



Swan Canning Estuary Water Quality Monitoring Project

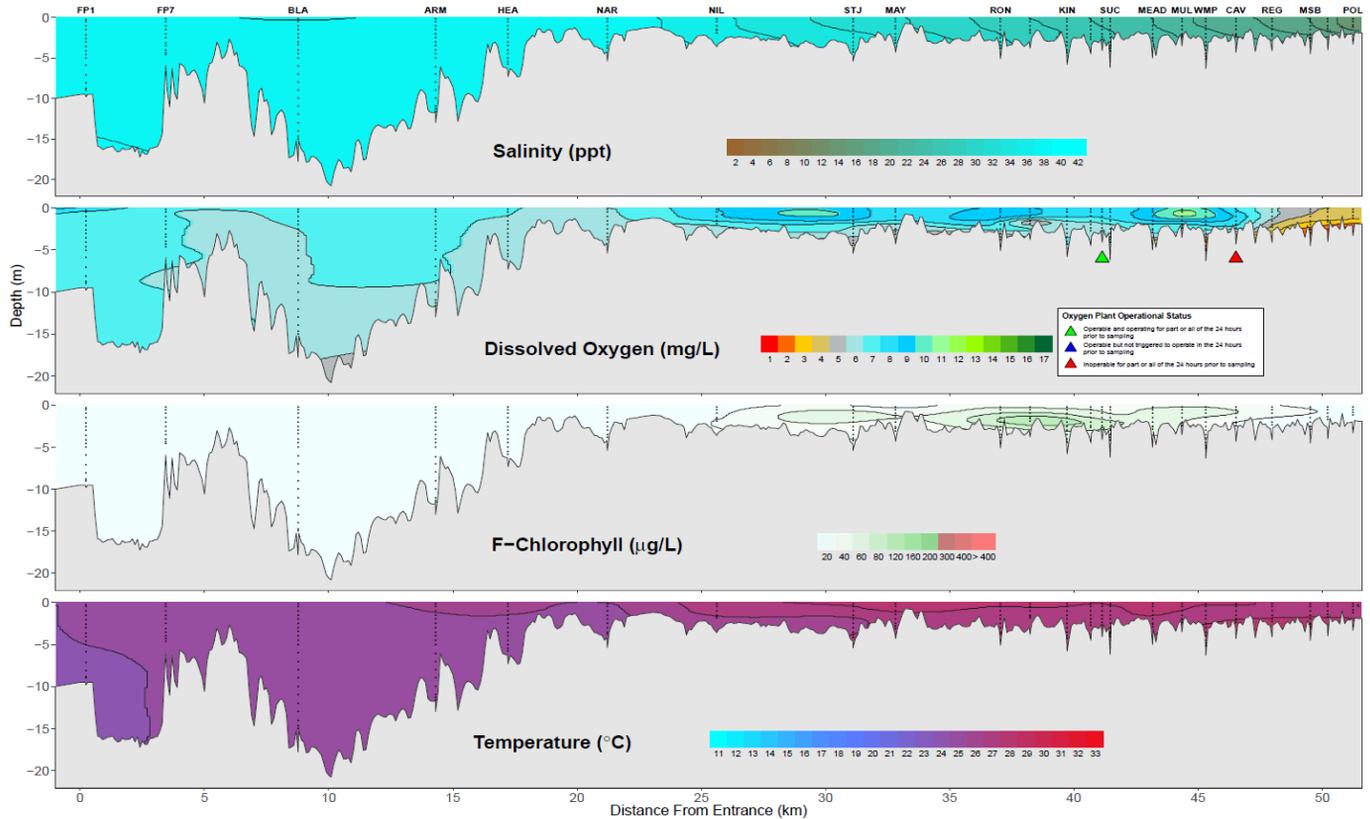
**Weekly Profile Report for the
Lower to Upper Swan Estuary**

17th February 2020

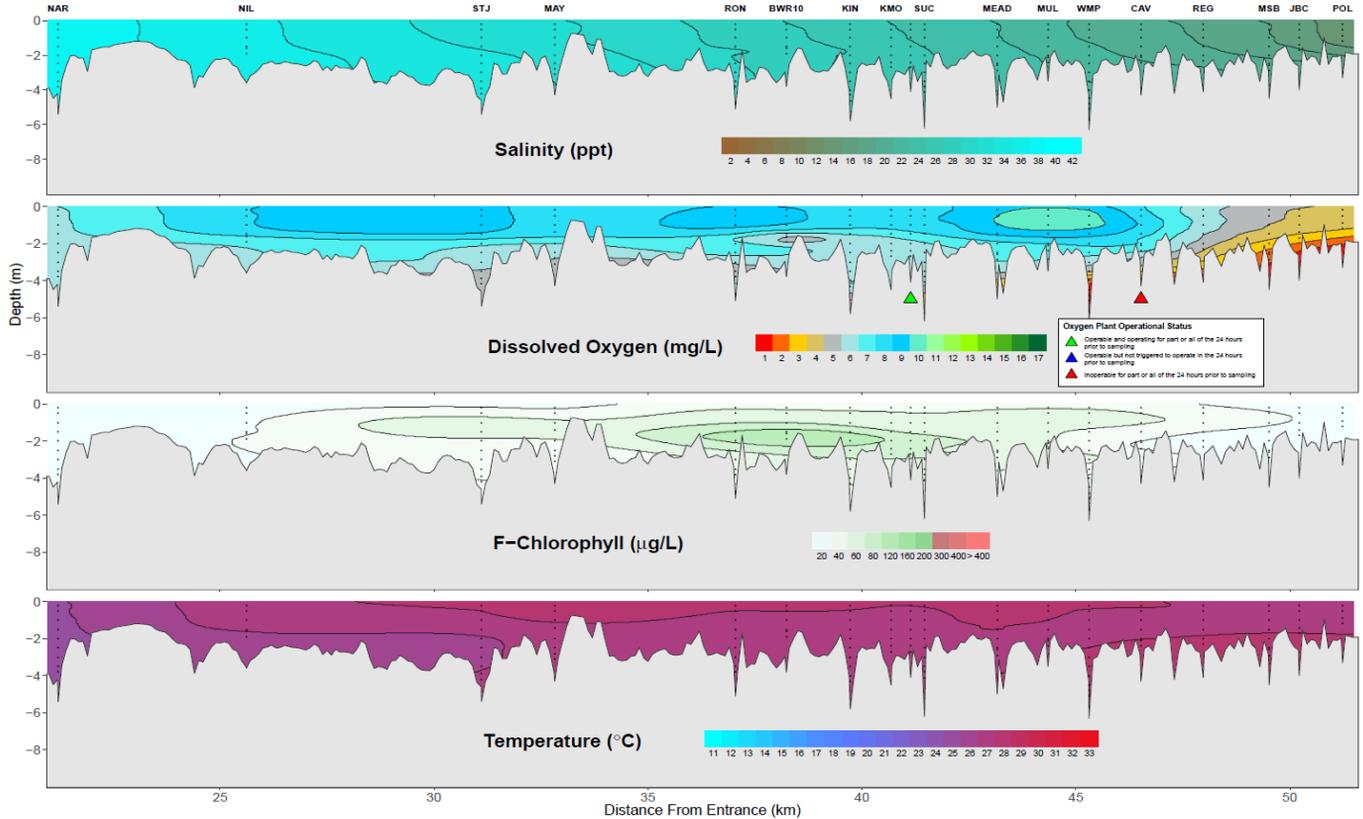
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Swan River Estuary – Physical-Chemical Profile – 17th Feb 2020



Middle and Upper Swan River Estuary – Physical-Chemical Profile – 17th Feb 2020



Date: 17th February 2020

Weather & tide conditions: Conditions were clear with a predominantly easterly breeze of up to 9 knots. The predicted tides at Barrack St were 0.52 m at 06:10 am (low tide) and 1.02 m at 6:15 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 for part of the 24 hours prior to sampling.

Lower Swan Canning Estuary (FPI to NAR): The Lower Swan Canning Estuary was saline, waters were oxygenated or well oxygenated and chlorophyll fluorescence was low throughout this zone. Water temperature ranged from 24.8 to 25.3 °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 STJ indicating higher microalgal activity in this area. Water temperature ranged from 25.2 to 27.7 °C.

Upper Swan Estuary (BWR10 to POL): The Upper Swan Estuary was saline at BWR10, brackish over saline at KIN and KMO and brackish from VIT to POL. Surface waters were oxygenated or well oxygenated between BWR10 and JBC and low in oxygen at POL. Bottom waters were low in oxygen at BWR10, REG, JBC and POL, hypoxic at MSB and anoxic at WMP. Chlorophyll fluorescence was highest at BWR10 indicating higher microalgal activity in this area. Water temperature ranged from 26.0 to 27.9 °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 17th February 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.