

Swan Canning Estuary Water Quality Monitoring Project

Weekly Water Quality Report

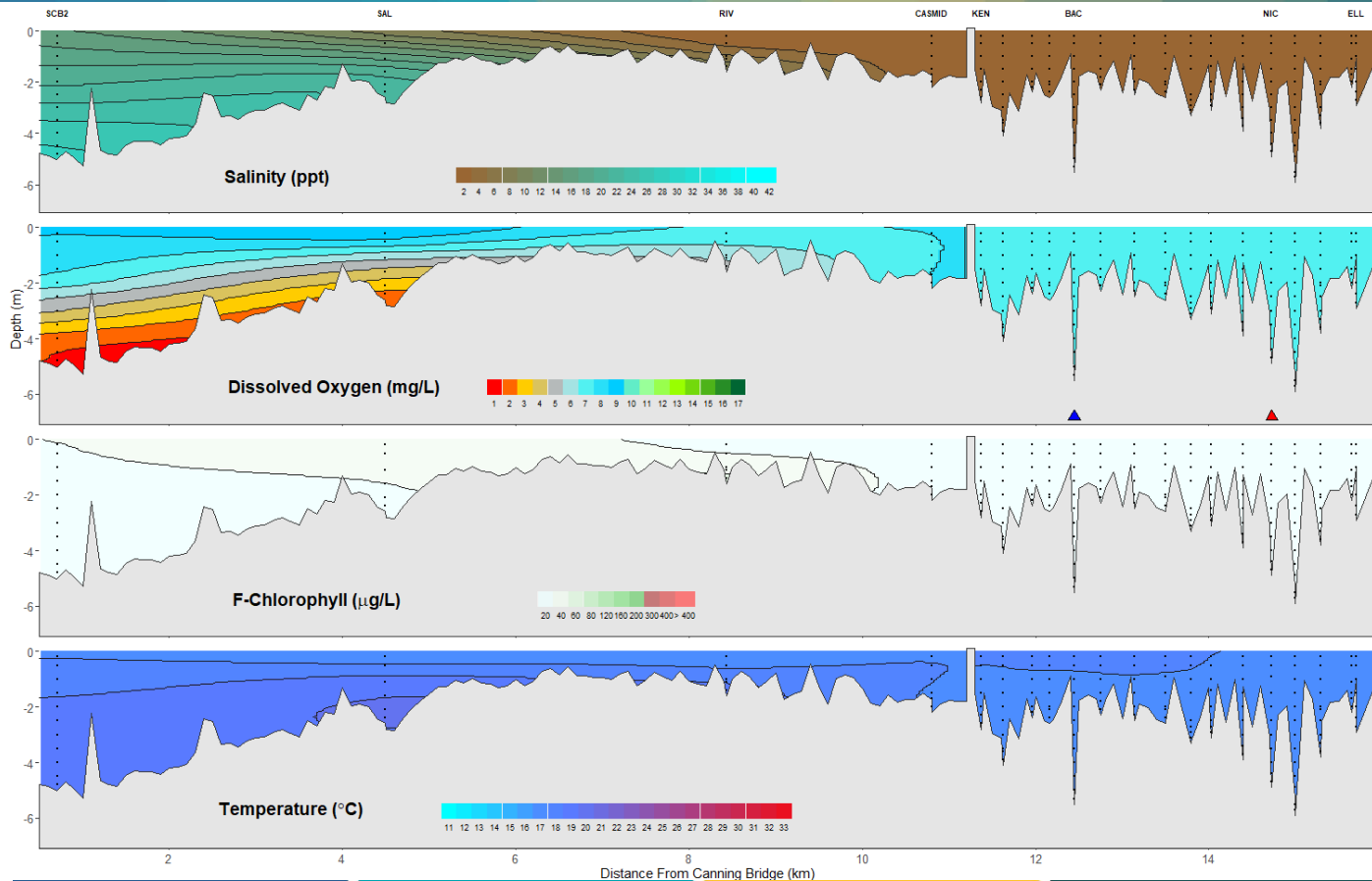
Canning Estuary and Lower Canning River

12 October 2021

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Canning Estuary and Lower Canning River - Water Quality Profiles – 12 October 2021



Date: 12 October 2021

Weather & tide conditions: Conditions were overcast with a light southerly breeze of up to 5 knots. The predicted tides at Barrack St were 1.05 m at 1:57 am (high tide) and 0.51 m at 2:24 pm (low tide). Perth recorded 7.6 mm of rainfall in the week prior to sampling (Bureau of Meteorology).

Oxygenation: The Bacon St oxygenation plant was not triggered to provide oxygen and the Nicholson Rd oxygenation plant was not operational in the 24 hours prior to sampling.

Canning Estuary (SCB2 to CASMID): The Canning Estuary was brackish over saline at SCB2, brackish at SAL, and fresh from RIV to CASMID. Surface waters were oxygenated or well oxygenated throughout, however bottom waters were hypoxic at SCB2 and SAL. Chlorophyll fluorescence was highest at RIV indicating higher microalgal activity in this area. Water temperature ranged from 16.2 to 19.1°C.

Lower Canning River (upstream of KEN): The Lower Canning River was fresh, waters were oxygenated or well oxygenated and chlorophyll fluorescence was low throughout this zone. Water temperature ranged from 16.1 to 17.7°C.

NB: Profile plots are visual interpolations of measured parameters only. Detailed data are available at wir.water.wa.gov.au.

Oxygenation Plant Operational Status:

- ▲ Operating for part or all of the 24 hours prior to sampling
- ▲ Operable but not triggered to operate in the 24 hours prior to sampling
- ▲ Inoperable for part or all of the 24 hours prior to sampling

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

Recommended reference: Department of Biodiversity, Conservation and Attractions 2021. *Swan Canning Estuary water quality profile report, Canning Estuary and Lower Canning River 12 October 2021*. Rivers and Estuaries Science (<https://www.dpaw.wa.gov.au/management/swan-canning-riverpark>)