



Swan Canning Estuary Water Quality Monitoring Project

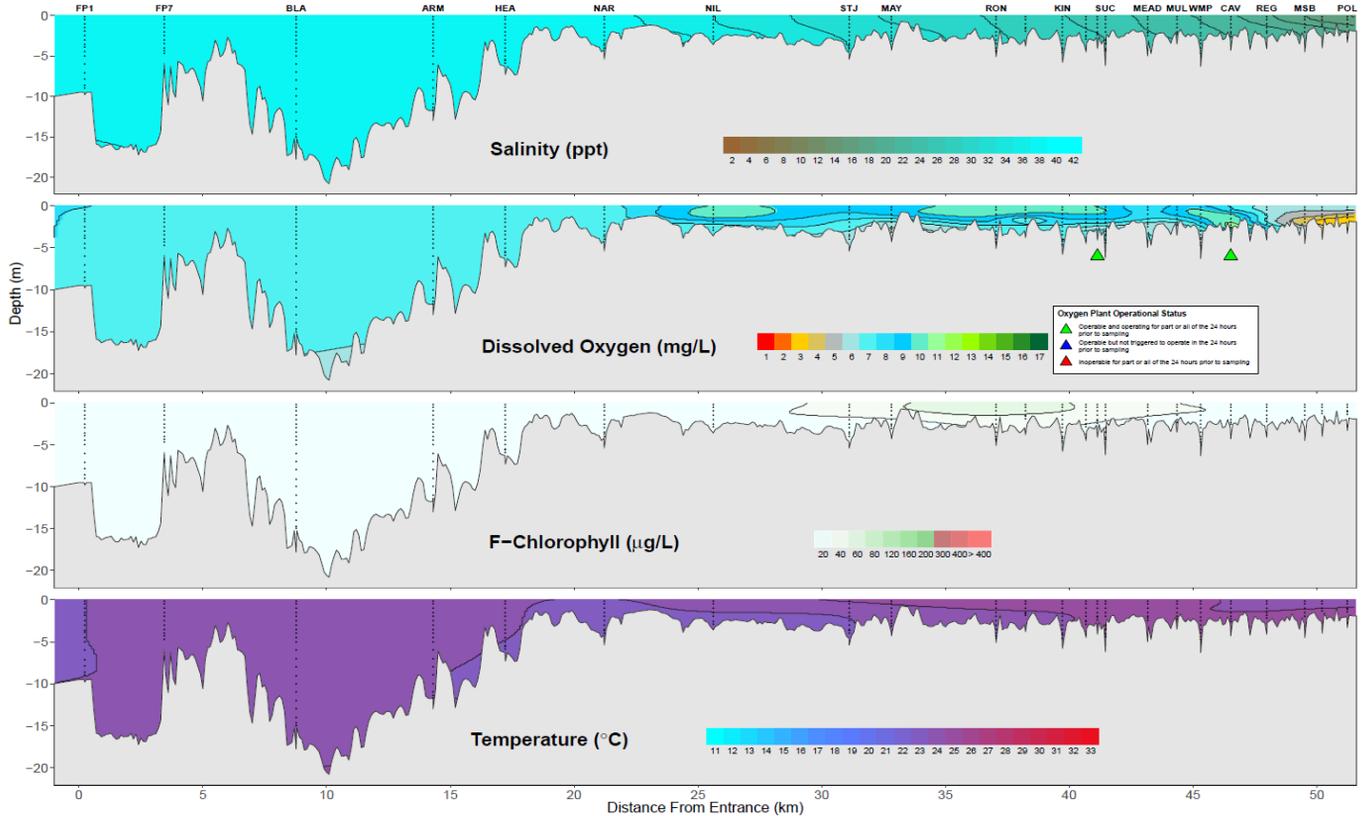
**Weekly Profile Report for the
Lower to Upper Swan Estuary**

3rd March 2020

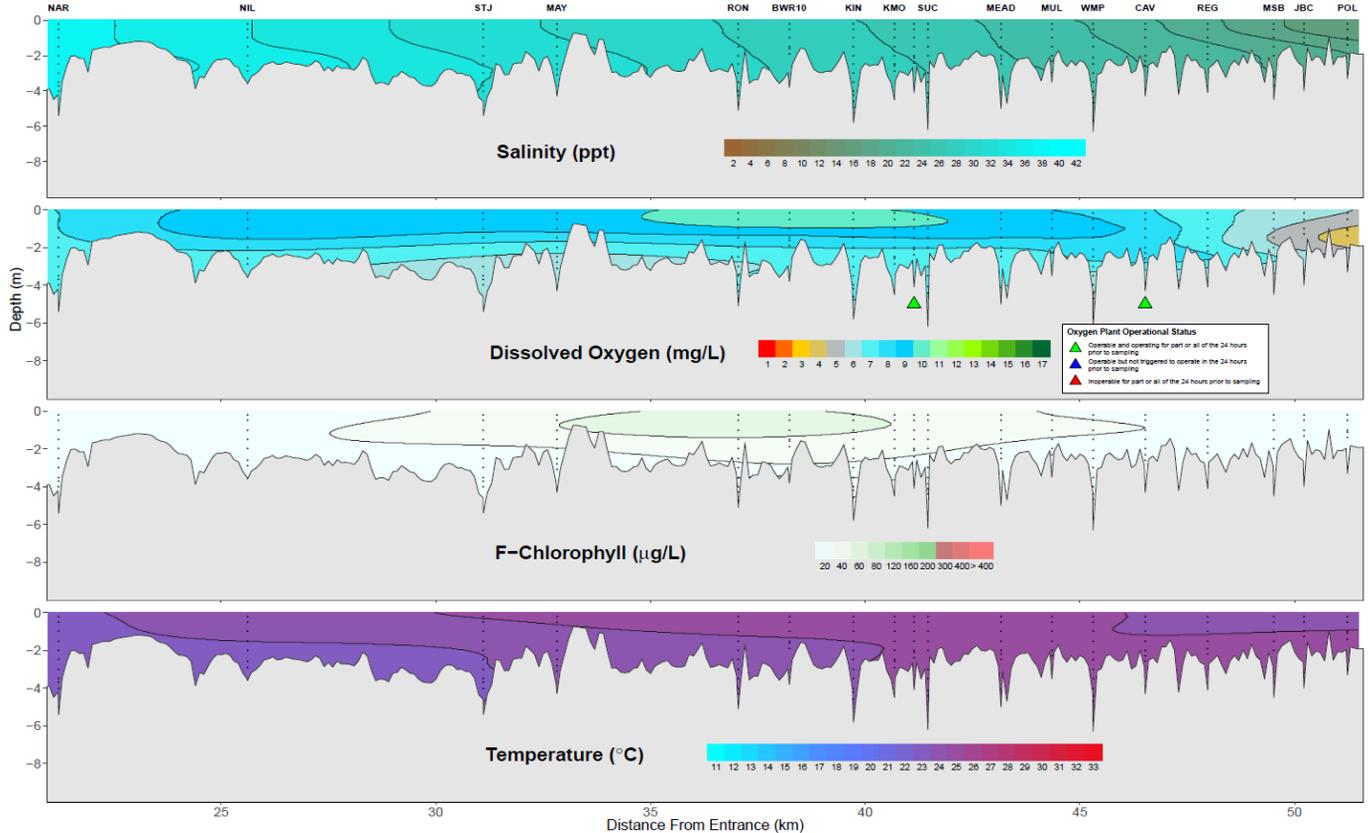
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Swan River Estuary – Physical-Chemical Profile – 3rd Mar 2020



Middle and Upper Swan River Estuary – Physical-Chemical Profile – 3rd Mar 2020



Date: 3rd March 2020

Weather & tide conditions: Conditions were clear with a predominantly south-easterly breeze of up to 7 knots. The predicted tides at Barrack St were 0.60 m at 5:44 am (low tide) and 1.03 m at 5:11 pm (high tide). Perth recorded 33.4 mm of rainfall during 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 (FPI to NAR): The Lower Swan Canning Estuary was saline and waters were well oxygenated. Chlorophyll fluorescence was low throughout this zone. Water temperature ranged from 22.6 to 23.7 °C.

Middle Swan Estuary (NIL to RON): The Middle Swan Estuary was saline and waters were oxygenated or well oxygenated throughout this zone. Chlorophyll fluorescence was highest at RON indicating higher microalgal activity in that area. Water temperature ranged from 23.3 to 24.4 °C.

Upper Swan Estuary (BWR10 to POL): The Upper Swan Estuary was saline between BWR10 and SUC and brackish from MEAD to POL. Waters were oxygenated or well oxygenated throughout this zone except bottom waters at MSB and POL which were low in oxygen. Chlorophyll fluorescence was highest at SUC indicating higher microalgal activity in that area. Water temperature ranged from 23.0 to 25.3 °C.

NB: Profile plots are visual interpolations of measured parameters only. Detailed data are available at wir.water.wa.gov.au.

Recommended reference

Department of Biodiversity, Conservation and Attractions 2019. *Swan Canning Estuary water quality monitoring weekly profile report, Lower to Upper Swan Estuary 3rd March 2020*. Rivers and Estuaries Science (<https://www.dpaw.wa.gov.au/management/swan-canning-riverpark>)

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.