



Environmental Monitoring and Reporting Swan River Estuary ~ Weekly profile

by

Water Science Branch, Department of Water and Environmental Regulation

Date: Monday 11th December 2017

Weather & tide conditions: Conditions were fine with up to 60% cloud cover and a predominantly east north easterly breeze of up to 6 knots. The predicted tides at Guildford were 0.64 m (low tide) at 10:52 and 0.86 m (high tide) at 22:13. Perth recorded 0 mm of rainfall during the week prior to sampling (Bureau of Meteorology).

Oxygenation: The Guildford oxygenation plant was operational up to the 8th December in the week prior to sampling, while the Caversham oxygenation plant was not operational.

Lower Swan/Canning Estuary (FPI to NAR): The Lower Swan Estuary was hyper saline to saline throughout. Water was well oxygenated to oxygenated at all sites. Water temperature ranged from 21.7 to 26.6 °C.

Middle Swan Estuary (NIL to RON): The Middle Swan Estuary was brackish on the surface over saline bottom water from NIL to MAY and brackish at RON. Surface water was well oxygenated at all sites while bottom water was oxygenated at NIL, low in oxygen at STJ and MAY and hypoxic at RON. Water temperature ranged from 25.3 to 29.8 °C.

Upper Swan Estuary (BWR10 to POL): The Upper Swan Estuary was brackish throughout. Water was well oxygenated to oxygenated on the surface at all sites while bottom water was hypoxic from BWR10 to VIT, from MEA to MULB FARM and at CAV, near anoxic at SUC and WMP and low in oxygen from REG to POL. Water temperature ranged from 25.1 to 29.9 °C.

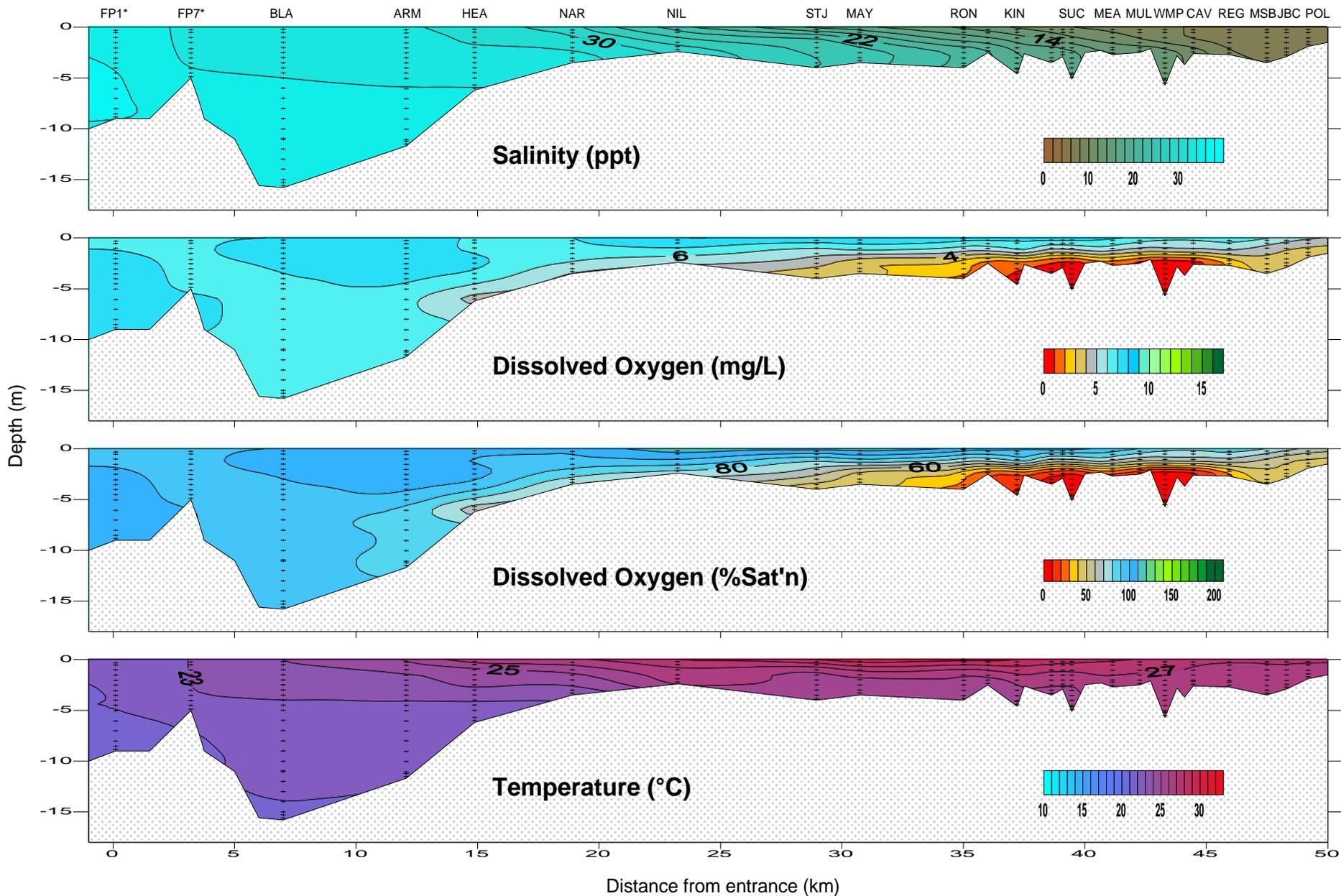
Definitions:

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 - 11th December 2017

Prepared by Water Science Branch, Department of Water and Environmental Regulation



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