



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

by
Water Science Branch, Department of Water

Date: Monday 11th April 2016

Weather & tide conditions: Conditions were fine with up to 100% cloud cover and a predominantly east to south easterly breeze of up to 18 knots. The predicted tides at Guildford were 0.67 m (low tide) at 00:51 and 1.10 m (high tide) at 14:29. Perth recorded 11.4 mm of rainfall during the week prior to sampling (Bureau of Meteorology).

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

Lower Swan/Canning Estuary (BLA to NAR): The Lower Swan Estuary was hyper saline throughout, with the exception of saline surface water at NAR. Water was mostly well oxygenated with oxygenated bottom water at HEA and NAR. Water temperature ranged from 20.9 to 21.5 °C.

Middle Swan Estuary (NIL to RON): The Middle Swan Estuary was saline at NIL and brackish surface water over saline bottom water from STJ to RON. Water was well oxygenated to oxygenated with the exception of hypoxic bottom water at STJ and MAY and anoxic bottom water at RON. Water temperature ranged from 21.2 to 21.7 °C.

Upper Swan Estuary (BWR10 to POL): The Upper Swan Estuary was brackish throughout, with the exception of saline bottom water at BWR10. There was well oxygenated to oxygenated surface water over near anoxic bottom water at BWR10 to MEA and at WMP to MSB. Surface water was oxygenated over hypoxic bottom water at MULB FARM and JBC. Water at POL was oxygenated. Water temperature ranged from 20.6 to 22.4 °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 - 11th April 2016

