

Swan Canning Estuary Water Quality Monitoring Project

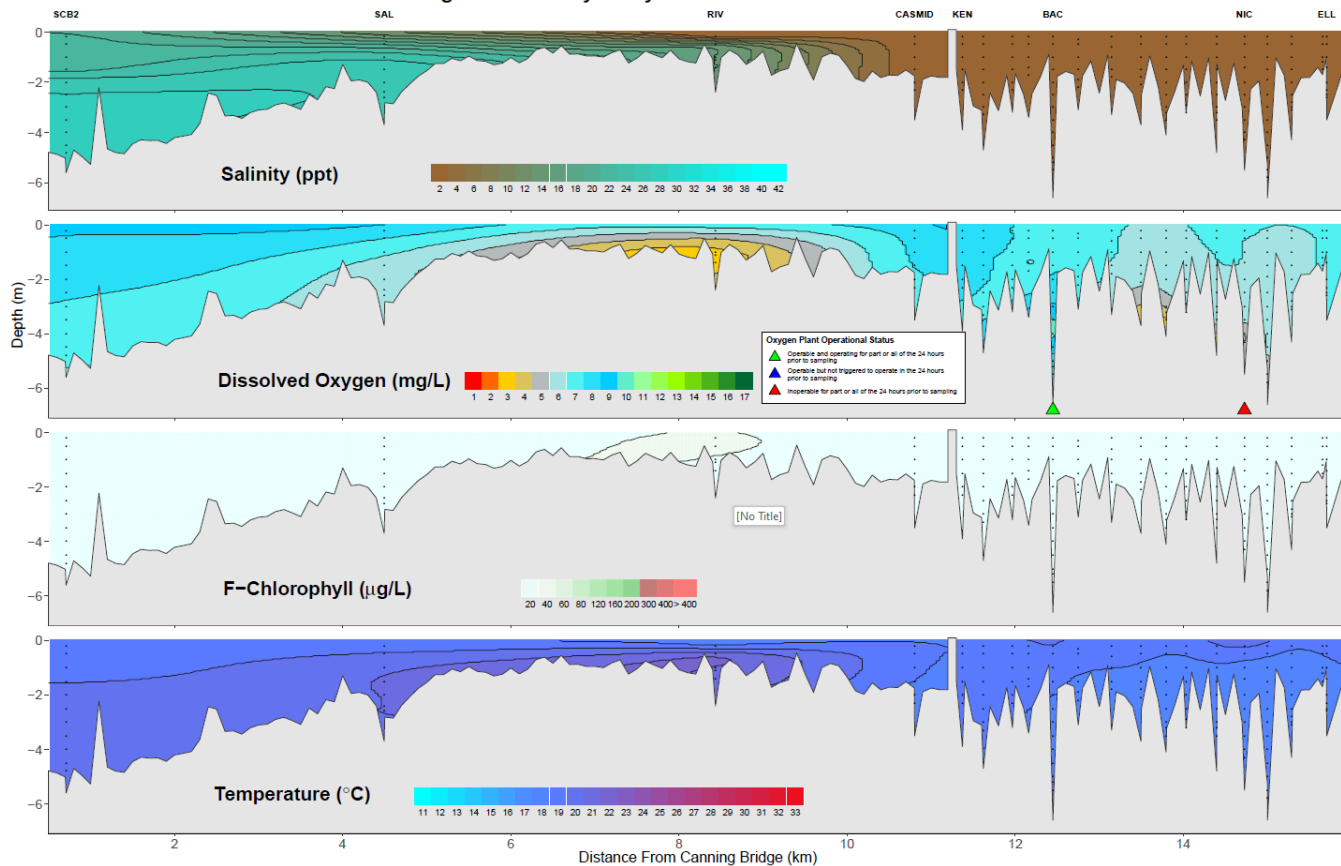
Weekly Profile Report for the Canning Estuary and Lower Canning River

8th October 2019

Prepared by

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Canning River Estuary – Physical-Chemical Profile – 8th Oct 2019



Date: 8th October 2019

Weather & tide conditions: Conditions were overcast with up to 80% cloud cover and a shifting breeze of up to 10 knots. The tide was ebbing and the river was flowing during the sampling period. Gosnells recorded 9.5 mm of rainfall during the week prior to sampling (Bureau of Meteorology).

Oxygenation: The Bacon St oxygenation plant was triggered to provide oxygen and the Nicholson Rd oxygenation plant was not operational in the 24 hours prior to sampling.

Canning Estuary (downstream of Kent St Weir): The Canning Estuary was brackish over saline at SCB2, brackish at SAL, fresh over brackish at RIV and fresh at CASMID. Surface waters were well oxygenated throughout this zone with bottom waters being low in oxygen at RIV. Chlorophyll fluorescence was high at RIV indicating higher microalgal activity in this area. Water temperature ranged from 17.6 to 20.9 °C.

Lower Canning River (upstream of Kent St Weir): The Lower Canning River was fresh throughout with well oxygenated surface waters. Bottom waters were low in oxygen at KS7. Chlorophyll fluorescence was low throughout this zone. Water temperature ranged from 17.1 to 19.6 °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, 8th October 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.