



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

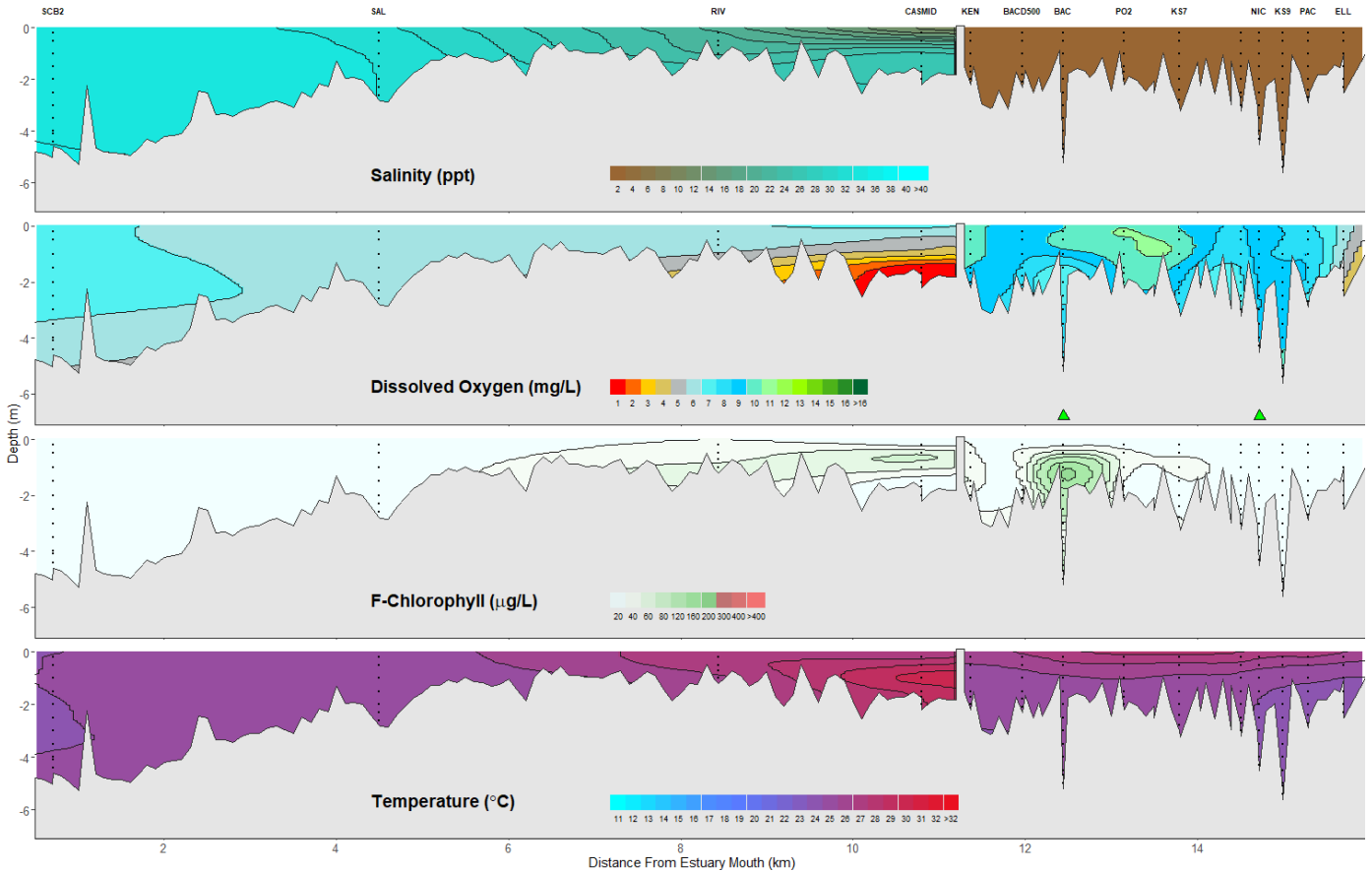
Canning Estuary and Lower Canning River

31 December 2024

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Canning Estuary and Lower Canning River - Water Quality Profiles – 31 December 2024



Date: 31 December 2024

Weather & tide conditions: Conditions were clear with variable breeze of up to 10.0 knots. The predicted tides at Barrack St were 0.48 m at 9:15 am (low tide) and 1.19 m at 11:11 pm (high tide). Perth recorded no 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 between SCB2 and SAL, brackish at RIV and brackish over saline at CASMID. Waters were oxygenated or well oxygenated, except bottom waters at CASMID which were anoxic. Chlorophyll fluorescence was moderate in bottom waters at RIV and surface waters at CASMID. Water temperatures ranged from 24 to 29.5 °C at the time of sampling.

Lower Canning River (KEN to ELL): The Lower Canning River was fresh. Waters were oxygenated or well oxygenated, except bottom waters at ELL which were low in oxygen. Chlorophyll fluorescence was high in subsurface waters at BAC. Water temperatures ranged from 23.4 to 27.1 °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