

Derbal Yirragan

Swan waterway

Weekly water quality report

31 August 2026

Monitoring conducted on Whadjuk Noongar Country

Prepared by:

Rivers and Estuaries Science

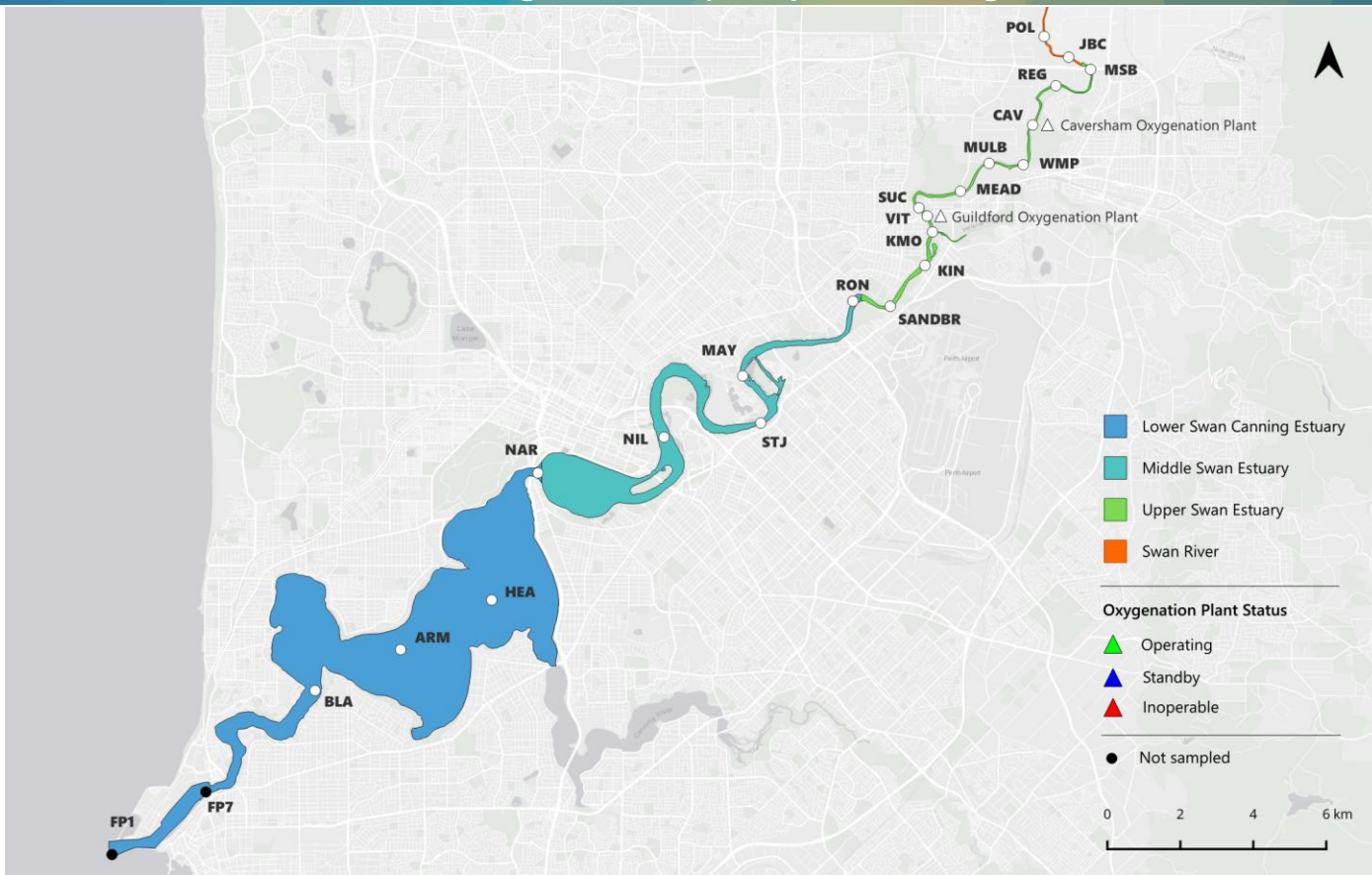
Biodiversity and Conservation Science

Department of Biodiversity, Conservation and Attractions

Photo – DBCA

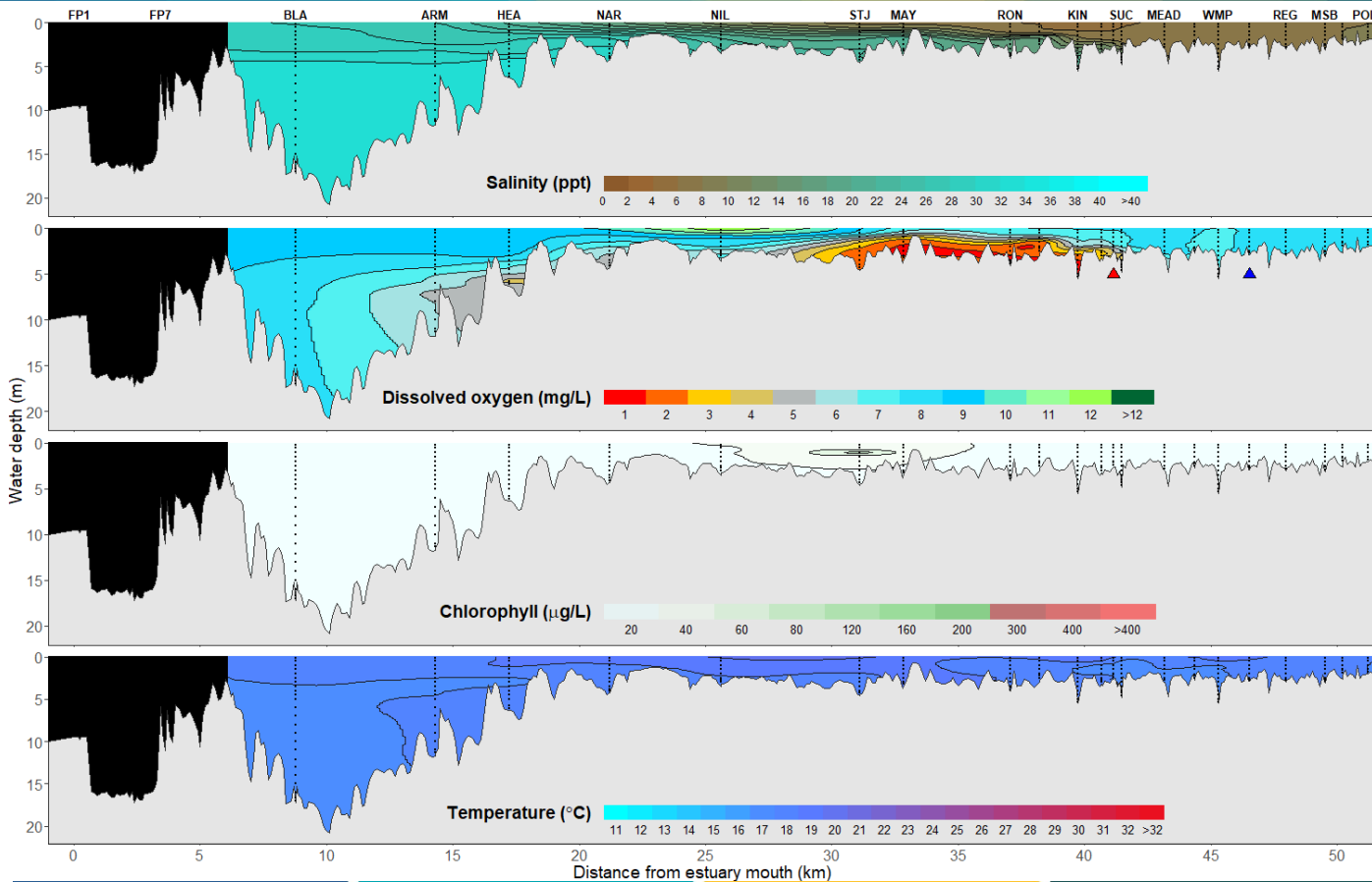
Derbal Yirragan water quality monitoring sites

31 August 2026



Derbal Yirragan water quality profile

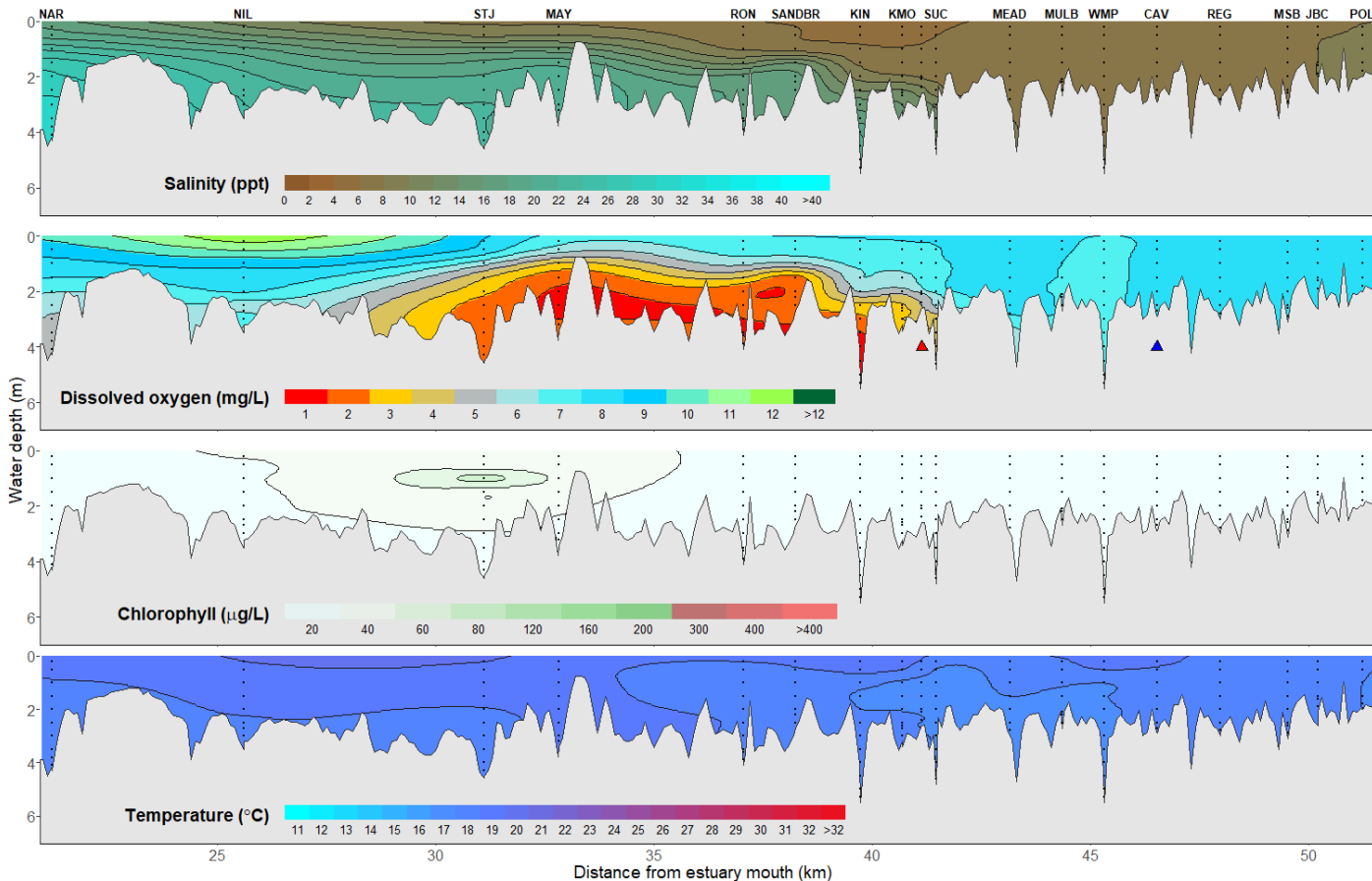
31 August 2026



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

31 August 2026

Lower Swan Canning Estuary: Salinity in this zone was predominately polyhaline over euhaline, except for NAR which had mesohaline surface waters. Chlorophyll fluorescence was low throughout, indicating low phytoplankton activity. Waters were oxygenated to well-oxygenated and water temperatures ranged from 16.8 to 18.2 °C.

Middle Swan Estuary: There was significant stratification across this zone from recent riverine flow. Waters were polyhaline with mesohaline surface waters throughout. Waters were oxygenated to well oxygenated at NIL, surface waters from STJ to RON were oxygenated to well oxygenated with bottom waters being hypoxic. STJ recorded a moderate chlorophyll fluorescence reading in the middle column and water temperatures ranged from 17.4 to 19 °C throughout.

Upper Swan Estuary and Swan River: The river was flowing and sites were predominately mesohaline, except for the bottom waters at KIN which were polyhaline. Waters were mostly oxygenated to well oxygenated waters, except for bottom waters from SANDBR to KIN which were hypoxic, and bottom waters at KMO and SUC which were low oxygen. Chlorophyll fluorescence was low throughout, and water temperatures ranged from 16.6 to 18.5 °C.

Season			
Djilba		First spring	
Predicted tides ¹			
Low Tide		High Tide	
0.91 m	7:14 am	0.97	1:26 pm

Recorded weather conditions	
Skies	Cloudy
Wind direction	NW
Wind speed (max)	6.8 knots
Air temperature ² (max)	22.3 °C
Rainfall ² (within week prior)	15.4 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 31 August 2026.
2. BOM (Bureau of Meteorology) (2026) [Perth Western Australia Daily Weather Observations](#), BOM, accessed 31 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, 31 August 2026*. Rivers and Estuaries Science (<https://www.dbca.wa.gov.au/management/swan-canning-riverpark/swan-canning-riverpark-water-quality-monitoring>)