



# Swan Canning Estuary Water Quality Monitoring Project

## Weekly Water Quality Report

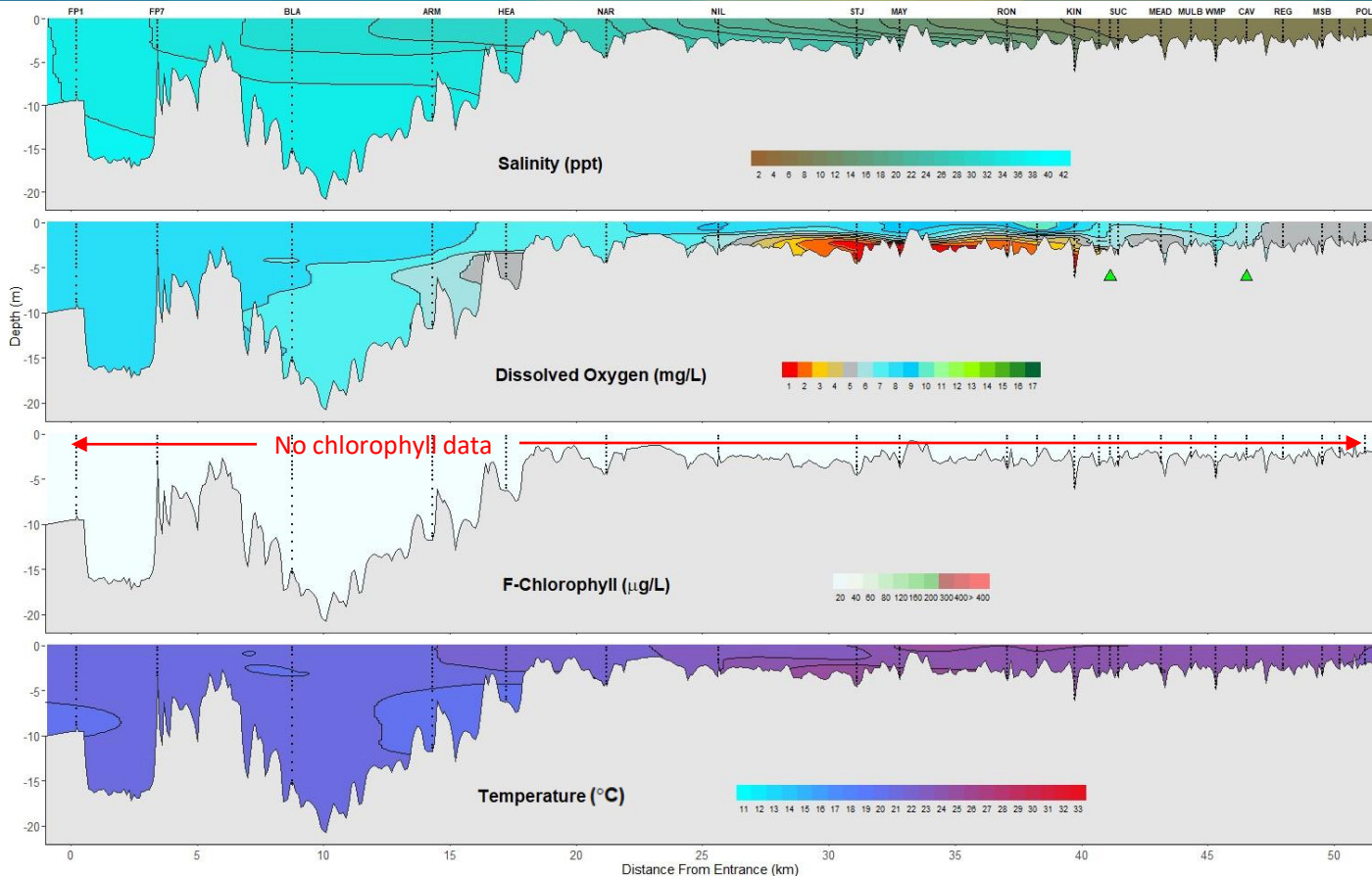
### Lower Swan Canning Estuary to Upper Swan Estuary

23<sup>rd</sup> October 2023

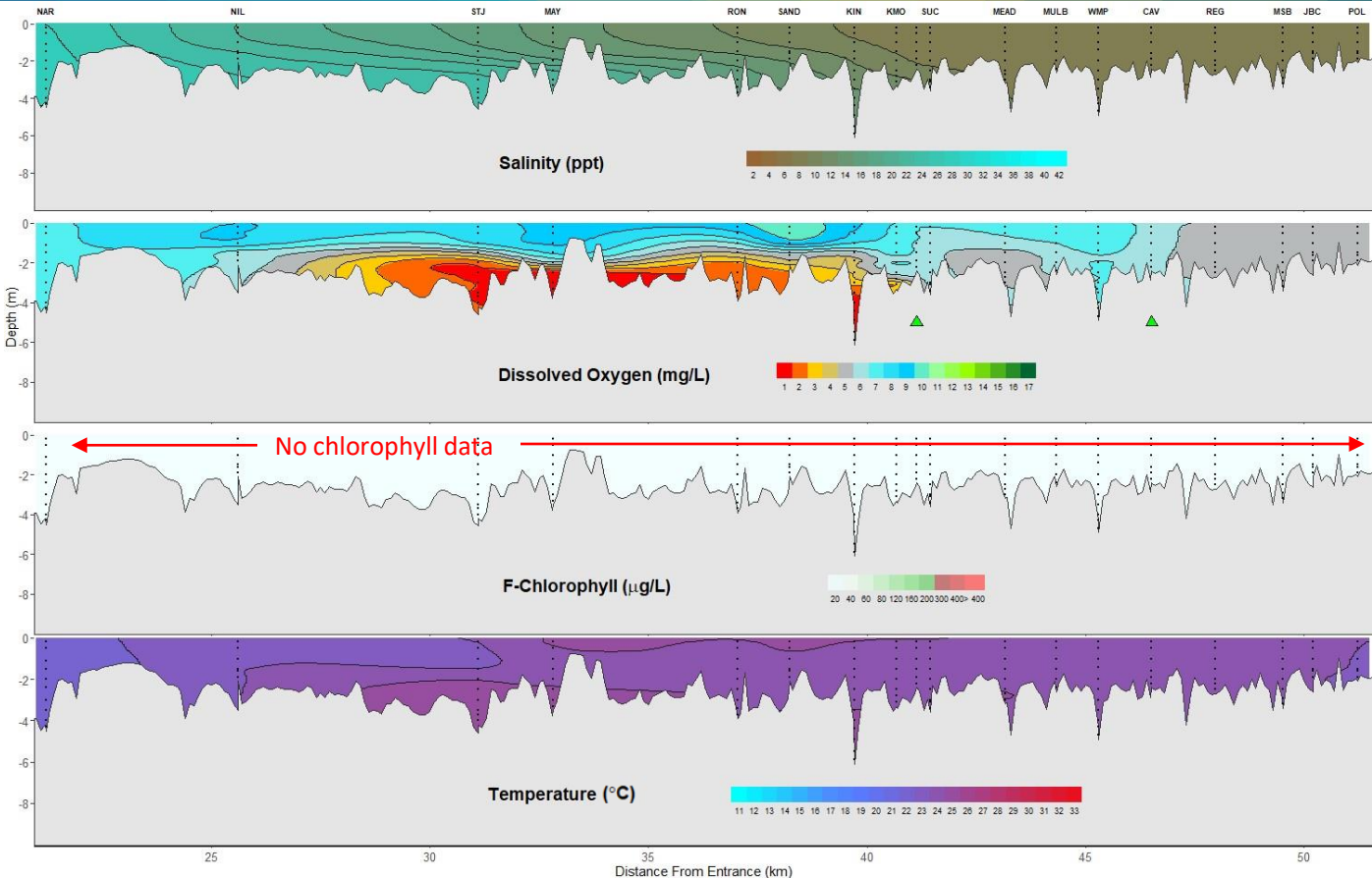
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## Swan Canning Estuary - Water Quality Profiles – 23<sup>rd</sup> October 2023



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Date: 23<sup>rd</sup> October 2023

Weather & tide conditions: Conditions were mostly clear with scattered clouds and a predominantly southerly breeze of up to 16.0 knots. The predicted tides at Barrack St were 0.98 m at 4:28 am (high tide) and 0.55 m at 3:45 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 (FPI and NAR): The Lower Swan Canning Estuary was saline, waters were oxygenated or well oxygenated and water temperatures ranged from 19.5 °C to 21.4 °C at the time of sampling.

Middle Swan Estuary (NIL to RON): The Middle Swan Estuary was brackish. Waters were oxygenated or well oxygenated, except bottom waters at STJ (hypoxic), MAY (hypoxic to anoxic) and RON (low in oxygen to hypoxic). Water temperatures ranged from 22.8 °C to 24.5 °C at the time of sampling.

Upper Swan Estuary (SAND to POL): The Upper Swan Estuary was brackish. Waters were oxygenated or well oxygenated, except for bottom waters at SAND (low in oxygen), KIN (low in oxygen to anoxic) and KMO (hypoxic). Water temperatures ranged from 22.9 °C to 24.4 °C.

NB: Fluorescence data not available due to sensor issue.

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>