

Swan Canning Estuary Water Quality Monitoring Project

Weekly Water Quality Report

Canning Estuary and Lower Canning River

11th June 2024

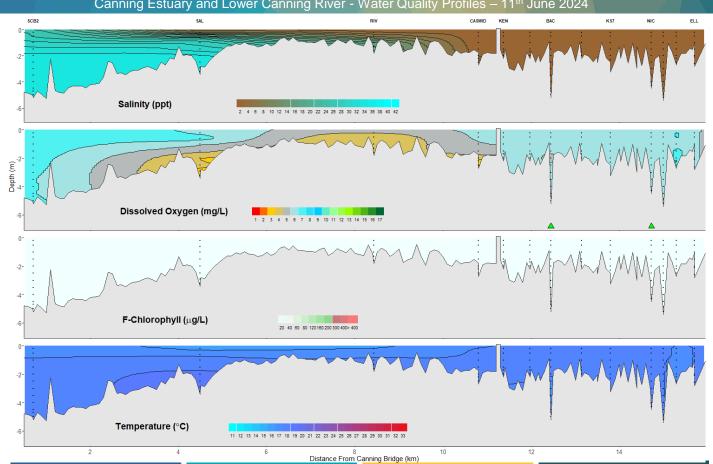
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We're working for Western Australia.

Canning Estuary and Lower Canning River - Water Quality Profiles - 11th June 2024



Date: 11th June 2024

<u>Weather & tide conditions</u>: Conditions were overcast with a light variable breeze of up to 5 knots. The predicted tides at Barrack St were 0.75 m at 12:15 am (low tide) and 1.23 m at 1:11 pm (high tide). Perth recorded 36 mm of 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 saline at SCB2, brackish over saline at SAL, and fresh over brackish at RIV and CASMID. Waters were oxygenated or well oxygenated, except for bottom waters from SAL - CASMID, which were low in oxygen. Chlorophyll fluorescence was low throughout, and water temperatures ranged from 15.9 to 18.4 °C at the time of sampling.

<u>Lower Canning River (KEN to ELL)</u>: The Lower Canning River was fresh and waters were oxygenated or well oxygenated. Chlorophyll fluorescence was low and water temperatures ranged from 16.8 to 17.3 °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 11th June 2024. Rivers and Estuaries Science (https://www.dpaw.wa.gov.au/management/swan-canning-riverpark)