

Swan Canning Estuary Water Quality Monitoring Project

Weekly Water Quality Report

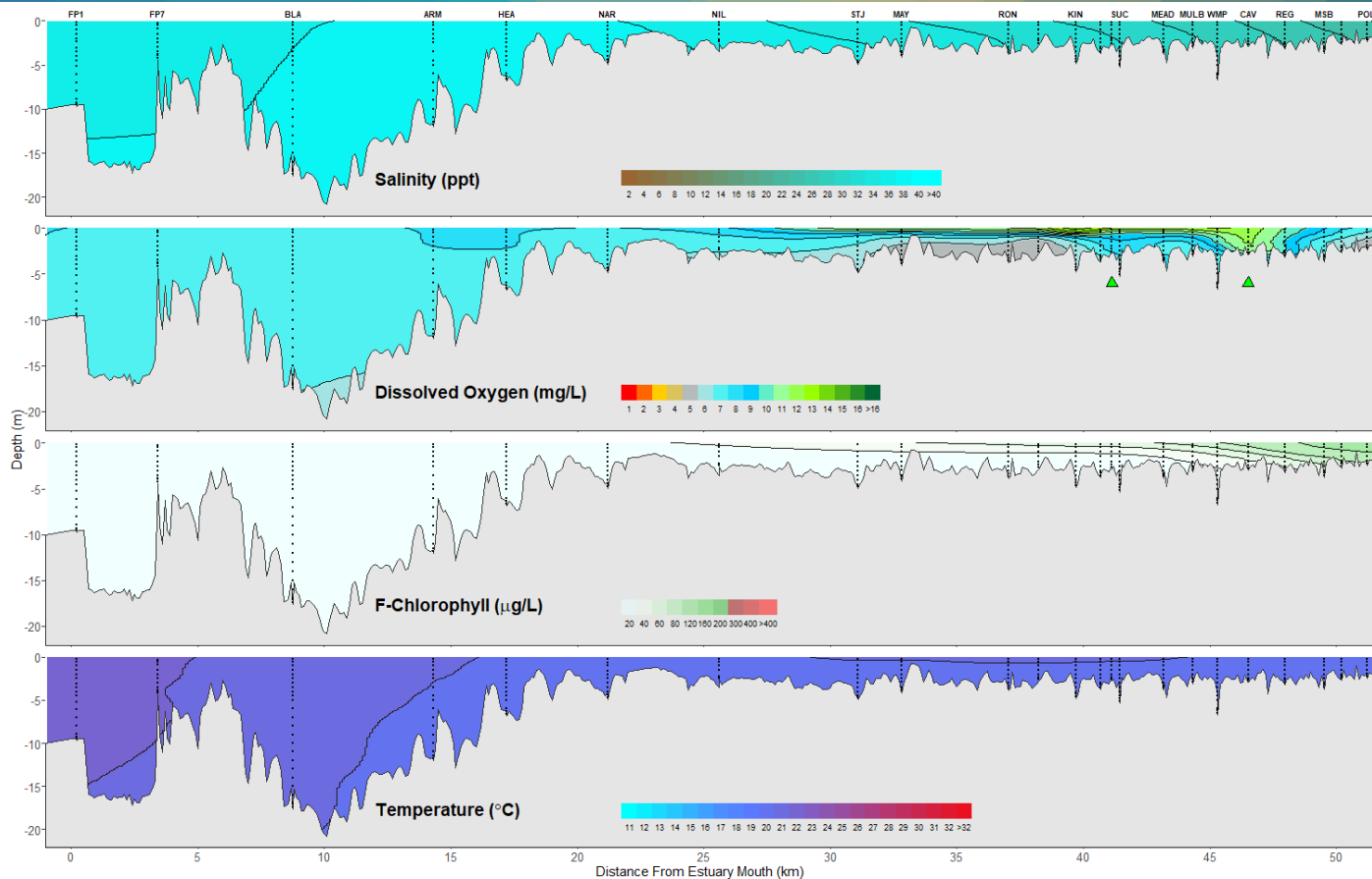
Lower Swan Canning Estuary to Upper Swan Estuary

5 May 2025

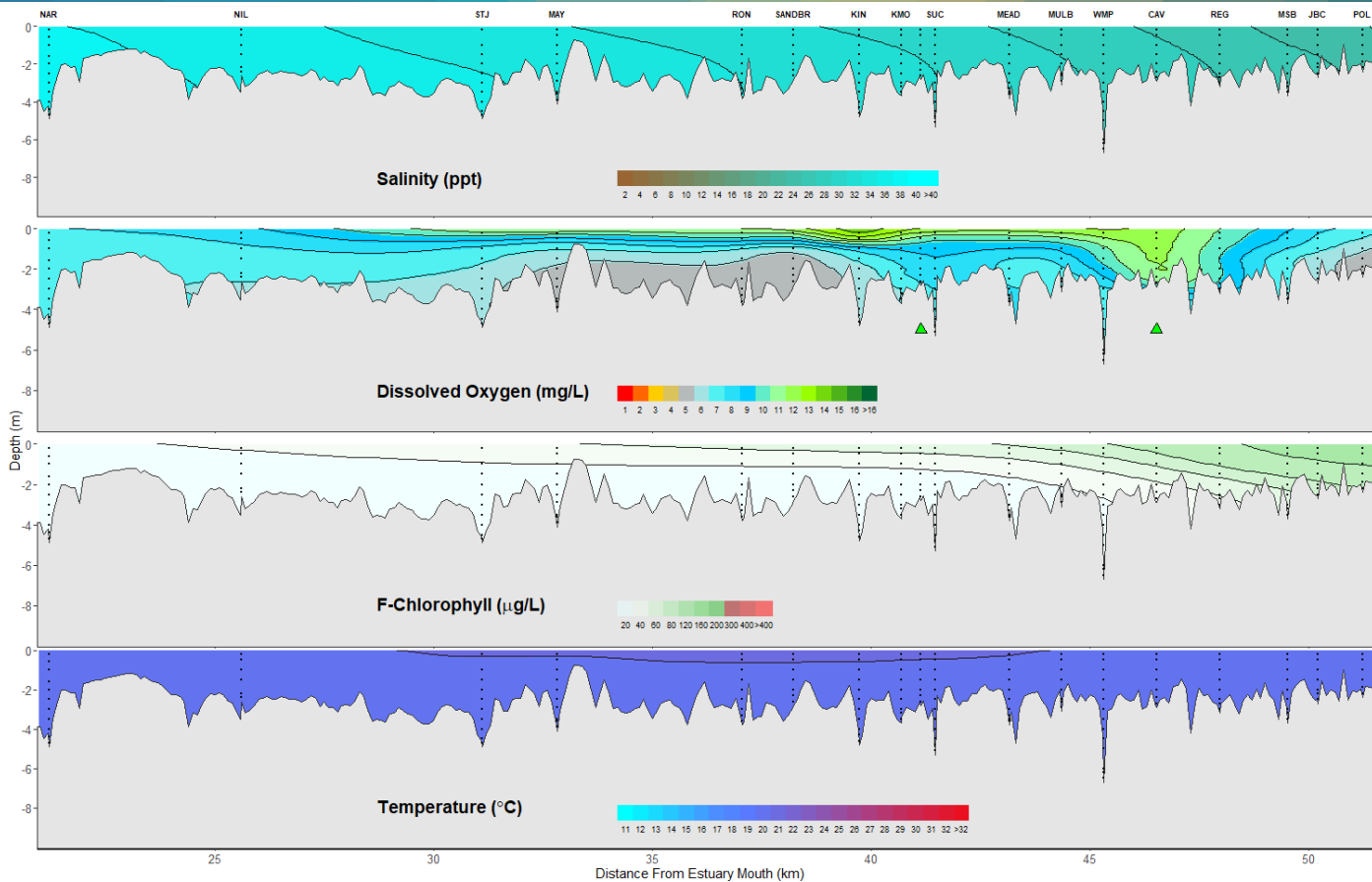
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Swan Canning Estuary - Water Quality Profiles – 5 May 2025



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Date: 5 May 2025

Weather & tide conditions: Conditions were overcast with a light north easterly to south westerly breeze of up to 5.1 knots. The predicted tides at Barrack St were 0.73 m at 3:09 am (low tide) and 1.11 m at 3:30 pm (high tide). Perth recorded 7.8 mm 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 (FP1 to NAR): The Lower Swan Canning Estuary was saline at FP1 and FP7, saline over hypersaline at BLA and hypersaline from ARM to NAR. Waters were well oxygenated and chlorophyll fluorescence was low. Water temperatures ranged from 19.4 to 21.7 °C at the time of sampling.

Middle Swan Estuary (NIL to RON): The Middle Swan Estuary was saline and waters were oxygenated or well oxygenated. Chlorophyll fluorescence was moderate in surface waters at MAY. Water temperatures ranged from 19.2 to 20.4 °C at the time of sampling.

Upper Swan Estuary (SANDBR to POL): The Upper Swan Estuary was saline from SANDBR to CAV, brackish over saline at REG and MSB and brackish at JBC and POL. Waters were oxygenated or well oxygenated. Chlorophyll fluorescence was moderate from SANDBR to KMO, MEAD to WMP and REG to POL, high in surface waters at JBC and extreme in surface waters at MSB. Water temperatures ranged from 19.0 to 21.0 °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 5 May 2025*. Rivers and Estuaries Science (<https://www.dpaw.wa.gov.au/management/swan-canning-riverpark>)