

Swan Canning Estuary Water Quality Monitoring Project

Weekly Water Quality Report

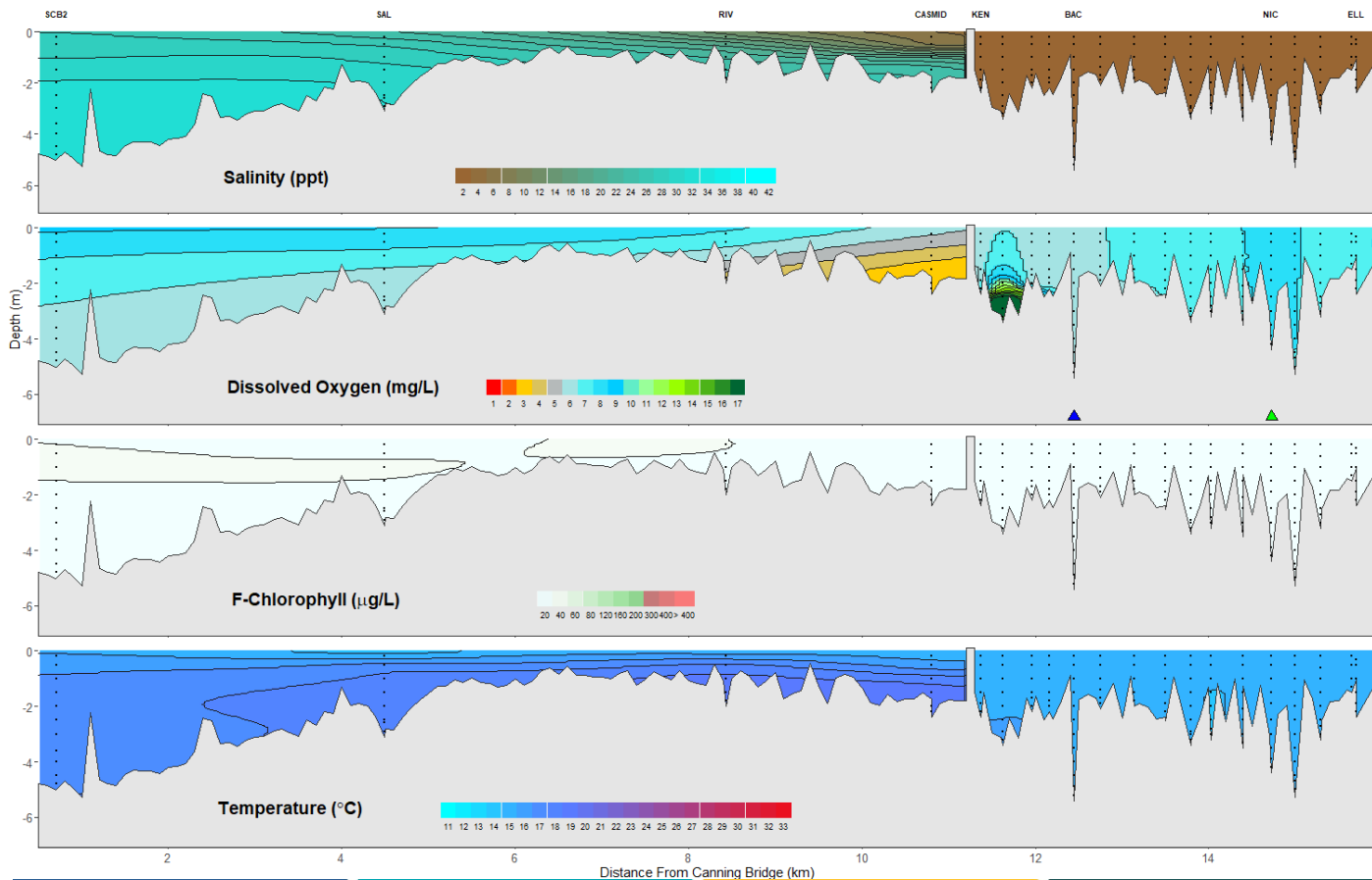
Canning Estuary and Lower Canning River

28 June 2022

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Canning Estuary and Lower Canning River - Water Quality Profiles – 28 June 2022



Date: 28 June 2022

Weather & tide conditions: Conditions were predominantly clear with a slight easterly breeze of up to 3.4 knots. The predicted tides at Barrack St were 1.29 m at 10:11 am (high tide) and 0.75 m at 9:06 pm (low tide). Perth recorded 1.6 mm of rainfall in the week prior to sampling (Bureau of Meteorology).

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

Canning Estuary (SCB2 to CASMID): Waters were saline from SCB2 to SAL and brackish from RIV to CASMID. Waters were oxygenated or well oxygenated throughout, except for bottom waters at RIV and CASMID which were low in oxygen. Chlorophyll fluorescence was low and water temperatures ranged from 14.5 to 18.6 °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. Bottom waters 500m upstream of KEN were supersaturated with oxygen due to the influence of the Bacon street oxygenation plant and restricted water mixing linked to a recent overtopping event and slightly more saline bottom waters in this area. Water temperatures ranged from 14 to 15.7 °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 (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