



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

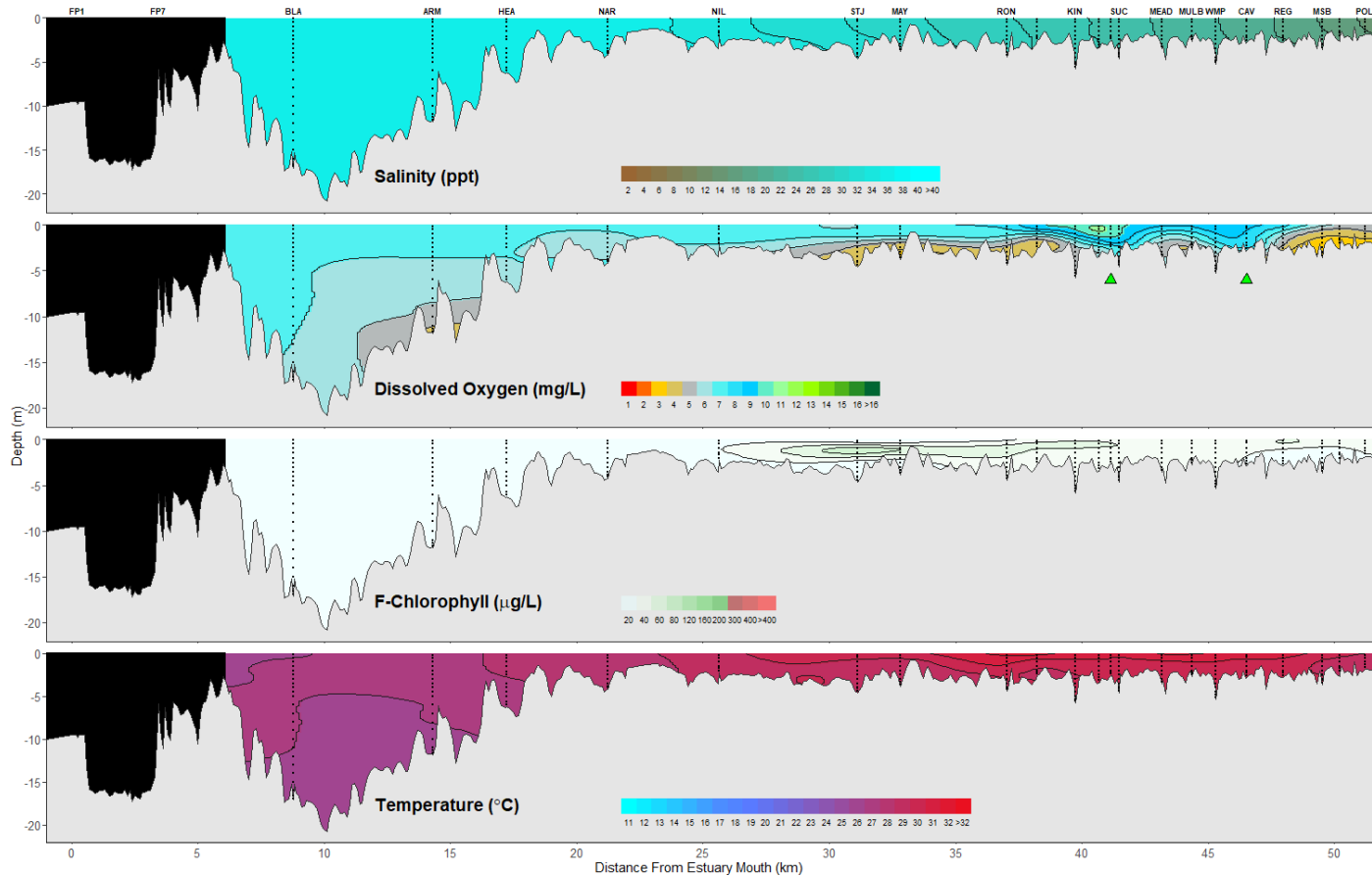
Lower Swan Canning Estuary to Upper Swan Estuary

3 February 2025

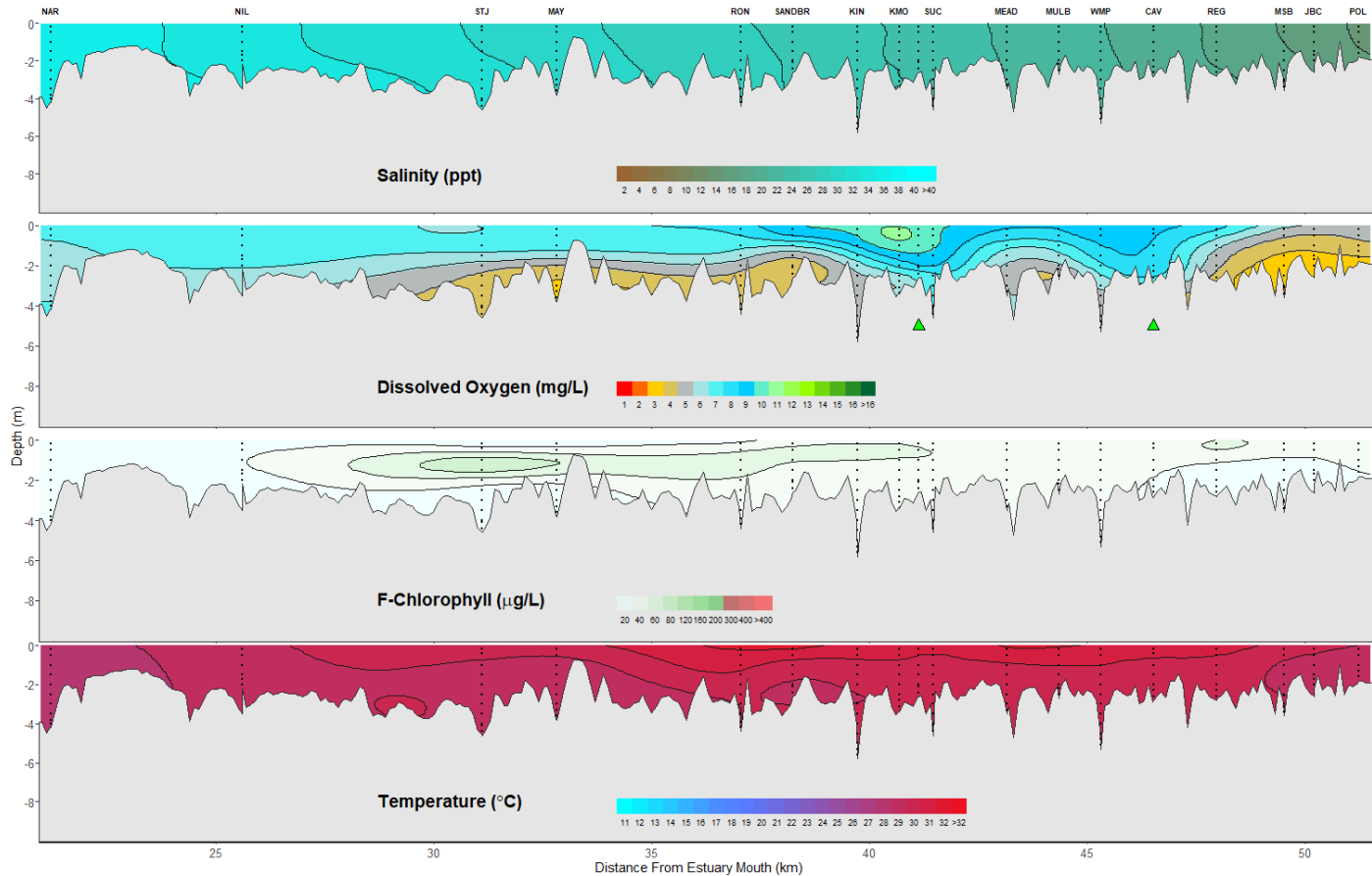
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Swan Canning Estuary - Water Quality Profiles – 3 February 2025



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Date: 3 February 2025

Weather & tide conditions: Conditions were clear with a predominately southern breeze of up to 9.2 knots. The predicted tides at Barrack St were 0.69 m at 7:55 am (low tide) and 0.95 m at 3:54 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 (BLA to NAR): The Lower Swan Canning Estuary was saline. Waters were oxygenated or well oxygenated, except for bottoms waters at ARM which were low in oxygen. Chlorophyll fluorescence was low and water temperatures ranged from 25.8 to 27.5 °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 from STJ to RON which were low in oxygen. Chlorophyll fluorescence was moderate in subsurface from STJ to RON. Water temperatures ranged from 28.1 to 31 °C at the time of sampling.

Upper Swan Estuary (SANDBR to POL): The Upper Swan Estuary was saline at SANDBR and brackish from KIN to POL. Waters were oxygenated or well oxygenated, except for bottom waters at SANDBR, KMO, MULB, REG, JBC, and POL which were low in oxygen and at MSB which were hypoxic. Chlorophyll fluorescence was moderate in surface waters at SANDBR, KMO, WMP and REG. Water temperatures ranged from 28.3 to 31.3 °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 >36
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 February 2025*. Rivers and Estuaries Science (<https://www.dpaw.wa.gov.au/management/swan-canning-riverpark>)