



Environmental Monitoring and Reporting Swan River Estuary ~ Weekly profile

by
Water Science Branch, Department of Water

Date: Monday 5th September 2016

Weather & tide conditions: Conditions were fine with 0% cloud cover and a predominantly south westerly breeze of up to 8 knots. The predicted tides at Guildford were 0.86 m (high tide) at 01:37 and 0.70 m (low tide) at 07:28. Perth recorded 11.6 mm of rainfall during the week prior to sampling (Bureau of Meteorology).

Oxygenation: The Caversham oxygenation plant was operational the week prior to sampling, while the Guildford oxygenation plant was not operational.

Lower Swan/Canning Estuary (FP1 to NAR): The Lower Swan Estuary was saline over hyper saline at FP1 and there was brackish surface water over saline bottom water at FP7 to NAR. Water was mostly well oxygenated with oxygenated bottom water at BLA, low oxygen bottom water at HEA and ARM and hypoxic bottom water at NAR. Water temperature ranged from 15.4 to 16.4 °C.

Middle Swan Estuary (NIL to MAY): The Middle Swan Estuary was brackish and well oxygenated throughout all sites. Water temperature ranged from 14.6 to 15.9 °C.

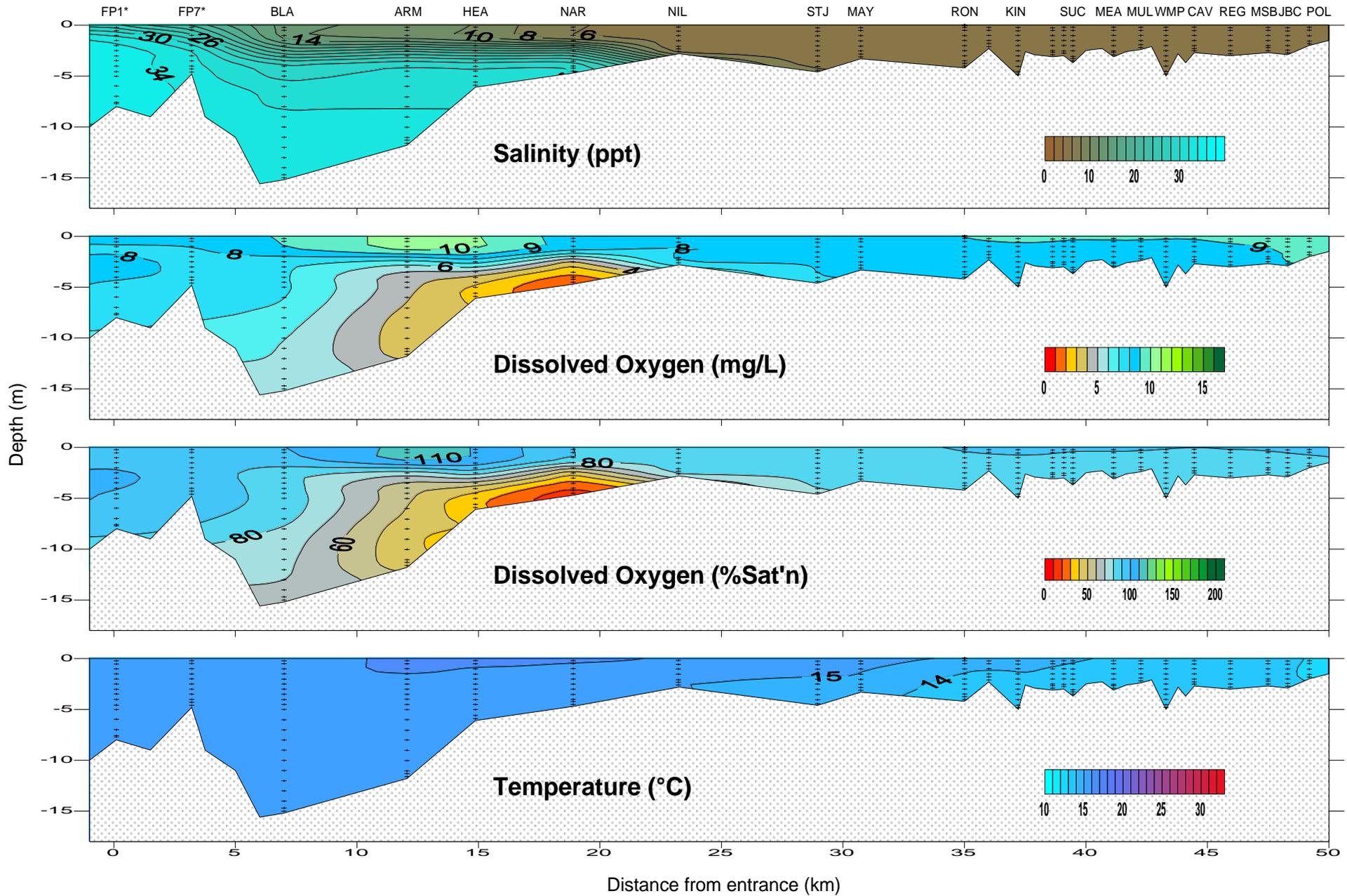
Upper Swan Estuary (RON to POL): The Upper Swan Estuary was brackish and well oxygenated throughout all sites with the exception of fresh surface water at BWR10 and KMO. Water temperature ranged from 12.9 to 14.9 °C.

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 - 5th September 2016



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