

Swan Canning Estuary Water Quality Monitoring Project

Weekly Water Quality Report

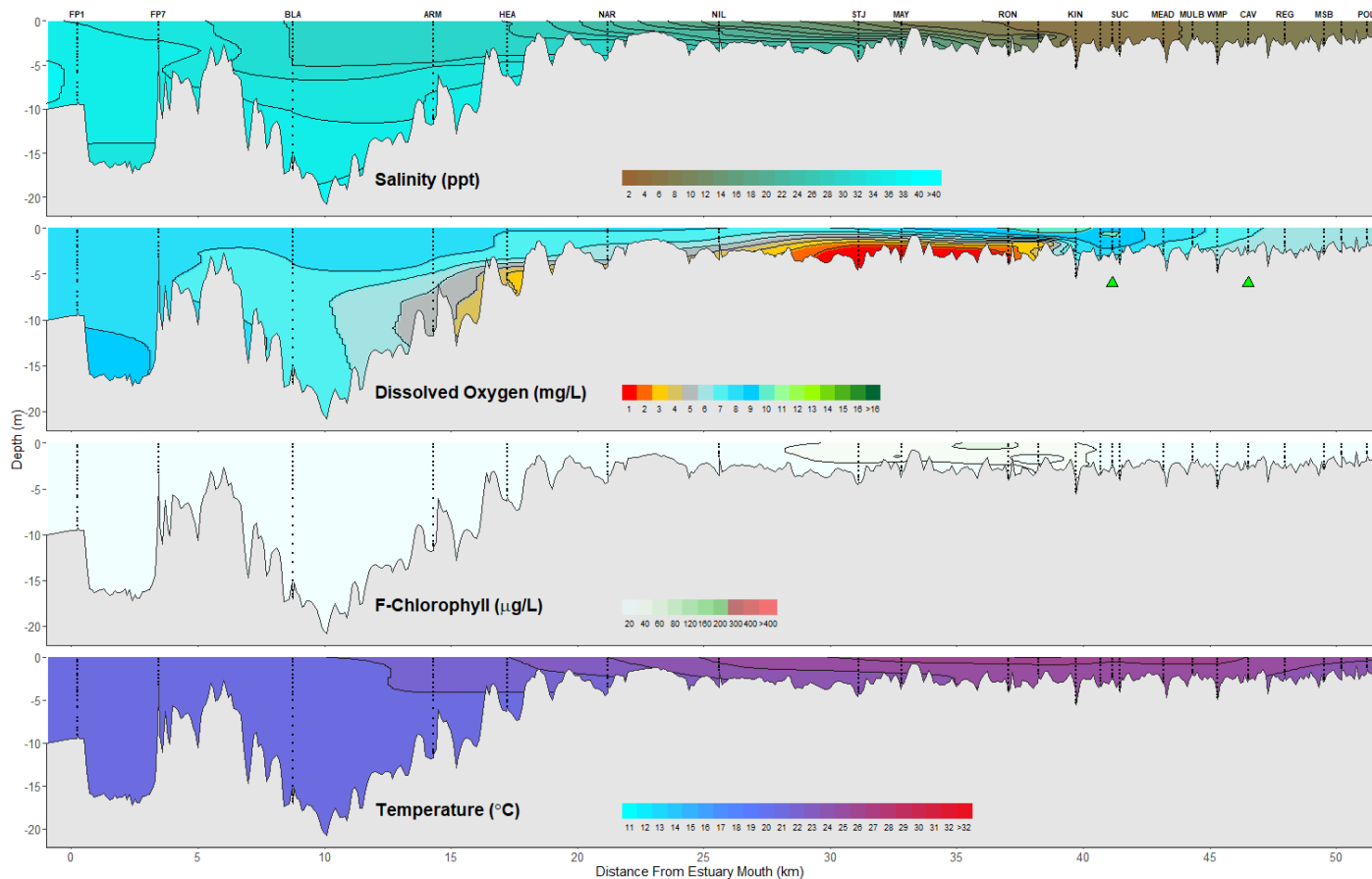
Lower Swan Canning Estuary to Upper Swan Estuary

17 November 2025

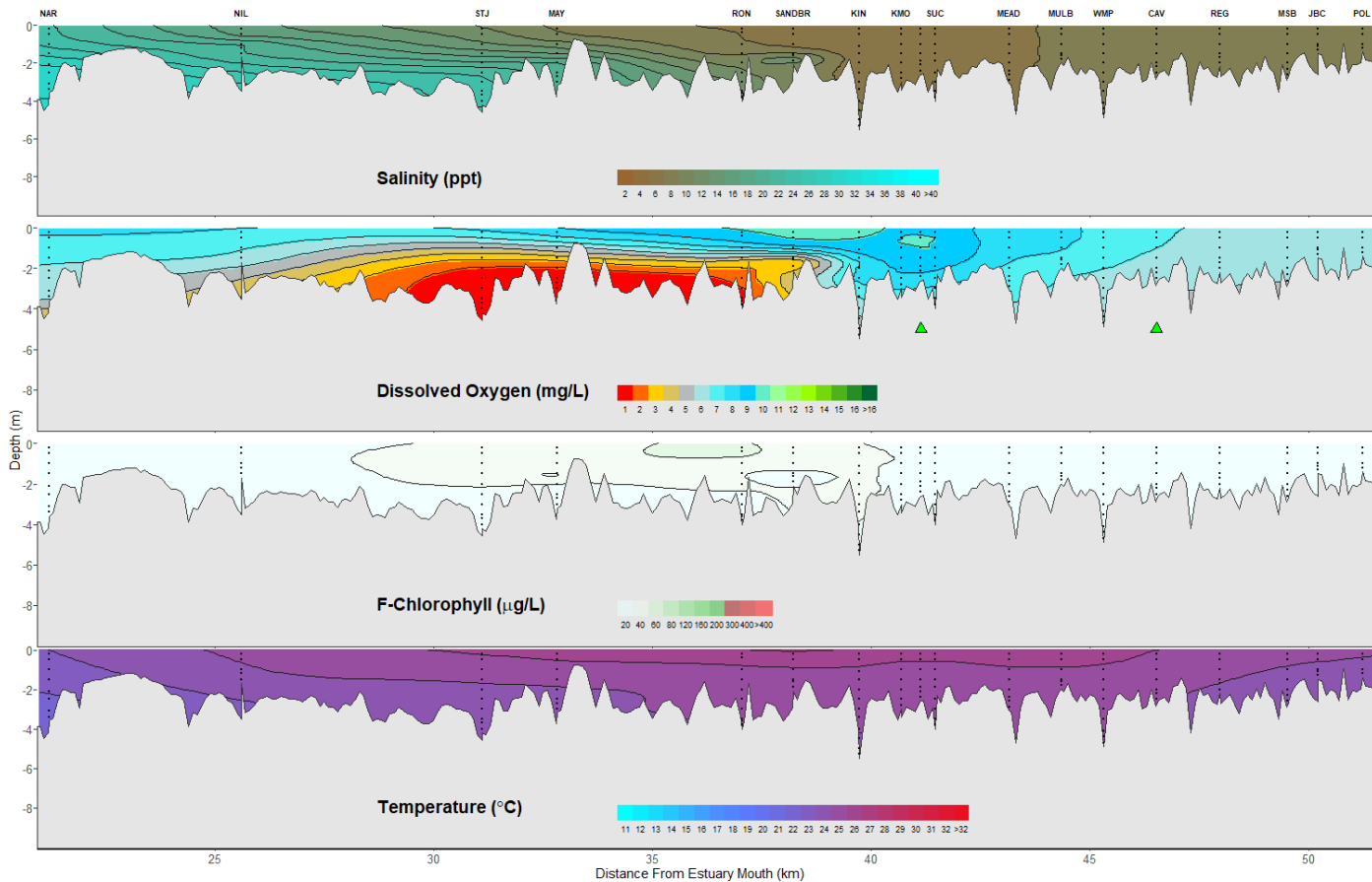
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Swan Canning Estuary - Water Quality Profiles – 17 November 2025



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Date: 17 November 2025

Weather & tide conditions: Conditions were clear with an east – northeast breeze of up to 12.9 knots. The predicted tides at Barrack St were 0.65 m at 6:50 am (low tide) and 1.07 m at 9:28 pm (high tide). Perth recorded 0 mm of rainfall in the week prior to sampling (Bureau of Meteorology).

Oxygenation: The Caversham and Guildford oxygenation plants were operable and 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 from FP1 to HEA and brackish over saline at NAR. Waters were oxygenated to well-oxygenated, except for HEA bottom waters (low oxygen). Chlorophyll fluorescence was low at all sites and water temperatures ranged from 20.1 to 20.9 °C.

Middle Swan Estuary (NIL to RON): The Middle Swan Estuary was brackish throughout all sites. Surface waters were well oxygenated. From STJ to RON mid-bottom waters were low oxygen to anoxic. Chlorophyll fluorescence was low at all sites and water temperatures ranged from 23.5 to 25.8 °C.

Upper Swan Estuary (SANDBR to POL): The Upper Swan Estuary was mostly brackish, with fresh surface waters at SUC to SANDBR and fresh bottom water at VIT and KMO. Waters were oxygenated to well-oxygenated, except for bottom waters at SANDBR and KIN (low oxygen – hypoxic). Chlorophyll fluorescence was low at all sites and water temperatures ranged from 22 to 26.3 °C.

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 ppt
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 17 November 2025*. Rivers and Estuaries Science (<https://www.dpaw.wa.gov.au/management/swan-canning-riverpark>)