



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

by
Water Science Branch, Department of Water

Date: Monday 3rd August 2015

Weather & tide conditions: Conditions were fine with up to 15% cloud cover and a north easterly to south easterly breeze of up to 3 knots. The predicted tides at Guildford were 0.8 m (low tide) at 05:09 and 1.02 m (high tide) at 13:47. Perth recorded 24.6 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 saline throughout, with the exception of brackish surface water at NAR. Water was well oxygenated and oxygenated throughout at all sites. Water temperature ranged from 12.7 to 16.3 °C.

Middle Swan Estuary (NIL to RON): The Middle Swan Estuary was brackish over saline from NIL to MAY, and fresh over brackish at RON. Surface water was well oxygenated at all sites. Bottom water was oxygenated at NIL, low in oxygen at STJ and MAY and hypoxic at RON. Water temperature ranged from 14.1 to 16.7 °C.

Upper Swan Estuary (BWR10 to POL): The Upper Swan Estuary was fresh over brackish at BWR10, fresh throughout KIN to SUC and brackish throughout MEA to POL. Water was well oxygenated at all sites with the exception of oxygenated bottom water at BWR10. Water temperature ranged from 12.4 to 15.0 °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 - 8th August 2015

