



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

by  
**Water Science Branch, Department of Water**

Date: Wednesday 13<sup>th</sup> January 2016

Weather & tide conditions: Conditions were fine with up to 40% cloud cover and a predominantly easterly to south easterly breeze of up to 12 knots. The predicted tides at Guildford were 1.00 m (high tide) at 00:59 and 0.55 m (low tide) at 10:21. Perth recorded 0.6 mm of rainfall during the week prior to sampling (Bureau of Meteorology).

Oxygenation: Guildford and Caversham oxygenation plants were operational the week prior to sampling.

Lower Swan/Canning Estuary (FPI to NAR): The Lower Swan Estuary was hyper saline throughout with the exception of saline surface water at NAR. Surface water was well oxygenated with oxygenated bottom water throughout all sites with the exception of low oxygen bottom water at ARM. Water temperature ranged from 22.9 to 26.4 °C.

Middle Swan Estuary (NIL to RON): The Middle Swan Estuary was brackish throughout NIL to MAY and brackish throughout RON. Water was well oxygenated to oxygenated throughout all sites. Water temperature ranged from 25.3 to 26.4°C.

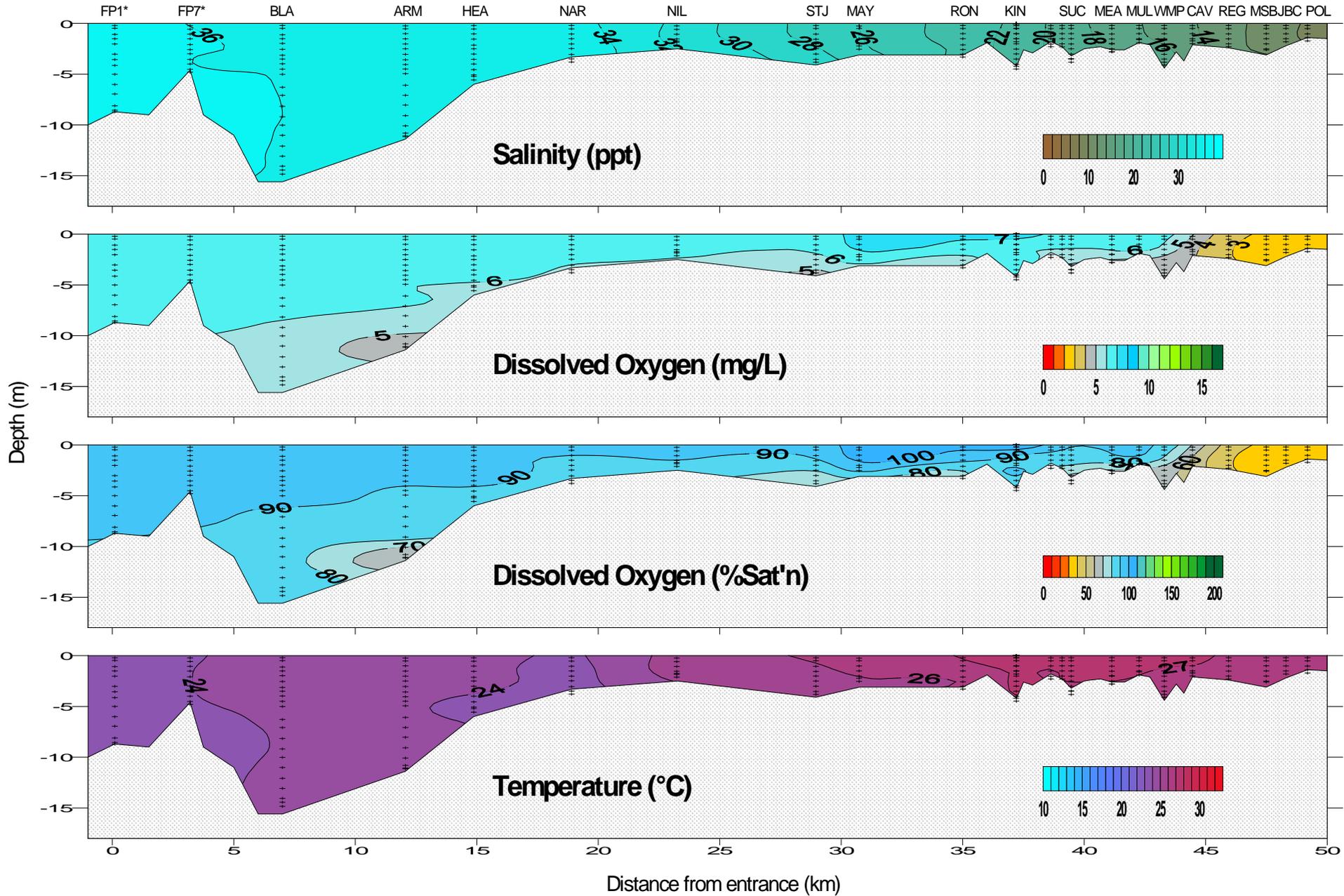
Upper Swan Estuary (BWR10 to POL): The Upper Swan Estuary was brackish throughout. Water was well oxygenated over oxygenated bottom water at all sites from BWR10 to WMP with the exception of low oxygenated bottom water at SUC. Water was low oxygenated throughout REG to POL and oxygenated surface water above low oxygenated bottom water at CAV. Water temperature ranged from 26.1 to 28.0 °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 January 2016



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