



Department of Biodiversity,  
Conservation and Attractions



Biodiversity and  
Conservation Science

*We're working for  
Western Australia.*

# Swan Canning Estuary Water Quality Monitoring Project

## Weekly Water Quality Report

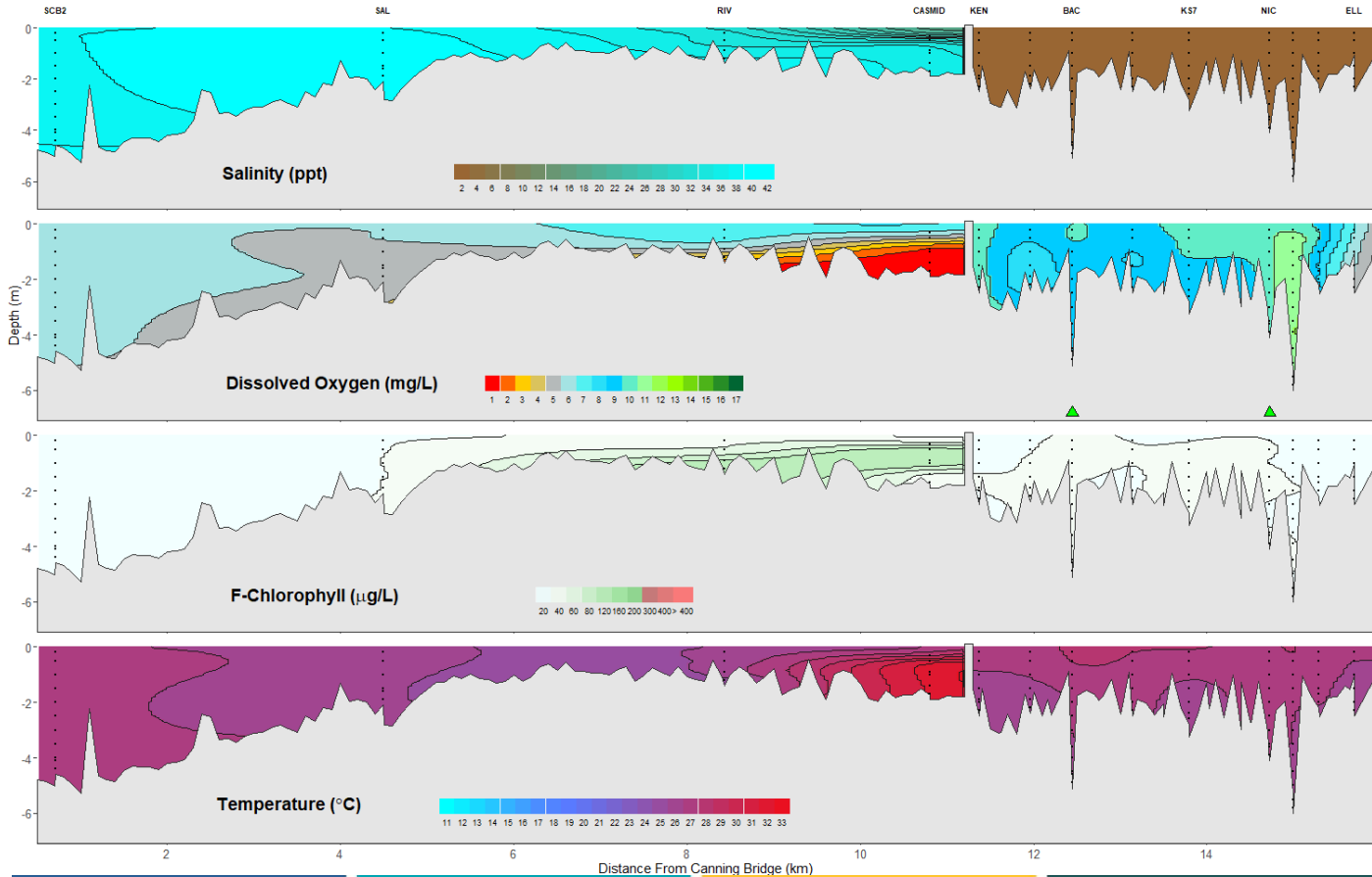
### Canning Estuary and Lower Canning River

13<sup>th</sup> February 2024

Prepared by

Rivers and Estuaries Science  
Biodiversity and Conservation Science  
Department of Biodiversity, Conservation and Attractions

## Canning Estuary and Lower Canning River - Water Quality Profiles – 13<sup>th</sup> February 2024



Date: 13<sup>th</sup> February 2024

Weather & tide conditions: Conditions were sunny with a predominantly southerly breeze of up to 8.7 knots. The predicted tides at Barrack St were 0.96 m at 12:54 am (high tide), 0.69 m at 8:28 am (low tide), and 0.88 m at 3:13 pm (2<sup>nd</sup> high tide). Perth recorded no rainfall in the week prior to sampling (Bureau of Meteorology).

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

Canning Estuary (SCB2 to CASMID): The Canning Estuary was hypersaline at SCB2 and SAL, saline over hypersaline at RIV and brackish over hypersaline at CASMID. Surface waters were oxygenated or well oxygenated, except bottom waters of RIV which were low in oxygen and CASMID which were anoxic. Chlorophyll fluorescence was moderate in bottom waters of RIV and subsurface waters of CASMID. Water temperatures ranged from 24.9 to 31.4 °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. Chlorophyll fluorescence was low and water temperatures ranged from 25.5 to 27.1 °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 < 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>