Swan Canning Estuary Water Quality Monitoring Project

Weekly Water Quality Report

Canning Estuary and Lower Canning River

6th March 2024

Prepared by

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Department of **Biodiversity, Conservation and Attractions**

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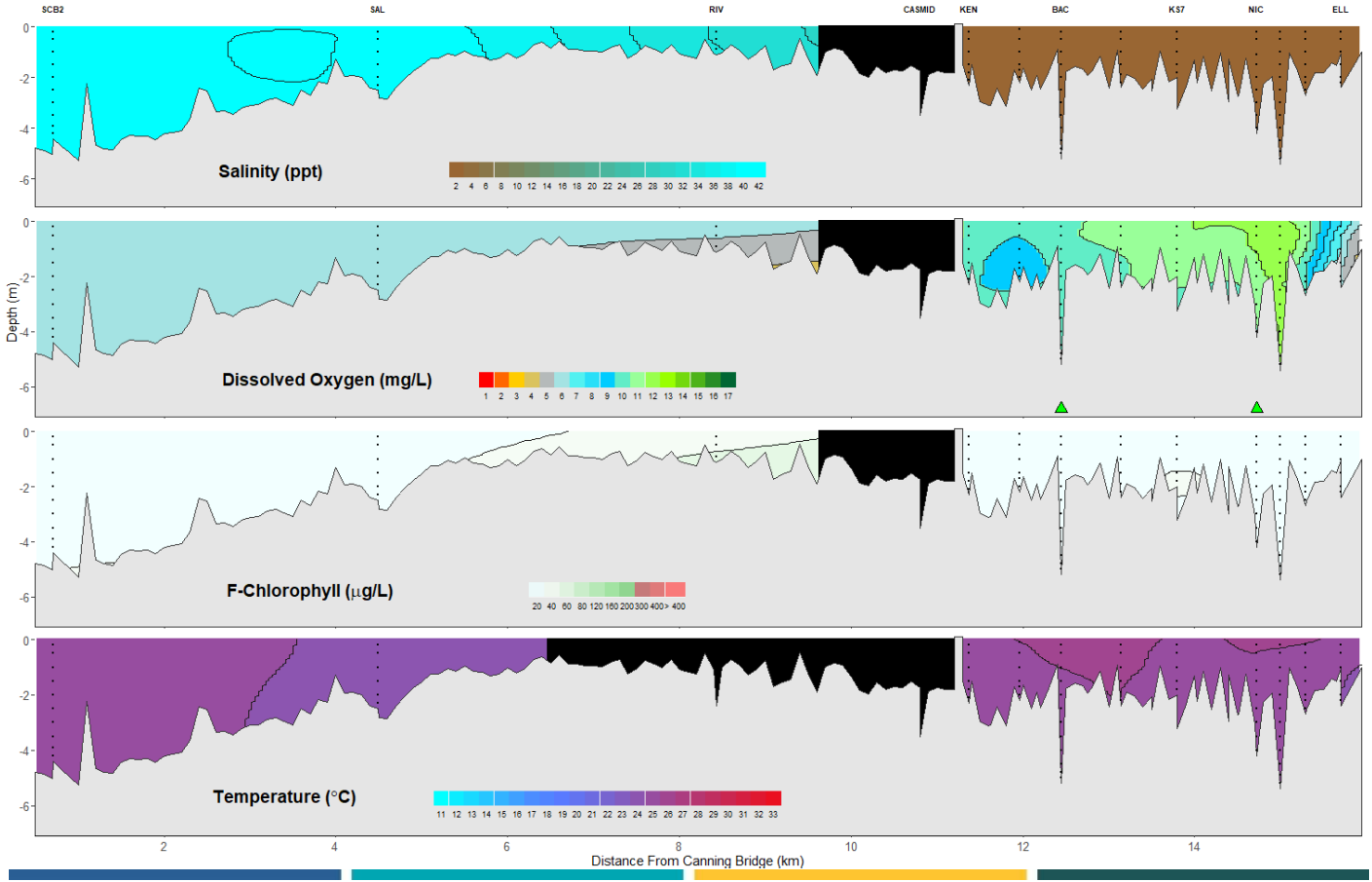
Canning Estuary and Lower Canning River - Water Quality Profiles – 6th March 2024



Date: 6th March 2024

Weather & tide conditions: Conditions were clear with a predominantly southeasterly breeze of up to 10.8 knots. The predicted tides at Barrack St were 0.44 m at 4:25 am (low tide), 1.16 m at 6:49 pm (high tide). Perth recorded no rainfall in the week prior to sampling (Bureau of Meteorology).

Oxygenation: The Bacon St and the Nicholson Rd oxygenation plant were triggered to provide oxygen in the 24 hours prior to sampling.

Canning Estuary (SCB2 to RIV): The Canning Estuary was hypersaline from SCB2 to SAL and saline at RIV. Waters were oxygenated or well oxygenated. Chlorophyll fluorescence was low. Water temperatures ranged from 23.7 to 24.5 °C at the time of sampling.

NB: CASMID could not be sampled due to low tides and temperatures were not logged at RIV.

Lower Canning River (KEN to ELL): The Lower Canning River was fresh. Waters were oxygenated or well oxygenated and chlorophyll fluorescence was low. Water temperatures ranged from 23.7 to 25.6 °C at the time of sampling.

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^{-1}, oxygenated >4-6 mg L^{-1}, low oxygen >2-4 mg L^{-1}, hypoxic 0.5-2 mg L^{-1}, anoxic <0.5 mg L^{-1}
Chlorophyll fluorescence (mod/high flow): low < 50 µg L^{-1}, moderate 50-150 µg L^{-1}, high 150-400 µg L^{-1}, extreme > 400 µg L^{-1}

Recommended reference: Department of Biodiversity, Conservation and Attractions 2024. *Swan Canning Estuary water quality profile report, Canning Estuary and Lower Canning River 6th March 2024.* Rivers and Estuaries Science (https://www.dpaw.wa.gov.au/management/swan-canning-riverpark)