Derbal Yirragan

Swan waterway

Weekly water quality report

13 July 2026

Monitoring conducted on Whadjuk Noongar Country

Prepared by:
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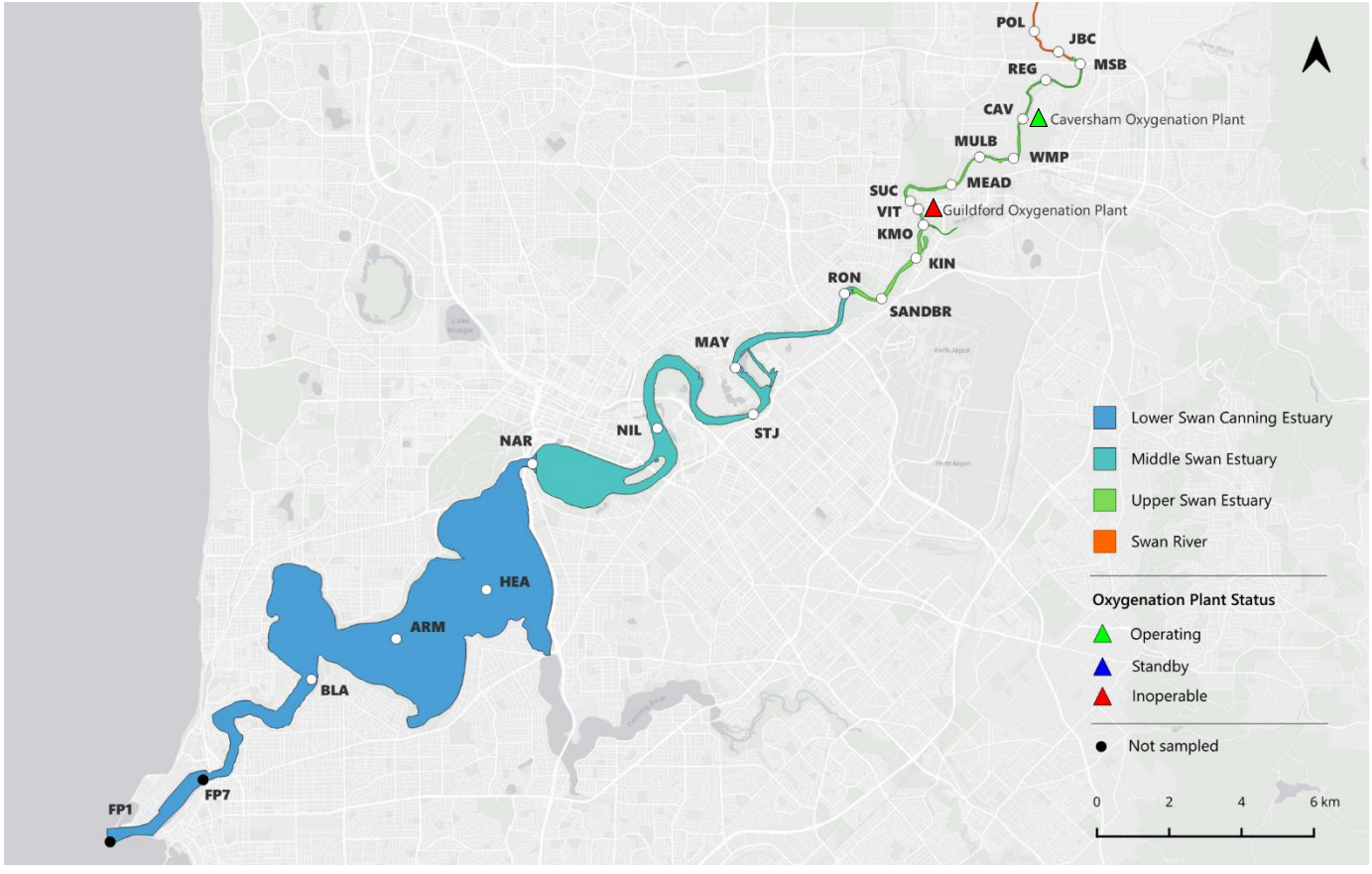
Photo – DBCA

Derbal Yirragan water quality monitoring sites

13 July 2026



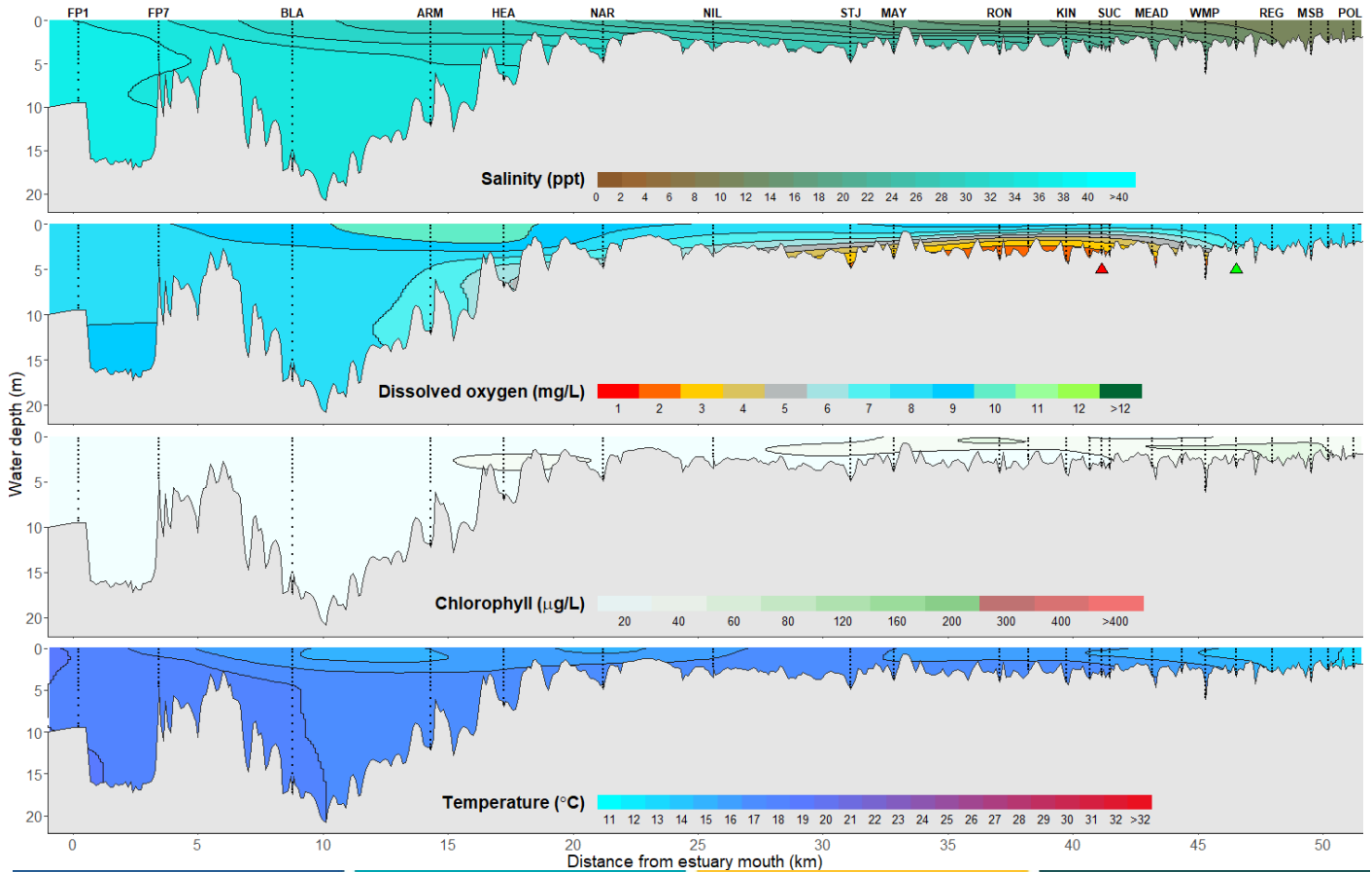
Department of Biodiversity, Conservation and Attractions

GOVERNMENT OF WESTERN AUSTRALIA

Biodiversity and Conservation Science

Derbal Yirragan water quality profile

13 July 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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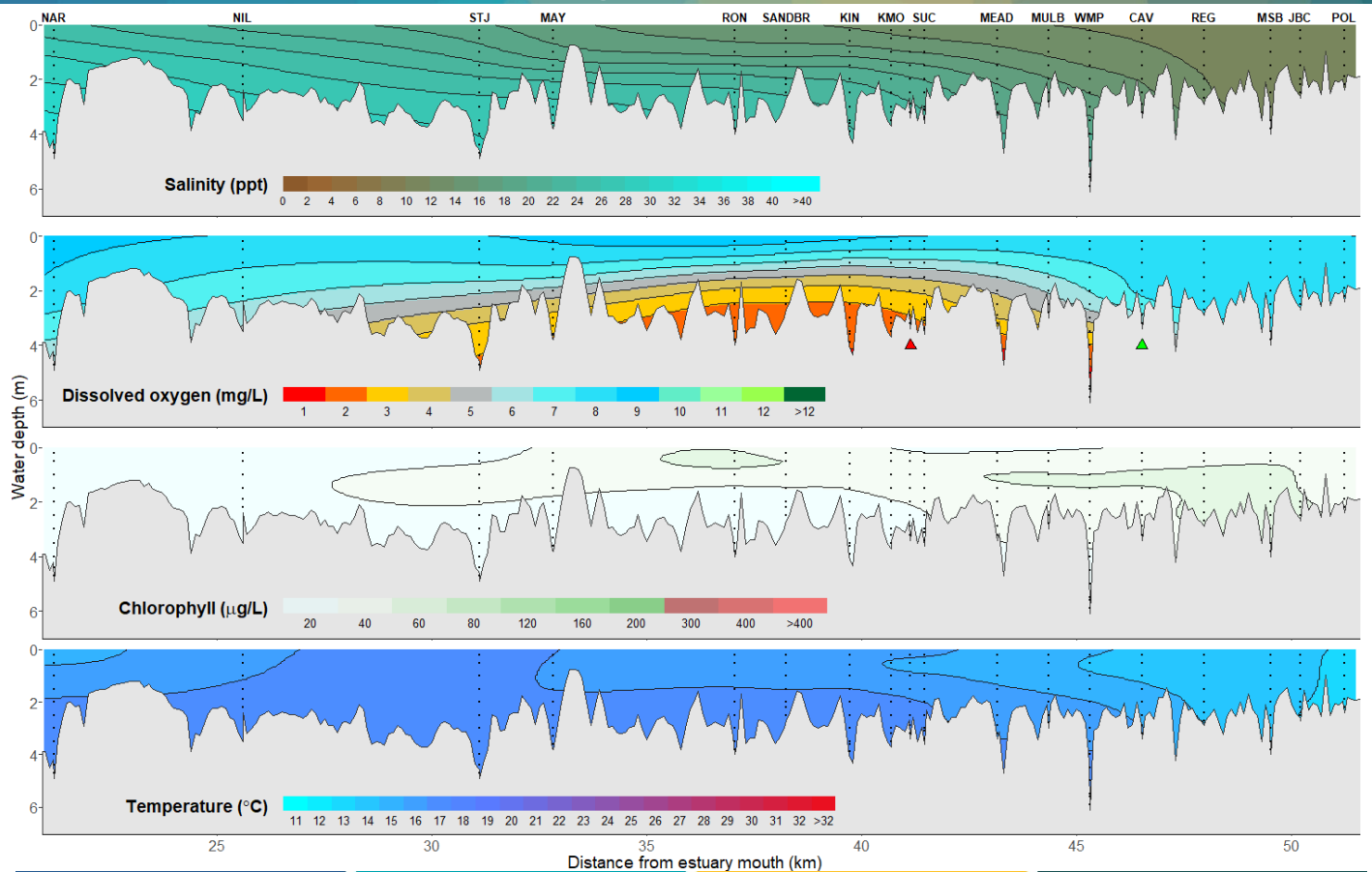

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Derbal Yirragan water quality summary

13 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 14.7 to 17.9 °C.

Middle Swan Estuary: Stratification was present from freshwater influence. Waters were polyhaline throughout except for MAY and RON surface waters which were mesohaline. Waters were well oxygenated except for bottom waters at STJ and MAY which were low oxygen and bottom waters at RON which were hypoxic. Chlorophyll fluorescence was low throughout, indicating low phytoplankton activity. Water temperatures ranged from 15.4 to 17.0 °C.

Upper Swan Estuary and Swan River: Waters were predominately mesohaline except for bottom waters from SANDBR to MEAD and WMP which were polyhaline. Bottom waters were low in oxygen and hypoxic from SANDBR to MEAD and WMP and 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 12.8 to 16.5 °C.

Season	
Makuru	Winter

Predicted tides[1]			
High tide		**Low tide**	
1.36 m	10:15 am	0.6 m	9:09 pm

Recorded weather conditions	
Skies	Clear
Wind direction	NE
Wind speed (max)	3.9knots
Air temperature[2] (max)	19 °C
Rainfall[2] (within week prior)	2.6 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 13 July 2026.
2. BOM (Bureau of Meteorology) (2026) Perth Western Australia Daily Weather Observations, BOM, accessed 13 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. *Canning Water Quality Report, 13 July 2026.* Rivers and Estuaries Science (https://www.dbca.wa.gov.au/management/swan-canning-riverpark/swan-canning-riverpark-water-quality-monitoring)