

Swan Canning Estuary Water Quality Monitoring Project

Weekly Water Quality Report

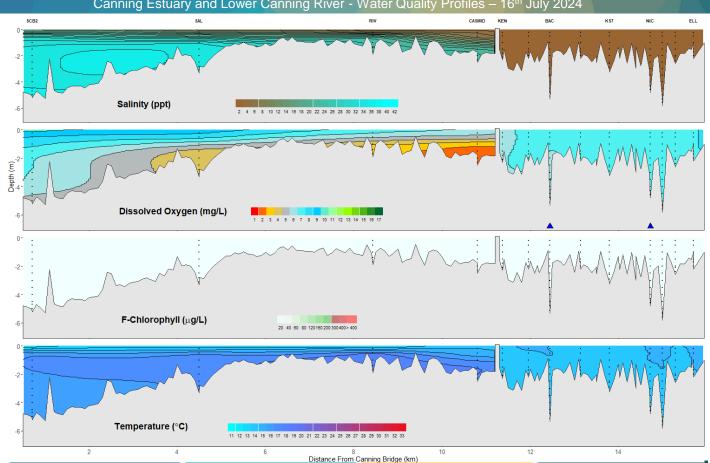
Canning Estuary and Lower Canning River

16th July 2024

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Canning Estuary and Lower Canning River - Water Quality Profiles - 16th July 2024



Date: 16th July 2024

<u>Weather & tide conditions</u>: Conditions were clear with a predominately easterly breeze of up to 6 knots. The predicted tides at Barrack St were 1.17 m at 6:57 am (high tide) and 0.77 m at 7:00 pm (low tide). Perth recorded 33.4 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 brackish over saline at SCB2 and SAL, brackish at RIV and fresh over brackish at CASMID. Waters were oxygenated or well oxygenated, except subsurface and bottom waters of SAL and RIV which were low in oxygen and CASMID which were hypoxic. Chlorophyll fluorescence was low and water temperatures ranged from 12.9 to 17.6 °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 13.6 to 14.2 °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 (low 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 16th July 2024. Rivers and Estuaries Science (https://www.dpaw.wa.gov.au/management/swan-canning-riverpark)