



Environmental Monitoring and Reporting Swan River Estuary ~ Weekly profile

by
Water Science Branch, Department of Water

Date: Tuesday 27th September 2016

Weather & tide conditions: Conditions were fine with up to 100% cloud cover and a predominantly west to north westerly breeze of up to 16 knots. The predicted tides at Guildford were 0.87 m (high tide) at 09:11 and 0.62 m (low tide) at 18:08. Perth recorded 44.4 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 throughout. Water was mostly well oxygenated with hypoxic bottom water at HEA and NAR. Water temperature ranged from 15.1 to 16.4 °C.

Middle Swan Estuary (NIL to MAY): The Middle Swan Estuary was brackish at NIL, there was fresh over brackish water at STJ and water was fresh at MAY. Water was oxygenated to well oxygenated at all sites. Water temperature ranged from 15.9 to 16.9 °C.

Upper Swan Estuary (RON to POL): The Upper Swan Estuary was fresh at RON and BWR10. There was fresh surface water over brackish bottom water at KIN to SUC and at WMP. Water was brackish at MEA and MULB FARM and at CAV to POL. Water was well oxygenated at all sites. Water temperature ranged from 12.8 to 16.2 °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 September 2016

