



# Swan Canning Estuary Water Quality Monitoring Project

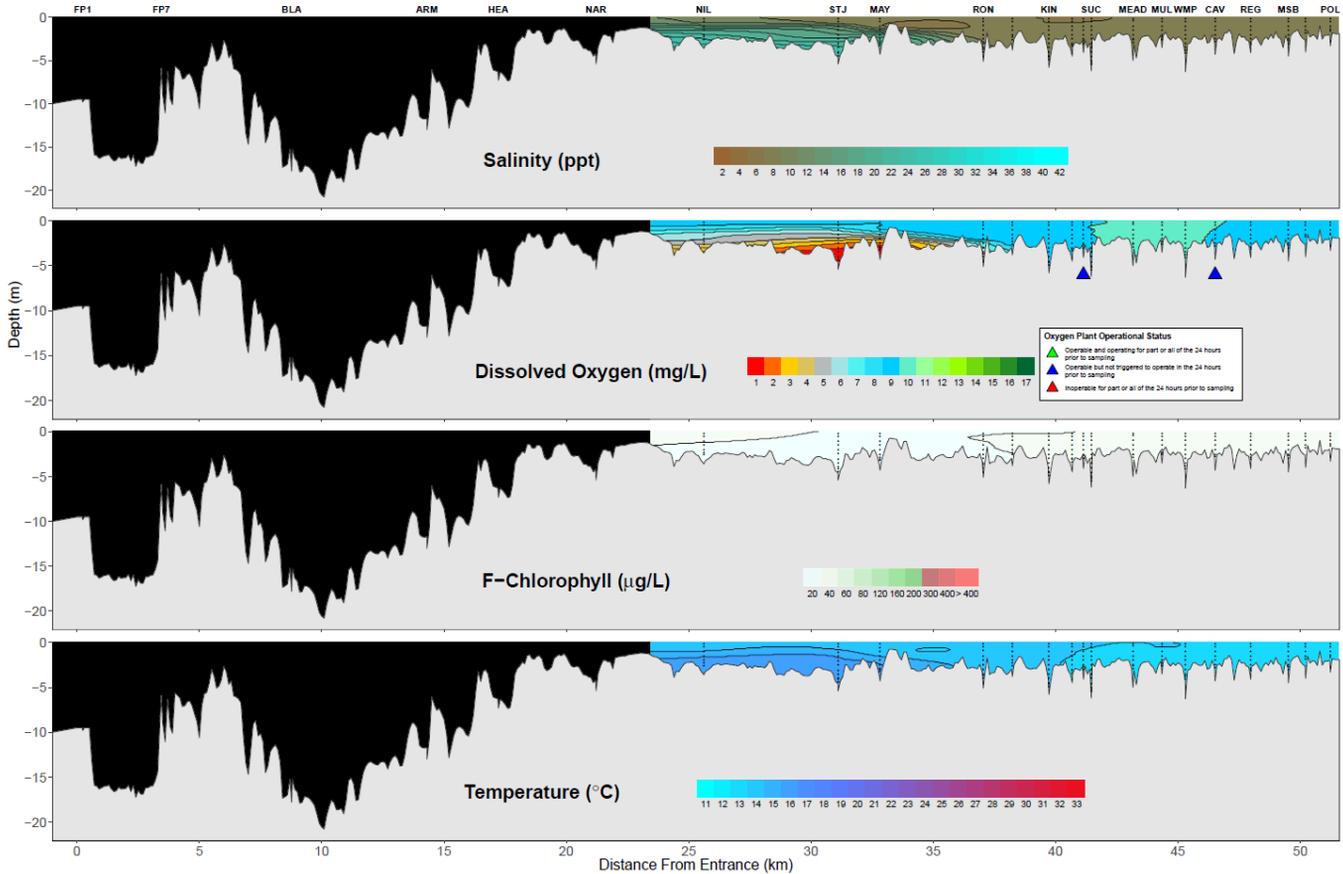
**Weekly Profile Report for the  
Lower to Upper Swan Estuary**

15 July 2019

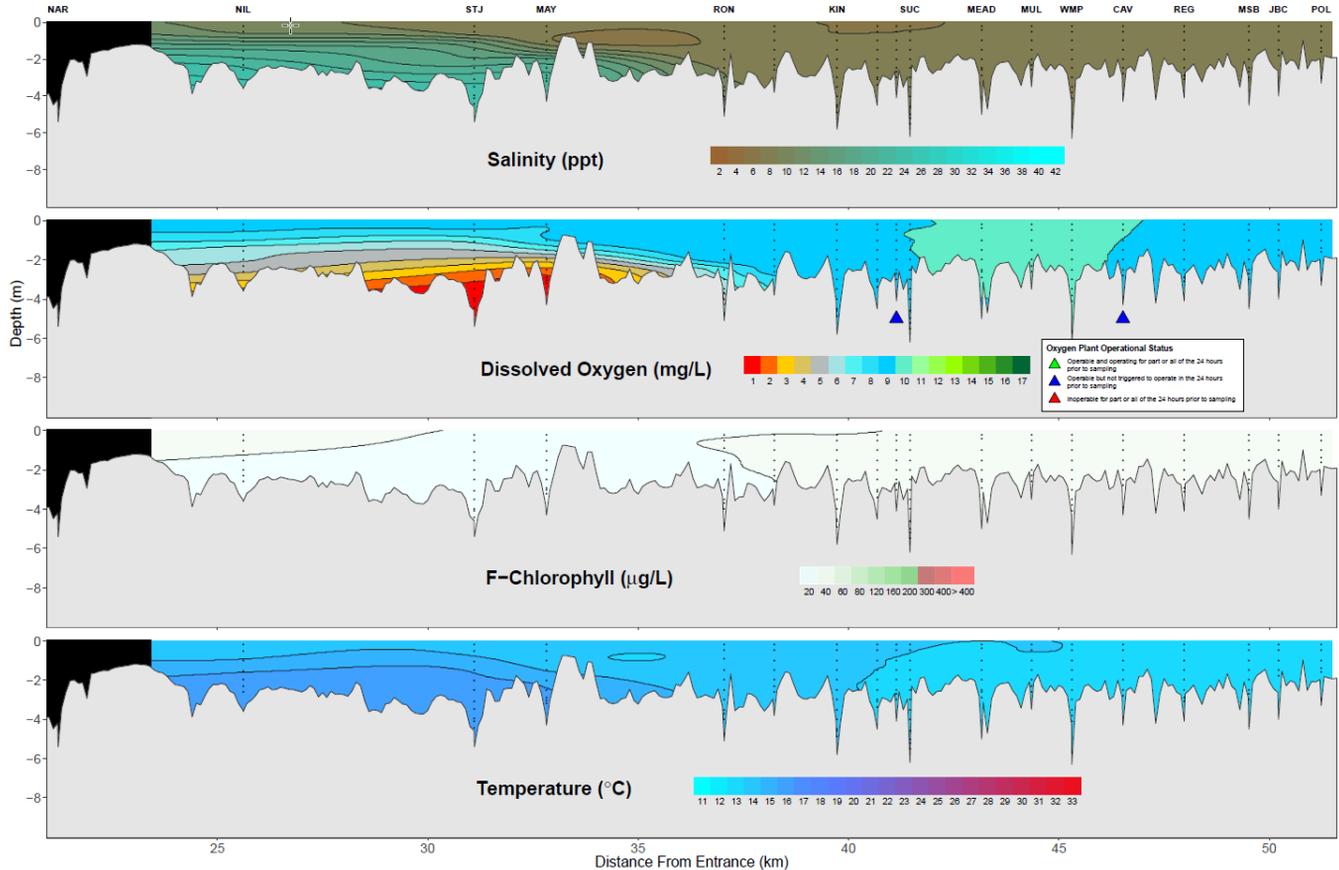
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### Swan River Estuary – Physical-Chemical Profile – 15th Jul 2019



### Middle and Upper Swan River Estuary – Physical-Chemical Profile – 15th Jul 2019



*Date:* 15 July 2019

*Weather & tide conditions:* Conditions were fine with up to 15% cloud cover and a predominantly north easterly breeze of up to 12 knots. The predicted tides at Guildford were 1.20 m (high tide) at 10:23 and 0.68 m (low tide) at 21:21. Perth airport recorded 0.6 mm of rainfall during the week prior to sampling (Bureau of Meteorology).

*Oxygenation:* The Guildford and Caversham oxygenation plants were not operational the week prior to sampling.

*Lower Swan-Canning Estuary (FPI to NAR):* No data was obtained in this zone due to equipment failure.

*Middle Swan Estuary (NIL to RON):* The Middle Swan Estuary brackish throughout. Surface water was oxygenated to well oxygenated throughout, but hypoxic bottom waters occurred at MAY and anoxia occurred at the bottom at STJ. Water temperature ranged from 13.2 to 15.7°C.

*Upper Swan Estuary (BWR10 to POL):* The Upper Swan Estuary was brackish throughout. Water was well oxygenated throughout. Chlorophyll fluorescence was high, suggesting high microalgae activity. Water temperature ranged from 12.3 to 13.6°C.

**Recommended reference**

Department of Biodiversity, Conservation and Attractions 2019. *Swan Canning estuary water quality monitoring weekly profile report, Swan Estuary 15 July 2019*. Rivers and Estuaries Science Program (<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.