



Department of Biodiversity,
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Swan Canning Estuary Water Quality Monitoring Project

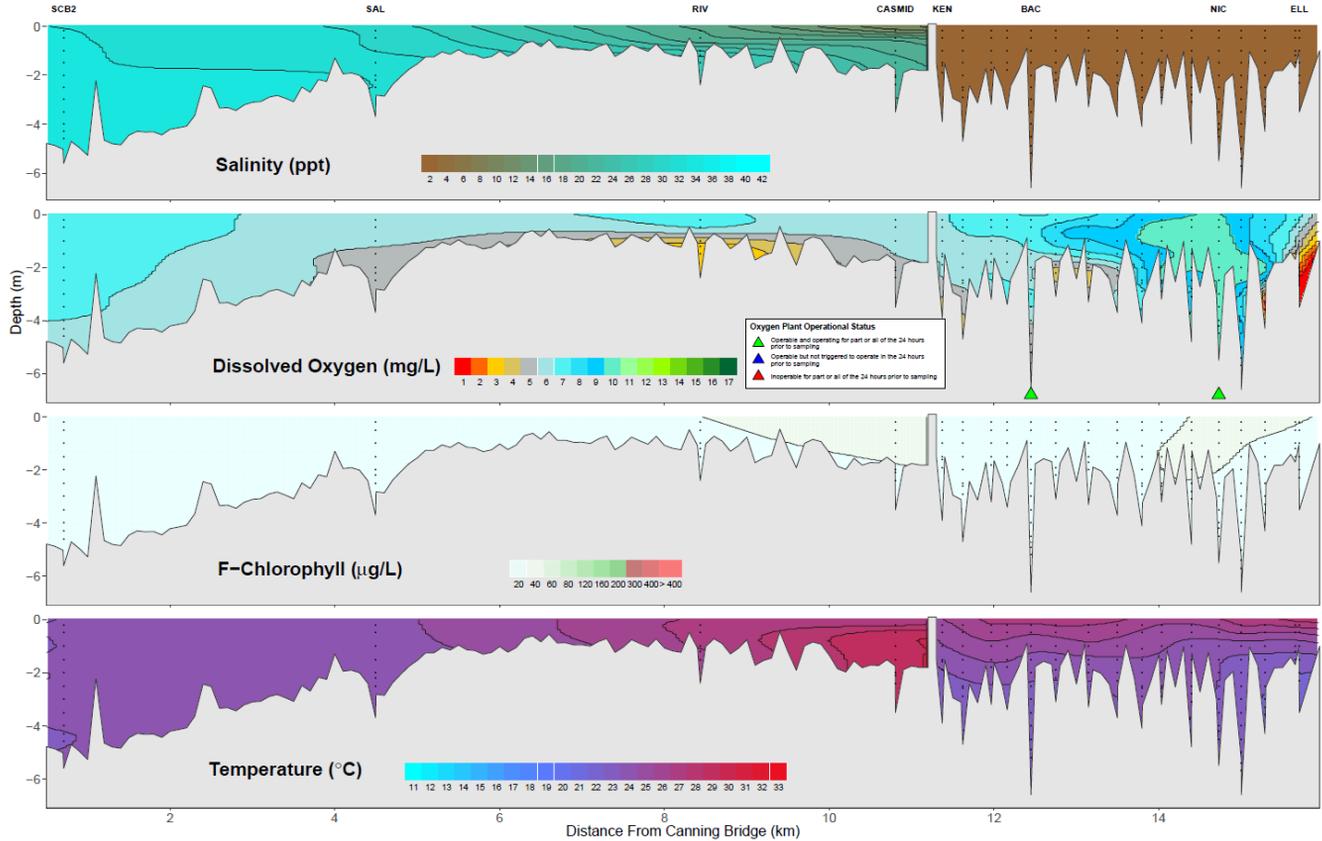
Weekly Profile Report for the Canning Estuary and Lower Canning River

3rd December 2019

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Canning River Estuary – Physical-Chemical Profile – 3rd Dec 2019



Date: 3rd December 2019

Weather & tide conditions: Conditions were overcast with a shifting breeze of up to 5 knots. The predicted tides at Barrack St were 0.5 m at 08:05 am (low tide) and 1.06 m at 10:39 pm (high 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 at SCB2 and SAL, brackish at RIV and fresh over brackish at CASMID. Surface waters were oxygenated or well oxygenated throughout this zone. Bottom waters were low in oxygen at RIV. Chlorophyll fluorescence was highest at CASMID indicating higher microalgal activity in this area. Water temperature ranged from 22.8 to 28.1 °C.

Lower Canning River (upstream of Kent St Weir): The Lower Canning River was fresh throughout. Surface waters were well oxygenated between KEN and PAC and low in oxygen between MACD50 and ELL. Bottom waters were hypoxic or low in oxygen throughout this zone except at BAC which was well oxygenated. Chlorophyll fluorescence was highest between MASD50 and ELL indicating higher microalgal activity in this area. Water temperature ranged from 21.6 to 25.3 °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, 3rd 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.