

Swan Canning Estuary Water Quality Monitoring Project

Weekly Water Quality Report

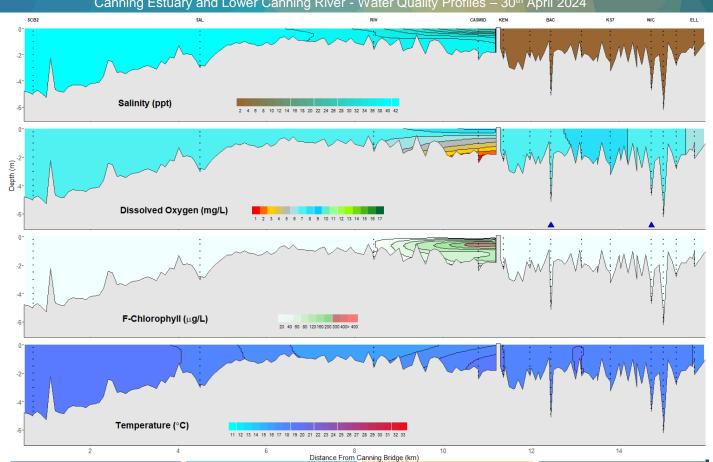
Canning Estuary and Lower Canning River

30th April 2024

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Canning Estuary and Lower Canning River - Water Quality Profiles - 30th April 2024



Date: 30th April 2024

<u>Weather & tide conditions</u>: Conditions progressed from overcast to storms with periods of rain and a predominately easterly breeze of up to 12.5 knots. The predicted tides at Barrack St were 0.66 m at 1:59 am (low tide) and 1.23 m at 2:48 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 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 hypersaline from SCB2 to RIV and saline over hypersaline at CASMID. Waters were oxygenated or well oxygenated, except at CASMID where bottom waters were hypoxic. Chlorophyll fluorescence was high in the subsurface water at CASMID. Water temperatures ranged from 15.2 to 18.8 °C at the time of sampling.

<u>Lower Canning River (KEN to ELLL)</u>: The Lower Canning River was fresh and waters were oxygenated or well oxygenated. Chlorophyll fluorescence was low and water temperatures ranged from 17.0 to 18.0 °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 30th April 2024. Rivers and Estuaries Science (https://www.dpaw.wa.gov.au/management/swan-canning-riverpark)