



Swan Canning Estuary Water Quality Monitoring Project

Weekly Water Quality Report

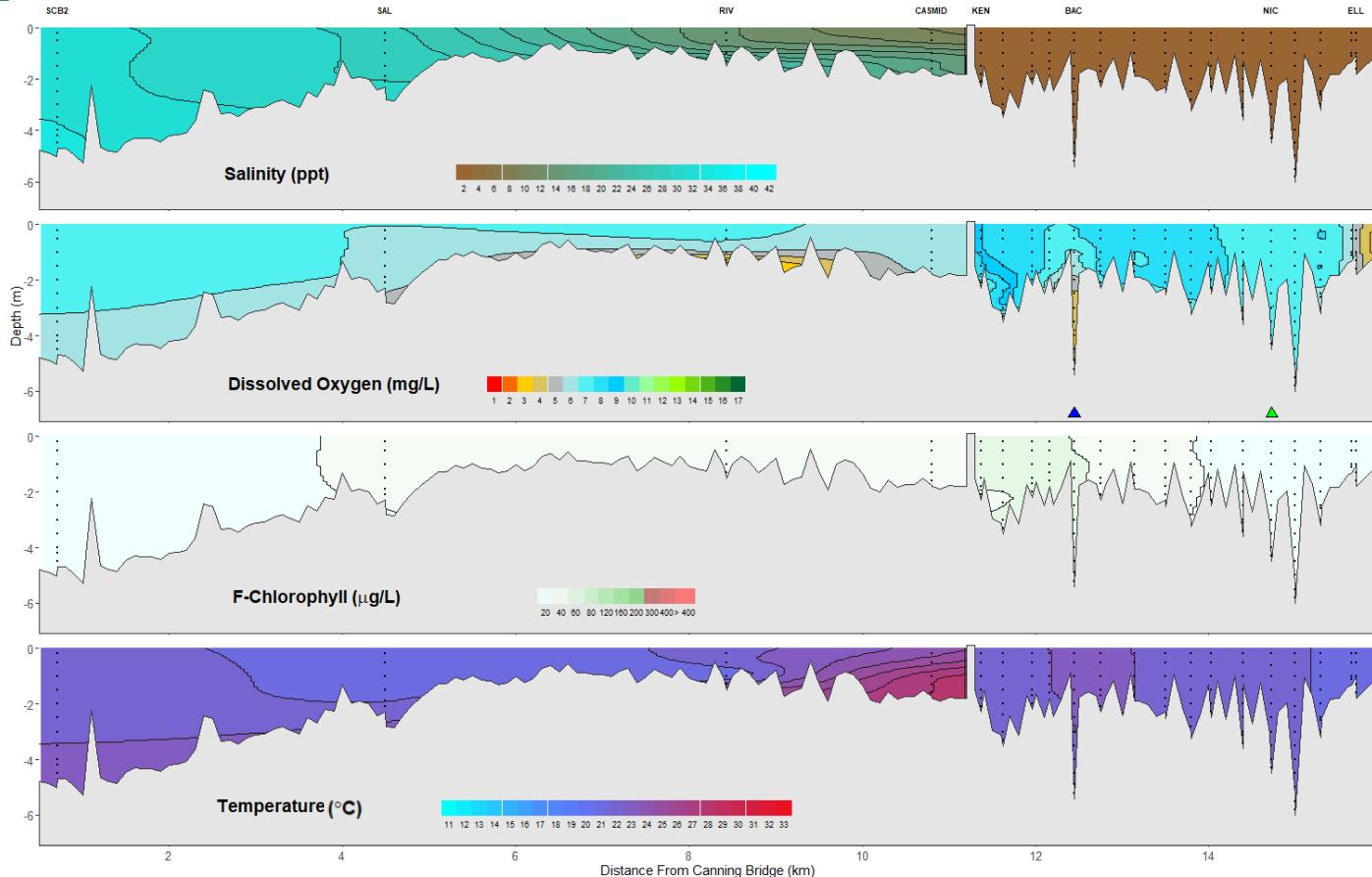
Canning Estuary and Lower Canning River

13th December 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 - 13th December 2022





Date: 13th December 2022

Weather & tide conditions: Conditions were overcast with a predominantly easterly breeze of up to 10.3 knots. The predicted tides at Barrack St were 1.06 m at 12:30 am (high tide) and 0.56 m at 11:03 am (low tide). Perth recorded no rainfall in the week prior to sampling (Bureau of Meteorology).

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

Canning Estuary (SCB2 to CASMID): Waters were saline at SCB2 and SAL, and brackish at RIV and CASMID. Waters were oxygenated or well oxygenated throughout, except at the very bottom waters of RIV, which were low in oxygen. Chlorophyll fluorescence was low throughout, and water temperatures ranged from 20.4 to 27°C at the time of sampling.

Lower Canning River (KEN to ELL): The Lower Canning River was fresh, and waters were oxygenated or well oxygenated throughout, except at the bottom waters to mid-column of BAC, which were low in oxygen. Chlorophyll fluorescence was low throughout, and water temperatures ranged from 20.5 to 22.5 °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