



# Swan Canning Estuary Water Quality Monitoring Project

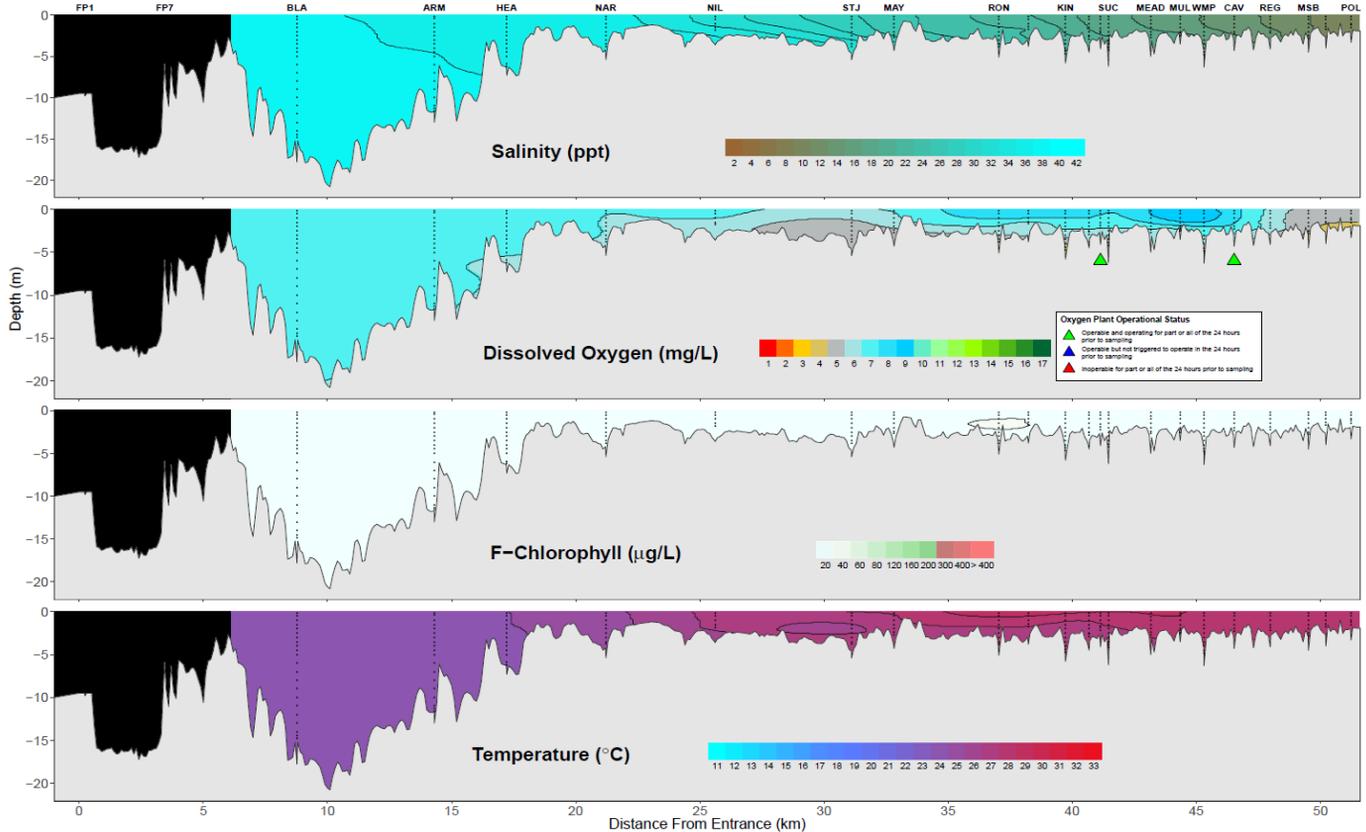
**Weekly Profile Report for the  
Lower to Upper Swan Estuary**

**13<sup>th</sup> January 2020**

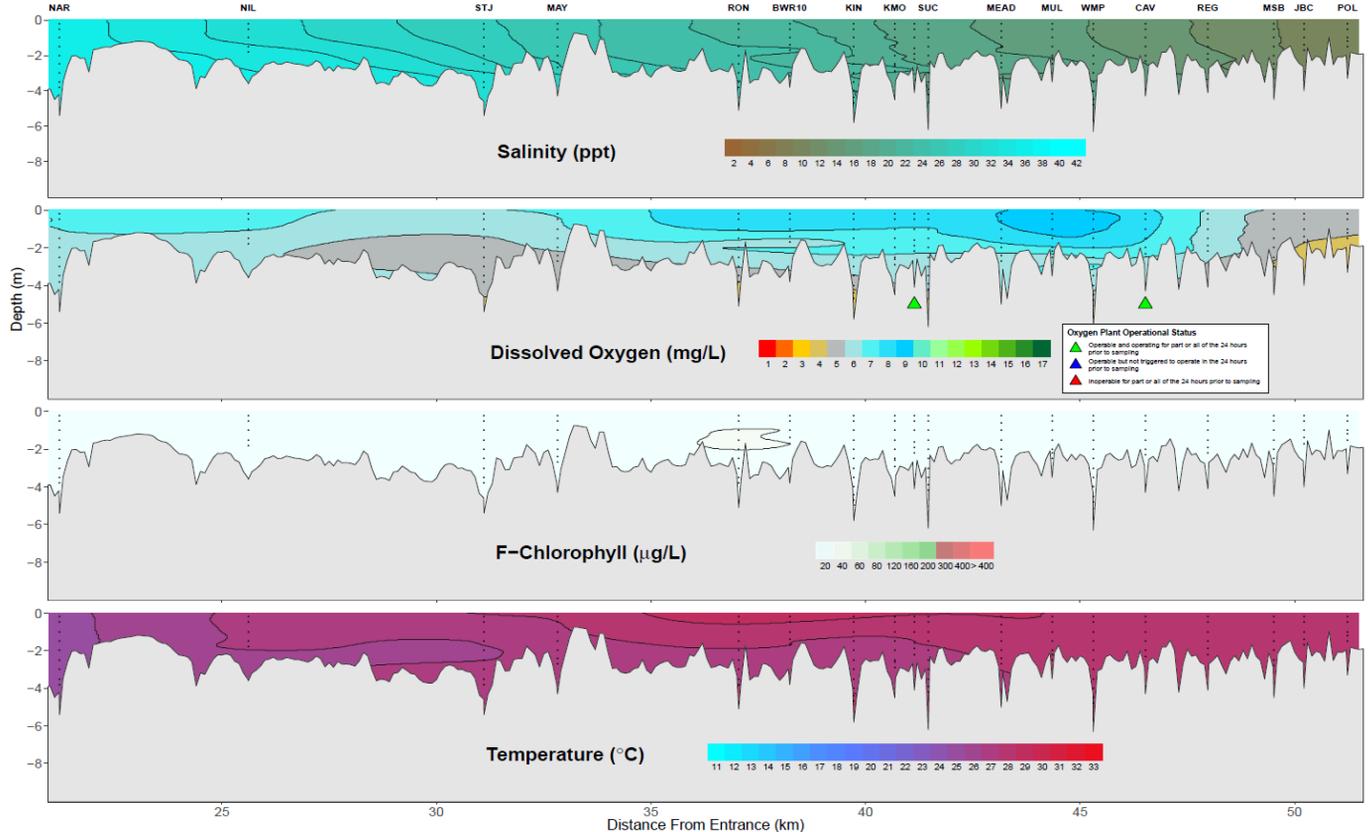
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### Swan River Estuary – Physical-Chemical Profile – 13th Jan 2020



### Middle and Upper Swan River Estuary – Physical-Chemical Profile – 13th Jan 2020



Date: 13<sup>th</sup> January 2020

Weather & tide conditions: Conditions were clear with a predominantly easterly breeze of up to 10 knots. The predicted tides at Barrack St were 1.09 m at 12:08 am (high tide overnight) and 0.47 m at 10:23 am (low tide). Perth recorded no rainfall during the week prior to sampling (Bureau of Meteorology).

Oxygenation: The Guildford and Caversham oxygenation plants were both triggered to provide oxygen in the 24 hours prior to sampling.

Lower Swan Canning Estuary (BLA 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 23.3 to 24.6 °C.

Middle Swan Estuary (NIL to RON): The Middle Swan Estuary was saline between NIL and MAY and brackish at RON. Surface waters were well oxygenated and bottom waters were oxygenated throughout this zone. Chlorophyll fluorescence was highest at RON indicating higher microalgal activity in this area. Water temperature ranged from 25.7 to 28.7 °C.

Upper Swan Estuary (BWR10 to POL): The Upper Swan Estuary was brackish and surface waters were oxygenated or well oxygenated throughout this zone. Bottom waters were low in oxygen at MSB and JBC. Chlorophyll fluorescence was highest at BWR10 indicating higher microalgal activity in this area. Water temperature ranged from 26.4 to 28.8 °C.

NB: Profile plots are visual interpolations of measured parameters only. Detailed data are available at [wir.water.wa.gov.au](http://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 13<sup>th</sup> January 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.