



# Swan Canning Estuary Water Quality Monitoring Project

## Weekly Water Quality Report

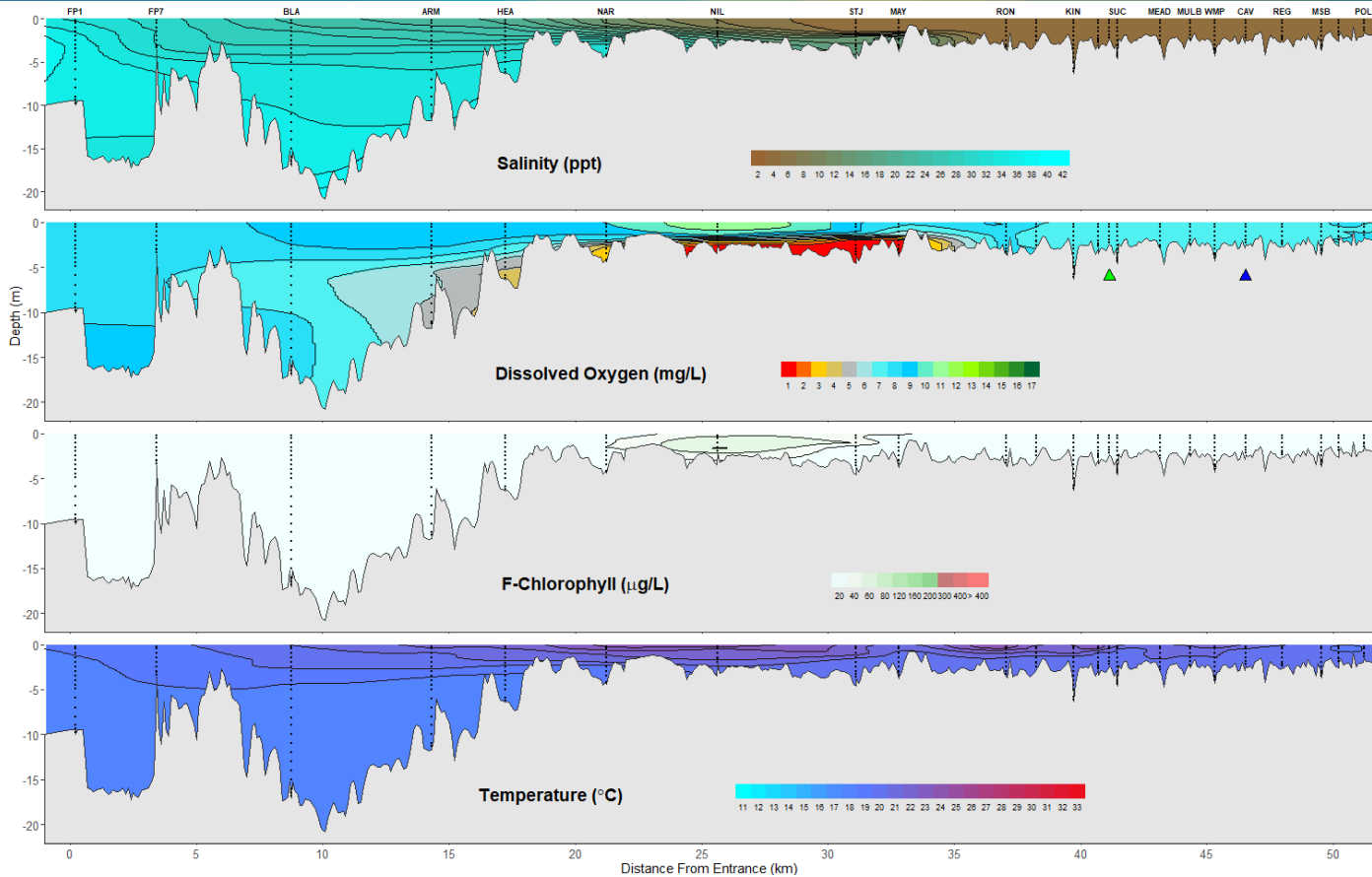
### Lower Swan Canning Estuary to Upper Swan Estuary

7 October 2024

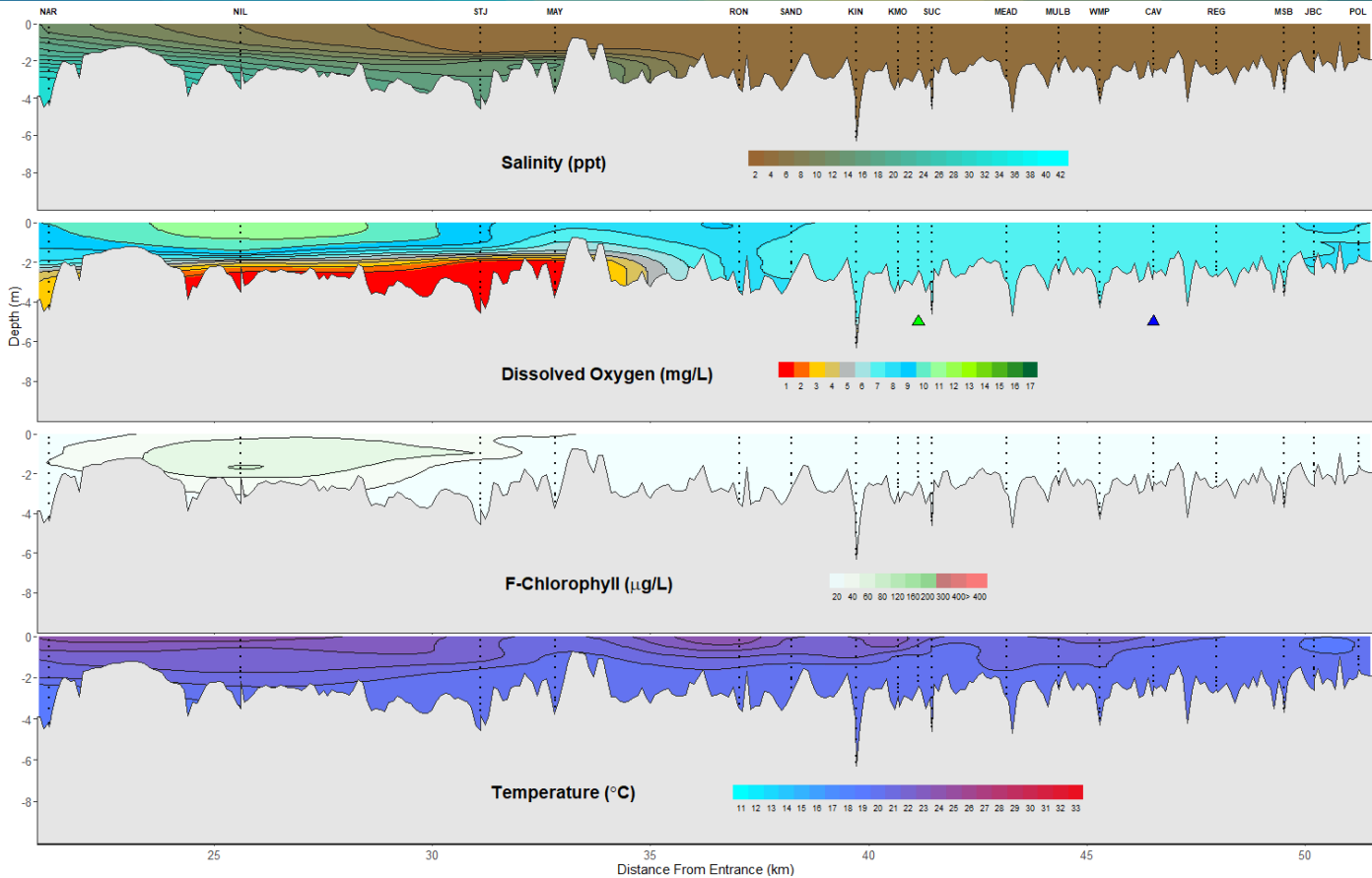
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## Swan Canning Estuary - Water Quality Profiles – 7 October 2024



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Date: 7 October 2024

Weather & tide conditions: Conditions were clear with a predominantly south-westerly breeze of up to 10.2 knots. The predicted tides at Barrack St were 1.06 m at 12:29 am (high tide) and 0.62 m at 10:26 am (low tide). Perth recorded 31.2 mm of rainfall in the week prior to sampling (Bureau of Meteorology).

Oxygenation: The Guildford oxygenation plant was triggered to provide oxygen and the Caversham oxygenation plant was operable, but not triggered to provide oxygen in the 24 hours prior to sampling.

Lower Swan Canning Estuary (FPI to NAR): The Lower Swan Canning Estuary was saline from FP1 to FP7 and brackish over saline from BLA to NAR. Waters were oxygenated or well oxygenated, except bottom waters at HEA and NAR which were low in oxygen. Chlorophyll fluorescence was low and water temperatures ranged from 17.3 to 23.0 °C at the time of sampling.

Middle Swan Estuary (NIL to RON): The Middle Swan Estuary was brackish at NIL, fresh over brackish from STJ to MAY and fresh at RON. Waters were oxygenated or well oxygenated, except bottom waters at NIL which were low in oxygen and subsurface waters at MAY and RON which were anoxic. Chlorophyll fluorescence was moderate in subsurface waters at NIL. Water temperatures ranged from 19 to 23.5 °C at the time of sampling.

Upper Swan Estuary (SAND to POL): The Upper Swan Estuary was fresh, except at KIN which was fresh over saline. Waters were oxygenated or well oxygenated, except bottom waters at KIN which were hypoxic. Chlorophyll fluorescence was low and water temperatures ranged from 18.8 to 22.4 °C.

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 < 60 µg L<sup>-1</sup>, moderate 60-160 µg L<sup>-1</sup>, high 160-400 µg L<sup>-1</sup>, extreme > 400 µg L<sup>-1</sup>