



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

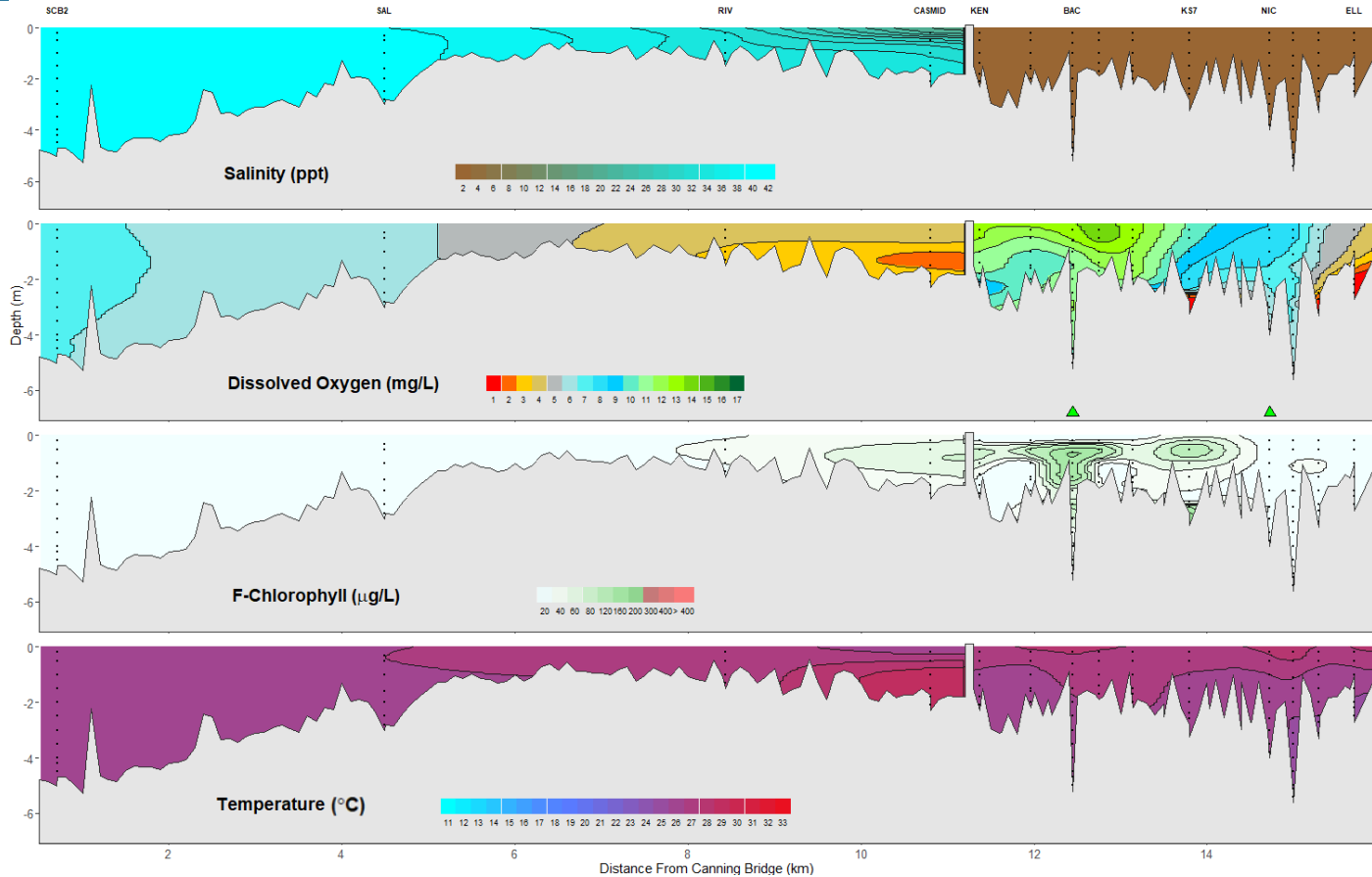
### Canning Estuary and Lower Canning River

7<sup>th</sup> February 2023

Prepared by

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## Canning Estuary and Lower Canning River - Water Quality Profiles – 7<sup>th</sup> February 2023



Date: 7<sup>th</sup> February 2023

Weather & tide conditions: Conditions were sunny with a predominantly south easterly breeze of up to 6.5 knots. The predicted tides at Barrack St were 0.59 m at 8:56 am (low tide) and 1.06 m at 11:44 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 providing oxygen in the 24 hours prior to sampling.

Canning Estuary (SCB2 to CASMID): Waters were hypersaline between SCB2 and SAL, saline at RIV and brackish over saline at CASMID. Waters were oxygenated or well oxygenated between SCB2 and SAL, low in oxygen at RIV, and low to hypoxic at CASMID. Chlorophyll fluorescence was low throughout, and water temperatures ranged from 25.4 to 28.7°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 at the bottom waters of KS7 and PAC, and bottom to middle waters of ELL, which were low in oxygen to anoxic. Chlorophyll fluorescence was moderate in the bottom to middle waters of KEN, BACD500, and KS7, and moderate to high at BAC. Water temperatures ranged from 24.2 to 28 °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 (mod/high flow): low < 60 µg L<sup>-1</sup>, moderate 60-160 µg L<sup>-1</sup>, high 160-400 µg L<sup>-1</sup>, extreme > 400 µg L<sup>-1</sup>