



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

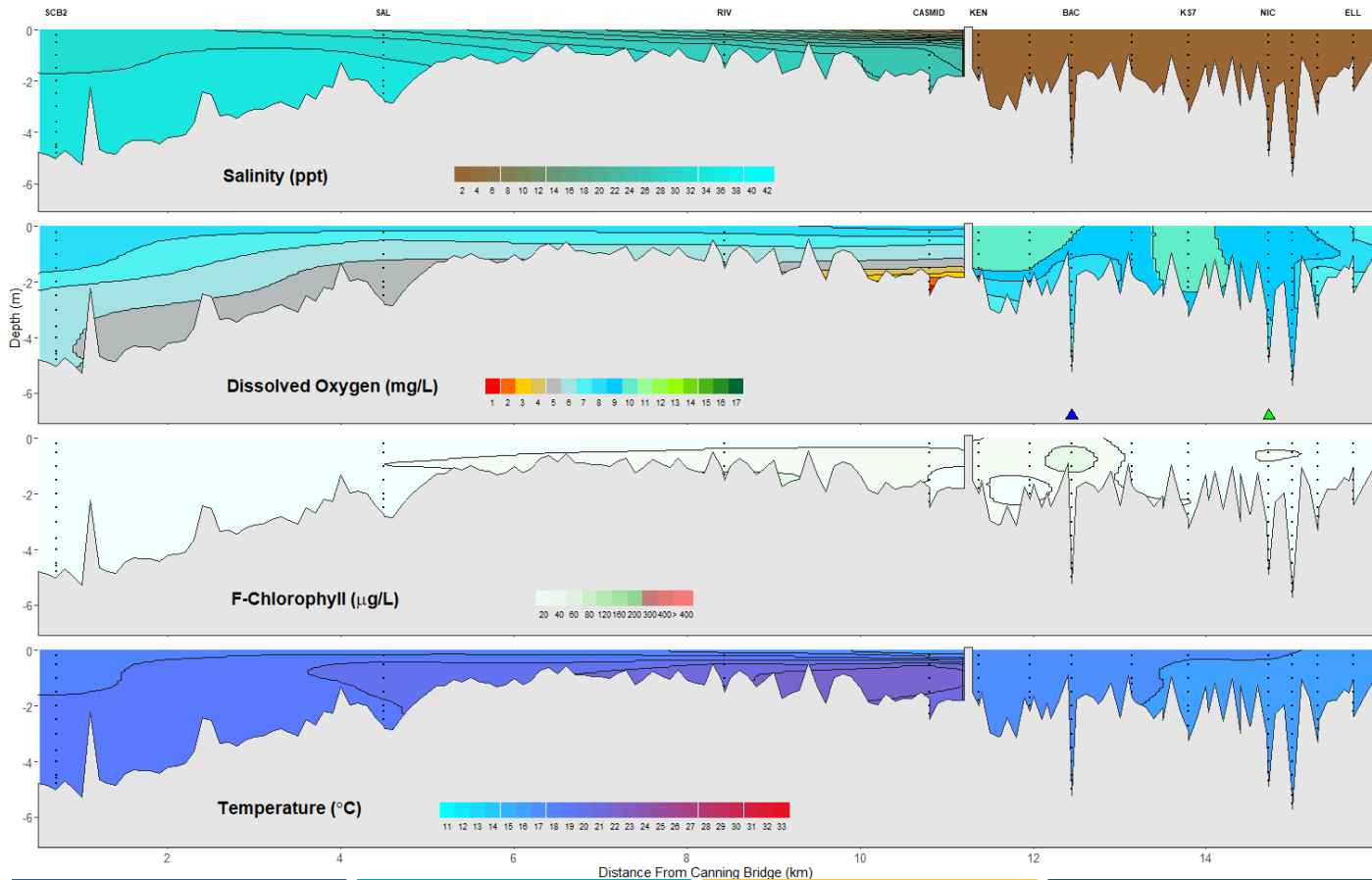
Canning Estuary and Lower Canning River

2nd May 2023

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Canning Estuary and Lower Canning River - Water Quality Profiles – 2nd May 2023



Date: 2nd May 2023

Weather & tide conditions: Conditions were sunny and clear with a predominantly south-easterly breeze of up to 5 knots. The predicted tides at Barrack St were 0.82 m at 3:44 am (low tide), 1.05 m at 10:35 pm (high tide) and 0.92 m at 16:38 (2nd low tide). Perth recorded 9.2 mm of rainfall in the week prior to sampling (Bureau of Meteorology).

Oxygenation: The Nicholson Rd oxygenation plant was operable and provided oxygen in the 24 hours prior to sampling, whereas the Bacon St plant was operable but not triggered to provide oxygen.

Canning Estuary (SCB2 to CASMID): Waters were saline between SCB2 and RIV and brackish over saline at CASMID. Waters were oxygenated to well oxygenated from SCB2 to RIV and hypoxic in the bottom waters of CASMID. Chlorophyll fluorescence was low throughout, and water temperatures ranged from 16.9 °C to 21.2 °C at the time of sampling.

Lower Canning River (KEN to ELL): The Lower Canning River was fresh, and waters were oxygenated to well oxygenated throughout. Chlorophyll fluorescence was moderate in the surface waters at BAC and water temperatures ranged from 15.3 °C to 16.8 °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