



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

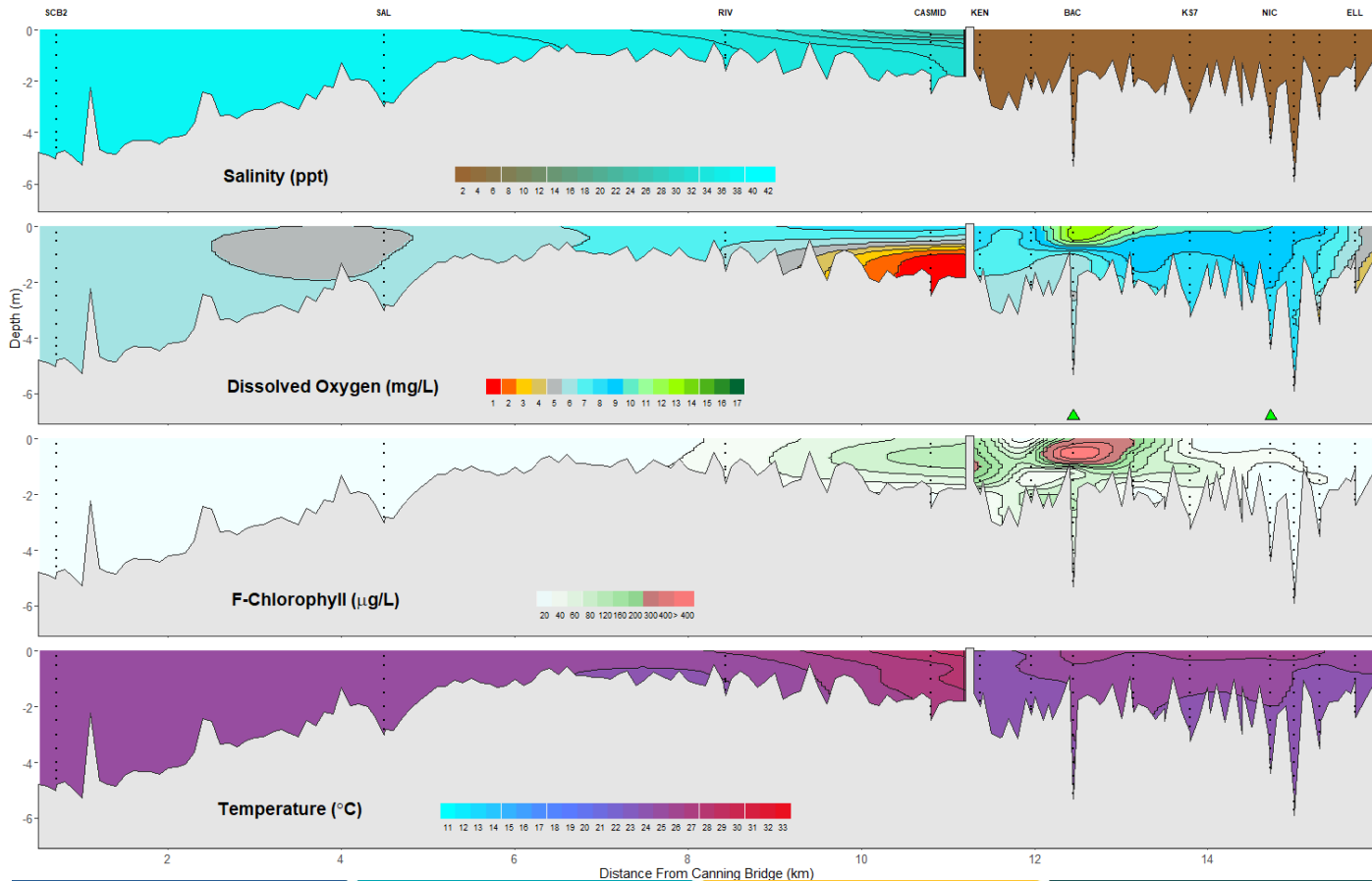
### Canning Estuary and Lower Canning River

14<sup>th</sup> March 2023

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## Canning Estuary and Lower Canning River - Water Quality Profiles - 14<sup>th</sup> March 2023



Date: 14<sup>th</sup> March 2023

Weather & tide conditions: Conditions were slightly overcast with a predominantly south easterly breeze of up to 3 knots. The predicted tides at Barrack St were 0.64 m at 4:30 am (low tide) and 1.13 m at 3:32 pm (high tide). Perth recorded no rainfall in the week prior to sampling (Bureau of Meteorology).

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

Canning Estuary (SCB2 to CASMID): Waters were hypersaline between SCB2 and SAL and saline from RIV to CASMID. Waters were oxygenated to well oxygenated throughout, except for the bottom waters at CASMID, which were anoxic. Chlorophyll fluorescence was low throughout, except for moderate fluorescence detected in the surface and middle waters of CASMID. Water temperatures ranged from 23.9 °C to 27.6 °C at the time of sampling.

Lower Canning River (KEN to ELL): The Lower Canning River was fresh, and waters were oxygenated or well oxygenated throughout except for bottom waters at PAC which were low in oxygen. Chlorophyll fluorescence was high in the surface and middle waters at KEN and PO2, moderate in the surface and middle waters of BACD500 and KS7 and extreme in the surface waters of BAC. Water temperatures ranged from 23.4 °C to 25.6 °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](http://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<sup>-1</sup>, oxygenated >4-6 mg L<sup>-1</sup>, low oxygen >2-4 mg L<sup>-1</sup>, hypoxic 0.5-2 mg L<sup>-1</sup>, anoxic <0.5 mg L<sup>-1</sup>  
Chlorophyll fluorescence (low flow): low < 50 µg L<sup>-1</sup>, moderate 50-150 µg L<sup>-1</sup>, high 150-400 µg L<sup>-1</sup>, extreme > 400 µg L<sup>-1</sup>