

Swan Canning Estuary Water Quality Monitoring Project

Weekly Water Quality Report

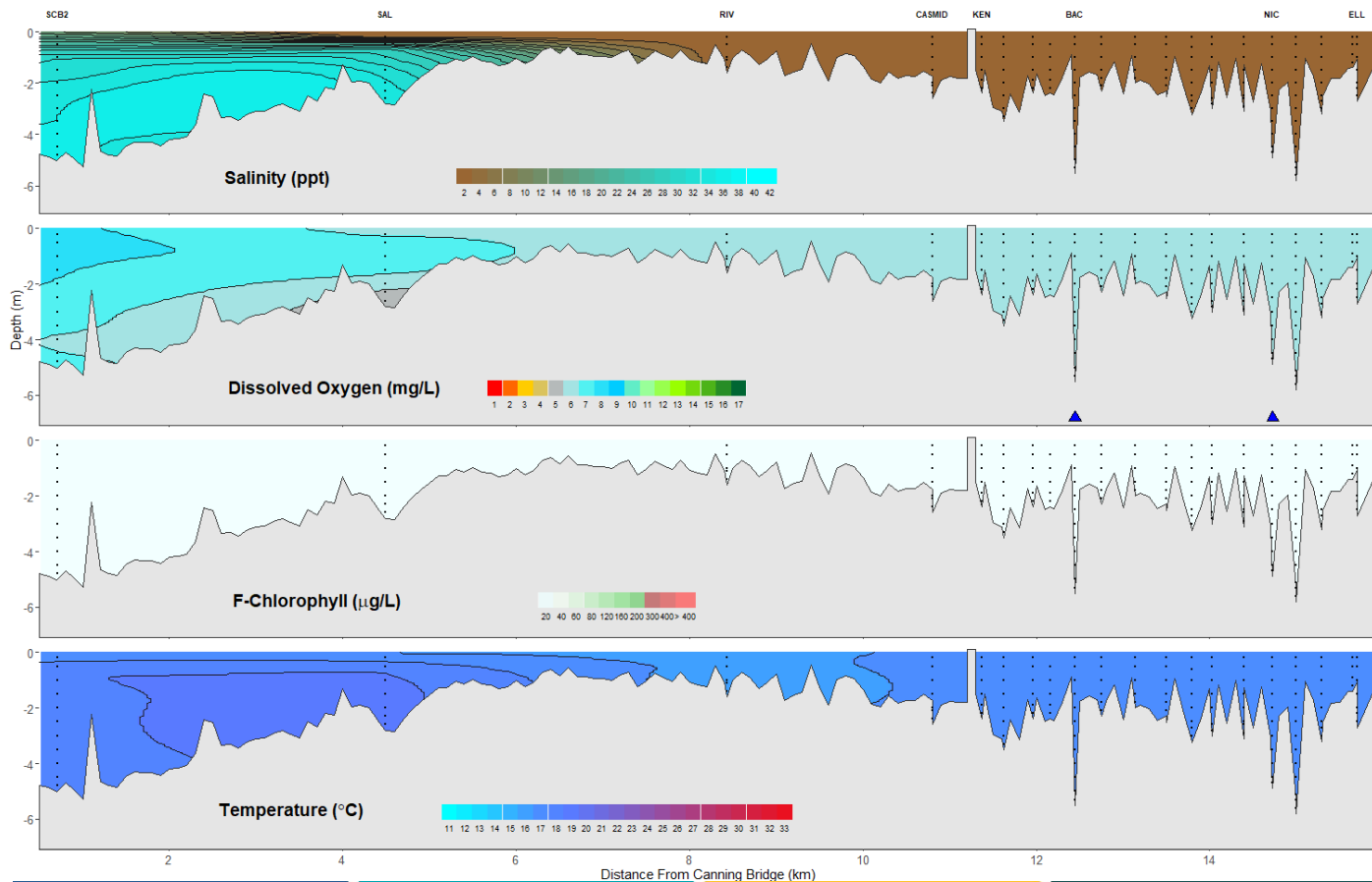
Canning Estuary and Lower Canning River

25 May 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 – 25 May 2022



Date: 25 May 2022

NB: Sampling delayed due to inclement weather on Monday (24 May 2022).

Weather & tide conditions: Conditions were clear with a light easterly breeze of up to 3 knots. The predicted tides at Barrack St were 0.85 m at 2:46 am (low tide) and 1.07 m at 10:11 am (high tide). Perth recorded 62.4 mm of rainfall in the week prior to sampling (Bureau of Meteorology).

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

Canning Estuary (SCB2 to CASMID): Waters were brackish over saline at SCB2, fresh over saline at SAL and fresh from RIV to CASMID. Surface and bottom waters were oxygenated or well oxygenated throughout and chlorophyll fluorescence remained low throughout this zone. Water temperature ranged from 15.5 to 18.2 °C at the time of sampling.

Lower Canning River (KEN to ELL): The Lower Canning River was fresh and waters were oxygenated or well oxygenated throughout. Chlorophyll fluorescence was low throughout this zone and water temperatures ranged from 16.1 to 16.7 °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 (summer): low < 50 µg L⁻¹, moderate 50-150 µg L⁻¹, high 150-400 µg L⁻¹, extreme > 400 µg L⁻¹