

# Swan Canning Estuary Water Quality Monitoring Project

## Weekly Water Quality Report

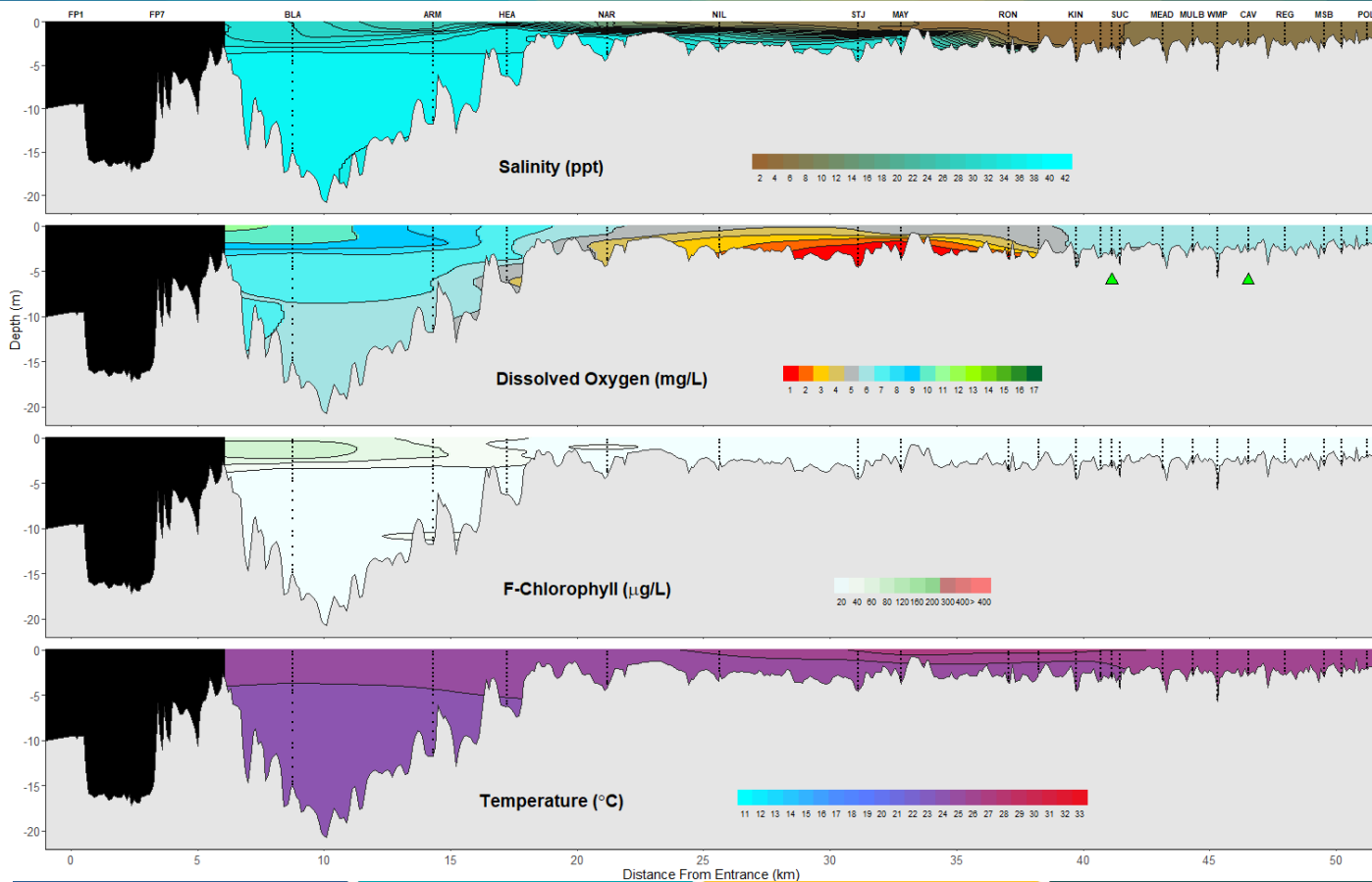
### Lower Swan Canning Estuary to Upper Swan Estuary

8<sup>th</sup> March 2021

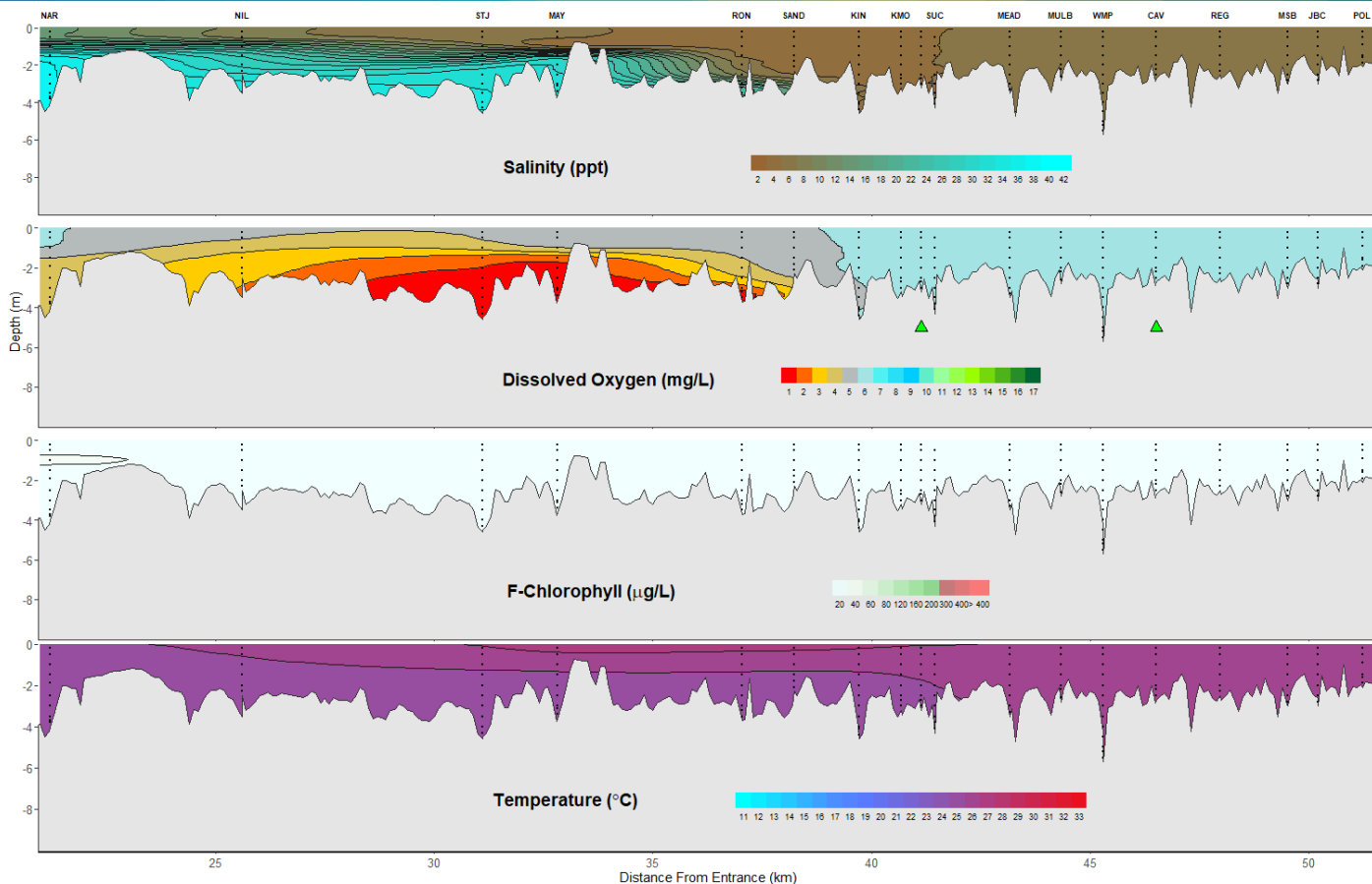
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## Swan Canning Estuary- Water Quality Profiles- 8<sup>th</sup> March 2021



## Middle and Upper Swan Estuary- Water Quality Profiles- 8<sup>th</sup> March 2021



Date: 8<sup>th</sup> March 2021

Weather & tide conditions: Conditions were overcast with a predominantly easterly breeze of up to 8 knots. The predicted tides at Barrack St were 0.54 m at 6:00 am (low tide) and 1.11 m at 7:15 pm (high tide). Perth recorded 34.0 mm of rainfall during the week prior to sampling (Bureau of Meteorology).

Oxygenation: The Guildford and Caversham oxygenation plants were triggered to provide oxygen during the 24 hours prior to sampling.

Lower Swan Canning Estuary (BLA to NAR): The Lower Swan Canning Estuary was saline from BLA to HEA and brackish over saline at NAR. Surface waters were oxygenated or well oxygenated and bottom waters were low in oxygen at HEA and NAR. Chlorophyll fluorescence was highest at BLA indicating higher microalgal activity in that area. Water temperature ranged from 23.7 to 24.9 °C.

Middle Swan Estuary (NIL to RON): The Middle Swan Estuary was brackish over saline at NIL, fresh over saline from STJ to MAY and fresh over brackish at RON. Surface waters were oxygenated and bottom waters were low in oxygen at NIL and anoxic from STJ to RON. Chlorophyll fluorescence was low throughout this zone. Water temperature ranged from 24.5 to 26.3 °C.

Upper Swan Estuary (SAND to POL): The Upper Swan Estuary was fresh, waters were oxygenated and chlorophyll fluorescence was low throughout this zone. Water temperature ranged from 24.7 to 26.4 °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 >6mg/L, oxygenated >4-6mg/L, low oxygen >2-4mg/L, hypoxic 0.5-2mg/L, anoxic <0.5mg/L

**Recommended reference:** Department of Biodiversity, Conservation and Attractions 2021. *Swan Canning Estuary water quality profile report, Lower Swan Canning Estuary to Upper Swan Estuary 8<sup>th</sup> March 2021*. Rivers and Estuaries Science (<https://www.dpaw.wa.gov.au/management/swan-canning-riverpark>)