



Environmental Monitoring and Reporting Swan River Estuary ~ Weekly profile

by

Water Science Branch, Department of Water and Environmental Regulation

Date: Monday 4th September 2017

Weather & tide conditions: Conditions were fine with up to 60% cloud cover and an east to south easterly breeze of up to 12 knots. The predicted tides at Guildford were 1.01 m (high tide) at 10:27 and 0.66 m (low tide) at 19:43. Perth recorded 18.2 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.

Lower Swan/Canning Estuary (FP1 to NAR): The Lower Swan Estuary was saline over hypersaline at FP1 and FP7 and brackish over saline at BLA to NAR. Water was mostly well oxygenated with the exception of oxygenated bottom water at BLA and ARM and low oxygen bottom water at HEA and NAR. Water temperature ranged from 15.4 to 17.0 °C.

Middle Swan Estuary (NIL to RON): The Middle Swan Estuary was fresh and well oxygenated throughout all sites. Water temperature ranged from 14.3 to 16.5 °C.

Upper Swan Estuary (BWR10 to POL): The Upper Swan Estuary was fresh and well oxygenated throughout all sites. Water temperature ranged from 13.6 to 15.4 °C.

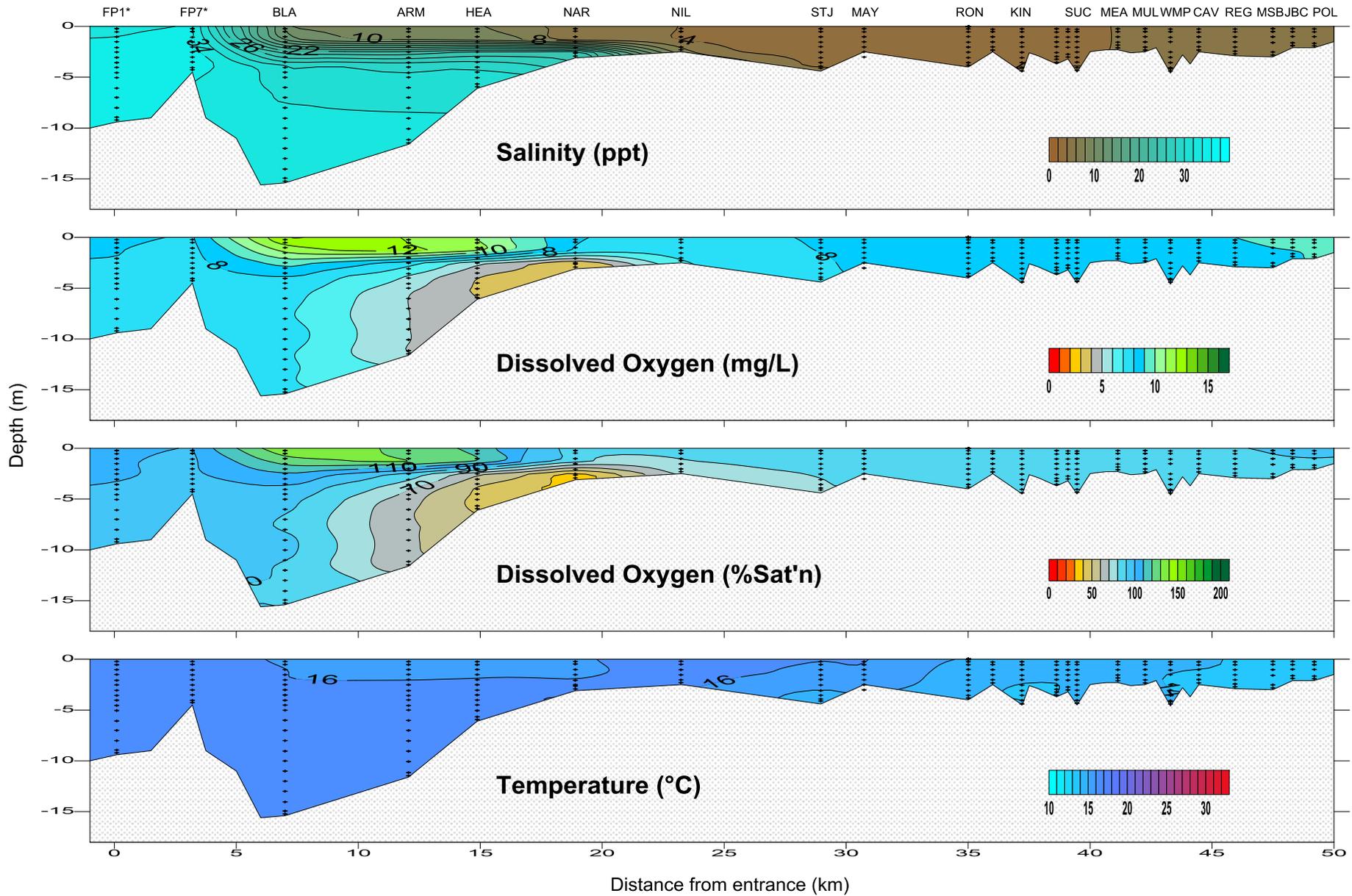
Definitions:

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 - 4th September 2017

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