



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

by
Water Science Branch, Department of Water

Date: Monday 3rd October 2016

Weather & tide conditions: Conditions were overcast with up to 100% cloud cover and a west to north westerly breeze of up to 13 knots. The predicted tides at Guildford were 0.64 m (low tide) at 07:35 and 0.74 m (high tide) at 13:27. Perth recorded 16.4 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 (FP7 to NAR): The Lower Swan Estuary was brackish over saline at all sites, with the exception of saline surface water at FP7. Water was well oxygenated to oxygenated, with the exception of low oxygen bottom water at NAR. Water temperature ranged from 14.8 to 15.8 °C.

Middle Swan Estuary (NIL to MAY): The Middle Swan Estuary was brackish throughout NIL, fresh over brackish at STJ and fresh throughout MAY. Water was well oxygenated to oxygenated throughout all sites. Water temperature ranged from 15.3 to 16.2 °C.

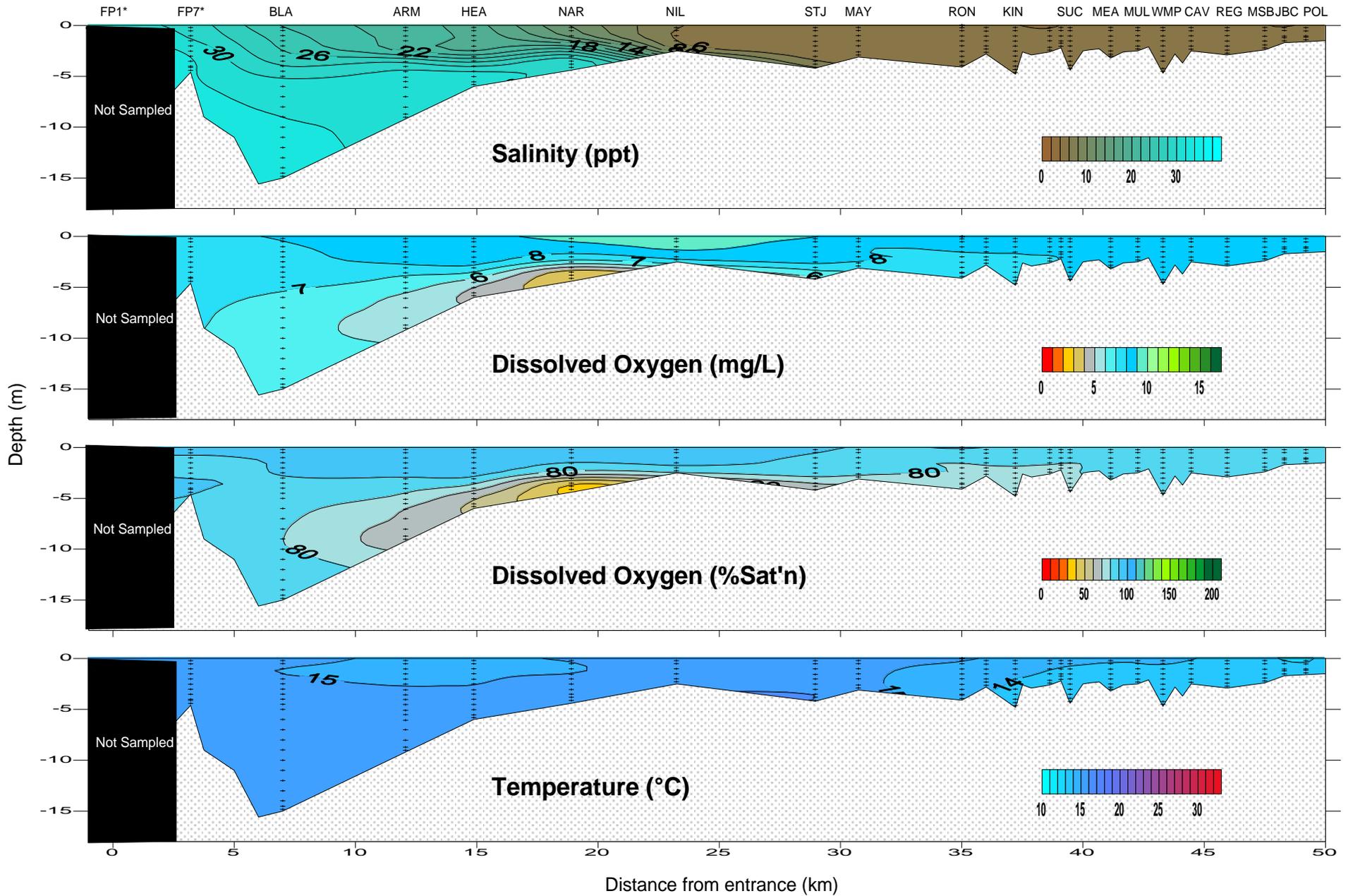
Upper Swan Estuary (RON to POL): The Upper Swan Estuary was fresh throughout RON to VIT and brackish throughout SUC to POL, with the exception of fresh surface water at SUC and JBC. Water temperature ranged from 12.3 to 15.5 °C.

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 - 3rd October 2016



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