

Swan Canning Estuary Water Quality Monitoring Project

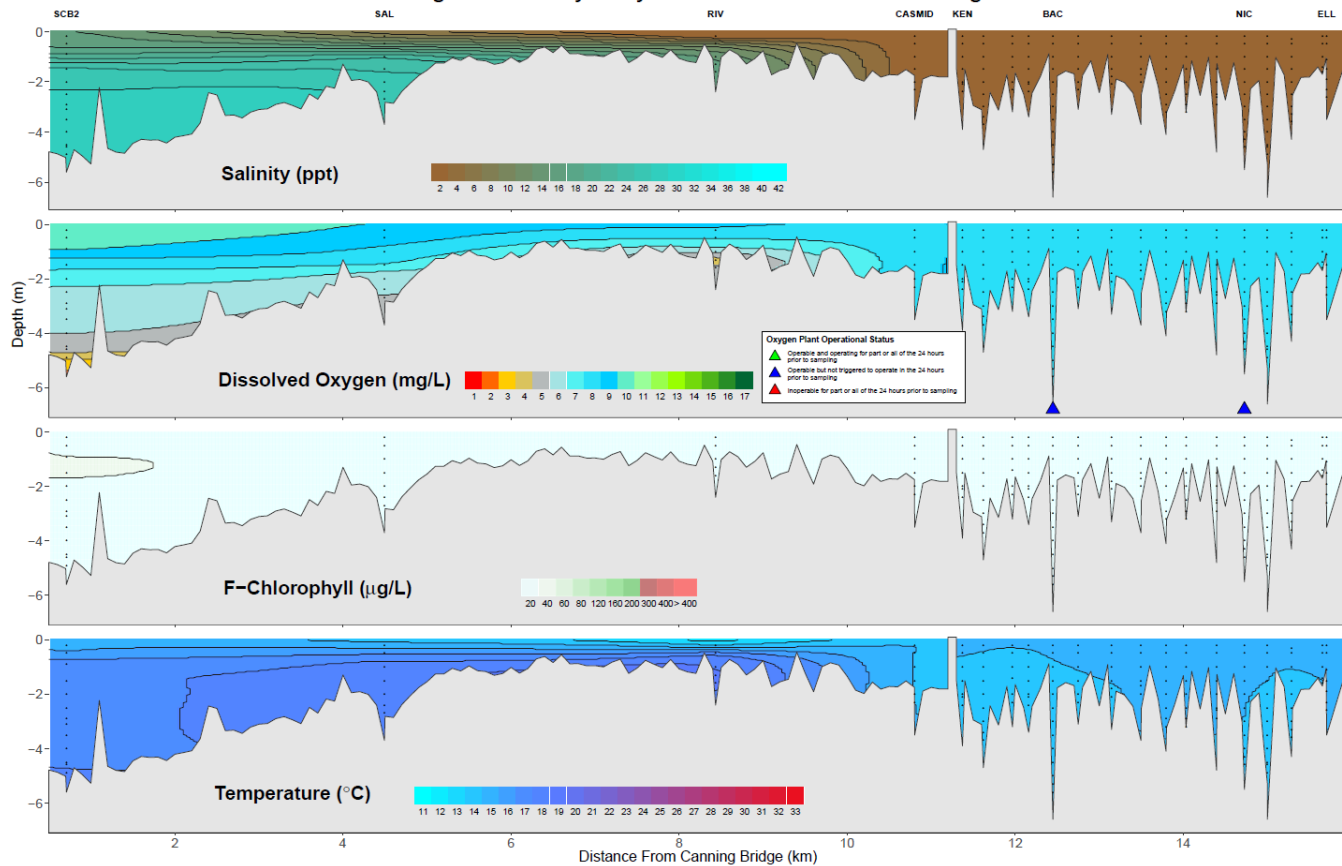
Weekly Profile Report for the Canning Estuary and Lower Canning River

27 August 2019

Prepared by

River and Estuaries Science Program,
Biodiversity and Conservation Science
Department of Biodiversity, Conservation and Attractions

Canning River Estuary – Physical-Chemical Profile – 27th Aug 2019



Date: 27 August 2019

Weather & tide conditions: Conditions were fine with no cloud cover and a shifting breeze of up to 8 knots. The tide was stationary and the river was flowing during the sampling period. Gosnells recorded 31.0 mm of rainfall during the week prior to sampling (Bureau of Meteorology).

Oxygenation: The Bacon St and Nicholson Rd oxygenation plants were operational but were not triggered to provide oxygen during 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 brackish at RIV and fresh at CASMID. Surface waters were well oxygenated throughout this zone with low oxygen bottom waters at SCB2 and RIV. Chlorophyll fluorescence was highest at SCB2 indicating higher microalgal activity in surface waters in this area. Water temperature ranged from 13.1 to 18.3 °C.

Lower Canning River (upstream of Kent St Weir): The Lower Canning River was fresh and well oxygenated throughout the water column at all sites. Chlorophyll fluorescence was low, suggesting limited microalgal activity in this zone. Water temperature ranged from 13.7 to 15.0 °C.

Recommended reference

Department of Biodiversity, Conservation and Attractions 2019. *Swan Canning estuary water quality monitoring weekly profile report, Canning River Estuary, 27 August 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.