



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

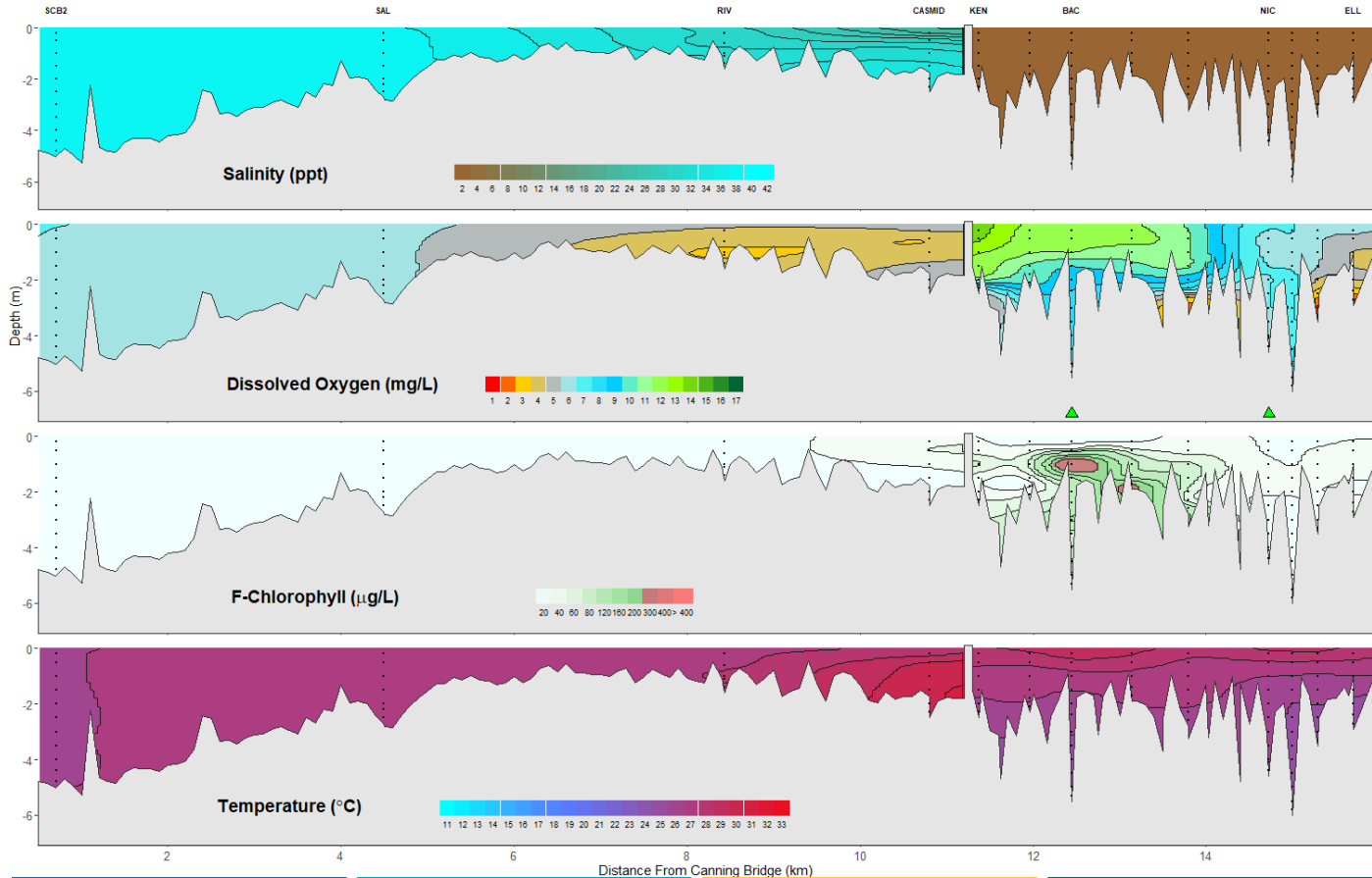
Canning Estuary and Lower Canning River

31st January 2023

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Canning Estuary and Lower Canning River - Water Quality Profiles – 31st January 2023



Date: 31st January 2023

Weather & tide conditions: Conditions were sunny with a predominantly variable easterly breeze of up to 6 knots. The predicted tides at Barrack St were 0.53 m at 6:56 am (low tide) and 1.10 m at 7:15am (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 operable and providing oxygen in the 24 hours prior to sampling.

Canning Estuary (SCB2 to CASMID): Waters were hypersaline between SCB2 and SAL and saline from RIV to CASMID. Waters were oxygenated or well oxygenated between SCB2 and SAL and low in oxygen at RIV and within the surface waters at CASMID. Chlorophyll fluorescence was low throughout this zone. Water temperatures ranged from 26.3 to 29.8°C at the time of sampling.

Lower Canning River (KEN to ELL): The Lower Canning River was fresh, and waters were oxygenated or well oxygenated throughout, except at the bottom waters between KEN, BAC, KS7 and PAC which were hypoxic to anoxic. Chlorophyll fluorescence was moderate in the bottom to middle waters from KEN to BACD500, PO2 and KS7 and high in middle waters at BAC. Water temperatures ranged from 22.4 to 28.7 °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 < 60 µg L⁻¹, moderate 60-160 µg L⁻¹, high 160-400 µg L⁻¹, extreme > 400 µg L⁻¹