Swan Canning Estuary Water Quality Monitoring Project

Weekly Water Quality Report

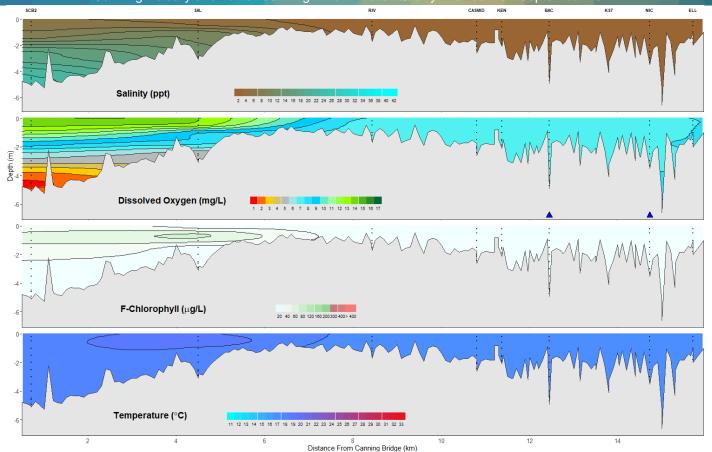
Canning Estuary and Lower Canning River

3rd September 2024

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Canning Estuary and Lower Canning River - Water Quality Profiles – 3rd September 2024



Date: 3rd September 2024

Weather & tide conditions: Conditions were partly cloudy with a north-westerly breeze of up to 7.7 knots. The predicted tides at Barrack St were 0.82 m at 12:39 am (high tide), 0.78 m at 4:03 am (low tide), 1.04 m at 11:18 am (2nd high tide) and 0.73 m at 7:15 pm (2nd low tide). Perth recorded 12.6 mm of rainfall in the week prior to sampling (Bureau of Meteorology).

<u>Oxygenation</u>: The Bacon St and Nicholson Rd oxygenation plants were operable, but not triggered to provide oxygen in the 24 hours prior to sampling.

<u>Canning Estuary (SCB2 to CASMID)</u>: The Canning Estuary was fresh over brackish from SCB2 to SAL and fresh between RIV and CASMID. Waters were oxygenated or well oxygenated, especially surface waters at SCB2 and SAL which were super saturated. Bottom waters at SCB2 which were hypoxic. Chlorophyll fluorescence was low and water temperatures ranged from 16.1 to 18.7 °C at the time of sampling.

<u>Lower Canning River (KEN to ELL)</u>: The Lower Canning River was fresh, waters were well oxygenated and chlorophyll fluorescence was low. Water temperatures ranged from 16.3 to 16.8 °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

Dissolved oxygen – 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 < 60 μ g L⁻¹, moderate 60-160 μ g L⁻¹, high 160-400 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 3rd September 2024. Rivers and Estuaries Science (https://www.dpaw.wa.gov.au/management/swan-canning-riverpark)