



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

by
Water Science Branch, Department of Water

Date: Monday 12th December 2016

Weather & tide conditions: Conditions were overcast with up to 100% cloud cover and a predominantly south westerly breeze of up to 7 knots. The predicted tides at Guildford were 0.52 m (low tide) at 08:01 and 1.07 m (high tide) at 22:32. Perth recorded 7.8 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 to hypersaline throughout. Water was well oxygenated to oxygenated throughout all sites with the exception of low oxygen bottom water at HEA. Water temperature ranged from 21.6 to 24.8 °C.

Middle Swan Estuary (NIL to MAY): The Middle Swan Estuary was brackish over saline at NIL and STJ, and brackish throughout MAY. 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 25.4 to 27.0 °C.

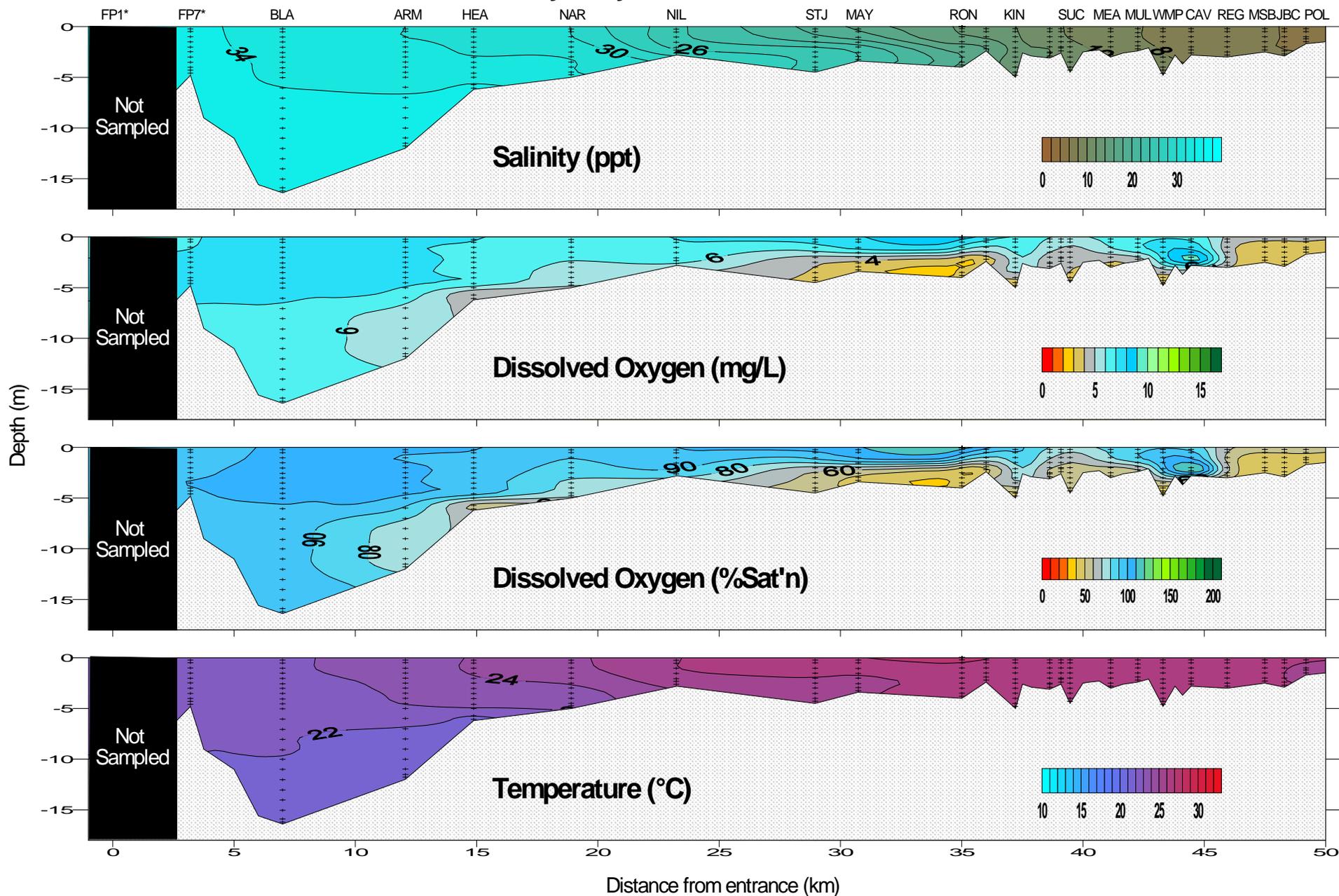
Upper Swan Estuary (RON to POL): The Upper Swan Estuary was brackish throughout. Surface water was well oxygenated to oxygenated throughout all sites. Bottom water was well oxygenated to oxygenated at VIT, SUC, MULB FARM and CAV and low in oxygen at RON to KMO, MEA, WMP and REG to POL. Water temperature ranged from 25.8 to 27.4 °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 December 2016



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