



# Swan Canning Estuary Water Quality Monitoring Project

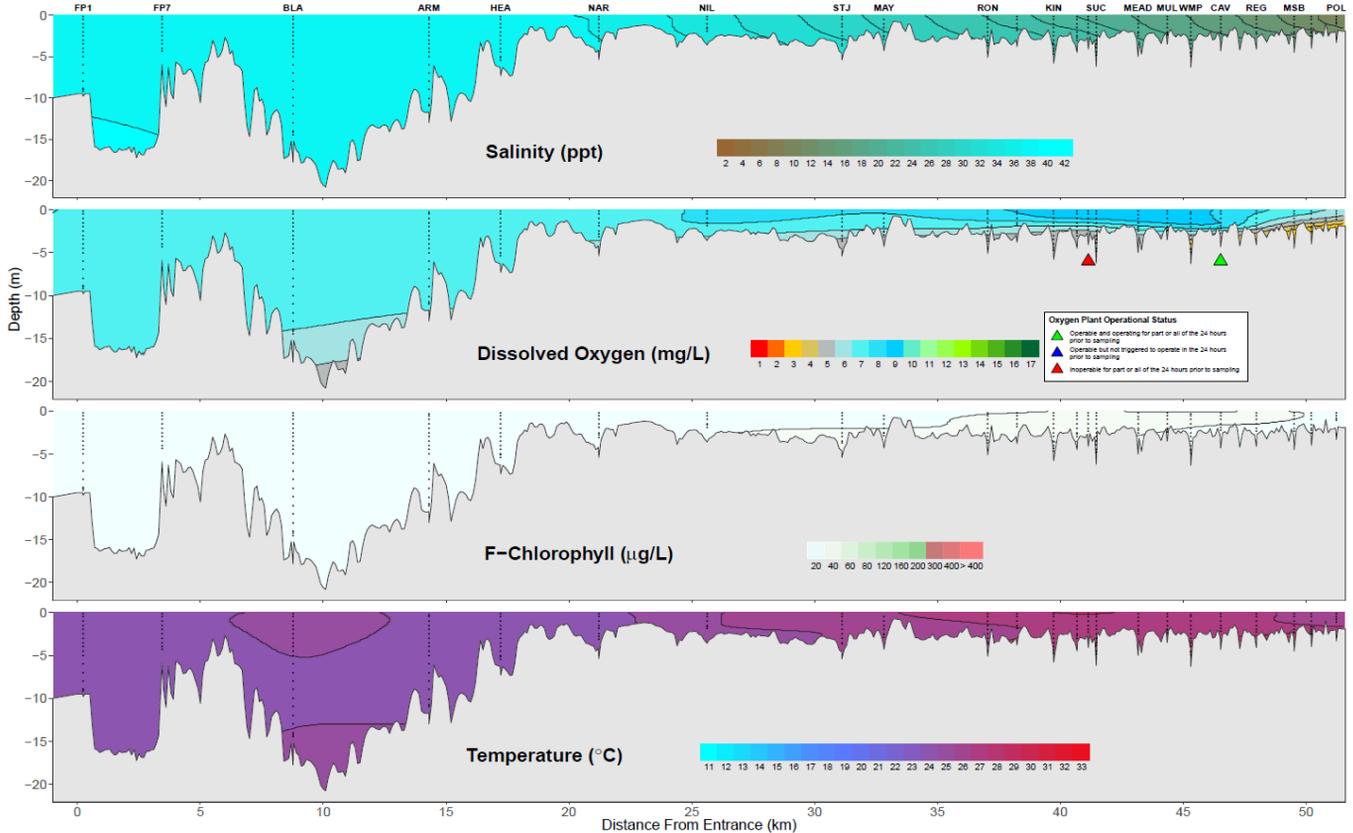
**Weekly Profile Report for the  
Lower to Upper Swan Estuary**

**3<sup>rd</sup> February 2020**

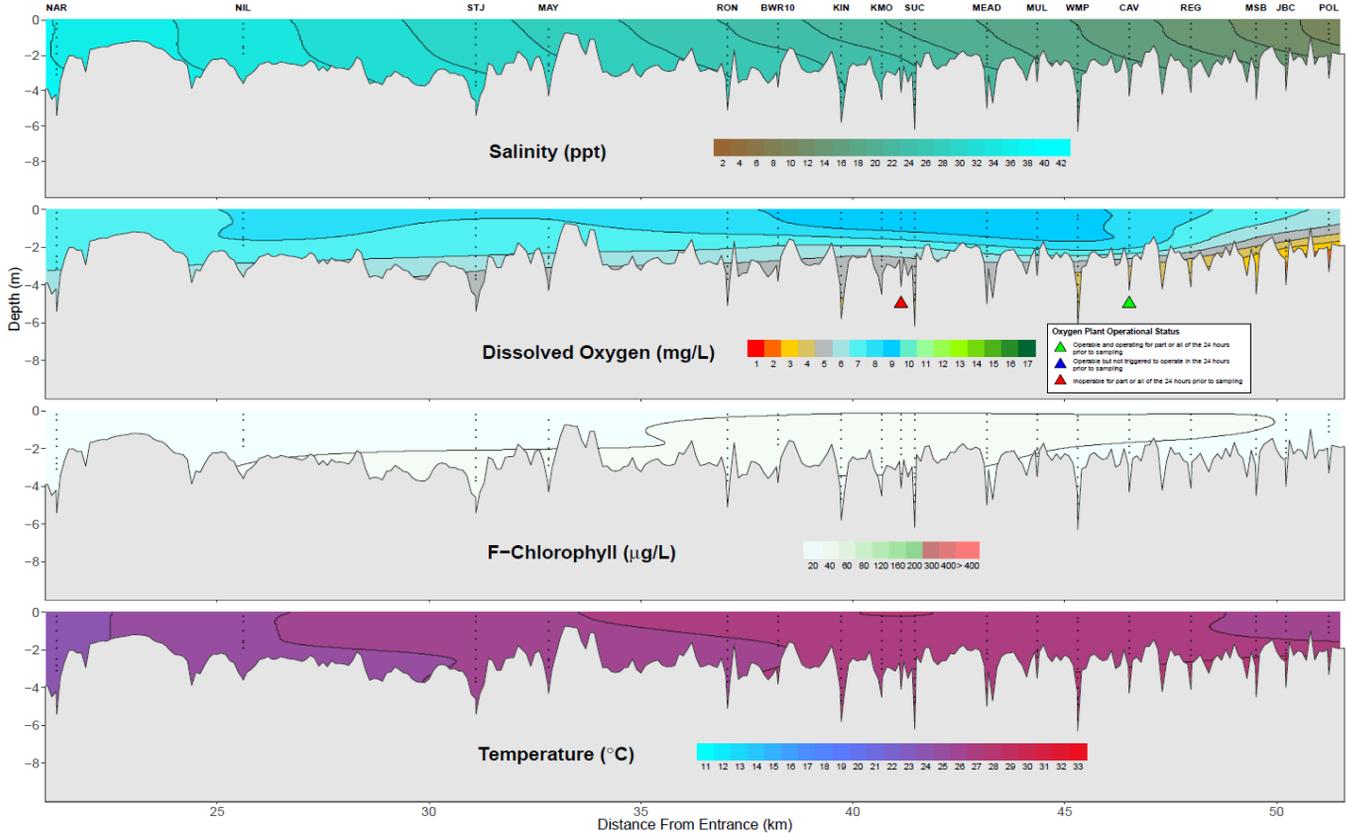
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### Swan River Estuary – Physical-Chemical Profile – 3rd Feb 2020



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



Date: 3<sup>rd</sup> February 2020

Weather & tide conditions: Conditions were clear with a predominantly easterly breeze of up to 17 knots. The predicted tides at Barrack St were 0.59 m at 07:13 am (low tide) and 1.00 m at 06:35 pm (high tide). Perth recorded 1.2mm rainfall during the week prior to sampling (Bureau of Meteorology).

Oxygenation: The Caversham oxygenation plant was triggered to provide oxygen and the Guildford oxygenation plant was turned off for maintenance in 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 23.2 to 24.2 °C.

Middle Swan Estuary (NIL to RON): The Middle Swan Estuary was saline between NIL and MAY and brackish over saline at RON. Surface waters were well oxygenated and bottom waters were oxygenated throughout this zone. Chlorophyll fluorescence was highest at MAY indicating higher microalgal activity in this area. Water temperature ranged from 24.9 to 26.4 °C.

Upper Swan Estuary (BWR10 to POL): The Upper Swan Estuary was brackish over saline at BWR10 and brackish between KIN and POL. Surface waters were oxygenated or well oxygenated throughout this zone. Bottom waters were low in oxygen at KIN, KMO, WMP, MSB and JBC Chlorophyll fluorescence was highest at KMO indicating higher microalgal activity in this area. Water temperature ranged from 25.1 to 27.3 °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 3<sup>rd</sup> 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.