Swan Canning Estuary Water Quality Monitoring Project

Weekly Water Quality Report

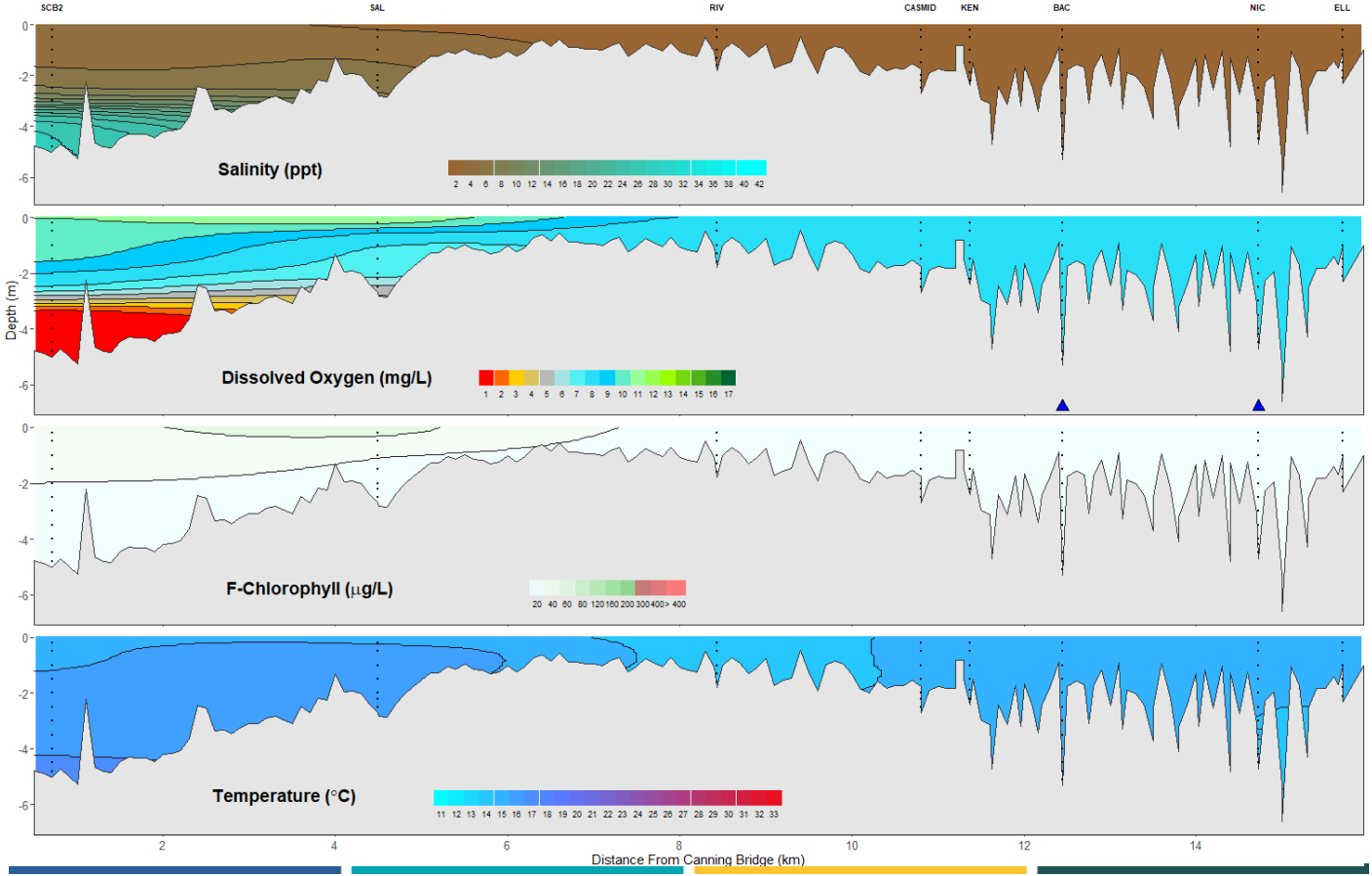
Canning Estuary and Lower Canning River

30 August 2022

Prepared by

Rivers and Estuaries Science
Biodiversity and Conservation Science
Department of Biodiversity, Conservation and Attractions

Canning Estuary and Lower Canning River - Water Quality Profiles – 30 August 2022



Date: 30 August 2022

Weather & tide conditions: Conditions were clear with a gentle breeze of up to 3 knots. The predicted tides at Barrack St were 0.77 m at 6:03 am (low tide), 0.96 m at 12:37 pm (high tide) and 0.75 m at 7:07pm (2nd low tide). Perth recorded 7.4 mm of rainfall in the week prior to sampling (Bureau of Meteorology).

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

Canning Estuary (SCB2 to CASMID): Waters were fresh over saline at SCB2 and fresh from SAL to CASMID. Waters were well oxygenated throughout except for bottom waters at SCB2, which were anoxic. Chlorophyll fluorescence was low and water temperatures ranged from 13.5 to 16.1 °C at the time of sampling.

Lower Canning River (KEN to ELL): The Lower Canning River was fresh and waters were well oxygenated throughout. Chlorophyll fluorescence was low and water temperatures ranged from 14.0 to 14.3 °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 < 60 µg L^{-1}, moderate 60-160 µg L^{-1}, high 160-400 µg L^{-1}, extreme > 400 µg L^{-1}

Recommended reference: Department of Biodiversity, Conservation and Attractions 2022. *Swan Canning Estuary water quality profile report, Canning Estuary and Lower Canning River 30 August 2022.* Rivers and Estuaries Science (https://www.dpaw.wa.gov.au/management/swan-canning-riverpark)