



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

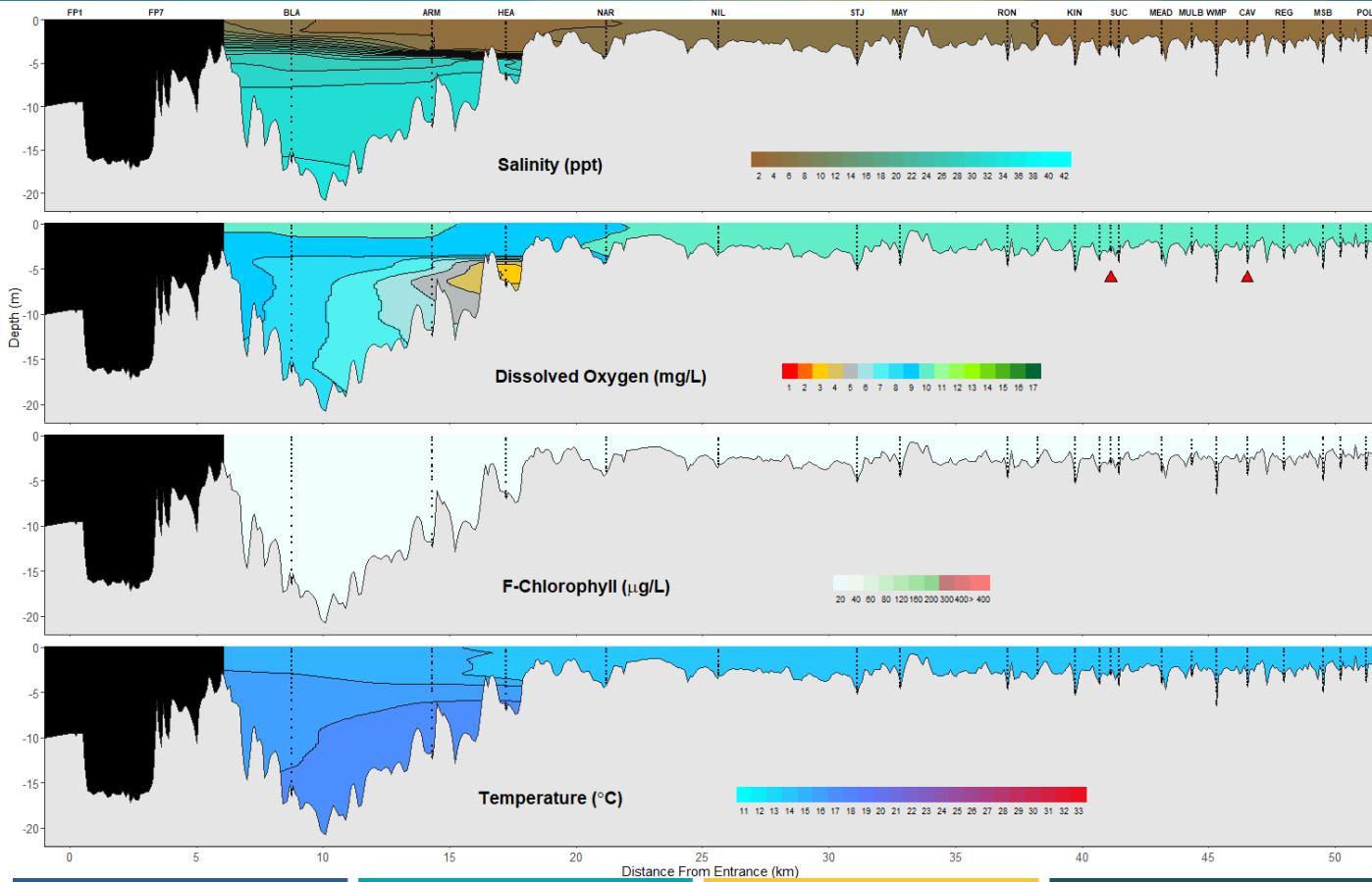
Lower Swan Canning Estuary to Upper Swan Estuary

9 August 2021

Prepared by

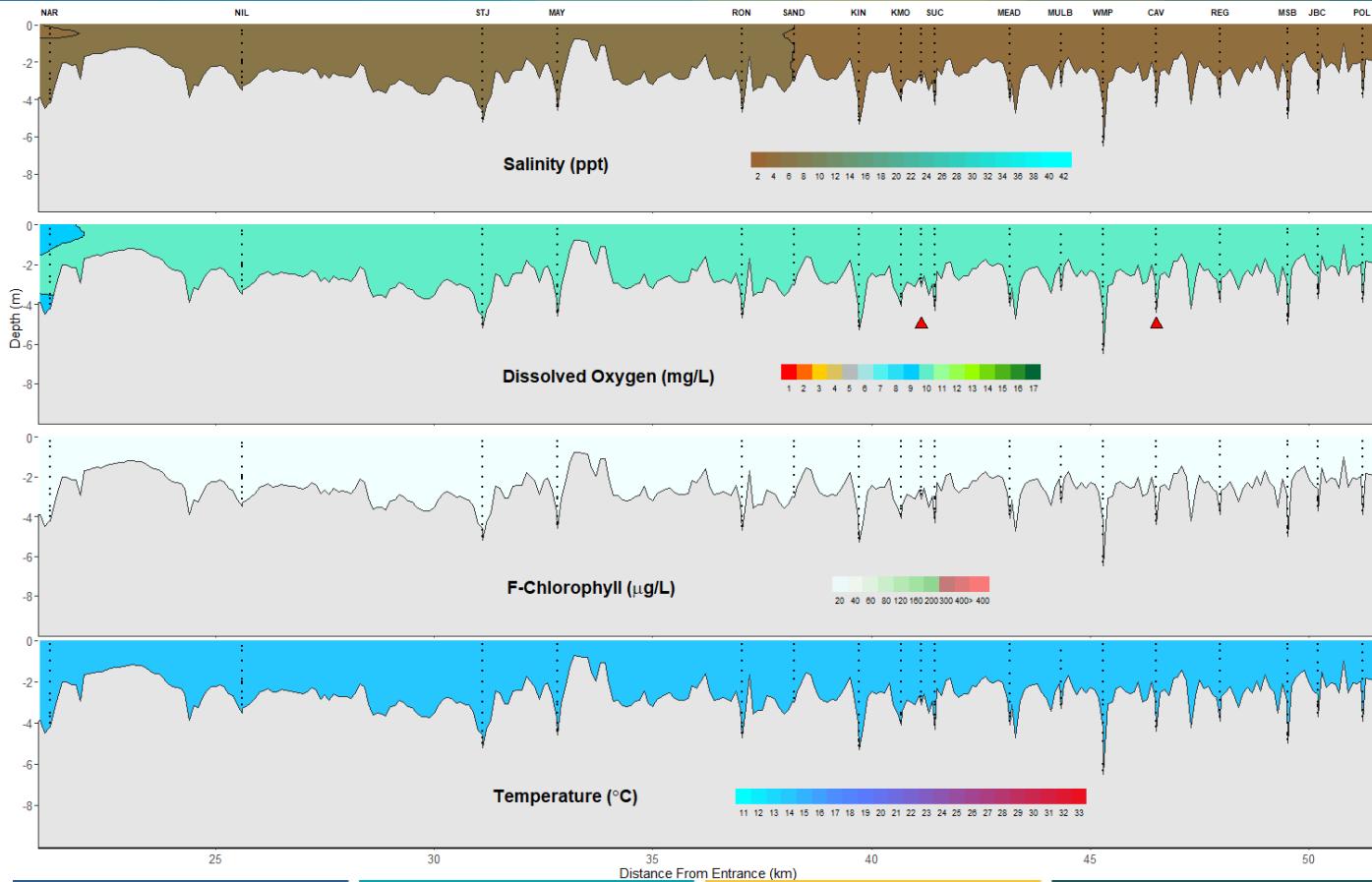
Rivers and Estuaries Science
Biodiversity and Conservation Science
Department of Biodiversity, Conservation and Attractions

Swan Canning Estuary- Water Quality Profiles- 9 August 2021





Middle and Upper Swan Estuary- Water Quality Profiles- 9 August 2021





Date: 9 August 2021

Weather & tide conditions: Conditions were overcast with a westerly gale of up to 22 knots. The predicted tides at Barrack St were 1.2 m at 11:29 am (high tide) and 0.69 m at 9:25 pm (low tide). Perth recorded 9 mm of rainfall during the week prior to sampling (Bureau of Meteorology).

Oxygenation: The Guildford and Caversham oxygenation plants were not operational during the 24 hours prior to sampling.

Lower Swan Canning Estuary (BLA to NAR): The Lower Swan Canning Estuary was fresh over saline between BLA and HEA and fresh at NAR. Waters were oxygenated or well oxygenated except for bottom waters at HEA which were low in oxygen. Chlorophyll fluorescence was low throughout this zone. Water temperatures ranged from 13.2 to 16.3 °C.

Middle Swan Estuary (NIL to RON): The Middle Swan Estuary was fresh throughout, waters were well oxygenated and chlorophyll fluorescence was low throughout this zone. Water temperature ranged from 13.4 to 13.5 °C.

Upper Swan Estuary (SAND to POL): The Upper Swan Estuary was fresh throughout, waters were well oxygenated and chlorophyll fluorescence was low throughout this zone. Water temperature ranged from 13.4 to 13.5 °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 >6mg/L, oxygenated >4-6mg/L, low oxygen >2-4mg/L, hypoxic 0.5-2mg/L, anoxic <0.5mg/L

Recommended reference: Department of Biodiversity, Conservation and Attractions 2021. *Swan Canning Estuary water quality profile report, Lower Swan Canning Estuary to Upper Swan Estuary 9 August 2021. Rivers and Estuaries Science* (<https://www.dpaw.wa.gov.au/management/swan-canning-riverpark>)