



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

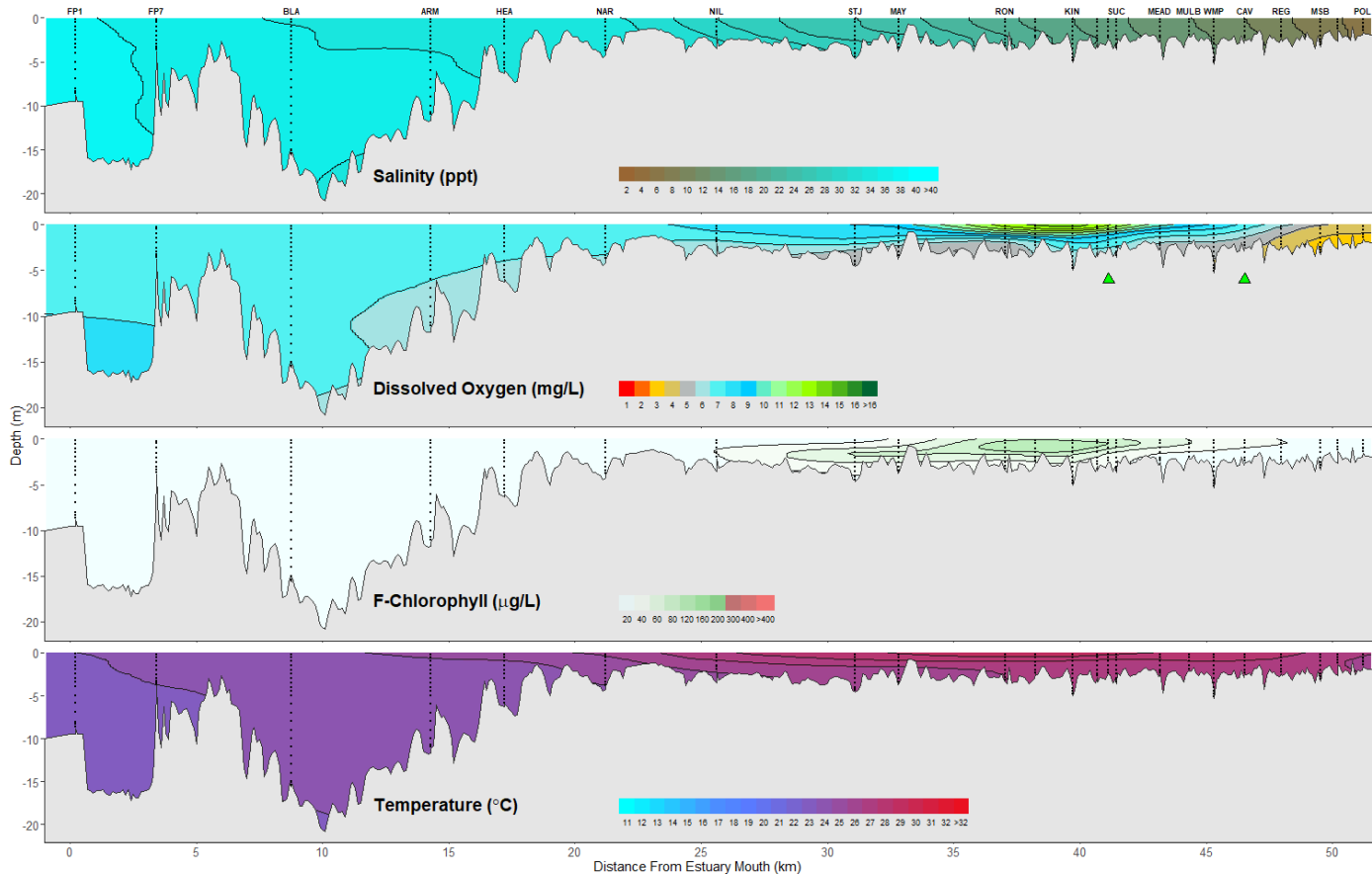
### Lower Swan Canning Estuary to Upper Swan Estuary

30 December 2024

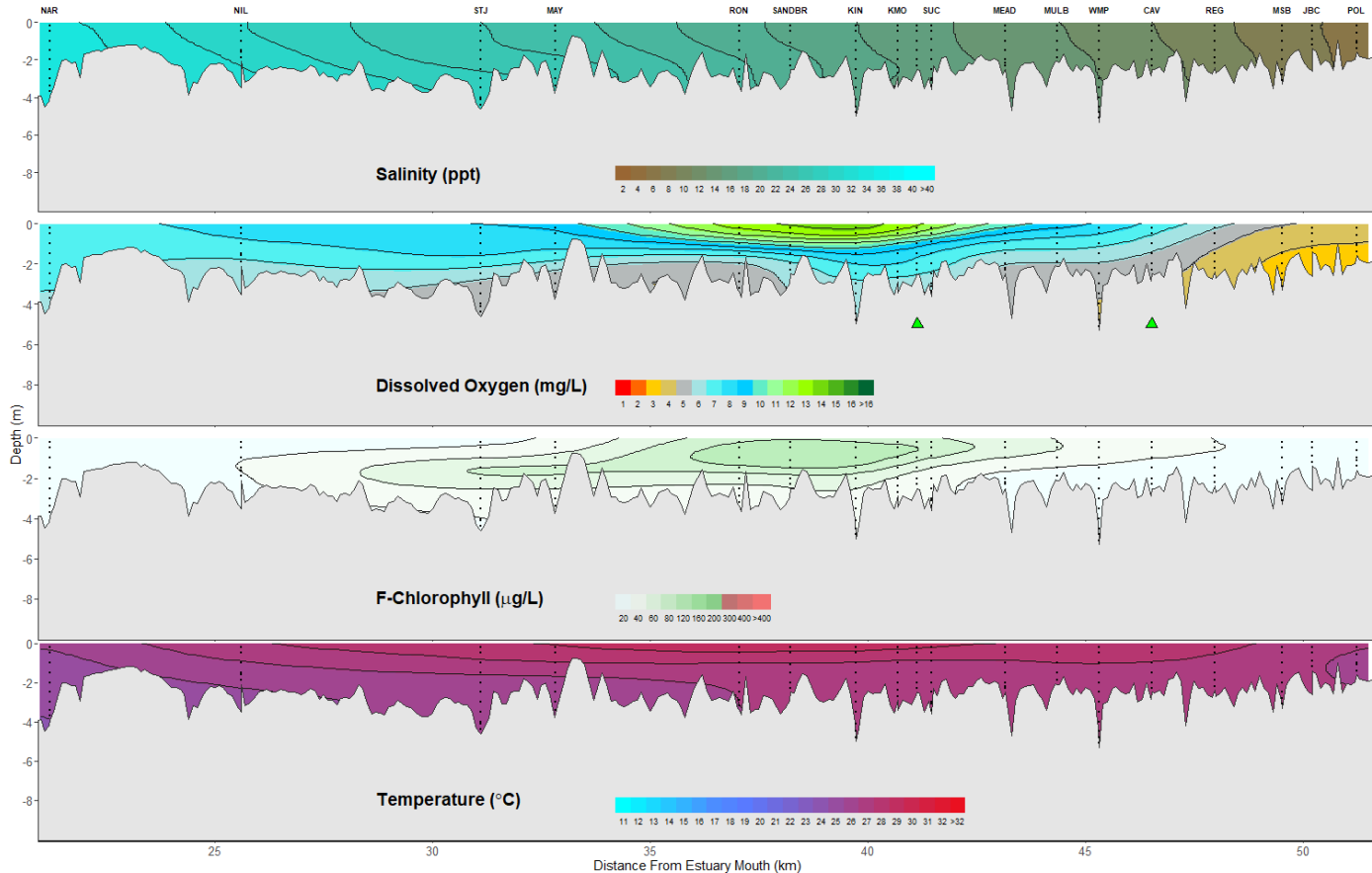
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## Swan Canning Estuary - Water Quality Profiles – 30 December 2024



# Swan Canning Estuary - Water Quality Profiles – 30 December 2024



Date: 30 December 2024

Weather & tide conditions: Conditions were clear with a south westerly breeze of up to 10.0 knots. The predicted tides at Barrack St were 0.5 m at 8:41 am (low tide) and 1.19 m at 10:31 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 (FPI to NAR): The Lower Swan Canning Estuary was hypersaline at FP1 and saline from FP7 to NAR. Waters were oxygenated or well oxygenated., chlorophyll fluorescence was low and water temperatures ranged from 22.4 to 24.7 °C at the time of sampling.

Middle Swan Estuary (NIL to RON): The Middle Swan Estuary was saline at NIL, brackish over saline between STJ and MAY and brackish at RON. Waters were oxygenated or well oxygenated. Chlorophyll fluorescence was moderate in subsurface waters from STJ and MAY and surface waters at RON. Water temperatures ranged from 25.2 to 29.1 °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 bottom waters at WMP and REG and both surface and bottom waters from MSB to POL which were low in oxygen. Chlorophyll fluorescence was moderate in surface waters between SANDBR and SUC and at MULB. Water temperatures ranged from 25.6 to 29.3 °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 >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 30 December 2024*. Rivers and Estuaries Science (<https://www.dpaw.wa.gov.au/management/swan-canning-riverpark>)