



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

by
Water Science Branch, Department of Water

Date: Tuesday 26th April 2016

Weather & tide conditions: Conditions were fine with up to 100% cloud cover and a predominantly west to north westerly breeze of up to 15 knots. The predicted tides at Guildford were 1.14 m (high tide) at 13:44 and 0.72 m (low tide) at 23:58. Perth recorded 37.8 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 hyper saline at BLA to HEA and saline at NAR. Water was well oxygenated with oxygenated bottom water at ARM and NAR. Water temperature ranged from 20.8 to 21.1 °C.

Middle Swan Estuary (NIL to RON): The Middle Swan Estuary was saline throughout with the exception of brackish surface water at MAY and RON. Surface water was well oxygenated over low oxygen bottom water at NIL and near anoxic bottom water at STJ to RON. Water temperature ranged from 20.8 to 22.2 °C.

Upper Swan Estuary (BWR10 to POL): The Upper Swan Estuary was brackish throughout, with the exception of saline bottom water at BWR10. Water was well oxygenated over near anoxic bottom water at BWR10, KMO and at MULB FARM and WMP, there was hypoxic bottom water at SUC and MEA and low oxygen bottom water at VIT and CAV. Water was oxygenated at REG to POL. Water temperature ranged from 20.2 to 22.2 °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 Profile - 26th April 2016

