



Swan Canning Estuary Water Quality Monitoring Project

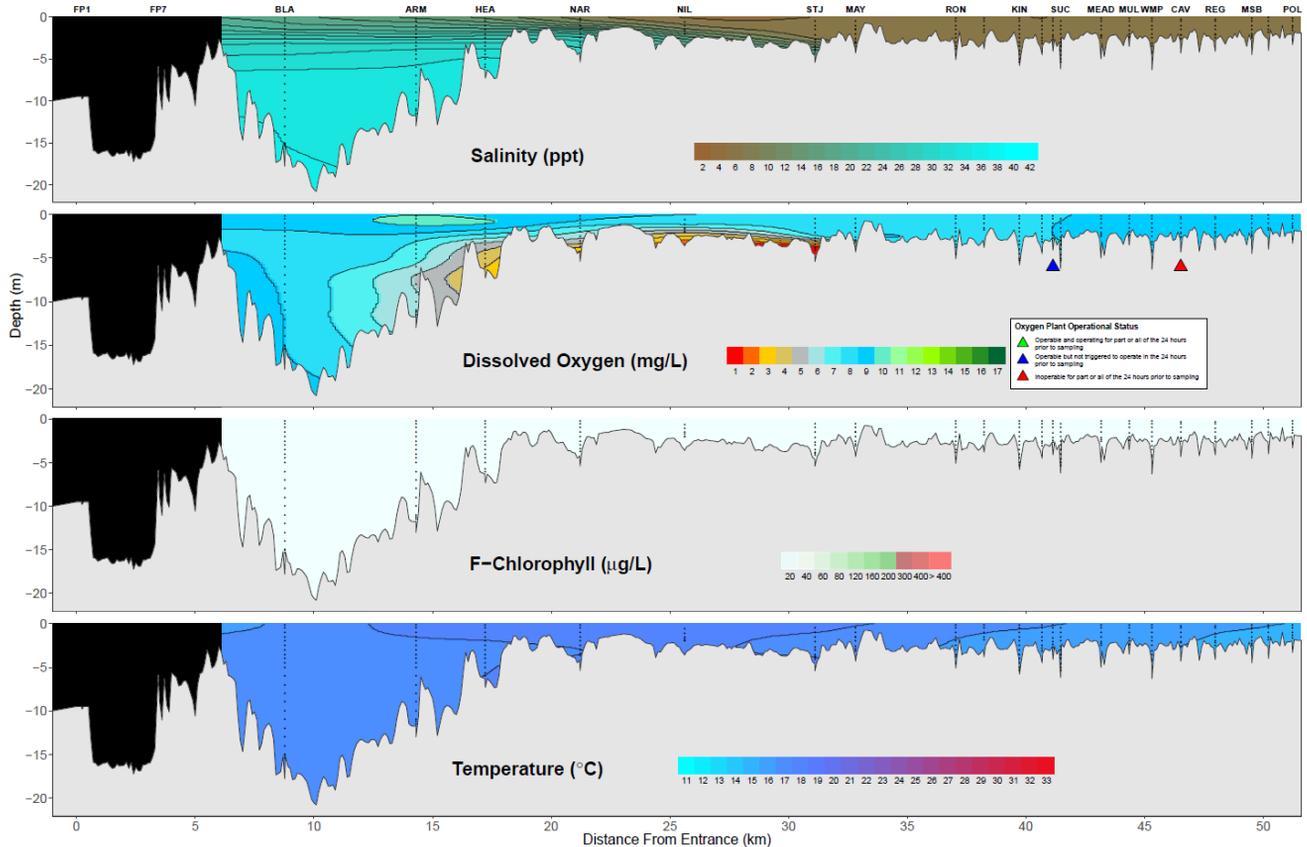
**Weekly Profile Report for the
Lower to Upper Swan Estuary**

9th September 2019

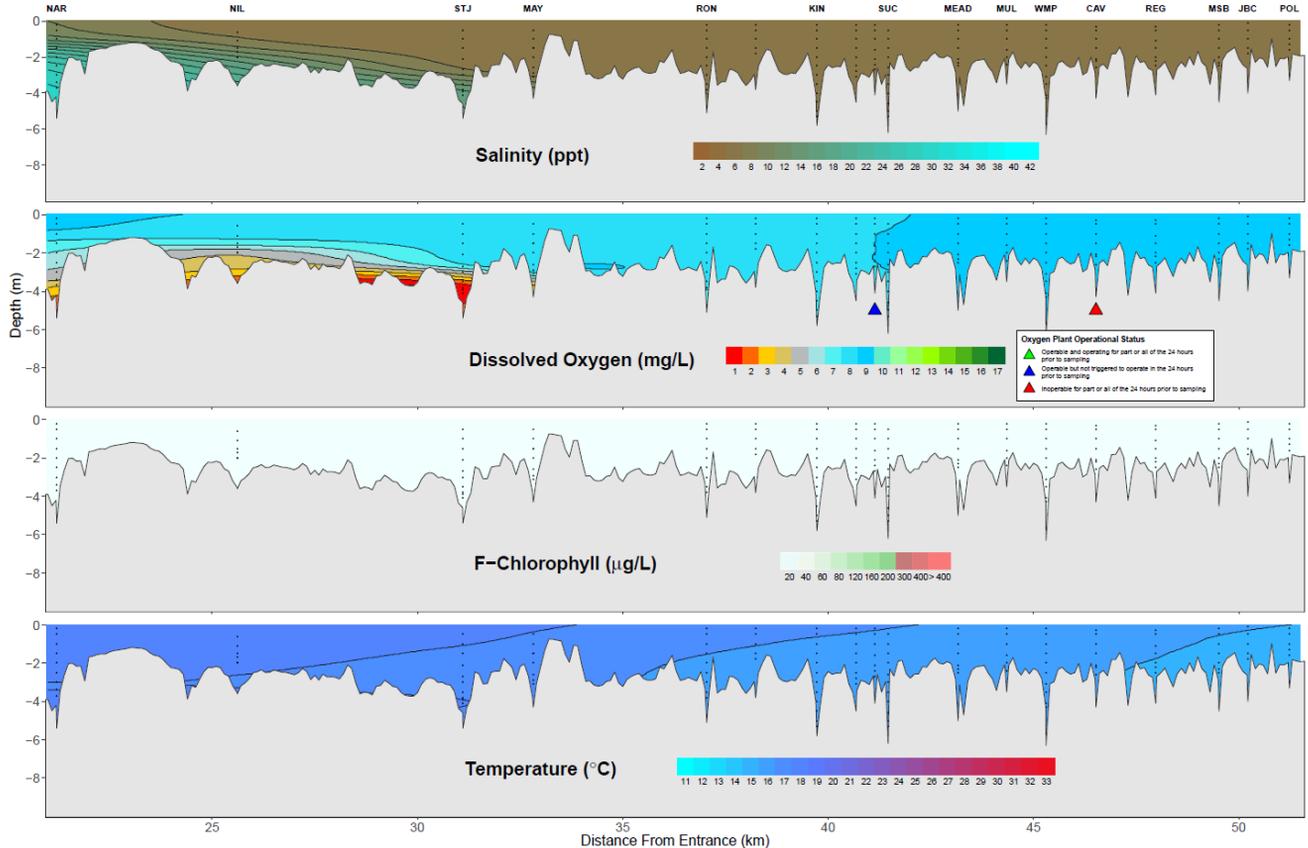
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Swan River Estuary – Physical-Chemical Profile – 9th Sep 2019



Middle and Upper Swan River Estuary – Physical-Chemical Profile – 9th Sep 2019



Date: 9 September 2019

Weather & tide conditions: Conditions were clear with a predominantly north-easterly breeze of up to 6 knots. The predicted tides at Barrack St were 0.82 m (high tide) at 7:10 am and 0.59 m (low tide) at 8:11 pm. Perth recorded 4.0 mm of rainfall during the week prior to sampling (Bureau of Meteorology).

Oxygenation: The Guildford oxygenation plant was operational but not triggered to provide oxygen and the Caversham oxygenation plant was not operational the week prior to sampling.

Lower Swan-Canning Estuary (FPI to NAR): The Lower Swan-Canning Estuary was brackish over saline from BLA to NAR. Surface waters in this zone were well oxygenated, with the bottom waters being low in oxygen at HEA and NAR. Chlorophyll fluorescence was low throughout this zone. Water temperature ranged from 16.0 to 18.2 °C.

Middle Swan Estuary (NIL to RON): The Middle Swan Estuary was fresh over brackish at NIL and STJ and fresh at MAY and RON. Surface waters were well oxygenated throughout the zone with bottom waters being low in oxygen at NIL and hypoxic at STJ. Chlorophyll fluorescence was low throughout this zone. Water temperature ranged from 15.6 to 17.8 °C.

Upper Swan Estuary (BWR10 to POL): The Upper Swan Estuary was fresh from BWR10 to POL. Waters were well oxygenated and chlorophyll fluorescence was low throughout this zone. Water temperature ranged from 14.9 to 16.8 °C.

Recommended reference

Department of Biodiversity, Conservation and Attractions 2019. *Swan Canning estuary water quality monitoring weekly profile report, Lower to Upper Swan Estuary 9 September 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.