



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

by
Water Science Branch, Department of Water

Date: Monday 16th May 2016

Weather & tide conditions: Conditions were fine with up to 50% cloud cover and a predominantly north easterly breeze of up to 5 knots. The predicted tides at Guildford were 0.81 m (low tide) at 02:41 and 1.01 m (high tide) at 10:49. 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 (FPI to NAR): The Lower Swan Estuary was hyper saline to saline throughout. Water was well oxygenated to oxygenated at all sites, with the exception of low oxygen bottom water at HEA and NAR. Water temperature ranged from 17.8 to 19.3 °C.

Middle Swan Estuary (NIL to RON): The Middle Swan Estuary was brackish on the surface over saline bottom water throughout. Water was well oxygenated on the surface over near anoxic bottom water at all sites. Water temperature ranged from 16.9 to 19.2 °C.

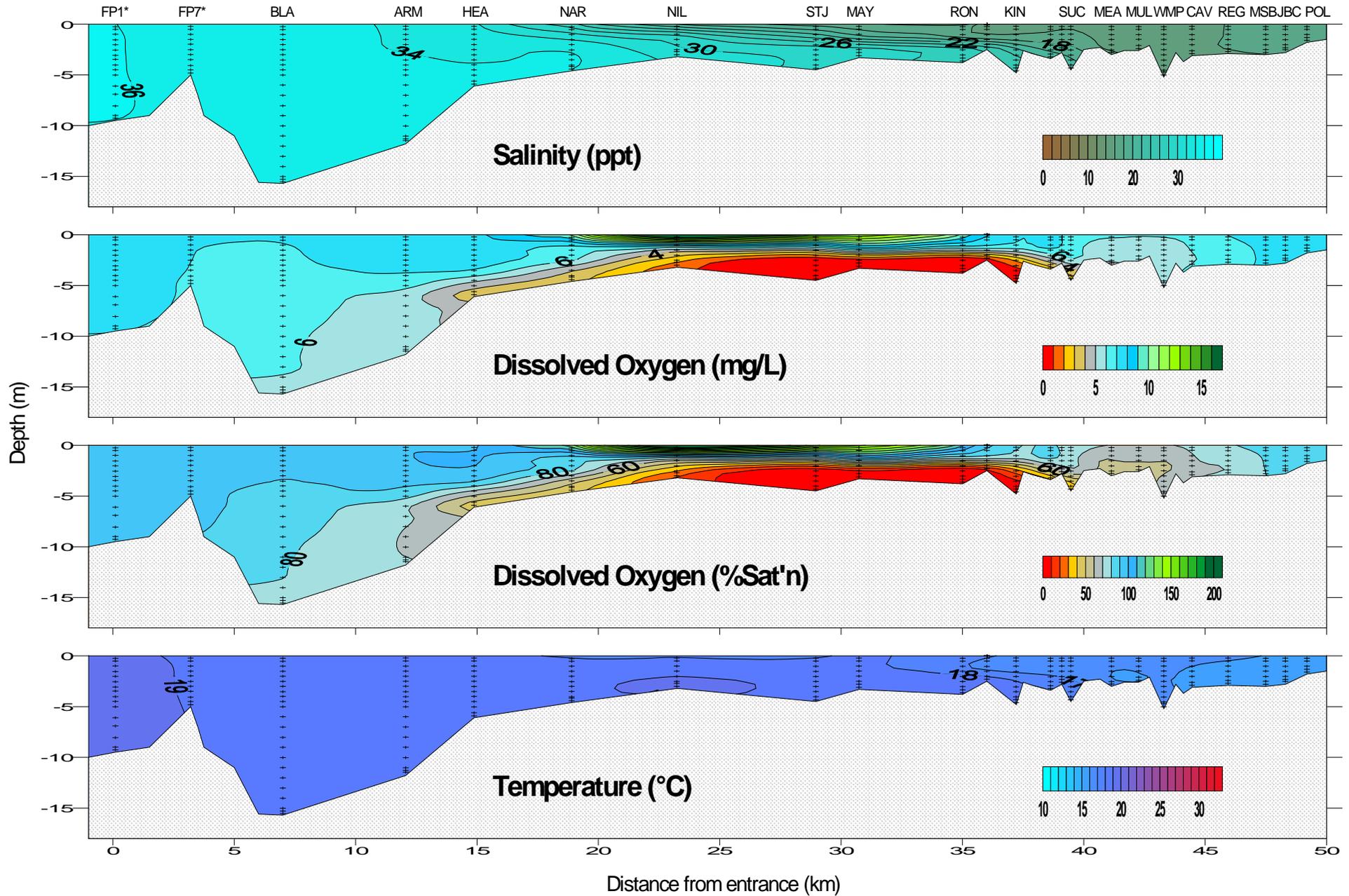
Upper Swan Estuary (BWR10 to POL): The Upper Swan Estuary was brackish throughout all sites, with the exception of saline bottom water at POL. Water was well oxygenated to oxygenated at all sites, with the exception of hypoxic bottom water at BWR10, KMO and SUC, and near anoxic bottom water at KIN. Water temperature ranged from 15.5 to 18.6 °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 May 2016



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