



Department of Biodiversity,
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Biodiversity and
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Swan Canning Estuary Water Quality Monitoring Project

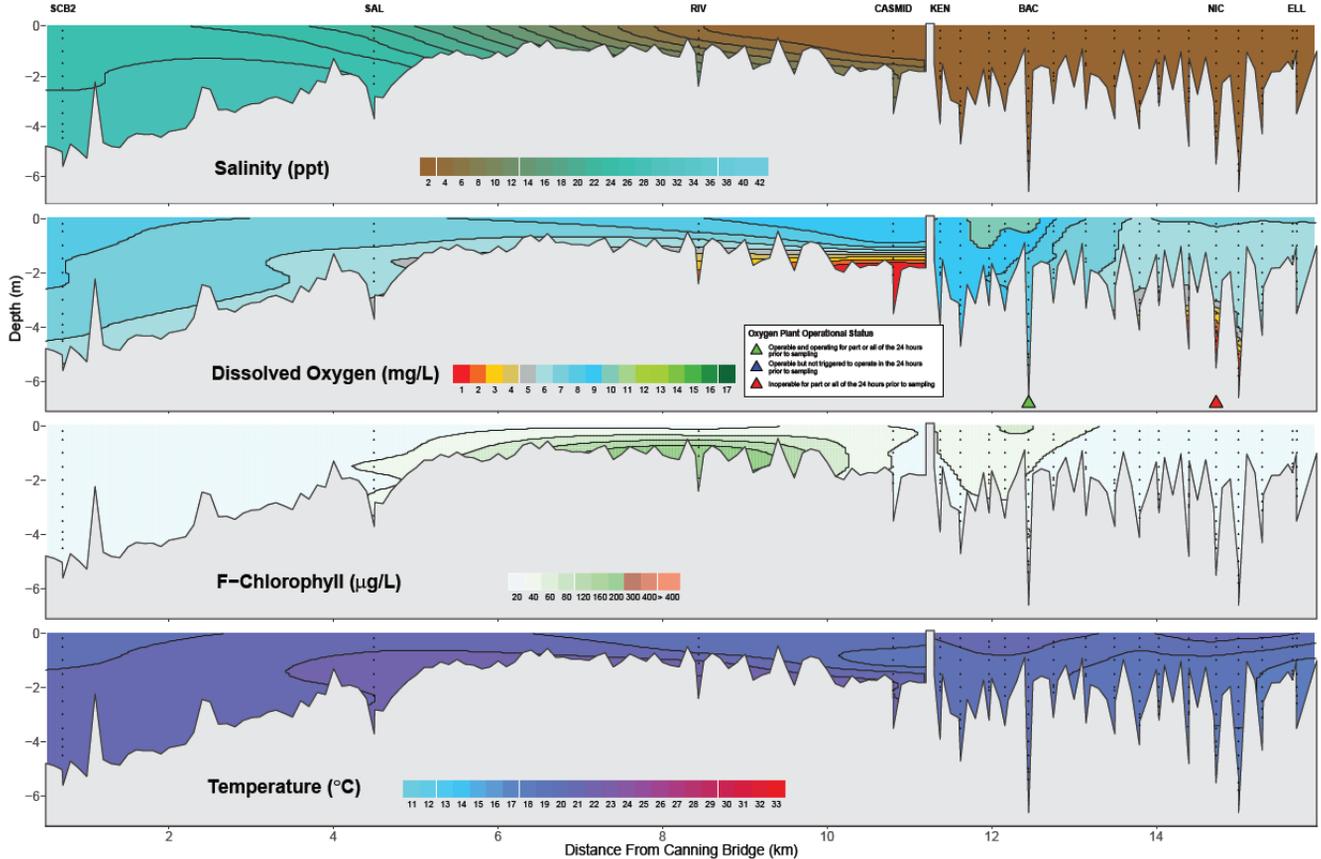
Weekly Profile Report for the Canning Estuary and Lower Canning River

15th October 2019

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Canning River Estuary – Physical-Chemical Profile – 15th Oct 2019



Date: 15th October 2019

Weather & tide conditions: Conditions were fine with up to 35% cloud cover and a shifting breeze of up to 7.5 knots. The tide was flooding and the river had minimal flow during the sampling period. Gosnells recorded 2.8 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 the week prior to sampling.

Canning Estuary (downstream of Kent St Weir): The Canning Estuary was saline at SCB2, brackish over saline at SAL and fresh over brackish at RIV and CASMID. Surface waters were well oxygenated throughout this zone with bottom waters being low in oxygen at RIV and hypoxic at CASMID. Chlorophyll fluorescence was highest at RIV indicating higher microalgal activity in this area. Water temperature ranged from 18.4 to 21.4 °C.

Lower Canning River (upstream of Kent St Weir): The Lower Canning River was fresh and had well oxygenated surface waters, with bottom waters being hypoxic at NIC and KS9. Chlorophyll fluorescence was high at BAC, BACD300 and BACD500 indicating higher microalgal activity in those areas. Water temperature ranged from 17.3 to 21.0 °C.

Recommended reference

Department of Biodiversity, Conservation and Attractions 2019. *Swan Canning estuary water quality monitoring weekly profile report, Canning River Estuary, 15th 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.