

Swan Canning Estuary Water Quality Monitoring Project

Weekly Water Quality Report

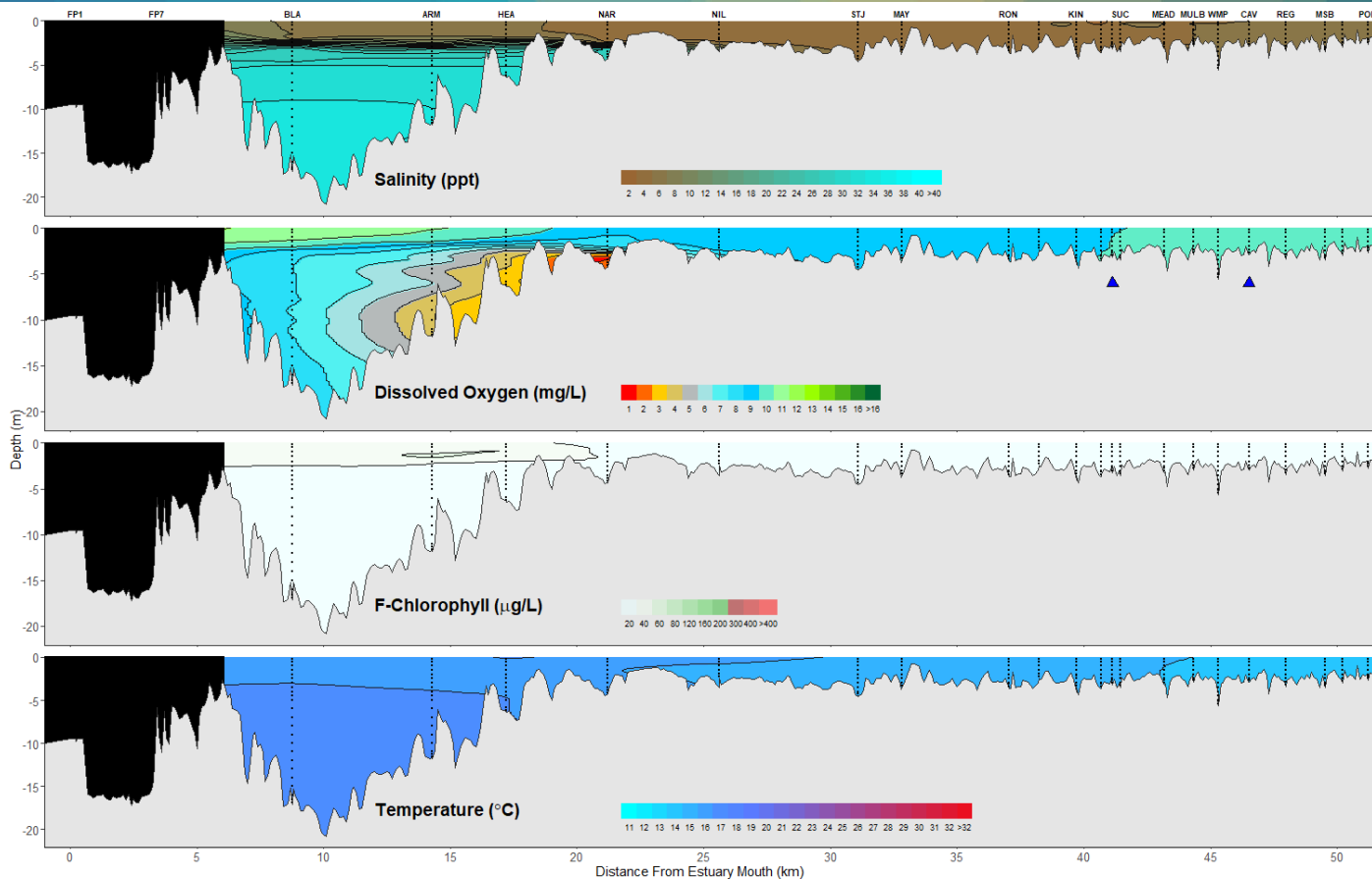
Lower Swan Canning Estuary to Upper Swan Estuary

1 September 2025

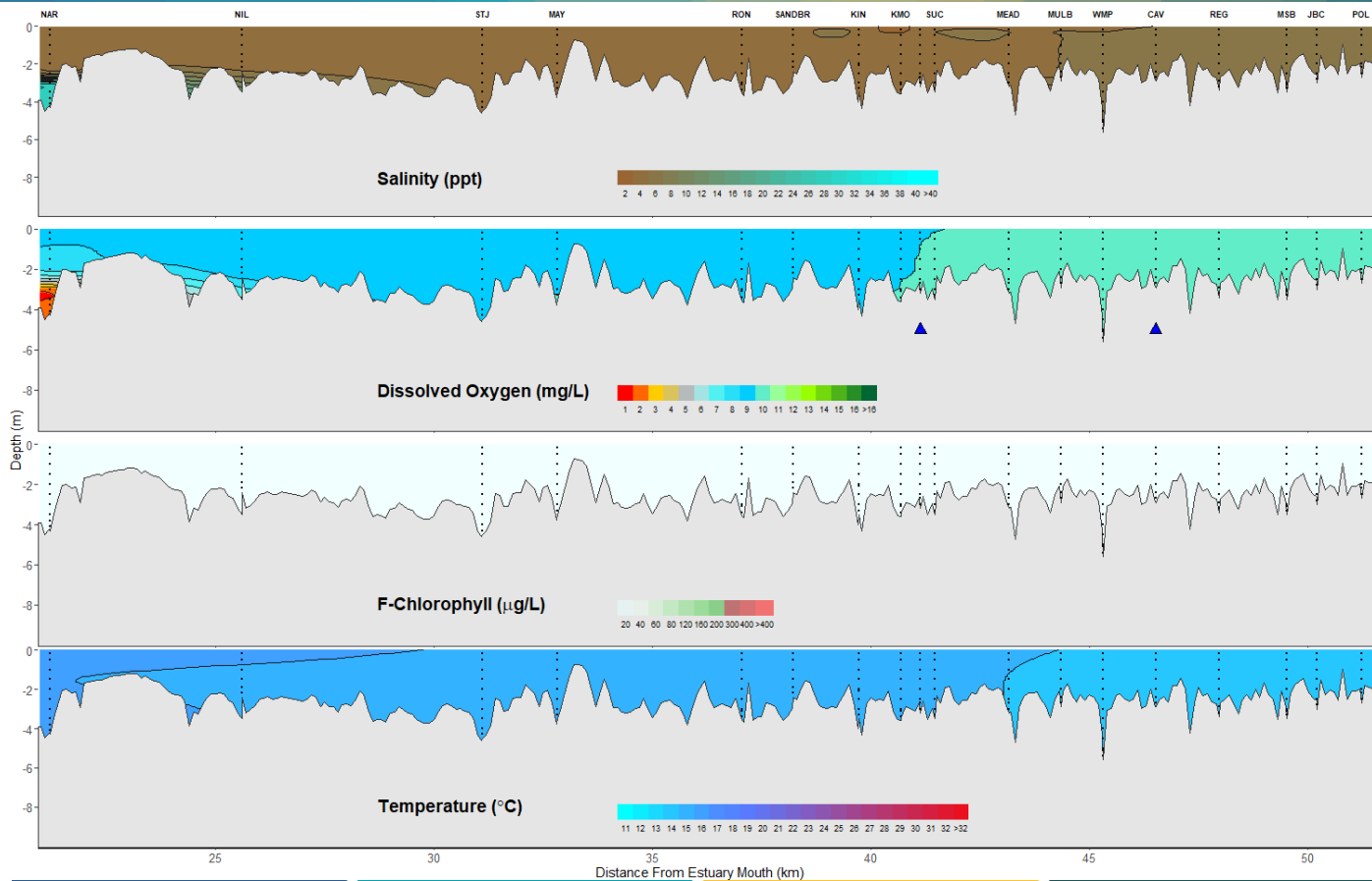
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Swan Canning Estuary - Water Quality Profiles – 1 September 2025



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Date: 1 September 2025

Weather & tide conditions: Conditions were overcast with a variable breeze of up to 8 knots. The predicted tides at Barrack St were 1.06 m at 4:02 am (high tide) and 0.66 m at 17:11 pm (low tide). Perth recorded 34 mm of rainfall in the week prior to sampling (Bureau of Meteorology).

Oxygenation: The Guildford and Caversham oxygenation plants were operable but not triggered to provide oxygen in the 24 hours prior to sampling.

Lower Swan Canning Estuary (BLA to NAR): The Lower Swan Canning Estuary was brackish over saline at BLA and fresh over saline from ARM to NAR. Waters were oxygenated or well oxygenated except for bottom waters at HEA, ARM and NAR which were either low in oxygen (ARM and HEA) or hypoxic (NAR). Chlorophyll fluorescence was low throughout and water temperatures ranged from 14.8 to 16.4 °C.

Middle Swan Estuary (NIL to RON): The Middle Swan Estuary was fresh and well oxygenated throughout. Chlorophyll fluorescence was low and water temperatures ranged from 14.2 to 15.7 °C.

Upper Swan Estuary (SANDBR to POL): The Upper Swan Estuary was fresh and well oxygenated throughout. Chlorophyll fluorescence was low and water temperatures ranged from 13.3 to 16.3 °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 1 September 2025*. Rivers and Estuaries Science (<https://www.dpaw.wa.gov.au/management/swan-canning-riverpark>)