



Department of Biodiversity,  
Conservation and Attractions



Biodiversity and  
Conservation Science

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# Swan Canning Estuary Water Quality Monitoring Project

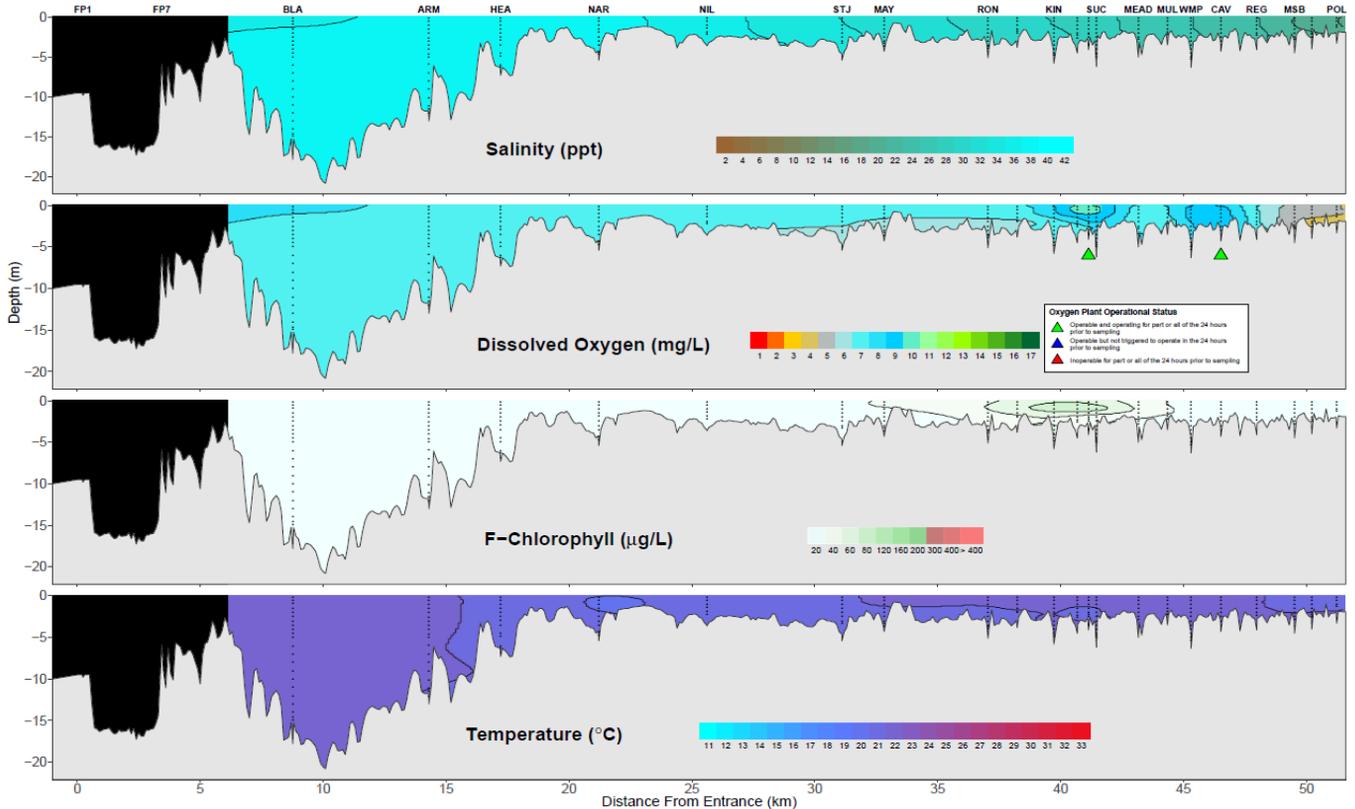
**Weekly Profile Report for the  
Lower to Upper Swan Estuary**

**6<sup>th</sup> April 2020**

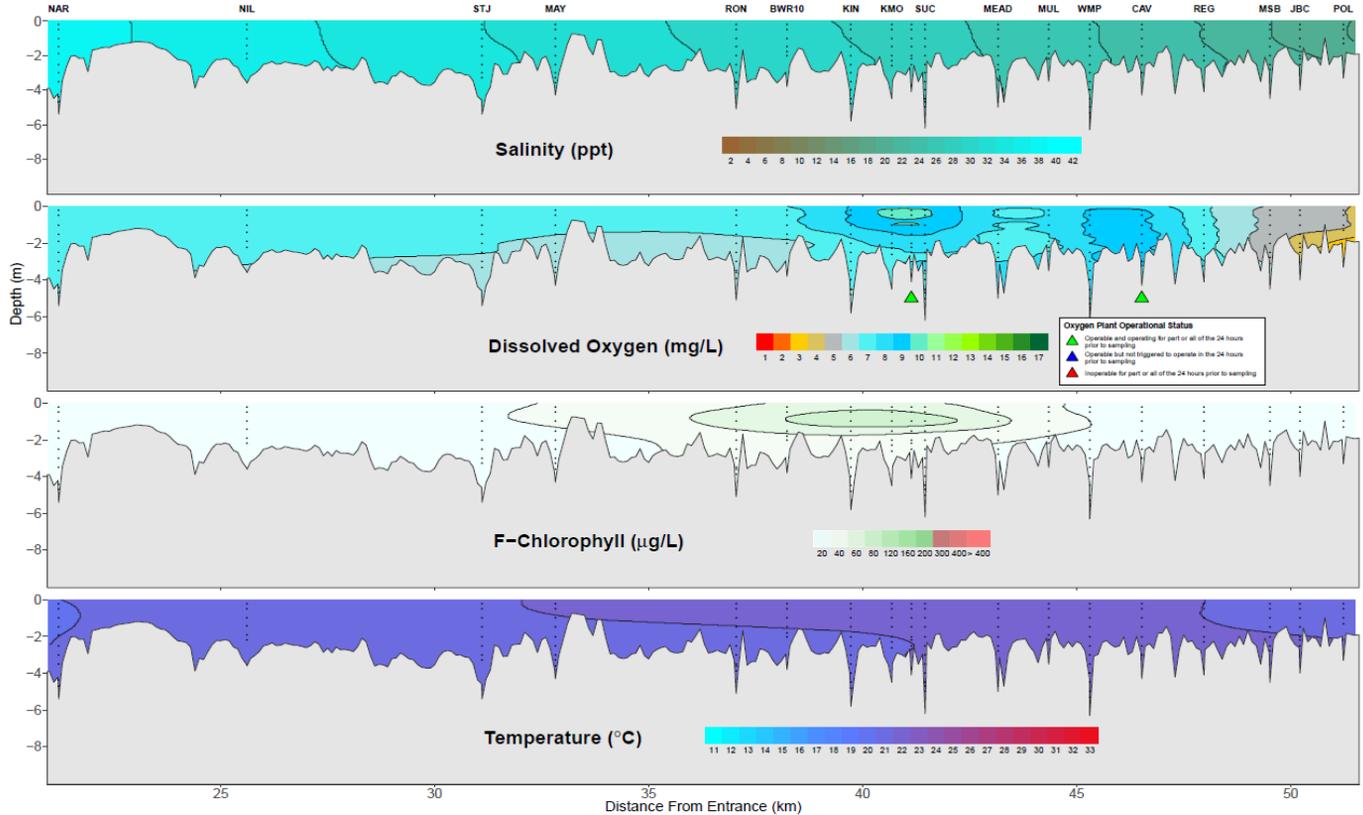
**Prepared by**

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### Swan River Estuary – Physical-Chemical Profile – 6th Apr 2020



### Middle and Upper Swan River Estuary – Physical-Chemical Profile – 6th Apr 2020



Date: 6<sup>th</sup> April 2020

Weather & tide conditions: Conditions were clear with a predominantly easterly breeze of up to 12 knots. The predicted tides at Barrack St were 0.66 m at 5:57 am (low tide) and 0.86 m at 12:16 pm (high tide). Perth recorded 1.6 mm of 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 19.9 to 21.3 °C.

Middle Swan Estuary (NIL to RON): The Middle Swan Estuary was saline and waters were oxygenated or well oxygenated. Chlorophyll fluorescence was highest at RON indicating higher microalgal activity in this area. Water temperature ranged from 20.3 to 21.2 °C.

Upper Swan Estuary (BWR10 to POL): The Upper Swan Estuary was saline from BWR10 to MEAD and brackish between MULB FARM and POL. Surface waters were oxygenated or well oxygenated throughout this zone and bottom waters were low in oxygen from MSB to POL. Chlorophyll fluorescence was highest at KMO indicating higher microalgal activity in this area. Water temperature ranged from 20.5 to 21.5 °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).

**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