



Environmental Monitoring and Reporting Swan River Estuary ~ Weekly profile

by

Aquatic Science Branch, Department of Water and Environmental Regulation

Date: Monday 2nd July 2018

Weather & tide conditions: Conditions were overcast and with 100% cloud cover, continuous rainfall and a north-easterly to north-westerly breeze of up to 13 knots. The predicted tides at Guildford were 1.16 m (high tide) at 01:13 and 0.75 m (low tide) at 23:15. Perth recorded 28.4 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 from BLA to HEA and brackish over saline at NAR. Water was well oxygenated to oxygenated throughout, with the exception of low oxygen bottom water at NAR. Water temperature ranged from 15.1 to 18.2 °C.

Middle Swan Estuary (NIL to RON): The Middle Swan Estuary was brackish over saline at STJ and MAY, and brackish at RON. Surface water was well oxygenated to oxygenated and bottom water was hypoxic at all sites. Water temperature ranged from 14.2 to 17.3 °C.

Upper Swan Estuary (BWR10 to POL): The Upper Swan Estuary was brackish throughout all sites. Water was well oxygenated to oxygenated throughout, with the exception of hypoxic bottom water from BWR10 to SUC and low oxygen bottom water from MEAD to WMP. Water temperature ranged from 12.1 to 17.2 °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 Profiles 2nd July 2018

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