

Swan Canning Estuary Water Quality Monitoring Project

Weekly Water Quality Report

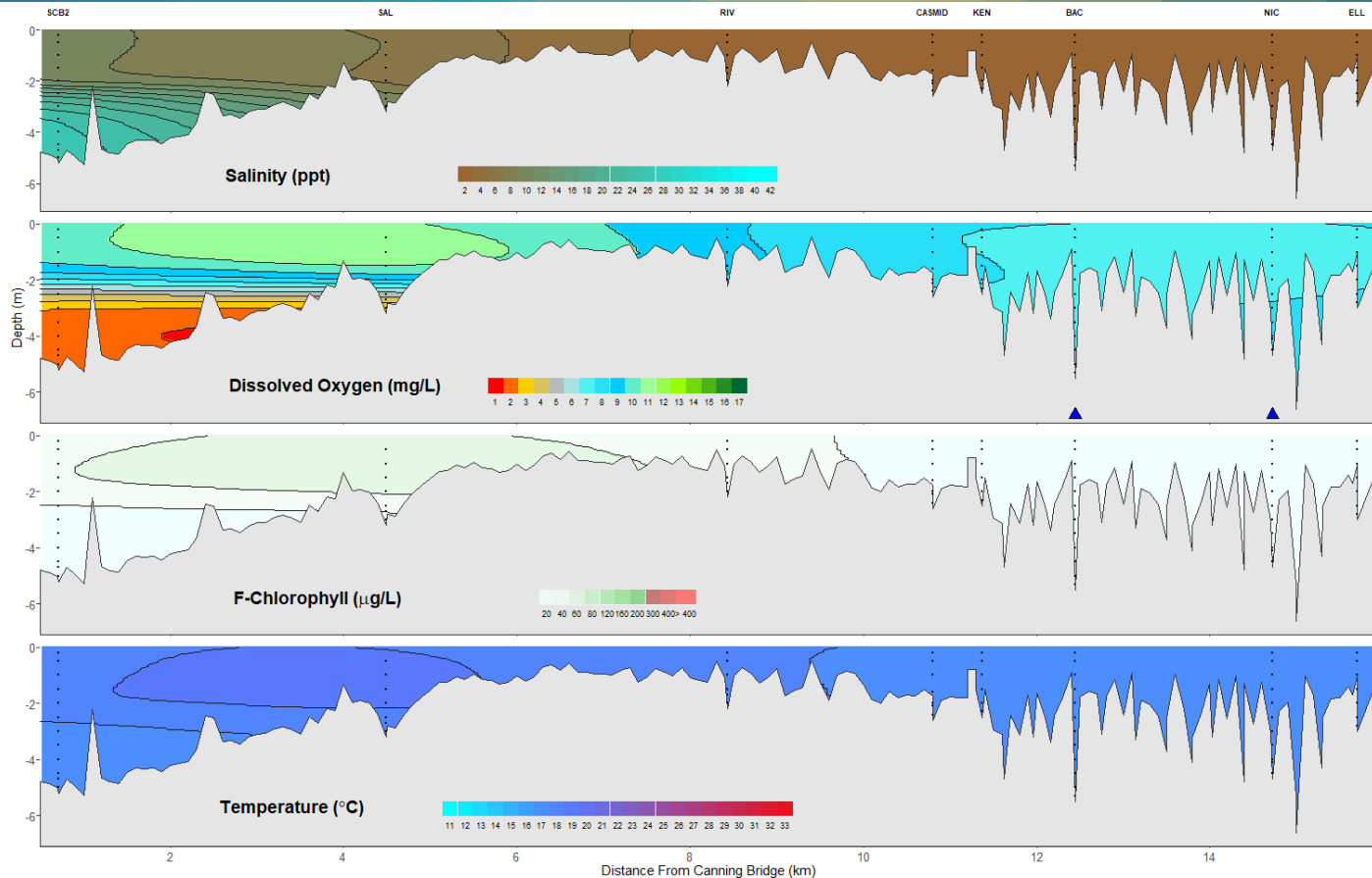
Canning Estuary and Lower Canning River

13 September 2022

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Canning Estuary and Lower Canning River - Water Quality Profiles – 13 September 2022



Date: 13 September 2022

Weather & tide conditions: Conditions were overcast with a moderate breeze of up to 19 knots. The predicted tides at Barrack St were 0.9 m at 1:00 am (first high tide), 0.74 m at 6:57 am (low tide), and 0.81 m at 1:12 pm (second high tide) however a significant storm surge resulted in a peak tidal height of 1.44 m. Perth recorded 13.8 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 brackish over saline at SCB2, brackish at SAL and fresh from RIV to CASMID. Waters were well oxygenated throughout except for bottom waters at SCB2 which were anoxic, and bottom waters at SAL which were hypoxic. Chlorophyll fluorescence was low throughout and water temperatures ranged from 16.3 to 18.2 °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 16.7 to 17 °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