

Derbal Yirragan

Swan waterway

Weekly water quality report

20 July 2026

Monitoring conducted on Whadjuk Noongar Country

Prepared by:

Rivers and Estuaries Science

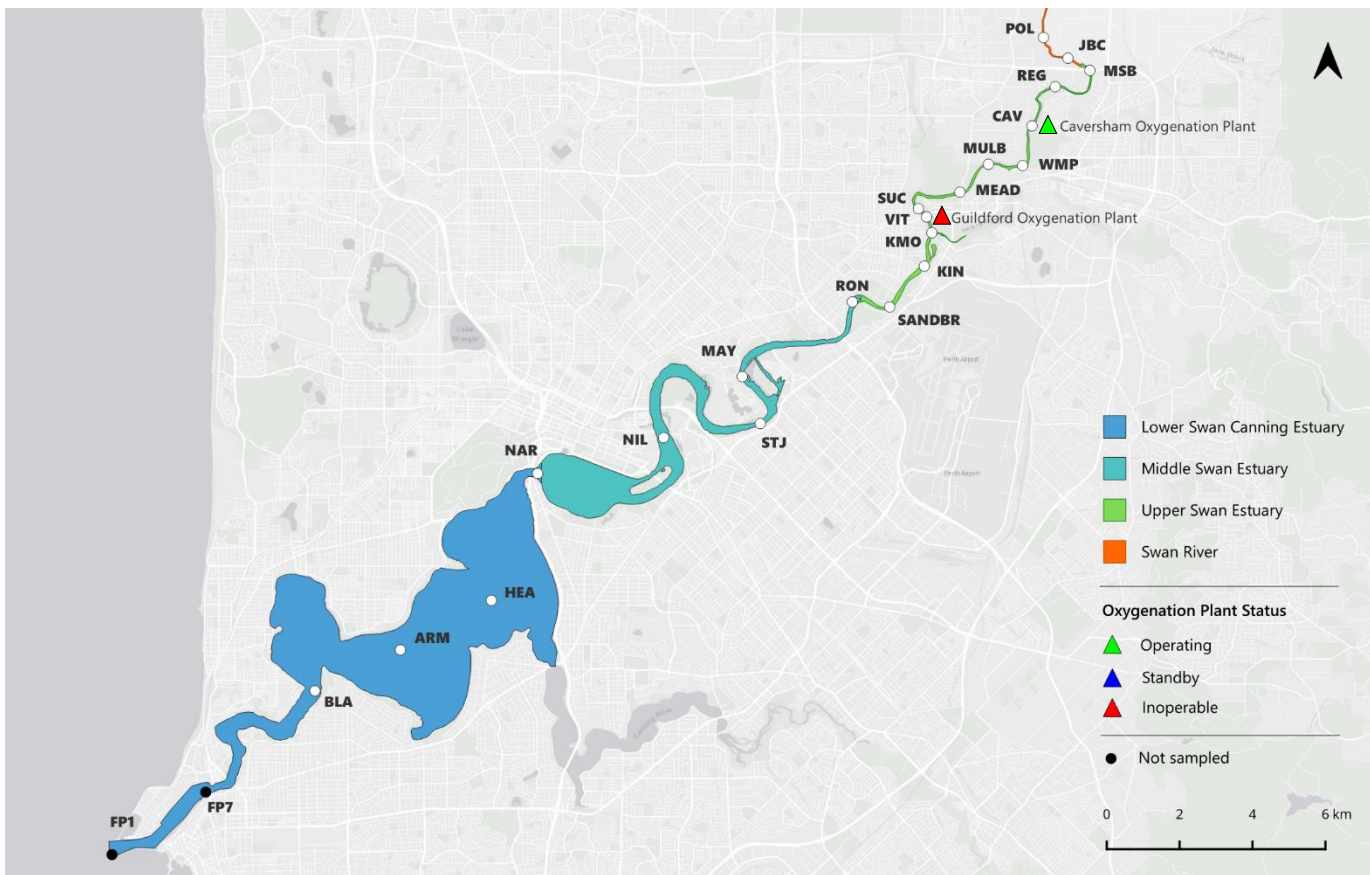
Biodiversity and Conservation Science

Department of Biodiversity, Conservation and Attractions

Photo – DBCA

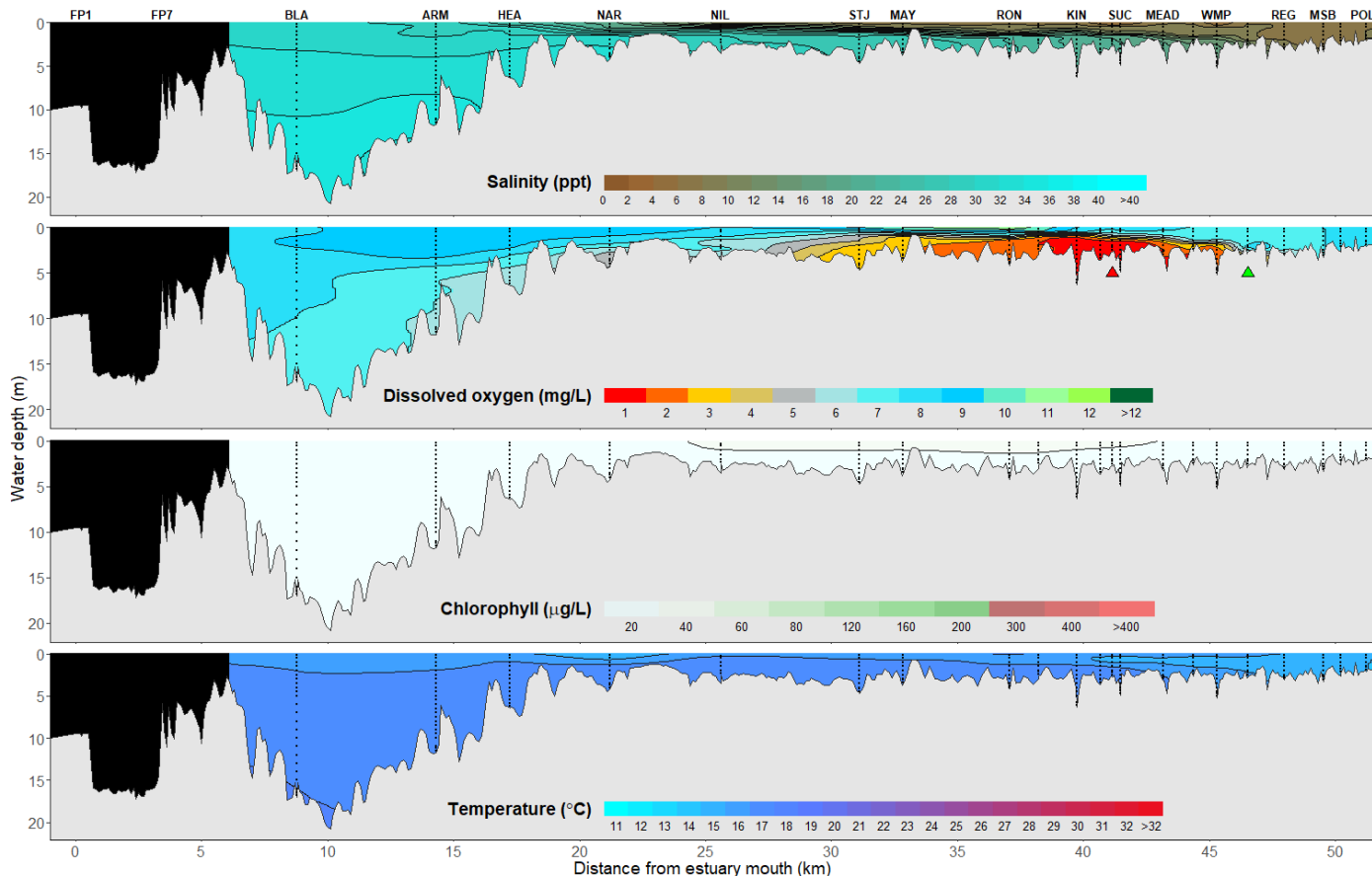
Derbal Yirragan water quality monitoring sites

20 July 2026



Derbal Yirragan water quality profile

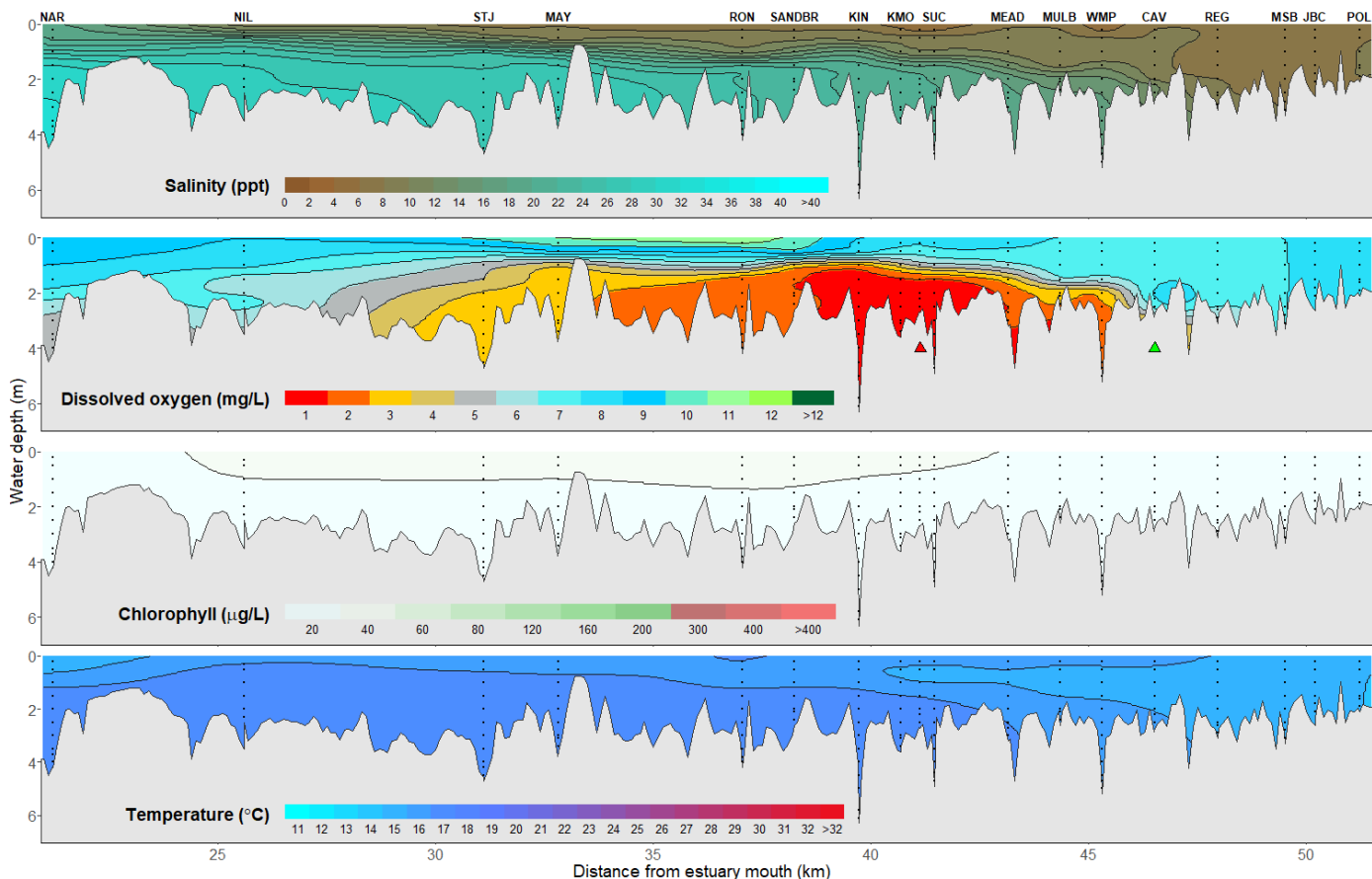
20 July 2026



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

20 July 2026



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Derbal Yirragan water quality summary

20 July 2026

Lower Swan Canning Estuary: Waters were predominately euhaline, except for surface waters from ARM to NAR which were polyhaline. Chlorophyll fluorescence was low throughout, indicating low phytoplankton activity. Waters were oxygenated to well-oxygenated and water temperatures ranged from 14.6 to 17 °C.

Middle Swan Estuary: Stratification was present within this zone due to recent riverine flow. Bottom waters were polyhaline throughout while surface waters were mesohaline. Surface waters were well oxygenated throughout but bottom waters from STJ to MAY were in low oxygen and bottom waters at RON were hypoxic. Chlorophyll fluorescence was low throughout, indicating low phytoplankton activity. Water temperatures ranged from 15.2 to 16.8 °C.

Upper Swan Estuary and Swan River: Surface waters were predominately mesohaline except in the bottom waters from SANDBR to MEAD which were polyhaline, leading to stratification of the water column within this zone. As a result, bottom waters were hypoxic from SANDBR to MEAD and WMP but well oxygenated elsewhere. The Guildford Oxygenation plant was inoperable and hence unavailable to alleviate the low dissolved oxygen within this zone. Chlorophyll fluorescence was low throughout, and water temperatures ranged from 14 to 16.7 °C.

Season			
Makuru		Winter	
Predicted tides ¹			
Low Tide		High Tide	
1.00 m	7:55 am	1.01 m	9:53 pm

Recorded weather conditions	
Skies	Partly cloudy
Wind direction	Variable
Wind speed (max)	4.9 knots
Air temperature ² (max)	19.2 °C
Rainfall ² (within week prior)	28.8 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 20 July 2026.
2. BOM (Bureau of Meteorology) (2026) [Perth Western Australia Daily Weather Observations](#), BOM, accessed 20 July 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, 20 July 2026*. Rivers and Estuaries Science (<https://www.dbca.wa.gov.au/management/swan-canning-riverpark/swan-canning-riverpark-water-quality-monitoring>)