



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

**by
Water Science Branch, Department of Water**

Date: Monday 29th June 2015

Weather & tide conditions: Conditions were fine with up to 5% cloud cover and a north westerly to north easterly breeze of up to 3 knots. The predicted tides at Guildford were 1.20 m (high tide) at 09:44 and 0.76 m (low tide) at 20:10. Perth recorded 0 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 NAR. Water temperature ranged from 14.3 to 17.5 °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 oxygenated at NIL, then low in oxygen at the other sites. Water temperature ranged from 15.1 to 16.9 °C.

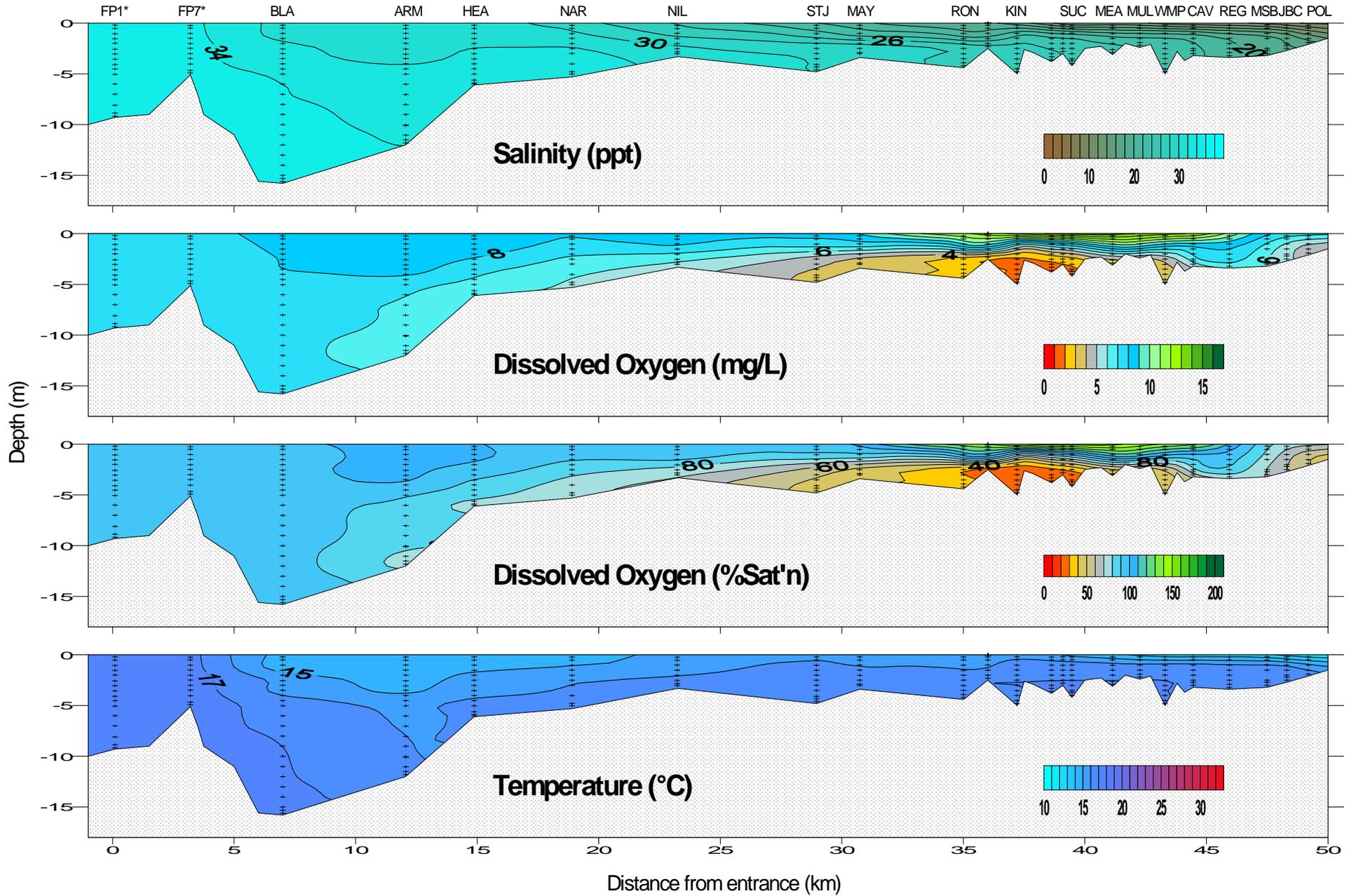
Upper Swan Estuary (BWR10 to POL): The Upper Swan Estuary was brackish on the surface over saline bottom water from BWR10 to SUC, then brackish throughout from MEA to POL. Surface water was well oxygenated at all sites. Bottom water was low in oxygen at BWR10, VIT, WMP and POL, hypoxic at KIN, KMO and SUC, and oxygenated to well oxygenated at the other sites. Water temperature ranged from 12.2 to 17.1 °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 - 29th June 2015



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