



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

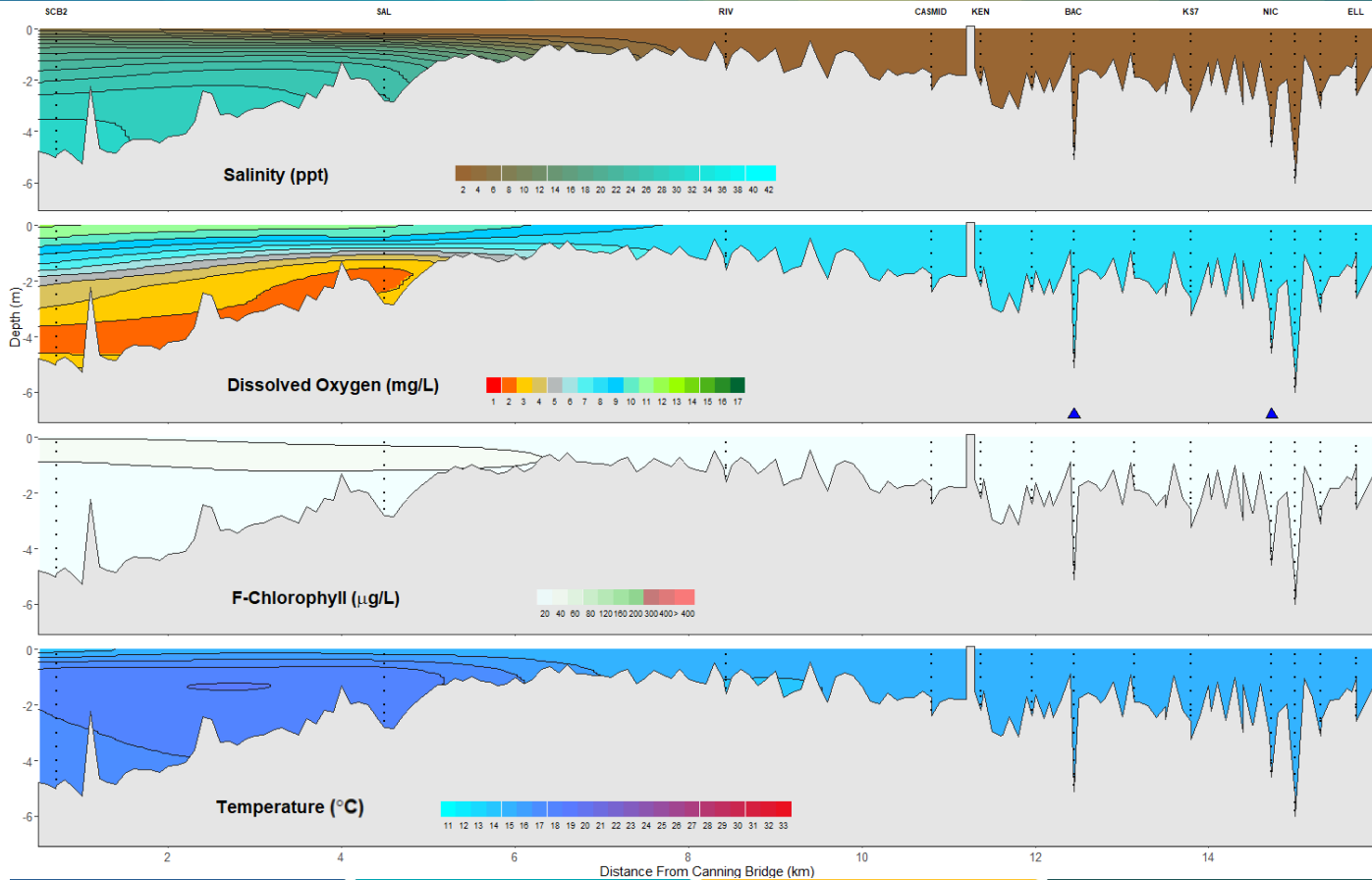
Canning Estuary and Lower Canning River

22nd August 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 – 22nd August 2023



Date: 22nd August 2023

Weather & tide conditions: Conditions were overcast with a variable breeze of up to 1.6 knots. The predicted tides at Barrack St were 0.98 m at 2:14 am (high tide), 0.83 m at 9:23 am (low tide), 0.84 m at 12:36 pm (2nd high tide) and 0.75 m at 6:48 pm (2nd low tide). Perth recorded 40.2 mm of 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): The Canning Estuary was brackish over saline at SCB2, brackish at SAL and fresh between RIV and CASMID. Waters were oxygenated or well oxygenated, except bottom waters at SCB2 and SAL which were low in oxygen or hypoxic. Chlorophyll fluorescence was low and water temperatures ranged from 13.8 °C to 17.6 °C at the time of sampling.

Lower Canning River (KEN to ELL): The Lower Canning River was fresh and waters were well oxygenated. Chlorophyll fluorescence was low and water temperatures ranged from 14.1 °C to 14.8 °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 < 50 µg L⁻¹, moderate 50-150 µg L⁻¹, high 150-400 µg L⁻¹, extreme > 400 µg L⁻¹