

Swan Canning Estuary Water Quality Monitoring Project

Weekly Water Quality Report

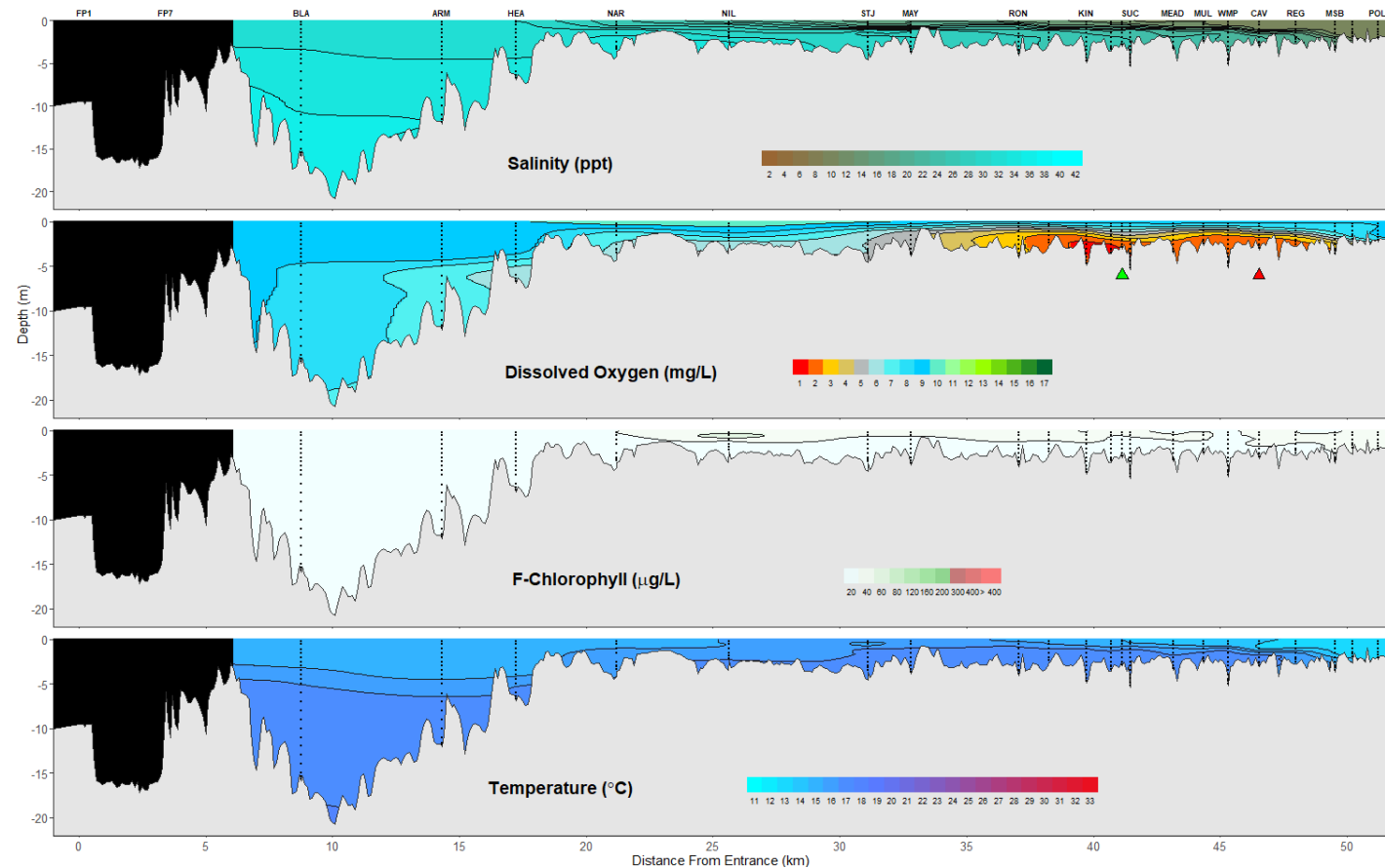
Lower Swan Canning Estuary to Upper Swan Estuary

13th July 2020

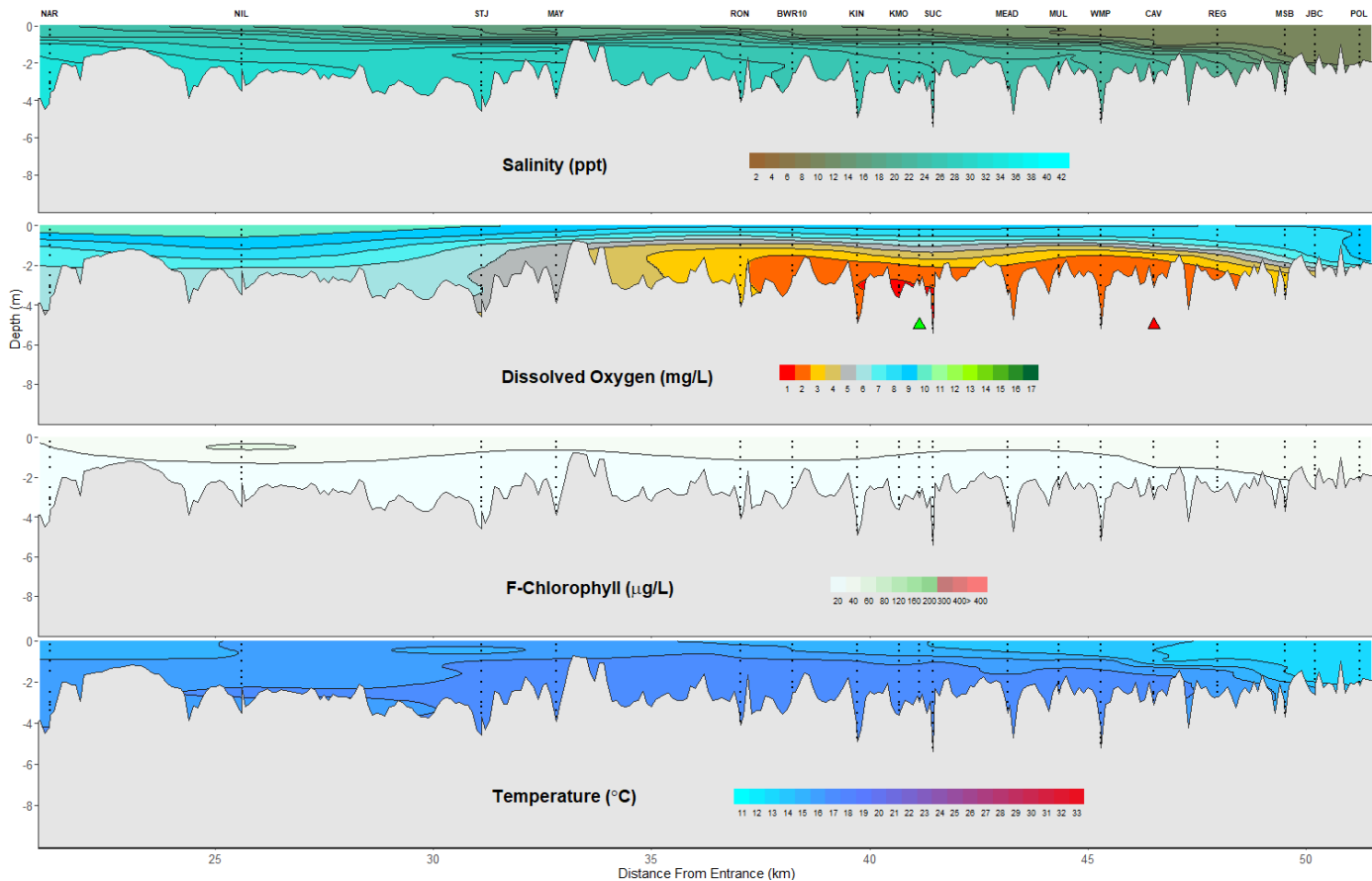
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Swan Canning Estuary- Water Quality Profiles- 13th July 2020



Middle and Upper Swan Estuary- Water Quality Profiles- 13th July 2020



Date: 13th July 2020

Weather & tide conditions: Conditions were overcast with a predominantly northerly breeze of up to 7 knots. The predicted tides at Barrack St were 0.98 m at 7:05 am (high tide) and 0.79 m at 8:41 pm (low tide). Perth recorded 21.0 mm of rainfall during the week prior to sampling (Bureau of Meteorology).

Oxygenation: The Guildford oxygenation plant was triggered to provide oxygen and the Caversham oxygenation plant was not operational during the 24 hours prior to sampling.

Lower Swan Canning Estuary (BLA to NAR): The Lower Swan Canning Estuary was saline, waters were well oxygenated and chlorophyll fluorescence was low throughout this zone. Water temperature ranged from 14.1 to 16.7 °C.

Middle Swan Estuary (NIL to RON): The Middle Swan Estuary was brackish over saline. Surface waters were oxygenated or well oxygenated and bottom waters were low in oxygen at RON. Chlorophyll fluorescence was highest at NIL indicating higher microalgal activity in that area. Water temperature ranged from 14.8 to 16.4 °C.

Upper Swan Estuary (BWR10 to POL): The Upper Swan Estuary was brackish over saline from BWR10 to KMO and brackish from VIT to POL. Surface waters were oxygenated or well oxygenated and bottom waters were hypoxic from BWR10 to REG and low in oxygen at MSB. Chlorophyll fluorescence was low throughout this zone. Water temperature ranged from 12.4 to 16.5 °C.

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 >6mg/L, oxygenated >4-6mg/L, low oxygen >2-4mg/L, hypoxic 0.5-2mg/L, anoxic <0.5mg/L