

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**

29 January 2025

Prepared by

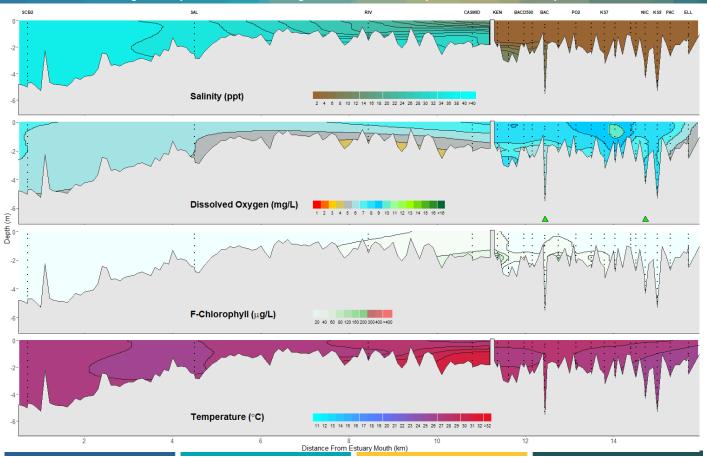
Rivers and Estuaries Science Biodiversity and Conservation Science Department of Biodiversity, Conservation and Attractions GOVERNMENT OF WESTERN AUSTRALIA

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



### We're working for Western Australia.

#### Canning Estuary and Lower Canning River - Water Quality Profiles – 29 January 2025





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Date: 29 January 2025

<u>Weather & tide conditions</u>: Conditions were clear with a predominantly easterly breeze of up to 10.7 knots. The predicted tides at Barrack St were 0.51 m at 8:53 am (low tide) and 1.2 m at 11:08 pm (high tide). Perth recorded 2.6 mm of 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 saline between SCB2 and SAL and brackish over from RIV to CASMID. Waters were oxygenated or well oxygenated, except for bottom waters at RIV which were hypoxic. Chlorophyll fluorescence was low, except in bottom waters at CASMID which were moderate. Water temperatures ranged from 25.9 to 30.7 °C at the time of sampling.

<u>Lower Canning River (KEN to ELL)</u>: The Lower Canning River was fresh, except for bottom waters at KENU300 and BAC which were brackish due to the intrusion of saline waters around the Kent St Weir as a result of significant storm surges on 23 and 24 January 2025. Waters were oxygenated or well oxygenated. Chlorophyll fluorescence was moderate in the bottom waters at KEN, BACU300 and GRE. Water temperatures ranged from 25.2 to 27.9 °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:

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

Recommended reference: Department of Biodiversity, Conservation and Attractions 2025. Swan Canning Estuary water quality profile report, Canning Estuary and Lower Canning River 29 January 2025. Rivers and Estuaries Science (<u>https://www.dpaw.wa.gov.au/management/swan-canning-riverpark</u>)