



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

by
Water Science Branch, Department of Water

Date: Monday 2nd May 2016

Weather & tide conditions: Conditions were fine with up to 100% cloud cover and a predominantly east to north easterly breeze of up to 5 knots. The predicted tides at Guildford were 0.74 m (low tide) at 03:53 and 0.95 m (high tide) at 11:48. Perth recorded 20.8 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 mostly well oxygenated with oxygenated bottom water at HEA and NAR. Water temperature ranged from 17.3 to 19.5 °C.

Middle Swan Estuary (NIL to RON): The Middle Swan Estuary was brackish with the exception of saline bottom water at NIL to MAY. Surface water was well oxygenated with the exception of near anoxic bottom water at STJ and RON and low oxygen surface water over hypoxic bottom water at MAY. Water temperature ranged from 18.0 to 20.4 °C.

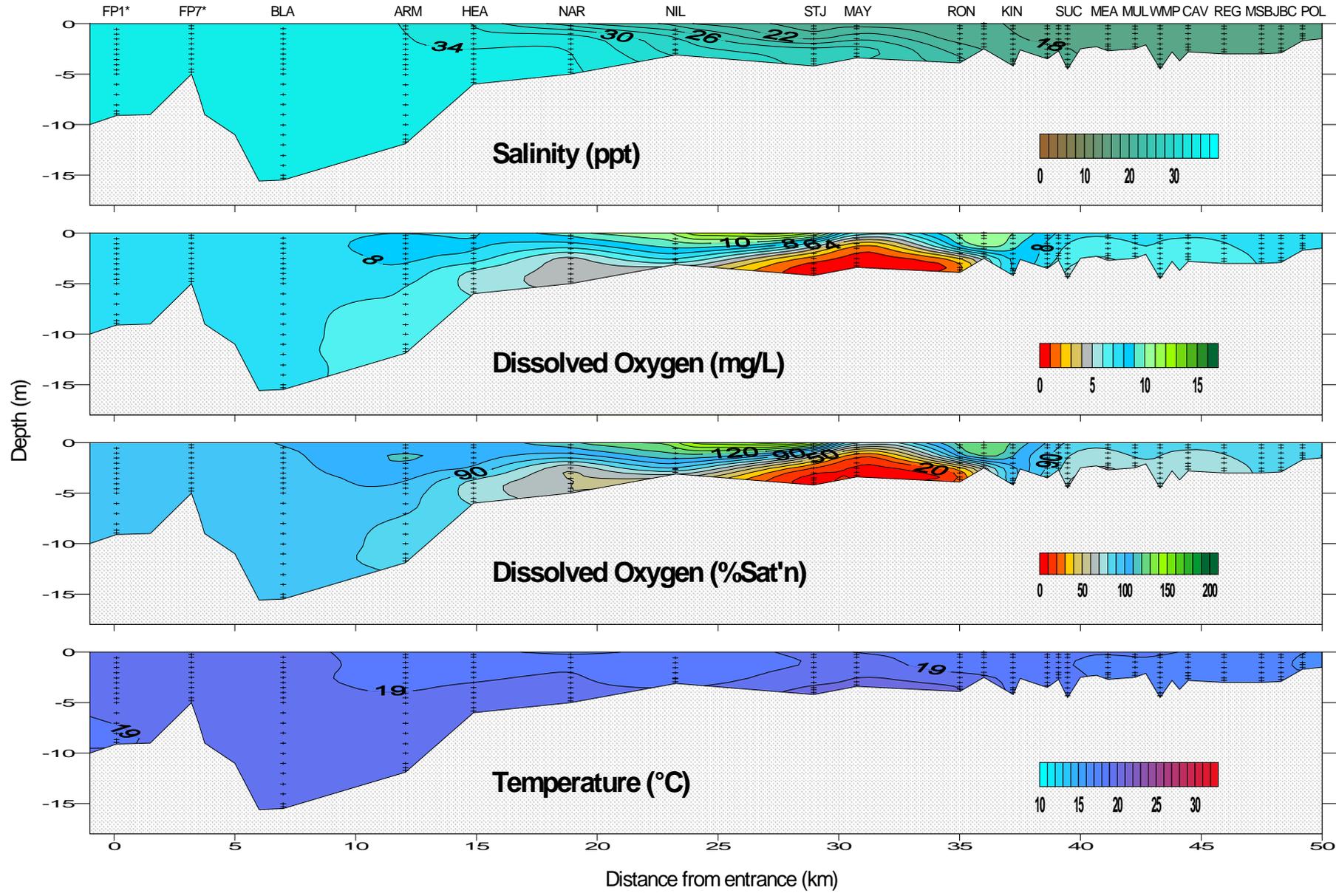
Upper Swan Estuary (BWR10 to POL): The Upper Swan Estuary was brackish and well oxygenated to oxygenated throughout. Water temperature ranged from 16.9 to 20.6 °C.

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 - 2nd May 2016



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