

Swan Canning Estuary Water Quality Monitoring Project

Weekly Water Quality Report

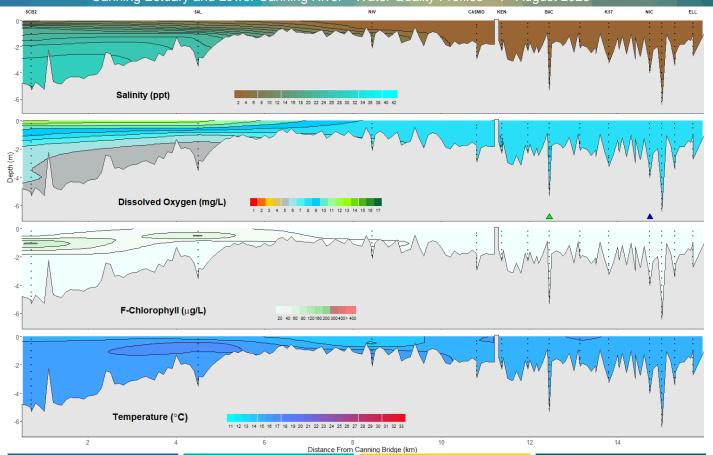
Canning Estuary and Lower Canning River

1st August 2023

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Canning Estuary and Lower Canning River - Water Quality Profiles — 1st August 2023



Date: 1st August 2023

<u>Weather & tide conditions</u>: Conditions were sunny with a variable northerly breeze of up to 4.2 knots. The predicted tides at Barrack St were 1.3 m at 10:39 am (high tide) and 0.59 m at 9:15 pm (low tide). Perth recorded 50.8 mm of rainfall in the week prior to sampling (Bureau of Meteorology).

<u>Oxygenation</u>: The Bacon St oxygenation plant provided oxygen in the 24 hours prior to sampling. The Nicholson Rd oxygenation plant was operable but was not triggered to provide oxygen in the 24 hours prior to sampling.

<u>Canning Estuary (SCB2 to CASMID)</u>: The Canning Estuary was brackish over saline at SCB2, brackish at SAL, fresh over brackish at RIV and fresh at CASMID. Waters were oxygenated or well oxygenated. Chlorophyll fluorescence was low except at SCB2 and SAL where it was moderate. Water temperatures ranged from 13 °C to 16.7 °C at the time of sampling.

<u>Lower Canning River (KEN to ELL)</u>: The Lower Canning River was fresh and waters were well oxygenated. Chlorophyll fluorescence was low and water temperatures ranged from 14.5 °C to 15 °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}

 $\frac{Chlorophyll \ fluorescence \ (mod/high \ flow)}{L^{1}. \ low < 50 \ \mu g \ L^{1}, \ moderate \ 50-150 \ \mu g \ L^{1}, \ high \ 150-400 \ \mu g \ L^{1}, \ extreme > 400 \ \mu g \ L^{1}$

Recommended reference: Department of Biodiversity, Conservation and Attractions 2023. Swan Canning Estuary water quality profile report, Canning Estuary and Lower Canning River 1st August 2023. Rivers and Estuaries Science (https://www.dpaw.wa.gov.au/management/swan-canning-riverpark)