

Derbal Yirragan

Swan waterway

Weekly water quality report

21 September 2026

Monitoring conducted on Whadjuk Noongar Country

Prepared by:

Rivers and Estuaries Science

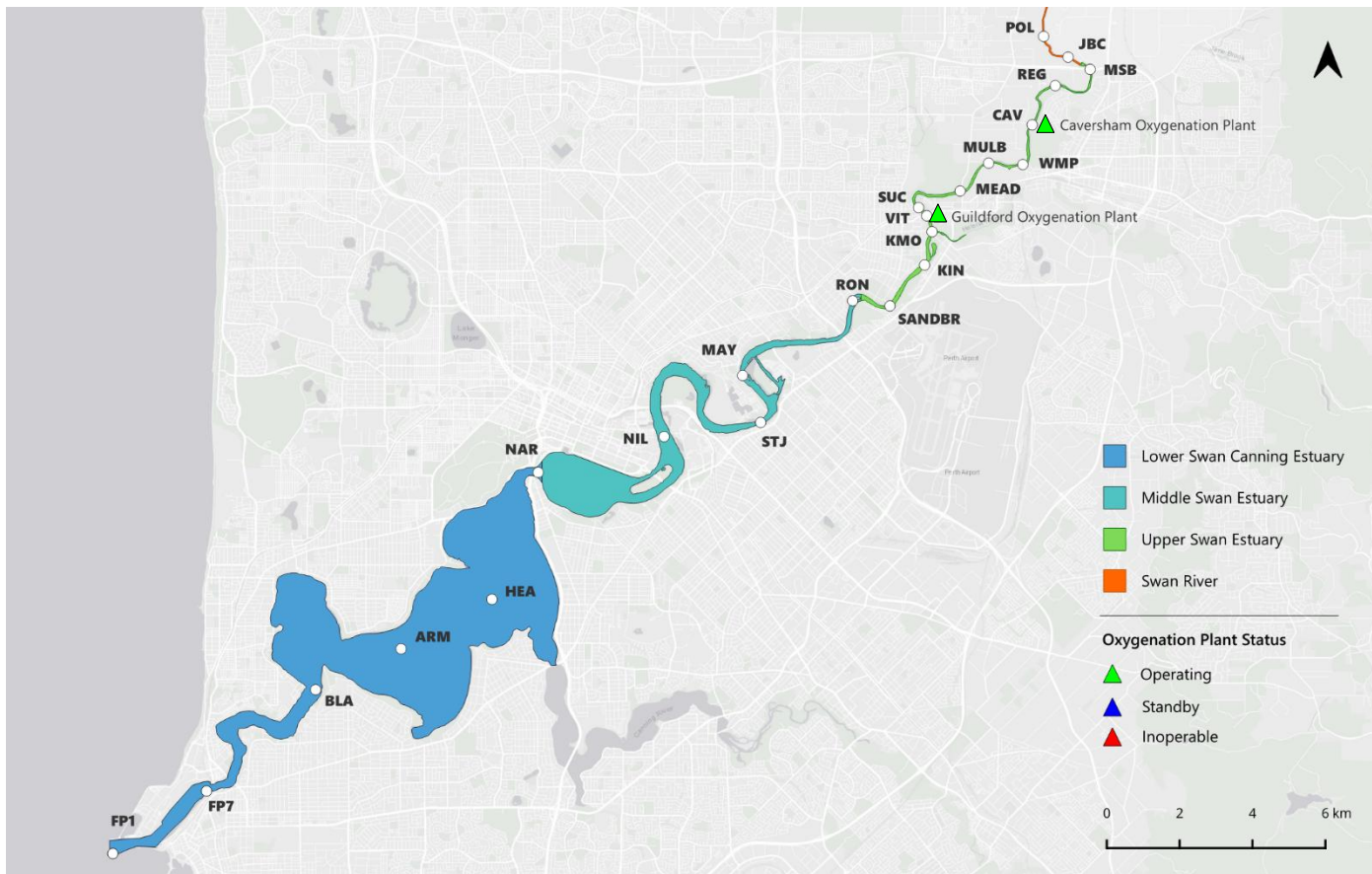
Biodiversity and Conservation Science

Department of Biodiversity, Conservation and Attractions

Photo – DBCA

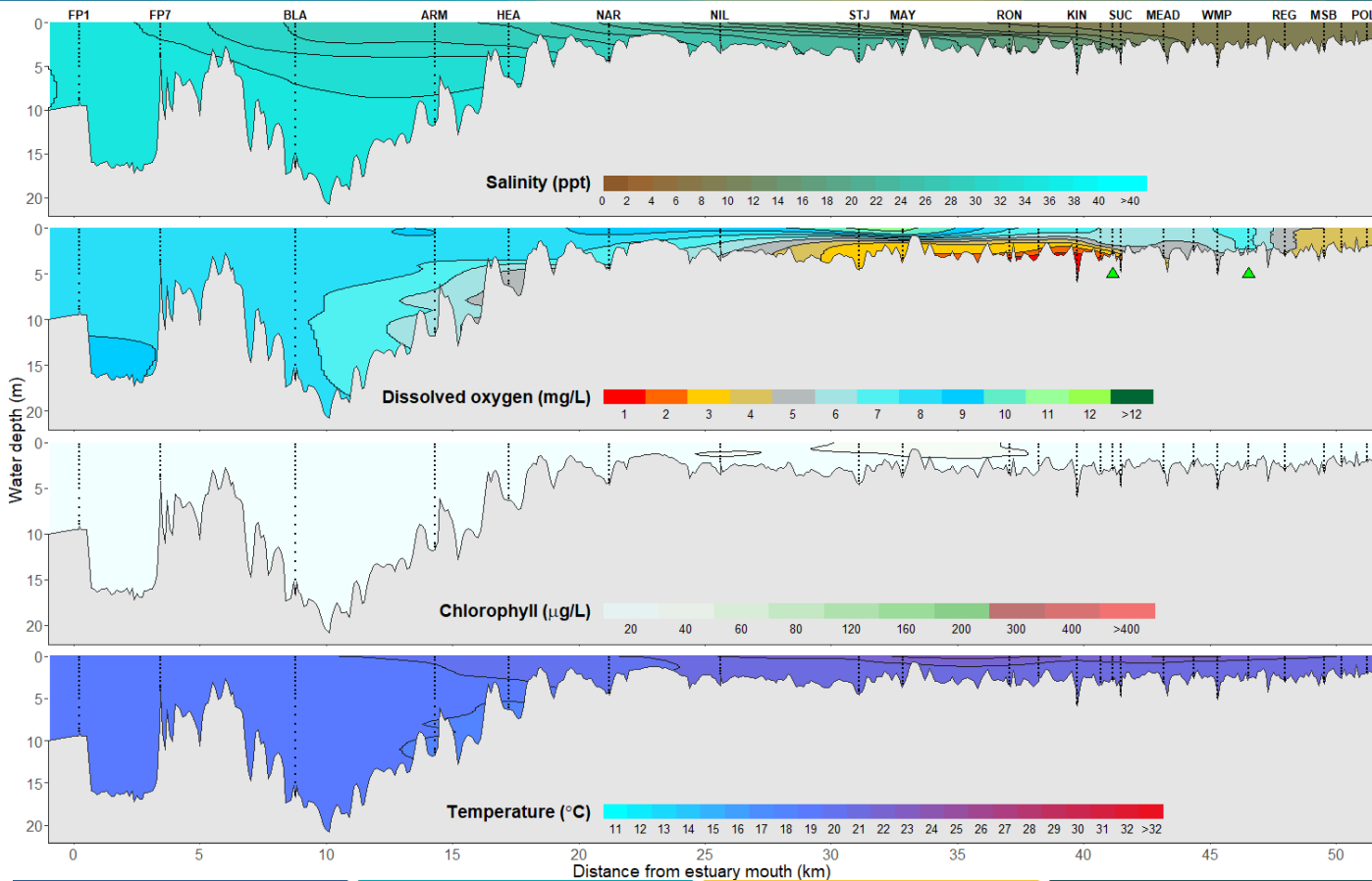
Derbal Yirragan water quality monitoring sites

21 September 2026



Derbal Yirragan water quality profile

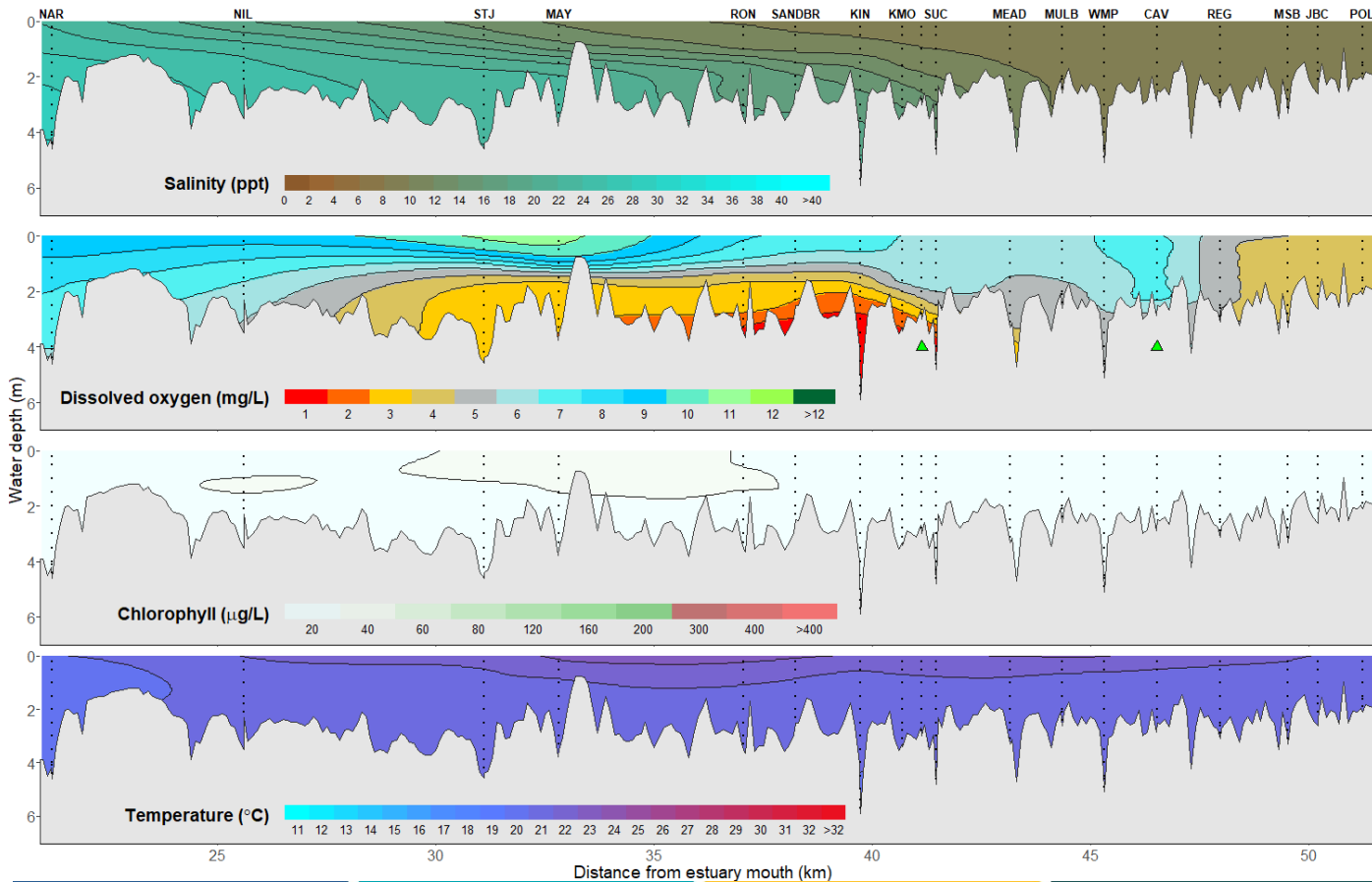
21 September 2026



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

21 September 2026

Lower Swan Canning Estuary: Salinity was euhaline throughout, with polyhaline surface waters from BLA to NAR. Chlorophyll fluorescence was low throughout, indicating low phytoplankton activity. Waters were oxygenated to well-oxygenated and water temperatures ranged from 17.9 to 19.8 °C.

Middle Swan Estuary: There was significant stratification across this zone from recent riverine flow. Waters were predominately polyhaline, with mesohaline surface waters from STJ to RON. Surface waters were oxygenated to well oxygenated while bottom waters were low in oxygen from STJ to MAY and hypoxic at RON. Chlorophyll fluorescence was low and water temperatures ranged from 20.2 to 22.2 °C.

Upper Swan Estuary and Swan River: Waters throughout were considered mesohaline except for bottom and mid column waters at KIN which were euhaline and polyhaline. Surface waters were oxygenated to well oxygenated from SANDBR to CAV with hypoxic and low oxygen bottom waters from SANDBR to SUC. Waters from REG to POL were predominately low oxygen throughout, with oxygenated surface waters and bottom waters at MSB and JBC, respectively. Chlorophyll fluorescence was low throughout, and water temperatures ranged from 19.6 to 22.1 °C.

Season			
Djilba		First spring	
Predicted tides ¹			
High Tide		Low Tide	
1 m	6:26 am	0.64 m	5:09 pm

Recorded weather conditions	
Skies	Clear
Wind direction	Variable
Wind speed (max)	3.3 knots
Air temperature ² (max)	24.4 °C
Rainfall ² (within week prior)	5 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 21 September 2026.
2. BOM (Bureau of Meteorology) (2026) [Perth Western Australia Daily Weather Observations](#), BOM, accessed 21 September 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, 21 September 2026*. Rivers and Estuaries Science (<https://www.dbca.wa.gov.au/management/swan-canning-riverpark/swan-canning-riverpark-water-quality-monitoring>)