



Swan Canning Estuary Water Quality Monitoring Project

Weekly Water Quality Report

Canning Estuary and Lower Canning River

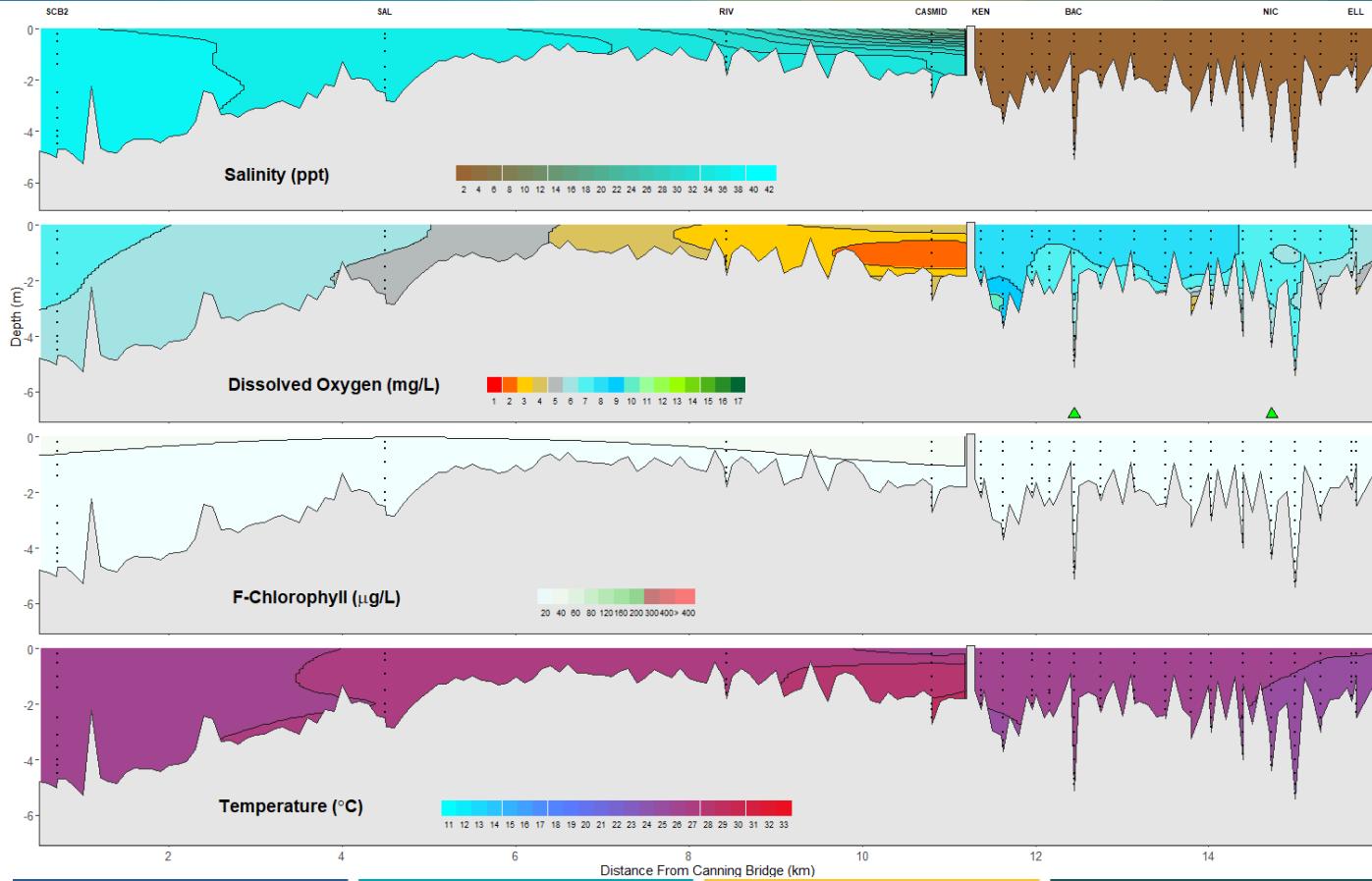
15 March 2022

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Canning Estuary and Lower Canning River - Water Quality Profiles – 15 March 2022





Date: 15 March 2022

Weather & tide conditions: Conditions were cloudy with a westerly breeze of up to 6 knots. The predicted tides at Barrack St were 0.62 m at 6:38 am (low tide) and 1.12 m at 9:32 pm (high tide). Perth recorded no rainfall in the week prior to sampling (Bureau of Meteorology).

Oxygenation: The Bacon St and Nicholson Rd oxygenation plants were both triggered to provide oxygen during the 24 hours prior to sampling.

Canning Estuary (SCB2 to CASMID): The Canning Estuary was hypersaline between SCB2 and SAL, saline at RIV and brackish over saline at CASMID. Surface and bottom waters were oxygenated or well oxygenated between SCB2 and SAL, and were low in oxygen at RIV and hypoxic at CASMID. Chlorophyll fluorescence was low throughout this zone. Water temperature ranged from 25.7 to 28.1 °C.

Lower Canning River (KEN to ELL): The Lower Canning River was fresh. Surface waters were oxygenated or well oxygenated throughout and bottom waters were low in oxygen at PAC and hypoxic at MASD50. Chlorophyll fluorescence was low throughout. Water temperature ranged from 24 to 26 °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 2021. *Swan Canning Estuary water quality profile report, Canning Estuary and Lower Canning River 15 March 2022. Rivers and Estuaries Science* (<https://www.dpaw.wa.gov.au/management/swan-canning-riverpark>)