



Swan Canning Estuary Water Quality Monitoring Project

Weekly Water Quality Report

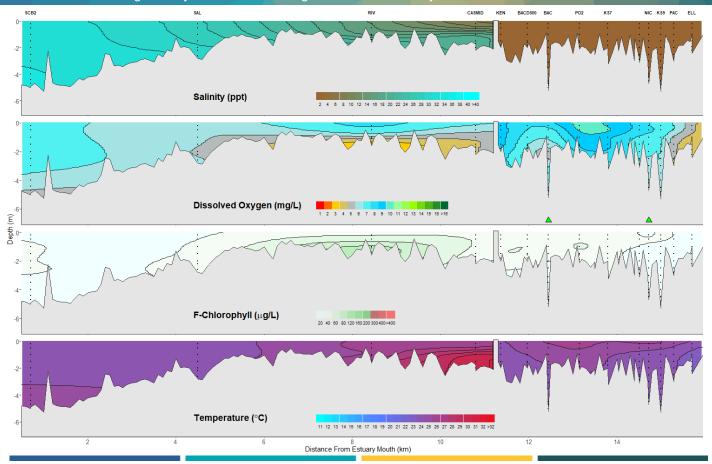
Canning Estuary and Lower Canning River

23 December 2025

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Canning Estuary and Lower Canning River - Water Quality Profiles – 23 December 2025







Date: 23 December 2025

<u>Weather & tide conditions</u>: Conditions were clear with a south-easterly breeze of up to 9.3 knots. The predicted tides at Barrack St were 0.54 m at 10:21 am (low tide) and 1.11 m at 12:20 am (high tide on Dec 24th, 2025). Perth recorded 0 mm of rainfall in the week prior to sampling (Bureau of Meteorology).

<u>Oxygenation</u>: The Bacon St and Nicholson Rd oxygenation plants were operating and providing oxygen in the 24 hours prior to sampling.

<u>Canning Estuary (SCB2 to CASMID)</u>: The Canning Estuary was saline at SCB2 and SAL, brackish at RIV and CASMID. Waters were oxygenated to well-oxygenated, except for low oxygen in the bottom water at RIV. Chlorophyll fluorescence was low, except for moderate levels in bottom waters of RIV. Water temperatures ranged from 23.6 to 29.7 °C.

<u>Lower Canning River (KEN to ELL)</u>: The Lower Canning River was fresh. Waters were oxygenated to well-oxygenated, with low oxygen levels in the sub-surface to bottom at ELL. Chlorophyll fluorescence was low and water temperatures ranged from 22.5 to 25.4 °C.

NB: Profile plots are visual interpolations of measured parameters only. Detailed data are available at wir.water.wa.gov.au.

Oxygenation Plant Operational Status:

- Operating for part or all of the 24 hours prior to sampling
- ▲ Operable but not triggered to operate in the 24 hours prior to sampling
- Inoperable for part or all of the 24 hours prior to sampling

Definitions:

Salinity - fresh <5, brackish 5-25, saline 25-35, hypersaline >35

<u>Dissolved oxygen</u> – well oxygenated >6 mg L^{-1} , oxygenated >4-6 mg L^{-1} , low oxygen >2-4 mg L^{-1} , hypoxic 0.5-2 mg L^{-1} , anoxic <0.5 mg L^{-1}

<u>Chlorophyll fluorescence (low flow)</u>: low < 50 μ g L⁻¹, moderate 50-150 μ g L⁻¹, high 150-400 μ g L⁻¹, extreme > 400 μ g L⁻¹

Recommended reference: Department of Biodiversity, Conservation and Attractions 2025. Swan Canning Estuary water quality profile report, Canning Estuary and Lower Canning River 16 December 2025. Rivers and Estuaries Science (https://www.dpaw.wa.gov.au/management/swan-canning-riverpark)