

Derbal Yirragan

Swan waterway

Weekly water quality report

6 July 2026

Monitoring conducted on Whadjuk Noongar Country

Prepared by:

Rivers and Estuaries Science

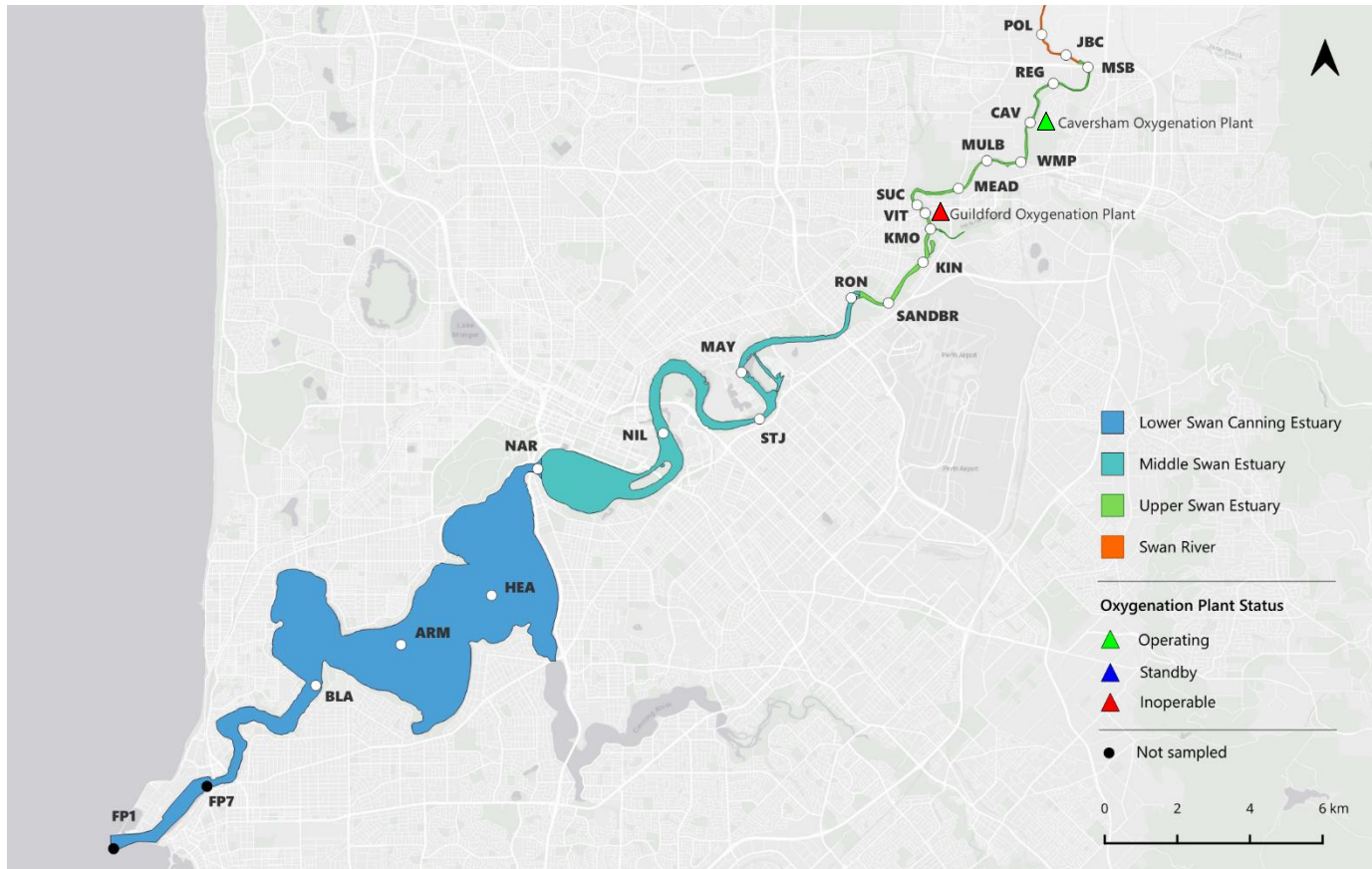
Biodiversity and Conservation Science

Department of Biodiversity, Conservation and Attractions

Photo – DBCA

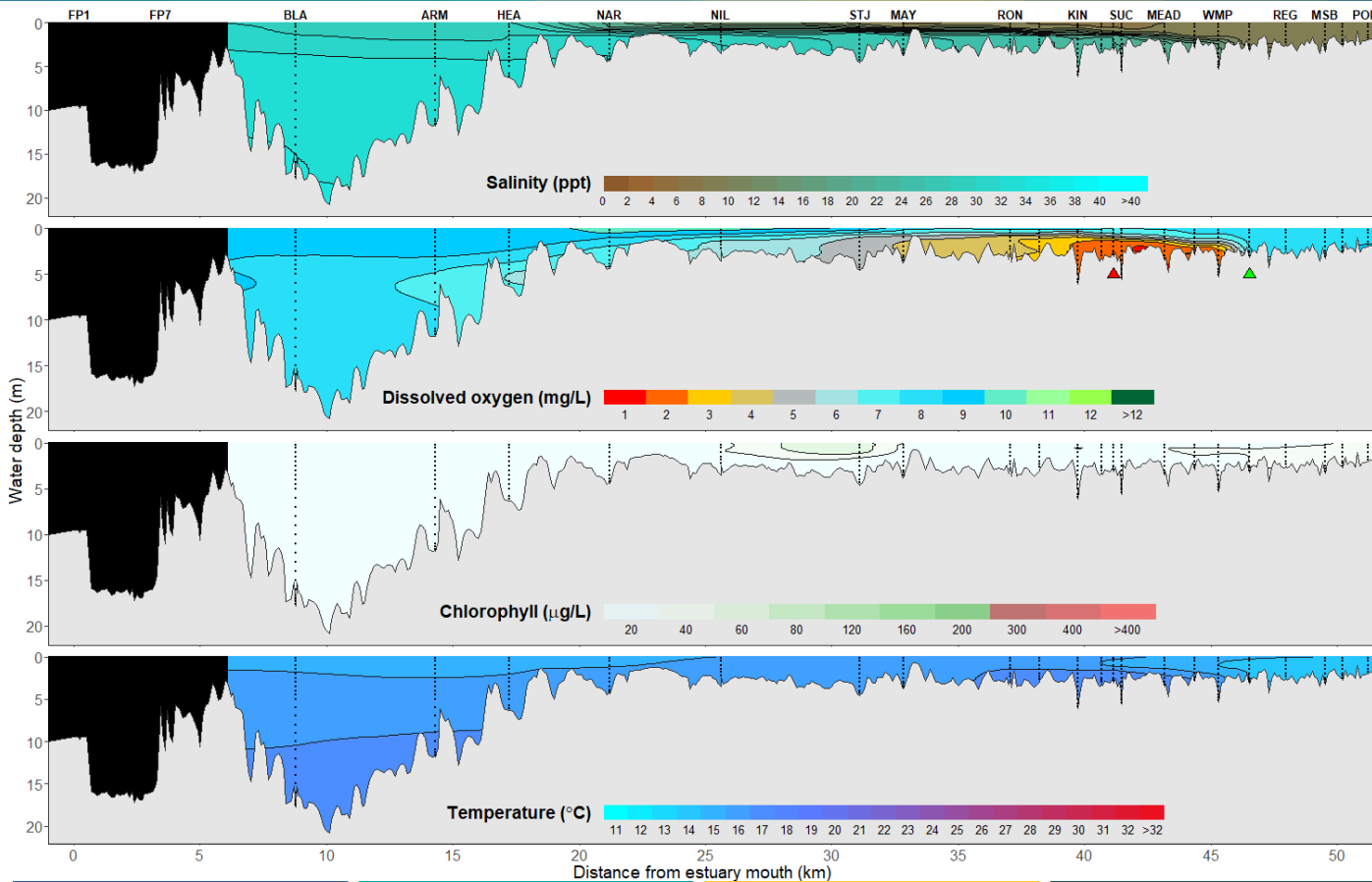
Derbal Yirragan water quality monitoring sites

6 July 2026



Derbal Yirragan water quality profile

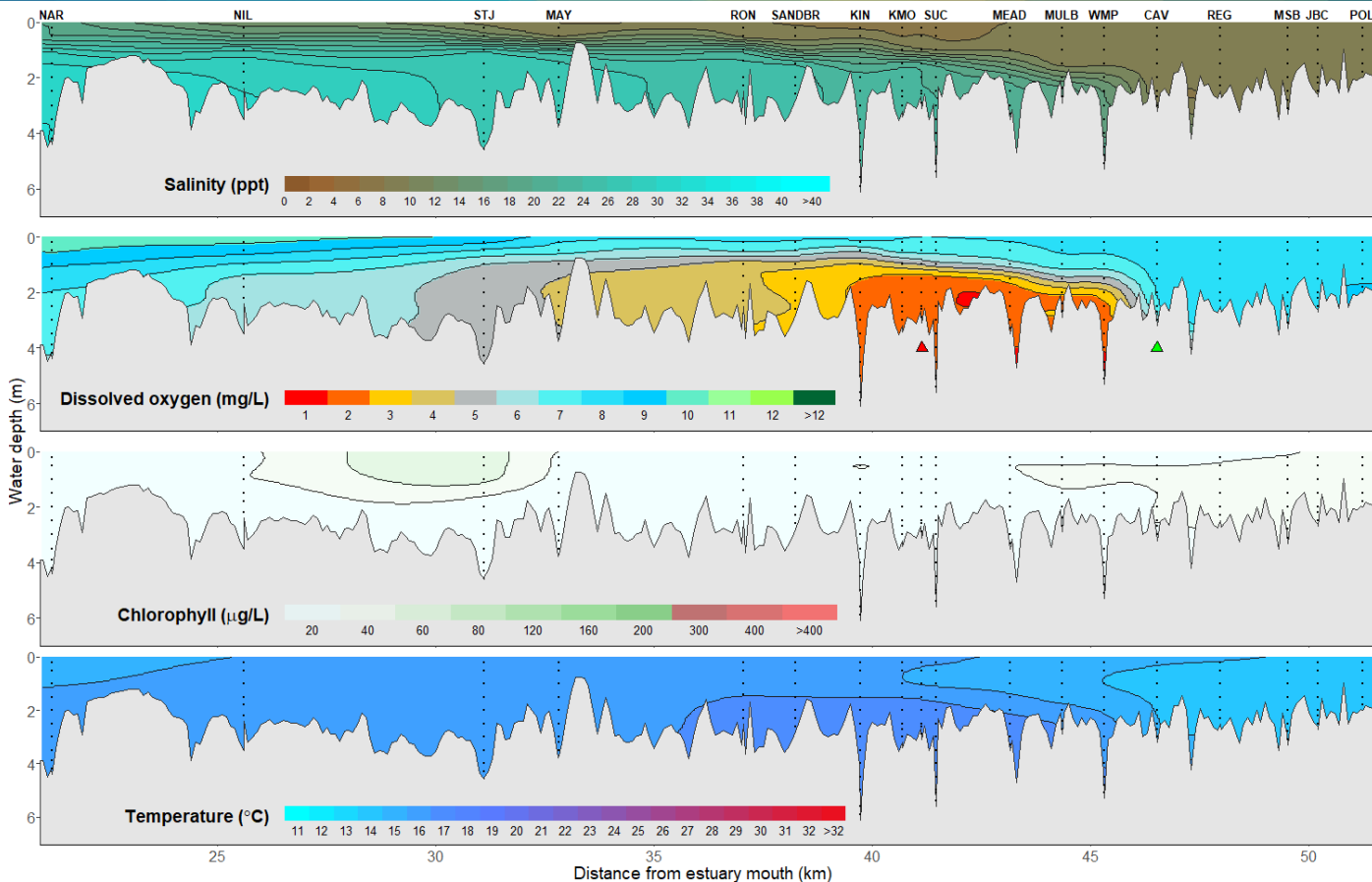
6 July 2026



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

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Derbal Yirragan water quality summary

6 July 2026

Lower Swan Canning Estuary: Freshwater input from recent rainfall has caused mild stratification within the zone. Bottom waters were euhaline, while surface waters were polyhaline. Chlorophyll fluorescence was low throughout, indicating low phytoplankton activity. Waters were well-oxygenated and water temperatures ranged from 14.5 to 16.2 °C.

Middle Swan Estuary: Freshwater influence is driving pronounced stratification. Bottom waters were polyhaline, while surface waters were mesohaline. This stratification influenced dissolved oxygen with low levels detected in the bottom waters of MAY and RON. Waters elsewhere remained oxygenated to well-oxygenated. Chlorophyll fluorescence was moderate in surface waters of STJ. Water temperatures ranged from 15.1 to 16 °C.

Upper Swan Estuary and Swan River: The Swan River was flowing, and significant stratification was detected from SANDBR to WMP. Bottom waters were low in oxygen at SANDBR and hypoxic from KIN to WMP. 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 13.7 to 16.6 °C.

Season			
Makuru		Winter	
Predicted tides ¹			
High tide		Low tide	
1.08 m	1:28 pm	0.85 m	9:21 pm

Recorded weather conditions	
Skies	Cloudy
Wind direction	E
Wind speed (max)	5.8 knots
Air temperature ² (max)	19 °C
Rainfall ² (within week prior)	26.4 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 6 July 2026.
2. BOM (Bureau of Meteorology) (2026) [Perth Western Australia Daily Weather Observations](#), BOM, accessed 6 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, 6 July 2026*. Rivers and Estuaries Science (<https://www.dbca.wa.gov.au/management/swan-canning-riverpark>)