



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

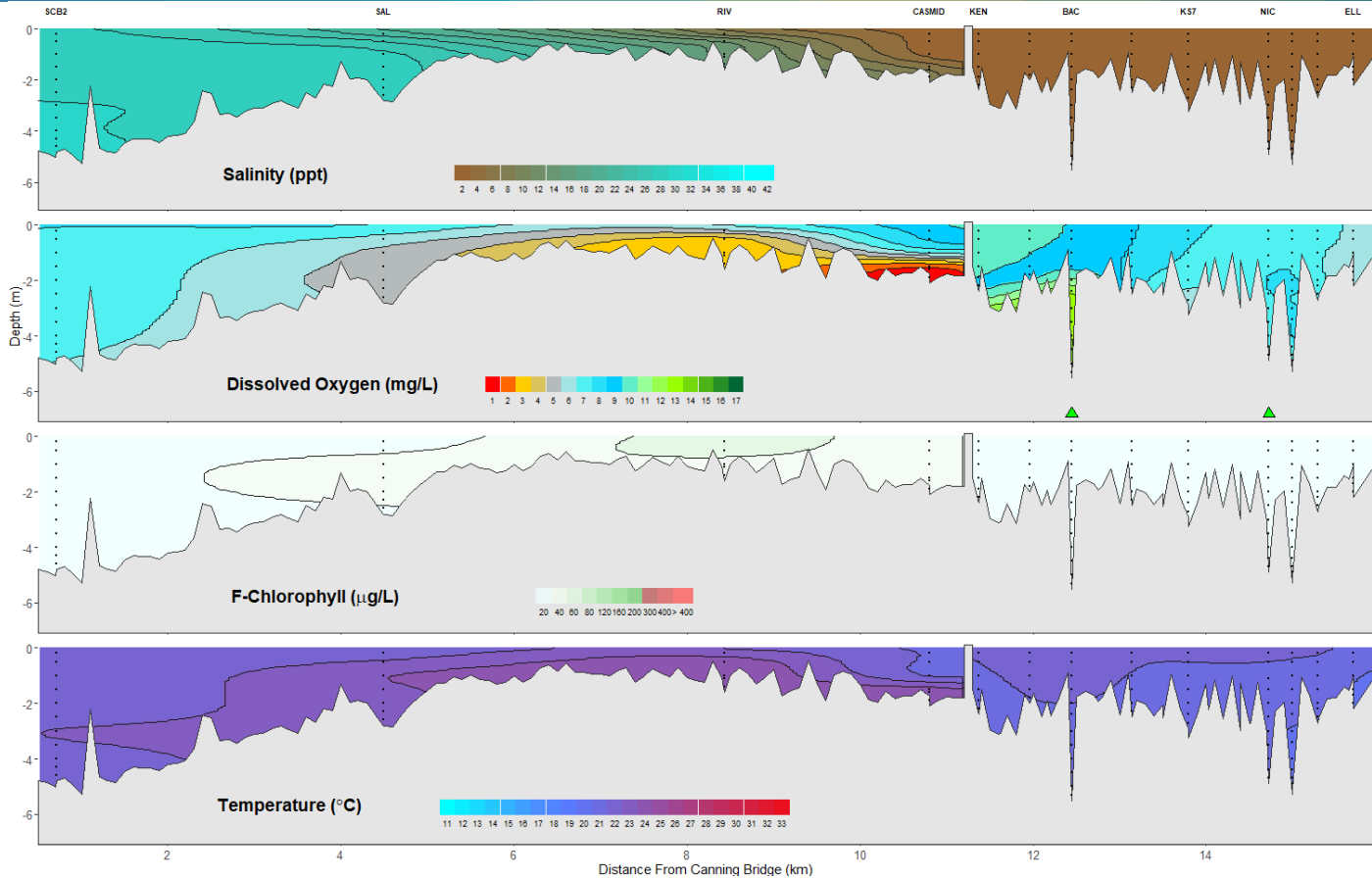
Canning Estuary and Lower Canning River

12 November 2024

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Canning Estuary and Lower Canning River - Water Quality Profiles – 12 November 2024



Distance From Canning Bridge (km)

Date: 12 November 2024

Weather & tide conditions: Conditions were cloudy with a predominantly south-easterly breeze of up to 5.6 knots. The predicted tides at Barrack St were 0.76 m at 3:57 am (low tide), 0.81 m at 8:48 am (high tide), 0.72 m at 2:49 pm (second low tide) and 0.95 m at 9:28 pm (second high tide). Perth recorded 1.4 mm rainfall in the week prior to sampling (Bureau of Meteorology).

Oxygenation: The Bacon St and Nicholson Rd oxygenation plants were triggered to provide oxygen in the 24 hours prior to sampling.

Canning Estuary (SCB2 to CASMID): The Canning Estuary was saline at SCB2, brackish over saline at SAL, brackish at RIV and fresh over brackish at CASMID. Waters were oxygenated or well oxygenated, except bottom waters at RIV which were low in oxygen and CASMID which were hypoxic. Chlorophyll fluorescence was moderate in the subsurface waters at CASMID. Water temperatures ranged from 20.8 to 23.8 °C at the time of sampling.

Lower Canning River (KEN to ELL): The Lower Canning River was fresh, waters were oxygenated or well oxygenated and chlorophyll fluorescence was low. Water temperatures ranged from 19.9 to 21.7 °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