



# Swan Canning Estuary Water Quality Monitoring Project

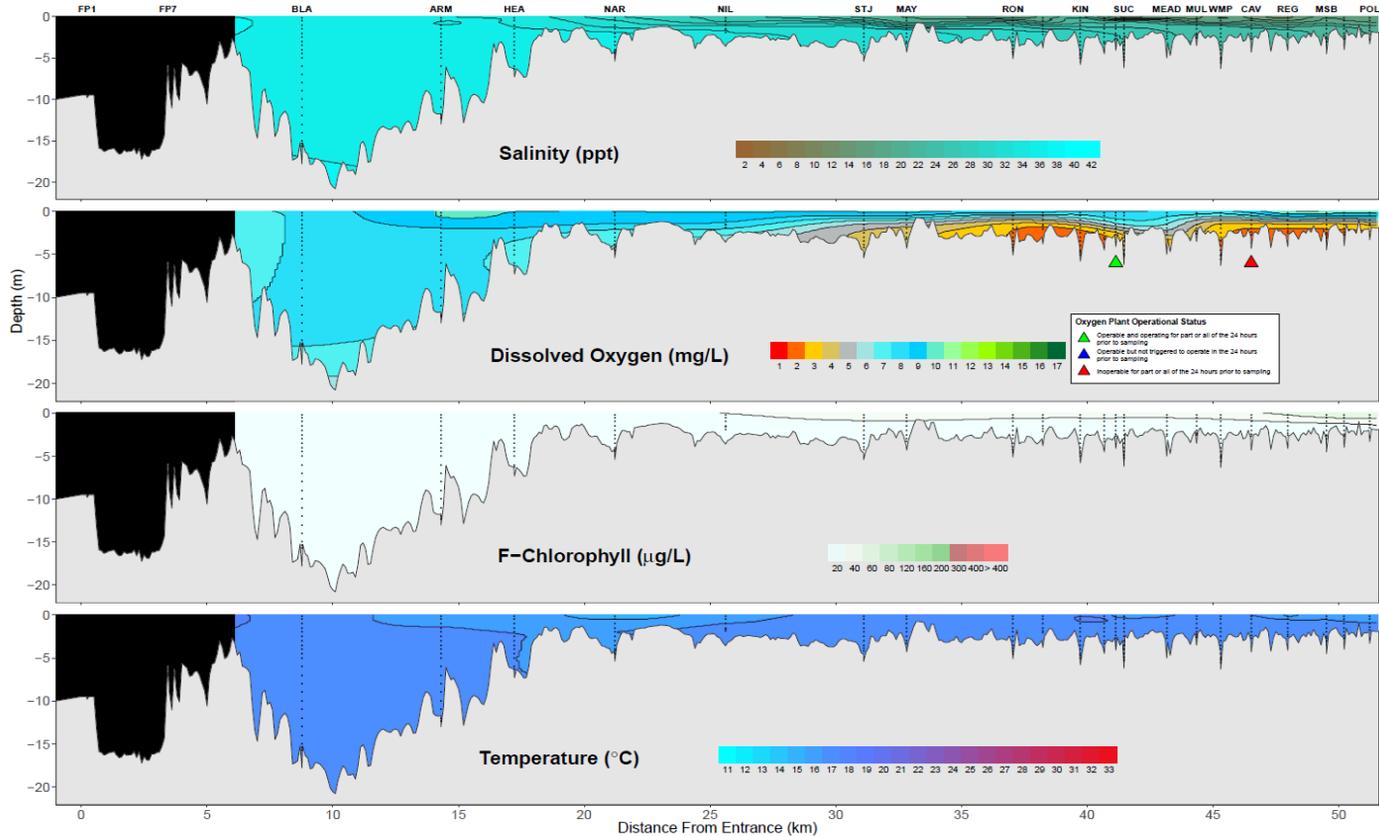
**Weekly Profile Report for the  
Lower to Upper Swan Estuary**

**2<sup>nd</sup> June 2020**

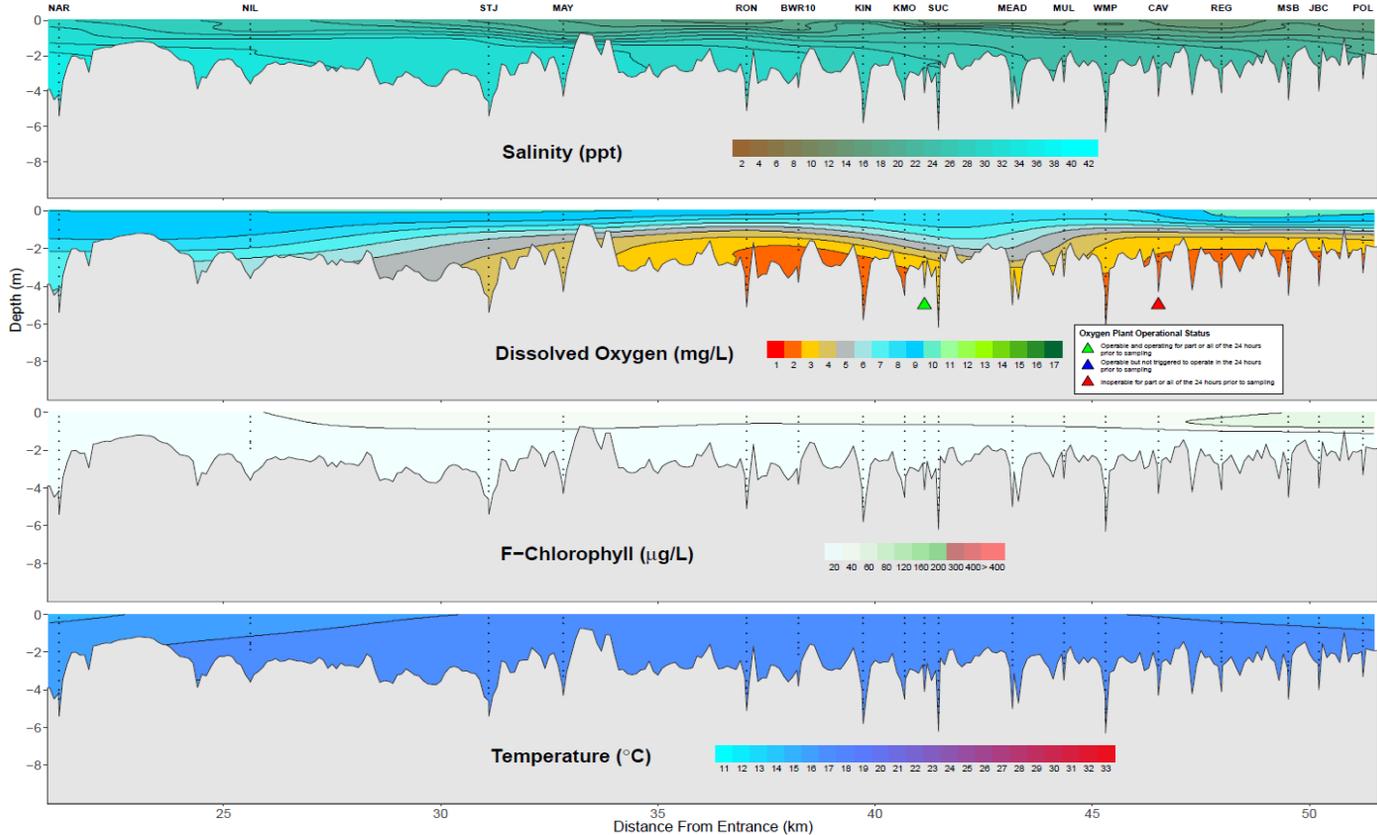
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### Swan River Estuary – Physical-Chemical Profile – 2nd Jun 2020



### Middle and Upper Swan River Estuary – Physical-Chemical Profile – 2nd Jun 2020



Date: Tuesday 2<sup>nd</sup> June 2020

Weather & tide conditions: Conditions were overcast with a predominantly easterly breeze of up to 7 knots. The predicted tides at Barrack St were 0.85 m at 2:05 am (low tide overnight), 1.09 m at 9:28 am (high tide) and 0.84 m at 5:39 pm (second low tide). Perth recorded 19.6 mm of 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 during 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 14.7 to 16.8 °C.

Middle Swan Estuary (NIL to RON): The Middle Swan Estuary was saline from NIL to STJ and brackish over saline from MAY to RON. Surface waters were oxygenated or well oxygenated and bottom waters were low in oxygen between STJ and MAY and hypoxic at RON. Chlorophyll fluorescence was highest at STJ indicating higher microalgal activity in this area. Water temperature ranged from 15.5 to 16.8 °C.

Upper Swan Estuary (BWR10 to POL): The Upper Swan Estuary was brackish over saline from BWR10 to SUC and brackish from MEAD to POL. Surface waters were oxygenated or well oxygenated and bottom waters were low in oxygen from VIT to SUC and at MUL and POL and hypoxic from BWR10 to KMO and between WMP and JBC. Chlorophyll fluorescence was highest at MSB indicating higher microalgal activity in this area. Water temperature ranged from 14.9 to 17.8 °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).

**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