

Swan Canning Estuary Water Quality Monitoring Project

Weekly Water Quality Report

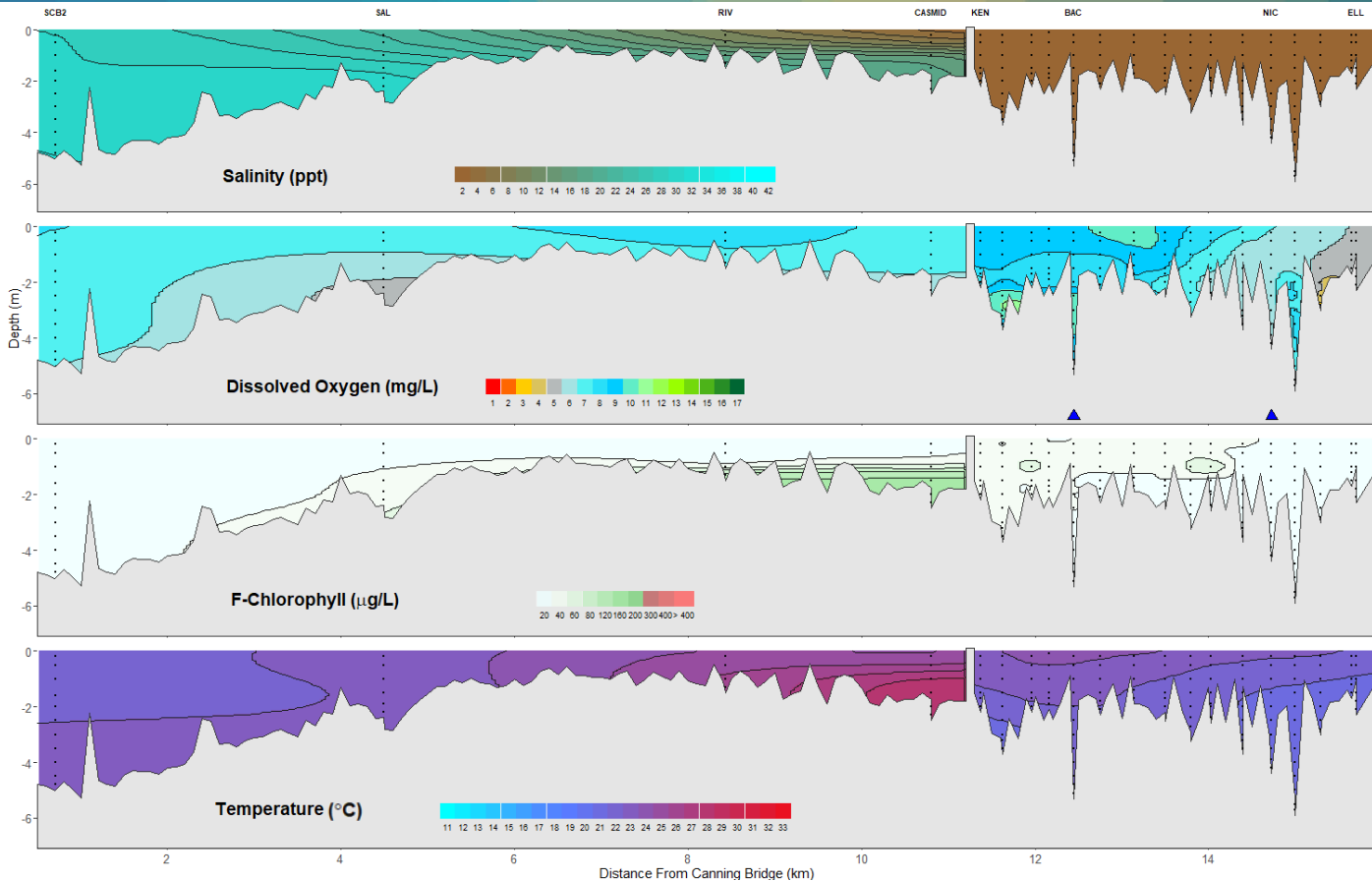
Canning Estuary and Lower Canning River

29th November 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 - 29th November 2022



Date: 29th November 2022

Weather & tide conditions: Conditions were sunny with a predominantly easterly breeze of up to 9 knots. The predicted tides at Barrack St were 1.06 m at 1:30 am (high tide) and 0.52 m at 13:15 (low 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 operable but not triggered to provide oxygen in the 24 hours prior to sampling.

Canning Estuary (SCB2 to CASMID): Waters were saline at SCB2, brackish over saline at SAL, brackish at RIV, and fresh over brackish at CASMID. Waters were oxygenated or well oxygenated throughout. Chlorophyll fluorescence was low throughout, except at the bottom waters of RIV and CASMID, where it was moderate indicating higher algal activity. Water temperatures ranged from 21.7 to 27.7°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, and water temperatures ranged from 20.3 to 23.6 °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 (mod/high flow): low < 60 µg L⁻¹, moderate 60-160 µg L⁻¹, high 160-400 µg L⁻¹, extreme > 400 µg L⁻¹