



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

by  
Water Science Branch, Department of Water

Date: Monday 17th October 2016

Weather & tide conditions: Conditions were fine with up to 90% cloud cover and a predominantly south westerly breeze of up to 9 knots. The predicted tides at Guildford were 0.58 m (low tide) at 08:14 and 0.72 m (high tide) at 14:01. Perth recorded 6.8 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 well oxygenated and brackish throughout with the exception of saline surface water at FP7. Bottom water was saline at all sites, well oxygenated at FP7 and BLA, oxygenated at ARM and low oxygen at HEA and NAR. Water temperature ranged from 16.5 to 19.0 °C.

Middle Swan Estuary (NIL to MAY): The Middle Swan Estuary surface water was well oxygenated throughout, brackish at NIL and fresh at all other sites. Bottom water well oxygenated and brackish at NIL, hypoxic and brackish at STJ, low oxygen and brackish at May and well oxygenated and fresh at RON. Water temperature ranged from 18.2 to 20.4 °C.

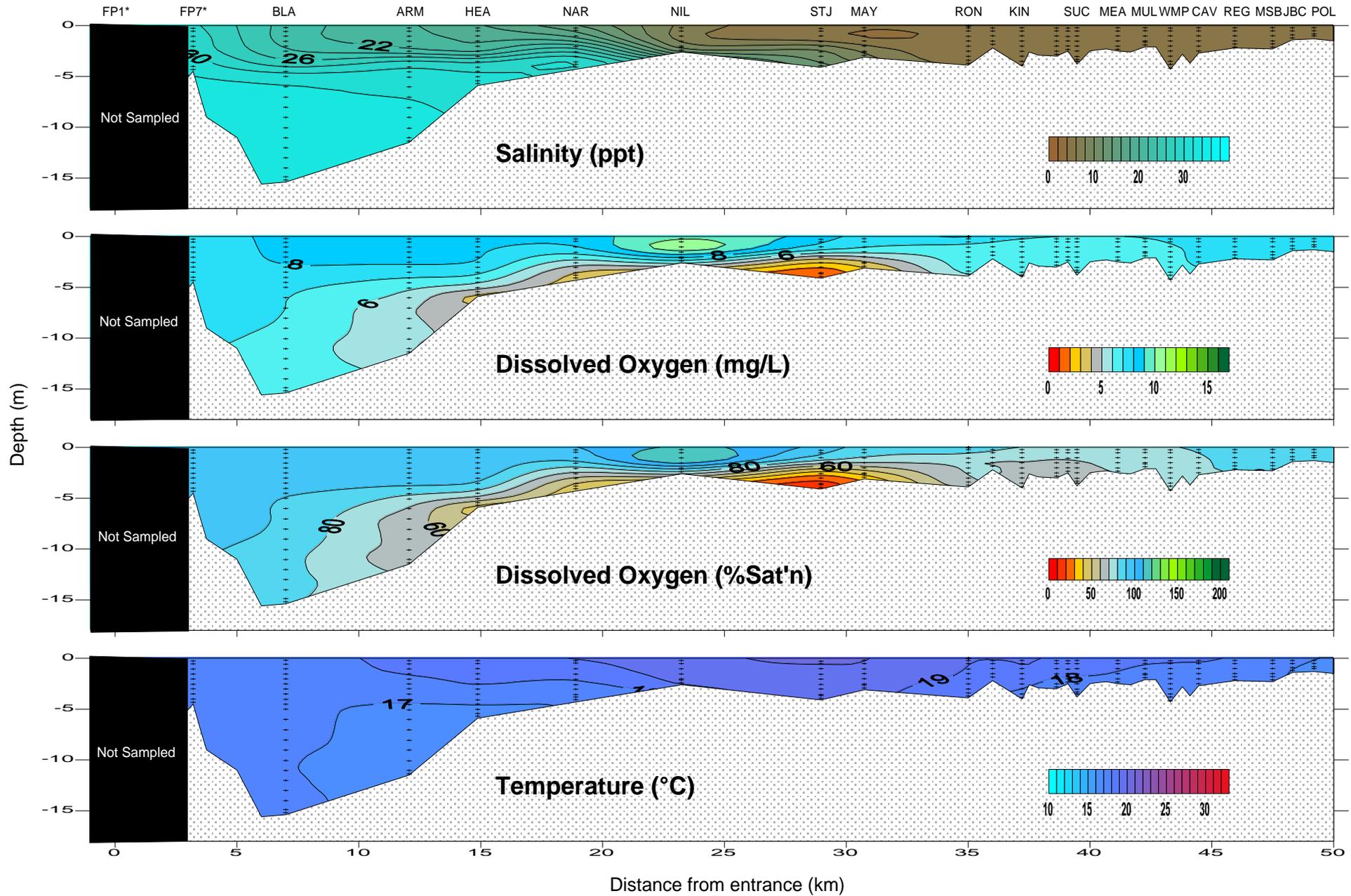
Upper Swan Estuary (RON to POL): The Upper Swan Estuary was well oxygenated and brackish throughout with the exception of fresh surface water at SUC, VIT, KMO and KIN. Water temperature ranged from 16.9 to 19.2 °C.

**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 - 17th October 2016



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