



Department of Biodiversity,
Conservation and Attractions



Biodiversity and
Conservation Science

*We're working for
Western Australia.*

Swan Canning Estuary Water Quality Monitoring Project

Weekly Water Quality Report

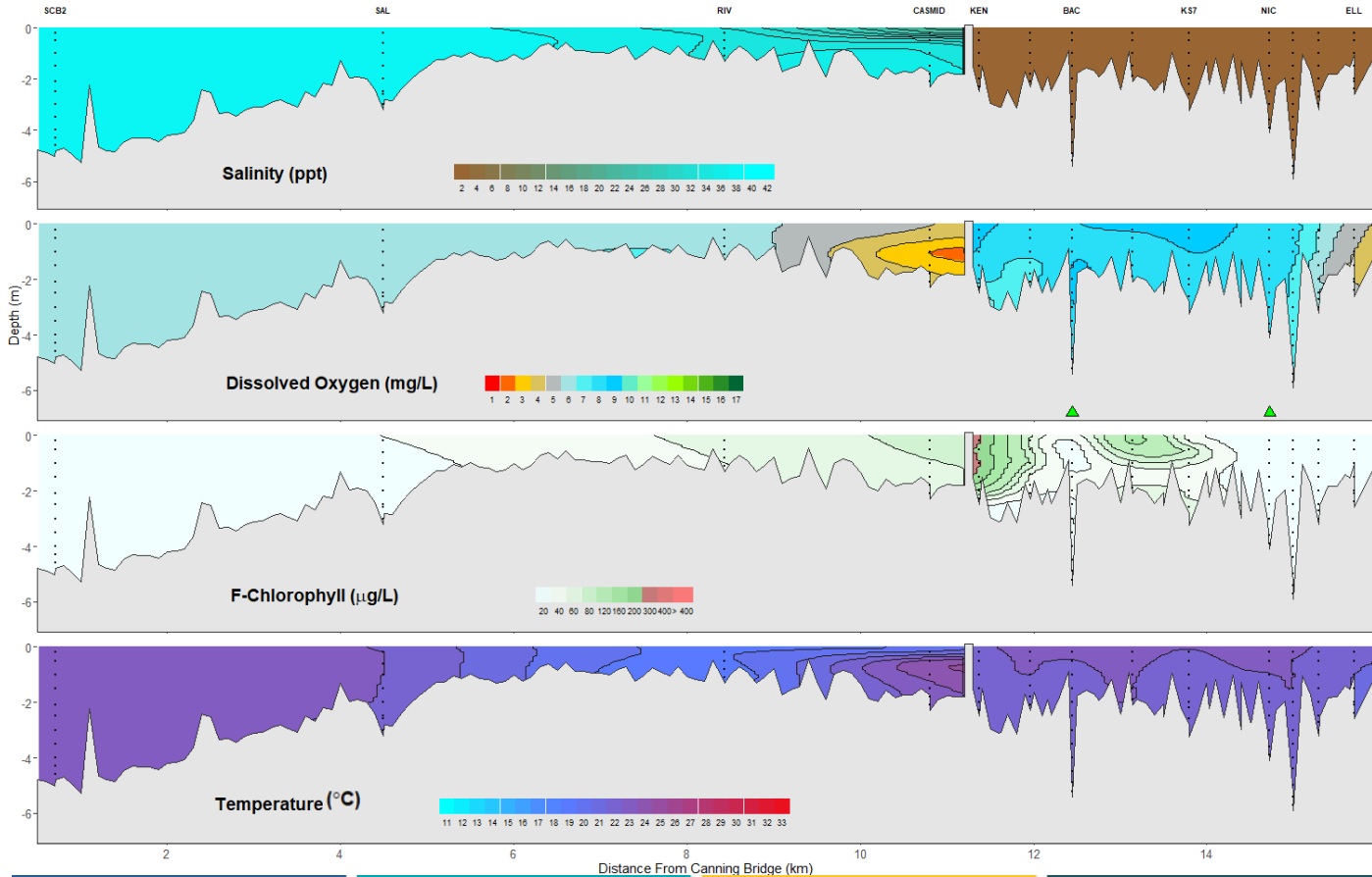
Canning Estuary and Lower Canning River

28th March 2023

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 - 28th March 2023



Date: 28th March 2023

Weather & tide conditions: Conditions were sunny with and a predominantly easterly breeze of up to 12 knots. The predicted tides at Barrack St were 0.62 m at 4:14 am (low tide) and 1.13 m at 15:01 pm (high tide). Perth recorded 1.4 mm of rainfall in the week prior to sampling (Bureau of Meteorology).

Oxygenation: The Bacon St and Nicholson Rd oxygenation plants were operable and provided oxygen in the 24 hours prior to sampling.

Canning Estuary (SCB2 to CASMID): Waters were hypersaline between SCB2 and SAL, saline at RIV and brackish over saline at CASMID. Waters were oxygenated to well oxygenated between SCB2 and RIV, and low in oxygen at CASMID. Chlorophyll fluorescence was low, except for high signals detected in the surface waters of CASMID. Water temperatures ranged from 18.5 °C to 23.5 °C at the time of sampling.

Lower Canning River (KEN to ELL): The Lower Canning River was fresh, and waters were oxygenated to well oxygenated between KEN and NIC, and low in oxygen to oxygenated at ELL. Chlorophyll fluorescence was low at BAC, NIC, and ELL, moderate in the surface waters of BACD500, PO2 and KS7, and moderate to high throughout the column of KEN. Water temperatures ranged from 20.8 °C to 22.7 °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 (low flow): low < 50 µg L⁻¹, moderate 50-150 µg L⁻¹, high 150-400 µg L⁻¹, extreme > 400 µg L⁻¹