

Derbal Yirragan

Swan waterway

Weekly water quality report

29 September 2026

Monitoring conducted on Whadjuk Noongar Country

Prepared by:

Rivers and Estuaries Science

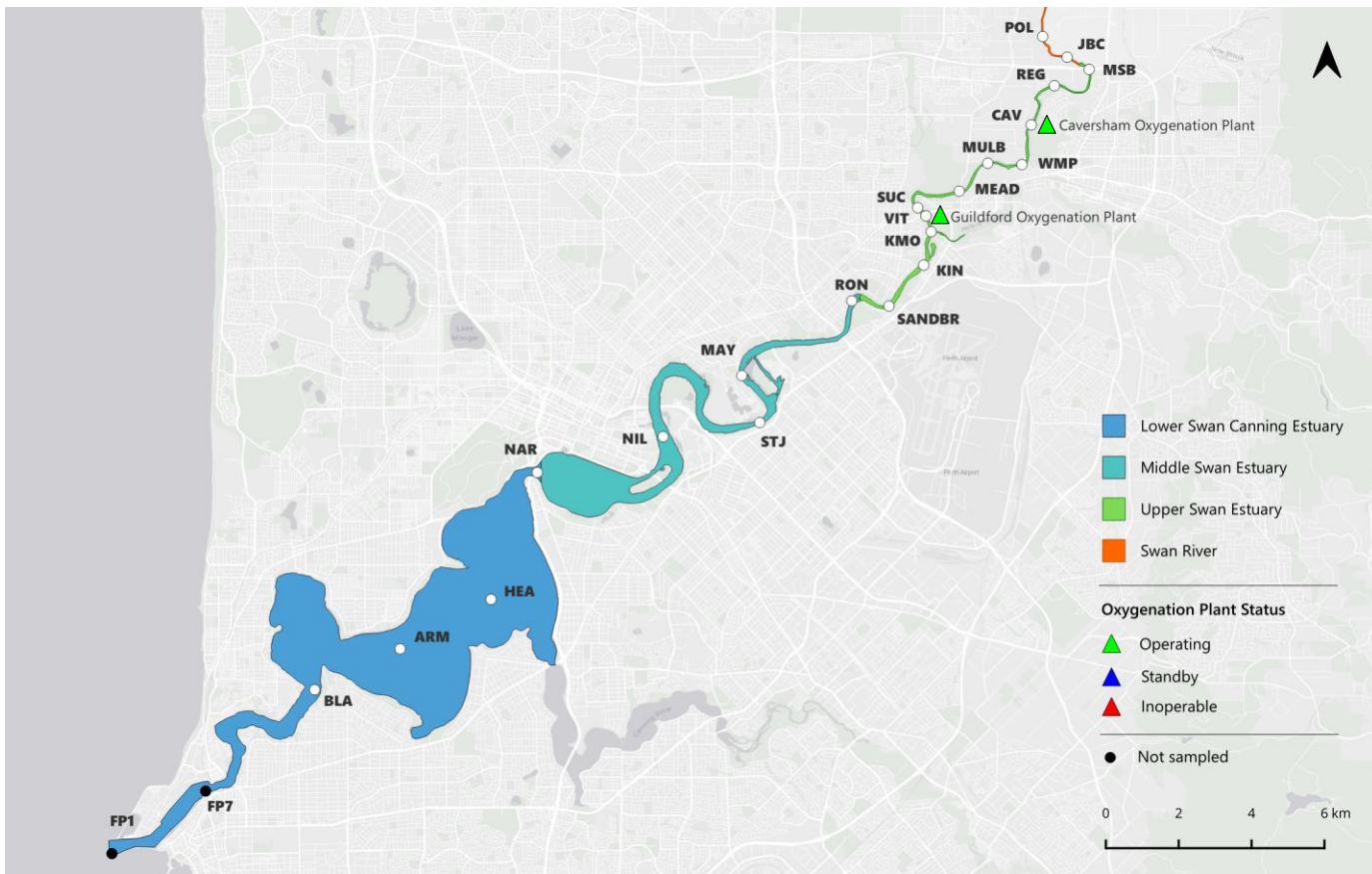
Biodiversity and Conservation Science

Department of Biodiversity, Conservation and Attractions

Photo – DBCA

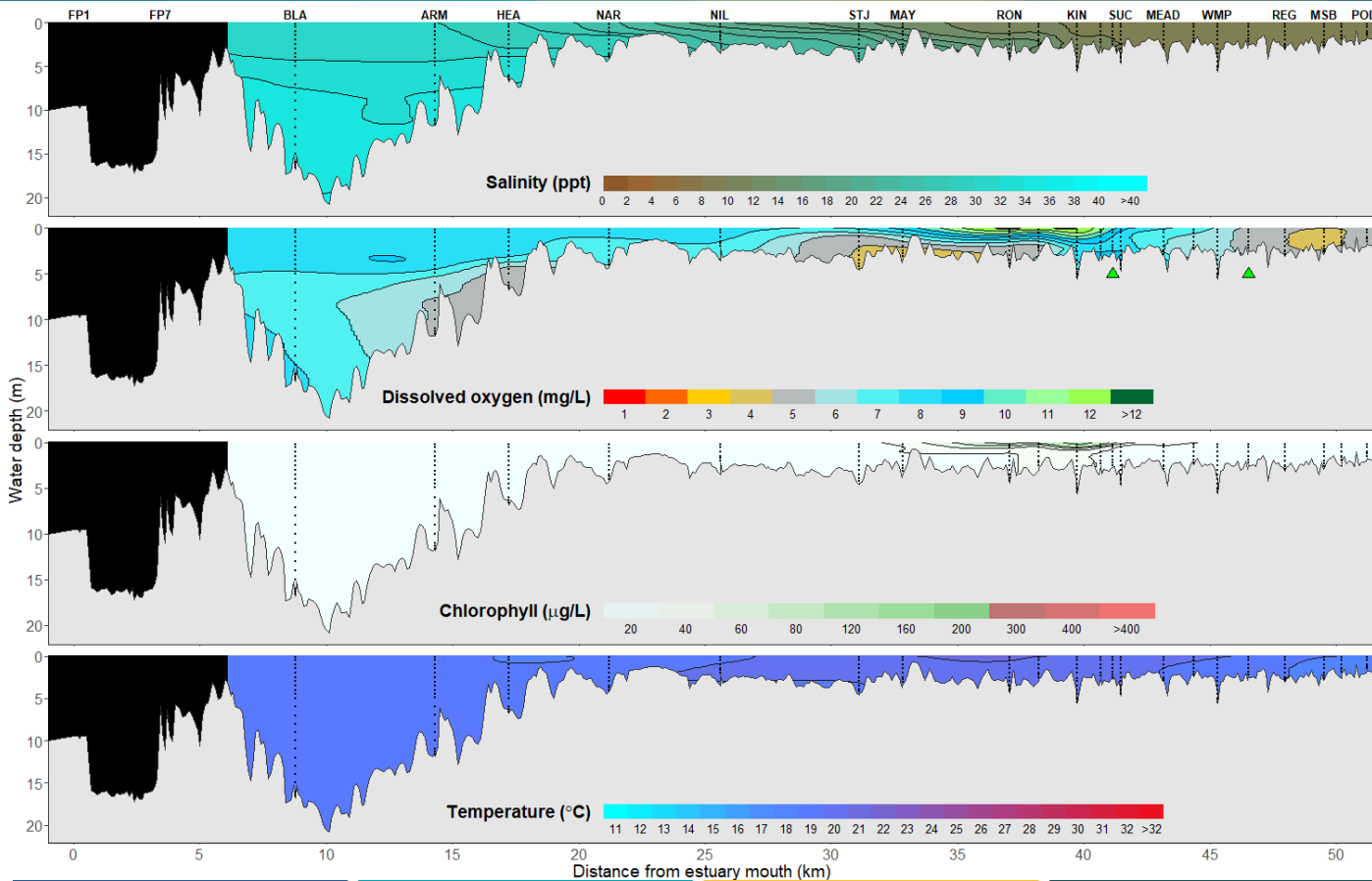
Derbal Yirragan water quality monitoring sites

29 September 2026



Derbal Yirragan water quality profile

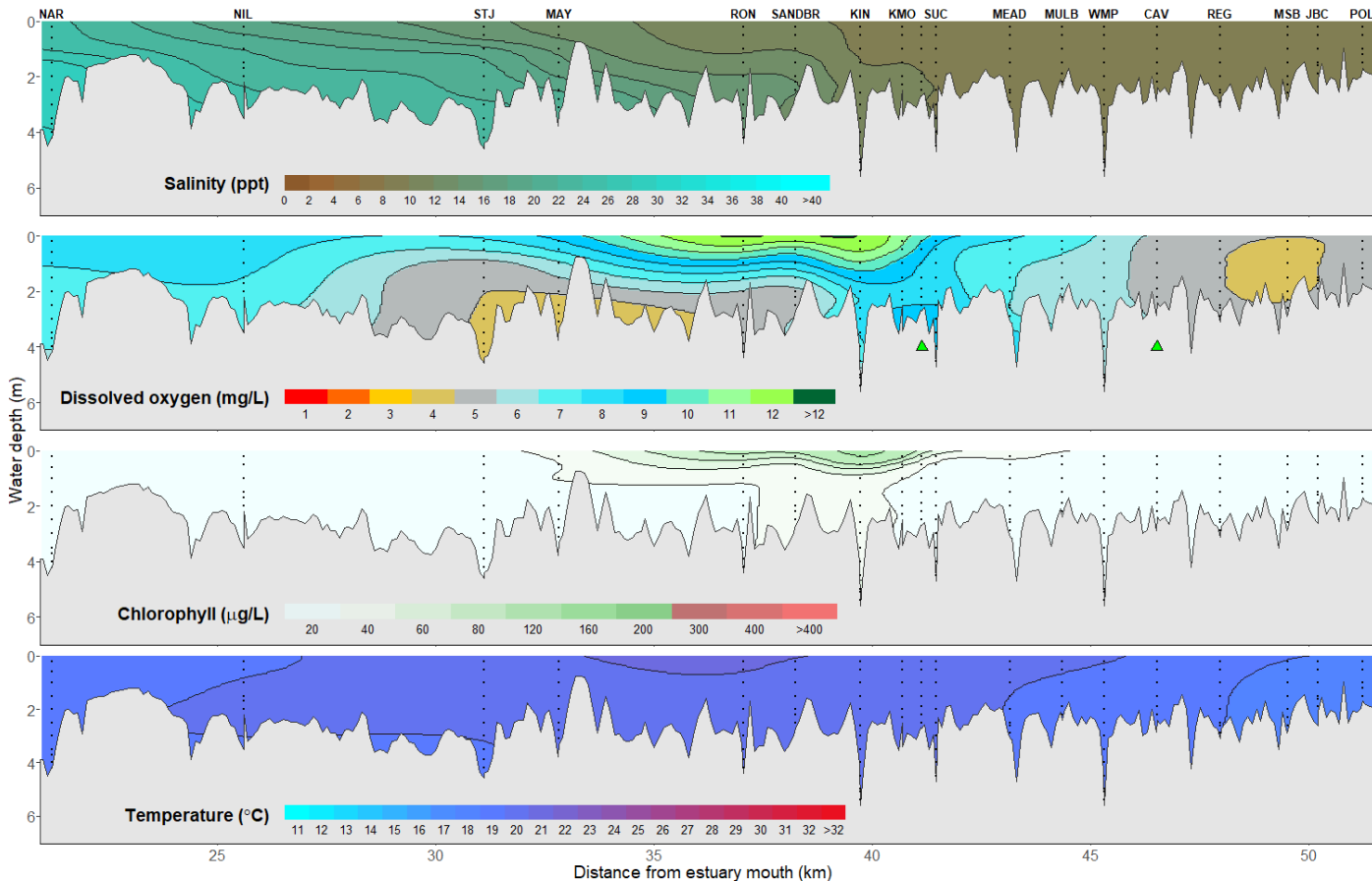
29 September 2026



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

29 September 2026

Lower Swan Canning Estuary: There was mild stratification within this zone from seasonal rainfall. Salinity transitioned from euhaline at BLA to polyhaline at NAR. Chlorophyll fluorescence was low throughout, indicating low phytoplankton activity. Waters were oxygenated to well-oxygenated and water temperatures ranged from 18.0 to 18.8 °C.

Middle Swan Estuary: There was significant stratification across this zone from recent riverine flow. Waters transitioned from polyhaline at NIL to mesohaline at RON. Bottom waters were low in oxygen at STJ and MAY, where stratification was most prominent. Elsewhere waters were oxygenated or well oxygenated. Chlorophyll fluorescence was low, except for moderate readings in the surface waters of RON. Water temperatures ranged from 18.9 to 20.3 °C.

Upper Swan Estuary and Swan River: Waters were predominately mesohaline. SANDBR and KIN were notably stratified and had low oxygen and hypoxic bottom waters, respectively. Sites upstream were considered well mixed from riverine flow and were oxygenated or well oxygenated, except for MSB and JBC, which were low in oxygen. Chlorophyll fluorescence was moderate in surface waters from SANDBR to KMO and water temperatures ranged from 17.7 to 19.9 °C.

Season			
Djilba		First spring	
Predicted tides ¹			
Low Tide		High Tide	
0.65 m	9:05 am	0.76 m	2:45 pm

Recorded weather conditions	
Skies	Overcast
Wind direction	W
Wind speed (max)	5.6 knots
Air temperature ² (max)	20.5 °C
Rainfall ² (within week prior)	0.6 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 29 September 2026.
2. BOM (Bureau of Meteorology) (2026) [Perth Western Australia Daily Weather Observations](#), BOM, accessed 29 September 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, 29 September 2026*. Rivers and Estuaries Science (<https://www.dbca.wa.gov.au/management/swan-canning-riverpark/swan-canning-riverpark-water-quality-monitoring>)