



Environmental Monitoring and Reporting Swan River Estuary ~ Weekly profile

by

Water Science Branch, Department of Water and Environmental Regulation

Date: Monday 29th January 2018

Weather & tide conditions: Conditions were fine with up to 3% cloud cover and an east to south easterly breeze of up to 16 knots. The predicted tides at Guildford were 0.47m (low tide) at 08:14 and 1.12 m (high tide) at 22:15. Perth recorded 0.6 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 to hypersaline with the exception of brackish surface water at NAR. Water was well oxygenated to oxygenated with the exception of low oxygen bottom water at HEA. Water temperature ranged from 23.4 to 25.1 °C.

Middle Swan Estuary (NIL to RON): The Middle Swan Estuary was brackish throughout. Water was well oxygenated to oxygenated with the exception of near anoxic bottom water at STJ and RON. Water temperature ranged from 24.8 to 27.6 °C.

Upper Swan Estuary (BWR10 to POL): The Upper Swan Estuary was brackish throughout all sites. Water was well oxygenated to oxygenated from BWR10 to MULB FARM, low in oxygen at WMP, and hypoxic from CAV to POL with the exception of low oxygen surface water at CAV. Water temperature ranged from 25.6 to 27.6 °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 - 29th January 2018

Prepared by Water Science Branch, Department of Water

