



Swan Canning Estuary Water Quality Monitoring Project

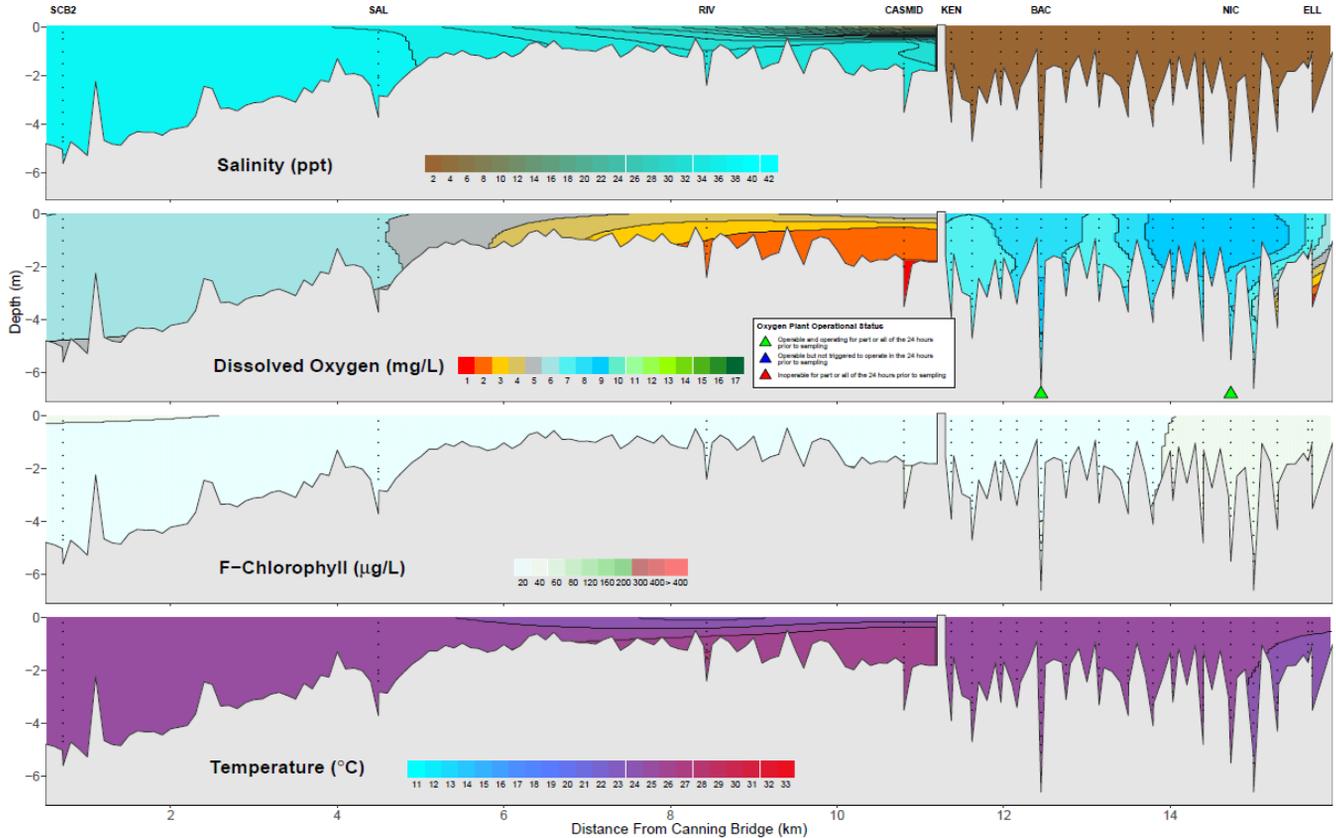
Weekly Profile Report for the Canning Estuary and Lower Canning River

17^h March 2020

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Canning River Estuary – Physical-Chemical Profile – 17th Mar 2020



Date: 17th March 2020

Weather & tide conditions: Conditions were overcast with a predominantly westerly breeze of up to 10 knots. The predicted tides at Barrack St were 0.54 m at 5:06 am (low tide) and 1.04 m at 4:51 pm (high tide) and flow was observed at Kent St Weir. Gosnells recorded 8 mm of rainfall during the week prior to sampling (Bureau of Meteorology).

Oxygenation: The Nicholson Rd and Bacon St oxygenation plants were both triggered to provide oxygen in the 24 hours prior to sampling.

Canning Estuary (downstream of Kent St Weir): The Canning Estuary was saline between SCB2 and RIV and brackish over saline at CASMID. Waters were oxygenated between SCB2 and SAL, while surface waters were low in oxygen and bottom waters were hypoxic between RIV and CASMID. Chlorophyll fluorescence was highest at CASMID indicating higher microalgal activity in that area. Water temperature ranged from 24.4 to 26.0 °C.

Lower Canning River (upstream of Kent St Weir): The Lower Canning River was fresh and surface waters were oxygenated or well oxygenated throughout this zone. Bottom waters were low in oxygen at ELL and hypoxic at PAC. Chlorophyll fluorescence was highest at ELL indicating higher microalgal activity in that area. Water temperature ranged from 23.4 to 24.7 °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, Canning River Estuary, 17th 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.