



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

by
Water Science Branch, Department of Water

Date: Monday 30th May 2016

Weather & tide conditions: Conditions were fine with 0% cloud cover and a predominantly east to north easterly breeze of up to 8 knots. The predicted tides at Guildford were 0.80 m (low tide) at 02:07 and 1.0 m (high tide) at 11:43. Perth recorded 35.8 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 (FP1 to NAR): The Lower Swan Estuary was saline throughout, with the exception of hyper saline bottom water at FP1 and FP7 and brackish surface water at NAR. Water was well oxygenated to oxygenated with the exception of low oxygen bottom water at HEA and NAR. Water temperature ranged from 15.7 to 18.3 °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 hypoxic bottom water at NIL and near anoxic bottom water at STJ to RON. Water temperature ranged from 15.5 to 17.9 °C.

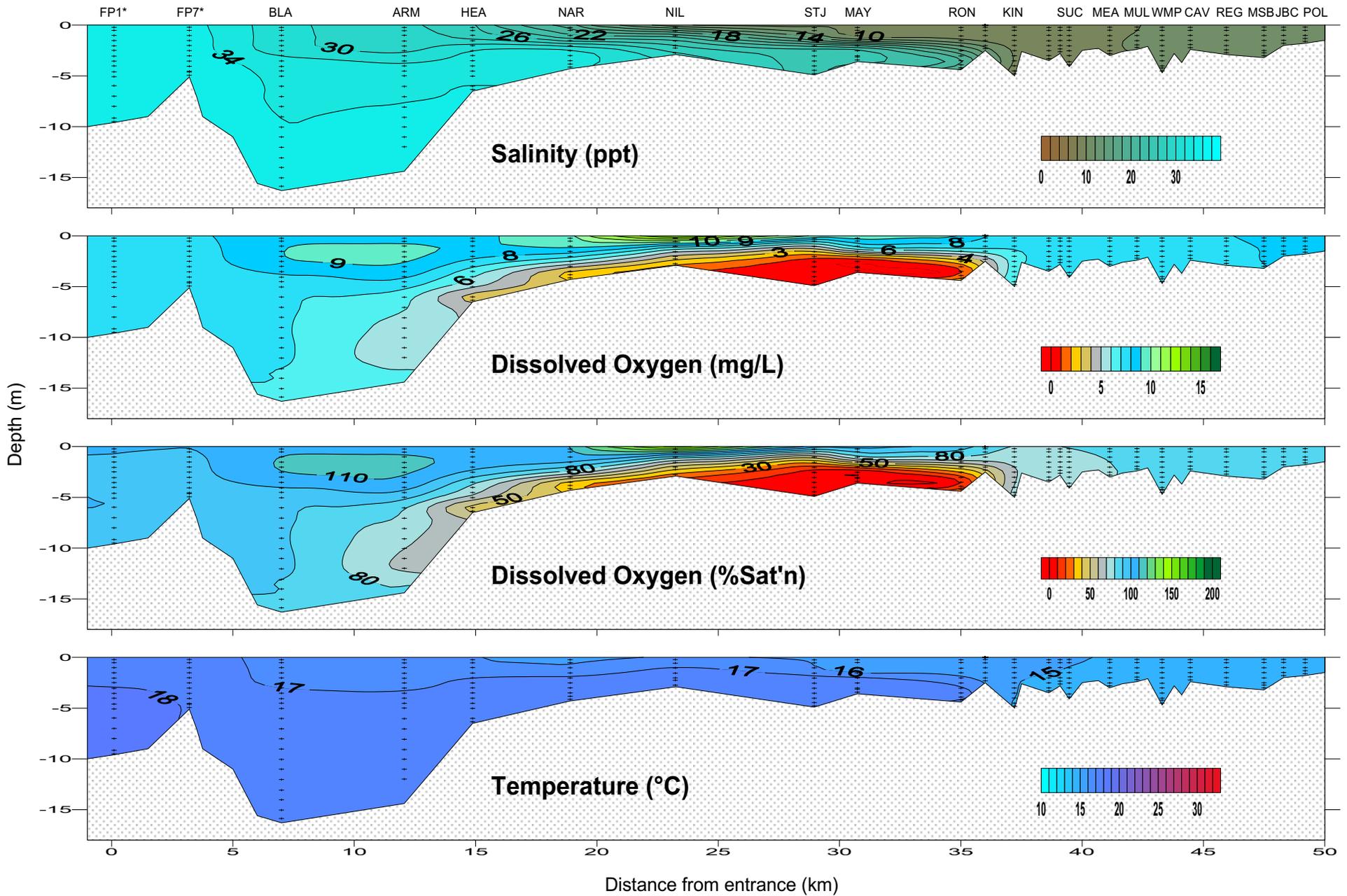
Upper Swan Estuary (BWR10 to POL): The Upper Swan Estuary was brackish and well oxygenated to oxygenated throughout all sites. Water temperature ranged from 14.3 to 15.9 °C.

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 - 30th May 2016



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