



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

by
Water Science Branch, Department of Water

Date: Monday 13th July 2015

Weather & tide conditions: Conditions were fine with 50 to 95% cloud cover and a south easterly to north easterly breeze of up to 5 knots. The predicted tides at Guildford were 1.17 m (high tide) at 09:38 and 0.69 m (low tide) at 20:35. Perth recorded 16.2 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 saline and well oxygenated throughout with the exception of oxygenated bottom water at HEA and NAR. Water temperature ranged from 13.5 to 16.9 °C.

Middle Swan Estuary (NIL to RON): The Middle Swan Estuary was saline throughout at NIL, then brackish on the surface and saline on the bottom at all other sites. Surface water was well oxygenated at all sites. Bottom water was well oxygenated at NIL, then low in oxygen at the other sites. Water temperature ranged from 13.4 to 17.3 °C.

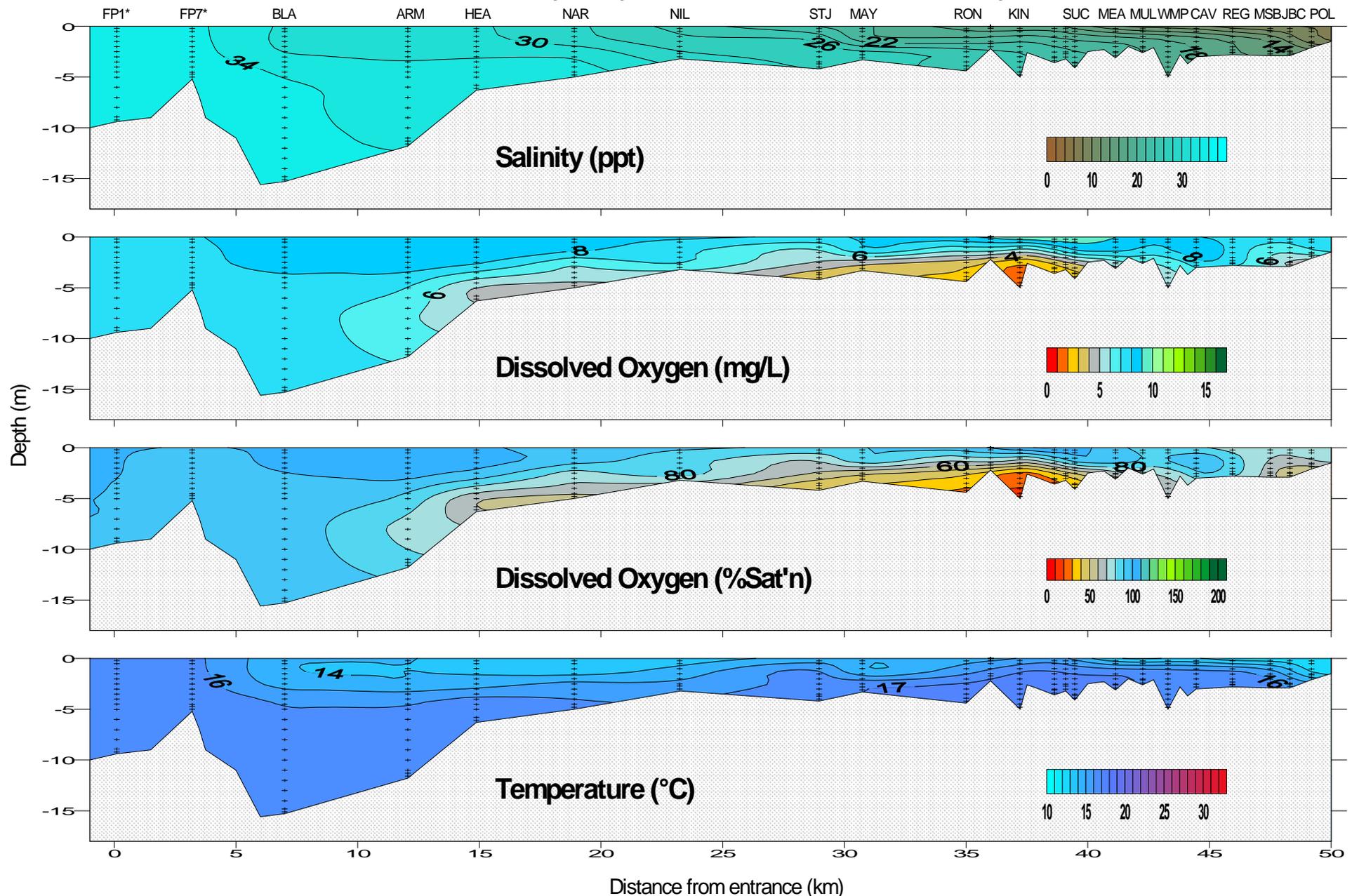
Upper Swan Estuary (BWR10 to POL): The Upper Swan Estuary was brackish throughout. Surface water was well oxygenated at all sites, while bottom water was oxygenated at BWR10, hypoxic at KIN and KMO, low in oxygen at SUC at MEA, then oxygenated to well oxygenated from MEA to POL. Water temperature ranged from 12.3 to 17.9 °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 - 13th July 2015



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