



Environmental Monitoring and Reporting Swan River Estuary ~ Weekly profile

by

Water Science Branch, Department of Water and Environmental Regulation

Date: Monday 26th March 2018

Weather & tide conditions: Conditions were overcast with 100% cloud cover and a north westerly breeze of up to 15 knots. The predicted tides at Guildford were 0.57 m (low tide) at 05:35 and 1.06 m (high tide) at 19:23. Perth recorded 0 mm of rainfall during the week prior to sampling (Bureau of Meteorology).

Oxygenation: The Caversham oxygenation plant was operational the week prior to sampling, while the Guildford oxygenation plant was operational from 20/03/18 onwards.

Lower Swan/Canning Estuary (BLA to NAR): The Lower Swan Estuary was hyper-saline to saline throughout. Water was well oxygenated to oxygenated throughout all sites. Water temperature ranged from 21.9 to 22.5 °C.

Middle Swan Estuary (NIL to RON): The Middle Swan Estuary was saline from NIL to MAY and brackish over saline at RON. Water was well oxygenated to oxygenated throughout all sites, with the exception of low oxygen bottom water at RON. Water temperature ranged from 21.8 to 22.8 °C.

Upper Swan Estuary (BWR10 to POL): The Upper Swan Estuary was brackish over saline at BWR10 and brackish throughout from KIN to POL. Surface water was well oxygenated to oxygenated with low oxygen bottom water from BWR10 to WMP, with the exception of hypoxic bottom water at KMO and MULB FARM. Water was well oxygenated to oxygenated throughout from CAV to MSB and low in oxygen throughout from JBC to POL. Water temperature ranged from 22.5 to 23.9 °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 - 26th March 2018

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