



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

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

Date: Monday 9<sup>th</sup> March 2015

Weather & tide conditions: Conditions were fine up to 5% cloud cover and predominantly a south easterly to south westerly breeze of up to 4 knots. The predicted tides at Guildford were 0.61 m (low tide) at 07:27 and 1.00 m (high tide) at 22:34. Perth recorded 0.0 mm of rainfall during the week prior to sampling (Bureau of Meteorology).

Oxygenation: The Caversham oxygenation plant was operational the week prior to sampling. The Guildford oxygenation plant was not operational from the 6<sup>th</sup> March 2015 due to a technical fault.

Lower Swan/Canning Estuary (FPI to NAR): The Lower Swan Estuary was hypersaline and well oxygenated throughout with the exception of oxygenated surface water at NAR. Water temperature ranged from 23.6 to 25.4 °C.

Middle Swan Estuary (NIL to RON): The Middle Swan Estuary was saline with well oxygenated surface water and oxygenated bottom water at all sites. Water temperature ranged from 25.1 to 27.0 °C.

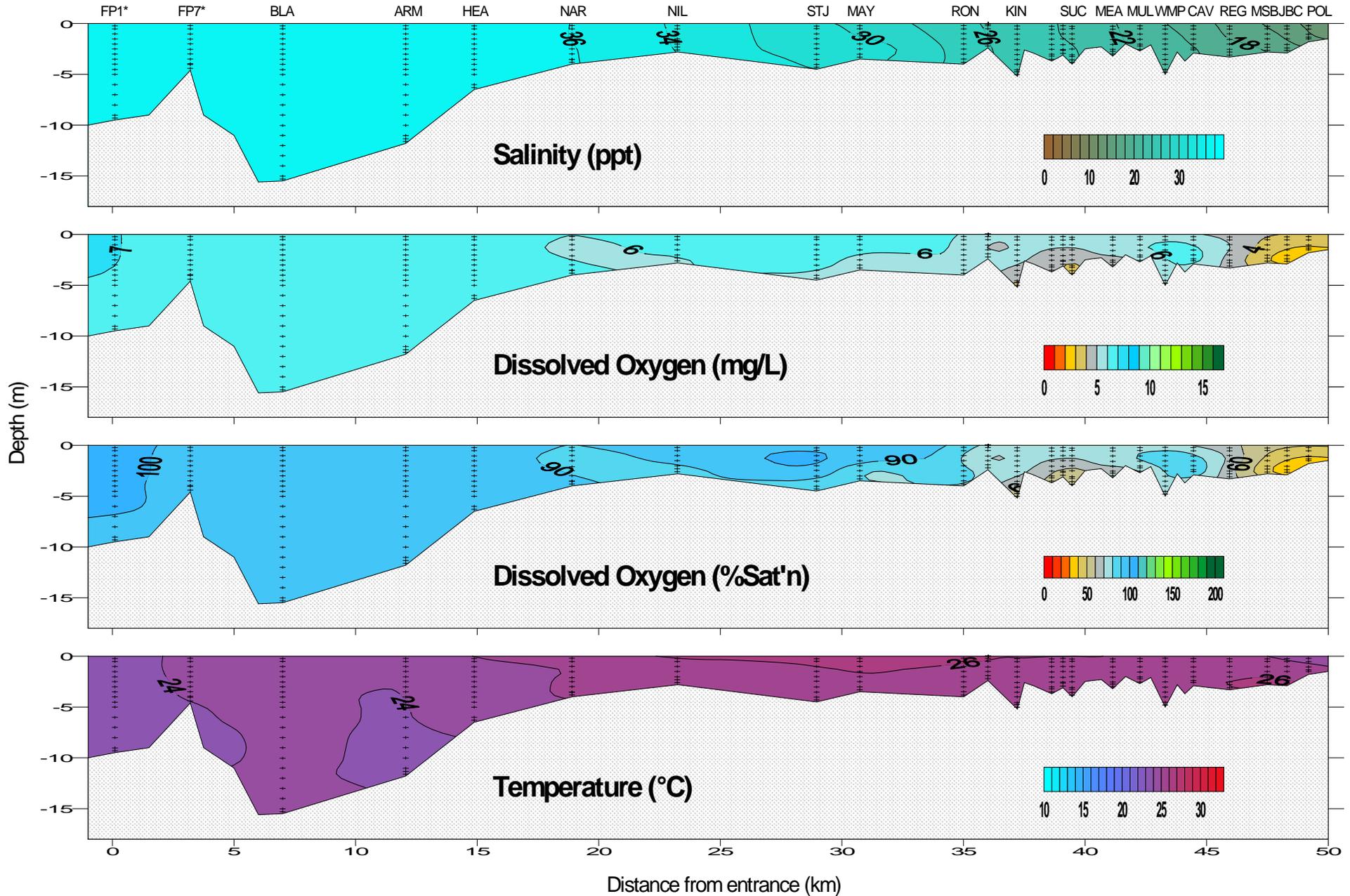
Upper Swan Estuary (BWR10 to POL): The Upper Swan Estuary was saline on the surface and bottom at BWR10, saline on the bottom at KIN, then brackish throughout at all other sites. Surface water was oxygenated from BWR10 to REG, then low in oxygen from MSB to POL. Bottom water was oxygenated at BWR10, from MEA to WMP and at REG, low in oxygen from KIN to SUC and from MSB to POL, and well oxygenated at CAV. Water temperature ranged from 24.6 to 26.2 °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 - 9th March 2015



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