



Swan Canning Estuary Water Quality Monitoring Project

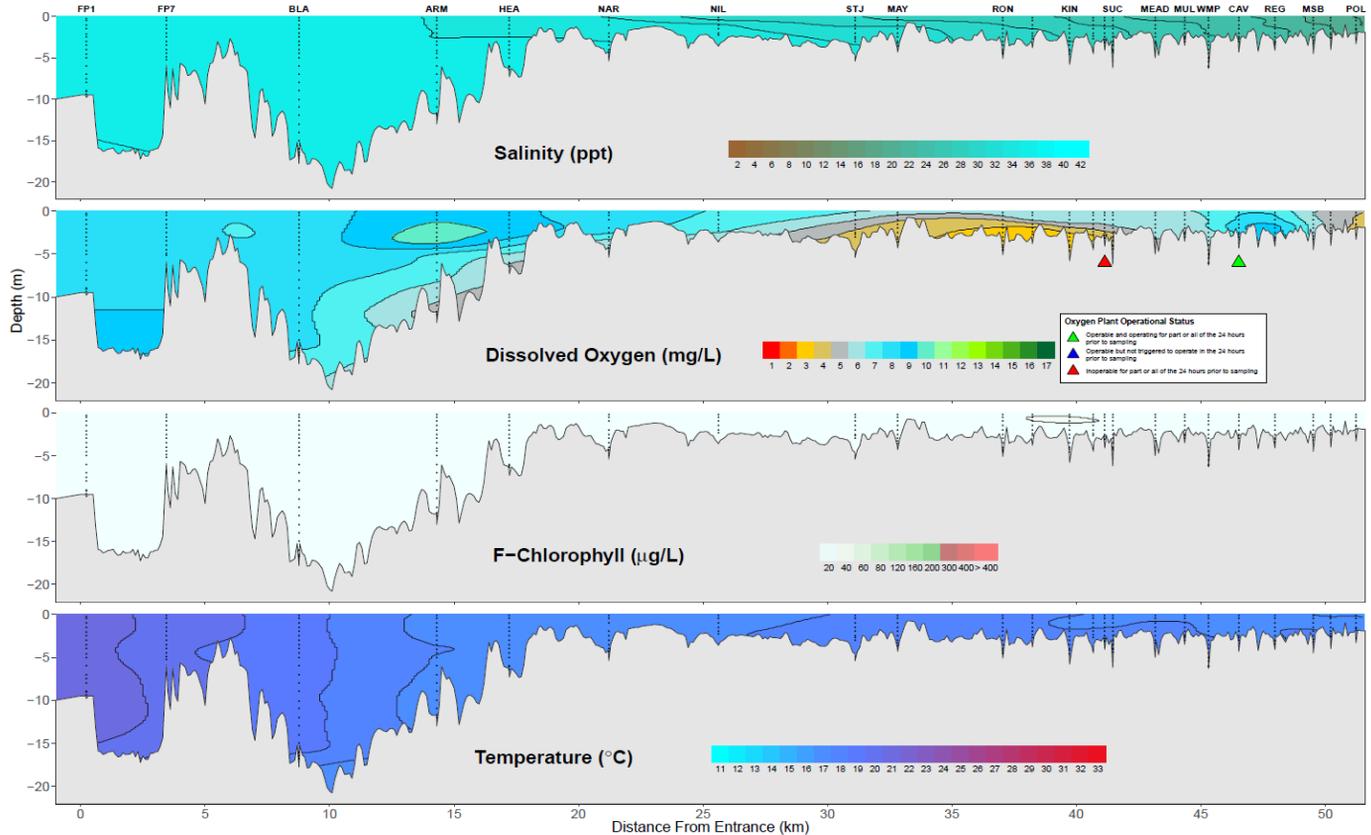
**Weekly Profile Report for the
Lower to Upper Swan Estuary**

8th June 2020

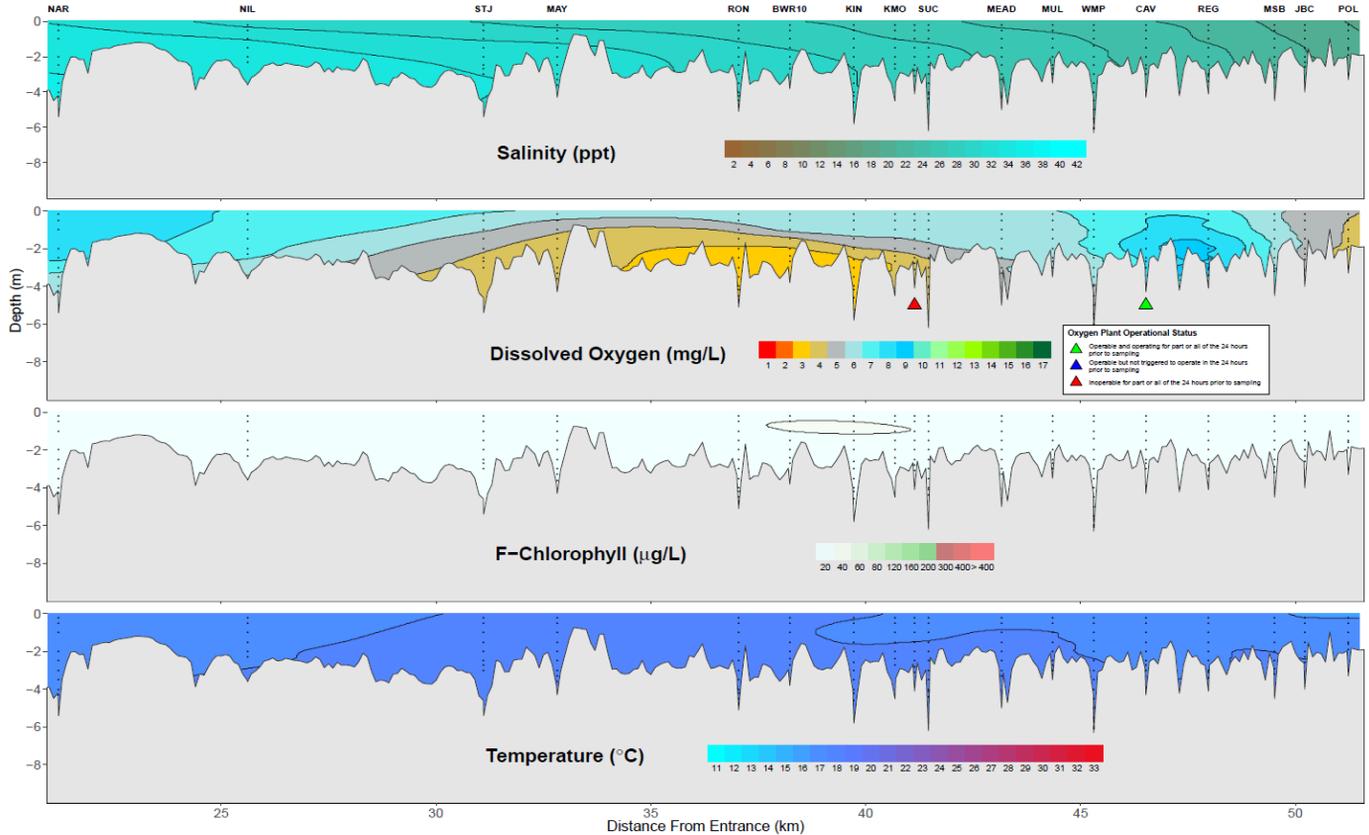
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Swan River Estuary – Physical-Chemical Profile – 8th Jun 2020



Middle and Upper Swan River Estuary – Physical-Chemical Profile – 8th Jun 2020



Date: 8th June 2020

Weather & tide conditions: Conditions were clear with a predominantly northerly breeze of up to 4 knots. The predicted tides at Barrack St were 1.16 m at 12:17 pm (high tide) and 0.71 m at 11:08 pm (low tide). Perth recorded 8.2 mm of rainfall during the week prior to sampling (Bureau of Meteorology).

Oxygenation: The Guildford oxygenation plant was not operational and the Caversham oxygenation plant was triggered to provide oxygen during 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 16.2 to 20.6 °C.

Middle Swan Estuary (NIL to RON): The Middle Swan Estuary was saline, surface waters were oxygenated or well oxygenated and bottom waters were low in oxygen between STJ and RON. Chlorophyll fluorescence was low throughout this zone. Water temperature ranged from 16.4 to 17.6 °C.

Upper Swan Estuary (BWR10 to POL): The Upper Swan Estuary was saline between BWR10 and SUC, brackish over saline from MEAD to MUL and brackish from WMP to POL. Surface waters were oxygenated or well oxygenated and bottom waters were low in oxygen from BWR10 to SUC and at POL. Chlorophyll fluorescence was highest at KMO indicating higher microalgal activity in that area. Water temperature ranged from 15.9 to 17.4 °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

Recommended reference: Department of Biodiversity, Conservation and Attractions 2019. *Swan Canning Estuary water quality monitoring weekly profile report, Lower to Upper Swan Estuary* 8th June 2020. Rivers and Estuaries Science (<https://www.dpaw.wa.gov.au/management/swan-canning-riverpark>)