



Department of Biodiversity,
Conservation and Attractions



Biodiversity and
Conservation Science

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Western Australia.*

Swan Canning Estuary Water Quality Monitoring Project

Weekly Water Quality Report

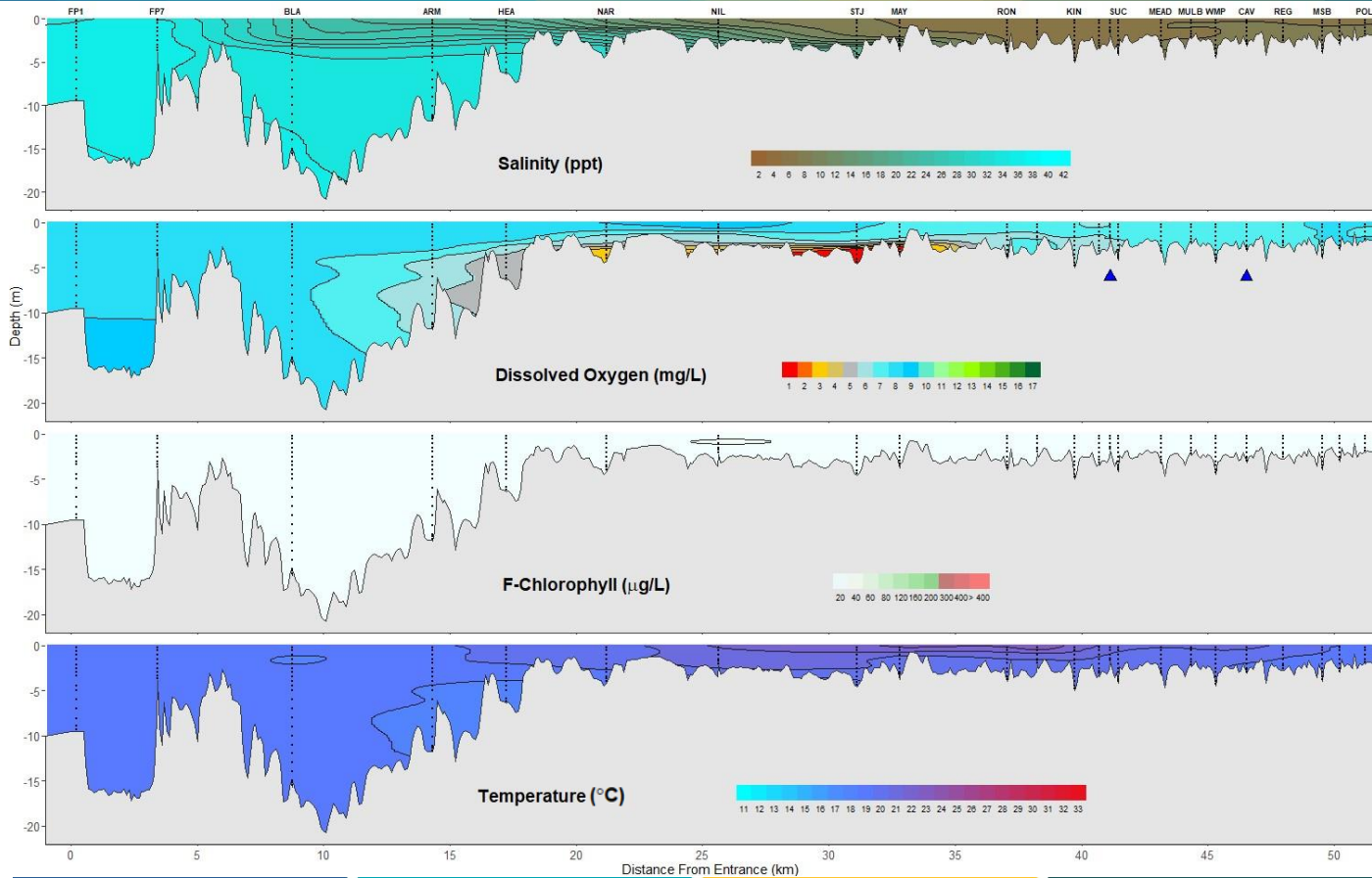
Lower Swan Canning Estuary to Upper Swan Estuary

26th September 2023

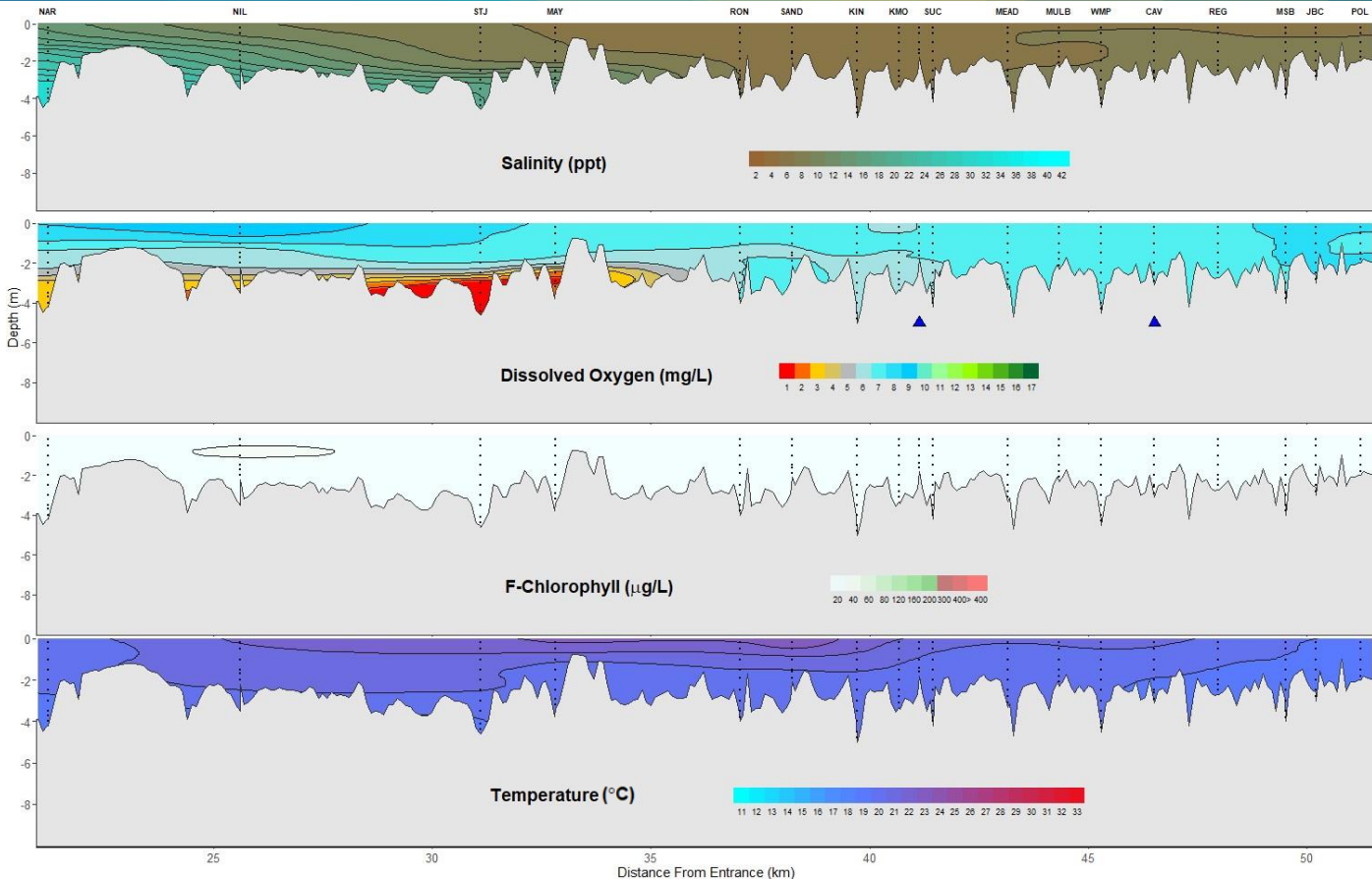
Prepared by

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Swan Canning Estuary - Water Quality Profiles – 26th September 2023



Swan Canning Estuary - Water Quality Profiles – 26th September 2023



Date: 26th September 2023

Weather & tide conditions: Conditions were sunny with a variable southerly breeze of up to 6 knots. The predicted tides at Barrack St were 1.06 m at 8:34 am (high tide) and 0.58 m at 6:01 pm (low tide). Perth recorded no rainfall in the week prior to sampling (Bureau of Meteorology).

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

Lower Swan Canning Estuary (FP1 to NAR): The Lower Swan Canning Estuary was saline between FP1 and FP7 and brackish over saline between BLA and NAR. Surface waters were oxygenated or well oxygenated, except bottom waters at NAR which were low in oxygen. Chlorophyll fluorescence was low and water temperatures ranged from 17.7 °C to 20.0 °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 STJ and MAY which were hypoxic or anoxic. Chlorophyll fluorescence was low and water temperatures ranged from 19.0 °C to 22.0 °C at the time of sampling.

Upper Swan Estuary (SAND to POL): The Upper Swan Estuary was brackish, except for KMO and JBC which were fresh over brackish. Waters were well oxygenated. Chlorophyll fluorescence was low and water temperatures ranged from 18.4 °C to 22.6 °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 (mod/high flow): low < 50 µg L⁻¹, moderate 50-150 µg L⁻¹, high 150-400 µg L⁻¹, extreme > 400 µg L⁻¹