

Swan Canning Estuary Water Quality Monitoring Project

Weekly Water Quality Report

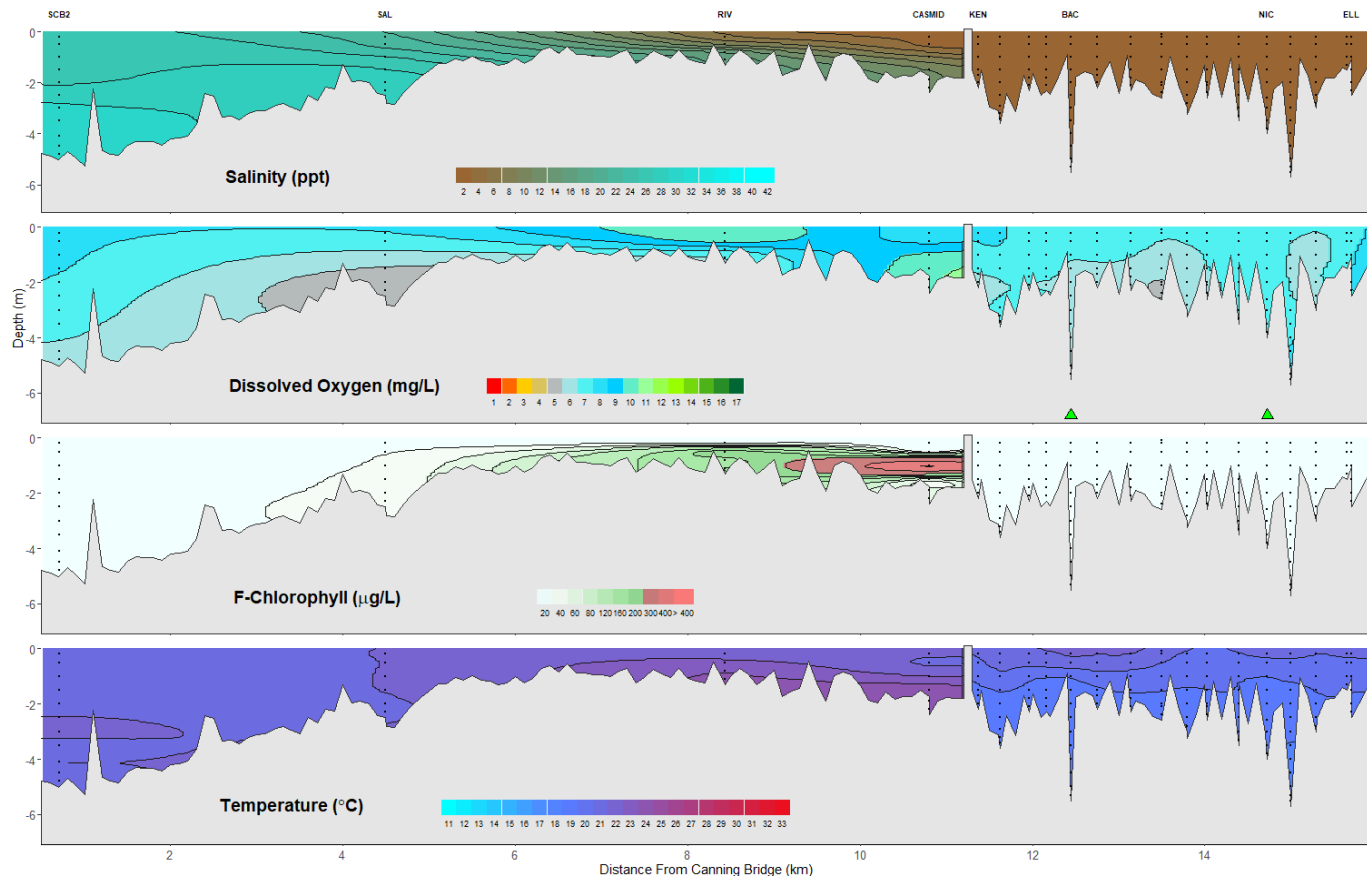
Canning Estuary and Lower Canning River

22nd November 2022

Prepared by

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Canning Estuary and Lower Canning River - Water Quality Profiles – 22nd November 2022



Date: 22nd November 2022

Weather & tide conditions: Conditions were cloudy with a predominantly easterly breeze of up to 10 knots. The predicted tides at Barrack St were 0.6 m at 6:31 am (low tide) and 1.09 m at 1:00 pm (high tide). Perth recorded 23.2 mm of rainfall in the week prior to sampling (Bureau of Meteorology).

Oxygenation: The Bacon St and Nicholson Rd oxygenation plants were both operating in the 24 hours prior to sampling.

Canning Estuary (SCB2 to CASMID): Waters were saline at SCB2, brackish over saline at SAL, brackish at RIV, and fresh over brackish at CASMID. Waters were oxygenated or well oxygenated throughout all sites. Chlorophyll fluorescence was low at the downstream sites SCB2 and SAL, while RIV recorded high concentrations and CASMID presented extreme concentrations mid-column. Water temperatures ranged from 20.4 to 23.9°C at the time of sampling.

Lower Canning River (KEN to ELL): Waters were fresh and oxygenated or well oxygenated throughout. Chlorophyll fluorescence was low throughout, and water temperatures ranged from 18.2 to 21.1 °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