



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

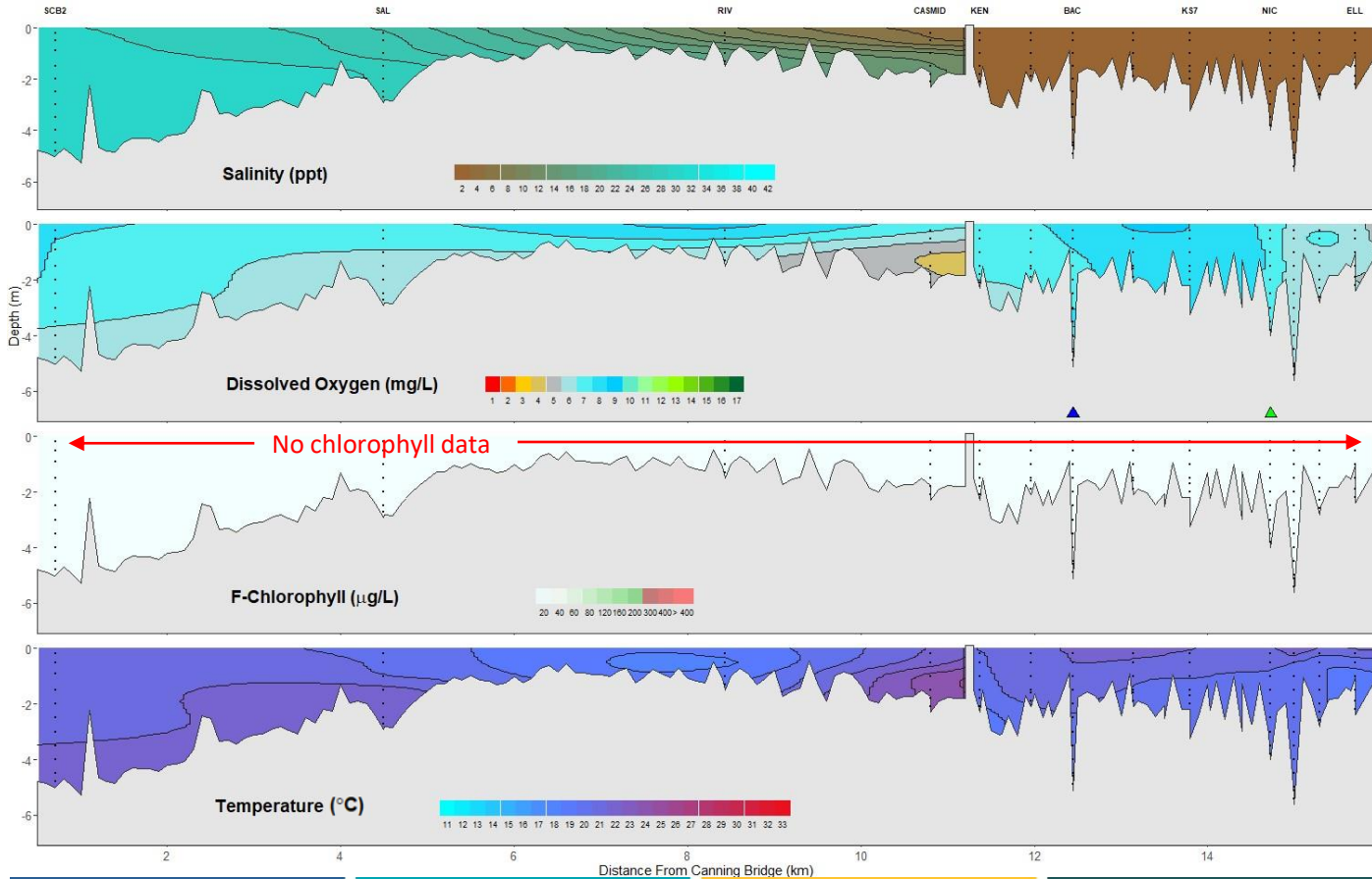
Canning Estuary and Lower Canning River

24th October 2023

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Canning Estuary and Lower Canning River - Water Quality Profiles – 24th October 2023



Date: 24th October 2023

Weather & tide conditions: Conditions were mostly clear with scattered clouds and a variable easterly breeze of up to 17.4 knots. The predicted tides at Barrack St were 0.94 m at 6:36 am (high tide) and 0.59 m at 4:08 pm (low tide). Perth recorded no rainfall in the week prior to sampling (Bureau of Meteorology).

Oxygenation: The Bacon St oxygenation plant was not triggered to provide oxygen and the Nicholson Rd oxygenation plant was triggered to provide oxygen in the 24 hours prior to sampling.

Canning Estuary (SCB2 to CASMID): The Canning Estuary was saline at SCB2, brackish over saline at SAL, brackish at RIV and fresh over brackish at CASMID. Waters were oxygenated or well oxygenated, except for bottom waters at CASMID which were low in oxygen. Water temperatures ranged from 17.8 °C to 23.4 °C at the time of sampling.

Lower Canning River (KEN to ELL): The Lower Canning River was fresh. Waters were oxygenated or well oxygenated, except for bottom waters at ELL which were low in oxygen. Water temperatures ranged from 18.6 °C to 21.4 °C at the time of sampling.

NB: Fluorescence data not available due to sensor issue.

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 < 50 µg L⁻¹, moderate 50-150 µg L⁻¹, high 150-400 µg L⁻¹, extreme > 400 µg L⁻¹