



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

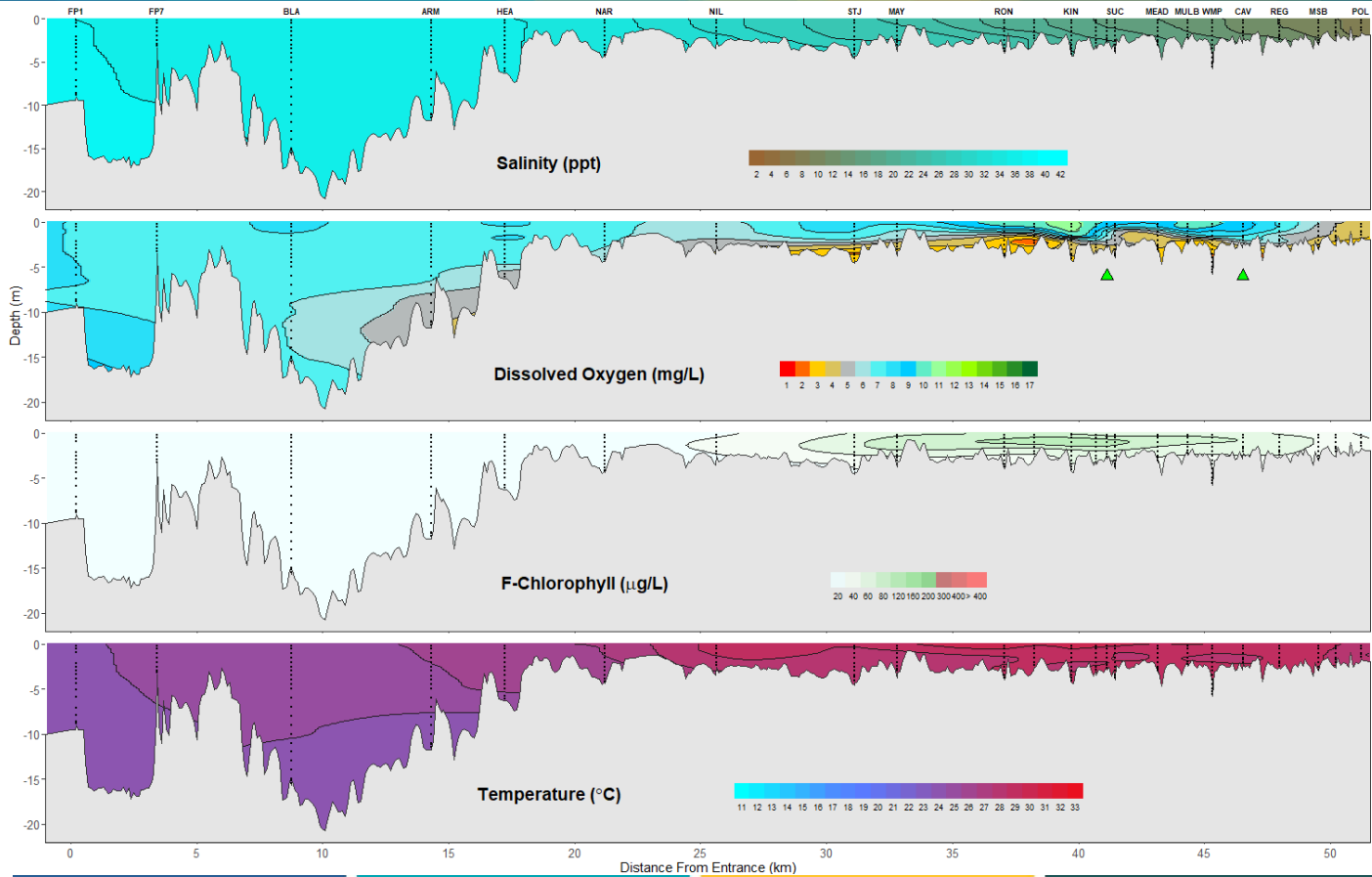
### Lower Swan Canning Estuary to Upper Swan Estuary

4<sup>th</sup> December 2023

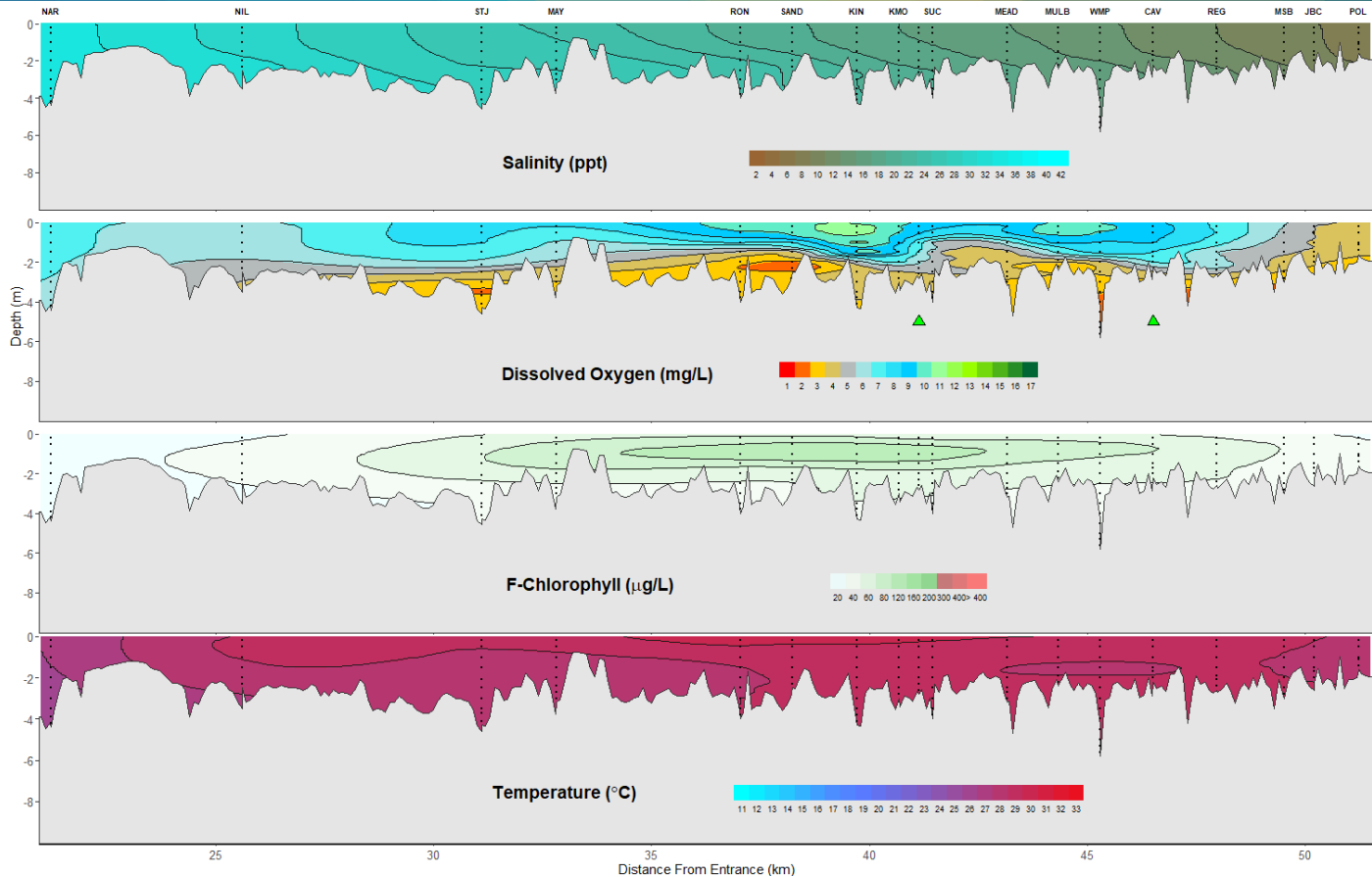
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## Swan Canning Estuary - Water Quality Profiles – 4<sup>th</sup> December 2023



## Swan Canning Estuary - Water Quality Profiles – 4<sup>th</sup> December 2023



Date: 4<sup>th</sup> December 2023

Weather & tide conditions: Conditions were overcast with a westerly breeze of up to 11.4 knots. The predicted tides at Barrack St were 0.98 m at 12:48 am (high tide) and 0.62 m at 11:55 pm (low tide). Perth recorded no rainfall in the week prior to sampling (Bureau of Meteorology).

Oxygenation: The Guildford and Caversham oxygenation plants were triggered to provide oxygen in the 24 hours prior to sampling.

Lower Swan Canning Estuary (BLA to NAR): The Lower Swan Canning Estuary was saline, waters were oxygenated or well oxygenated and chlorophyll fluorescence was low. Water temperatures ranged from 23.4 °C to 26.0 °C at the time of sampling.

Middle Swan Estuary (NIL to RON): The Middle Swan Estuary was saline at NIL, brackish over saline from STJ to MAY and brackish at RON. Surface waters were oxygenated or well oxygenated and bottom waters were low in oxygen from MAY to RON and hypoxic at STJ. Chlorophyll fluorescence was moderate in surface waters between MAY and RON and subsurface waters at STJ and MAY. Water temperatures ranged from 27.0 °C to 29.5 °C at the time of sampling.

Upper Swan Estuary (SAND to POL): The Upper Swan Estuary was brackish. Surface waters were oxygenated or well oxygenated and bottom waters were low in oxygen from KIN to KMO, SUC to MULB and MSB to POL and hypoxic at SAND and WMP. Chlorophyll fluorescence was moderate in surface or subsurface waters between SAND and MSB. Water temperatures ranged from 27.0 °C to 29.3 °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>