Swan Canning Estuary Water Quality Monitoring Project

Weekly Water Quality Report

Canning Estuary and Lower Canning River

10 May 2022

Prepared by

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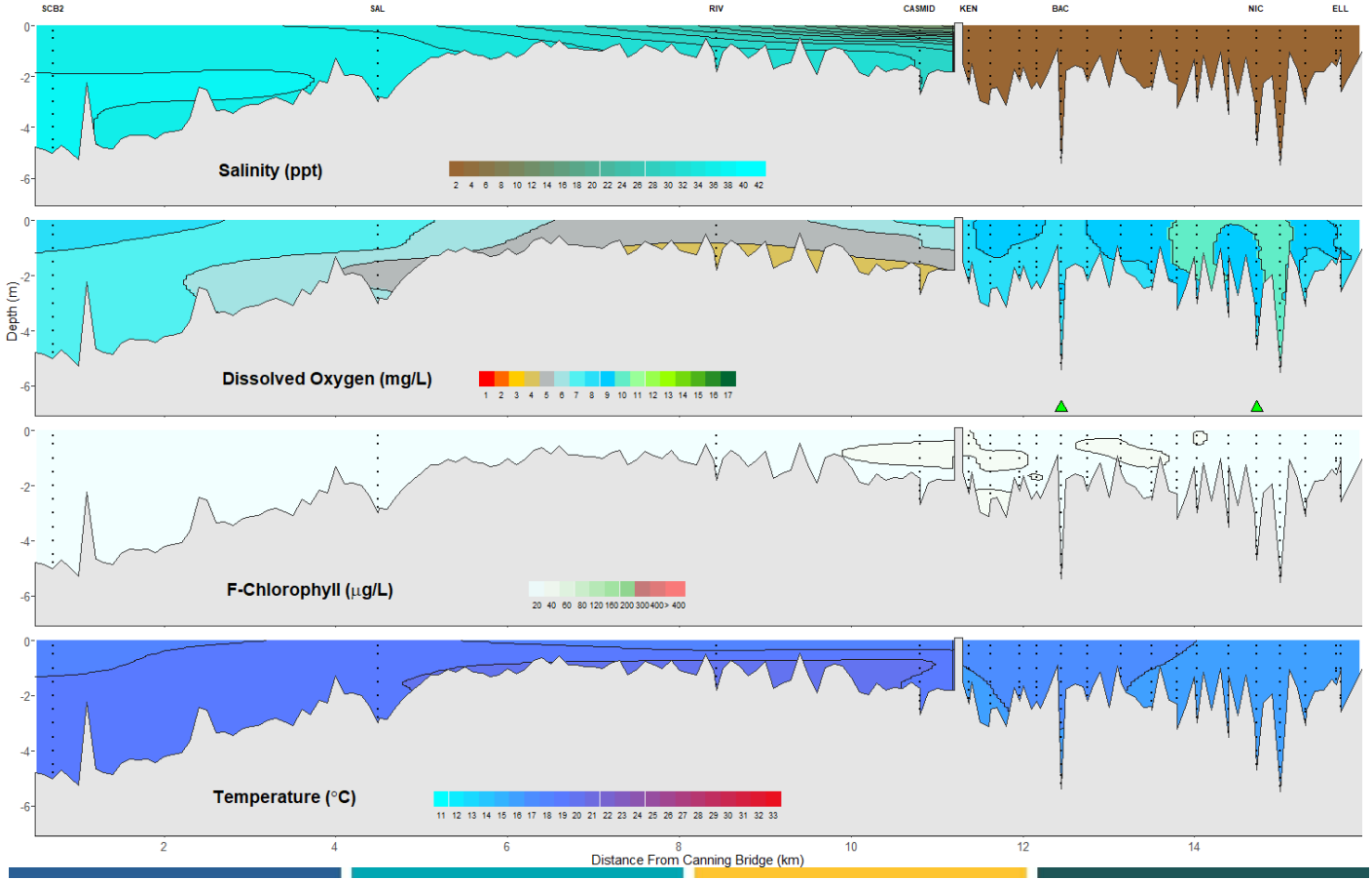
Canning Estuary and Lower Canning River - Water Quality Profiles – 10 May 2022



Date: 10 May 2022

Weather & tide conditions: Conditions were clear with a predominantly south-easterly breeze of up to 8 knots. The predicted tides at Barrack St were 0.76 m at 3:08 am (low tide) and 1.09 m at 5:00 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 in the 24 hours prior to sampling.

Canning Estuary (SCB2 to CASMID): Water was saline over hypersaline between SCB2 and SAL, saline at RIV and brackish over saline at CASMID. Surface waters were well oxygenated or oxygenated and bottom waters were low in oxygen from RIV to CASMID. Chlorophyll fluorescence was low throughout this zone. Water temperature ranged from 17.6 to 19.9 °C.

Lower Canning River (KEN to ELL): The Lower Canning River was fresh and waters were well oxygenated throughout. Chlorophyll fluorescence was low throughout this zone and water temperature ranged from 15.3 to 16.5 °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 10 May 2022.* Rivers and Estuaries Science (https://www.dpaw.wa.gov.au/management/swan-canning-riverpark)