



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

by
Water Science Branch, Department of Water

Date: Monday 28th November 2016

Weather & tide conditions: Conditions were fine with 0% cloud cover and a south east to south westerly breeze of up to 4 knots. The predicted tides at Guildford were 0.57 m (low tide) at 08:03 and 1.02 m (high tide) at 22:49. 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 (FPI to NAR): The Lower Swan Estuary was saline to hypersaline throughout. Water was well oxygenated to oxygenated throughout all sites. Water temperature ranged from 19.8 to 26.6 °C.

Middle Swan Estuary (NIL to MAY): The Middle Swan Estuary was brackish throughout STJ and MAY and NIL had brackish surface water over saline bottom water. Water was well oxygenated to oxygenated throughout all sites with the exception of low oxygen bottom water at STJ and MAY. Water temperature ranged from 25.7 to 28.7 °C.

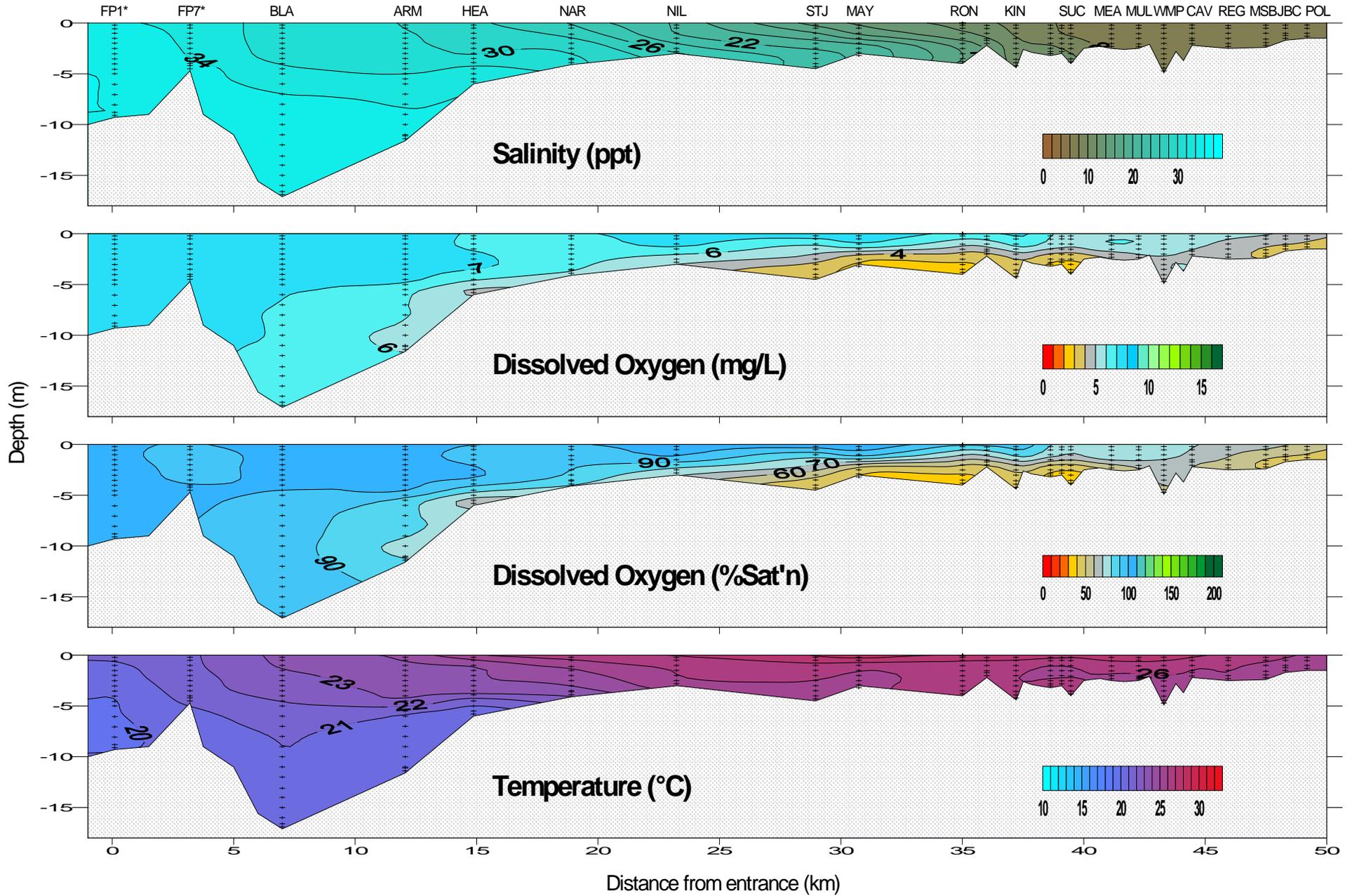
Upper Swan Estuary (RON to POL): The Upper Swan Estuary was brackish throughout. Water was well oxygenated to oxygenated throughout all sites, with the exception of low oxygen bottom water at POL to MSB, SUC to KIN and RON, and hypoxic bottom water at BWR10. Water temperature ranged from 25.4 to 27.9.

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 - 28 November 2016



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