

Swan Canning Estuary Water Quality Monitoring Project

Weekly Water Quality Report

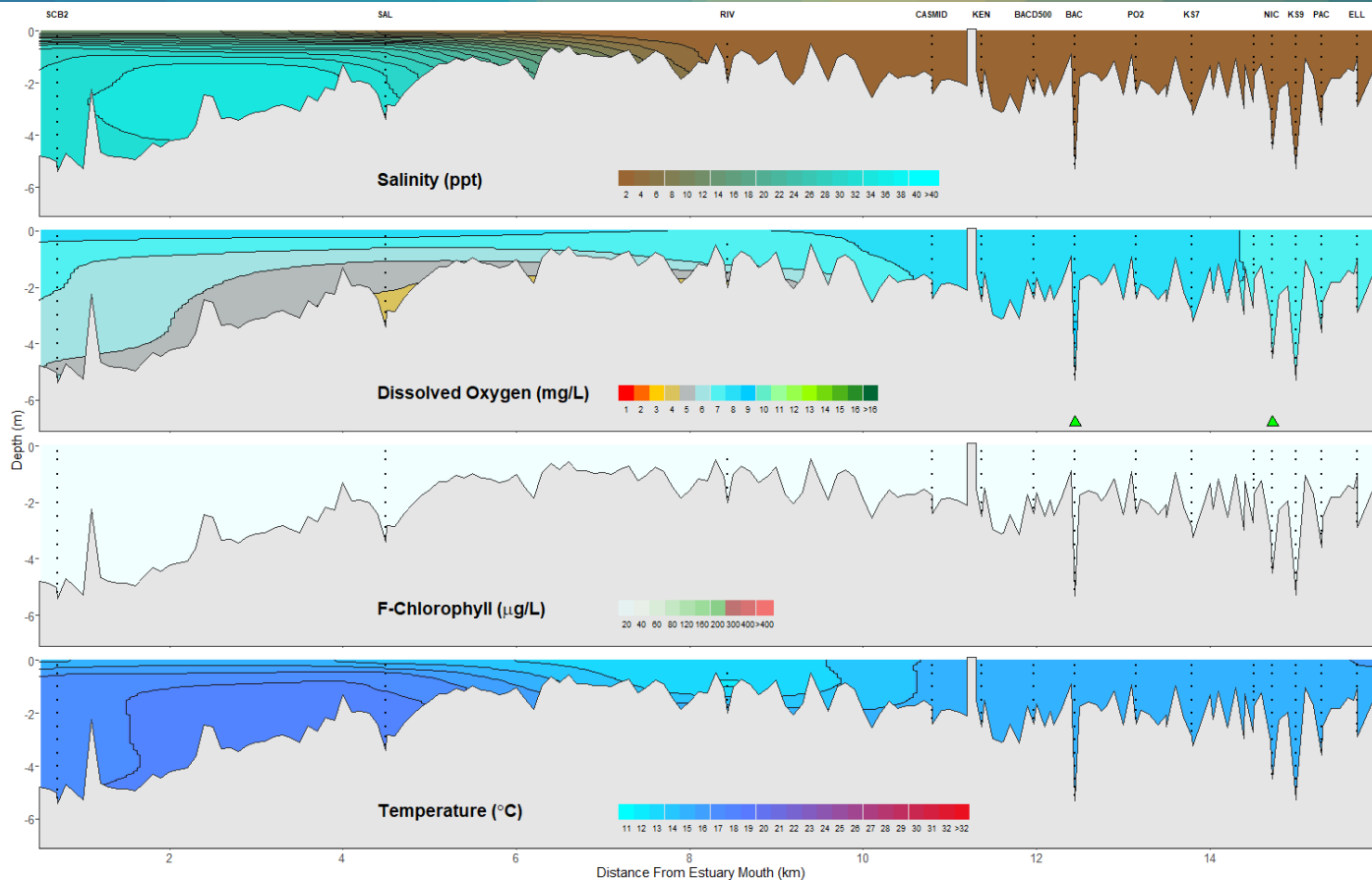
Lower Swan Canning Estuary to Upper Swan Estuary

23 June 2025

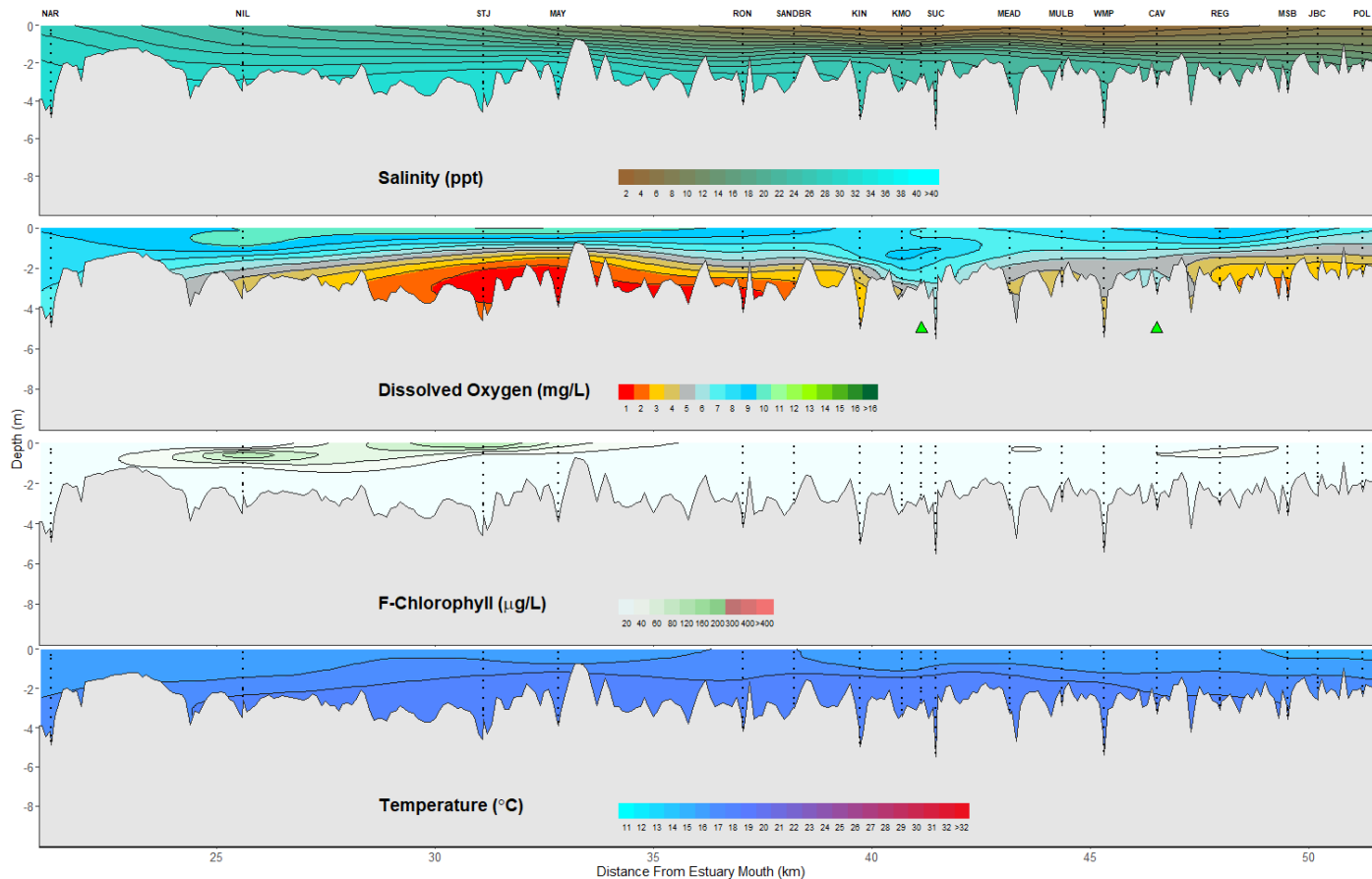
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Swan Canning Estuary - Water Quality Profiles – 23 June 2025



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Date: 23 June 2025

Weather & tide conditions: Conditions were overcast with a predominantly south-westerly breeze of up to 7.6 knots. The predicted tides at Barrack St were 1.34 m at 9:04 pm (high tide) and 0.68 m at 8:14pm (low tide). Perth recorded 72.8 mm of rainfall in the week prior to sampling (Bureau of Meteorology).

Oxygenation: The Guilford and Caversham oxygenation plants were triggered to provide oxygen in the 24 hours prior to sampling.

Lower Swan Canning Estuary (BLA to NAR): The Lower Swan Canning Estuary was saline, waters were oxygenated or well oxygenated and chlorophyll fluorescence was low. Water temperatures ranged from 15.3 to 17.3 °C at the time of sampling.

Middle Swan Estuary (NIL to RON): The Middle Swan Estuary was brackish over saline. Waters were oxygenated or well oxygenated, except for bottom waters at NIL which were low in oxygen and from STJ to RON which were hypoxic. Chlorophyll fluorescence was moderate in surface waters at NIL and STJ. Water temperatures ranged from 15.3 to 17.8 °C at the time of sampling.

Upper Swan Estuary (SANDBR to POL): The Upper Swan Estuary was brackish over saline at SANDBR, fresh over saline at KIN and SUC, fresh over brackish at KMO, VIT and from MULB to REG and brackish at MEAD and from MSB to POL. Waters were oxygenated or well oxygenated, except for bottom waters at SANDBR, KMO, SUC to WMP, REG and from JBC to POL which were low in oxygen and KIN and MSB which were hypoxic. Chlorophyll fluorescence was low and water temperatures ranged from 14.6 to 17.8 °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:

Salinity – fresh <5, brackish 5-25, saline 25-35, hypersaline >36
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
Chlorophyll fluorescence (low flow): low < 50 µg L⁻¹, moderate 50-150 µg L⁻¹, high 150-400 µg L⁻¹, extreme > 400 µg L⁻¹

Recommended reference: Department of Biodiversity, Conservation and Attractions, 2025. *Swan Canning Estuary water quality profile report, Lower Swan Canning Estuary to Upper Swan Estuary 23 June 2025*. Rivers and Estuaries Science (<https://www.dpaw.wa.gov.au/management/swan-canning-riverpark>)