



Swan Canning Estuary Water Quality Monitoring Project

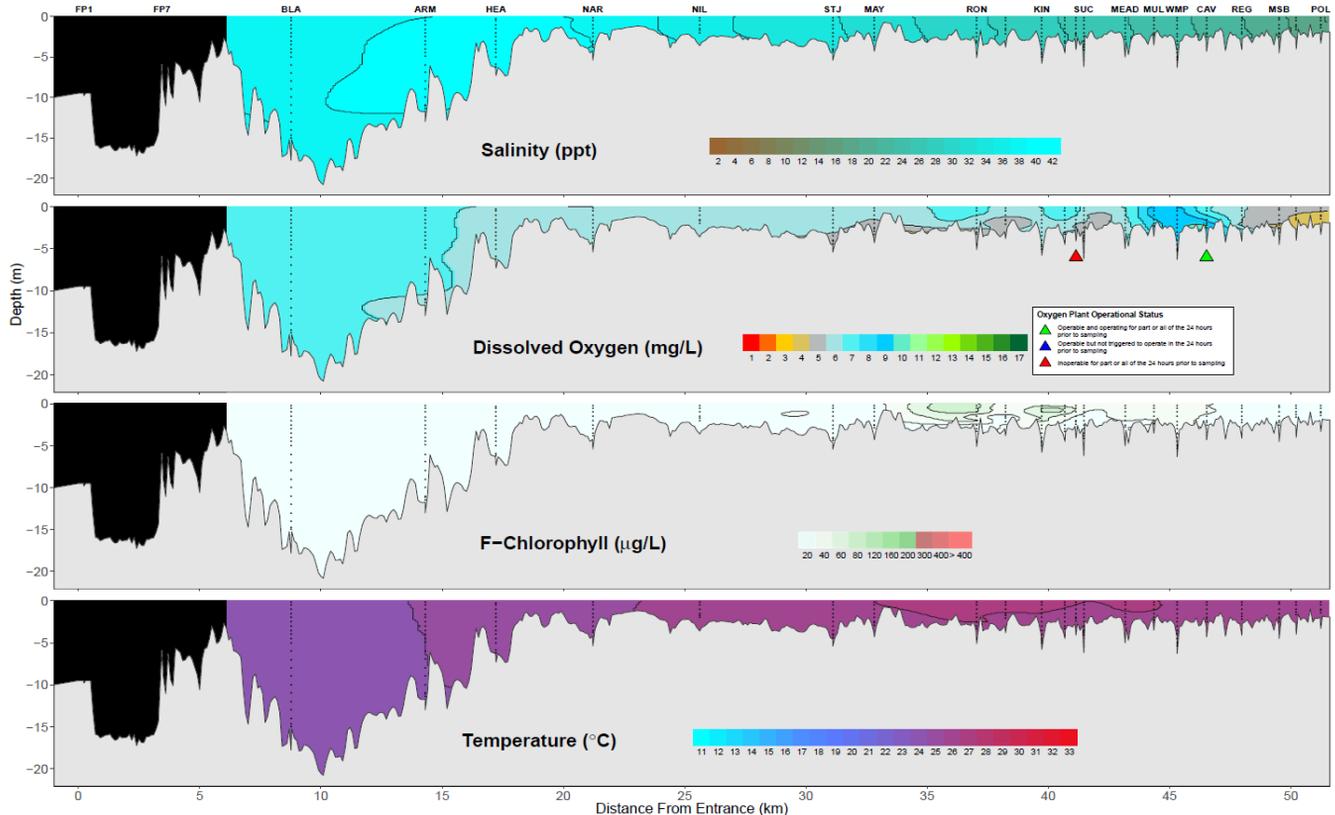
**Weekly Profile Report for the
Lower to Upper Swan Estuary**

9th March 2020

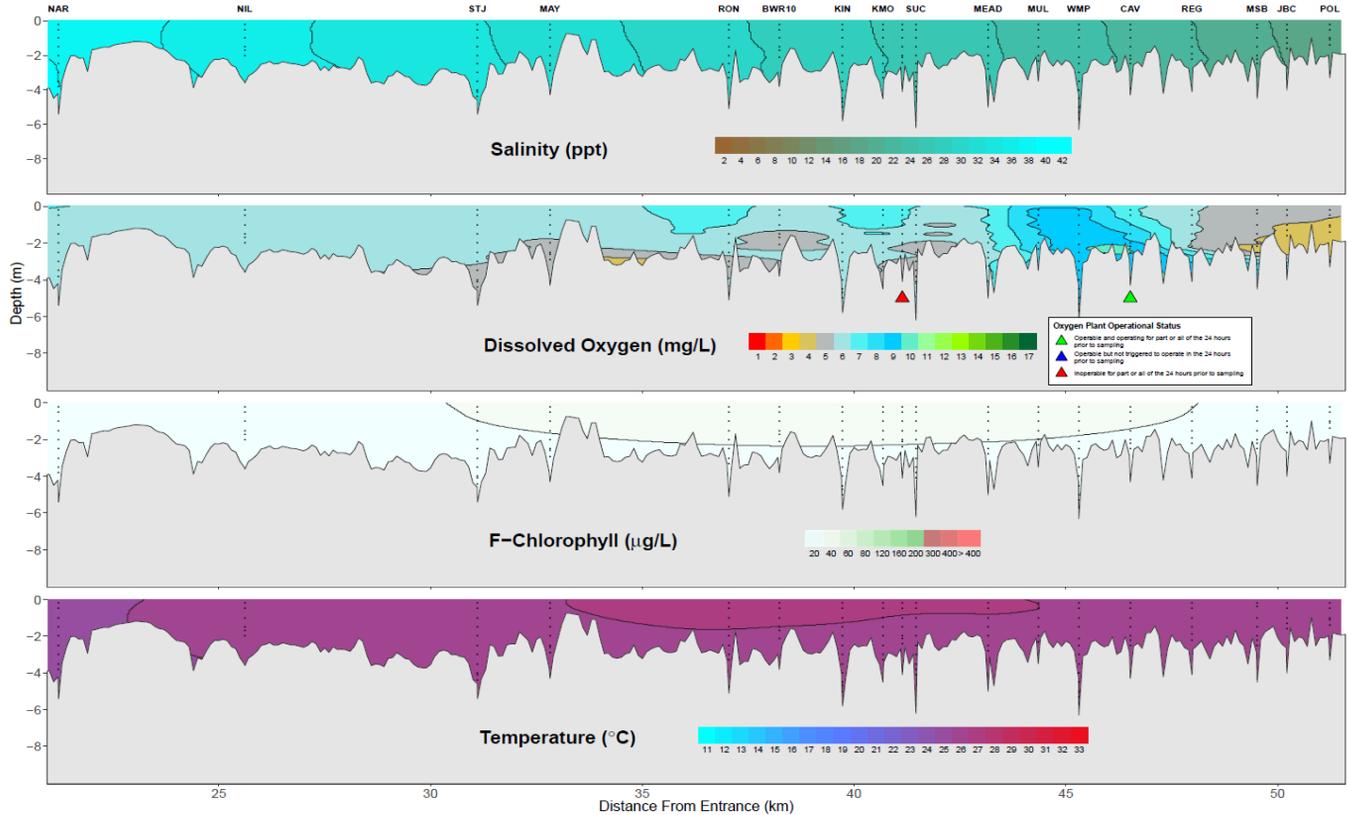
Prepared by

**Rivers and Estuaries Science
Biodiversity and Conservation Science
Department of Biodiversity, Conservation and Attractions**

Swan River Estuary – Physical-Chemical Profile – 9th Mar 2020



Middle and Upper Swan River Estuary – Physical-Chemical Profile – 9th Mar 2020



Date: 9th March 2020

Weather & tide conditions: Conditions were clear with a predominantly south-easterly breeze of up to 10 knots. The predicted tides at Barrack St were 0.57 m at 7:54 am (low tide) and 1.06 m at 11:27 pm (high tide). Perth recorded no rainfall during the week prior to sampling (Bureau of Meteorology).

Oxygenation: The Guildford oxygenation plant was not operational and the Caversham oxygenation plant was triggered to provide oxygen in the 24 hours prior to sampling.

Lower Swan Canning Estuary (FP1 to NAR): The Lower Swan Canning Estuary was saline and waters were well oxygenated. Chlorophyll fluorescence was low throughout this zone. Water temperature ranged from 23.7 to 26.0 °C.

Middle Swan Estuary (NIL to RON): The Middle Swan Estuary was saline and waters were oxygenated or well oxygenated throughout this zone. Chlorophyll fluorescence was highest at RON indicating higher microalgal activity in that area. Water temperature ranged from 25.2 to 26.3 °C.

Upper Swan Estuary (BWR10 to POL): The Upper Swan Estuary was saline between BWR10 and SUC and brackish from MEAD to POL. Waters were oxygenated or well oxygenated throughout this zone except bottom waters between MSB and POL which were low in oxygen. Chlorophyll fluorescence was highest at KIN indicating higher microalgal activity in that area. Water temperature ranged from 25.0 to 26.5 °C.

NB: Profile plots are visual interpolations of measured parameters only. Detailed data are available at 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 9th March 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.