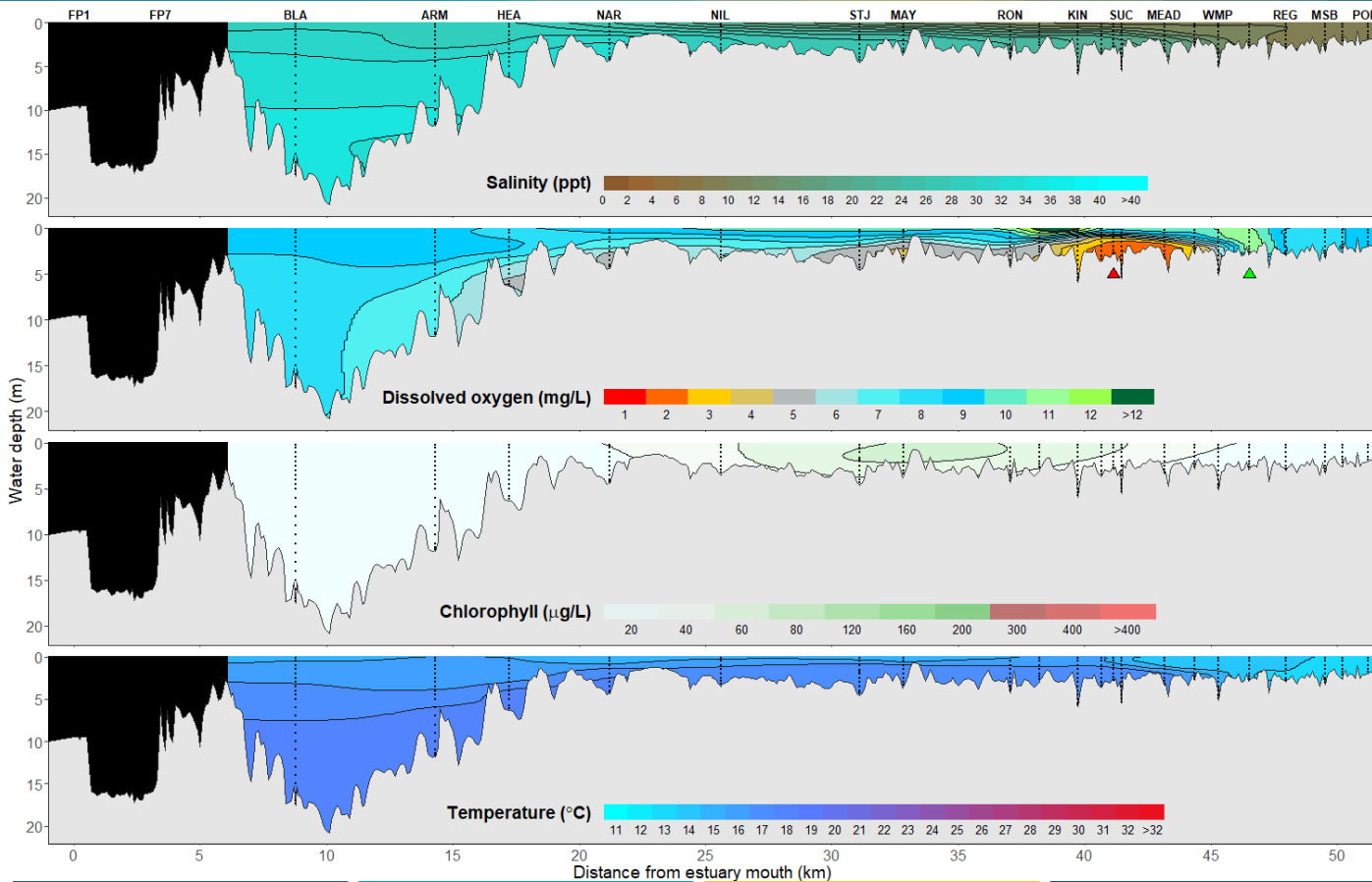
Derbal Yirragan water quality monitoring sites

3 August 2026



Derbal Yirragan water quality profile

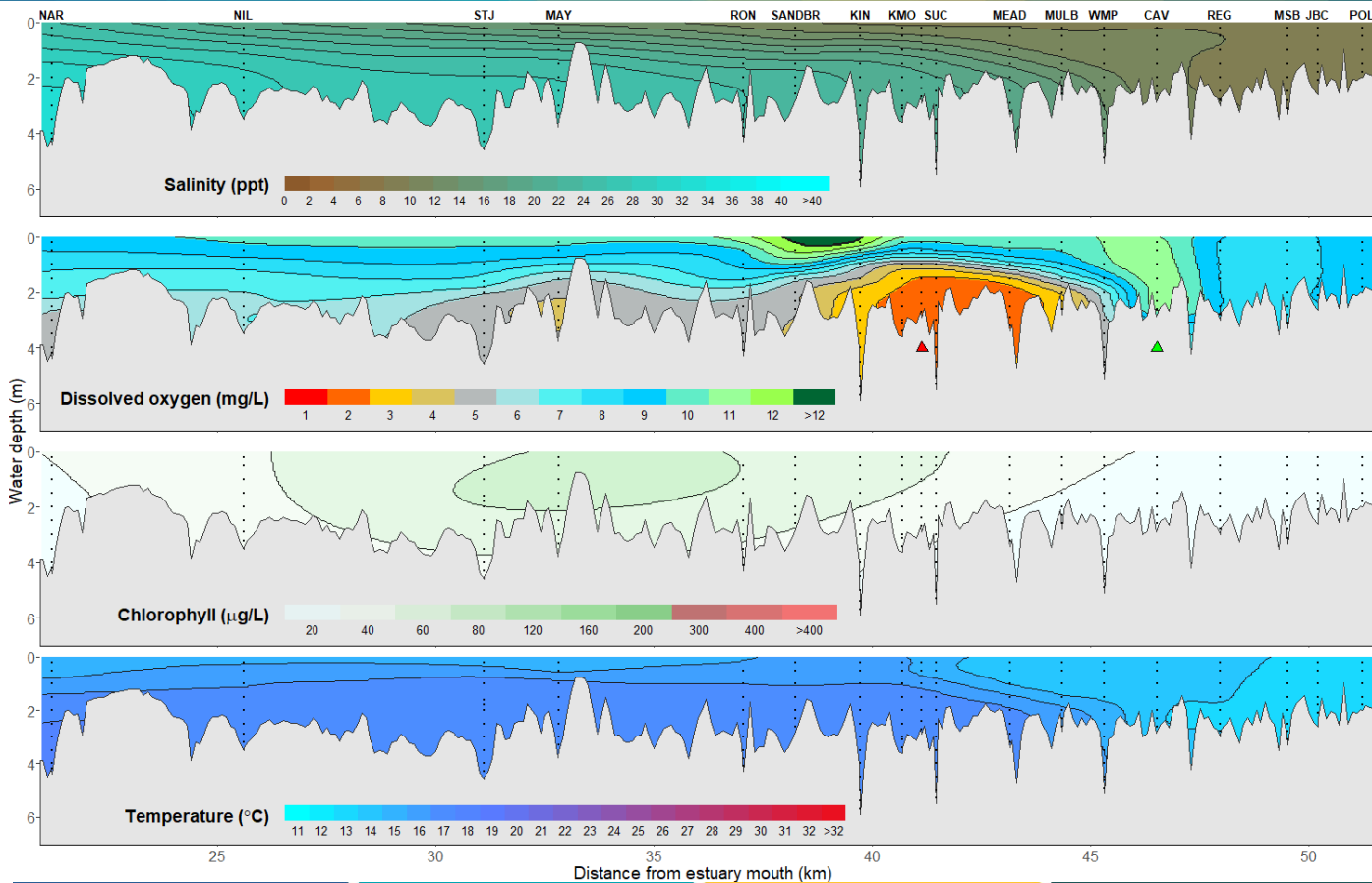
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Note: Profile plots are visual interpolations of measured parameters only. Detailed data are available at wir.water.wa.gov.au.

Derbal Yirragan water quality profile

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Derbal Yirragan water quality summary

Lower Swan Canning Estuary: Seasonal rainfall has created stratified conditions within this zone. Surface waters were polyhaline, while the rest of the water column was euhaline. Chlorophyll fluorescence was low throughout, indicating low phytoplankton activity. Waters were oxygenated or well-oxygenated and water temperatures ranged from 14.6 to 17.6 °C.

Middle Swan Estuary: Stratification was present within this zone due to ongoing riverine flow. Waters were predominately polyhaline with mesohaline surface waters from STJ to RON. Waters were oxygenated or well oxygenated throughout except for bottom waters at MAY, which were in low oxygen. There were high chlorophyll readings at STJ, and moderate readings at MAY and RON, indicating an increase in phytoplankton activity. Water temperatures ranged from 14.7 to 16.9 °C.

Upper Swan Estuary and Swan River: Riverine flow has significantly influenced conditions within this zone. Waters were predominantly mesohaline, with polyhaline bottom waters from SANDBR to MEAD. Where stratification was most prominent, bottom waters were low in oxygen or hypoxic. The Guildford Oxygenation plant was inoperable and hence unavailable to alleviate the reduced dissolved oxygen within this zone. High chlorophyll fluorescence was detected in surface waters at KIN, and moderate readings were detected from SANDBR to SUC. Water temperatures ranged from 12.6 to 16.9 °C.

Season			
Djilba		First spring	
Predicted tides ¹			
Low Tide		High Tide	
0.9 m	7:11 am	1.01 m	1:04 pm

Recorded weather conditions	
Skies	Clear
Wind direction	NE
Wind speed (max)	5.1 knots
Air temperature ² (max)	25.3 °C
Rainfall ² (within week prior)	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 3 August 2026.
2. BOM (Bureau of Meteorology) (2026) [Perth Western Australia Daily Weather Observations](#), BOM, accessed 3 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, 3 August 2026*. Rivers and Estuaries Science (<https://www.dbca.wa.gov.au/management/swan-canning-riverpark/swan-canning-riverpark-water-quality-monitoring>)