

# Swan Canning Estuary Water Quality Monitoring Project

## Weekly Water Quality Report

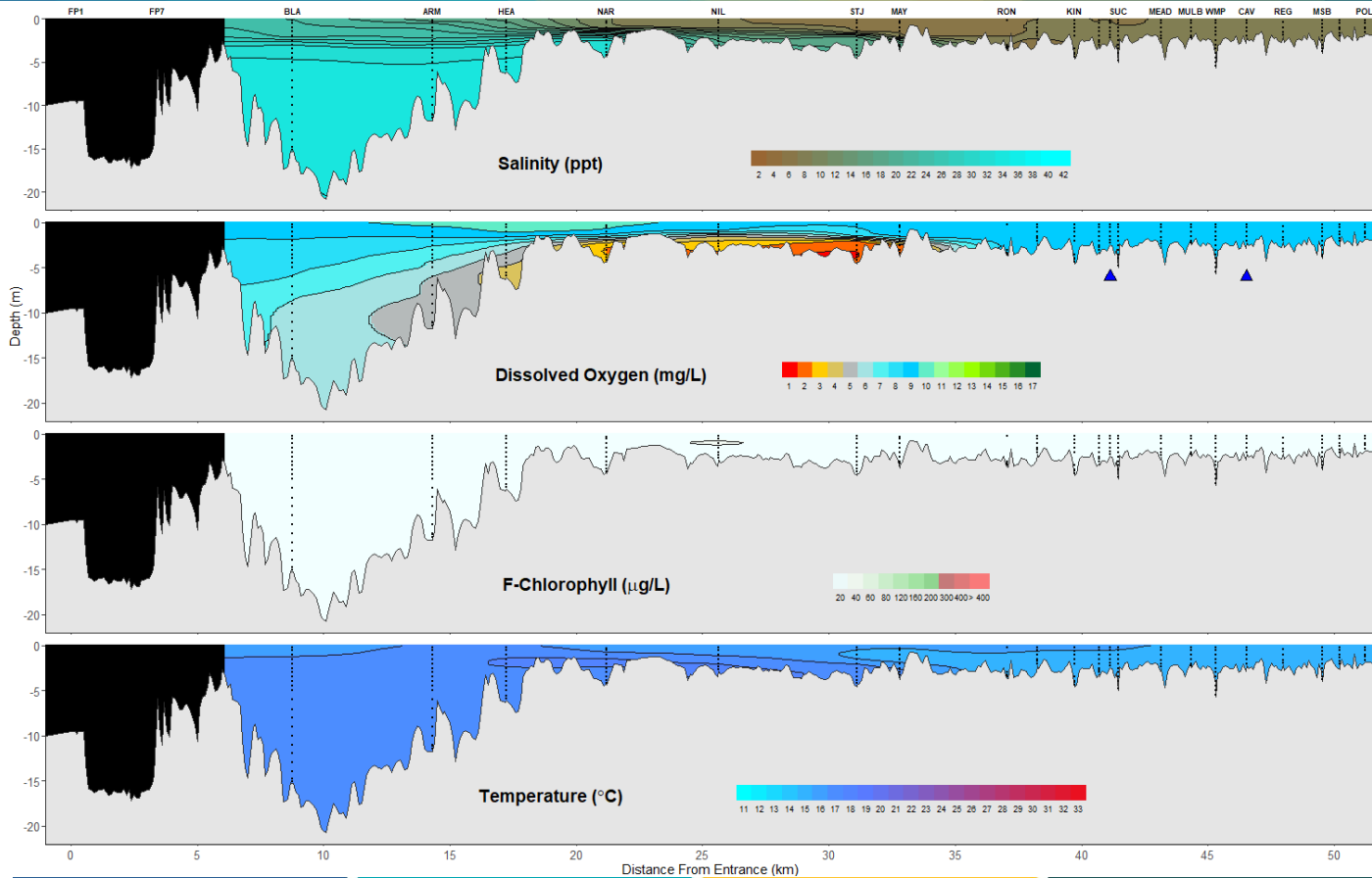
### Lower Swan Canning Estuary to Upper Swan Estuary

21<sup>st</sup> August 2023

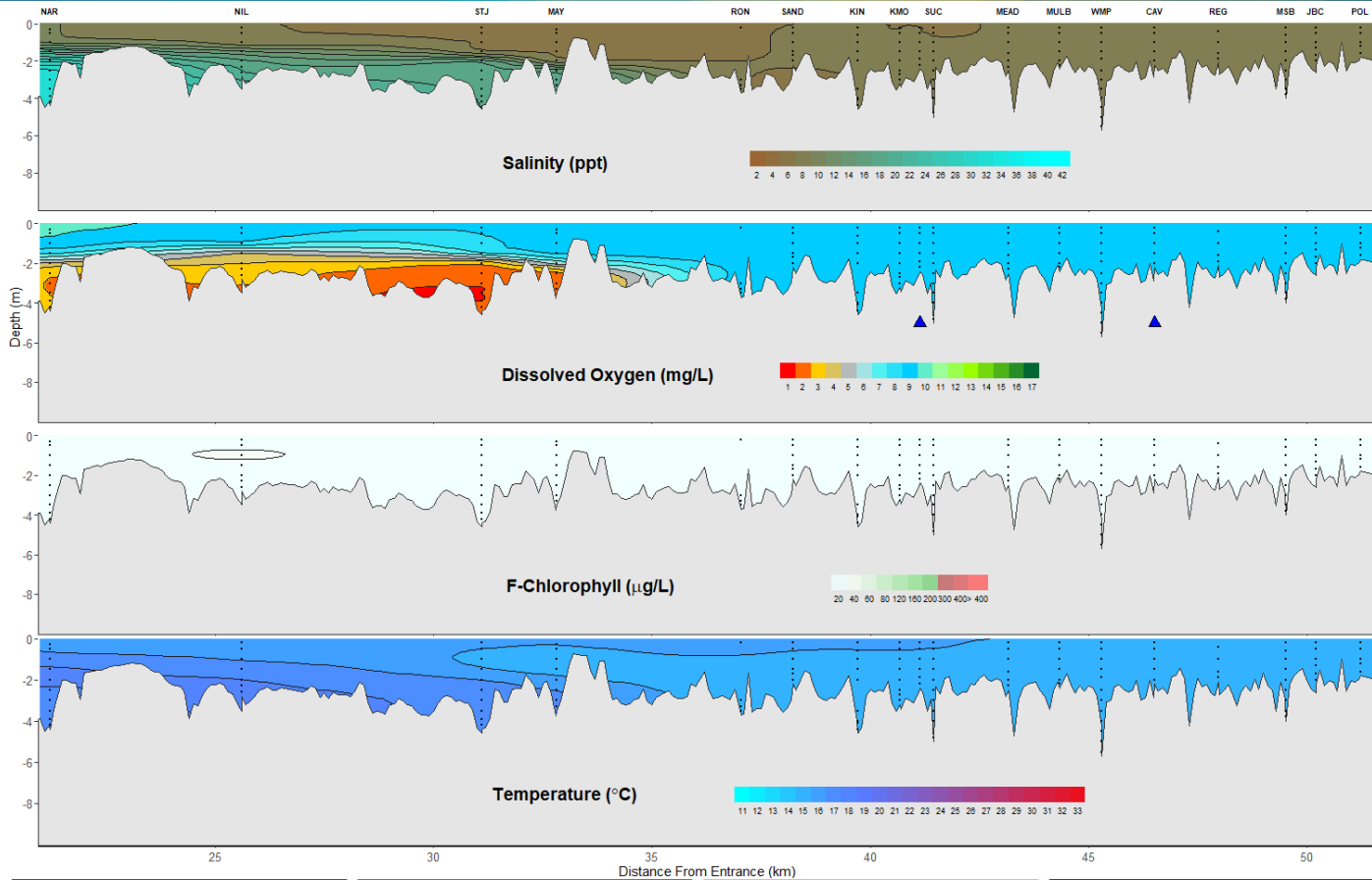
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## Swan Canning Estuary - Water Quality Profiles – 21<sup>st</sup> August 2023



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Date: 21<sup>st</sup> August 2023

Weather & tide conditions: Conditions were overcast with an easterly to south easterly breeze of up to 6.4 knots. The predicted tides at Barrack St were 0.83 m at 7:22 am (low tide) and 0.91 m at 12:42 pm (high tide). Perth recorded 63.4 mm of rainfall in the week prior to sampling (Bureau of Meteorology).

Oxygenation: The Guildford and Caversham oxygenation plants were both operable but not triggered to provide oxygen in the 24 hours prior to sampling.

Lower Swan Canning Estuary (BLA to NAR): The Lower Swan Canning Estuary was brackish over saline. Waters were oxygenated or well oxygenated, except bottom waters at HEA which were low in oxygen and NAR which were hypoxic. Chlorophyll fluorescence was low and water temperatures ranged from 15.7 °C to 17.5 °C at the time of sampling.

Middle Swan Estuary (NIL to RON): The Middle Swan Estuary was brackish. Waters were oxygenated to well oxygenated, except bottom waters at NIL which were low in oxygen and at STJ and MAY which were hypoxic. Chlorophyll fluorescence was low and water temperatures ranged from 14.4 °C to 17.1 °C at the time of sampling.

Upper Swan Estuary (SAND to POL): The Upper Swan Estuary was brackish and waters were well oxygenated. Chlorophyll fluorescence was low and water temperatures ranged from 14.3 °C to 15.7 °C.

**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>