Swan Canning Estuary Water Quality Monitoring Project

Weekly Water Quality Report

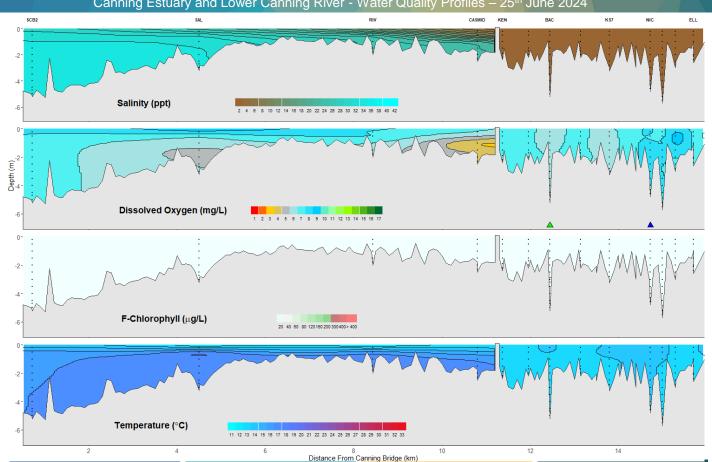
Canning Estuary and Lower Canning River

25th June 2024

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Canning Estuary and Lower Canning River - Water Quality Profiles - 25th June 2024



Date: 25th June 2024

<u>Weather & tide conditions</u>: Conditions were mostly sunny with a light variable breeze of up to 2.5 knots. The predicted tides at Barrack St were 0.68 m at 11:09 pm the previous day (low tide), and 1.3 m at 1:01 pm the day of (high tide). Perth recorded 6.6 mm of rainfall in the week prior to sampling (Bureau of Meteorology).

<u>Oxygenation</u>: The Bacon St oxygenation plant was triggered to provide oxygen in the 24 hours prior to sampling, whereas the Nicholson Rd plant was operable but not triggered to provide oxygen during this window.

<u>Canning Estuary (SCB2 to CASMID)</u>: The Canning Estuary was saline at SCB2 and SAL, brackish over saline at RIV, and brackish at CASMID. Waters were oxygenated or well oxygenated, except for mid-column and bottom waters of CASMID, which were low in oxygen. Chlorophyll fluorescence was low and water temperatures ranged from 12.9 to 16.9 °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 12.3 to 15.7 °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 25th June 2024. Rivers and Estuaries Science (https://www.dpaw.wa.gov.au/management/swan-canning-riverpark)