



Swan Canning Estuary Water Quality Monitoring Project

Weekly Water Quality Report

Canning Estuary and Lower Canning River

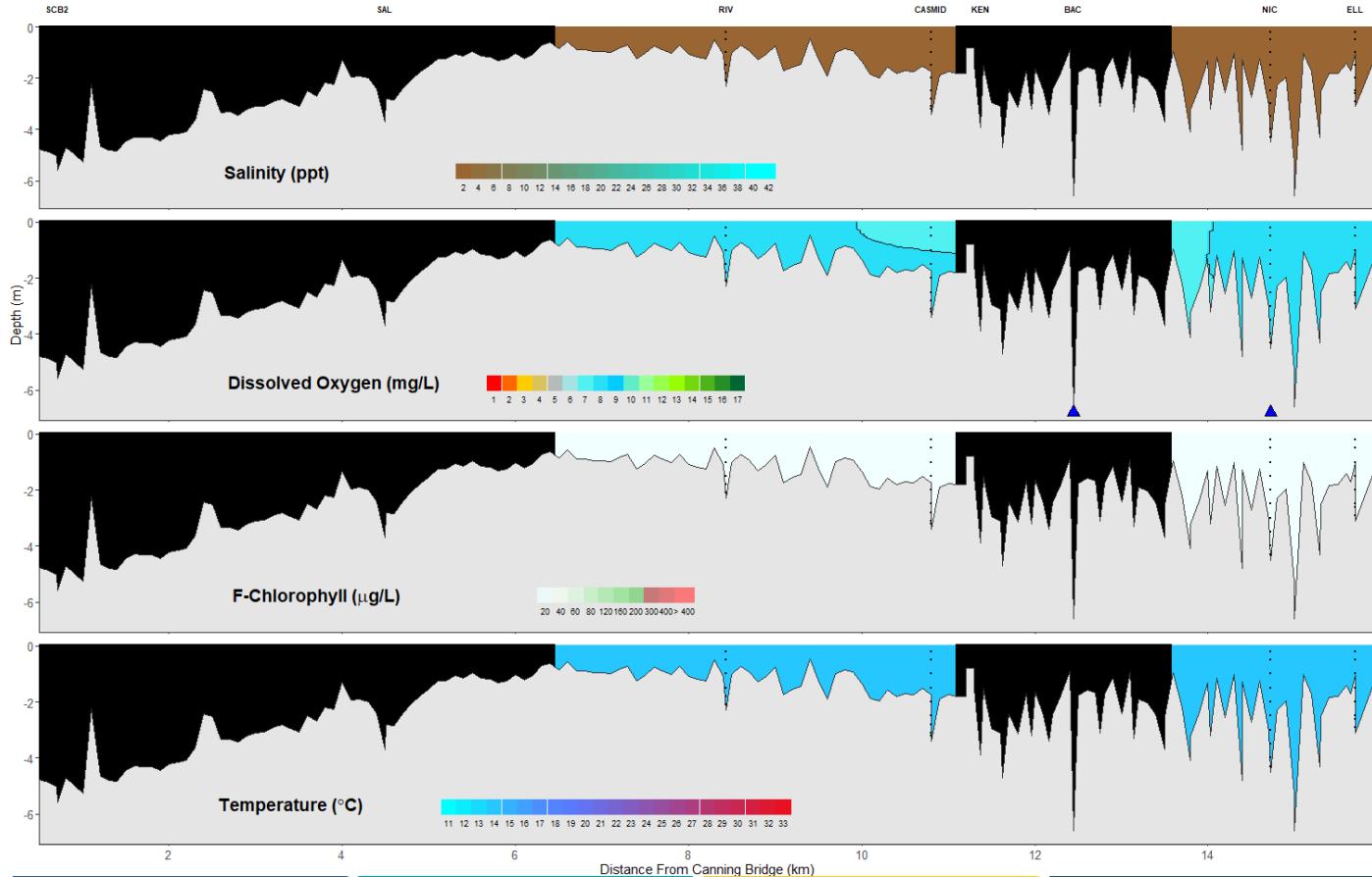
2 August 2022

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Canning Estuary and Lower Canning River - Water Quality Profiles – 2 August 2022





Date: 2 August 2022

Note: Technical issues with equipment has meant data is only available for RIV, CASMID, NIC and ELL.

Weather & tide conditions: Conditions were partly cloudy with westerly breeze of up to 15 knots. The predicted tides at Barrack St were 0.87 m at 5:13 am (1st low tide), 1.06 m at 12:56 pm (high tide) and 0.79 m at 8:38 pm (2nd low tide). Perth recorded 60.2 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): Data are missing for waters between SCB2 and SAL but the area is likely to have been brackish over saline. Waters between RIV and CASMID were fresh and well oxygenated throughout. Chlorophyll fluorescence between RIV and CASMID was low and water temperatures ranged from 13.5 to 13.9 °C at the time of sampling.

Lower Canning River (KEN to ELL): Due to the lack of marine tidal influence and current flow rates in the Lower Canning, waters between KEN and NIC were likely to have been fresh and well oxygenated. Waters between NIC and ELL were fresh and well oxygenated throughout. Chlorophyll fluorescence was low between NIC and ELL and water temperatures ranged from 13.8 to 13.9 °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

Recommended reference: Department of Biodiversity, Conservation and Attractions 2022. *Swan Canning Estuary water quality profile report, Canning Estuary and Lower Canning River 2 August 2022. Rivers and Estuaries Science* (<https://www.dpaw.wa.gov.au/management/swan-canning-riverpark>)