

Swan Canning Estuary Water Quality Monitoring Project

Weekly Water Quality Report

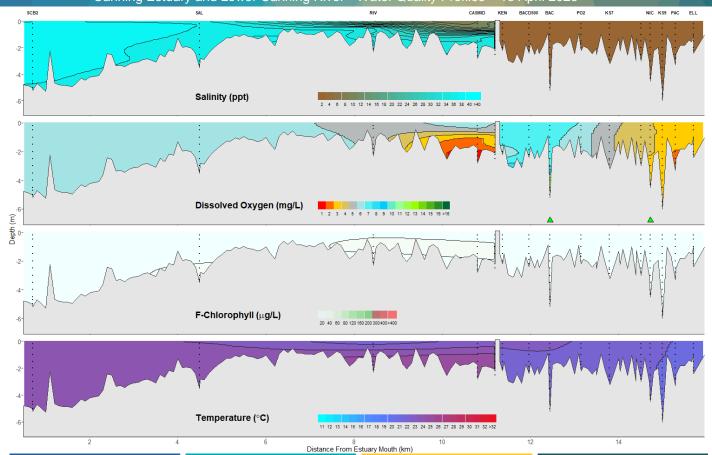
Canning Estuary and Lower Canning River

15 April 2025

Prepared by

Rivers and Estuaries Science
Biodiversity and Conservation Science
Department of Biodiversity, Conservation and Attractions

Canning Estuary and Lower Canning River - Water Quality Profiles – 15 April 2025



Date: 15 April 2025

<u>Weather & tide conditions</u>: Conditions were clear with a south-easterly breeze of up to 5.0 knots. The predicted tides at Barrack St were 0.81 m at 4:06 am (low tide) and 1.2 m at 12:12 pm (high tide). Perth recorded 5.6 mm of rainfall in the week prior to sampling (Bureau of Meteorology).

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

<u>Canning Estuary (SCB2 to CASMID)</u>: The Canning Estuary was hypersaline at SCB2, saline at SAL and brackish over saline from RIV to CASMID. Waters were oxygenated, except for bottom waters at CASMID which were anoxic. Chlorophyll fluorescence was low and water temperatures ranged from 20.6 to 24.9 °C at the time of sampling.

<u>Lower Canning River (KEN to ELL)</u>: The Lower Canning River was fresh. Waters were oxygenated or well oxygenated from KEN to KS7, low in oxygen from NICIN to ELL and hypoxic in bottom waters at PAC. Chlorophyll fluorescence was low and water temperatures ranged from 20.3 to 22.5 °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 (low flow)</u>: low < 50 μ g L⁻¹, moderate 50-150 μ g L⁻¹, high 150-400 μ g L⁻¹, extreme > 400 μ g L⁻¹

Recommended reference: Department of Biodiversity, Conservation and Attractions 2025. Swan Canning Estuary water quality profile report, Canning Estuary and Lower Canning River 15 April 2025. Rivers and Estuaries Science (https://www.dpaw.wa.gov.au/management/swan-canning-riverpark)