



Swan Canning Estuary Water Quality Monitoring Project

Weekly Water Quality Report

Canning Estuary and Lower Canning River

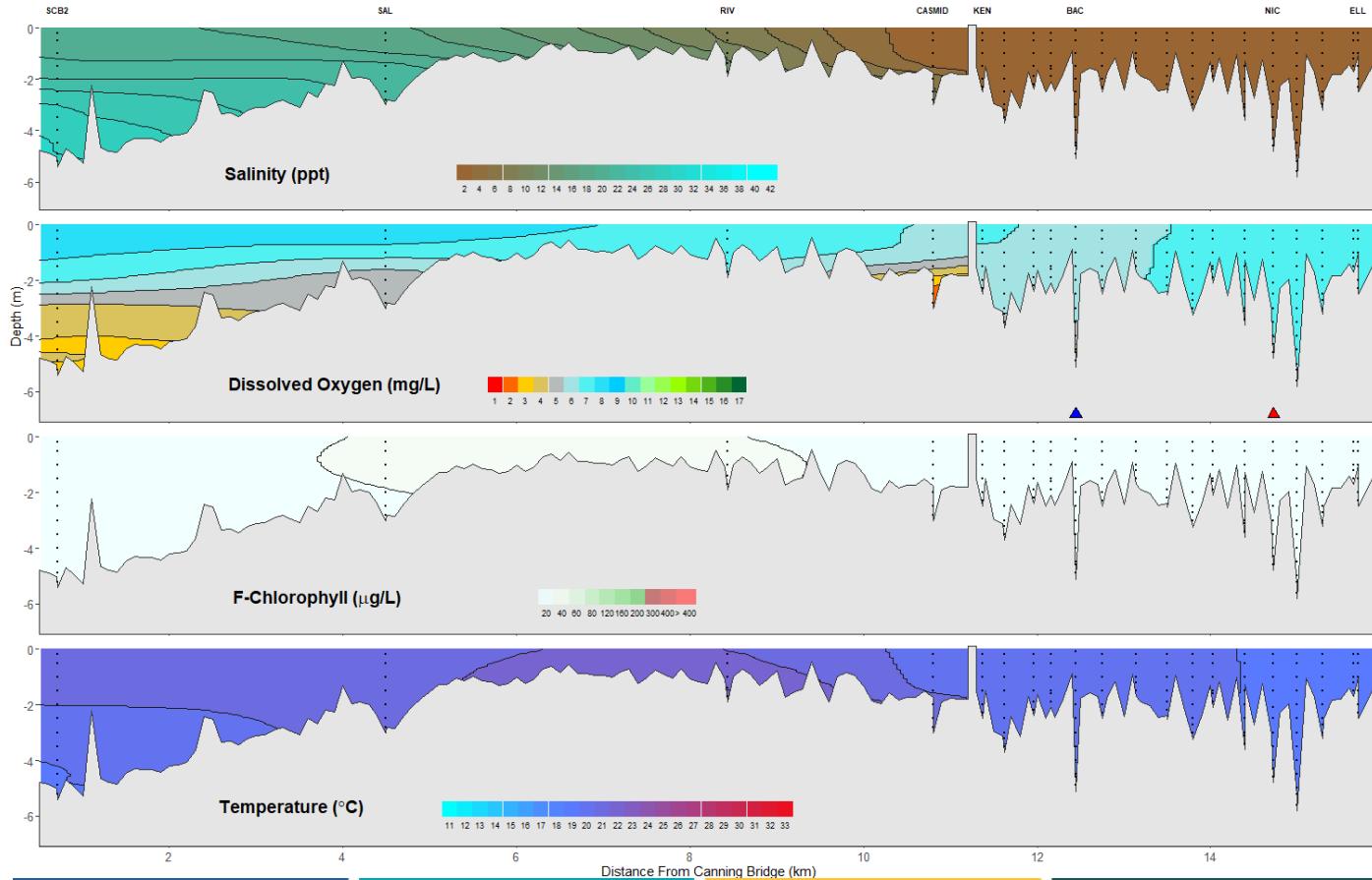
19 October 2021

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Canning Estuary and Lower Canning River - Water Quality Profiles – 19 October 2021





Date: 19 October 2021

Weather & tide conditions: Conditions were overcast with a northerly breeze of up to 9 knots. The predicted tides at Barrack St were 0.7 m at 5:09 am (low tide) and 0.51 m at 11:12 am (high tide). Perth recorded 18.6 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 from SAL to RIV and fresh over brackish at CASMID. Surface waters were oxygenated or well oxygenated. Bottom waters were low in oxygen at SCB2 and hypoxic at CASMID. Chlorophyll fluorescence was highest at RIV but generally low throughout. Water temperature ranged from 18.8 to 22.7 °C.

Lower Canning River (upstream of KEN): The Lower Canning River was fresh, waters were oxygenated or well oxygenated except bottom waters at BAC which were low in oxygen. Chlorophyll fluorescence was low throughout this zone. Water temperature ranged from 17.2 to 19.8 °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 >6 mg/L, oxygenated >4-6 mg/L, low oxygen >2-4 mg/L, hypoxic 0.5-2 mg/L, anoxic <0.5 mg/L

Recommended reference: Department of Biodiversity, Conservation and Attractions 2021. *Swan Canning Estuary water quality profile report, Canning Estuary and Lower Canning River 19 October 2021. Rivers and Estuaries Science* (<https://www.dpaw.wa.gov.au/management/swan-canning-riverpark>)