



Environmental Monitoring and Reporting Swan River Estuary ~ Weekly profile

by

Water Science Branch, Department of Water and Environmental Regulation

Date: Monday 15th January 2018

Weather & tide conditions: Conditions were overcast with 100% cloud cover and an east to south-easterly breeze of up to 17 knots. The predicted tides at Guildford were 0.53 m (low tide) at 08:38 and 1.07 m (high tide) at 22:37. Perth recorded 0.2 mm of rainfall during the week prior to sampling (Bureau of Meteorology).

Oxygenation: The Guildford and Caversham oxygenation plants were operational the week prior to sampling.

Lower Swan/Canning Estuary (BLA to NAR): The Lower Swan Estuary was saline throughout with hypersaline bottom water at BLA and ARM. Water was well oxygenated with oxygenated bottom water at HEA and NAR. Water temperature ranged from 23.4 to 24.1 °C.

Middle Swan Estuary (NIL to RON): The Middle Swan Estuary was saline at NIL, brackish over saline at STJ, and brackish throughout MAY and RON. Water was oxygenated throughout, with the exception of low oxygen bottom waters at MAY and RON. Water temperature ranged from 25.0 to 26.6 °C.

Upper Swan Estuary (BWR10 to POL): The Upper Swan Estuary was brackish throughout. Water was well oxygenated to oxygenated with low oxygen bottom water at all sites from BWR10 to CAV, with the exception of well oxygenated to oxygenated water at VIT to MULB. Water had low oxygen throughout REG to POL. Water temperature ranged from 25.8 to 27.6 °C.

Definitions:

Salinity – fresh <5ppt, brackish 5-25ppt, saline 25-35ppt, hypersaline >35ppt

Dissolved oxygen – well oxygenated >6 mg/L
oxygenated >4 to 6 mg/L, low oxygen >2 to 4 mg/L,
hypoxic >0.5 to 2.0 mg/L, near anoxic <0.5 mg/L

Swan River Estuary - Physical-chemical Profile - 15th January 2018

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