

Swan Canning Estuary Water Quality Monitoring Project

Weekly Water Quality Report

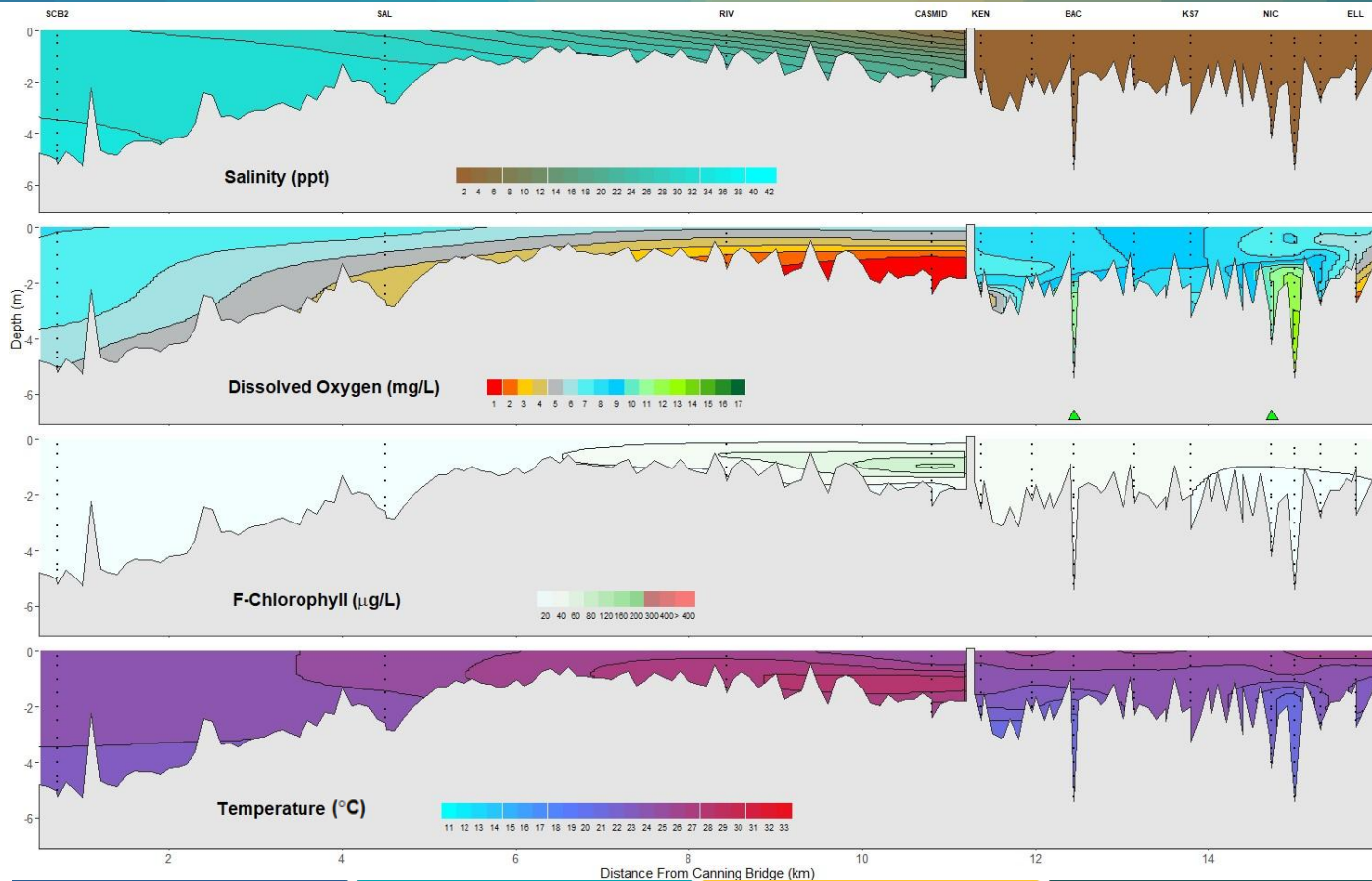
Canning Estuary and Lower Canning River

7th November 2023

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Canning Estuary and Lower Canning River - Water Quality Profiles – 7th November 2023



Date: 7th November 2023

Weather & tide conditions: Conditions were sunny with a predominantly easterly breeze of up to 11.4 knots. The predicted tides at Barrack St were 0.88 m at 12:14 am (high tide) and 0.65 m at 2:45 pm (low 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 SAL and brackish between RIV and CASMID. Surface waters were oxygenated and bottom waters were low in oxygen at SAL, hypoxic at RIV and anoxic at CASMID. Chlorophyll fluorescence was moderate in the surface waters at CASMID. Water temperatures ranged from 22.3 °C to 27.6 °C at the time of sampling.

Lower Canning River (KEN to ELL): The Lower Canning River was fresh. Waters were oxygenated or well oxygenated, except for bottom waters at KEN which were low in oxygen and ELL which were hypoxic. Chlorophyll fluorescence was low and water temperatures ranged from 20.2 °C to 25.3 °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 < 50 µg L⁻¹, moderate 50-150 µg L⁻¹, high 150-400 µg L⁻¹, extreme > 400 µg L⁻¹