



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

by  
**Water Science Branch, Department of Water**

Date: Monday 12<sup>th</sup> September 2016

Swan run: BLA (08:35) upstream to MAY (11:05) on the Kwilana. Crew of Julian Madaschi, Andrew Sayce, Vaughan Smith and Rainer Kellen. The YSI 6600 V2 #4 was used and there were no problems with the equipment.

Upperswan run: POL (09:20) downstream to RON (12:50) on the Kepa. Crew of Katherine Bennett, Tayla Parnham and Digby Veling. The YSI 6600 V2 #3 was used and there were no problems with the equipment.

Weather & tide conditions: Conditions were fine with up to 60% cloud cover and a predominantly north easterly breeze of up to 17 knots. The predicted tides at Guildford were 0.94 m (high tide) at 07:48 and 0.61 m (low tide) at 18:02. Perth recorded 12 mm of rainfall during the week prior to sampling (Bureau of Meteorology).

Additional samples: No additional samples were collected.

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

Lower Swan/Canning Estuary (BLA to NAR): The Lower Swan Estuary was brackish over saline throughout. Water was mostly well oxygenated with low oxygen bottom water at HEA and ARM and hypoxic bottom water at NAR. Water temperature ranged from 14.4 to 15.9 °C.

Middle Swan Estuary (NIL to MAY): The Middle Swan Estuary was fresh and well oxygenated throughout, with the exception of brackish bottom water at NIL. Water temperature ranged from 14.1 to 15.5 °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 KIN, KMO and JBC. Water temperature ranged from 13.0 to 14.5 °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 - 12th September 2016

