



Swan Canning Estuary Water Quality Monitoring Project

Weekly Water Quality Report

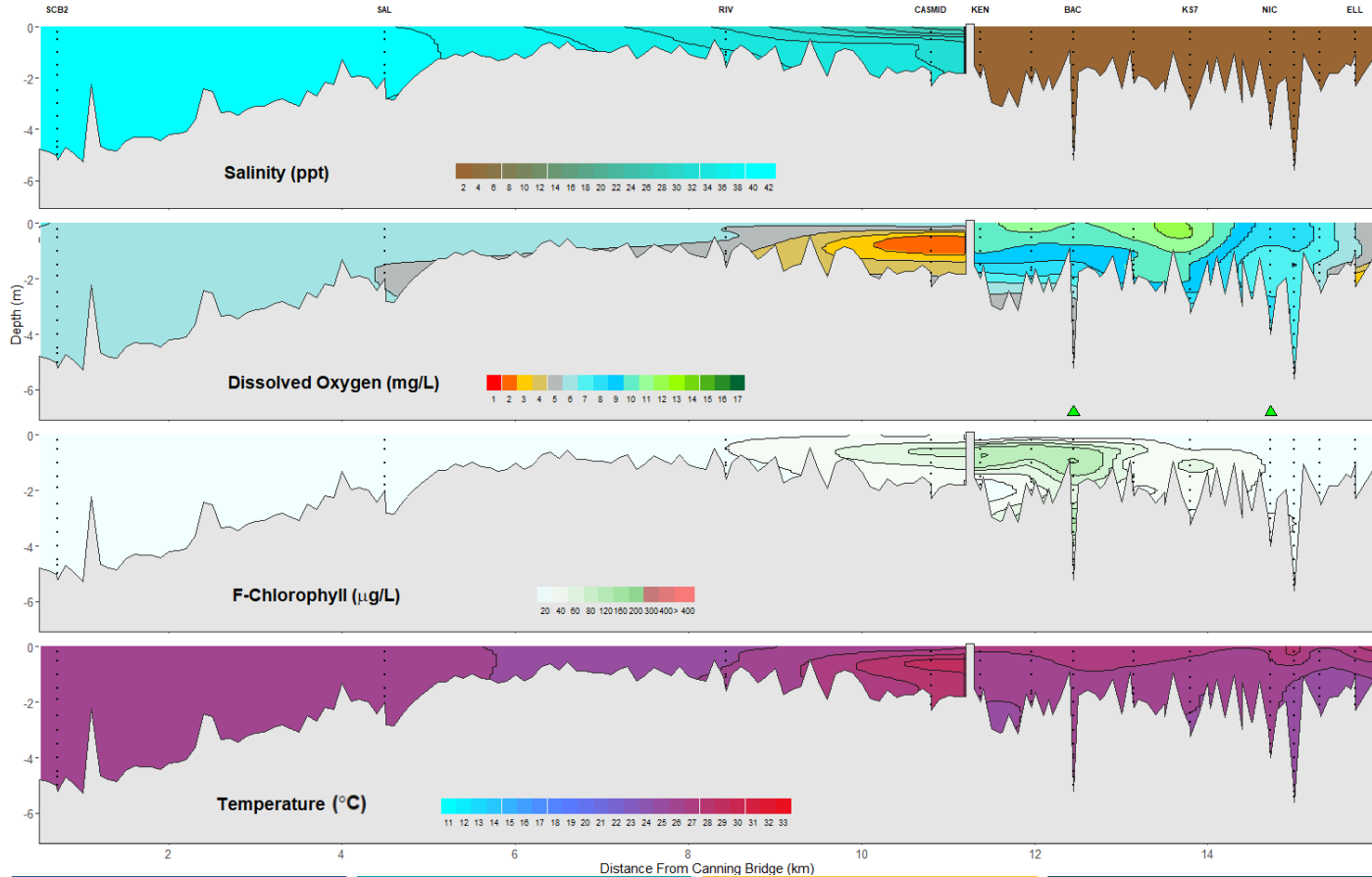
Canning Estuary and Lower Canning River

14th February 2023

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Canning Estuary and Lower Canning River - Water Quality Profiles – 14th February 2023



Date: 14th February 2023

Weather & tide conditions: Conditions were mostly sunny with a variable southerly breeze of up to 7.8 knots. The predicted tides at Barrack St were 0.60 m at 6:15 am (low tide) and 1.09 m at 17:28 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 operable and provided oxygen in the 24 hours prior to sampling.

Canning Estuary (SCB2 to CASMID): Waters were hypersaline between SCB2 and SAL, and saline between RIV and CASMID. Waters were oxygenated between SCB2 and RIV, and hypoxic to oxygenated at CASMID. Chlorophyll fluorescence was low throughout, except for the surface waters of CASMID, which had moderate signals. Water temperatures ranged from 24.6 °C to 28.4°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 for the bottom waters of ELL, which were low in oxygen. Chlorophyll fluorescence was low throughout, except for the middle to surface waters of KEN and BAC, which had moderate signals. Water temperatures ranged from 24.3 °C to 27.3 °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 < 60 µg L⁻¹, moderate 60-160 µg L⁻¹, high 160-400 µg L⁻¹, extreme > 400 µg L⁻¹