

Department of **Biodiversity**, **Conservation and Attractions**  Biodiversity and Conservation Science We're working for Western Anstralia.

## Swan Canning Estuary Water Quality Monitoring Project

Weekly Water Quality Report

## **Canning Estuary and Lower Canning River**

16th April 2024

Prepared by

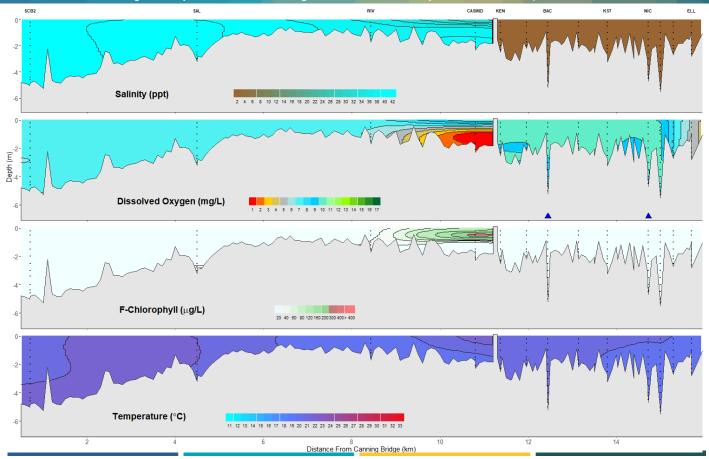
Rivers and Estuaries Science Biodiversity and Conservation Science Department of Biodiversity, Conservation and Attractions GOVERNMENT OF WESTERN AUSTRALIA

Department of **Biodiversity**, **Conservation and Attractions** 



## We're working for Western Australia.

Canning Estuary and Lower Canning River - Water Quality Profiles – 16th April 2024





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Date: 16th April 2024

<u>Weather & tide conditions</u>: Conditions were clear with a predominately easterly breeze of up to 8 knots. The predicted tides at Barrack St were 0.66 m at 3:46 am (low tide) and 1.16 m at 3:48 pm (high tide). Perth recorded 1.2 mm of rainfall in the week prior to sampling (Bureau of Meteorology).

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

<u>Canning Estuary (SCB2 to CASMID)</u>: The Canning Estuary was hypersaline from SCB2 to RIV and saline over hypersaline at CASMID. Waters were oxygenated or well oxygenated, except at CASMID where subsurface waters were anoxic and bottom waters were hypoxic. Chlorophyll fluorescence was moderate to high in surface waters of CASMID. Water temperatures ranged from 19.2 to 21.3 °C at the time of sampling.

*Lower Canning River (KEN to ELL)*: The Lower Canning River was fresh, waters were oxygenated or well oxygenated and chlorophyll fluorescence was low. Water temperatures ranged from 19.3 to 20.8 °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:

 $\begin{array}{l} \underline{Salinity} - fresh < 5, \ brackish 5-25, \ saline 25-35, \ hypersaline >35 \\ \underline{Dissolved \ oxygen} - \ well \ oxygenated >6 \ mg \ L^1, \ oxygenated >4-6 \ mg \ L^1, \ low \ oxygen >2-4 \ mg \ L^1, \ hypoxic \ 0.5-2 \ mg \ L^1, \ anoxic <0.5 \ mg \ L^1 \\ \underline{Chlorophyll \ fluorescence \ (mod/high \ flow): \ low < 50 \ \mug \ L^1, \ moderate \ 50-150 \ \mug \ L^1, \ high \ 150-400 \ high \ hight \ h$ 

**Recommended reference:** Department of Biodiversity, Conservation and Attractions 2024. Swan Canning Estuary water quality profile report, Canning Estuary and Lower Canning River 16<sup>th</sup> April 2024. Rivers and Estuaries Science (<u>https://www.dpaw.wa.gov.au/management/swan-canning-riverpark</u>)