



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

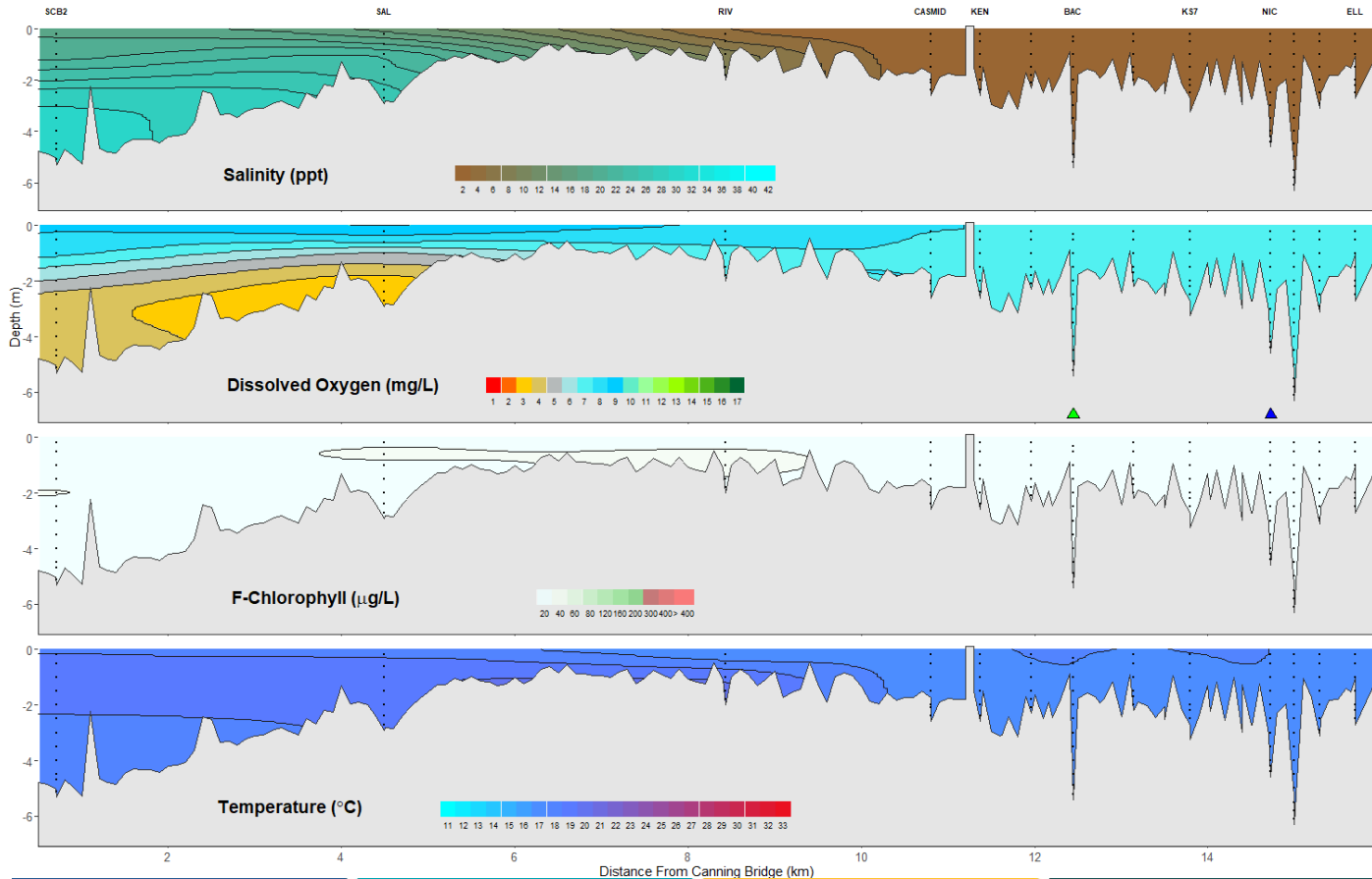
Canning Estuary and Lower Canning River

29th August 2023

Prepared by

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Canning Estuary and Lower Canning River - Water Quality Profiles – 29th August 2023



Date: 29th August 2023

Weather & tide conditions: Conditions became cloudy and there was a light south easterly breeze of up to 3.2 knots. The predicted tides at Barrack St were 1.19 m at 9:43 am (high tide) and 0.58 m at 7:53 am (low tide). Perth recorded 0.4 mm of rainfall in the week prior to sampling (Bureau of Meteorology).

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

Canning Estuary (SCB2 to CASMID): The Canning Estuary was brackish over saline at SCB2, brackish at SAL, fresh over brackish at RIV and fresh at CASMID. Waters were oxygenated or well oxygenated, except bottom waters at SCB2 and SAL which were low in oxygen. Chlorophyll fluorescence was high in surface waters at SHELL, approximately 550 m downstream of RIV (site not shown on plot). Water temperatures ranged from 16.4 °C to 19.7 °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. Chlorophyll fluorescence was low and water temperatures ranged from 16.2 °C to 17.1 °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 (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