



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

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

Date: Monday 16<sup>th</sup> November 2015

Weather & tide conditions: Conditions were fine with no cloud cover and a north easterly to westerly breeze of up to 7 knots. The predicted tides at Guildford were 0.99 m (high tide) at 01:08 and 0.52 m (low tide) at 11:25. Perth recorded 0.2 mm of rainfall during the week prior to sampling (Bureau of Meteorology).

Oxygenation: The Guildford oxygenation plant was operational and the Caversham oxygenation plant was not operational during the week prior to sampling.

Lower Swan/Canning Estuary (FP1 to NAR): The Lower Swan Estuary was hypersaline to saline at FP1 and FP2.1 then saline throughout. Water was well oxygenated throughout from FP1 to BLA then well oxygenated over oxygenated from ARM to NAR. Water temperature ranged from 20.9 to 26.8 °C.

Middle Swan Estuary (NIL to RON): The Middle Swan Estuary was brackish throughout with the exception of saline bottom water at NIL. Surface water was well oxygenated over bottom water which was oxygenated from NIL to MAY then low in oxygen at RON. Water temperature ranged from 26.6 to 28.6 °C.

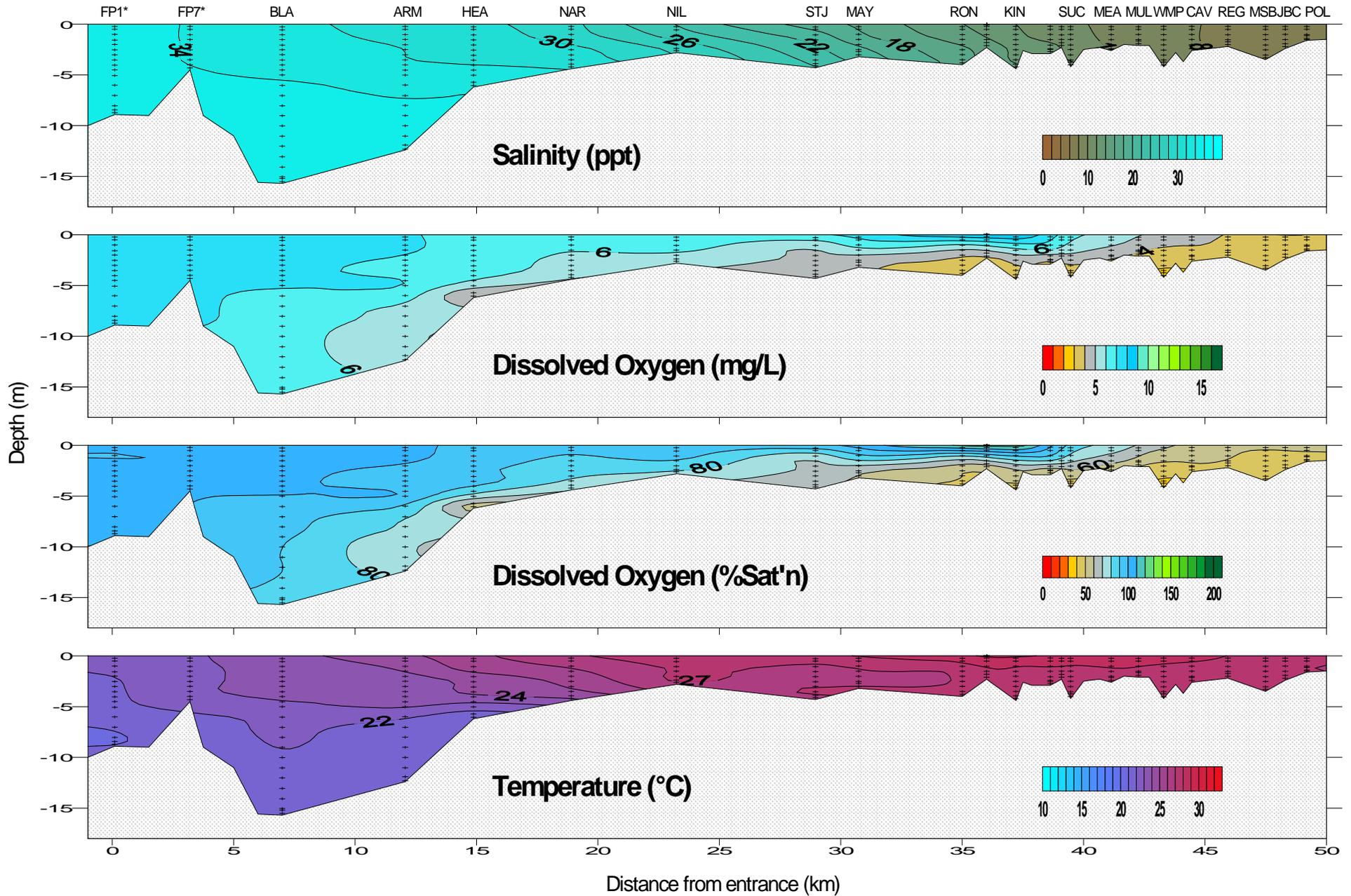
Upper Swan Estuary (BWR10 to POL): The Upper Swan Estuary was brackish throughout. Surface water was well oxygenated from BWR10 to VIT, oxygenated from SUC to CAV and at JBC, then low in oxygen at REG, MSB and POL. Bottom water was low in oxygen at all sites except for VIT and MEA which were oxygenated on the bottom. Water temperature ranged from 27.0 to 29.6 °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 - 16th November 2015



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