



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

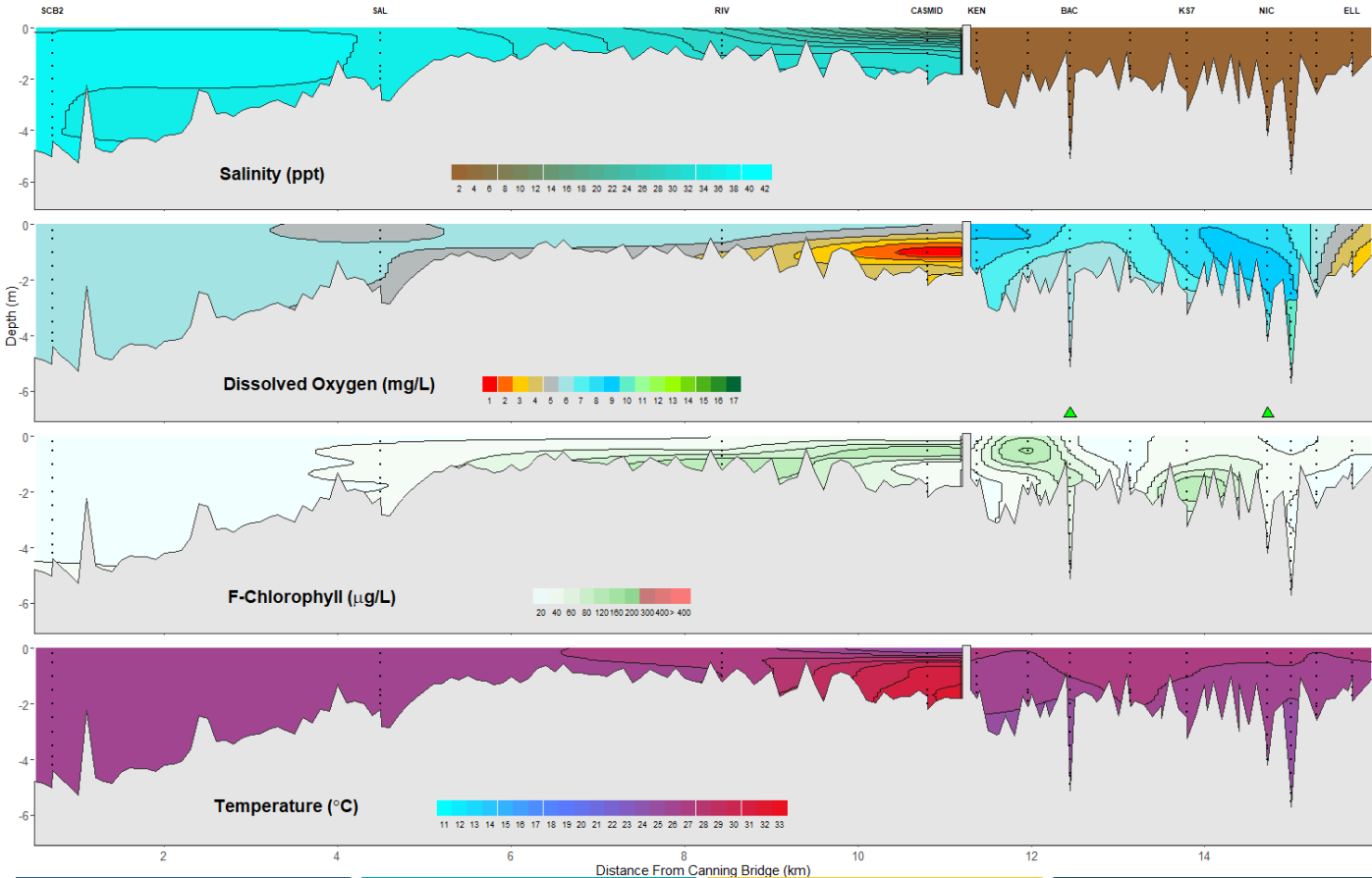
Canning Estuary and Lower Canning River

9 January 2024

Prepared by

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



Date: 9 January 2024

Weather & tide conditions: Conditions were sunny with a south-westerly breeze of up to 9.9 knots. The predicted tides at Barrack St were 0.50 m at 7:48 am (low tide) and 1.20 m at 9:29 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 from SCB2 to RIV and brackish over saline at CASMID. Waters were oxygenated, except for subsurface and bottom waters at CASMID which were anoxic and low in oxygen, respectively. Chlorophyll fluorescence was moderate in bottom waters at RIV and in subsurface waters at CASMID. Water temperatures ranged from 25.1 to 30.9 °C at the time of sampling.

Lower Canning River (KEN to ELL): The Lower Canning River was fresh. Surface waters were oxygenated or well oxygenated and subsurface and bottom waters were low in oxygen at ELL. Chlorophyll fluorescence was moderate in surface waters at BACD500, subsurface waters at BAC and bottom waters at BAC, KS7 and KS9. Water temperatures ranged from 24.6 to 26.6 °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