



Swan Canning Estuary Water Quality Monitoring Project

Weekly Water Quality Report

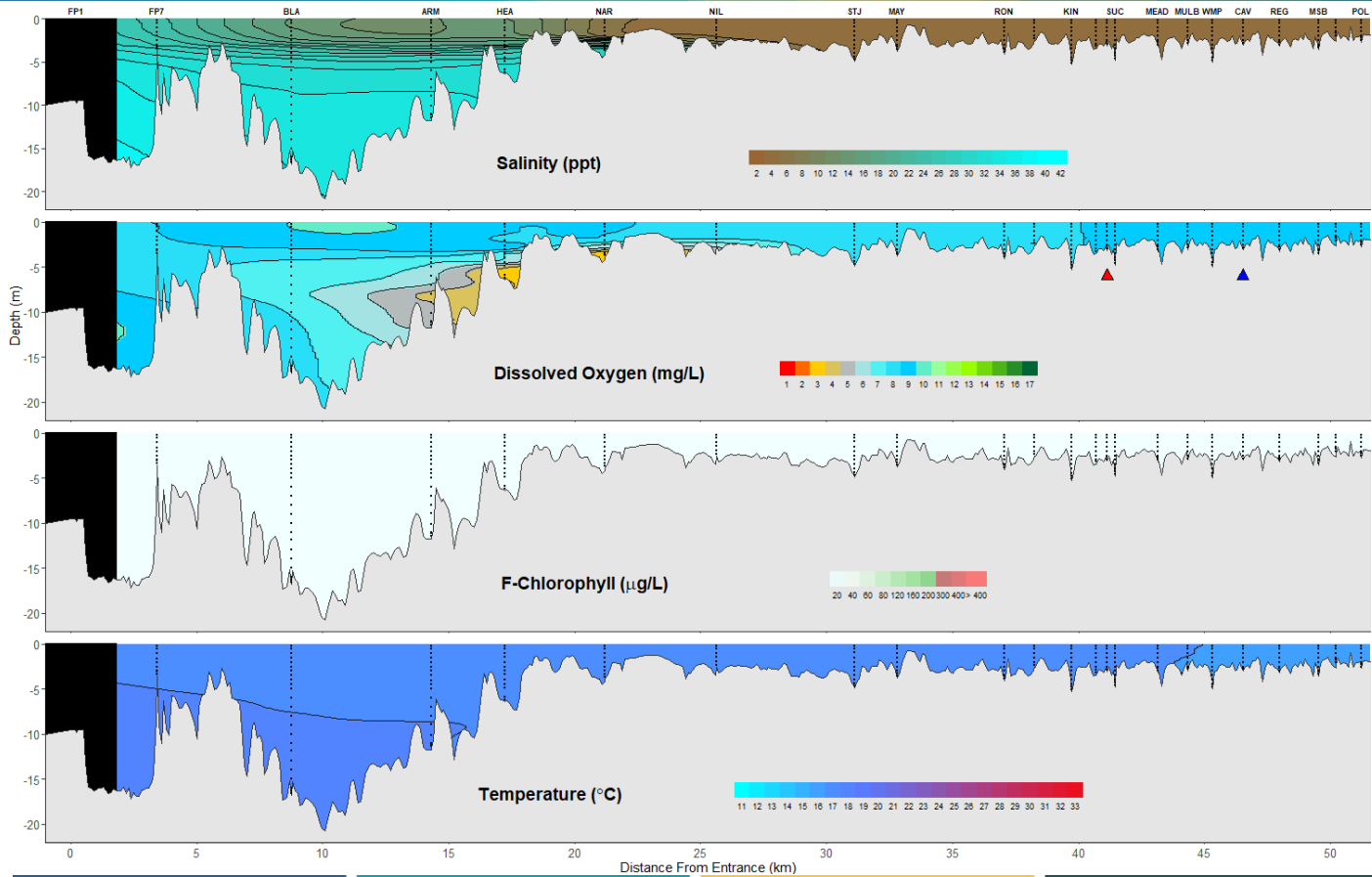
Lower Swan Canning Estuary to Upper Swan Estuary

26th August 2024

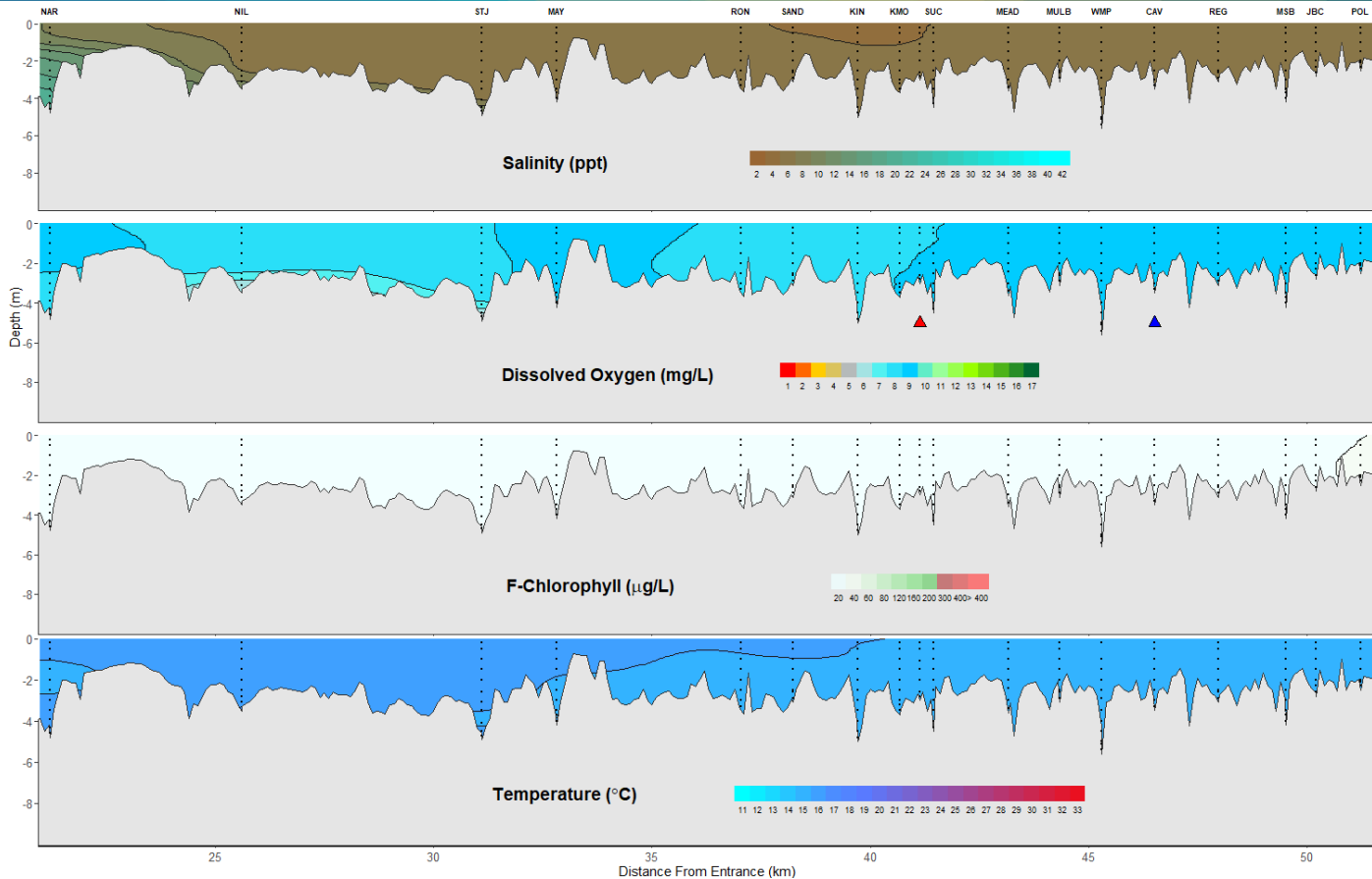
Prepared by

Rivers and Estuaries Science
Biodiversity and Conservation Science
Department of Biodiversity, Conservation and Attractions

Swan Canning Estuary - Water Quality Profiles – 26th August 2024



Swan Canning Estuary - Water Quality Profiles – 26th August 2024



Date: 26th August 2024

Weather & tide conditions: Conditions were overcast with a predominately north north-westerly breeze of up to 13.6 knots. The predicted tides at Barrack St were 1.08 m at 3:19 am (high tide) and 0.62 m at 4:49 pm (low tide). Perth recorded 31.8 mm of rainfall in the week prior to sampling (Bureau of Meteorology).

Oxygenation: The Guildford oxygenation plant was inoperable and the Caversham oxygenation plant was 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 brackish over saline. Waters were oxygenated or well oxygenated, except for bottom waters at HEA and NAR which were low in oxygen. Chlorophyll fluorescence was low and water temperatures ranged from 16.2 to 17.2 °C at the time of sampling.

Middle Swan Estuary (NIL to RON): The Middle Swan Estuary was fresh and waters were oxygenated or well oxygenated. Chlorophyll fluorescence was low and water temperatures ranged from 16.2 to 16.8 °C at the time of sampling.

Upper Swan Estuary (SAND to POL): The Upper Swan Estuary was fresh, waters were well oxygenated and chlorophyll fluorescence was low. Water temperatures ranged from 15.8 to 16.3 °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