



Environmental Monitoring and Reporting Swan River Estuary ~ Weekly profile

by

Aquatic Science Branch, Department of Water and Environmental Regulation

Date: Monday 6th August 2018

Weather & tide conditions: Conditions were overcast with up to 95% cloud cover and a predominantly north-easterly breeze of up to 2 knots. The predicted tides at Guildford were 1.04 m (high tide) at 07:03 and 0.70 m (low tide) at 18:59. Perth recorded 80.2 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 operational.

Lower Swan/Canning Estuary (FP1 to NAR): The Lower Swan Estuary was brackish on the Surface from FP1 to BLA, while bottom water hypersaline at FP1 and saline at BLA. Surface water was fresh from ARM to NAR, while bottom water was saline at ARM, brackish at HEA and fresh at NAR. Water was well oxygenated to oxygenated throughout all sites. Water temperature ranged from 13.1 to 17.0 °C. Due to strong flows it was only possible to obtain the surface profile at FP7 and STJ.

Middle Swan Estuary (NIL to MAY): The Middle Swan Estuary was fresh throughout. Water was well oxygenated at all sites. Water temperature ranged from 12.8 to 13.2 °C.

Upper Swan Estuary (BWR10 to POL): Due to flood conditions and strong flows it was not possible to sample the upper Swan from POL to RON.

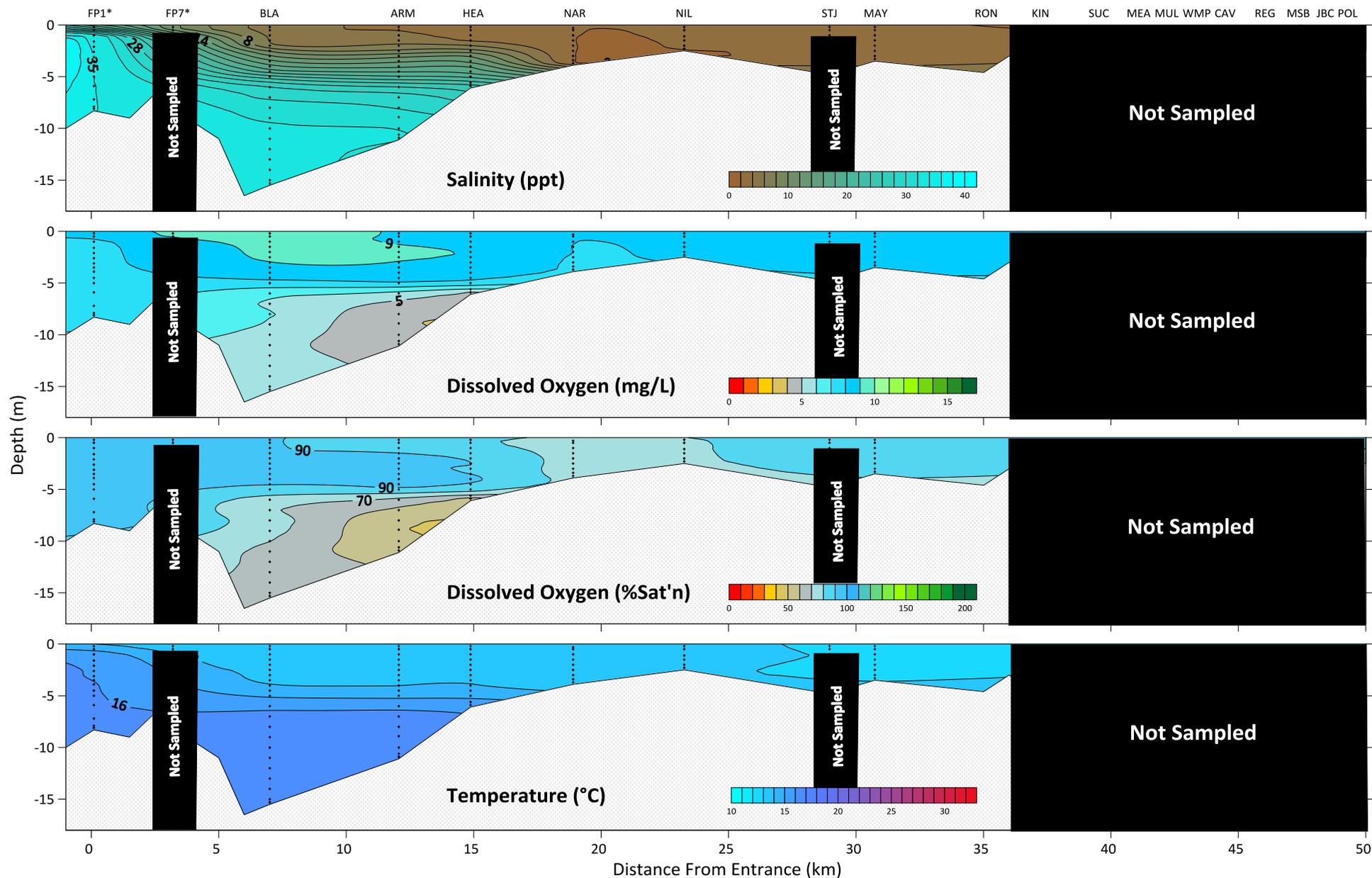
Definitions:

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 - 6th August 2018

Prepared by Aquatic 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