



Environmental Monitoring and Reporting Swan River Estuary ~ Weekly profile

by
Water Science Branch, Department of Water and Environmental Regulation

Date: Monday 12th March 2018

Weather & tide conditions: Conditions were fine with up to 10% cloud cover and a south-easterly to north-easterly breeze of up to 15 knots. The predicted tides at Guildford were 0.60 m (low tide) at 06:13 and 1.01 m (high tide) at 20:13. Perth recorded 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 hyper-saline to saline throughout. Water was well oxygenated to throughout all sites. Water temperature ranged from 22.6 to 23.4 °C.

Middle Swan Estuary (NIL to RON): The Middle Swan Estuary was saline at NIL, brackish over saline at STJ and MAY and brackish at RON. Water was well-oxygenated to oxygenated throughout with the exception of low oxygen bottom water at STJ and MAY and near anoxic bottom water at RON. Water temperature ranged from 23.4 to 25.5 °C.

Upper Swan Estuary (BWR10 to POL): The Upper Swan Estuary was brackish throughout. Water was well oxygenated to oxygenated from BWR10 to REG with the exception of bottom water with low oxygen at BRW10, VIT, MEA and WMP, hypoxic bottom water at KMO and near anoxic bottom water at KIN and SUC. Water had low oxygen throughout from MSB to POL. Water temperature ranged from 24.1 to 25.9 °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 - 12th March 2018

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