

Swan Canning Estuary Water Quality Monitoring Project

Weekly Water Quality Report

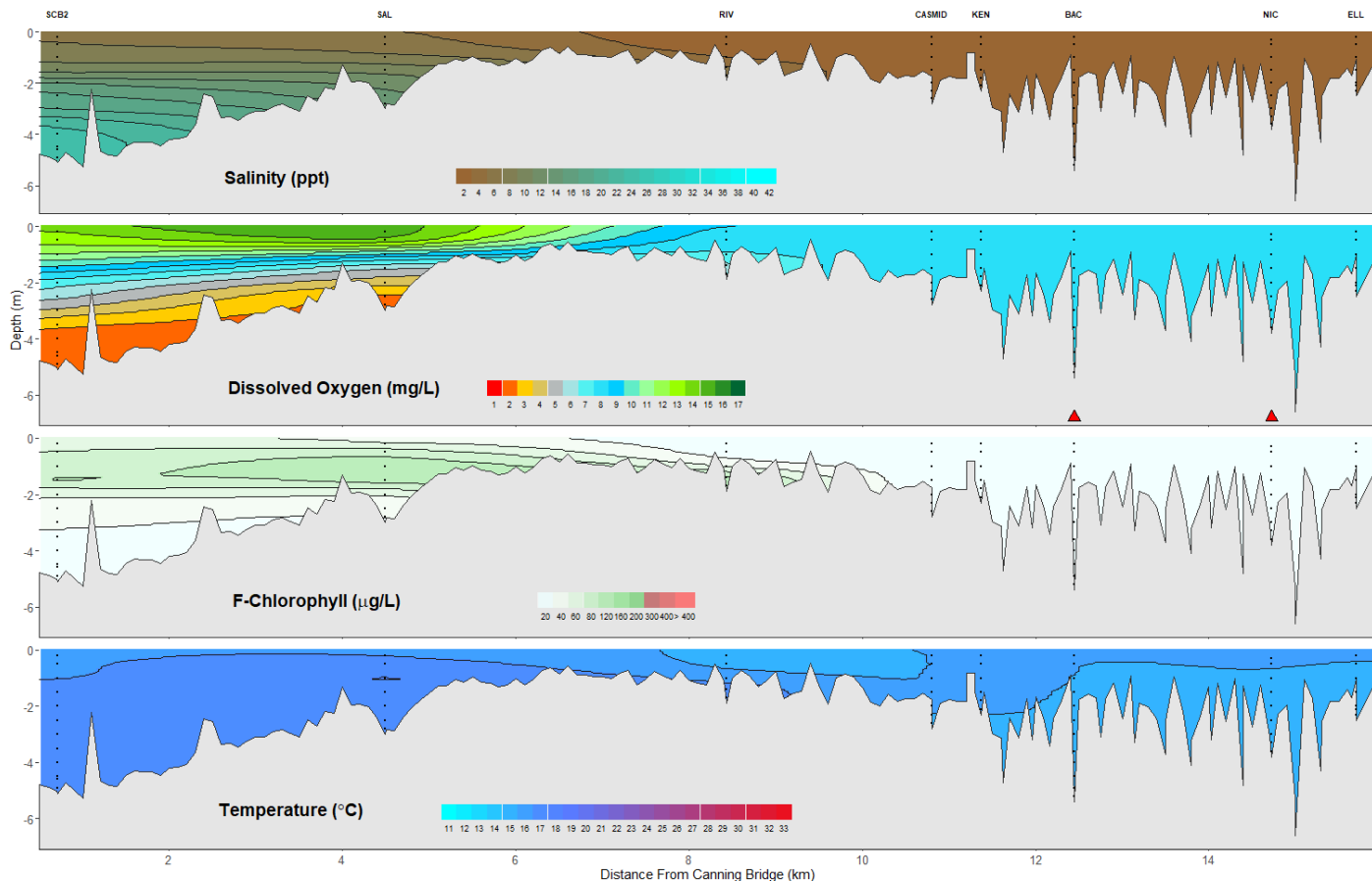
Canning Estuary and Lower Canning River

7 September 2021

Prepared by

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Canning Estuary and Lower Canning River - Water Quality Profiles – 7 September 2021



Date: 7 September 2021

NB: Kent Street Weir was opened to alleviate winter flows on 9 July 2021.

Weather & tide conditions: Conditions were clear with a light north easterly breeze of up to 6 knots. The predicted tides at Barrack St were 0.75 m at 3:47 am (low tide) and 1.07 m at 11:25 pm (high tide). Perth recorded 18.6 mm of rainfall in the week prior to sampling (Bureau of Meteorology).

Oxygenation: The Bacon St and Nicholson Rd oxygenation plants were not operational in the 24 hours prior to sampling.

Canning Estuary (SCB2 to CASMID): The Canning Estuary was brackish from SCB2 to SAL and fresh from RIV to CASMID. Surface waters were well oxygenated and bottom waters were hypoxic at SCB2 and SAL. Chlorophyll fluorescence was highest at SAL indicating higher microalgal activity in this area. Water temperature ranged from 14.8 to 17.3 °C.

Lower Canning River (upstream of KEN): The Lower Canning River was fresh, waters were well oxygenated and chlorophyll fluorescence was low throughout this zone. Water temperature ranged from 14.7 to 15.4 °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 7 September 2021*. Rivers and Estuaries Science (<https://www.dpaw.wa.gov.au/management/swan-canning-riverpark>)