



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

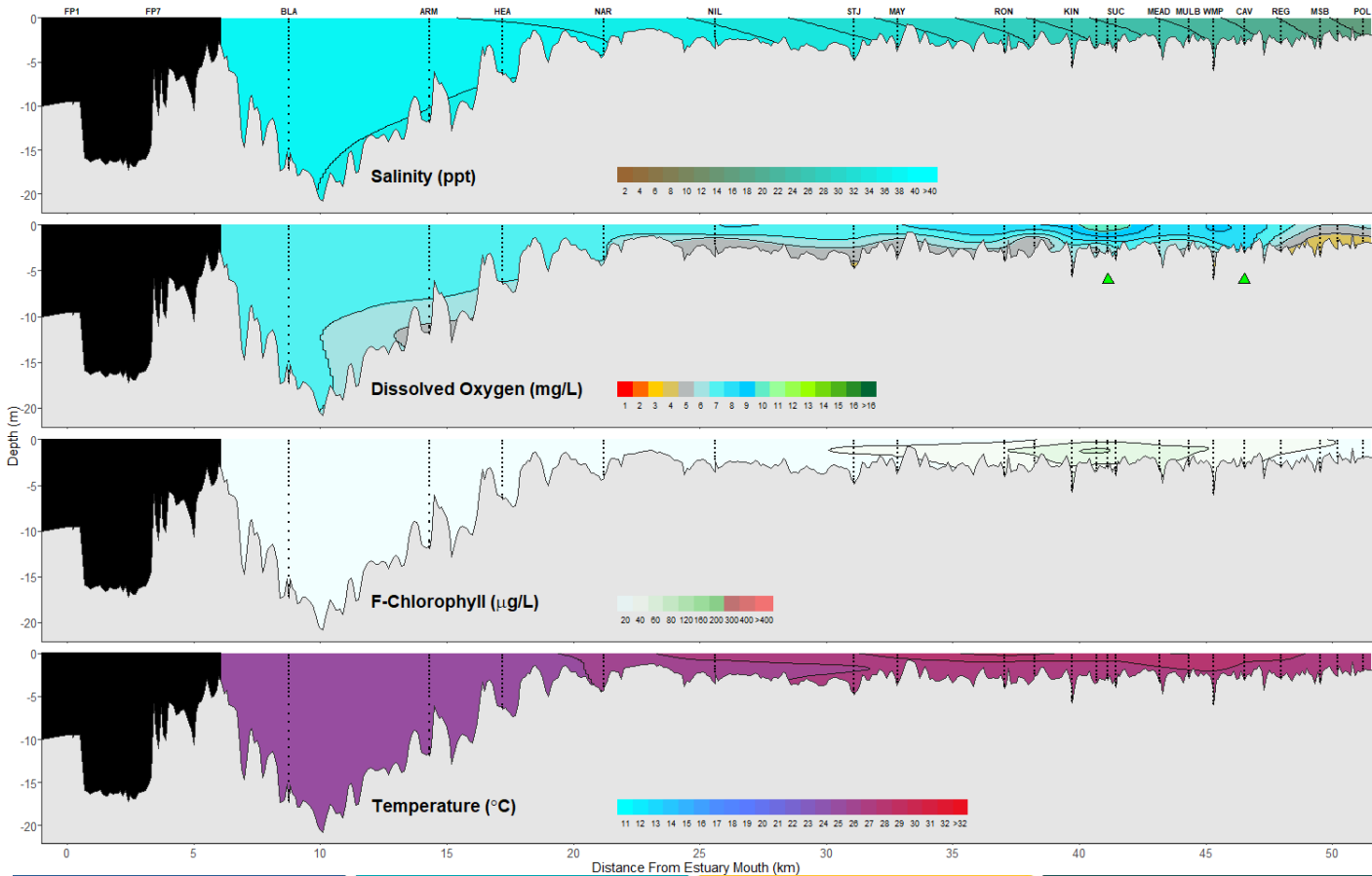
### Lower Swan Canning Estuary to Upper Swan Estuary

17 February 2025

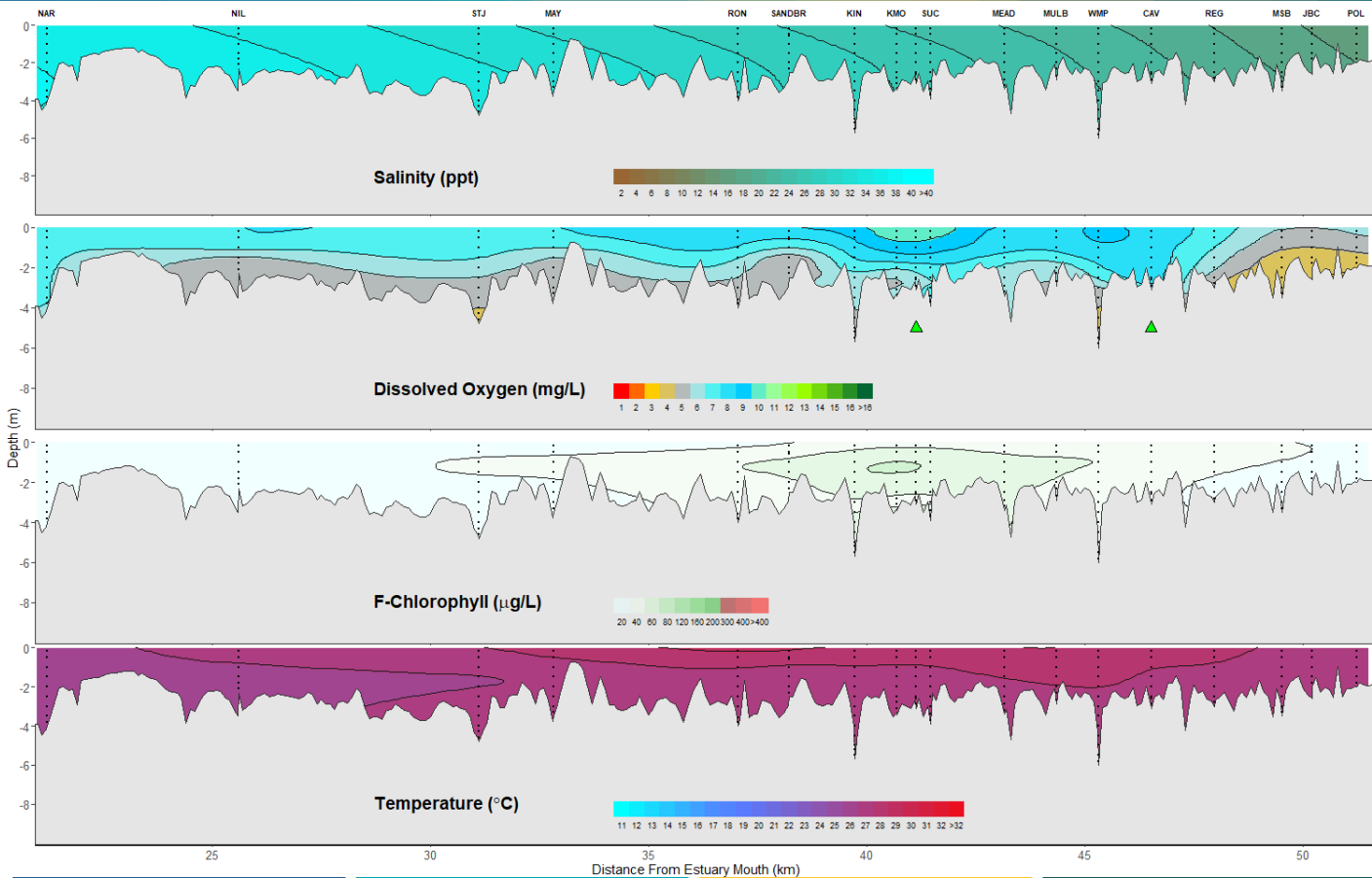
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## Swan Canning Estuary - Water Quality Profiles – 17 February 2025



## Swan Canning Estuary - Water Quality Profiles – 17 February 2025



Date: 17 February 2025

Weather & tide conditions: Conditions were cloudy with a predominately easterly breeze of up to 6.6 knots. The predicted tides at Barrack St were 0.68 m at 6:55 am (low tide), 0.97 m at 2:39 pm (high tide) and 0.85 m at 8:23 pm (second 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 hypersaline, waters were oxygenated or well oxygenated and chlorophyll fluorescence was low. Water temperatures ranged from 24.0 to 25.3 °C at the time of sampling.

Middle Swan Estuary (NIL to RON): The Middle Swan Estuary was saline. 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 RON. Water temperatures ranged from 25.6 to 28 °C at the time of sampling.

Upper Swan Estuary (SANDBR to POL): The Upper Swan Estuary was saline between SANDBR and KIN, brackish over saline from KMO to SUC and brackish from MEAD to POL. Waters were oxygenated or well oxygenated, except for bottom waters at SANDBR, WMP and MSB to POL which were low in oxygen. Chlorophyll fluorescence was moderate in subsurface waters at SANDBR and KIN and both surface and subsurface waters from KMO to SUC and WMP. Water temperatures ranged from 26.0 to 28.3 °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 >36  
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, 2025. *Swan Canning Estuary water quality profile report, Lower Swan Canning Estuary to Upper Swan Estuary 17 February 2025*. Rivers and Estuaries Science (<https://www.dpaw.wa.gov.au/management/swan-canning-riverpark>)