

Derbal Yirragan

Swan waterway

Weekly water quality report

12 October 2026

Monitoring conducted on Whadjuk Noongar Country

Prepared by:

Rivers and Estuaries Science

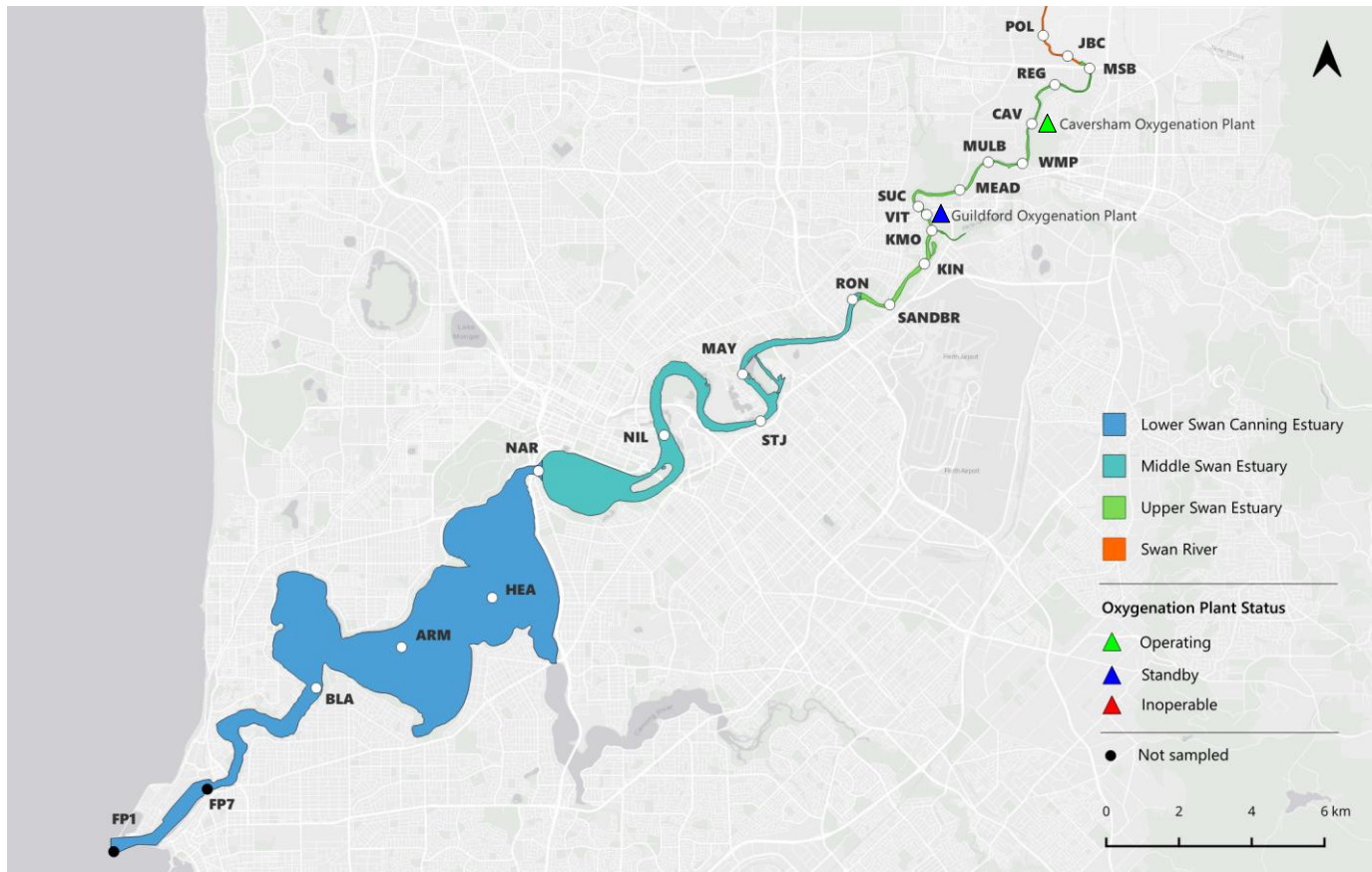
Biodiversity and Conservation Science

Department of Biodiversity, Conservation and Attractions

Photo – DBCA

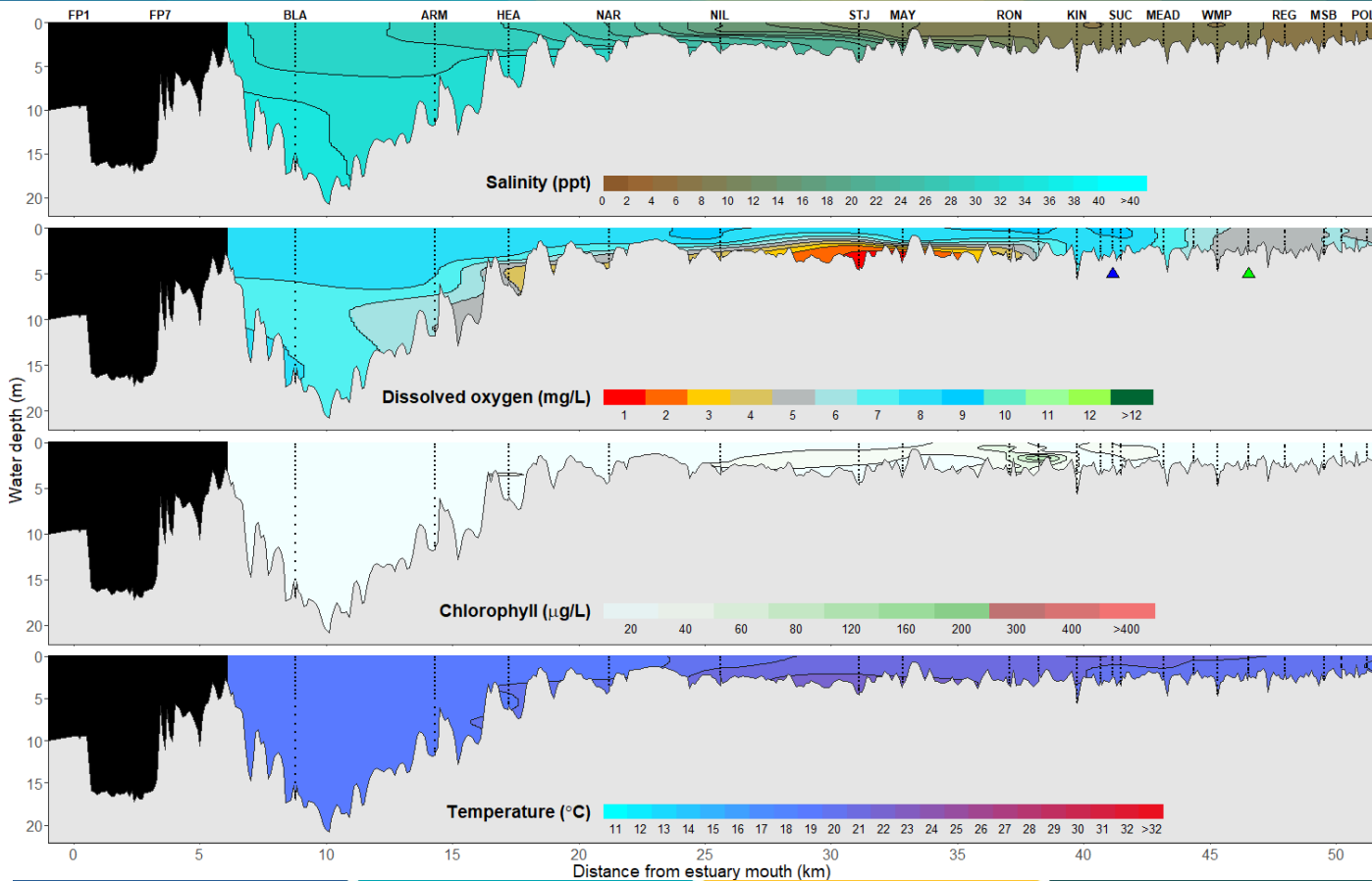
Derbal Yirragan water quality monitoring sites

12 October 2026



Derbal Yirragan water quality profile

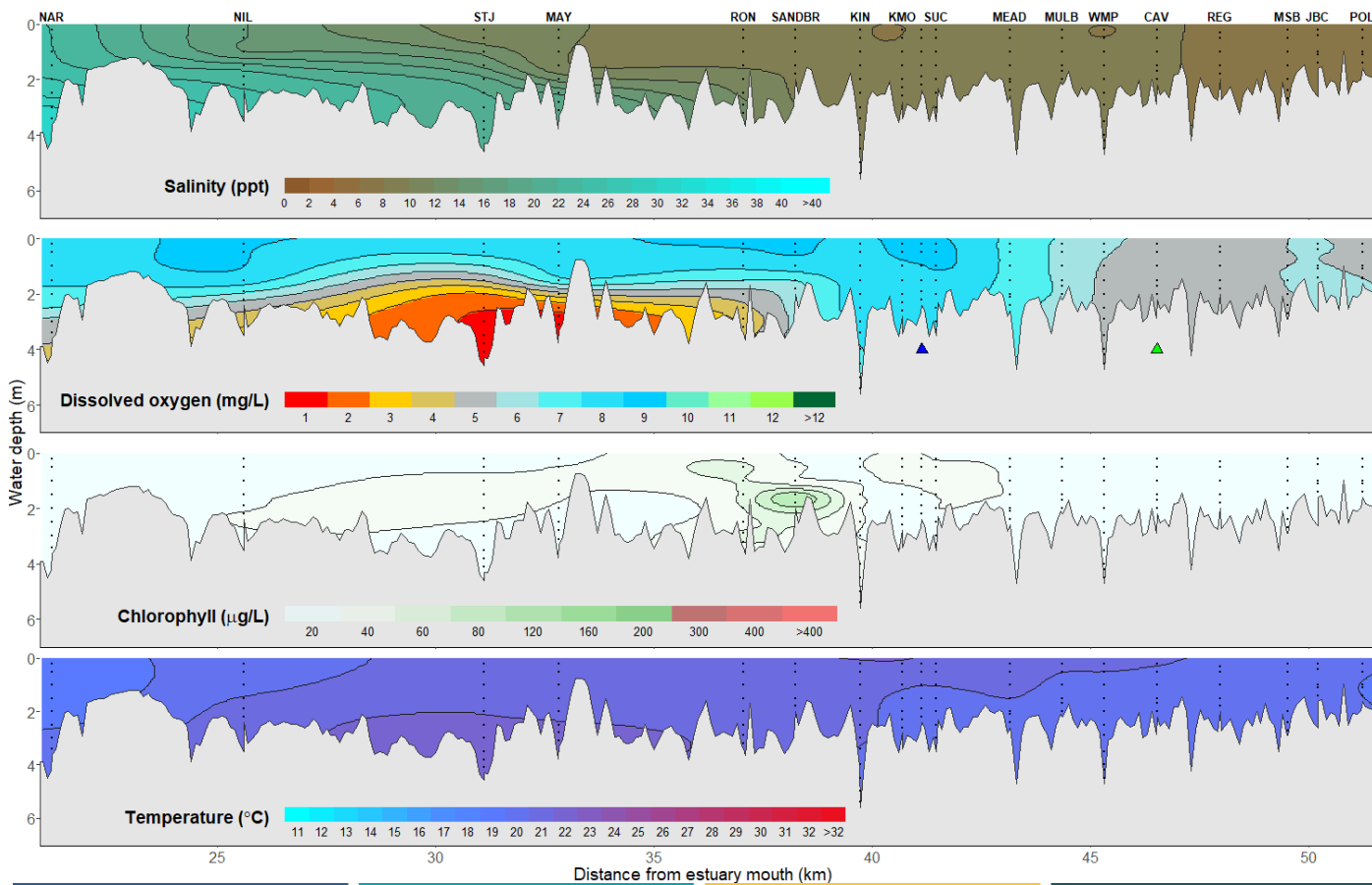
12 October 2026



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

12 October 2026



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Derbal Yirragan water quality summary

12 October 2026

Lower Swan Canning Estuary: There was mild stratification within this zone from seasonal rainfall. Sites were euhaline, with polyhaline surface waters from ARM to NAR. Chlorophyll fluorescence was low throughout, indicating low phytoplankton activity. Waters were oxygenated or well oxygenated and water temperatures ranged from 18.1 to 19.5°C.

Middle Swan Estuary: There was significant stratification across this zone from recent riverine flow. Sites were mesohaline, with polyhaline bottom waters from NIL to MAY. Bottom waters were hypoxic at STJ and MAY, and low in oxygen at RON. Waters elsewhere were oxygenated or well oxygenated. Chlorophyll fluorescence was low throughout, indicating low phytoplankton activity and water temperatures ranged from 19.4 to 21.5°C.

Upper Swan Estuary and Swan River: Most sites were well mixed from recent riverine flow and waters were mesohaline and oxygenated or well oxygenated. There was mild stratification at KIN and bottom waters were low in oxygen. Chlorophyll fluorescence was low, except in the bottom waters of SANDBR where it was moderate. Water temperatures ranged from 19.0 to 21.2°C.

Season			
Kambarang		Second spring	
Predicted tides ¹			
Low Tide		High Tide	
0.66 m	8:37 am	0.74 m	1:57 pm

Recorded weather conditions	
Skies	Clear
Wind direction	E
Wind speed (max)	10.2 knots
Air temperature ² (max)	23.7 °C
Rainfall ² (within week prior)	15.2 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 12 October 2026.
2. BOM (Bureau of Meteorology) (2026) [Perth Western Australia Daily Weather Observations](#), BOM, accessed 12 October 2026.
3. 'The Venice System for the Classification of Marine Waters According to Salinity' (1958) *Limnology and Oceanography*, 3, 346-347 [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, 12 October 2026*. Rivers and Estuaries Science (<https://www.dbca.wa.gov.au/management/swan-canning-riverpark/swan-canning-riverpark-water-quality-monitoring>)