



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

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

Date: Monday 27<sup>th</sup> June 2016

Weather & tide conditions: Conditions were fine with up to 15% cloud cover and a north to north easterly breeze of up to 15 knots. The predicted tides at Guildford were 1.00 m (high tide) at 13:44 and 0.83 m (low tide) at 23:23. Perth recorded 21.8 mm of rainfall during the week prior to sampling (Bureau of Meteorology).

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

Lower Swan/Canning Estuary (FP10 NAR): The Lower Swan Estuary was hypersaline to saline throughout, with the exception of brackish surface water at NAR. Water was well oxygenated to oxygenated throughout, with the exception of hypersaline bottom water at HEA and near anoxic bottom water at NAR. Water temperature ranged from 13.8 to 17.1 °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 oxygenated at all sites and bottom water was low in oxygen at NIL, near anoxic at STJ and hypoxic at MAY and RON. Water temperature ranged from 13.9 to 16.7 °C.

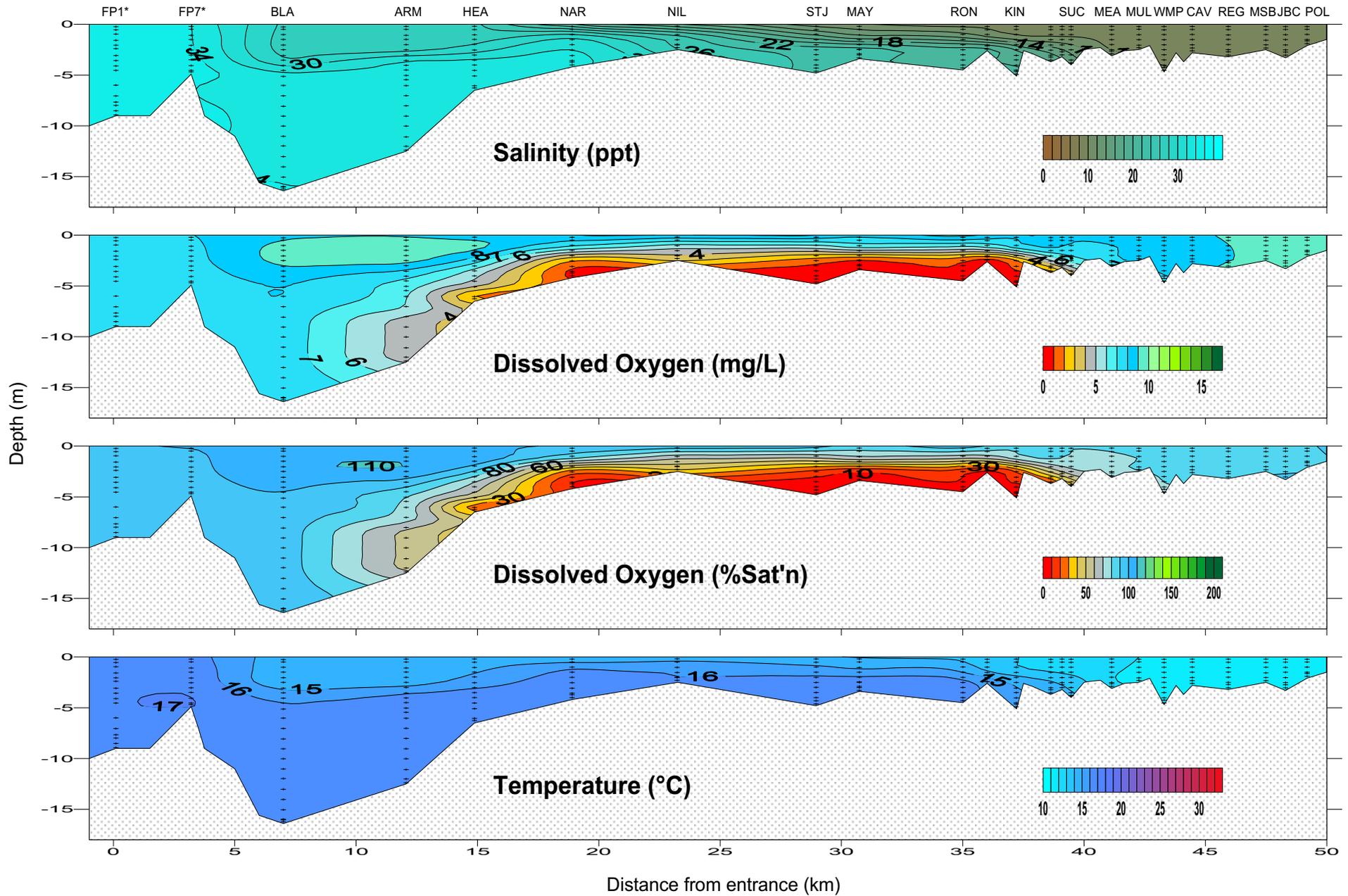
Upper Swan Estuary (BWR10 to POL): The Upper Swan Estuary was brackish throughout. Water was well oxygenated throughout most sites, with the exception of hypoxic bottom water at BWR10, KMO and RON2, near anoxic bottom water at KIN and low oxygen bottom water at VIT and SUC. Water temperature ranged from 11.1 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 - 27th June 2016



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