

Swan Canning Estuary Water Quality Monitoring Project

Weekly Water Quality Report

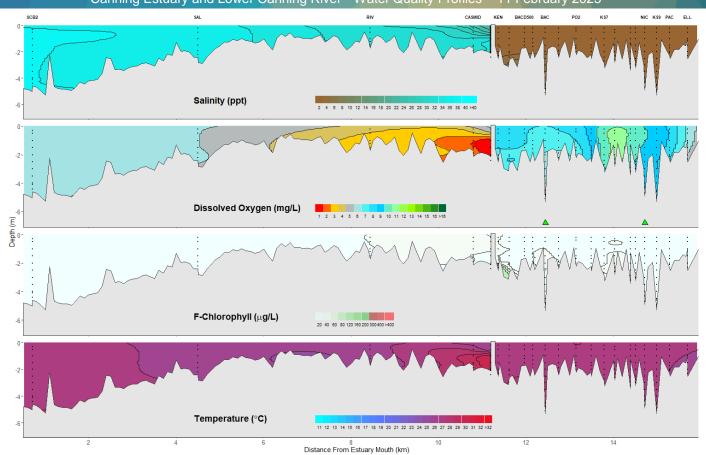
Canning Estuary and Lower Canning River

11 February 2025

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Canning Estuary and Lower Canning River - Water Quality Profiles – 11 February 2025



Date: 11 February 2025

<u>Weather & tide conditions</u>: Conditions were overcast with a predominantly westerly breeze of up to 8.6 knots. The predicted tides at Barrack St were 0.54 m at 8:19 am (low tide) and 1.16 m at 10:31 pm (high tide). Perth recorded no rainfall in the week prior to sampling (Bureau of Meteorology).

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

<u>Canning Estuary (SCB2 to CASMID)</u>: The Canning Estuary was hypersaline at SCB2 and saline from SAL to CASMID. Waters were oxygenated at SCB2 and SAL, low in oxygen at RIV and low in oxygen in surface waters and hypoxic in bottom waters at CASMID. Chlorophyll fluorescence was low and water temperatures ranged from 25.4 to 28.6 °C at the time of sampling.

<u>Lower Canning River (KEN to ELL)</u>: The Lower Canning River was fresh, however salinities remained slightly elevated between KEN and BACU300 due to the intrusion of saline waters around the Kent St Weir on 23 and 24 January 2025. Waters were oxygenated or well oxygenated, except for the bottom waters at BAC which were low in oxygen. Chlorophyll fluorescence was moderate in bottom waters at KEN. Water temperatures ranged from 25.6 to 27.2 °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 11 February 2025. Rivers and Estuaries Science (https://www.dpaw.wa.gov.au/management/swan-canning-riverpark)