

Swan Canning Estuary Water Quality Monitoring Project

Weekly Water Quality Report

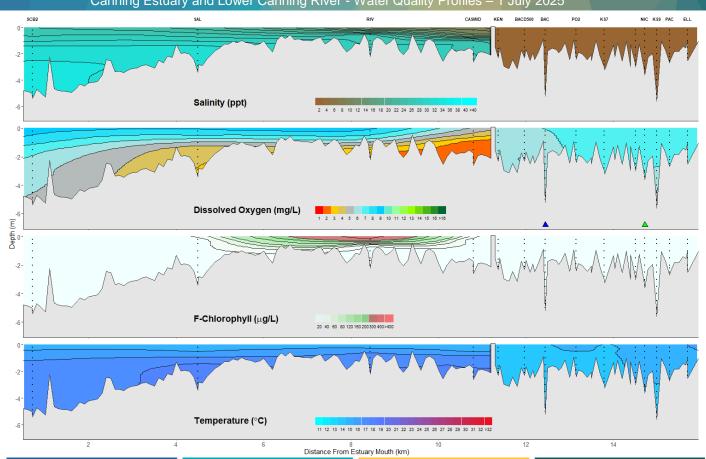
Canning Estuary and Lower Canning River

1 July 2025

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Canning Estuary and Lower Canning River - Water Quality Profiles - 1 July 2025



Date: 1 July 2025

<u>Weather & tide conditions</u>: Conditions were overcast with a variable breeze of up to 2.2 knots. The predicted tides at Barrack St were 1.10 m at 12:16 pm (high tide) and 0.87 m at 9:24 pm (low tide). Perth recorded no rainfall in the week prior to sampling (Bureau of Meteorology).

<u>Oxygenation</u>: The Bacon St oxygenation plant was operable but not triggered and the Nicholson Rd oxygenation plant was triggered to provide oxygen in the 24 hours prior to sampling.

<u>Canning Estuary (SCB2 to CASMID)</u>: The Canning Estuary was saline at SCB2 and brackish over saline from SAL to CASMID. Waters were oxygenated or well oxygenated, except for bottom waters from SAL to RIV which were low in oxygen and bottom water at CASMID which were hypoxic. Chlorophyll fluorescence was moderate to high in surface waters at RIV and temperatures ranged from 14.7 to 17.2 °C.

<u>Lower Canning River (KEN to ELLL)</u>: The Lower Canning River was fresh, waters were oxygenated or well oxygenated and chlorophyll fluorescence was low. Water temperatures ranged from 13.5 to 15.0 °C at the time of sampling.

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 1 July 2025. Rivers and Estuaries Science (https://www.dpaw.wa.gov.au/management/swan-canning-riverpark)