



Department of Biodiversity,
Conservation and Attractions



Biodiversity and
Conservation Science

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Swan Canning Estuary Water Quality Monitoring Project

Weekly Water Quality Report

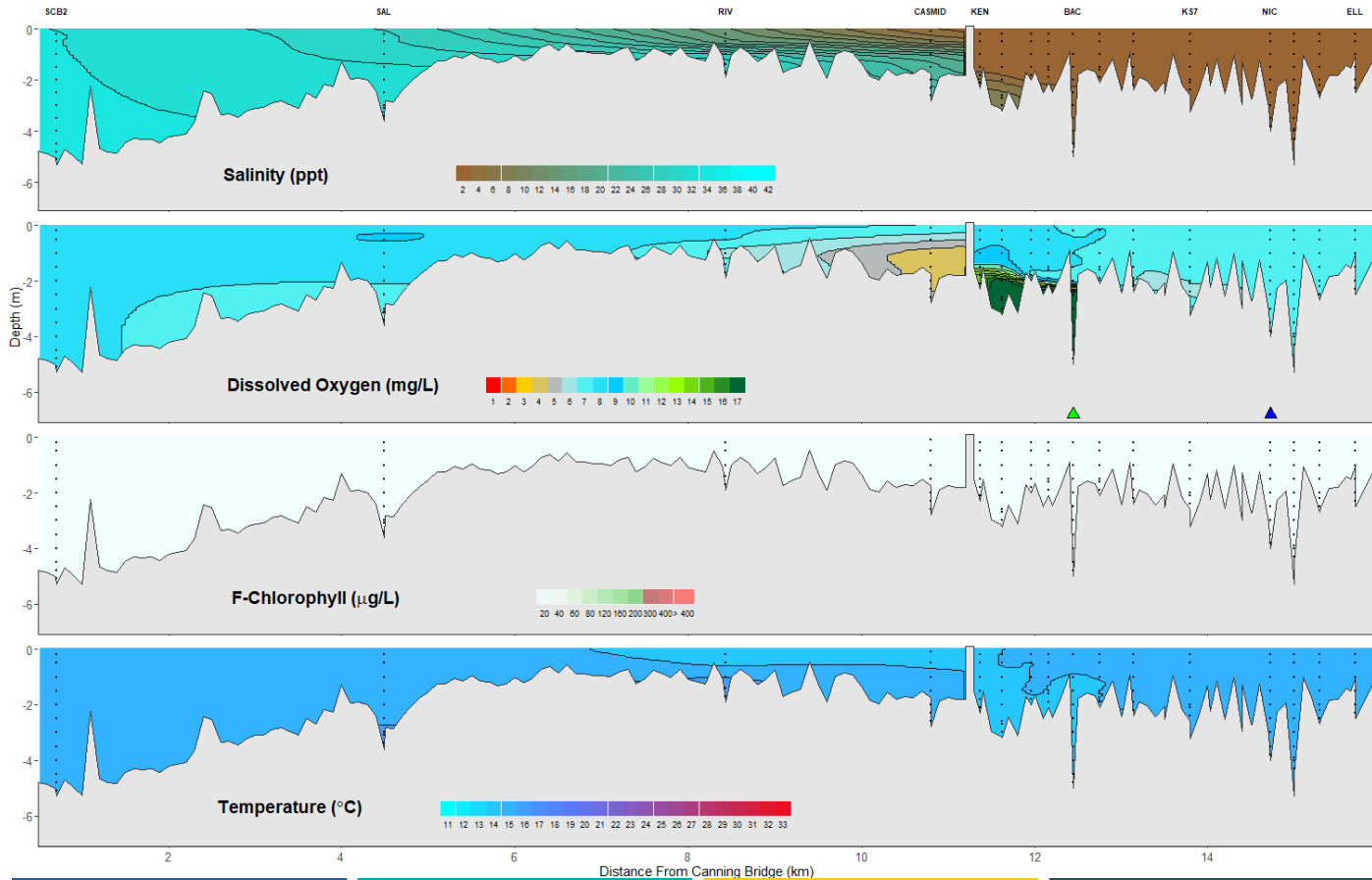
Canning Estuary and Lower Canning River

9th July 2024

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Canning Estuary and Lower Canning River - Water Quality Profiles – 9th July 2024



Date: 9th July 2024

Weather & tide conditions: Conditions were clear becoming cloudy with a variable breeze of up to 8.9 knots. The predicted tides at Barrack St were 1.21 m at 10:30 am (high tide), and 0.76 m at 7:17 pm (low tide). Perth recorded 10.2 mm of rainfall in the week prior to sampling (Bureau of Meteorology).

Oxygenation: 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.

Canning Estuary (SCB2 to CASMID): The Canning Estuary was saline through SCB2 – SAL, brackish over saline at RIV, and fresh over brackish at CASMID. Waters from SCB2 – RIV were oxygenated or well oxygenated, while CASMID had low subsurface oxygen. Chlorophyll fluorescence was low, and water temperatures ranged from 13.7 to 15.1 °C at the time of sampling.

Lower Canning River (KEN to ELL): The Lower Canning River was fresh, and waters were predominantly well oxygenated. Chlorophyll fluorescence was low, and water temperatures ranged from 13.4 to 14.7 °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
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
Chlorophyll fluorescence (low flow): low < 50 µg L⁻¹, moderate 50-150 µg L⁻¹, high 150-400 µg L⁻¹, extreme > 400 µg L⁻¹