Swan Canning Estuary Water Quality Monitoring Project

Weekly Water Quality Report

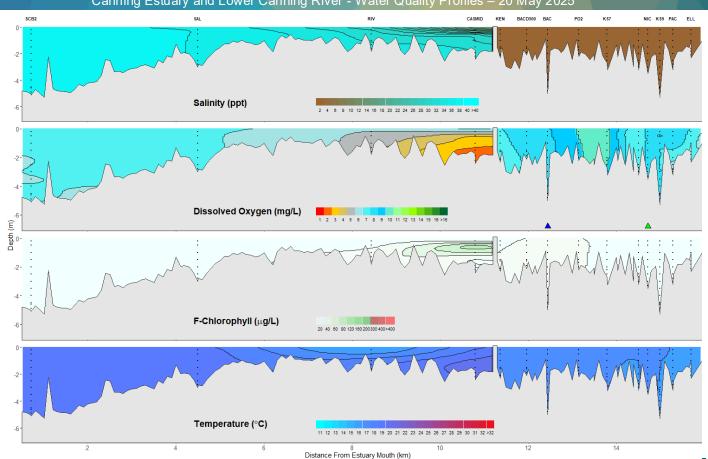
Canning Estuary and Lower Canning River

20 May 2025

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Canning Estuary and Lower Canning River - Water Quality Profiles - 20 May 2025



Date: 20 May 2025

<u>Weather & tide conditions</u>: Conditions were clear with a predominately southerly breeze of up to 5.1 knots. The predicted tides at Barrack St were 0.76 m at 2:04 am (low tide) and 1.18 m at 3:25 pm (high tide). Perth recorded no rain in the week prior to sampling (Bureau of Meteorology).

<u>Oxygenation</u>: The Bacon St oxygenation plant was operable but not triggered to provide oxygen 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 hypersaline at SCB2, saline at SAL and RIV and brackish over saline at CASMID. Waters were oxygenated or well oxygenated, except sub-surface and bottom waters at CASMID which were low in oxygen to hypoxic. Chlorophyll fluorescence was moderate in surface and sub-surface waters of CASMID. Water temperatures ranged from 15.2 to 19.6 °C at the time of sampling.

<u>Lower Canning River (KEN to ELL)</u>: The Lower Canning River was fresh, waters were oxygenated or well oxygenated and chlorophyll fluorescence was low. Water temperatures ranged from 15.4 to 16.7 °C at the time of sampling.

NB: Profile plots are visual interpolations of measured parameters only. Detailed data are available atwir.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 oxygen ated >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>Ch lo ro phyll flu orescence (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 20 May 2025. Rivers and Estuaries Science (https://www.dpaw.wa.gov.au/management/swan-canning-river.park)