



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

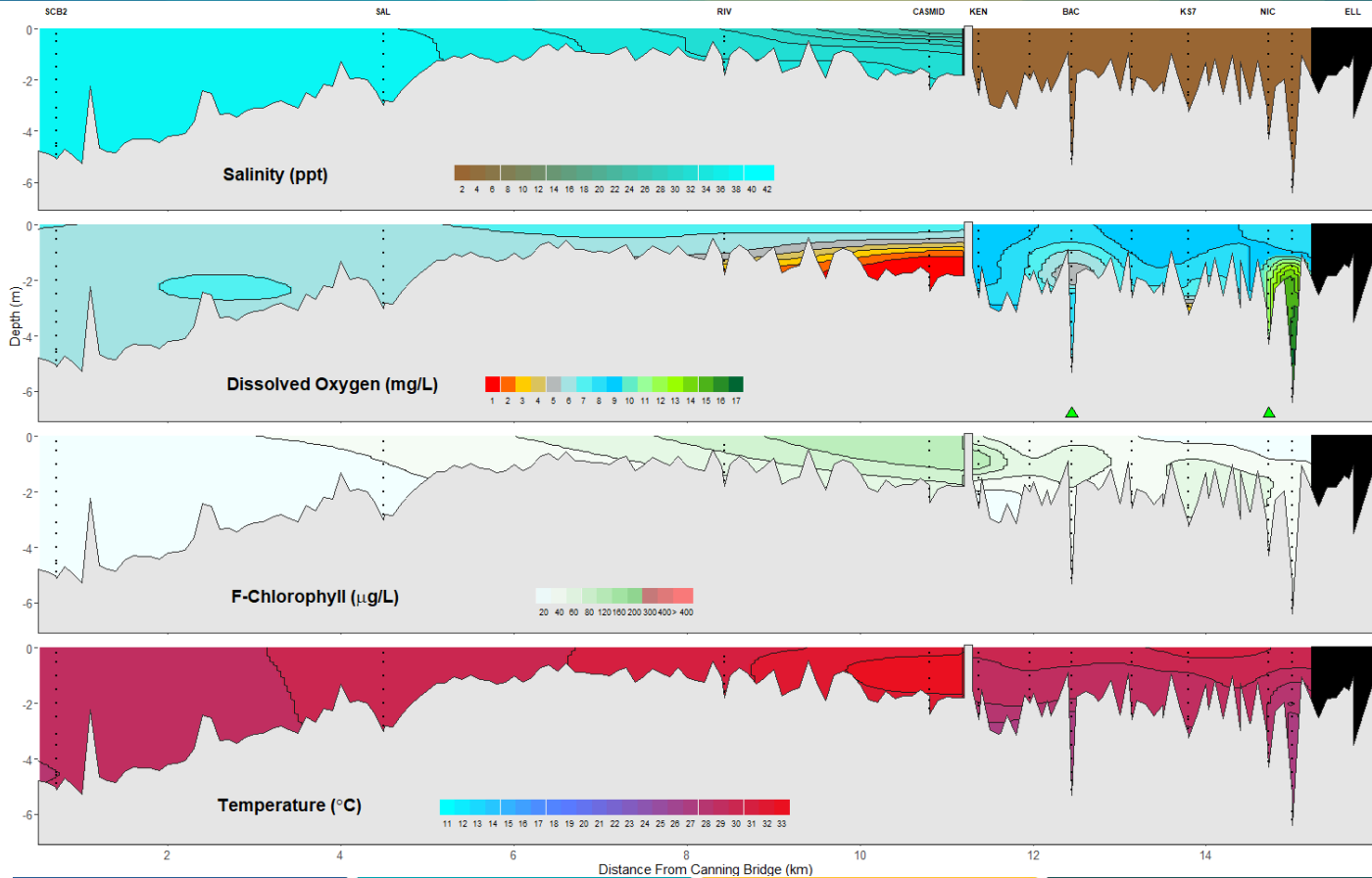
Canning Estuary and Lower Canning River

16th January 2024

Prepared by

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Canning Estuary and Lower Canning River - Water Quality Profiles – 16th January 2024



Date: 16th January 2024

Weather & tide conditions: Conditions were sunny with a south-easterly breeze of up to 8 knots. The predicted tides at Barrack St were 0.65 m at 9:59 am (low tide) and 0.89 m at 10:48 pm (high tide). Perth recorded 1.8 mm of rainfall in the week prior to sampling (Bureau of Meteorology).

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

Canning Estuary (SCB2 to CASMID): The Canning Estuary was hypersaline from SCB2 to SAL, saline between SHELL and RIV and brackish over saline at CASMID. Surface waters were oxygenated, bottom waters were low in oxygen at SHELL and RIV, and subsurface waters were hypoxic and bottom waters anoxic at CASMID. Chlorophyll fluorescence was moderate in bottom waters at SHELL and surface/subsurface at RIV and high in the surface waters at CASMID. Water temperatures ranged from 27.9 to 33.2 °C at the time of sampling.

Lower Canning River (KEN to ELL): The Lower Canning River was fresh. Surface waters were oxygenated or well oxygenated and bottom waters were low in oxygen at KS7. Chlorophyll fluorescence was moderate in surface and subsurface waters at KEN and BAC and in subsurface and bottom waters at KS7. Water temperatures ranged from 26.2 to 30.2 °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