



Swan Canning Estuary Water Quality Monitoring Project

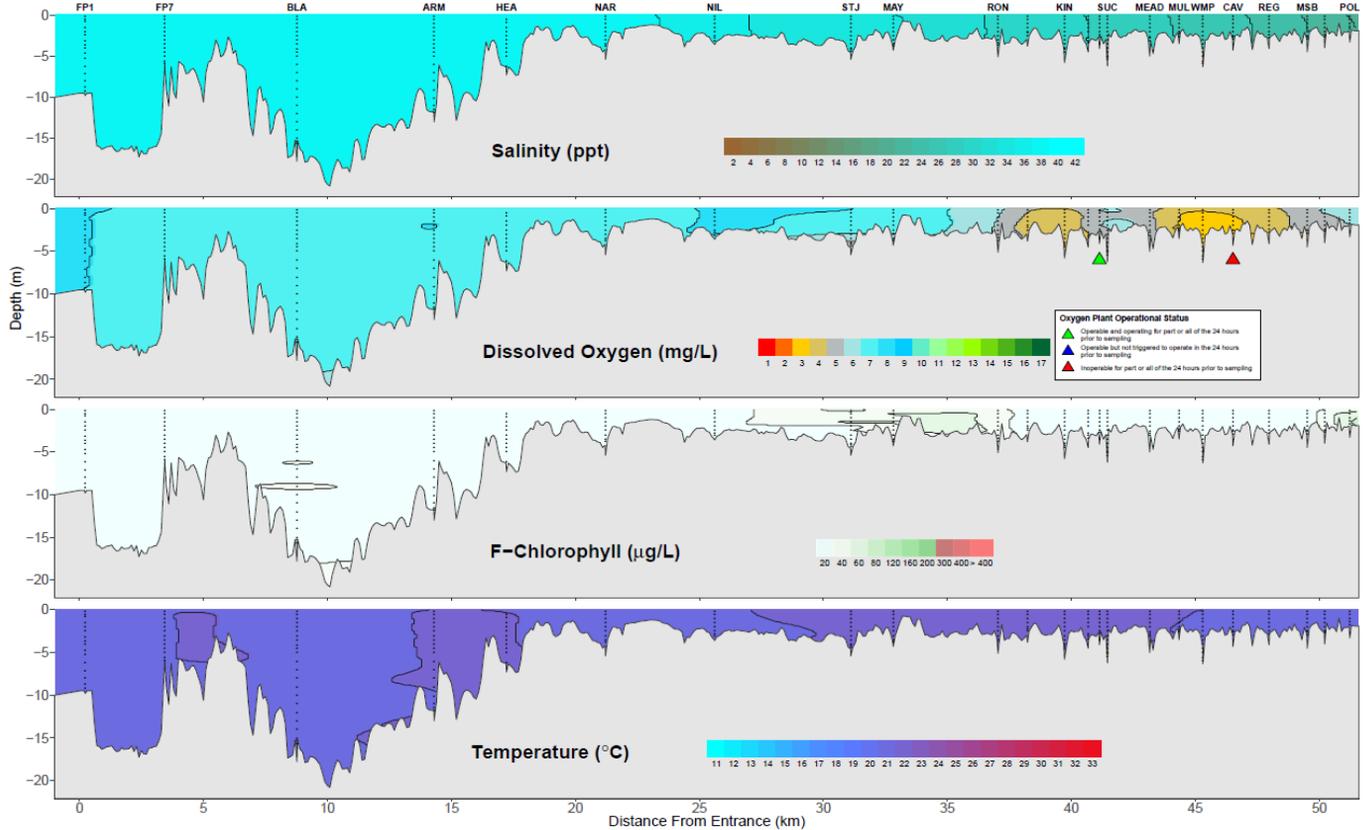
**Weekly Profile Report for the
Lower to Upper Swan Estuary**

28th April 2020

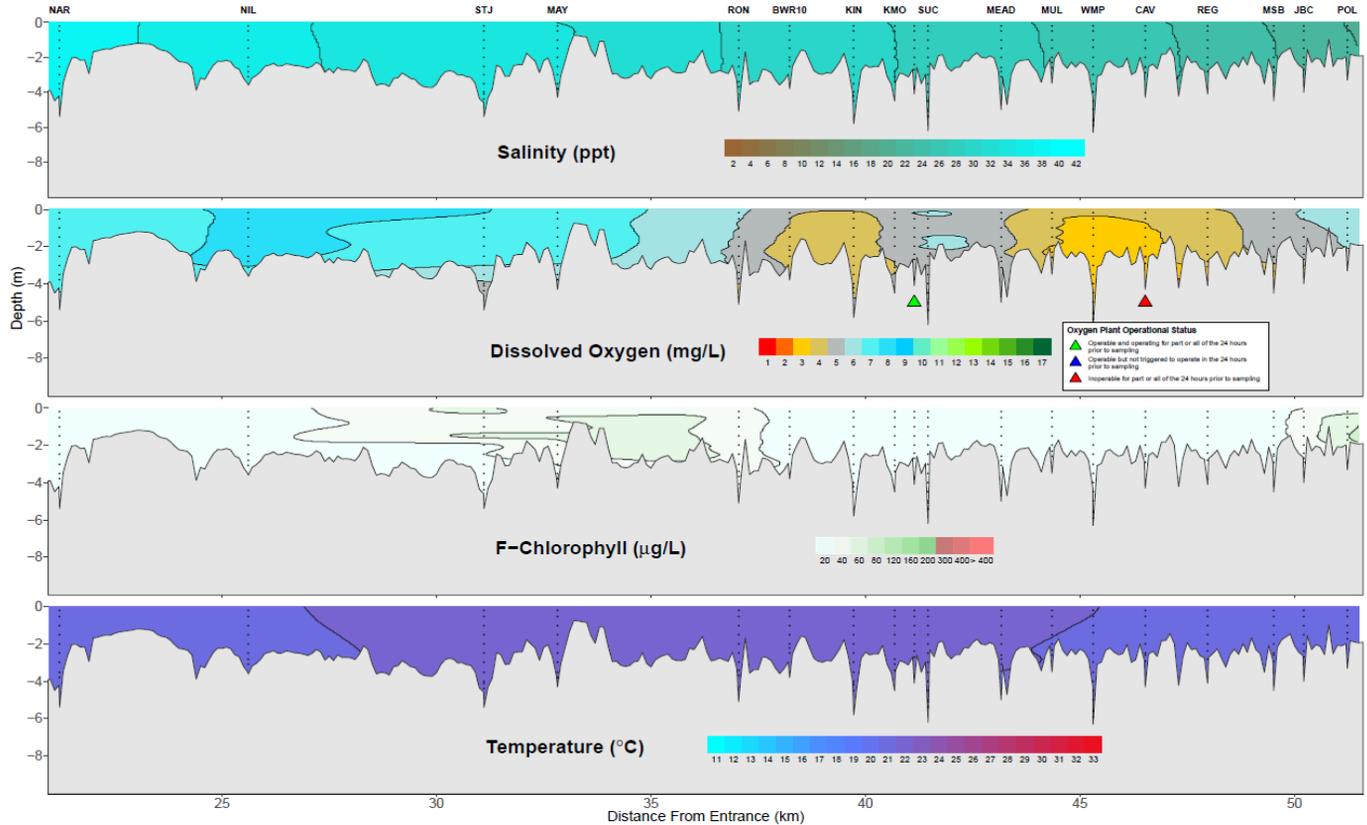
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Swan River Estuary – Physical-Chemical Profile – 28th Apr 2020



Middle and Upper Swan River Estuary – Physical-Chemical Profile – 28th Apr 2020



Date: 28th April 2020

Weather & tide conditions: Conditions were clear with a predominantly southerly breeze of up to 11 knots. The predicted tides at Barrack St were 0.68 m at 12:22 am (low tide overnight) and 1.17 m at 3:53 pm (high tide). Perth recorded 5.2 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 (FP1 to NAR): The Lower Swan Canning Estuary was saline, waters were oxygenated or well oxygenated and chlorophyll fluorescence was low to moderate throughout this zone. Water temperature ranged from 20.3 to 21.1 °C.

Middle Swan Estuary (NIL to RON): The Middle Swan Estuary was saline and waters were oxygenated or well oxygenated. Chlorophyll fluorescence was highest at STJ indicating higher microalgal activity in that area. Water temperature ranged from 21.1 to 21.4 °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, except at KIN and between MULB FARM and REG. Bottom waters were low in oxygen between BWR10 and KMO and from MULB FARM to REG. Chlorophyll fluorescence was highest at POL indicating increased microalgal activity in that area. Water temperature ranged from 19.8 to 21.8 °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