



Swan Canning Estuary Water Quality Monitoring Project

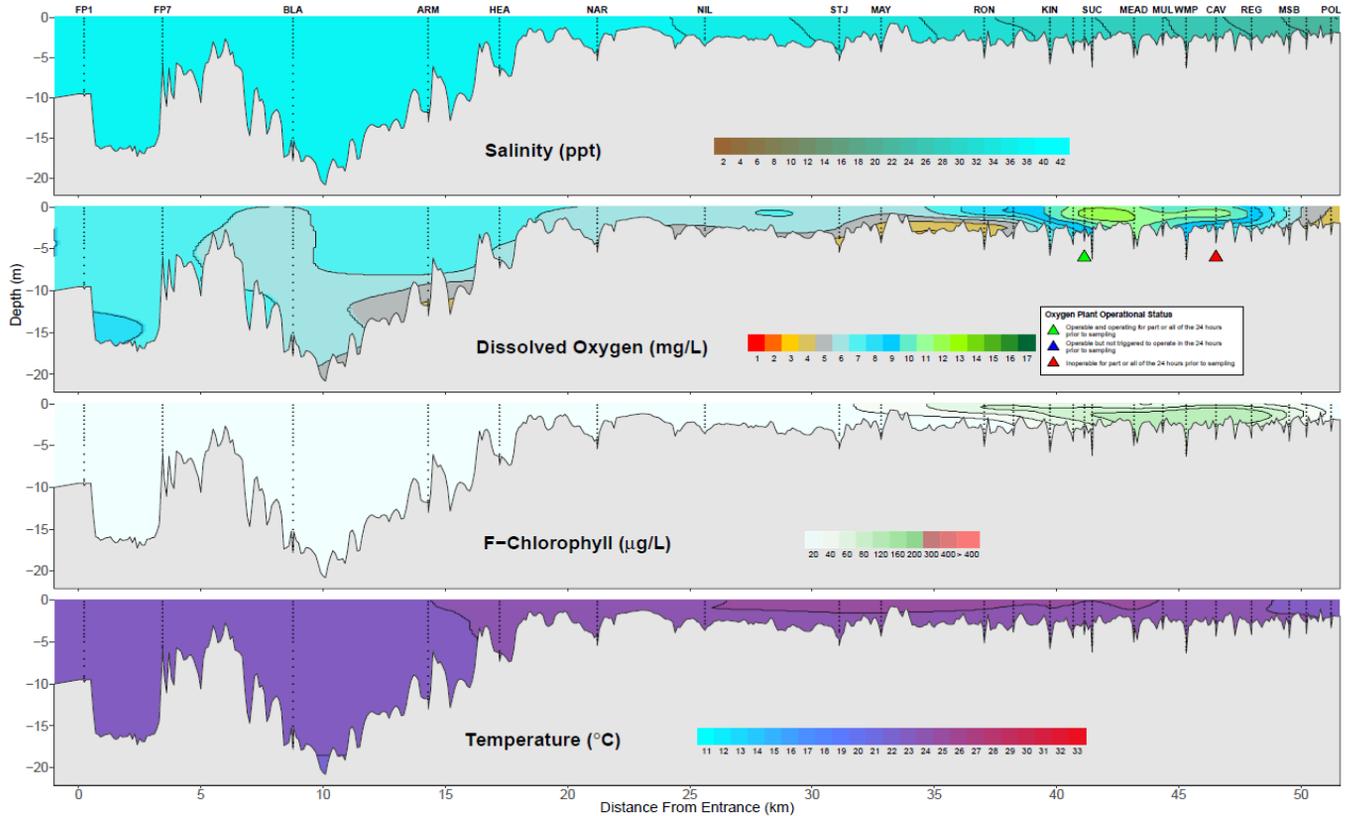
**Weekly Profile Report for the
Lower to Upper Swan Estuary**

14th April 2020

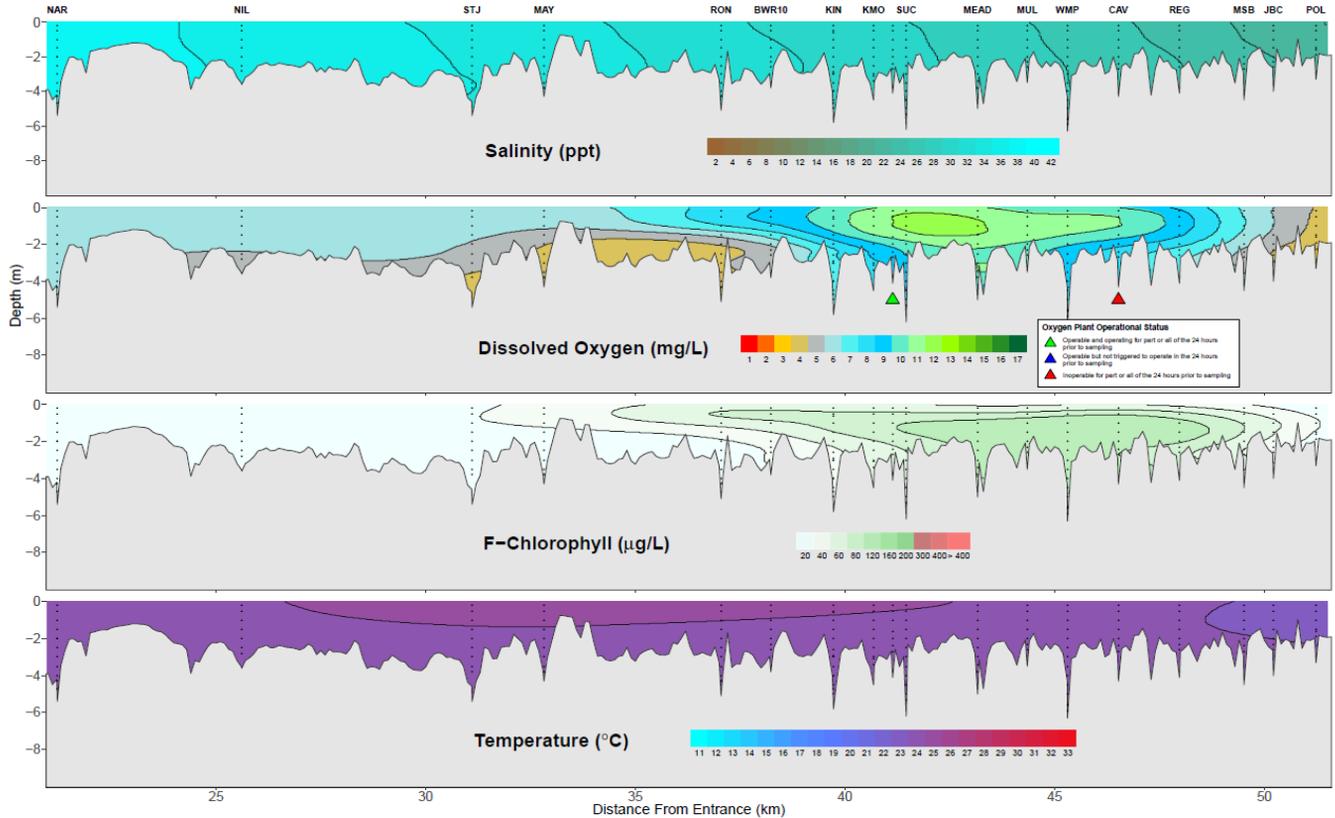
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Swan River Estuary – Physical-Chemical Profile – 14th Apr 2020



Middle and Upper Swan River Estuary – Physical-Chemical Profile – 14th Apr 2020



Date: 14th April 2020

Weather & tide conditions: Conditions were clear with a predominantly easterly breeze of up to 10 knots. The predicted tides at Barrack St were 0.60 m at 3:03 am (low tide) and 1.11 m at 2:56 pm (high tide). Perth recorded no 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 and waters were oxygenated or well oxygenated except bottom waters at ARM which were low in oxygen. Chlorophyll fluorescence was low throughout this zone. Water temperature ranged from 22.1 to 23.5 °C.

Middle Swan Estuary (NIL to RON): The Middle Swan Estuary was saline and waters were oxygenated or well oxygenated except bottom waters between STJ and RON which were low in oxygen. Chlorophyll fluorescence was highest at RON indicating higher microalgal activity in this area. Water temperature ranged from 23.2 to 24.7 °C.

Upper Swan Estuary (BWR10 to POL): The Upper Swan Estuary was saline from BWR10 to WMP and brackish between CAV and POL. Surface waters were oxygenated or well oxygenated throughout this zone and bottom waters were low in oxygen at BWR10 and from JBC to POL. Chlorophyll fluorescence was elevated between SUC and REG indicating higher microalgal activity in this area. Water temperature ranged from 22.5 to 24.4 °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