



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

by
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Date: Monday 12th October 2015

Weather & tide conditions: Conditions were fine with up to 10% cloud cover and a predominantly south westerly breeze of up to 1 knot on the upper Swan and an easterly breeze on the lower Swan of up to 2 knots. The predicted tides at Guildford were 0.65 m (low tide) at 06:04 and 0.78m (high tide) at 12:02. Perth recorded 0.2 mm of rainfall during the week prior to sampling (Bureau of Meteorology).

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

Lower Swan/Canning Estuary (BLA to NAR): The Lower Swan Estuary was saline throughout. Water was mostly well oxygenated with oxygenated bottom water at ARM and HEA and low oxygen bottom water at NAR. Water temperature ranged from 18.5 to 23.0 °C.

Middle Swan Estuary (NIL to RON): The Middle Swan Estuary was brackish throughout with the exception of saline bottom water at NIL. Surface water was well oxygenated at NIL, STJ and RON, and oxygenated at MAY. Bottom water was oxygenated at NIL, low oxygen at MAY and hypoxic at STJ and RON. Water temperature ranged from 22.4 to 26.1 °C.

Upper Swan Estuary (BWR10 to POL): The Upper Swan Estuary was brackish throughout. From BWR10 to WMP, surface water was well oxygenated to oxygenated and bottom water was near anoxic at BWR10 to KMO, low oxygen at VIT to MEA and at WMP and oxygenated at MULB. At sites from CAV to POL, water was low oxygen throughout. Water temperature ranged from 22.6 to 25.5 °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 - 12th October 2015

