



Swan Canning Estuary Water Quality Monitoring Project

Weekly Water Quality Report

Canning Estuary and Lower Canning River

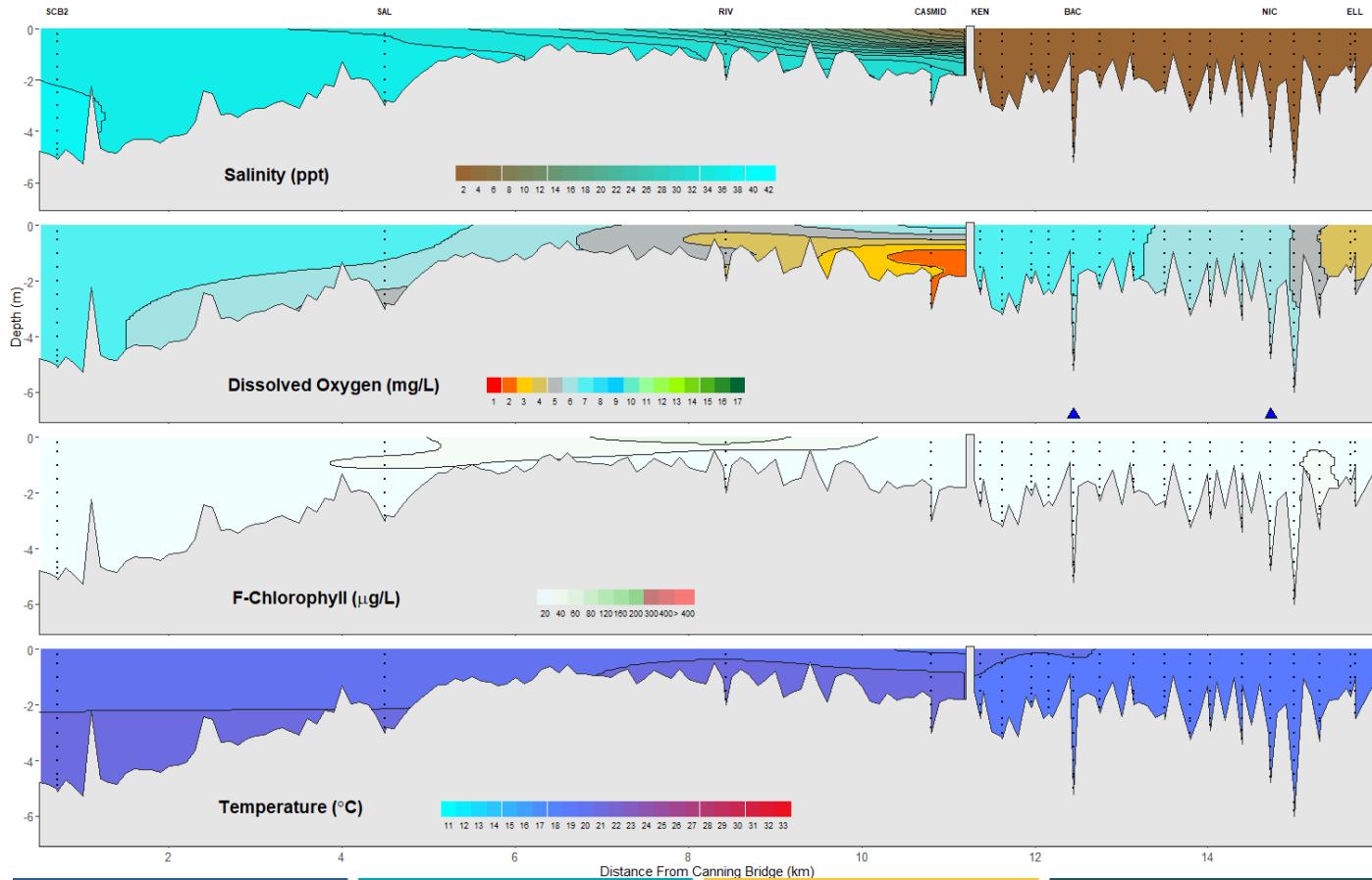
27 April 2022

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Canning Estuary and Lower Canning River - Water Quality Profiles – 27 April 2022





Date: 27 April 2022

NB: Sampling delayed due to public holiday (25 April 2022).

Weather & tide conditions: Conditions were partly cloudy with a predominantly southerly breeze of up to 4 knots. The predicted tides at Barrack St were 0.77 m at 4:26 am (low tide), 0.99 m at 11:14 am (high tide) and 0.92 m at 4:20 pm (2nd low tide). Perth recorded 25.6 mm of rainfall in the week prior to sampling (Bureau of Meteorology).

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

Canning Estuary (SCB2 to CASMID): The Canning Estuary was hypersaline at SCB2, saline from SAL to RIV and brackish over saline at CASMID. Surface waters were oxygenated or well oxygenated at SCB2, SAL and CASMID and low in oxygen at RIV. Bottom water were low in oxygen at RIV and hypoxic at CASMID. Chlorophyll fluorescence was low throughout this zone. Water temperature ranged from 19.1 to 20.9 °C.

Lower Canning River (KEN to ELL): The Lower Canning River was fresh. Waters were oxygenated or well oxygenated from KEN to PAC and low in oxygen from MACD50 to ELL. Chlorophyll fluorescence was low throughout this zone. Water temperature ranged from 18.2 to 19.0 °C.

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 (summer): 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 27 April 2022. Rivers and Estuaries Science* (<https://www.dpaw.wa.gov.au/management/swan-canning-riverpark>)