

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**

23<sup>rd</sup> April 2024

Prepared by

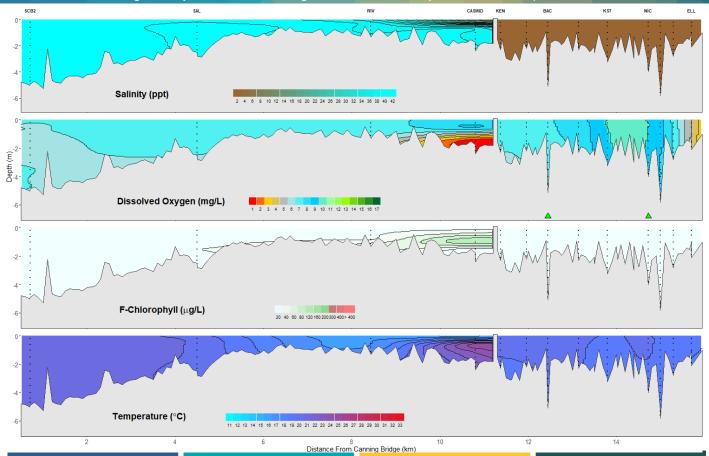
Rivers and Estuaries Science Biodiversity and Conservation Science Department of Biodiversity, Conservation and Attractions GOVERNMENT OF WESTERN AUSTRALIA

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



### We're working for Western Australia.

#### Canning Estuary and Lower Canning River - Water Quality Profiles – 23rd April 2024





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Date: 23rd April 2024

<u>Weather & tide conditions</u>: Conditions were mostly clear with a predominately south-easterly breeze of up to 9.7 knots. The predicted tides at Barrack St were 0.85 m at 3:48 am (low tide), 1.14 m at 11:09 pm (high tide) and 0.82 at 7:01 pm (second low tide). Perth recorded no 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 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 and bottom waters were hypoxic. Chlorophyll fluorescence was moderate in surface and subsurface waters of CASMID. Water temperatures ranged from 15.8 to 23.9 °C at the time of sampling.

*Lower Canning River (KEN to ELL)*: The Lower Canning River was fresh. Waters were oxygenated or well oxygenated, except bottom waters at ELL which were low in oxygen. Chlorophyll fluorescence was low. Water temperatures ranged from 17.9 to 19.3 °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:

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

**Recommended reference:** Department of Biodiversity, Conservation and Attractions 2024. Swan Canning Estuary water quality profile report, Canning Estuary and Lower Canning River 23<sup>rd</sup> April 2024. Rivers and Estuaries Science (<u>https://www.dpaw.wa.gov.au/management/swan-canning-riverpark</u>)