



# Swan Canning Estuary Water Quality Monitoring Project

## Weekly Water Quality Report

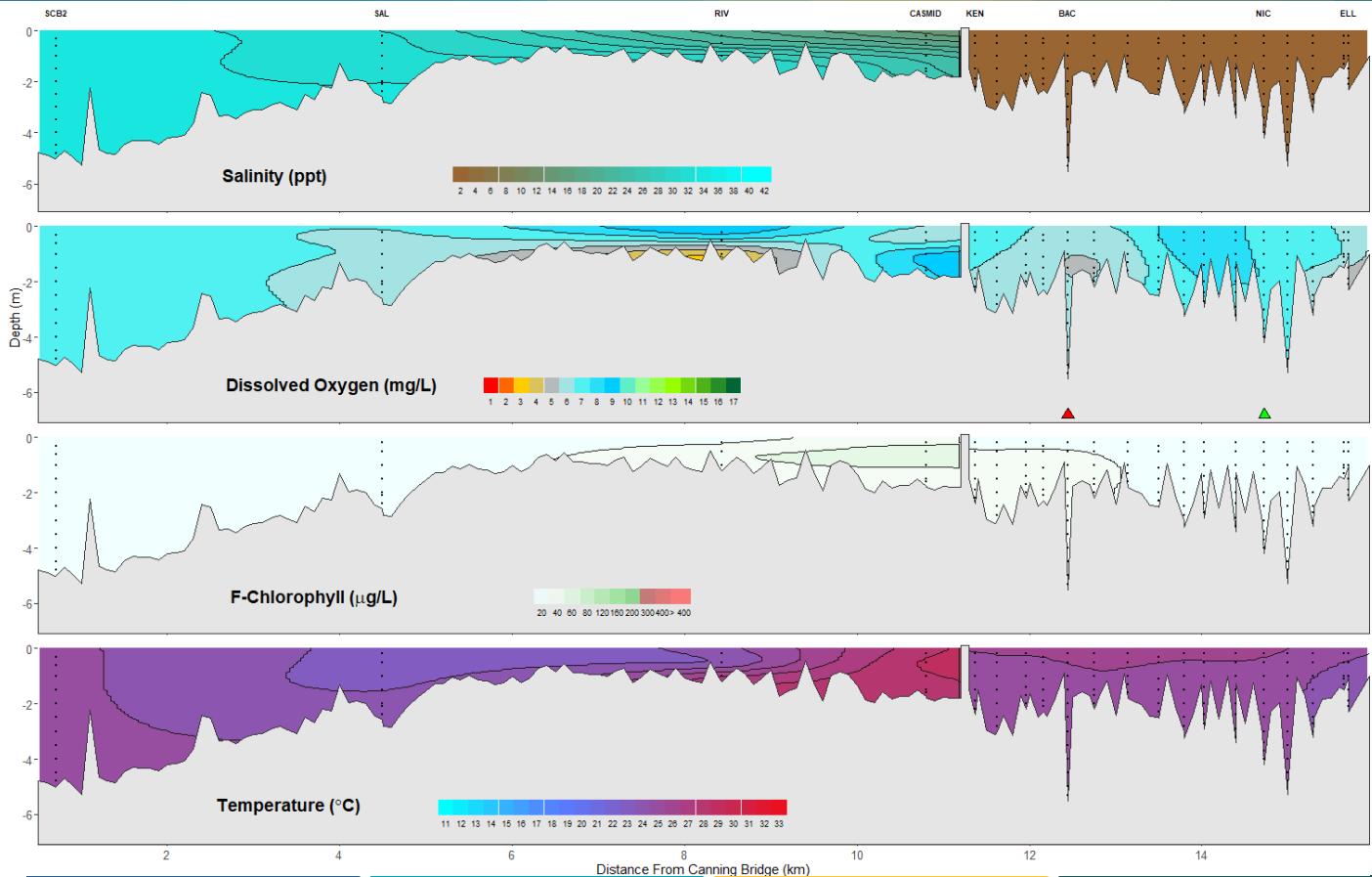
### Canning Estuary and Lower Canning River

11 January 2022

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## Canning Estuary and Lower Canning River - Water Quality Profiles – 11 January 2022





Date: 11 January 2022

Weather & tide conditions: Conditions were clear with an easterly breeze of up to 7 knots. The predicted tides at Barrack St were 0.60 m at 7:38 am (low tide) and 1.01 m at 7:12 am (high tide). Perth recorded no rainfall in the week prior to sampling (Bureau of Meteorology).

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

Canning Estuary (SCB2 to CASMID): The Canning Estuary was saline from SCB2 to SAL, brackish over saline at RIV and brackish at CASMID. Surface waters were oxygenated or well oxygenated and bottom waters were low in oxygen at RIV. Chlorophyll fluorescence was low from SCB2 to RIV and moderate at CASMID indicating higher microalgal activity in that area. Water temperature ranged from 22.8 to 28.1 °C.

Lower Canning River (KEN to ELL): The Lower Canning River was fresh, waters were oxygenated or well oxygenated and chlorophyll fluorescence was low throughout this zone. Water temperature ranged from 23.2 to 25.4 °C.

**NB:** Profile plots are visual interpolations of measured parameters only. Detailed data are available at [wir.water.wa.gov.au](http://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<sup>-1</sup>, oxygenated >4-6 mg L<sup>-1</sup>, low oxygen >2-4 mg L<sup>-1</sup>, hypoxic 0.5-2 mg L<sup>-1</sup>, anoxic <0.5 mg L<sup>-1</sup>
- Chlorophyll fluorescence (summer): low < 50 µg L<sup>-1</sup>, moderate 50-150 µg L<sup>-1</sup>, high 150-400 µg L<sup>-1</sup>, extreme > 400 µg L<sup>-1</sup>

**Recommended reference:** Department of Biodiversity, Conservation and Attractions 2021. *Swan Canning Estuary water quality profile report, Canning Estuary and Lower Canning River 11 January 2022. Rivers and Estuaries Science* (<https://www.dpaw.wa.gov.au/management/swan-canning-riverpark>)