



Department of Biodiversity,
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Swan Canning Estuary Water Quality Monitoring Project

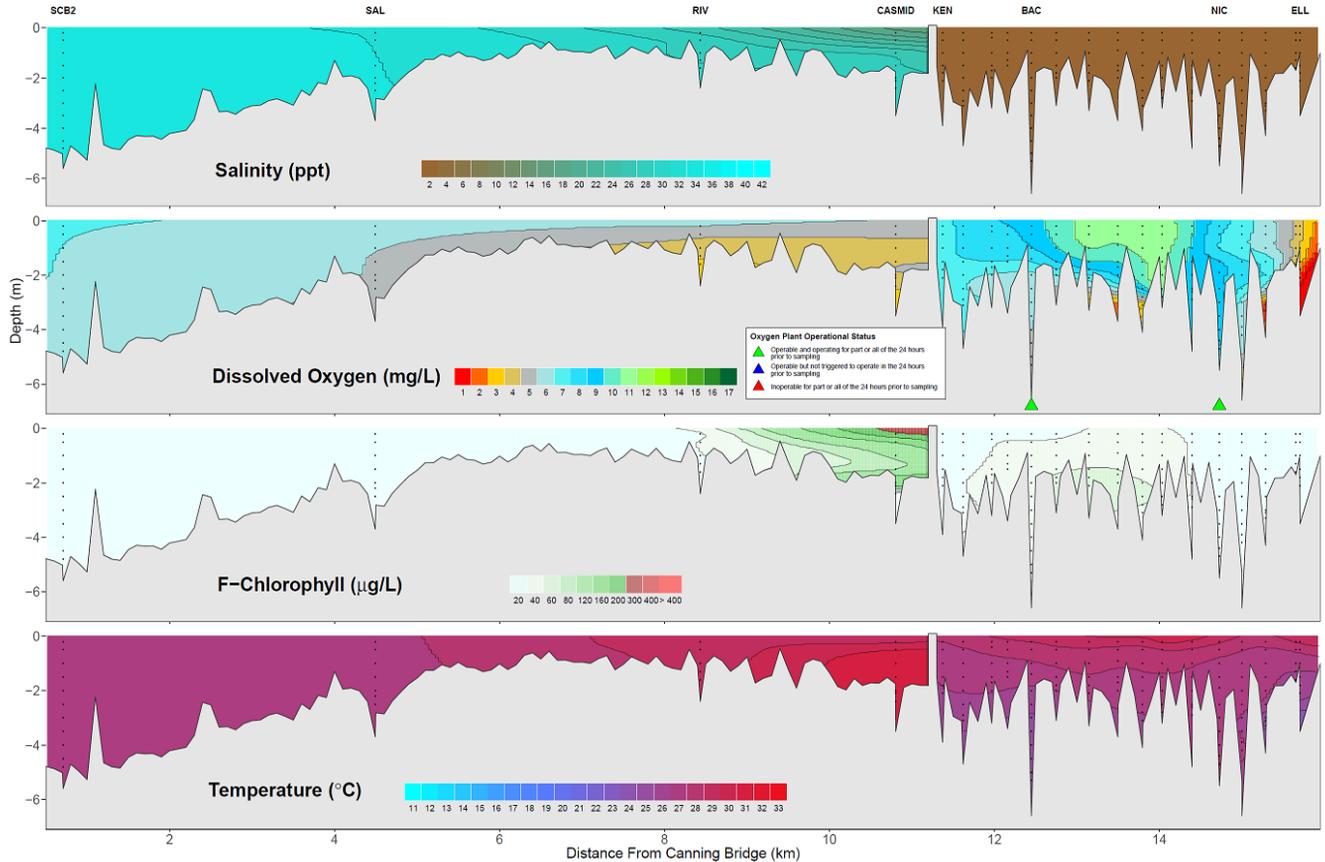
Weekly Profile Report for the Canning Estuary and Lower Canning River

17th December 2019

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Canning River Estuary – Physical-Chemical Profile – 17th Dec 2019



Date: 17th December 2019

Weather & tide conditions: Conditions were clear with a variable breeze of up to 4 knots. The predicted tides at Barrack St were 1.10 m at 01:10 am (high tide overnight) and 0.51 m at 12:03 pm (low tide) and flow was observed at Kent St Weir. Gosnells recorded no rainfall during the week prior to sampling (Bureau of Meteorology).

Oxygenation: The Bacon St and Nicholson Rd 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. Surface waters were oxygenated or well oxygenated throughout this zone. Bottom waters were oxygenated between SCB2 and SAL and low in oxygen between RIV and CASMID. Chlorophyll fluorescence was highest at CASMID indicating higher microalgal activity in this area. Water temperature ranged from 26.2 to 30.7 °C.

Lower Canning River (upstream of Kent St Weir): The Lower Canning River was fresh throughout. Surface waters were oxygenated or well oxygenated between KEN and MACD50 and low in oxygen at ELL. Bottom waters were anoxic at PAC and hypoxic at ELL. Chlorophyll fluorescence was highest at KS7 indicating higher microalgal activity in that area. Water temperature ranged from 23.2 to 29.8 °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 December 2019*. 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.