



Department of Biodiversity,
Conservation and Attractions



Biodiversity and
Conservation Science

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Swan Canning Estuary Water Quality Monitoring Project

Weekly Water Quality Report

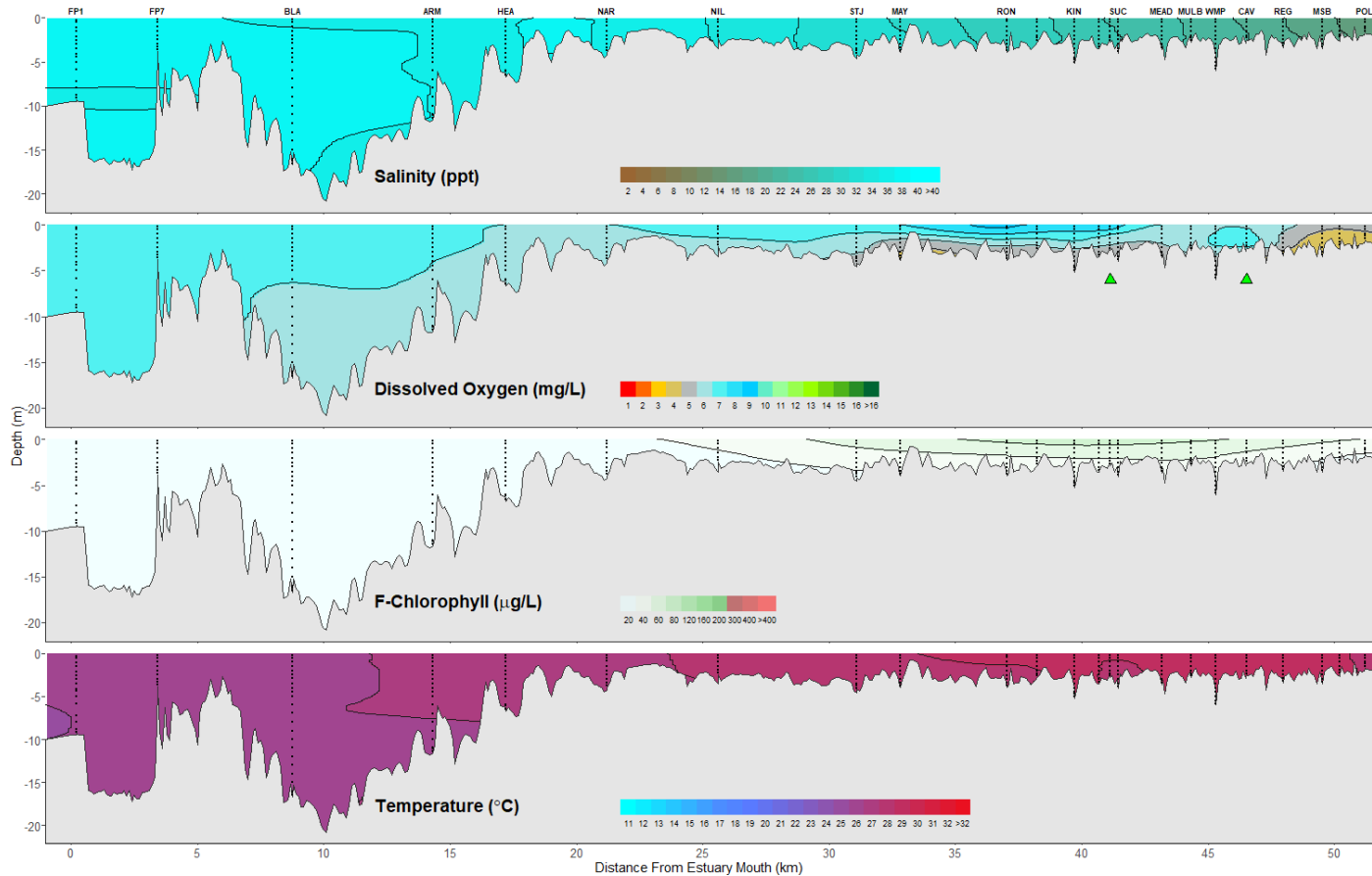
Lower Swan Canning Estuary to Upper Swan Estuary

10 February 2025

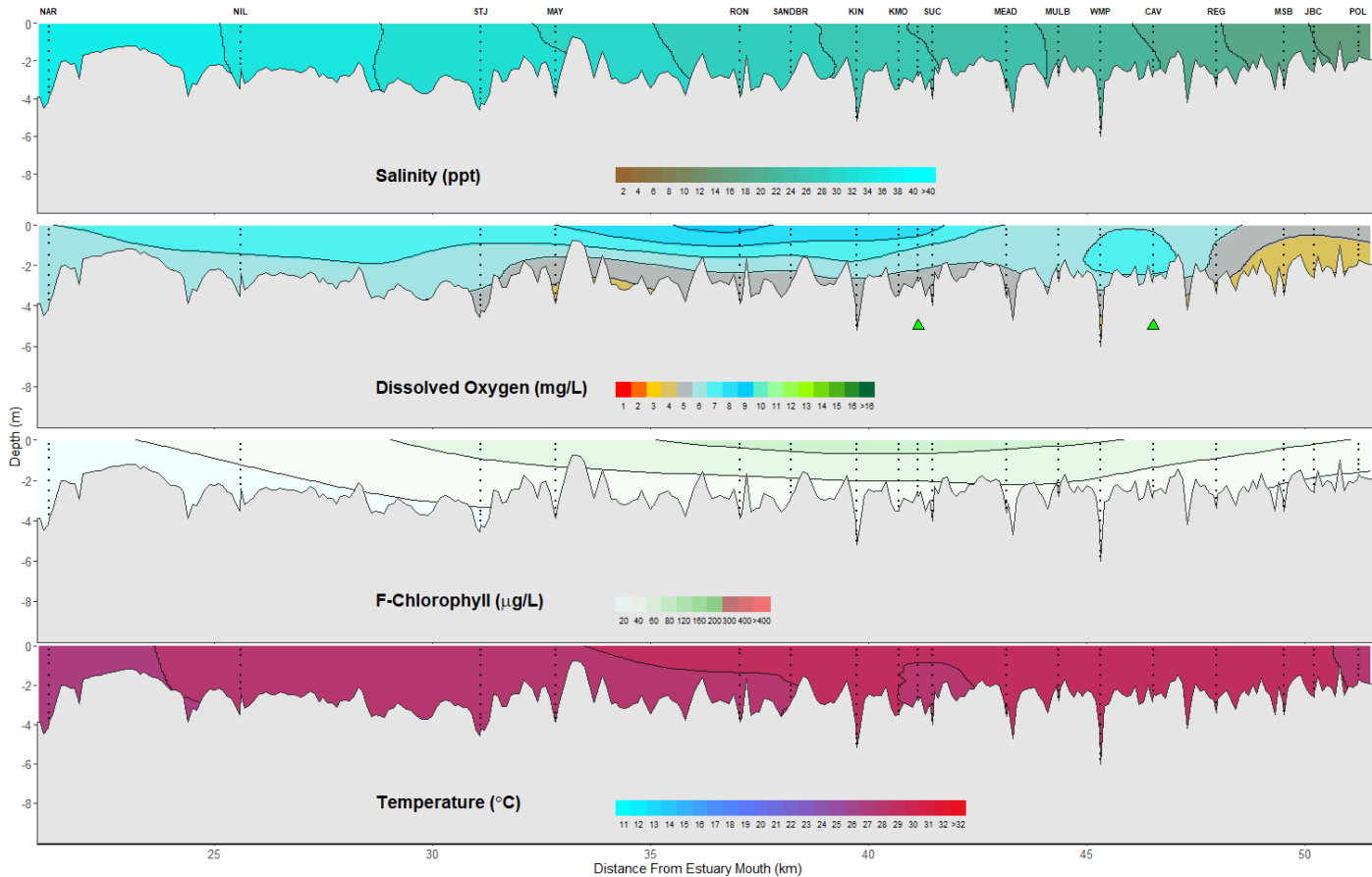
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Swan Canning Estuary - Water Quality Profiles – 10 February 2025



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Date: 10 February 2025

Weather & tide conditions: Conditions were overcast with a predominately westerly breeze of up to 6.5 knots. The predicted tides at Barrack St were 0.51 m at 7:56 am (low tide) and 1.17 m at 9:47 pm (high tide). Perth recorded no rainfall in the week prior to sampling (Bureau of Meteorology).

Oxygenation: The Guildford and Caversham oxygenation plants were triggered to provide oxygen in the 24 hours prior to sampling.

Lower Swan Canning Estuary (FPI to NAR): The Lower Swan Canning Estuary was hypersaline at FP1 and FP7, saline over hypersaline at BLA and saline from ARM to NAR. Waters were oxygenated or well oxygenated and chlorophyll fluorescence was low. Water temperatures ranged from 25 to 26.5 °C at the time of sampling.

Middle Swan Estuary (NIL to RON): The Middle Swan Estuary was saline. Waters were oxygenated or well oxygenated, except for bottom waters at MAY which were low in oxygen. Chlorophyll fluorescence was moderate in surface waters at MAY and RON. Water temperatures ranged from 27.3 to 28.8 °C at the time of sampling.

Upper Swan Estuary (SANDBR to POL): The Upper Swan Estuary was saline at SANDBR and KIN and brackish from KMO to POL. Waters were oxygenated or well oxygenated, except for bottom waters at KMO, WMP, REG and POL and both surface and bottom waters at MSB and JBC which were low in oxygen. Chlorophyll fluorescence was moderate in surface waters at SANDBR, KIN and from VIT to REG and high in surface waters at KMO. Water temperatures ranged from 27.8 to 28.7 °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 >35
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 10 February 2025*. Rivers and Estuaries Science (<https://www.dpaw.wa.gov.au/management/swan-canning-riverpark>)