

Swan Canning Estuary Water Quality Monitoring Project

Weekly Water Quality Report

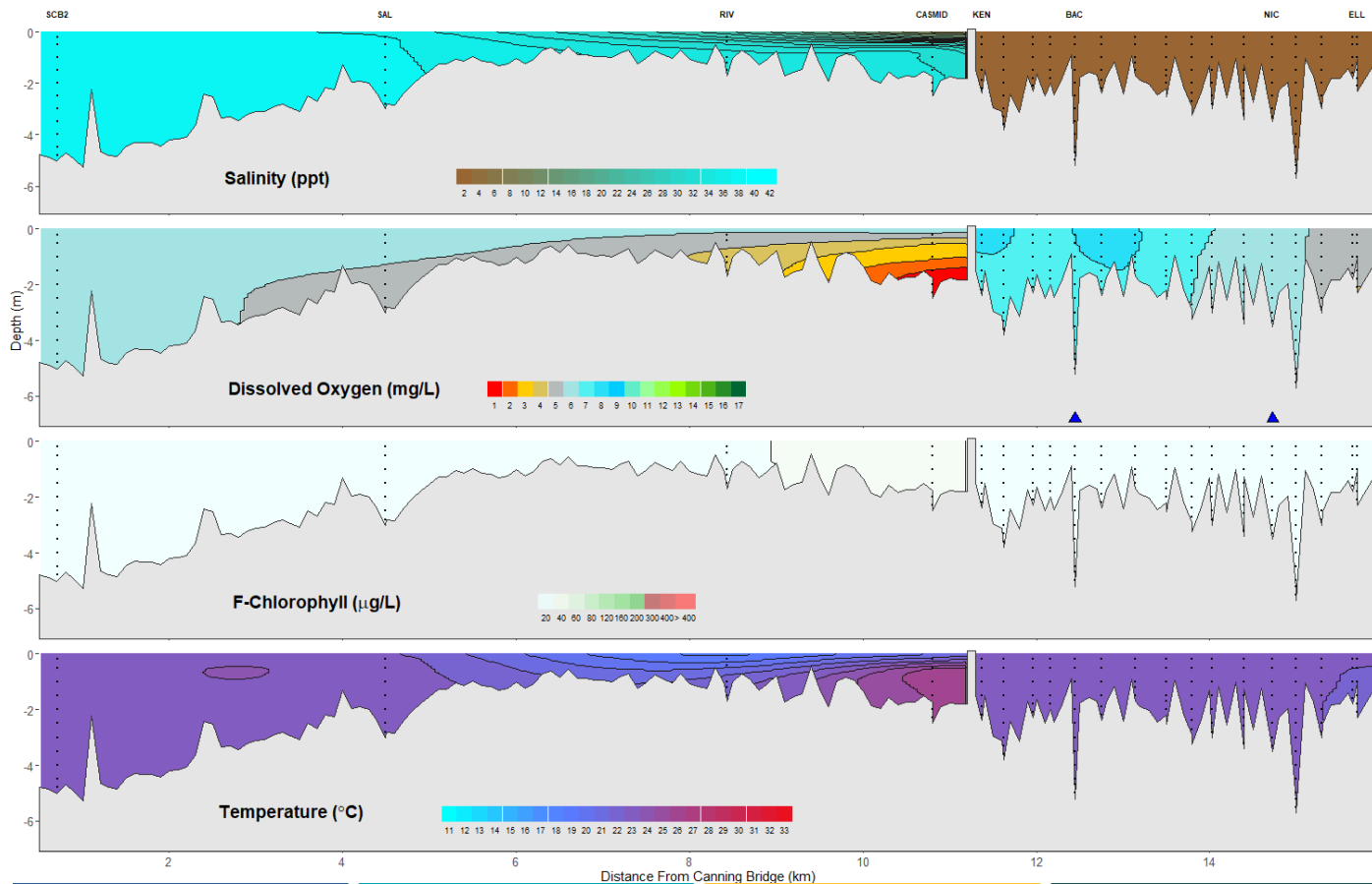
Canning Estuary and Lower Canning River

5 April 2022

Prepared by

Rivers and Estuaries Science
Biodiversity and Conservation Science
Department of Biodiversity, Conservation and Attractions

Canning Estuary and Lower Canning River - Water Quality Profiles – 5 April 2022



Date: 5 April 2022

Weather & tide conditions: Conditions were clear with an easterly breeze of up to 10 knots. The predicted tides at Barrack St were 0.74 m at 4:19 am (low tide) and 1.14 m at 1:19 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 not triggered to provide oxygen in the 24 hours prior to sampling.

Canning Estuary (SCB2 to CASMID): The Canning Estuary was hypersaline from SCB2 to SAL and saline between RIV and CASMID. Surface waters were oxygenated from SCB2 to RIV and low in oxygen at CASMID. Bottom waters were low in oxygen at RIV and anoxic at CASMID. Chlorophyll fluorescence was low throughout this zone. Water temperature ranged from 18.6 to 25.5 °C.

Lower Canning River (KEN to ELL): The Lower Canning River was fresh, waters were oxygenated or well oxygenated except bottom waters at PAC which was low in oxygen. Chlorophyll fluorescence was low throughout this zone. Water temperature ranged from 22.6 to 23.0 °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