

Swan Canning Estuary Water Quality Monitoring Project

Weekly Water Quality Report

Canning Estuary and Lower Canning River

6th August 2024

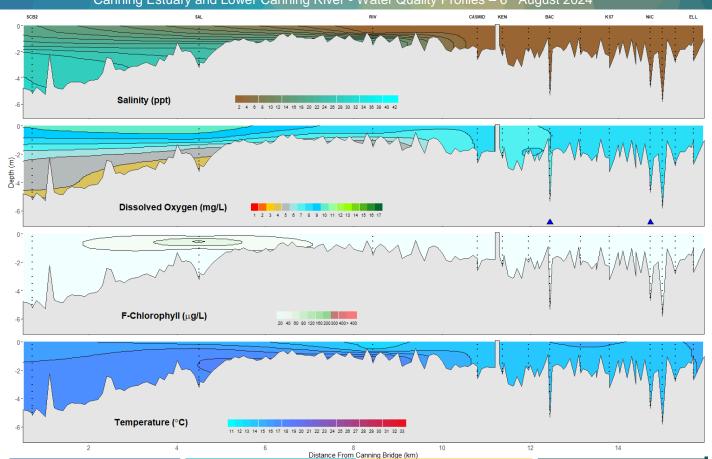
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We're working for Western Australia.

Canning Estuary and Lower Canning River - Water Quality Profiles - 6th August 2024



Date: 6th August 2024

<u>Weather & tide conditions</u>: Conditions were clear with a predominantly north-westerly breeze of up to 6.9 knots. The predicted tides at Barrack St were 1.15 m at 11:52 am (high tide) and 0.75 m at 9:08 pm (low tide). Perth recorded 16.0 mm of rainfall in the week prior to sampling (Bureau of Meteorology).

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

<u>Canning Estuary (SCB2 to CASMID)</u>: The Canning Estuary was brackish over saline at SCB2, brackish at SAL, fresh over brackish at RIV and fresh at CASMID. Waters were oxygenated or well oxygenated, except for bottom waters at SCB2 and SAL which were low in oxygen. Chlorophyll fluorescence was moderate in surface waters at SAL. Water temperatures ranged from 13.0 to 17.1 °C at the time of sampling.

<u>Lower Canning River (KEN to ELL)</u>: The Lower Canning River was fresh, waters were well oxygenated and chlorophyll fluorescence was low. Water temperatures ranged from 13.6 to 14.1 °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 2024. Swan Canning Estuary water quality profile report, Canning Estuary and Lower Canning River 6th August 2024. Rivers and Estuaries Science (https://www.dpaw.wa.gov.au/management/swan-canning-riverpark)