

Swan Canning Estuary Water Quality Monitoring Project

Weekly Water Quality Report

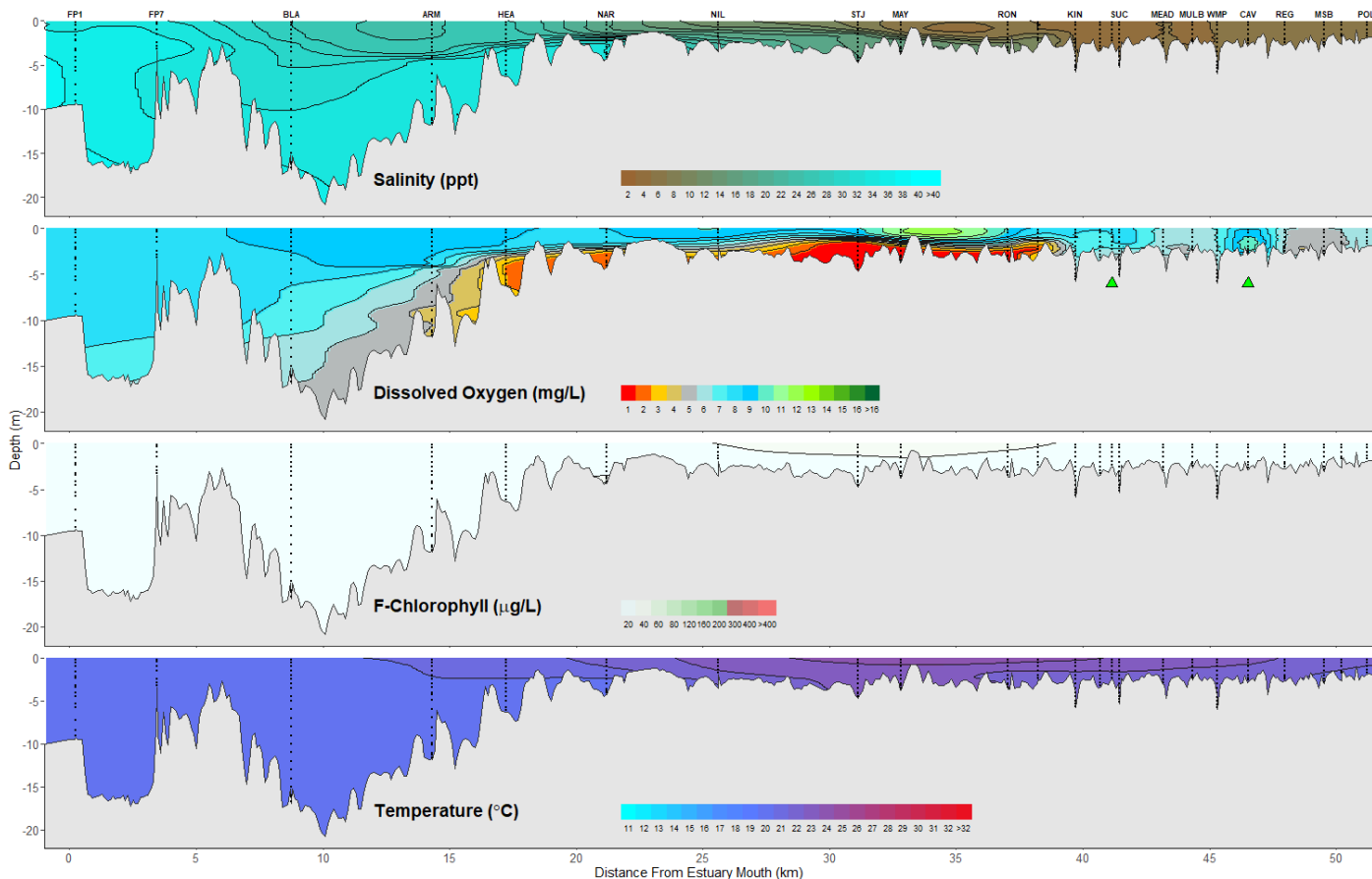
Lower Swan Canning Estuary to Upper Swan Estuary

3 November 2025

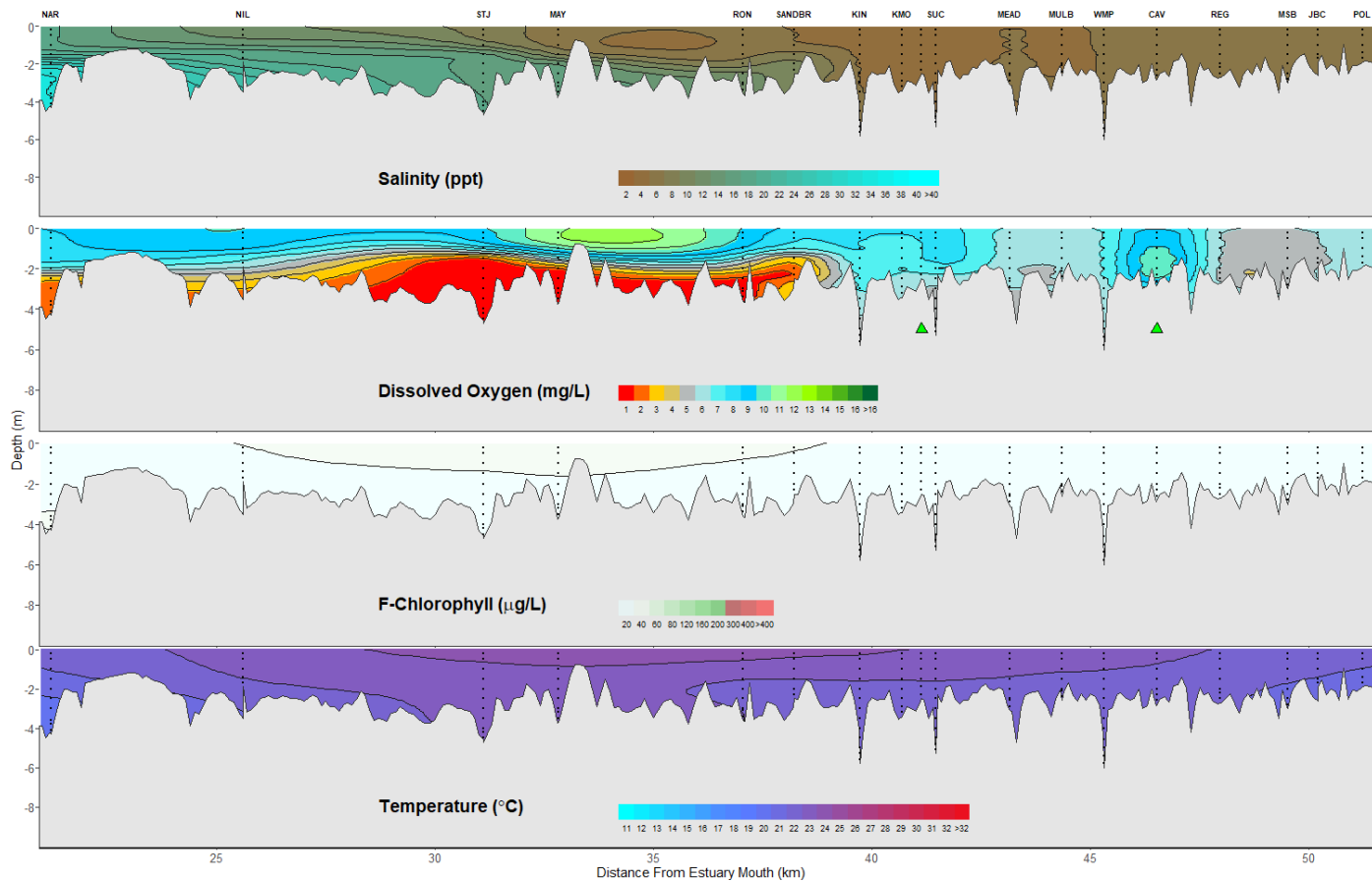
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Swan Canning Estuary - Water Quality Profiles – 3 November 2025



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Date: 3 November 2025

Weather & tide conditions: Conditions were clear with a north easterly breeze of up to 12.3 knots. The predicted tides at Barrack St were 0.69 m at 4:54 am (low tide), 0.82 m at 10:47 am (high tide), and 0.77 m at 2:54 pm (second low tide). Perth recorded 11 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 BLA and brackish over saline from ARM to NAR. Waters were oxygenated to well oxygenated, except for bottom waters at ARM (low oxygen), HEA (hypoxic) and NAR (hypoxic). Chlorophyll fluorescence was low throughout and water temperatures ranged from 19.1 to 21.2 °C.

Middle Swan Estuary (NIL to RON): The Middle Swan Estuary was brackish from NIL to MAY and fresh over brackish at RON. Waters were oxygenated to well oxygenated, except for bottom waters STJ to RON which were hypoxic to anoxic. Chlorophyll fluorescence was low and water temperatures ranged from 21.6 to 23.9 °C.

Upper Swan Estuary (SANDBR to POL): The Upper Swan Estuary was fresh over brackish from SANDBR to KIN, and fresh from KMO to POL. Waters were oxygenated to well oxygenated, except for bottom waters at KIN (low oxygen) and SANDBR (hypoxic). Chlorophyll fluorescence was low and water temperatures ranged from 20.8 to 23.5 °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 3 November 2025*. Rivers and Estuaries Science (<https://www.dpaw.wa.gov.au/management/swan-canning-riverpark>)