

# Swan Canning Estuary Water Quality Monitoring Project

## Weekly Water Quality Report

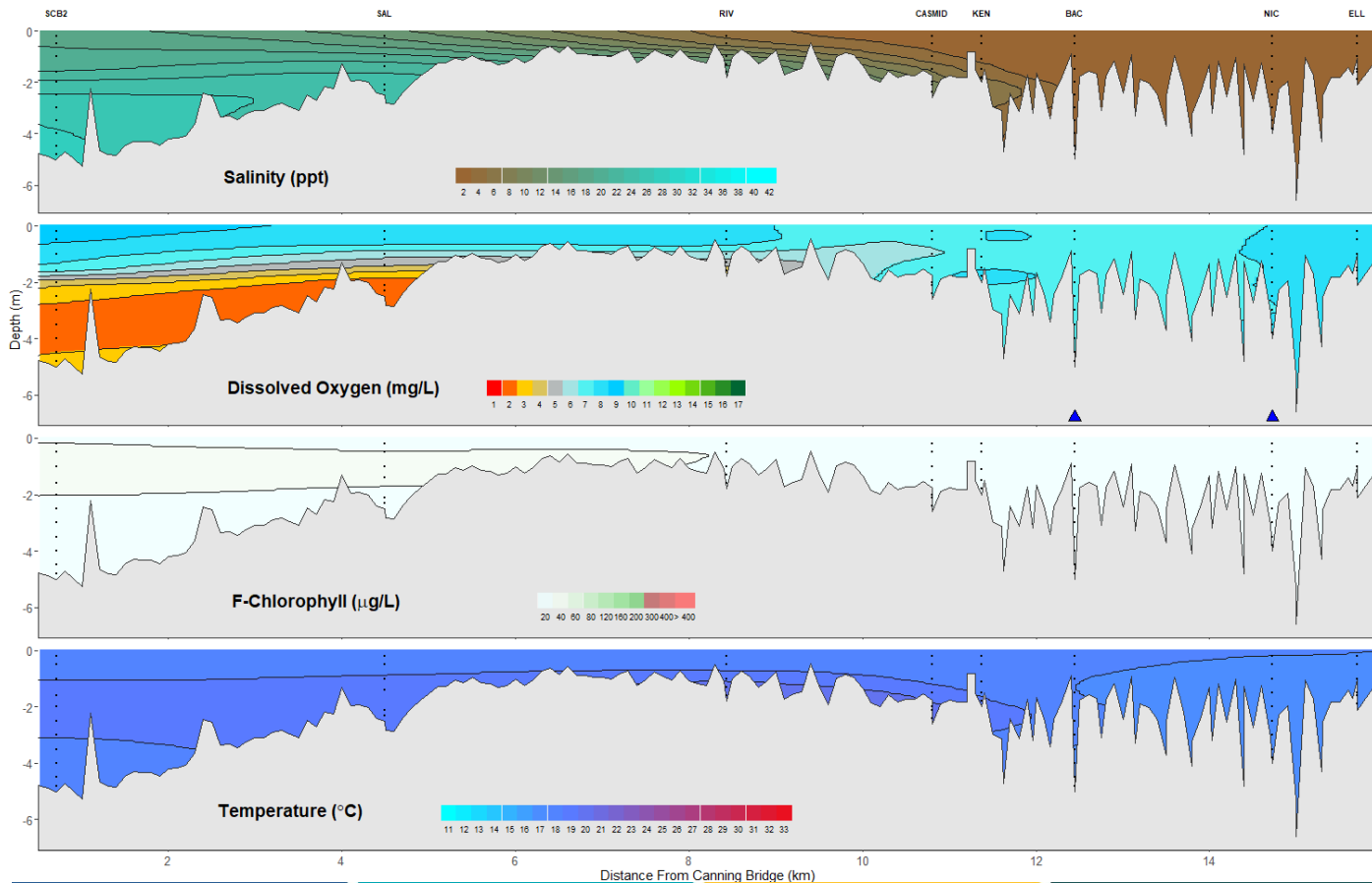
### Canning Estuary and Lower Canning River

4 October 2022

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## Canning Estuary and Lower Canning River - Water Quality Profiles – 4 October 2022



Date: 4 October 2022

Weather & tide conditions: Conditions were clear with a predominately easterly breeze of up to 10 knots. The predicted tides at Barrack St were 1.01 m at 4:35 am (high tide) and 0.53 m at 4:30 pm (low tide). Perth recorded 0 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 over brackish from RIV to CASMID. Waters were oxygenated or well oxygenated throughout except for bottom waters between SCB2 and SAL which were hypoxic. Chlorophyll fluorescence was low throughout this zone and water temperatures ranged from 17.1 to 20.0 °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 16.3 to 17.7 °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](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 (mod/high flow): low < 60 µg L<sup>-1</sup>, moderate 60-160 µg L<sup>-1</sup>, high 160-400 µg L<sup>-1</sup>, extreme > 400 µg L<sup>-1</sup>

**Recommended reference:** Department of Biodiversity, Conservation and Attractions 2022. *Swan Canning Estuary water quality profile report, Canning Estuary and Lower Canning River 4 October 2022*. Rivers and Estuaries Science (<https://www.dpaw.wa.gov.au/management/swan-canning-riverpark>)