



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

by
Water Science Branch, Department of Water

Date: Monday 14th December 2015

Weather & tide conditions: Conditions were fine with up to 2% cloud cover and a predominantly south westerly breeze of up to 10 knots. The predicted tides at Guildford were 0.50 m (low tide) at 10:34. Perth recorded 0.0 mm of rainfall during the week prior to sampling (Bureau of Meteorology).

Oxygenation: The Caversham oxygenation plant was operational the week prior to sampling. The Guildford oxygenation plant was not operational from 7th to 11th December.

Lower Swan/Canning Estuary (FPI to NAR): The Lower Swan Estuary was mostly saline throughout with hyper-saline bottom water at BLA. Water was mostly well oxygenated with oxygenated bottom water at ARM and HEA. Water temperature ranged from 21.1 to 24.1 °C.

Middle Swan Estuary (NIL to RON): The Middle Swan Estuary was saline and well oxygenated throughout at NIL, well oxygenated with brackish surface water over saline bottom water at STJ and well oxygenated to oxygenated and brackish throughout at MAY and RON. Water temperature ranged from 24.0 to 27.1 °C.

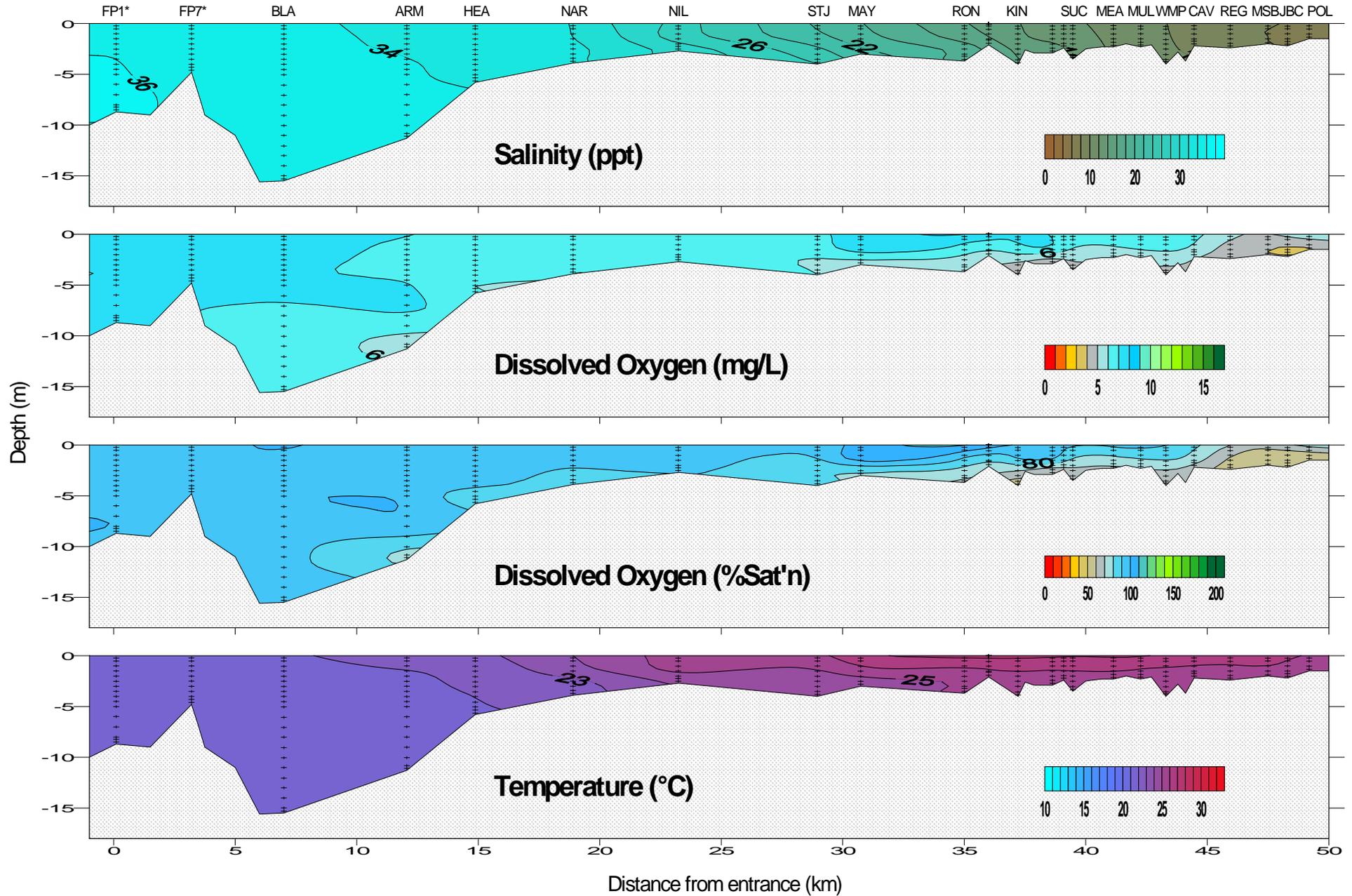
Upper Swan Estuary (BWR10 to POL): The Upper Swan Estuary was brackish throughout. Surface water was mostly well oxygenated over oxygenated bottom water with the exception of low oxygen bottom water at KIN, REG, JBC and POL. Water temperature ranged from 25.3 to 27.3 °C.

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 - 14th December 2015



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