



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

**by
Water Science Branch, Department of Water**

Date: Monday 9th May 2016

Weather & tide conditions: Conditions were fine with up to 80% cloud cover and a predominantly east to south easterly breeze of up to 5 knots. The predicted tides at Guildford were 1.20 m (high tide) at 13:21 and 0.67 m (low tide) at 24:18. Perth recorded 21 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, saline at NAR and there was saline surface water over hyper saline bottom water at ARM and HEA. Water was well oxygenated to oxygenated throughout all sites. Water temperature ranged from 16.3 to 19.0 °C.

Middle Swan Estuary (NIL to RON): The Middle Swan Estuary was saline at NIL, brackish at RON and there was brackish surface water over saline bottom water at STJ and MAY. Water was well oxygenated to oxygenated throughout with the exception of near anoxic bottom water at STJ and hypoxic bottom water at MAY and RON. Water temperature ranged from 16.9 to 19.6 °C.

Upper Swan Estuary (BWR10 to POL): The Upper Swan Estuary was brackish throughout. Water was well oxygenated to oxygenated throughout with the exception of low oxygen bottom water at KMO and hypoxic bottom water at KIN and BWR10. Water temperature ranged from 15.2 to 18.7 °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 - 9th May 2016

