



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

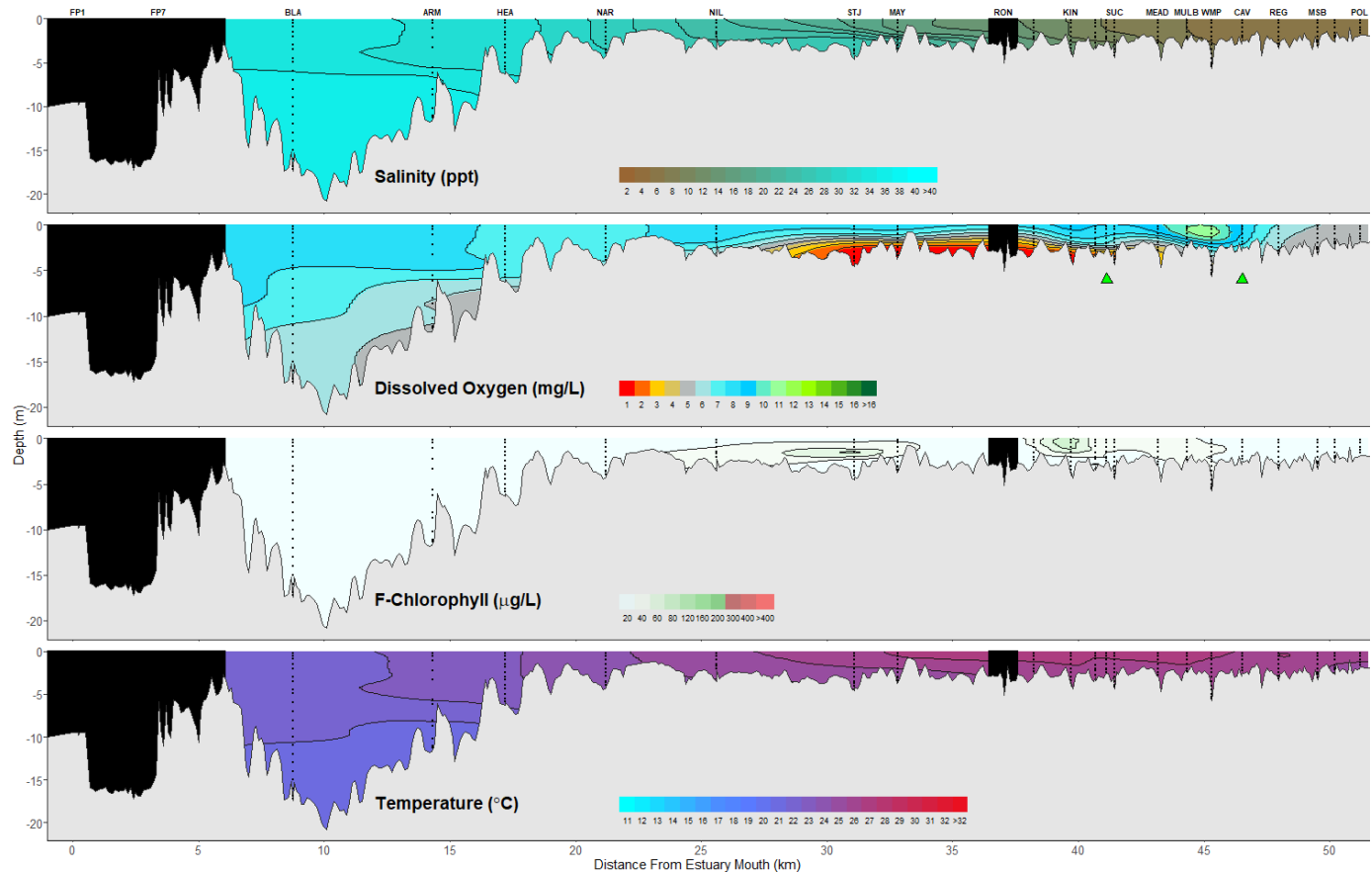
### Lower Swan Canning Estuary to Upper Swan Estuary

25 November 2024

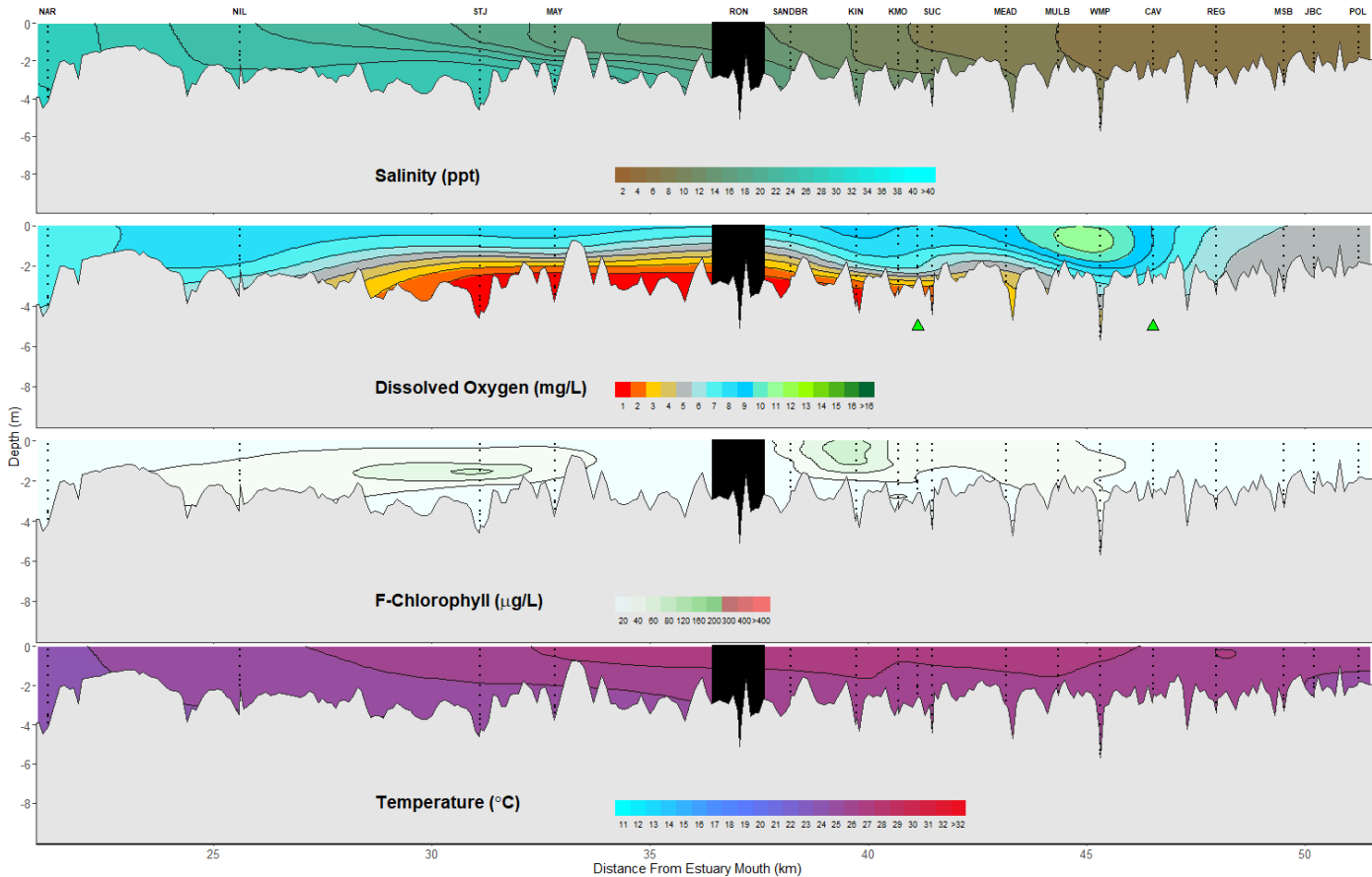
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## Swan Canning Estuary - Water Quality Profiles – 25 November 2024



# Swan Canning Estuary - Water Quality Profiles – 25 November 2024



Date: 25 November 2024

Weather & tide conditions: Conditions were largely clear with a strong south westerly breeze of up to 22.7 knots. The predicted tide at Barrack St was 0.70 m at 10:38 am (low tide) and 0.95 m at 8:58 pm (high tide). Perth recorded 5.2 mm of 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. Chlorophyll fluorescence was low and water temperatures ranged from 20.5 to 23.8 °C at the time of sampling.

Middle Swan Estuary (NIL to RON): The Middle Swan Estuary was brackish, except at STJ which was brackish over saline. Waters were oxygenated or well oxygenated, except bottom waters at STJ and MAY which were hypoxic. Chlorophyll fluorescence was moderate in subsurface waters at STJ. Water temperatures ranged from 24.1 to 26.2 °C at the time of sampling. NB: Due to unfavourable weather conditions, no profile data was recorded at RON.

Upper Swan Estuary (SANDBR to POL): The Upper Swan Estuary was brackish from SANDBR to CAV and fresh from REG to POL. Waters were oxygenated or well oxygenated, except bottom waters at SANDBR, KMO, MEAD, WMP and JBC which were low in oxygen and KIN and SUC which were hypoxic. Chlorophyll fluorescence was moderate in surface waters at KIN. Water temperatures ranged from 24.8 to 27.1 °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>