



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

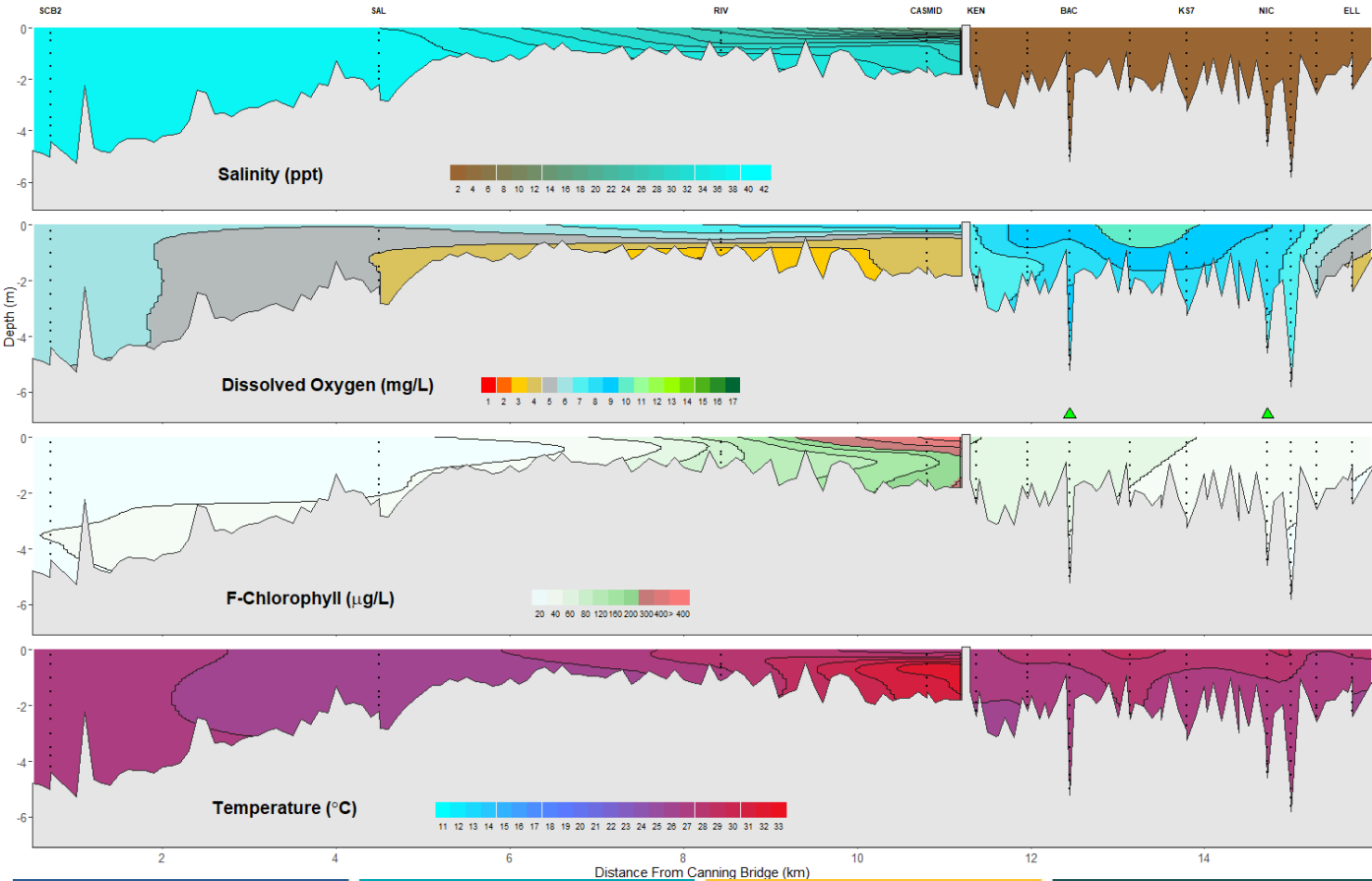
Canning Estuary and Lower Canning River

23rd January 2024

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Canning Estuary and Lower Canning River - Water Quality Profiles – 23rd January 2024



Date: 23rd January 2024

Weather & tide conditions: Conditions were sunny with a predominantly south easterly breeze of up to 6.9 knots. The predicted tides at Barrack St were 0.50 m at 8:04 am (low tide) and 1.16 m at 9:25 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 hypersaline from SCB2 to SAL, saline at RIV and brackish over saline at CASMID. Waters were oxygenated or well oxygenated, except for bottom waters at RIV and surface and bottom waters at CASMID which were low in oxygen. Chlorophyll fluorescence was moderate at RIV and high at CASMID. Water temperatures ranged from 25.1 to 31.3 °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 moderate in surface waters at PO2 and extreme in surface and subsurface waters of BACD500. Water temperatures ranged from 25.6 to 28.3 °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 (mod/high flow): low < 50 µg L⁻¹, moderate 50-150 µg L⁻¹, high 150-400 µg L⁻¹, extreme > 400 µg L⁻¹