



**Environmental Monitoring and Reporting
Swan River Estuary ~ Weekly profile**

by
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Date: Monday 4th July 2016

Weather & tide conditions: Conditions were fine with up to 80% cloud cover and an east to south easterly breeze of up to 7 knots. The predicted tides at Guildford were 1.24 m (high tide) at 11:22 and 0.68 m (low tide) at 22:14. Perth recorded 18.6 mm of rainfall during the week prior to sampling (Bureau of Meteorology).

Oxygenation: The Guildford oxygenation plant was operational the week prior to sampling. The Caversham oxygenation plant was not operational the week prior to sampling.

Lower Swan/Canning Estuary (BLA to NAR): The Lower Swan Estuary was saline throughout, with the exception of brackish surface water at NAR. Water was well oxygenated to oxygenated, with the exception of hypoxic bottom water at HEA and NAR. Water temperature ranged from 13.6 to 16.8 °C.

Middle Swan Estuary (NIL to RON): The Middle Swan Estuary was brackish throughout, with the exception of saline bottom water at STJ. Surface water was well oxygenated at all sites, and bottom water was oxygenated at NIL, near anoxic at STJ and hypoxic at MAY and RON. Water temperature ranged from 12.2 to 16.6 °C.

Upper Swan Estuary (BWR10 to POL): The Upper Swan Estuary was brackish and well oxygenated to oxygenated throughout, with the exception of low oxygenated bottom water at BWR10 and hypoxic bottom water at KIN. Water temperature ranged from 9.8 to 15.3 °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 - 4th July 2016

