



Swan Canning Estuary Water Quality Monitoring Project

Weekly Water Quality Report

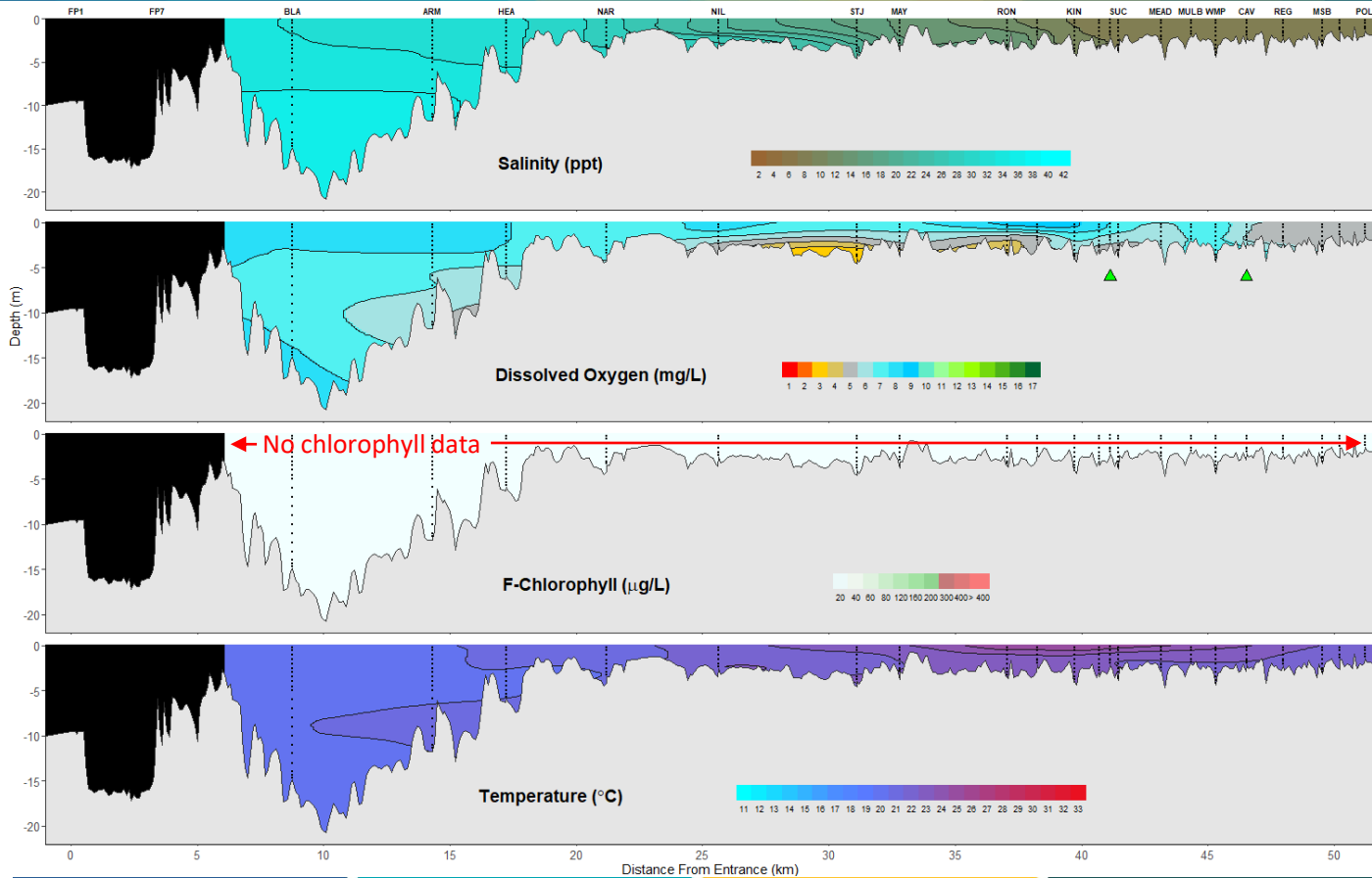
Lower Swan Canning Estuary to Upper Swan Estuary

30th October 2023

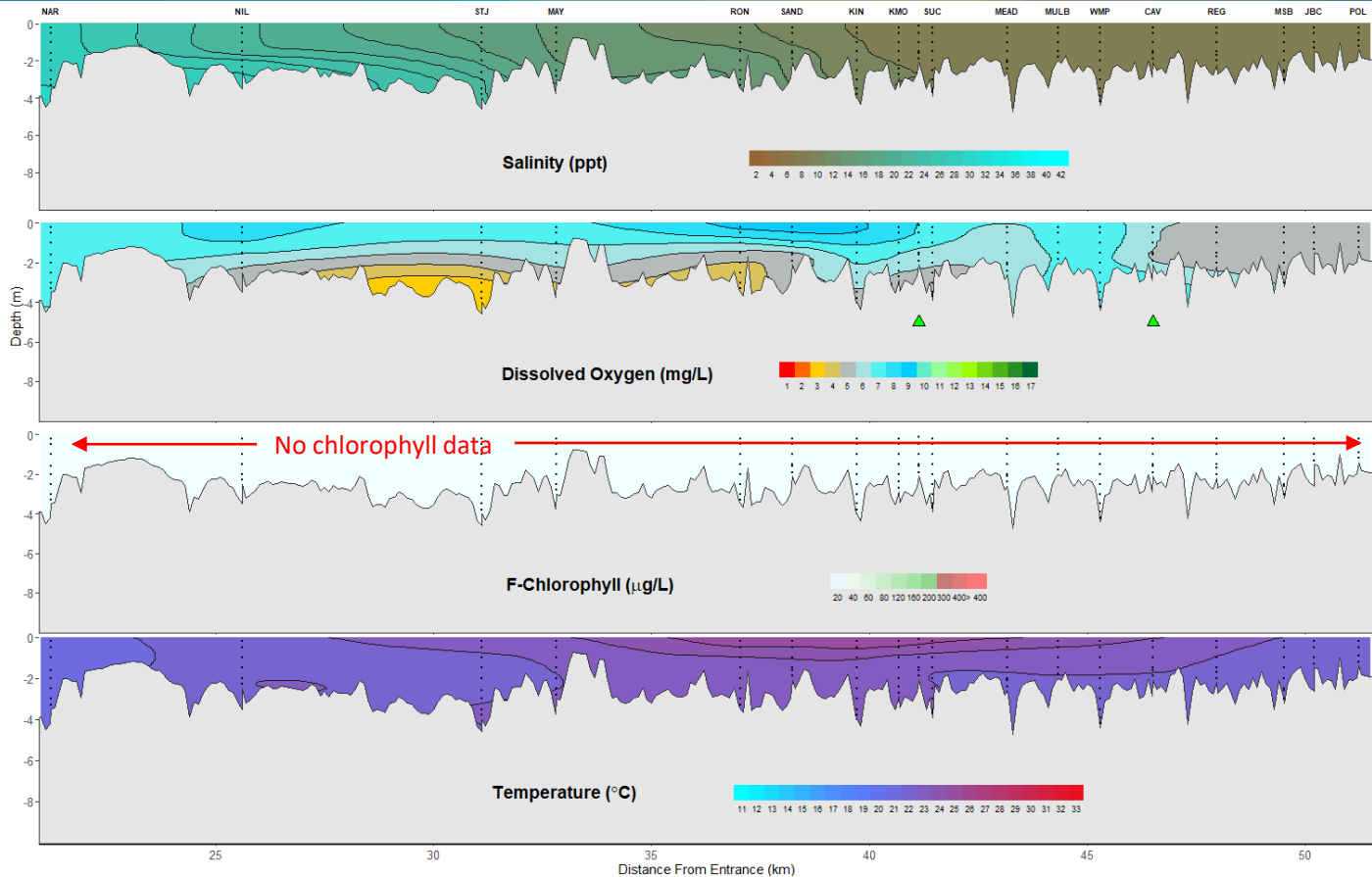
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Swan Canning Estuary - Water Quality Profiles – 30th October 2023



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Date: 30th October 2023

Weather & tide conditions: Conditions were clear with a predominantly easterly breeze of up to 9.9 knots. The predicted tides at Barrack St were 0.55 m at 9:15 am (low tide) and 1.10 m at 11:32 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 (BLA and NAR): The Lower Swan Canning Estuary was saline, waters were oxygenated or well oxygenated and water temperatures ranged from 19.4 °C to 20.5 °C at the time of sampling.

Middle Swan Estuary (NIL to RON): The Middle Swan Estuary was brackish, except for bottom waters at NIL which were saline. Waters were oxygenated or well oxygenated, except bottom waters at STJ which were low in oxygen. Water temperatures ranged from 21.4 °C to 24.7 °C at the time of sampling.

Upper Swan Estuary (SAND to POL): The Upper Swan Estuary was brackish, waters were oxygenated or well oxygenated and water temperatures ranged from 21.1 °C to 25.0 °C.

NB: Fluorescence data not available due to sensor issue.

NB: Profile plots are visual interpolations of measured parameters only. Detailed data are available at 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⁻¹, oxygenated >4-6 mg L⁻¹, low oxygen >2-4 mg L⁻¹, hypoxic 0.5-2 mg L⁻¹, anoxic <0.5 mg L⁻¹
Chlorophyll fluorescence (mod/high flow): low < 50 µg L⁻¹, moderate 50-150 µg L⁻¹, high 150-400 µg L⁻¹, extreme > 400 µg L⁻¹