

Derbal Yirragan

Swan waterway

Weekly water quality report

19 October 2026

Monitoring conducted on Whadjuk Noongar Country

Prepared by:

Rivers and Estuaries Science

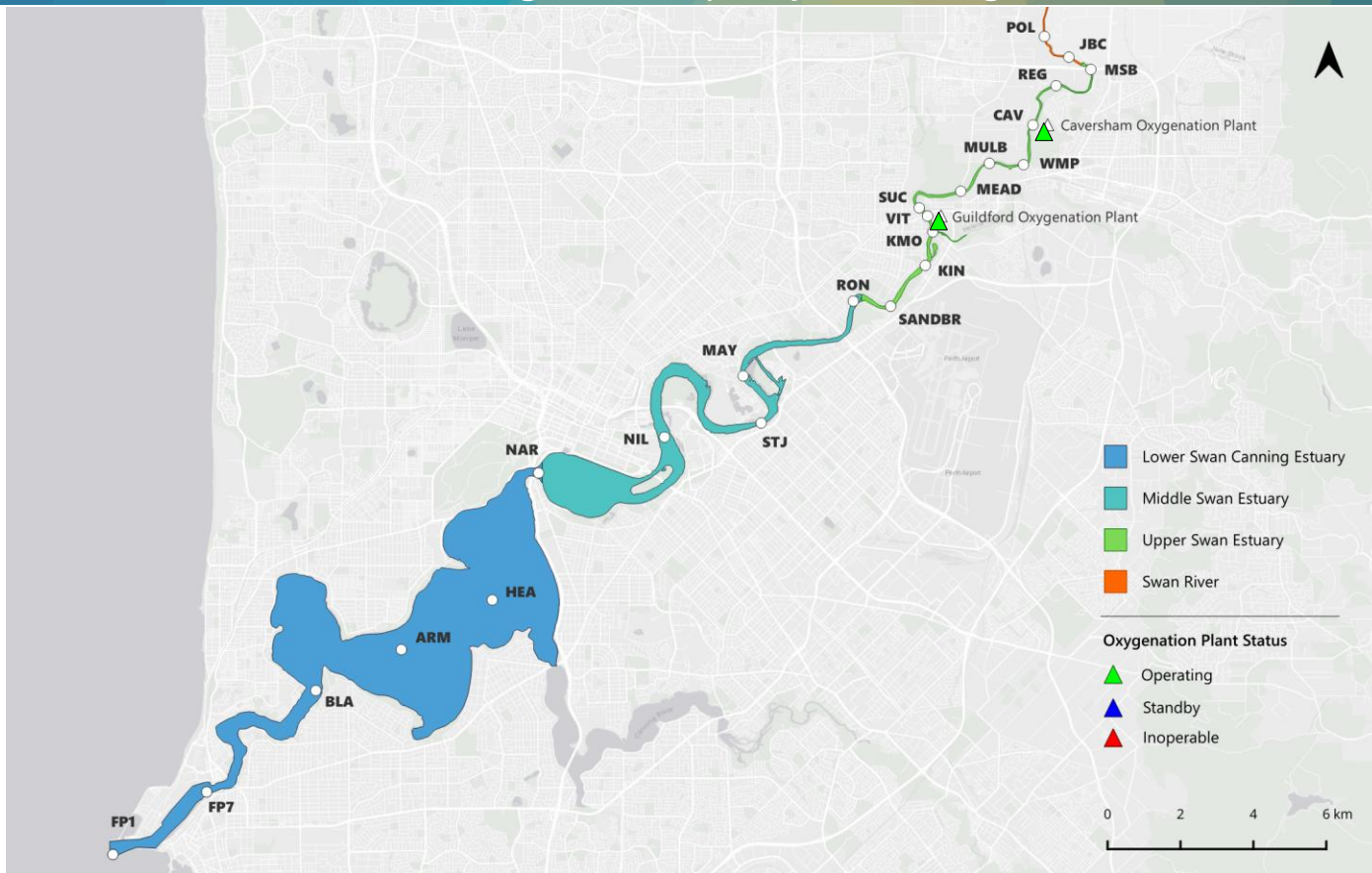
Biodiversity and Conservation Science

Department of Biodiversity, Conservation and Attractions

Photo – DBCA

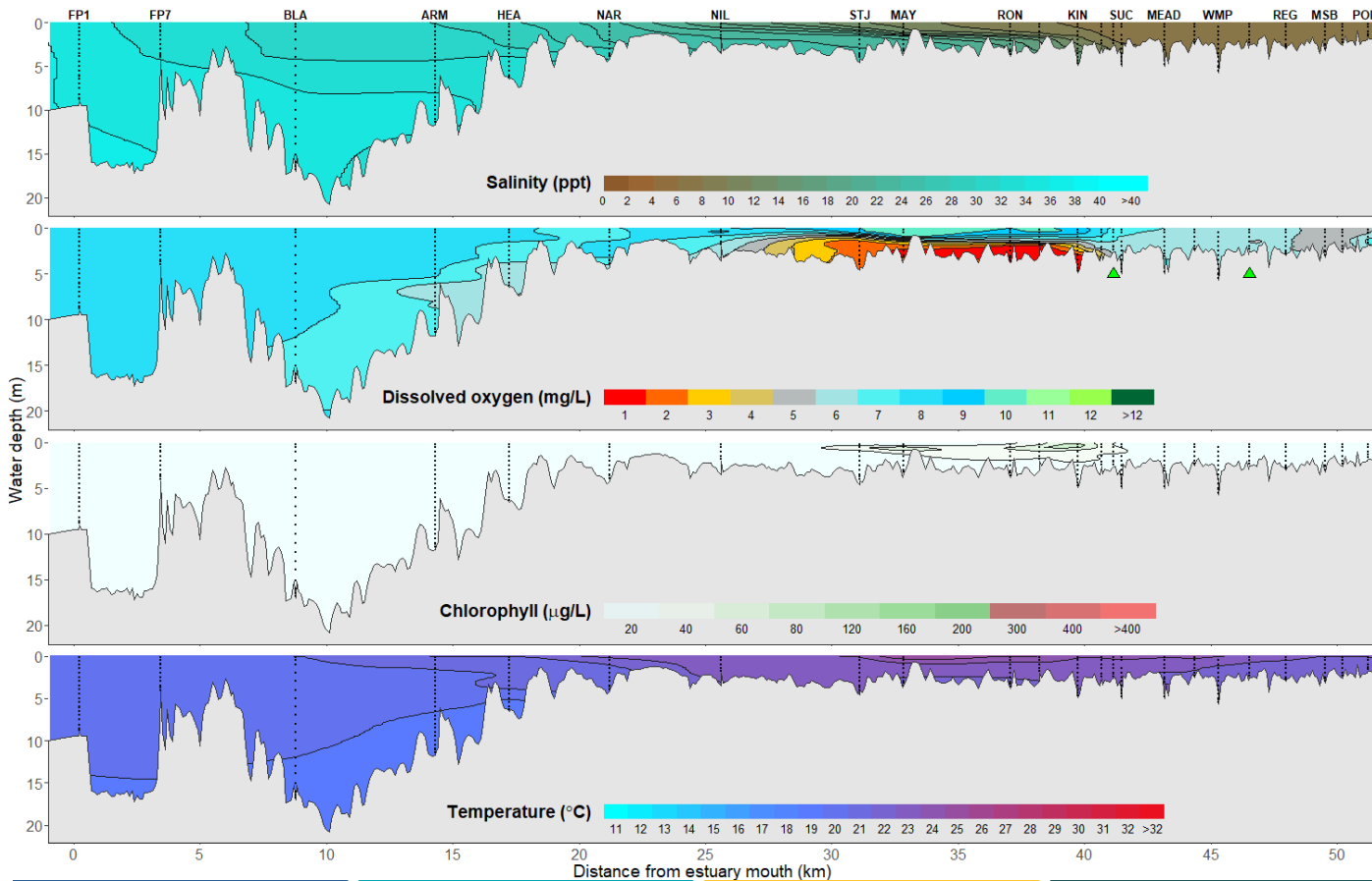
Derbal Yirragan water quality monitoring sites

19 October 2026



Derbal Yirragan water quality profile

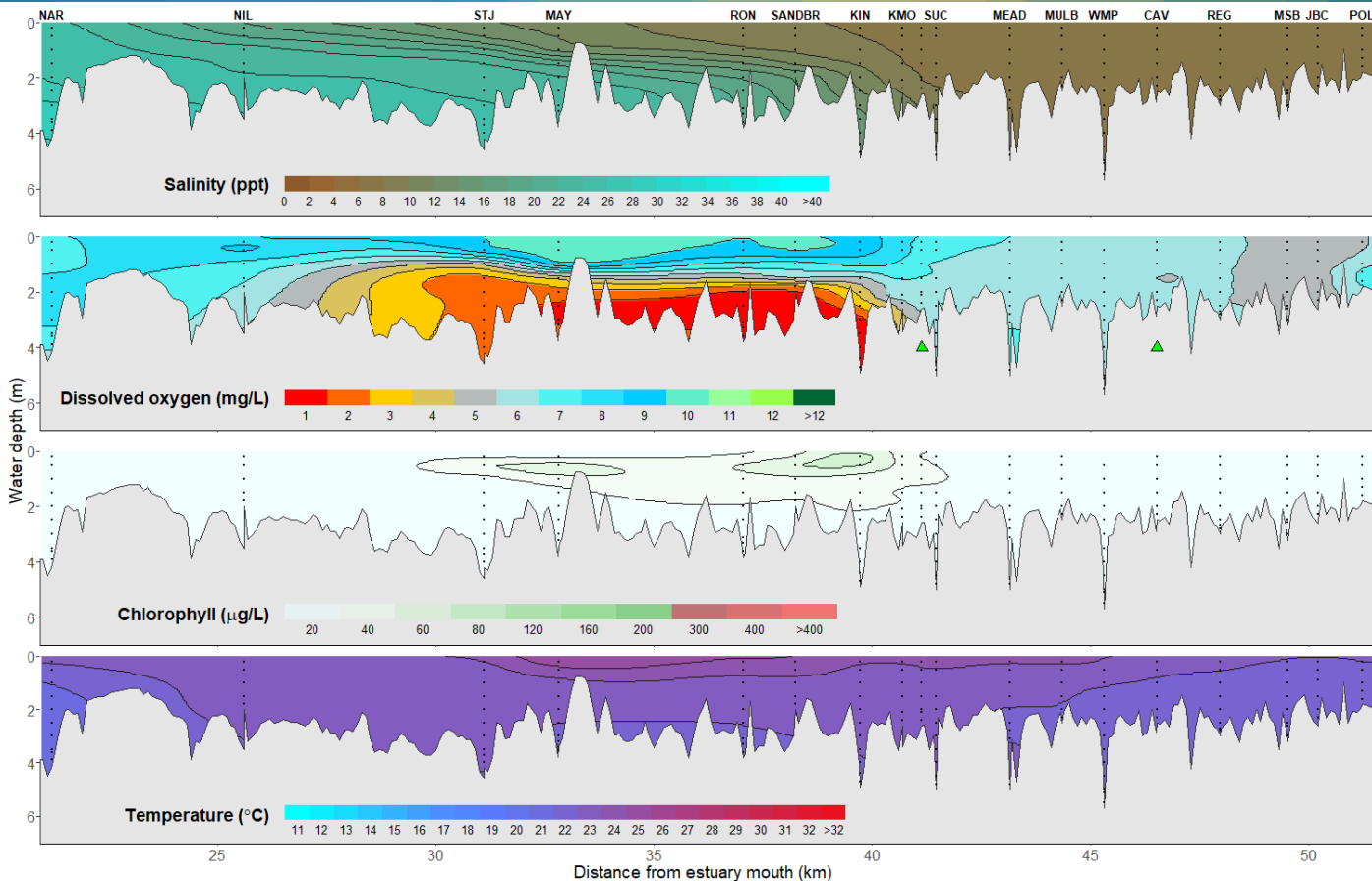
19 October 2026



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

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Derbal Yirragan water quality summary

19 October 2026

Lower Swan Canning Estuary: Waters were euhaline, with polyhaline surface waters from HEA to NAR. Chlorophyll fluorescence was low, indicating low phytoplankton activity. Waters were oxygenated or well oxygenated and water temperatures ranged from 18.7 to 22.3°C.

Middle Swan Estuary: Stratification was evident across this zone from recent riverine flow. Sites were polyhaline, with mesohaline surface waters from STJ to RON. Bottom waters were hypoxic from STJ to RON, while waters elsewhere were oxygenated or well oxygenated. Chlorophyll fluorescence was moderate in the surface waters at MAY, indicating some phytoplankton activity. Water temperatures ranged from 21.8 to 24.8°C.

Upper Swan Estuary and Swan River: Waters were mesohaline and predominately oxygenated or well oxygenated, except for bottom waters from SANDBR to KIN which were hypoxic. Chlorophyll fluorescence was low, except in the bottom waters of SANDBR and surface waters at KIN, where it was moderate. Water temperatures ranged from 21.4 to 24°C.

Season			
Kambarang		Second spring	
Predicted tides ¹			
High Tide		Low Tide	
0.99 m	2:49 am	0.62 m	3:13 pm

Recorded weather conditions	
Skies	Cloudy
Wind direction	Variable
Wind speed (max)	3.7 knots
Air temperature ² (max)	22 °C
Rainfall ² (within week prior)	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 19 October 2026.
2. BOM (Bureau of Meteorology) (2026) [Perth Western Australia Daily Weather Observations](#), BOM, accessed 19 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, 19 October 2026*. Rivers and Estuaries Science (<https://www.dbca.wa.gov.au/management/swan-canning-riverpark/swan-canning-riverpark-water-quality-monitoring>)