



**Environmental Monitoring and Reporting
Swan River Estuary ~ Weekly profile**

by
Water Science Branch, Department of Water

Date: Monday 13th June 2016

Weather & tide conditions: Conditions were fine with up to 50% cloud cover and a predominantly south westerly breeze of up to 4 knots. The predicted tides at Guildford were 1.02 m (high tide) at 11:13 and 0.83 m (low tide) at 22:26. Perth recorded 51.8 mm of rainfall during the week prior to sampling (Bureau of Meteorology).

Oxygenation: The Guildford oxygenation plant was operational the week prior to sampling. The Caversham oxygenation plant was operational the week prior to sampling up to 10/6/16.

Lower Swan/Canning Estuary (FPI to NAR): The Lower Swan Estuary was saline to hypersaline throughout all sites, with the exception of brackish surface water at NAR. Water was well oxygenated to oxygenated at all sites, with the exception of low oxygenated bottom water at HEA and hypoxic bottom water at NAR. Water temperature ranged from 14.7 to 17.2 °C.

Middle Swan Estuary (NIL to RON): The Middle Swan Estuary was brackish on the surface over saline bottom water at all sites, with the exception of brackish bottom water at RON. Water was well oxygenated on the surface over hypoxic bottom water at all sites. Water temperature ranged from 13.9 to 16.4 °C.

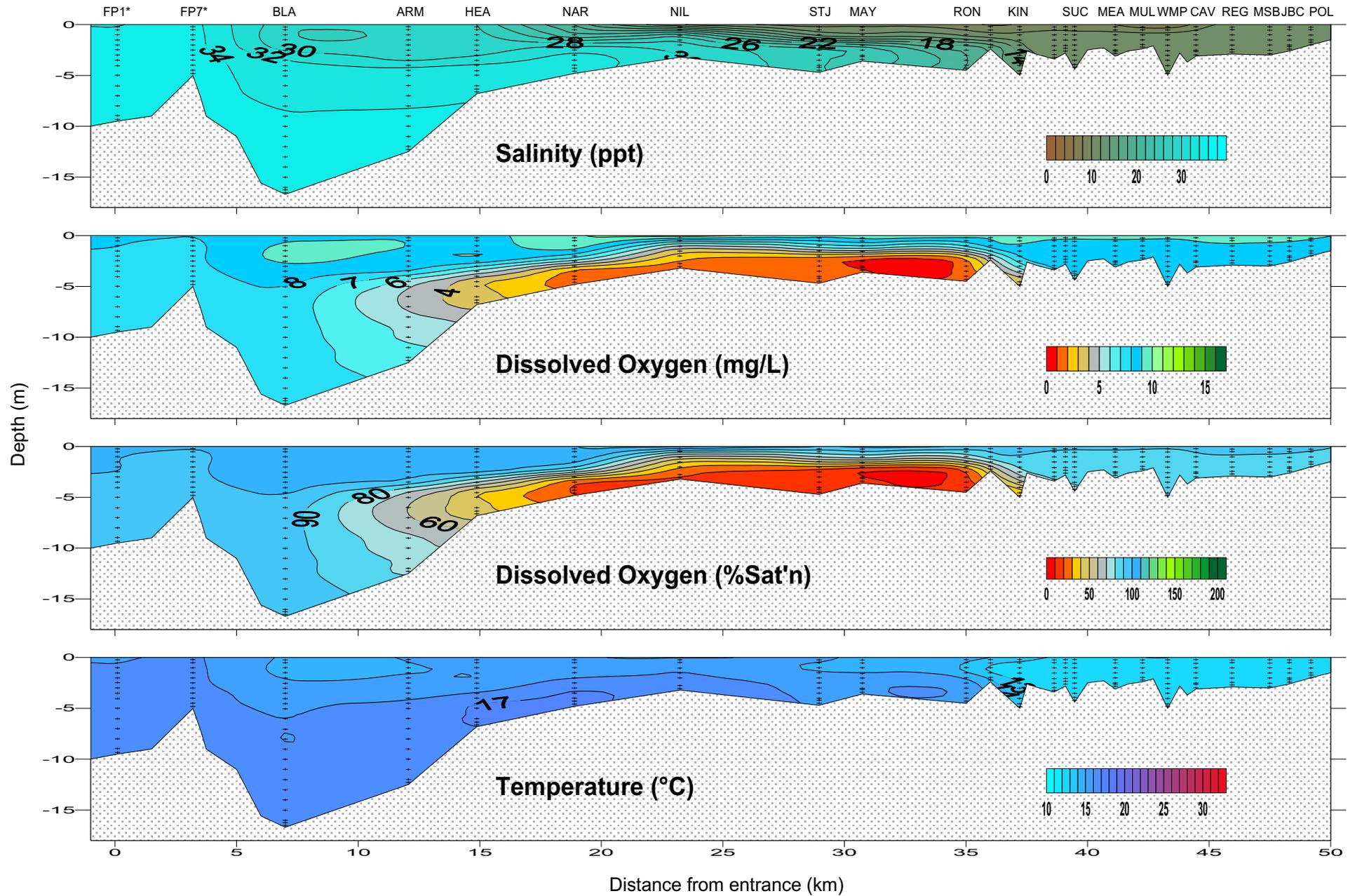
Upper Swan Estuary (BWR10 to POL): The Upper Swan Estuary was brackish throughout, with the exception of fresh surface water at WMP. Water was well oxygenated to oxygenated at all sites, with the exception of low oxygen bottom water at KIN and hypoxic bottom water at RON2. Water temperature ranged from 12.1 to 14.9 °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 - 13th June 2016



*Data for sites FP1 (Harbour entrance) and FP7 (Fremantle Bridge) are supplied courtesy of the Fremantle Port Authority