Swan Canning Estuary Water Quality Monitoring Project

Weekly Water Quality Report

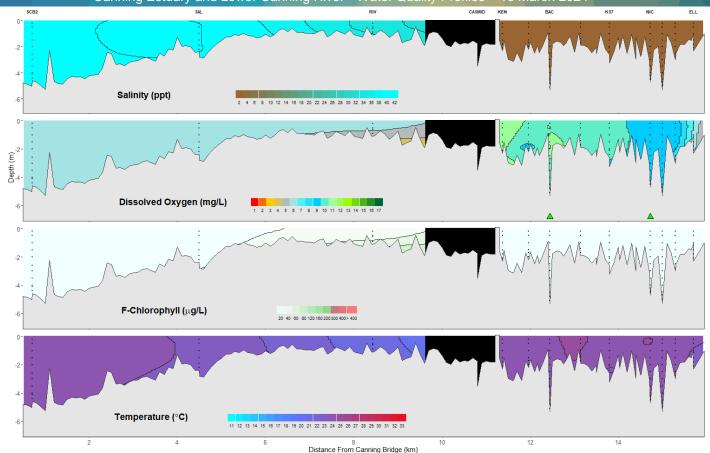
Canning Estuary and Lower Canning River

19 March 2024

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Canning Estuary and Lower Canning River - Water Quality Profiles – 19 March 2024



Date: 19 March 2024

<u>Weather & tide conditions</u>: Conditions were clear with an easterly breeze of up to 16.9 knots. The predicted tides at Barrack St were 0.59 m at 5:37 am (low tide) and 1.09 m at 6:37 pm (high tide). Perth recorded no 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 RIV)</u>: The Canning Estuary was hypersaline at SCB2 and SAL and saline at RIV. Waters were oxygenated or well oxygenated from SCB2 to RIV. Chlorophyll fluorescence was low and water temperatures ranged from 19.1 to 26.1 °C at the time of sampling.

NB: CASMID could not be sampled due to low tides.

<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 22.8 to 24.2 °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 (mod/high 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 19 March 2024. Rivers and Estuaries Science (https://www.dpaw.wa.gov.au/management/swan-canning-riverpark)