



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

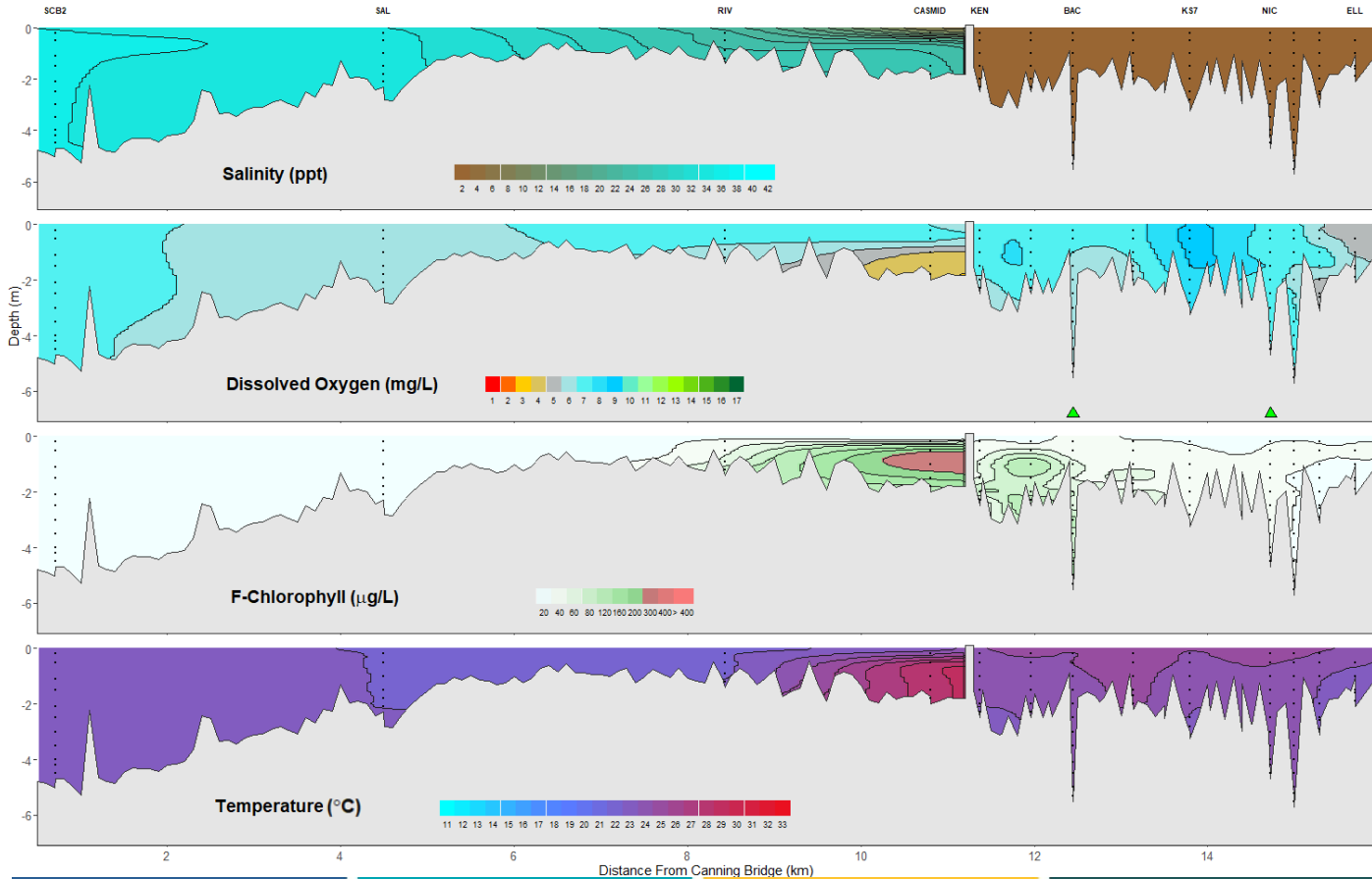
## Canning Estuary and Lower Canning River

17<sup>th</sup> January 2023

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## Canning Estuary and Lower Canning River - Water Quality Profiles – 17<sup>th</sup> January 2023



Date: 17<sup>th</sup> January 2023

Weather & tide conditions: Conditions were sunny with a predominantly south easterly breeze of up to 6.9 knots. The predicted tides at Barrack St were 0.59 m at 6:56 am (low tide) and 1.11 m at 17:28 (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 both operable and triggered to provide oxygen in the 24 hours prior to sampling.

Canning Estuary (SCB2 to CASMID): Waters were saline at SCB2 and SAL, brackish over saline at RIV, and brackish at CASMID. Waters were oxygenated or well oxygenated throughout, except at the bottom waters of CASMID where oxygen were low. Chlorophyll fluorescence was low at SCB2 and SAL, low at RIV except at the very bottom waters which were moderate, and moderate to high at CASMID. Water temperatures ranged from 21.4 to 27.7°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. Chlorophyll fluorescence was low throughout, except at KEN where bottom waters showed a moderate signal, and at BAC where signal was moderate to high. Water temperatures ranged from 22.1 to 25 °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>