Swan Canning Estuary Water Quality Monitoring Project

Weekly Water Quality Report

Canning Estuary and Lower Canning River

5th June 2024

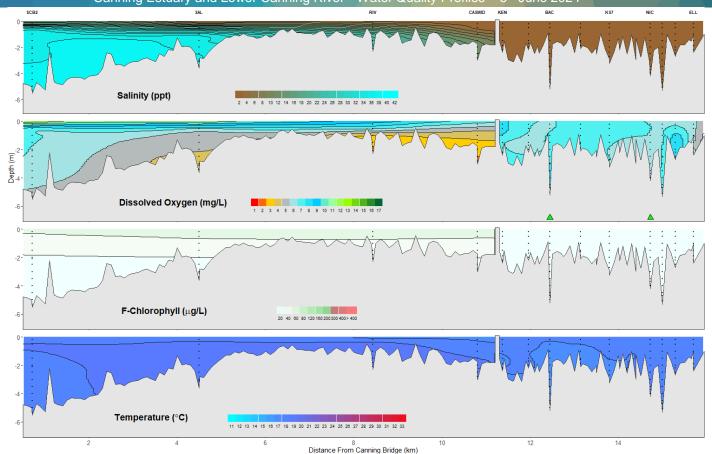
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We're working for Western Australia.

Canning Estuary and Lower Canning River - Water Quality Profiles - 5th June 2024



Date: 5th June 2024

<u>Weather & tide conditions</u>: Conditions were overcast with variable breeze up to 8.7 knots. The predicted tides at Barrack St were 1.32 m at 9:57 am (high tide) and 0.71 m at 8:49 pm (low tide). Perth recorded 68.8 mm of rainfall in the week prior to sampling (Bureau of Meteorology).

<u>Oxygenation</u>: The Bacon St. plant and the Nicholson Rd. were operable this week but triggered to provide oxygen in the 24 hours prior to sampling.

<u>Canning Estuary (SCB2 to CASMID)</u>: The Canning Estuary was brackish over hypersaline at SCB2 and SAL, brackish at RIV and fresh over brackish at CASMID. Waters were oxygenated or well oxygenated except for bottow waters upstream from SAL, which were low in oxygen. Chlorophyll fluorescence was high in the surface waters at SAL and RIV and moderate in the subsurface at CASMID. Water temperatures ranged from 16.9 to 18.6 °C at the time of sampling.

<u>Lower Canning River (KEN to ELLL)</u>: The Lower Canning River was fresh. Waters were oxygenated or well oxygenated. Chlorophyll fluorescence was low and water temperatures ranged from 16.8 to 17.6 °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}

Chlorophyll fluorescence (low flow): 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 5th June 2024. Rivers and Estuaries Science (https://www.dpaw.wa.gov.au/management/swan-canning-riverpark)