



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

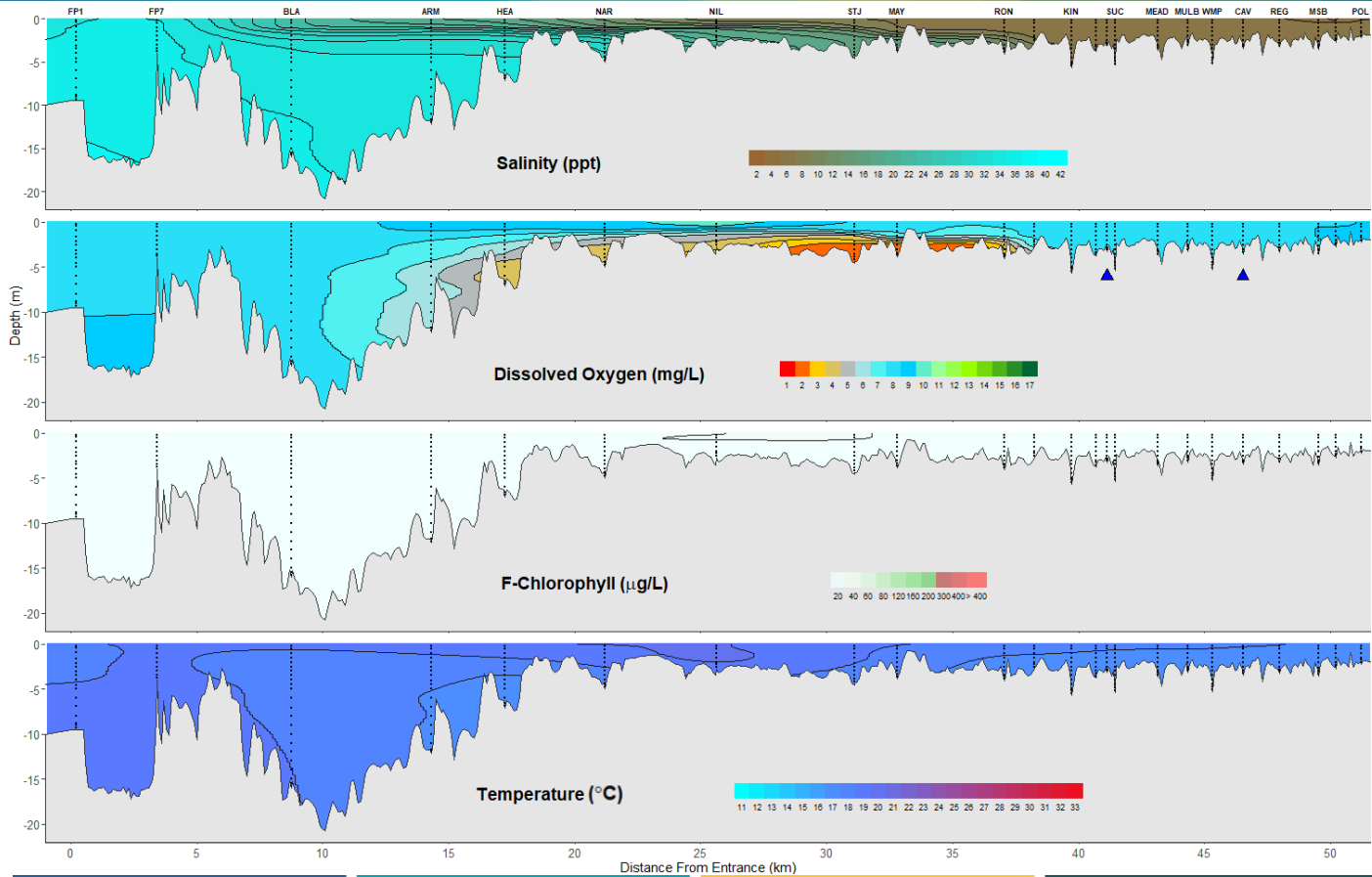
### Lower Swan Canning Estuary to Upper Swan Estuary

28<sup>th</sup> August 2023

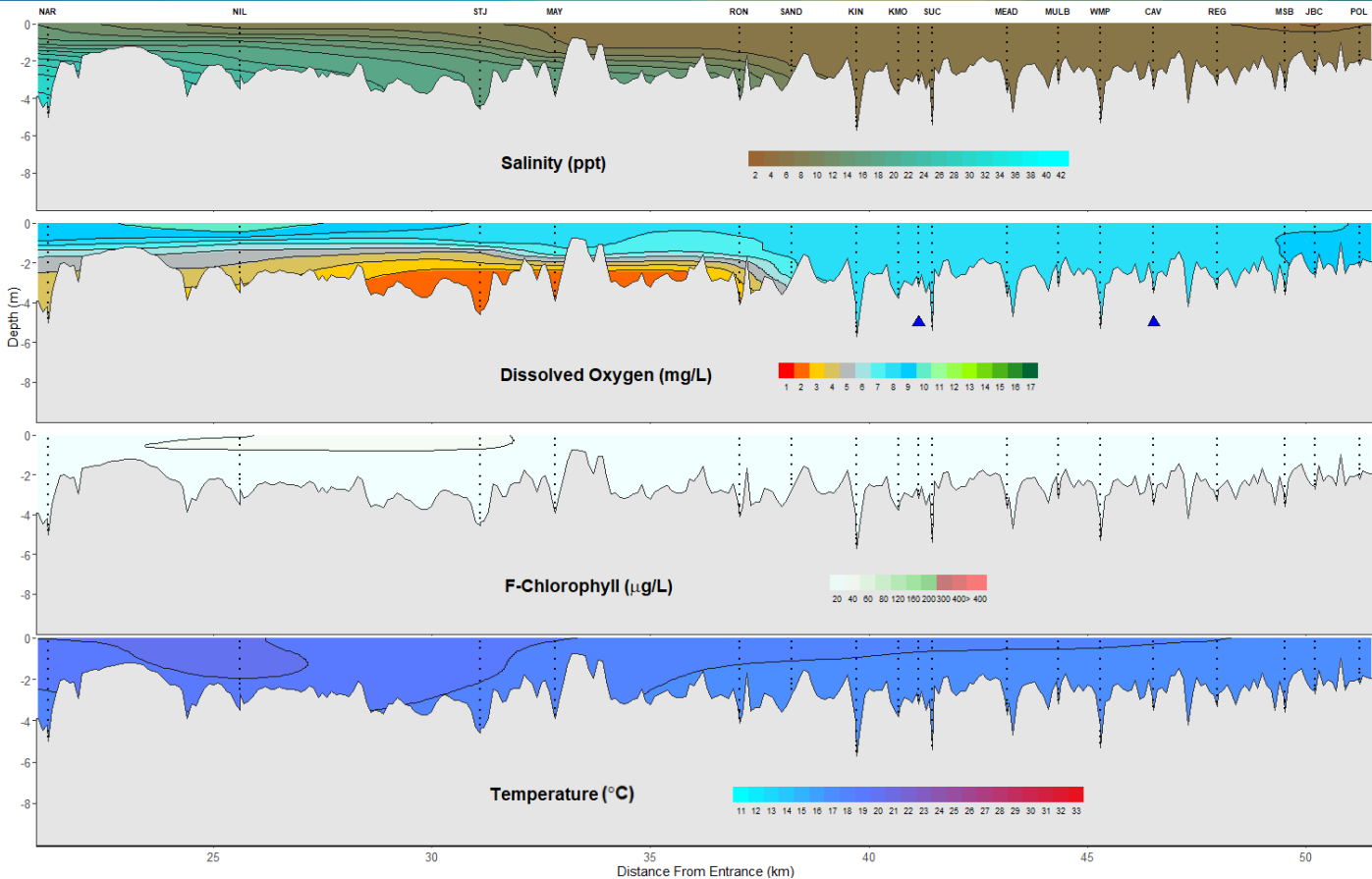
Prepared by

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

## Swan Canning Estuary - Water Quality Profiles – 28<sup>th</sup> August 2023



## Swan Canning Estuary - Water Quality Profiles – 28<sup>th</sup> August 2023



Date: 28<sup>th</sup> August 2023

Weather & tide conditions: Conditions were sunny with a variable breeze of up to 4.2 knots. The predicted tides at Barrack St were 1.17 m at 8:42 am (high tide) and 0.56 m at 7:17 pm (low tide). Perth recorded no rainfall in the week prior to sampling (Bureau of Meteorology).

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

Lower Swan Canning Estuary (FPI to NAR): The Lower Swan Canning Estuary was saline from FP1 to FP7 and brackish over saline between BLA and NAR. Waters were oxygenated or well oxygenated, except bottom waters at HEA and NAR which were low in oxygen. Chlorophyll fluorescence was low and water temperatures ranged from 16.6 °C to 19.3 °C at the time of sampling.

Middle Swan Estuary (NIL to RON): The Middle Swan Estuary was fresh over brackish. Surface waters were oxygenated to well oxygenated and bottom waters were low in oxygen or hypoxic. Chlorophyll fluorescence was low and water temperatures ranged from 16.3 °C to 19.3 °C at the time of sampling.

Upper Swan Estuary (SAND to POL): The Upper Swan Estuary was fresh over brackish except between MEAD and MULB, CAV and REG and at POL where it was brackish. Waters were well oxygenated. Chlorophyll fluorescence was low and water temperatures ranged from 15.6 °C to 18.7 °C.

**NB:** Profile plots are visual interpolations of measured parameters only. Detailed data are available at [wir.water.wa.gov.au](http://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<sup>-1</sup>, oxygenated >4-6 mg L<sup>-1</sup>, low oxygen >2-4 mg L<sup>-1</sup>, hypoxic 0.5-2 mg L<sup>-1</sup>, anoxic <0.5 mg L<sup>-1</sup>  
Chlorophyll fluorescence (mod/high flow): low < 50 µg L<sup>-1</sup>, moderate 50-150 µg L<sup>-1</sup>, high 150-400 µg L<sup>-1</sup>, extreme > 400 µg L<sup>-1</sup>