

Swan Canning Estuary Water Quality Monitoring Project

Weekly Water Quality Report

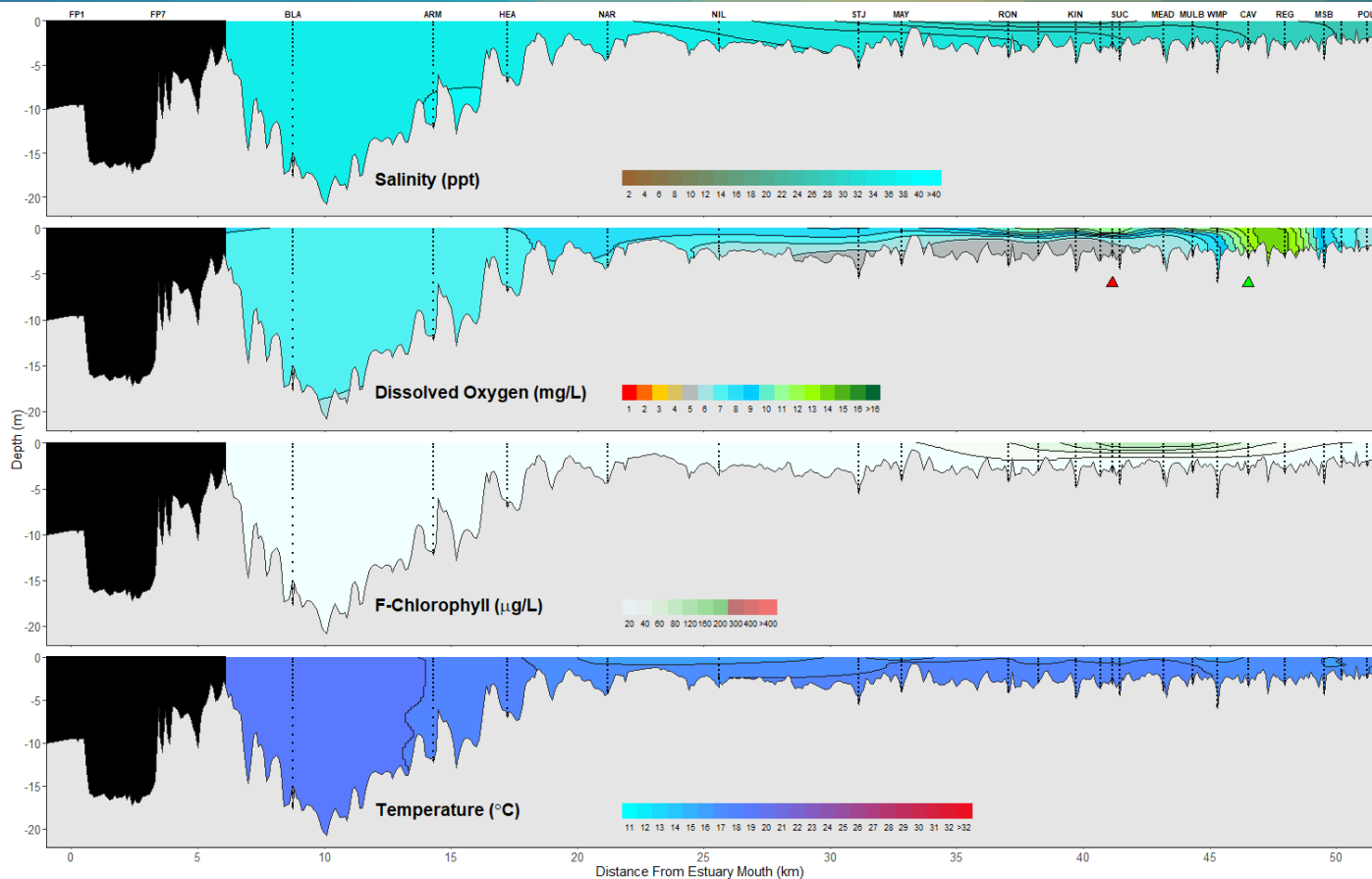
Lower Swan Canning Estuary to Upper Swan Estuary

26 May 2025

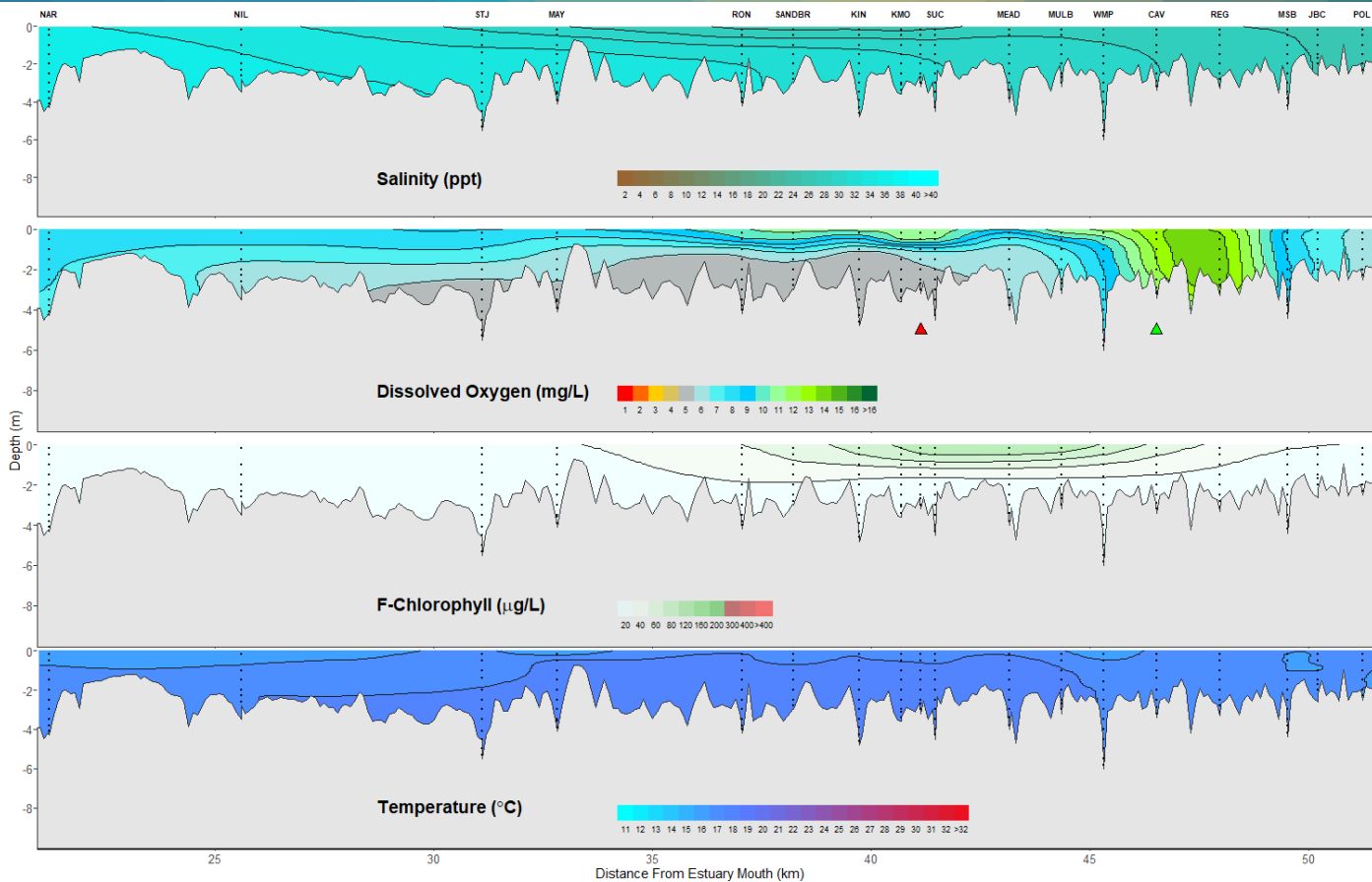
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Swan Canning Estuary - Water Quality Profiles – 26 May 2025



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Date: 26 May 2025

Weather & tide conditions: Conditions were clear with a variable breeze of up to 7.7 knots. The predicted tides at Barrack St were 1.34 m at 10:16 am (high tide) and 0.70 m at 8:51 pm (low tide). Perth recorded 29.4 mm of rainfall in the week prior to sampling (Bureau of Meteorology).

Oxygenation: The Guilford oxygenation plant was offline and the Caversham oxygenation plant was triggered to provide oxygen in the 24 hours prior to sampling.

Lower Swan Canning Estuary (FPI to NAR): The Lower Swan Canning Estuary was saline at BLA, saline over hypersaline at ARM and saline from HEA to NAR. Waters were well oxygenated, chlorophyll fluorescence was low and water temperatures ranged from 15.6 to 18.4 °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 low and water temperatures ranged from 15.8 to 17.7 °C at the time of sampling.

Upper Swan Estuary (SANDBR to POL): The Upper Swan Estuary was saline from SANDBR to KIN, brackish over saline at KMO, saline from VIT to JBC and brackish at POL. Waters were oxygenated or well oxygenated. Chlorophyll fluorescence was moderate from SANDBR to WMP and high in surface waters at SUC and MULB. Water temperatures ranged from 15.6 to 17.7 °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 26 May 2025*. Rivers and Estuaries Science (<https://www.dpaw.wa.gov.au/management/swan-canning-riverpark>)