

Swan Canning Estuary Water Quality Monitoring Project

Weekly Water Quality Report

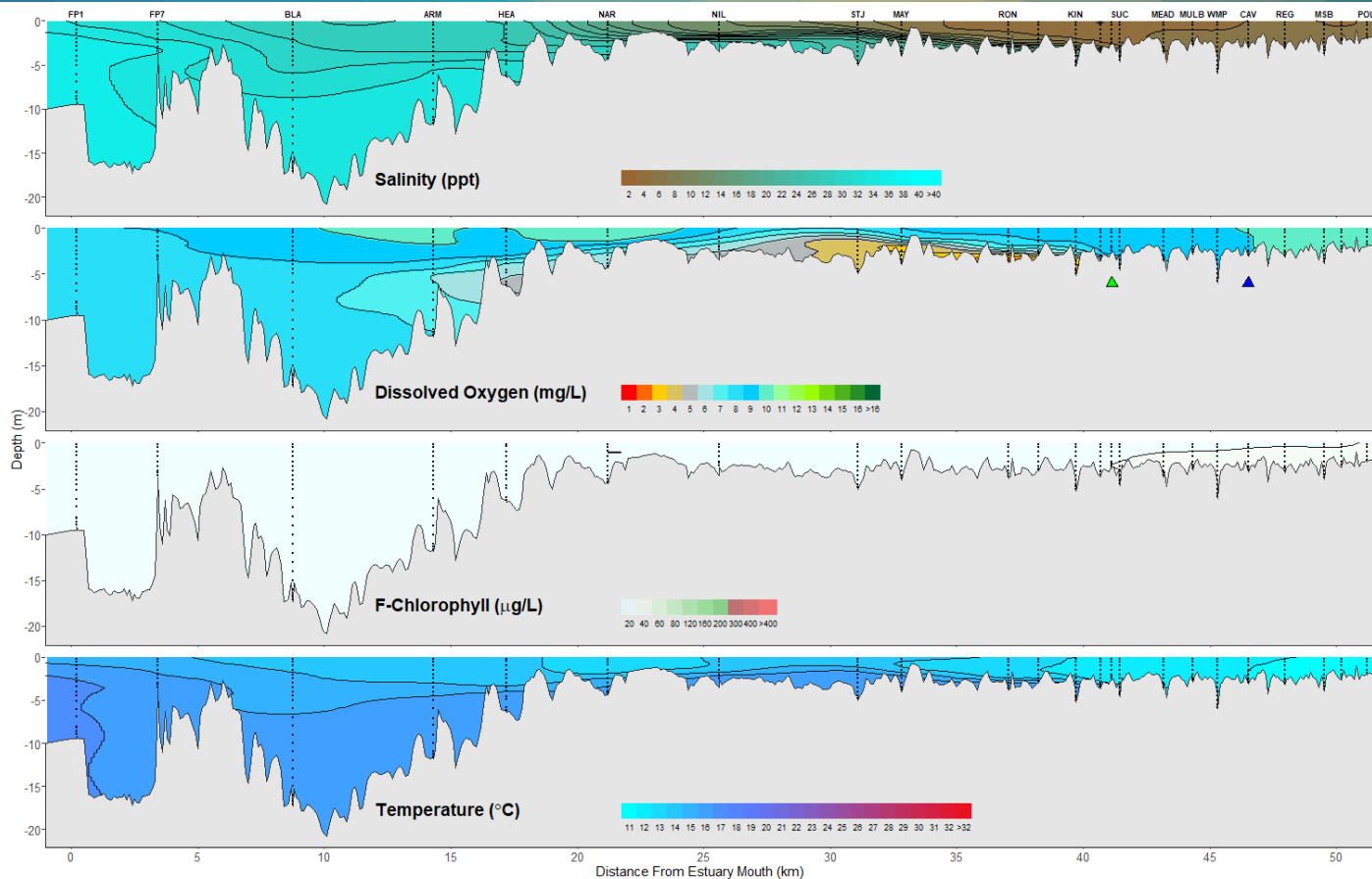
Lower Swan Canning Estuary to Upper Swan Estuary

28 July 2025

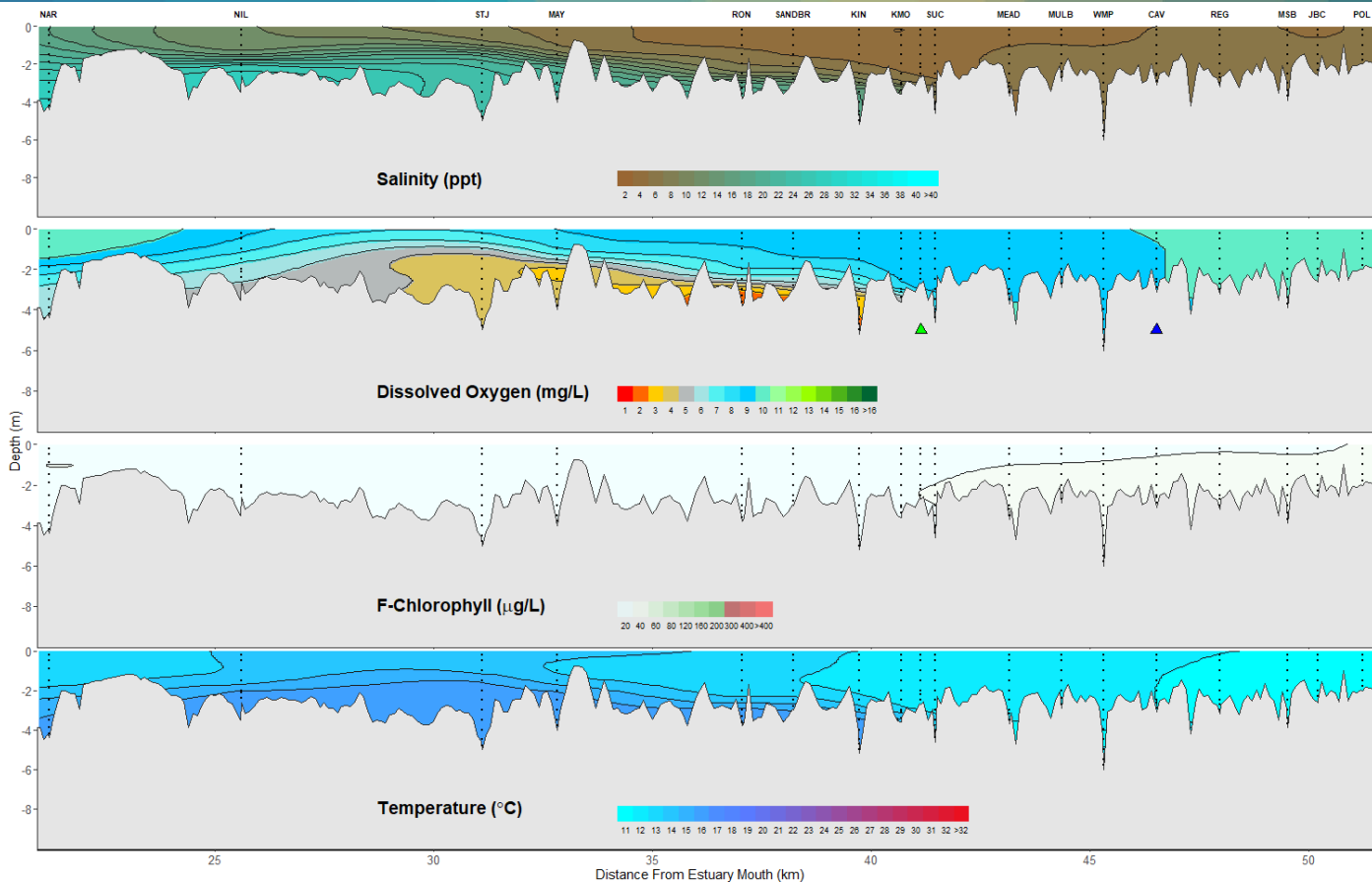
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Swan Canning Estuary - Water Quality Profiles – 28 July 2025



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Date: 28 July 2025

Weather & tide conditions: Conditions were partly cloudy with a predominantly south-westerly breeze of up to 14.8 knots. The predicted tides at Barrack St were 1.1m at 12:29 pm (high tide) and 0.82 m at 9:14 pm (low tide). Perth recorded 96.4 mm of rainfall in the week prior to sampling (Bureau of Meteorology).

Oxygenation: The Guildford oxygenation plant was triggered to provide oxygen in the 24 hours prior to sampling, whereas the Caversham oxygenation plant was operable but not triggered to provide oxygen during this window.

Lower Swan Canning Estuary (FP7 to NAR): The Lower Swan Canning Estuary was saline from FP7 to HEA and brackish over saline at NAR. Waters were oxygenated or well oxygenated and chlorophyll fluorescence was low. Water temperatures ranged from 12.5 to 16.2 °C.

Middle Swan Estuary (NIL to RON): The Middle Swan Estuary was brackish over saline at NIL, brackish between STJ and MAY and fresh over brackish at RON. Waters were oxygenated or well oxygenated, except for subsurface and bottom waters between STJ and MAY which were low in oxygen and bottom waters at RON which were hypoxic. Chlorophyll fluorescence was low and water temperatures ranged from 13.9 to 16.8 °C.

Upper Swan Estuary (SANDBR to POL): The Upper Swan Estuary was fresh over brackish from SANDBR to KMO and fresh from VIT to POL. Waters were oxygenated or well oxygenated, except for subsurface and bottom waters at KIN and RON which were hypoxic. Chlorophyll fluorescence was low and water temperatures ranged from 10.8 to 15.9 °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 28 July 2025*. Rivers and Estuaries Science (<https://www.dpaw.wa.gov.au/management/swan-canning-riverpark>)