



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

by
Water Science Branch, Department of Water

Date: Monday 27th March 2017

Weather & tide conditions: Conditions were fine with up to 30% cloud cover and a westerly breeze of up to 4 knots. The predicted tides at Guildford were 0.69 m (low tide) at 06:44 and 0.87 m (high tide) at 12:45. Perth recorded 7.0 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 BLA and brackish over saline from ARM to NAR. Water was well oxygenated to oxygenated with the exception of hypoxic to near anoxic bottom water at HEA and NAR. Water temperature ranged from 20.4 to 22.6 °C.

Middle Swan Estuary (NIL to MAY): The Middle Swan Estuary was brackish throughout all sites. Water was well oxygenated to oxygenated on the surface, and bottom water was low in oxygen at NIL and hypoxic at STJ and MAY. Water temperature ranged from 21.2 to 22.3 °C.

Upper Swan Estuary (RON to POL): The Upper Swan Estuary was brackish throughout all sites. Water was well oxygenated to oxygenated, with the exception of hypoxic to near anoxic bottom water at RON and BWR10, and low oxygen bottom water at REG. Water temperature ranged from 21.0 to 23.3 °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 - 27th March 2017

