



Environmental Monitoring and Reporting
Swan River Estuary ~ Weekly profile

by
Water Science Branch, Department of Water

Date: Monday 24th October 2016

Weather & tide conditions: Conditions were fine with up to 100% cloud cover and a south west to south easterly breeze of up to 5 knots. The predicted tides at Guildford were 0.83 m (high tide) at 02:28 and 0.58 m (low tide) at 14:05. Perth recorded 2.6 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 brackish over saline at all sites. Water was well oxygenated to oxygenated, with the exception of low oxygen bottom water at NAR. Water temperature ranged from 17.2 to 19.9 °C.

Middle Swan Estuary (NIL to MAY): The Middle Swan Estuary was brackish throughout NIL and STJ and fresh over brackish at MAY. Water was well oxygenated on the surface and bottom water was low in oxygen at NIL and STJ and hypoxic at MAY. Water temperature ranged from 20.1 to 21.3 °C.

Upper Swan Estuary (RON to POL): The Upper Swan Estuary was fresh through RON and BWR10, fresh over brackish from KIN to SUC, and brackish throughout MEA to POL. Water was well oxygenated to oxygenated throughout all sites. Water temperature ranged from 18.2 to 21.3 °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 - 24th October 2016

