



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

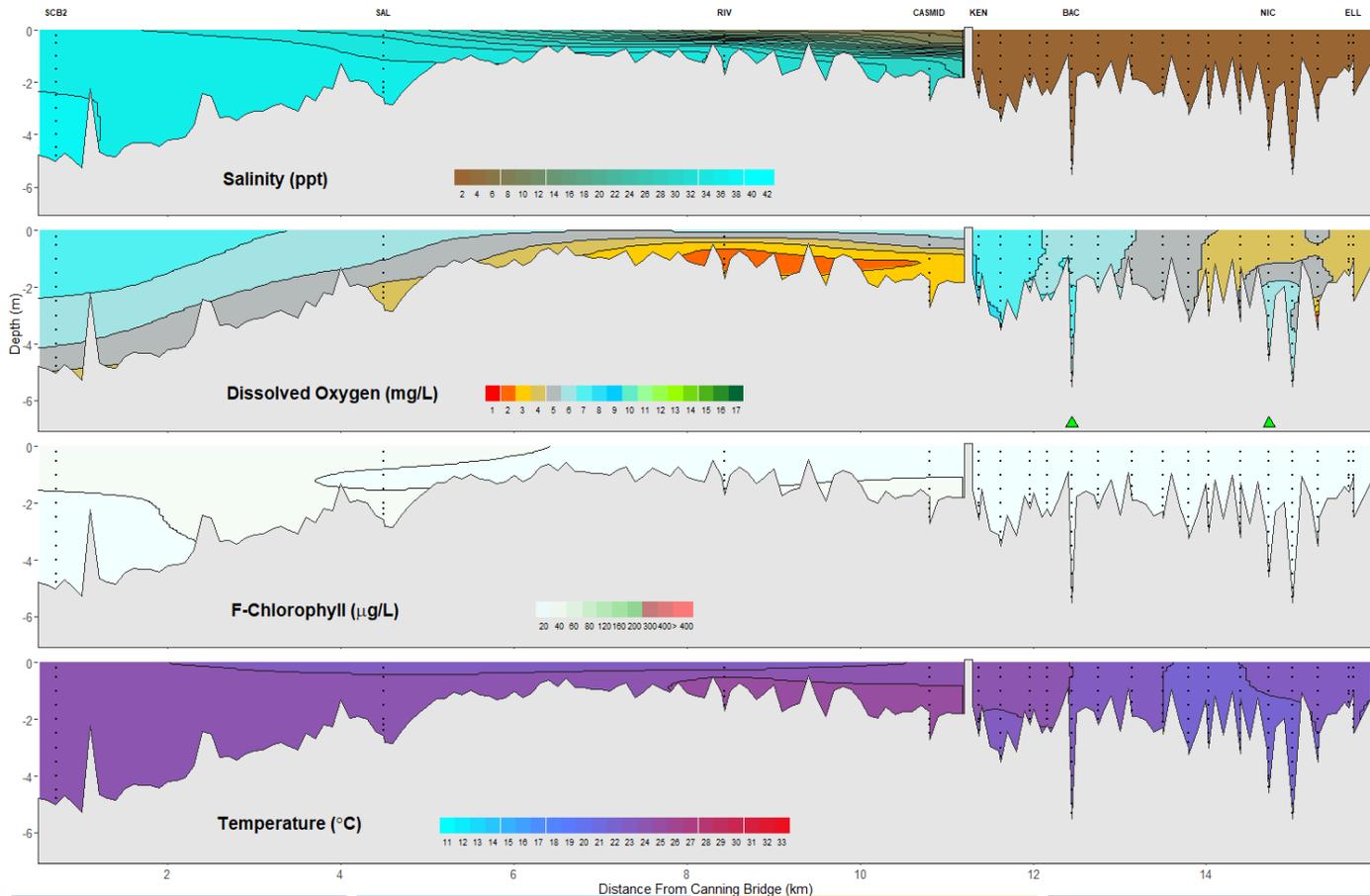
Canning Estuary and Lower Canning River

3rd March 2021

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Canning Estuary and Lower Canning River - Water Quality Profiles – 3rd March 2021



Date: 3rd March 2021

NB: Sampled on Wednesday (3 March 2021) rather than Tuesday (2 March 2021) due to public holiday (1 March 2021).

Weather & tide conditions: Conditions were clear with a predominantly easterly breeze of up to 5 knots. The predicted tides at Barrack St were 0.84 m at 1:11 am (high tide), 0.71 m at 7:00 am (low tide) and 0.98 at 2:46 pm (second high tide). Gosnells recorded 24.4 mm of rainfall during 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 (downstream of Kent St Weir): The Canning Estuary was saline from SCB2 to SAL and brackish over saline from RIV to CASMID. Surface waters were oxygenated or well oxygenated and bottom waters were low in oxygen from SAL to CASMID. Chlorophyll fluorescence was highest at SAL indicating higher microalgal activity in that area. Water temperature ranged from 22.9 to 24.5 °C.

Lower Canning River (upstream of Kent St Weir): The Lower Canning River was fresh. Surface waters were oxygenated or well oxygenated from KEN to KS7 and at PAC and were low in oxygen between MASD50 and NICD200, KS9 and from MACD50 to ELL. Bottom waters were low in oxygen at MASD50 and from PAC to ELL. Chlorophyll fluorescence was highest at KS7 indicating higher microalgal activity in that area. Water temperature ranged from 21.3 to 23.2 °C.

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 >6mg/L, oxygenated >4-6mg/L, low oxygen >2-4mg/L, hypoxic 0.5-2mg/L, anoxic <0.5mg/L