

## Swan Canning Estuary Water Quality Monitoring Project

**Weekly Water Quality Report** 

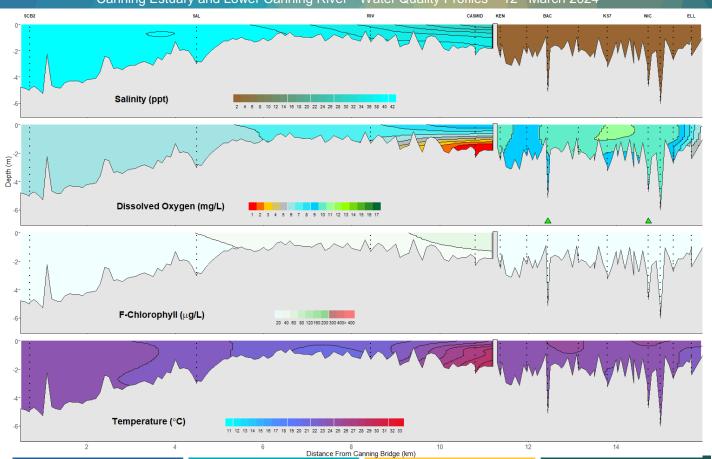
**Canning Estuary and Lower Canning River** 

12th March 2024

Prepared by

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## Canning Estuary and Lower Canning River - Water Quality Profiles – 12th March 2024



Date: 12th March 2024

<u>Weather & tide conditions</u>: Conditions were cloudy with an easterly breeze of up to 10 knots. The predicted tides at Barrack St were 0.75 m at 6:45 am (low tide), 0.98 m at 1:30 pm (high tide) and 0.79 m at 8:11 pm (2<sup>nd</sup> low tide). Perth recorded 1.6 mm rainfall in the week prior to sampling (Bureau of Meteorology).

<u>Oxygenation</u>: The Bacon St and Nicholson Rd oxygenation plants were triggered to provide oxygen in the 24 hours prior to sampling.

<u>Canning Estuary (SCB2 to RIV)</u>: The Canning Estuary was hypersaline from SCB2 to SAL and saline over hypersaline at RIV and CASMID. Waters were oxygenated or well oxygenated, except bottom waters at CASMID which were anoxic. Chlorophyll fluorescence was moderate in surface waters at CASMID. Water temperatures ranged from 21.1 to 27.9 °C at the time of sampling.

<u>Lower Canning River (KEN to ELLL)</u>: The Lower Canning River was fresh. Waters were oxygenated or well oxygenated and chlorophyll fluorescence was low. Water temperatures ranged from 22.4 to 24.3 °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  $L^{-1}$ 

 $\label{eq:chorophyll fluorescence (mod/high flow): low < 50 µg L¹, moderate 50-150 µg L¹, high 150-400 µg L¹, extreme > 400 µg L¹$ 

Recommended reference: Department of Biodiversity, Conservation and Attractions 2024. Swan Canning Estuary water quality profile report, Canning Estuary and Lower Canning River 12th March 2024. Rivers and Estuaries Science (https://www.dpaw.wa.gov.au/management/swan-canning-riverpark)