



Department of Biodiversity,
Conservation and Attractions



Biodiversity and
Conservation Science

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Swan Canning Estuary Water Quality Monitoring Project

Weekly Water Quality Report

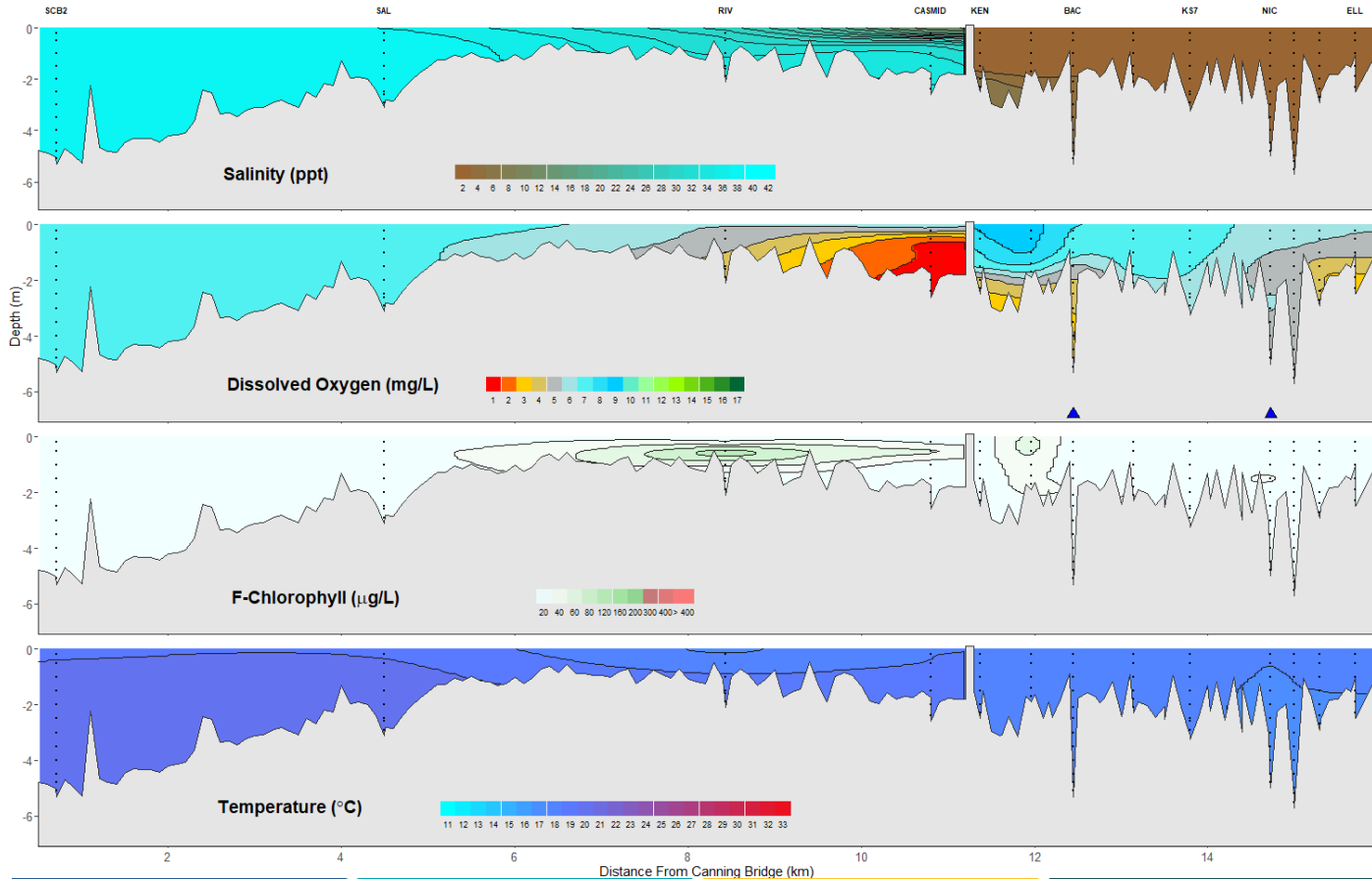
Canning Estuary and Lower Canning River

28th May 2024

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 May 2024



Date: 28th May 2024

Weather & tide conditions: Conditions were overcast with occasional showers and a light variable breeze up to 3.8 knots. The predicted tides at Barrack St were 0.69 m at 12:25 am (low tide) and 1.29 m at 1:47 pm (high tide). Perth recorded 17.4 mm of rainfall in the week prior to sampling (Bureau of Meteorology).

Oxygenation: The Bacon St. plant and the Nicholson Rd. were operable this week but not triggered to provide oxygen in the 24 hours prior to sampling.

Canning Estuary (SCB2 to CASMID): The Canning Estuary was hypersaline at SCB2 and SAL, saline at RIV and brackish over saline at CASMID. SCB2 and SAL were well oxygenated throughout whereas the bottom waters of RIV and CASMID were low in oxygen and anoxic, respectively. Chlorophyll fluorescence was moderate in sub-surface waters of RIV and low elsewhere. Water temperatures ranged from 17.1 to 19.3 °C at the time of sampling.

Lower Canning River (KEN to ELL): The Lower Canning River was fresh, except for at the bottom of KEN, where waters were brackish due to a high tide saltwater inundation at the weir. Waters were low in oxygen at the bottom of KEN, BAC, PAC and ELL, and oxygenated to well oxygenated elsewhere. Chlorophyll fluorescence was low and water temperatures ranged from 16.2 to 17.9 °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