

## Swan Canning Estuary Water Quality Monitoring Project

**Weekly Water Quality Report** 

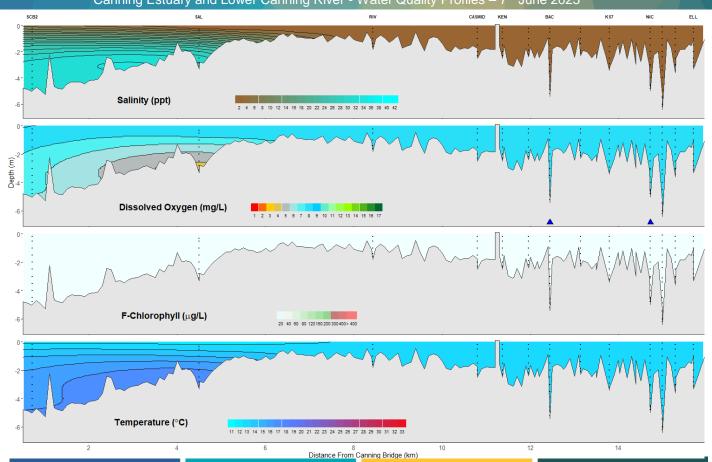
**Canning Estuary and Lower Canning River** 

7th June 2023

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## Canning Estuary and Lower Canning River - Water Quality Profiles - 7th June 2023



Date: 7th June 2023

<u>Weather & tide conditions</u>: Conditions were overcast with occasional showers and a light south easterly breeze of up to 2.3 knots. The predicted tide at Barrack St was 1.34 m (high tide) at 1:05 pm. Perth recorded 105.2 mm of rainfall in the week prior to sampling (Bureau of Meteorology), with 71.2 mm recorded on 5 June being the highest recorded June daily rainfall.

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

<u>Canning Estuary (SCB2 to CASMID)</u>: Waters were fresh over saline between SCB2 and SAL, and fresh from RIV to CASMID. Waters were oxygenated to well oxygenated, except for bottom waters of SAL which were low in oxygen. Chlorophyll fluorescence was low throughout, and water temperatures ranged from 12 °C to 16.8 °C at the time of sampling.

<u>Lower Canning River (KEN to ELL)</u>: The Lower Canning River was fresh, and waters were oxygenated to well oxygenated throughout. Chlorophyll fluorescence was low and water temperatures throughout were a consistent 12.4 °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

<u>Dissolved oxygen</u> – 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  $L^{-1}$ 

<u>Chlorophyll fluorescence (mod/high flow)</u>: low < 60  $\mu$ g L<sup>-1</sup>, moderate 60-160  $\mu$ g L<sup>-1</sup>, high 160-400  $\mu$ g L<sup>-1</sup>, extreme > 400  $\mu$ g L<sup>-1</sup>

Recommended reference: Department of Biodiversity, Conservation and Attractions 2023. Swan Canning Estuary water quality profile report, Canning Estuary and Lower Canning River 7th June 2023. Rivers and Estuaries Science (https://www.dpaw.wa.gov.au/management/swan-canning-riverpark)