



Environmental Monitoring and Reporting Swan River Estuary ~ Weekly profile

by

Aquatic Science Branch, Department of Water and Environmental Regulation

Date: Monday 17th December 2018

Weather & tide conditions: Conditions were fine with up to 90% cloud cover and a predominantly south-westerly breeze of up to 8 knots. The predicted tides at Guildford were 0.64 m (low tide) at 10:28 and 0.92 m (high tide) at 20:57. Perth recorded 0.2 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 throughout all sites. Water was well oxygenated to oxygenated throughout all sites. Water temperature ranged from 21.6 to 23.6 °C.

Middle Swan Estuary (NIL to RON): The Middle Swan Estuary was brackish over saline at NIL and brackish from STJ to RON. Surface water was well oxygenated to oxygenated at all sites while bottom water was oxygenated at NIL, near anoxic at STJ and hypoxic from MAY to RON. Water temperature ranged from 23.7 to 26.4 °C.

Upper Swan Estuary (BWR10 to POL): The Upper Swan Estuary was brackish from BWR10 to MULB and fresh from WMP to POL. Surface water was well oxygenated to oxygenated at all sites while bottom water was hypoxic at BWR10, low in oxygen at KIN, KMO and SUC, well oxygenated at VIT and oxygenated from MEAD to POL. Water temperature ranged from 24.9 to 27.2 °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 Profiles 17th December 2018

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