



Environmental Monitoring and Reporting Swan River Estuary ~ Weekly profile

by

Water Science Branch, Department of Water and Environmental Regulation

Date: Monday 23rd April 2018

Weather & tide conditions: Conditions were fine with up to 95% cloud cover and a south-westerly breeze of up to 10 knots. The predicted tides at Guildford were 0.63 m (low tide) at 03:52 and 1.08 m (high tide) at 17:00. Perth recorded 16 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 hyper-saline throughout. Water was well oxygenated to oxygenated throughout all sites. Water temperature ranged from 20.2 to 20.8 °C.

Middle Swan Estuary (NIL to RON): The Middle Swan Estuary was saline from NIL to MAY and brackish over saline at RON. Water was well oxygenated to oxygenated throughout, with the exception of low oxygen at STJ and hypoxic bottom water at RON. Water temperature ranged from 20.2 to 21.7 °C.

Upper Swan Estuary (BWR10 to POL): The Upper Swan Estuary was brackish over saline from BWR10 to KMO and brackish from VIT to POL. Water was well oxygenated to oxygenated from BWR10 to REG, with the exception of low oxygen bottom water at BWR10, KMO, MULB and WMP, and hypoxic bottom water at KIN. Water had low oxygen from MSB to POL. Water temperature ranged from 20.1 to 21.6 °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 - 23rd April 2018

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