



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

by
Water Science Branch, Department of Water

Date: Monday 7th September 2015

Weather & tide conditions: Conditions were fine with up to 0% cloud cover and a south easterly breeze of up to 2 knots. The predicted tides at Guildford were 0.93 m (high tide) at 06:06 and 0.59 m (low tide) at 18:13. Perth recorded 14.6 mm of rainfall during the week prior to sampling (Bureau of Meteorology).

Oxygenation: The Guildford oxygenation plant was operational the week prior to sampling. The Caversham oxygenation plant was not operational the week prior to sampling as it was decommissioned for compound works.

Lower Swan/Canning Estuary (FP1 to NAR): The Lower Swan Estuary was saline and hypersaline from FP1 to BLA, and brackish over saline at ARM to NAR. Water was well oxygenated and oxygenated throughout FP1 to ARM and well oxygenated over low oxygen at HEA and NAR. Water temperature ranged from 15.7 to 17.6 °C.

Middle Swan Estuary (NIL to RON): The Middle Swan Estuary was brackish throughout all sites. Surface water was well oxygenated at all sites, while bottom water was oxygenated at NIL, low in oxygen at STJ and MAY, and well oxygenated RON. Water temperature ranged from 16.2 to 18.3 °C.

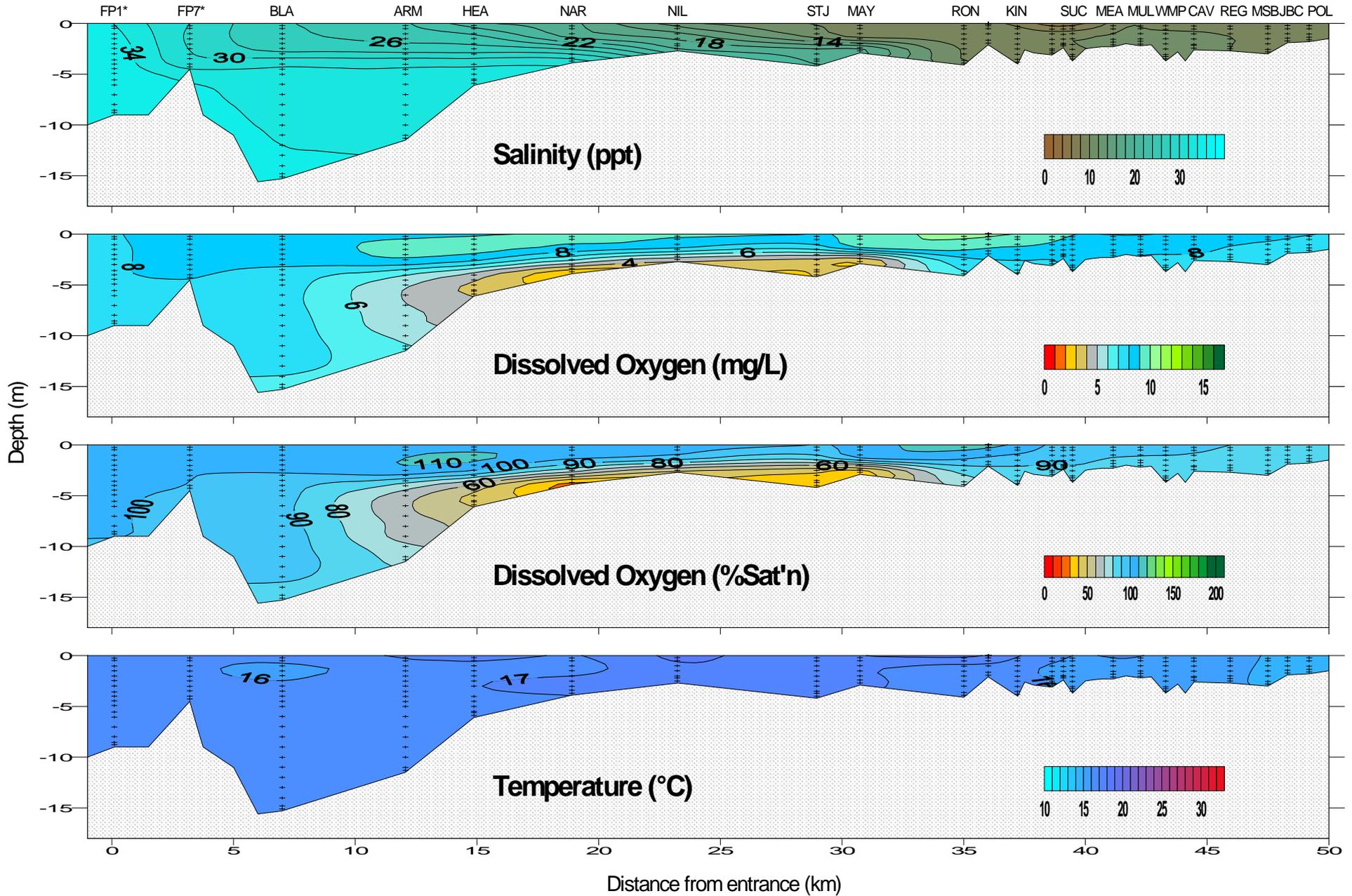
Upper Swan Estuary (BWR10 to POL): The Upper Swan Estuary was brackish and well oxygenated throughout all sites, with the exception of fresh surface water at VIT and SUC. Water temperature ranged from 14.5 to 18.2 °C.

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 - 7th September 2015



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