



Department of Biodiversity,
Conservation and Attractions



Biodiversity and
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Swan Canning Estuary Water Quality Monitoring Project

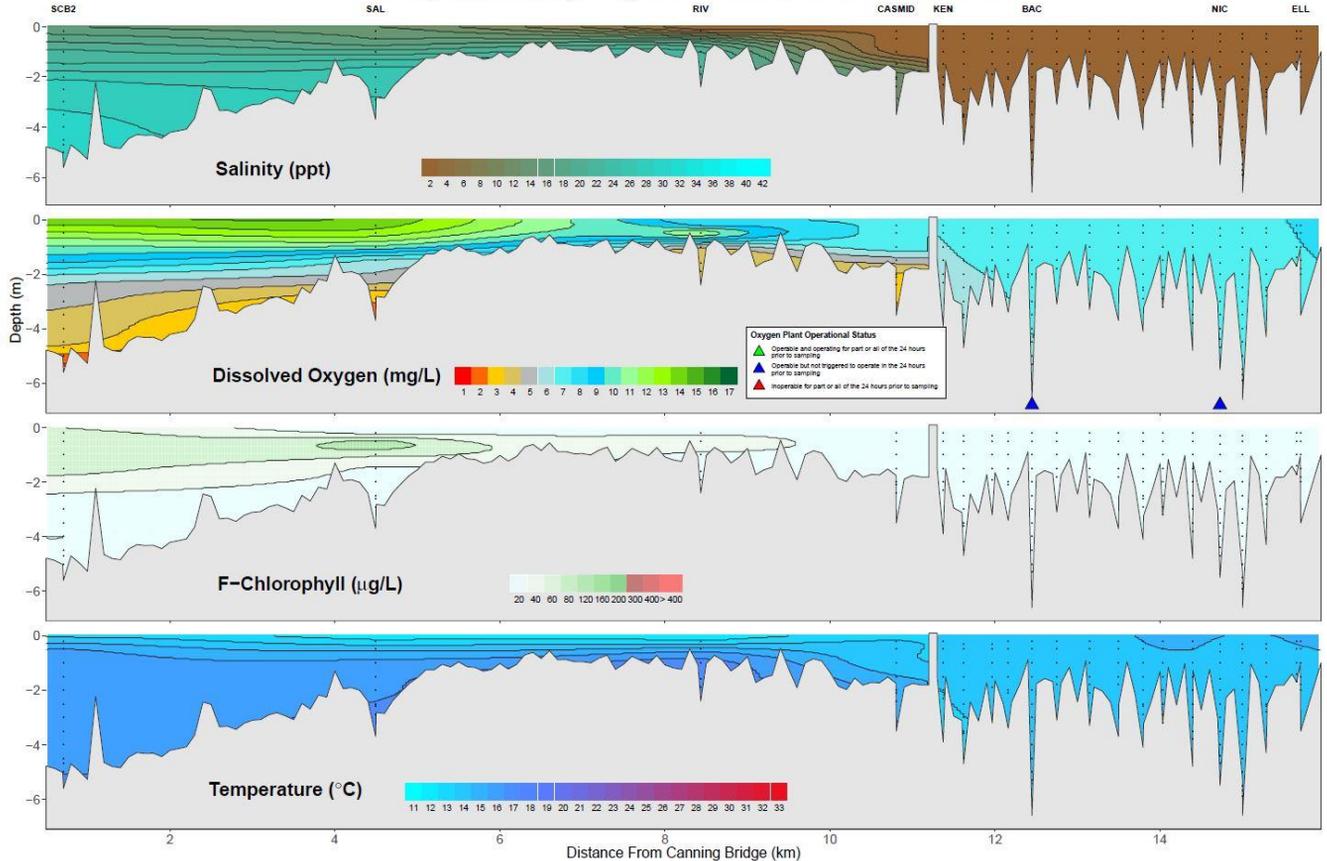
Weekly Profile Report for the Canning Estuary and Lower Canning River

16 July 2019

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Canning River Estuary – Physical–Chemical Profile – 16th Jul 2019



Date: 16 July 2019

Weather & tide conditions: Conditions were fine with 0% cloud cover and a predominantly northerly breeze of up to 3 knots. The tide was largely stationary during the sampling period. Gosnells recorded 0.5 mm of rainfall during the week prior to the morning of sampling (Bureau of Meteorology).

Oxygenation: The Bacon St and Nicholson Rd oxygenation plants were operational the week prior to sampling.

Canning Estuary (downstream of Kent St Weir): The Canning Estuary was brackish over saline at SCB2 and SAL fresh over saline at RIV and fresh over brackish at CASMID. Water was well oxygenated at the surface at RIV and CAS, but low oxygen levels occurred in bottom waters. Waters were well oxygenated at SAL and SCB2, exceeding 12mg/L in surface waters. Low oxygen conditions occurred in bottom waters at these sites. Chlorophyll fluorescence indicative of high algal activity at SAL and SCB2 and consistent with evidence of microalgal bloom at these locations. Water temperature ranged from 14-16 °C

Lower Canning River (upstream of Kent St Weir): The Lower Canning River was fresh throughout all sites. Water was well oxygenated throughout all sites. Water temperature ranged from 13-15 °C.

Recommended reference

Department of Biodiversity, Conservation and Attractions 2019. *Swan Canning estuary water quality monitoring weekly profile report, Canning River Estuary 16 July 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.