Swan Canning Estuary Water Quality Monitoring Project

Weekly Profile Report for the

Canning Estuary and Lower Canning River

10th September 2019

Prepared by

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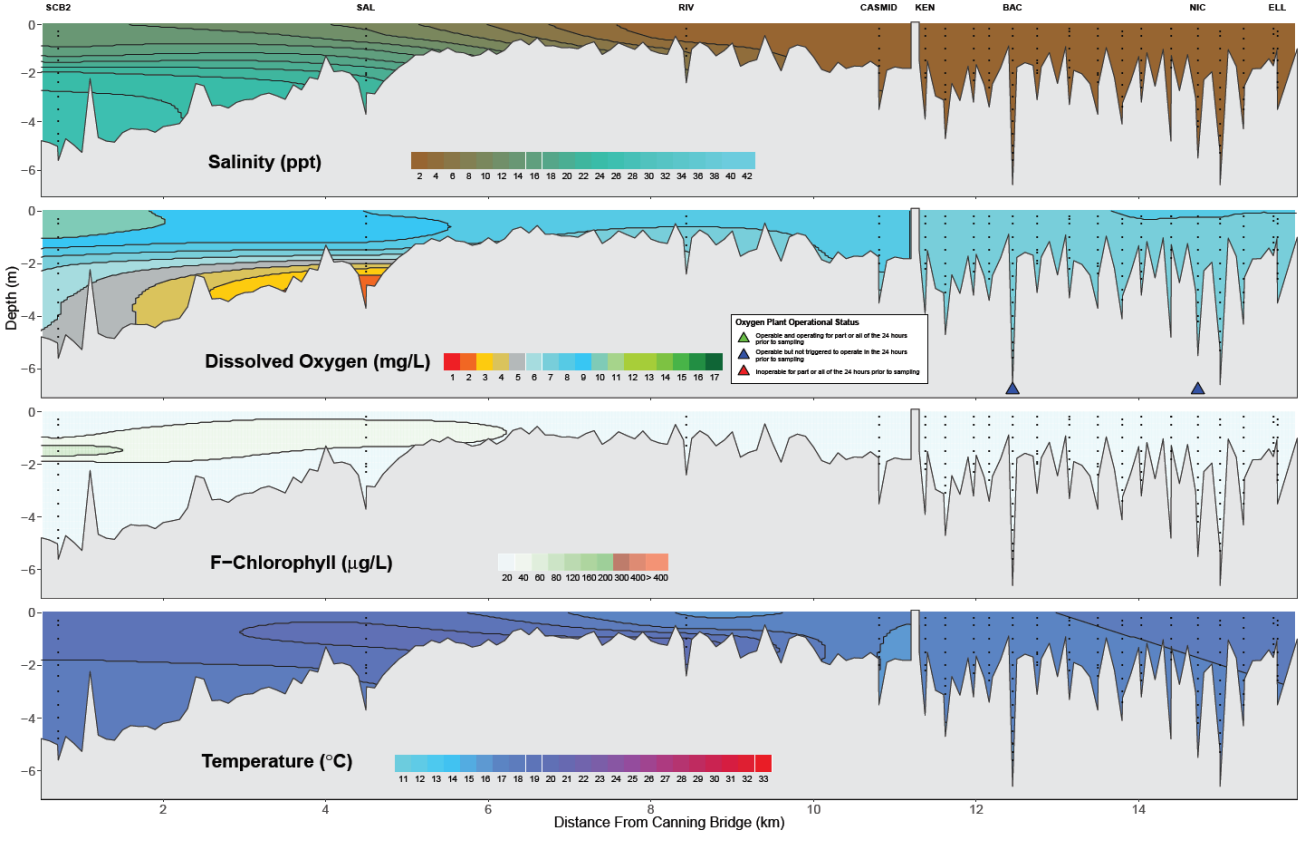
Canning River Estuary – Physical–Chemical Profile – 10th Sep 2019



Date: 10 September 2019

Weather & tide conditions: Conditions were fine with no cloud cover and a shifting breeze of up to 4 knots. The tide peaked at 8:30 am and the river was flowing during the sampling period. Gosnells recorded 0.0 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 at SCB2 and SAL and fresh at RIV and CASMID. Surface waters were well oxygenated throughout this zone with bottom waters being hypoxic at SAL. Chlorophyll fluorescence was high at SCB2 and SAL indicating higher microalgal activity in surface waters in this area. Water temperature ranged from 16.0 to 19.6 °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 16.2 to 18.7 °C.

Recommended reference
Department of Biodiversity, Conservation and Attractions 2019. *Swan Canning estuary water quality monitoring weekly profile report, Canning River Estuary, 10 September 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.