



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

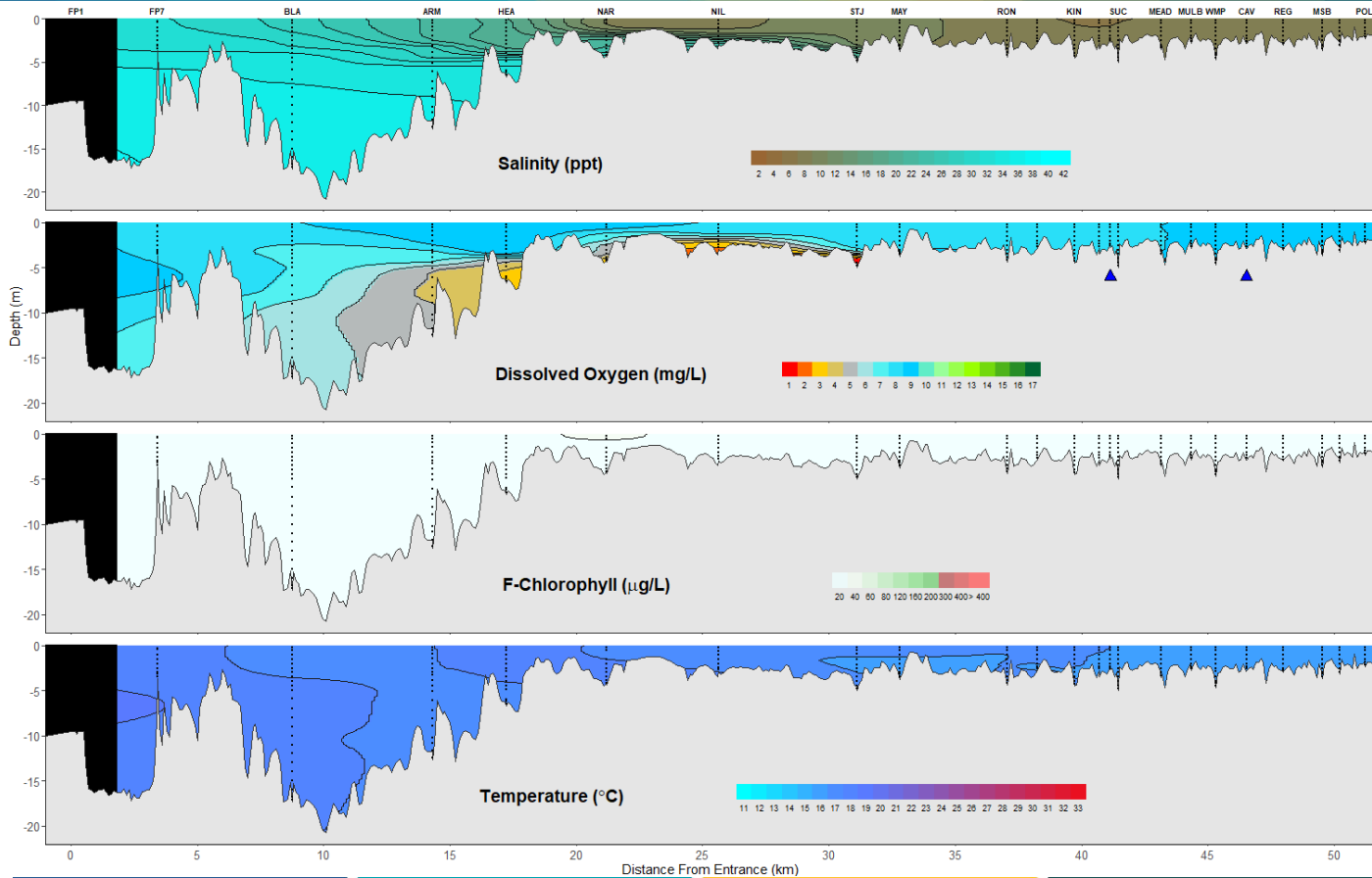
Lower Swan Canning Estuary to Upper Swan Estuary

12th August 2024

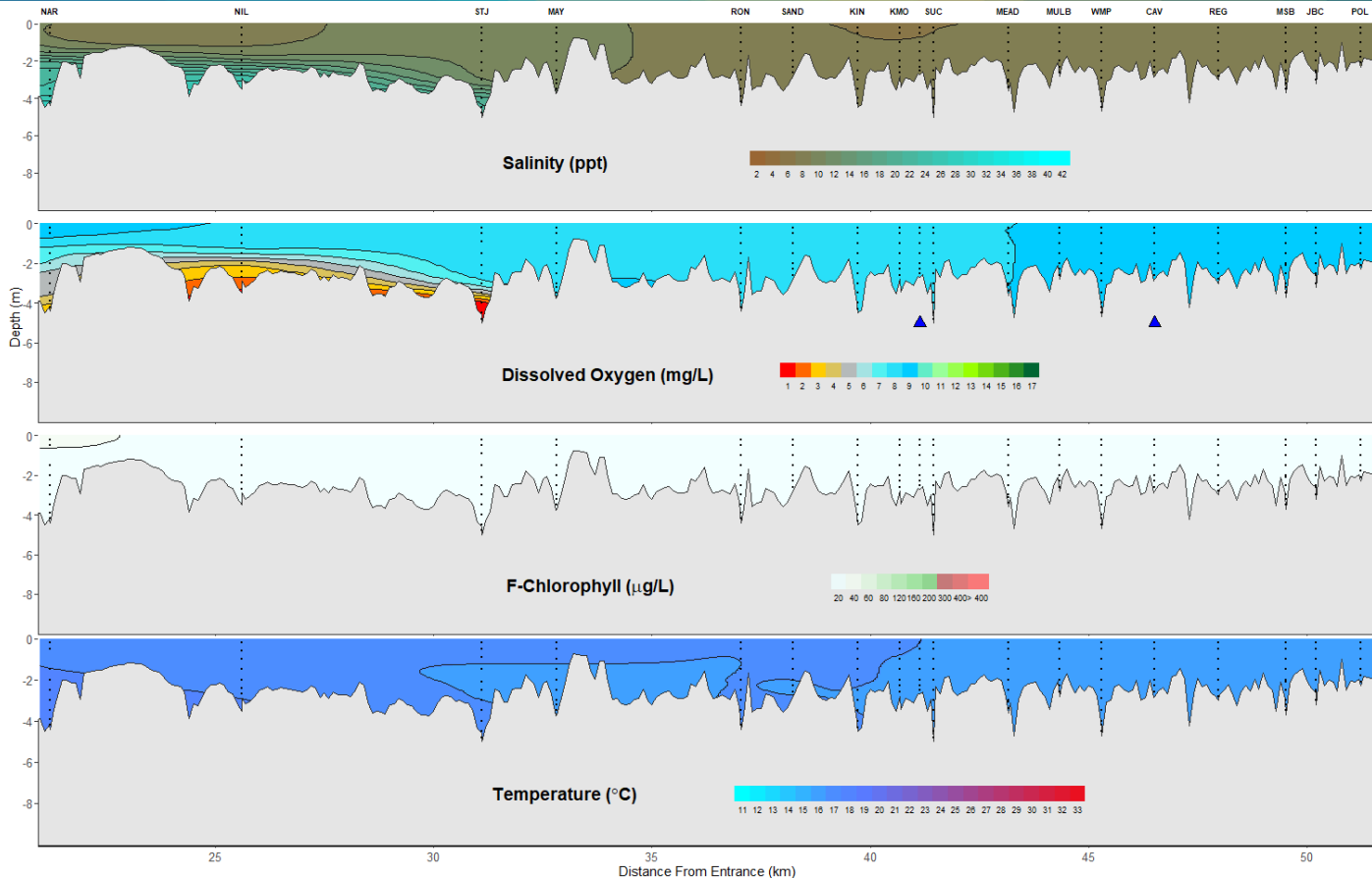
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Swan Canning Estuary - Water Quality Profiles – 12th August 2024



Swan Canning Estuary - Water Quality Profiles – 12th August 2024



Date: 12th August 2024

Weather & tide conditions: Conditions were partly cloudy with a predominately westerly breeze of up to 18 knots. The predicted tides at Barrack St were 1.06 m at 3:30 am (high tide) and 0.74 m at 6:26 pm (low tide). Perth recorded 31 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 (FP7 to NAR): The Lower Swan Canning Estuary was saline from FP7 to BLA and brackish over saline between ARM and NAR. Waters were oxygenated or well oxygenated, except for subsurface waters at ARM and bottom waters at HEA and NAR which were low in oxygen. Chlorophyll fluorescence was low and water temperatures ranged from 16.6 to 17.6 °C at the time of sampling.

Middle Swan Estuary (NIL to RON): The Middle Swan Estuary was brackish. Waters were oxygenated or well oxygenated, except for bottom waters at NIL which were low in oxygen and STJ which were hypoxic. Chlorophyll fluorescence was low and water temperatures ranged from 15.8 to 17.0 °C at the time of sampling.

Upper Swan Estuary (SAND to POL): The Upper Swan Estuary was brackish, except for the surface waters at KMO which were fresh. Waters were well oxygenated and chlorophyll fluorescence was low. Water temperatures ranged from 15.1 to 16.5 °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 >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