



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

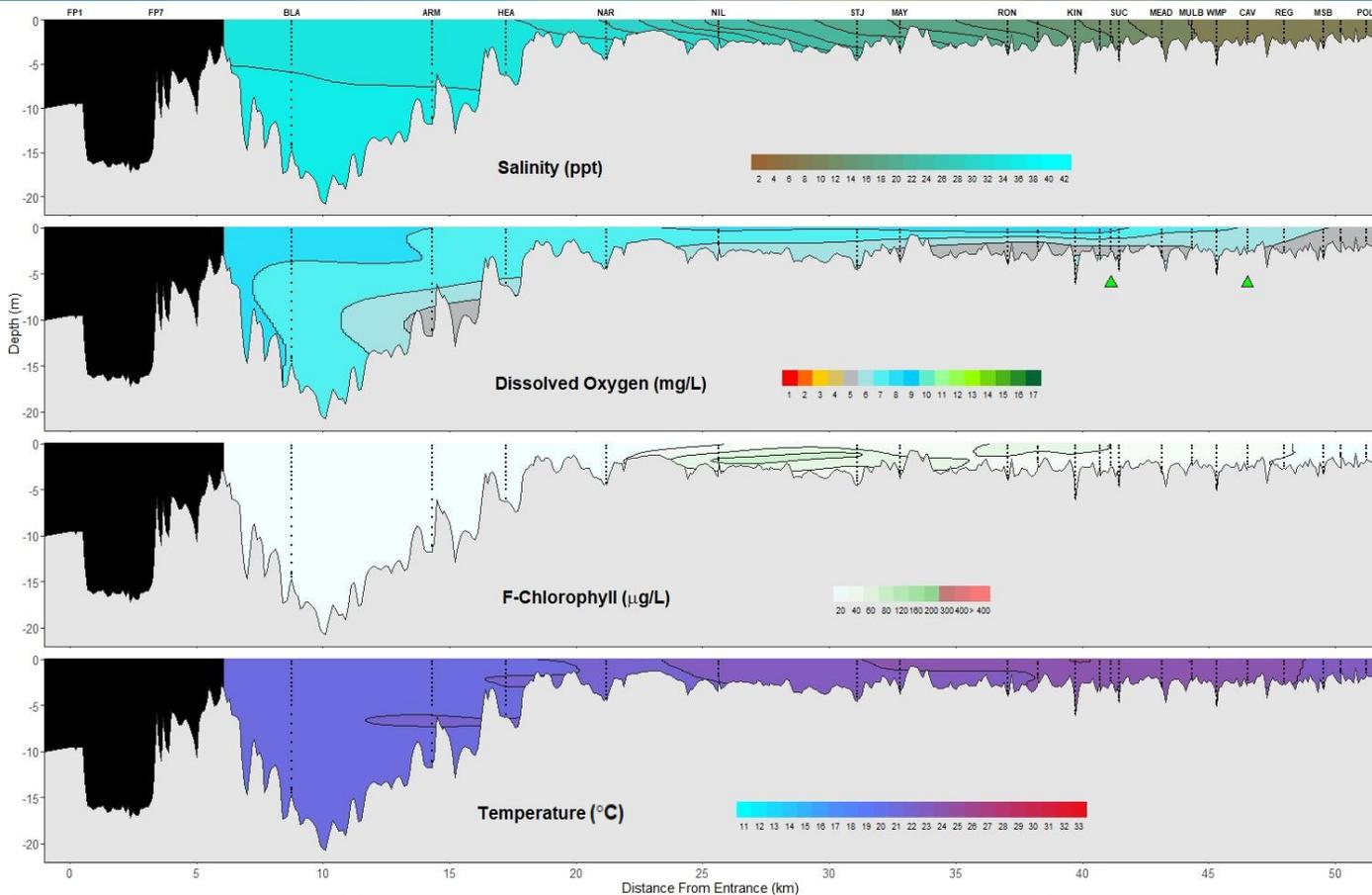
Lower Swan Canning Estuary to Upper Swan Estuary

13th November 2023

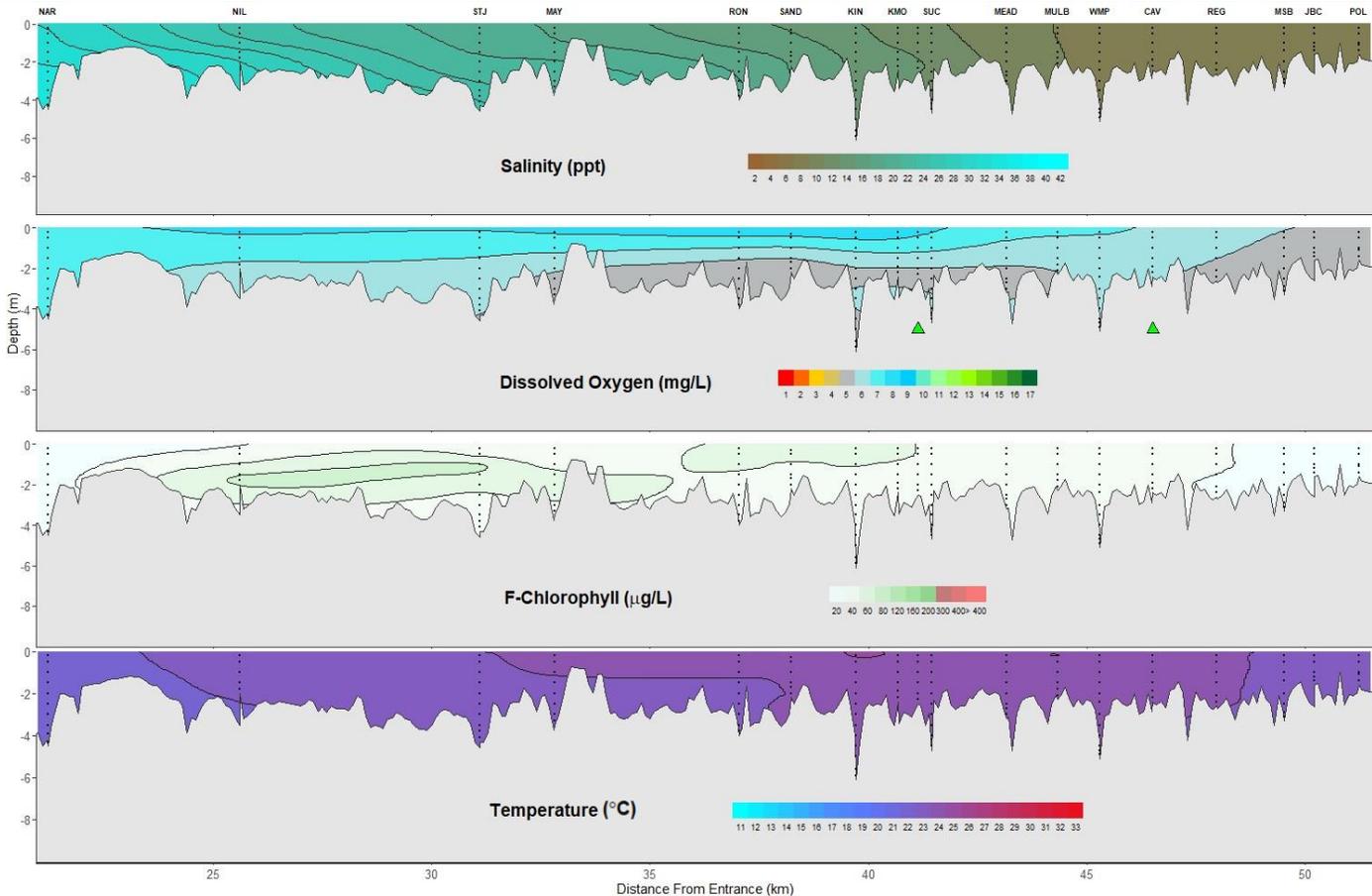
Prepared by

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Swan Canning Estuary - Water Quality Profiles – 13th November 2023



Swan Canning Estuary - Water Quality Profiles – 13th November 2023



Date: 13th November 2023

Weather & tide conditions: Conditions were overcast with a predominantly easterly breeze of up to 9.7 knots. The predicted tides at Barrack St were 0.57 m at 7:43 am (low tide) and 1.11 m at 10:41 pm (high tide). Perth recorded 2.6 mm of 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 and chlorophyll fluorescence was low. Water temperatures ranged from 20.6 °C to 21.3 °C at the time of sampling.

Middle Swan Estuary (NIL to RON): The Middle Swan Estuary was brackish over saline at NIL and brackish between STJ and RON. Waters were oxygenated or well oxygenated. Chlorophyll fluorescence was moderate in subsurface waters from NIL to MAY and surface waters at RON. Water temperatures ranged from 22.1 °C to 23.8 °C at the time of sampling.

Upper Swan Estuary (SAND to POL): The Upper Swan Estuary was brackish. Waters were oxygenated or well oxygenated, except for bottom waters at SAND and KMO which were low in oxygen. Chlorophyll fluorescence was moderate in surface waters between KIN and KMO. Water temperatures ranged from 22.6 °C to 24.0 °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 (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