Swan Canning Estuary Water Quality Monitoring Project

Weekly Water Quality Report

Canning Estuary and Lower Canning River

27th February 2024

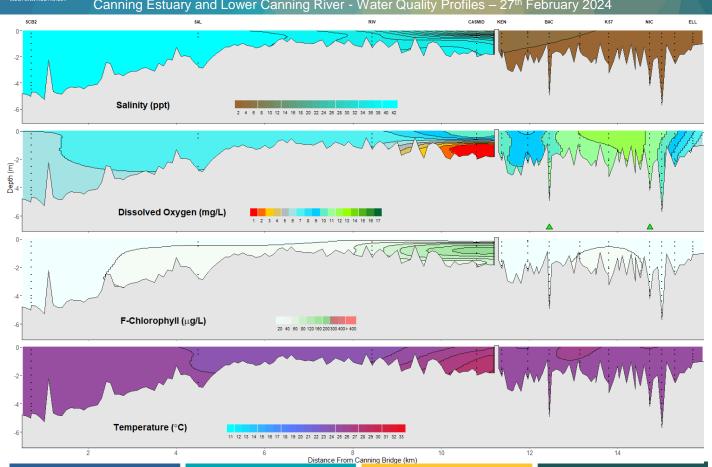
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We're working for Western Australia.

Canning Estuary and Lower Canning River - Water Quality Profiles - 27th February 2024



Date: 27th February 2024

Weather & tide conditions: Conditions were cloudy with a southerly breeze of up to 13 knots. The predicted tides at Barrack St were 0.70 m at 7:05 am (low tide), 0.91 m at 1:56 pm (high tide) and 0.82 m at 6:34 pm (2nd low tide). Perth recorded 4.8 mm rainfall in the week prior to sampling (Bureau of Meteorology).

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

<u>Canning Estuary (SCB2 to CASMID)</u>: The Canning Estuary was hypersaline from SCB2 to SAL, saline at RIV and brackish over hypersaline at CASMID. Waters were oxygenated or well oxygenated, except for subsurface and bottom waters of CASMID which were anoxic. Chlorophyll fluorescence was high in surface and subsurface waters of CASMID. Water temperatures ranged from 23.3 to 28.4 °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 24 to 25.6 °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 (mod/high 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 27th February 2024. Rivers and Estuaries Science (https://www.dpaw.wa.gov.au/management/swan-canning-riverpark)