



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

by
Water Science Branch, Department of Water

Date: Monday 5th December 2016

Weather & tide conditions: Conditions were fine with up to 15% cloud cover and a south east to south westerly breeze of up to 4 knots. The predicted tides at Guildford were 0.96 m (high tide) at 01:22 and 0.55 m (low tide) at 11:41. Perth recorded 1.8 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 saline throughout. Water was well oxygenated to oxygenated at all sites. Water temperature ranged from 21.2 to 22.5 °C.

Middle Swan Estuary (NIL to MAY): The Middle Swan Estuary was brackish throughout. Water was well oxygenated throughout NIL and well oxygenated over low oxygen at STJ and MAY. Water temperature ranged from 23.1 to 24.9 °C.

Upper Swan Estuary (RON to POL): The Upper Swan Estuary was brackish throughout. Water was well oxygenated to oxygenated on the surface of all sites. Bottom water was low in oxygen at RON to KMO, SUC, REG and MSB, and oxygenated at VIT, MEA to CAV and JBC to POL. Water temperature ranged from 24.5 to 26.3 °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 - 5th December 2016

