

Swan Canning Estuary Water Quality Monitoring Project

1. Swan Weekly Water Quality Report

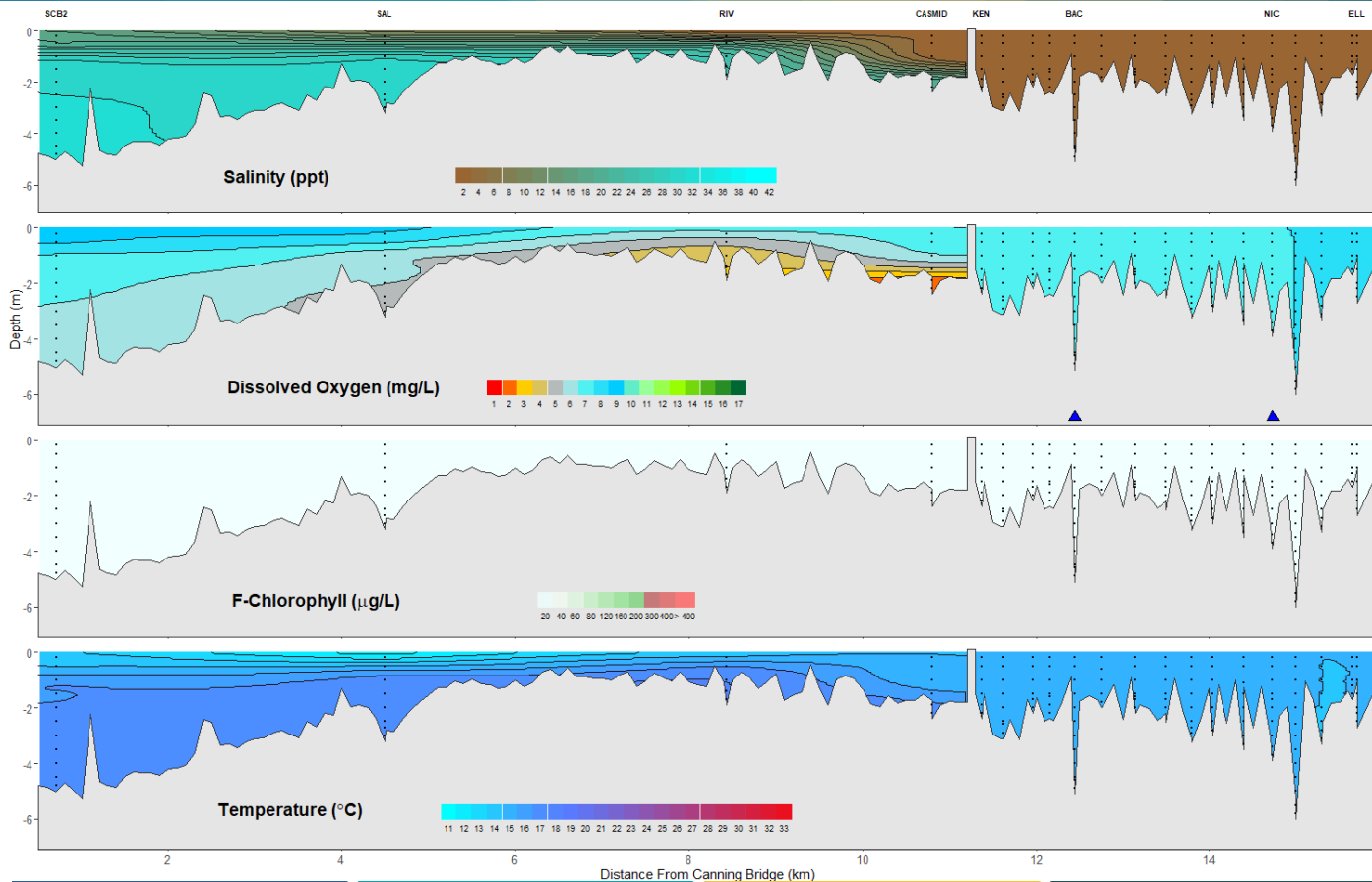
Canning Estuary and Lower Canning River

19 July 2022

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Canning Estuary and Lower Canning River - Water Quality Profiles – 19 July 2022



Date: 19 July 2022

Weather & tide conditions: Conditions were clear with predominantly easterly breeze of up to 3.1 knots. The predicted tides at Barrack St were 1.01 m at 11:43 am (high tide) and 0.84 m at 8:41 pm (low tide). Perth recorded 33.6 mm of rainfall in the week prior to sampling (Bureau of Meteorology).

Oxygenation: The Bacon St and Nicholson Rd oxygenation plants were both operable but not triggered in the 24 hours prior to sampling.

Canning Estuary (SCB2 to CASMID): Waters were brackish over saline from SCB2 to SAL, brackish at RIV and fresh over brackish at CASMID. Waters were oxygenated or well oxygenated throughout, except for bottom waters at RIV and CASMID, which were low in oxygen and hypoxic respectively. Chlorophyll fluorescence was low and water temperatures ranged from 11.9 to 17.1 °C at the time of sampling.

Lower Canning River (KEN to ELL): The Lower Canning River was fresh and waters were well oxygenated throughout. Chlorophyll fluorescence was low and water temperatures ranged from 14 to 14.5 °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 (no/low flow): low < 50 µg L⁻¹, moderate 50-150 µg L⁻¹, high 150-400 µg L⁻¹, extreme > 400 µg L⁻¹