



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

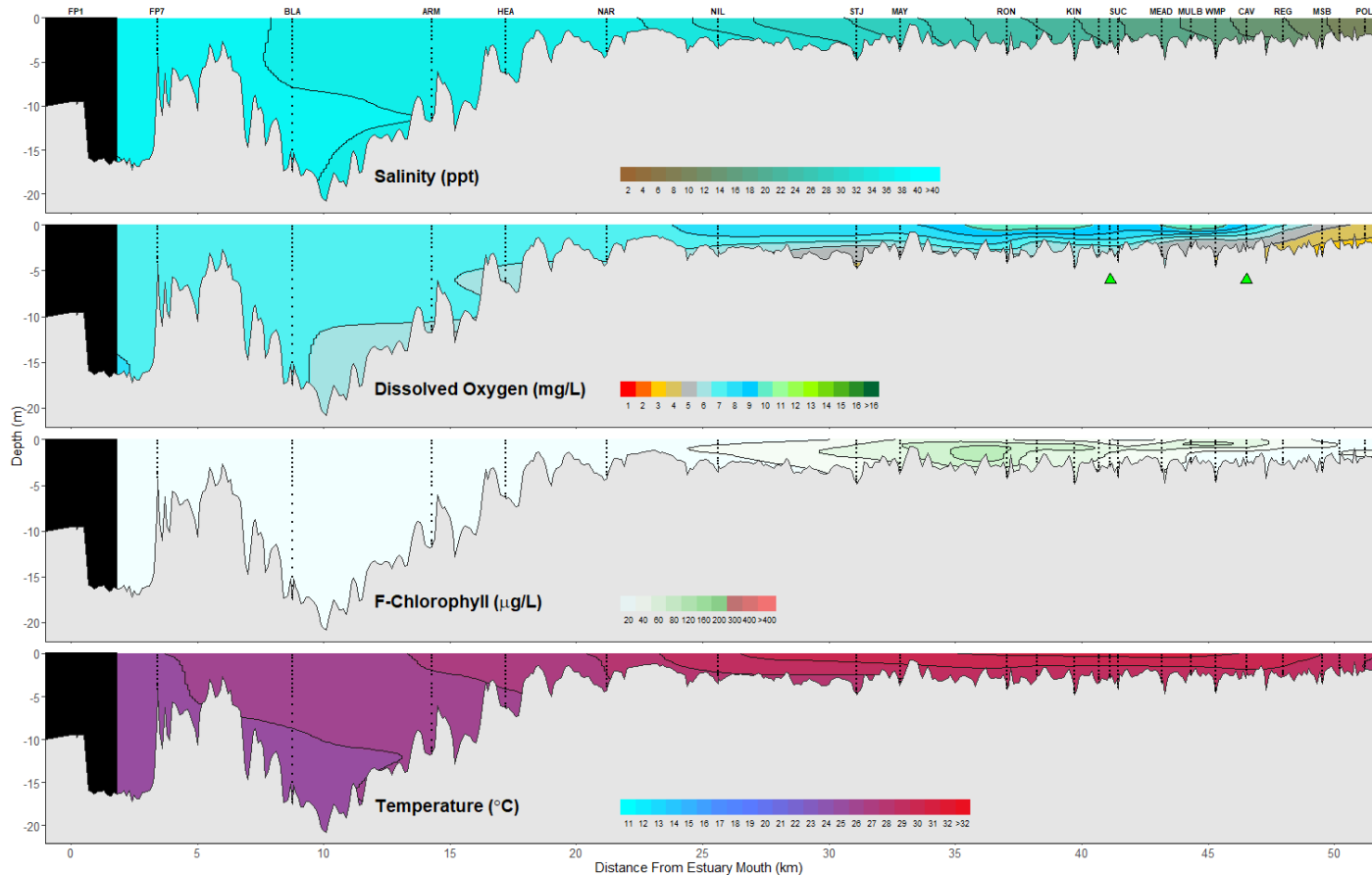
### Lower Swan Canning Estuary to Upper Swan Estuary

13 January 2025

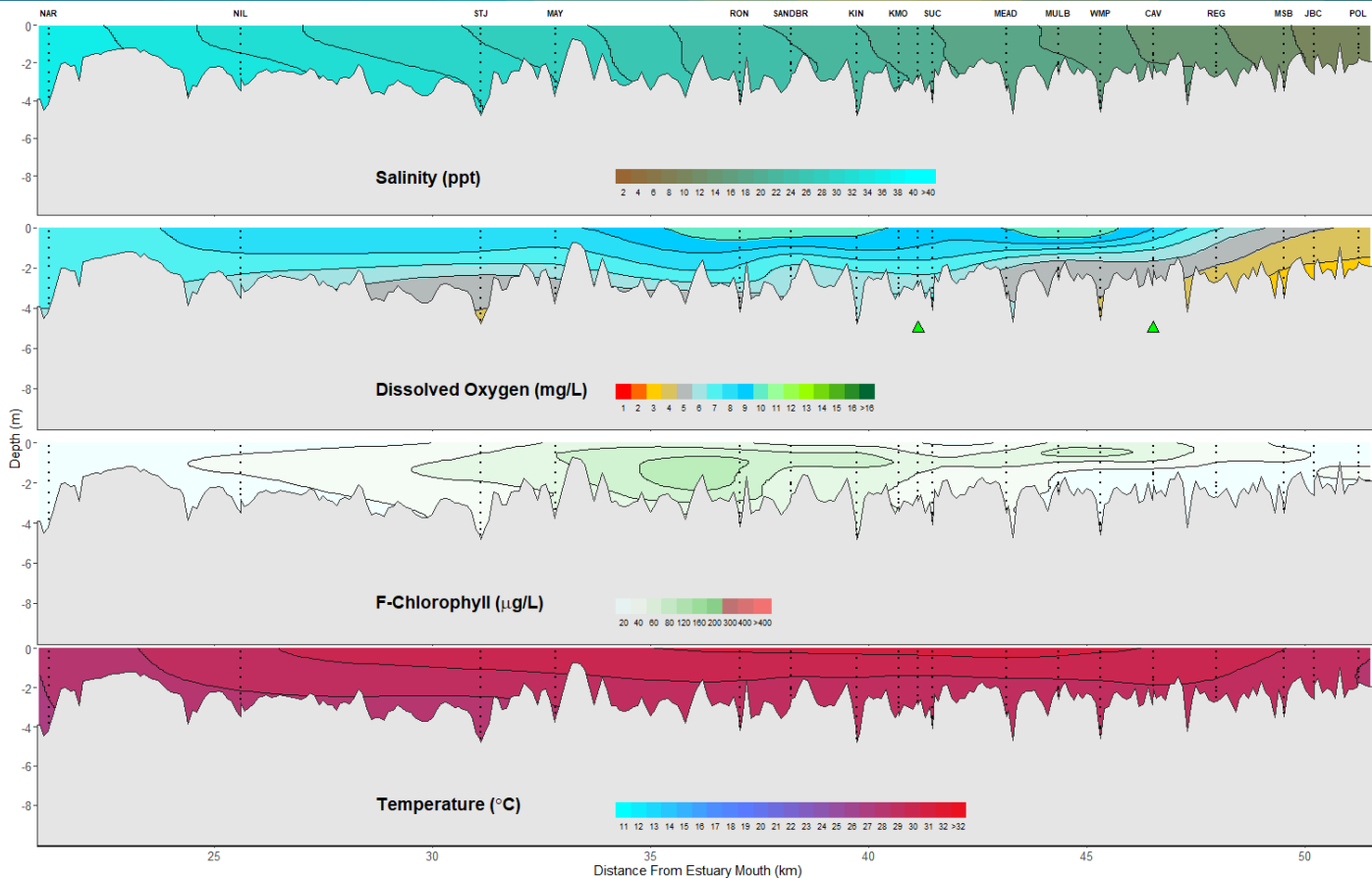
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## Swan Canning Estuary - Water Quality Profiles – 13 January 2025



## Swan Canning Estuary - Water Quality Profiles – 13 January 2025



Date: 13 January 2025

Weather & tide conditions: Conditions were clear with an easterly breeze of up to 12.4 knots. The predicted tides at Barrack St were 0.47 m at 8:57 am (low tide) and 1.20 m at 10:35 pm (high 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 (FP7 to NAR): The Lower Swan Canning Estuary was hypersaline and waters were oxygenated or well oxygenated. Chlorophyll fluorescence was low and water temperatures ranged from 24.8 to 27.1°C at the time of sampling.

Middle Swan Estuary (NIL to RON): The Middle Swan Estuary was saline from NIL to MAY and brackish at RON. Waters were oxygenated or well oxygenated, except for bottom waters at STJ which were low in oxygen. Chlorophyll fluorescence was moderate in subsurface waters at STJ and both surface and subsurface waters at MAY and RON. Water temperatures ranged from 27.7 to 30.0 °C at the time of sampling.

Upper Swan Estuary (SANDBR to POL): The Upper Swan Estuary was brackish. Waters were oxygenated or well oxygenated, except for bottom waters from MEAD to WMP and REG to MSB and both surface and bottom waters at JBC and POL. Chlorophyll fluorescence was moderate in surface waters between SANDBR and KMO and from MEAD to CAV. Water temperatures ranged from 27.8 to 30.6 °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 (low 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>

**Recommended reference:** Department of Biodiversity, Conservation and Attractions, 2024. *Swan Canning Estuary water quality profile report, Lower Swan Canning Estuary to Upper Swan Estuary 13 January 2025*. Rivers and Estuaries Science (<https://www.dpaw.wa.gov.au/management/swan-canning-riverpark>)