Department of Parks and Wildlife

SWAN CANNING RIVERPARK

Environmental Monitoring and Reporting

Canning River Estuary ~ Weekly profile

by
Water Science Branch, Department of Water

Date: Tuesday 7th February 2017

Canning Estuary run: SCB2 (08:27) upstream to CASMID (10:05) on the Trekker. Crew of Rebecca Firth and Nathan Phelps. The YSI 6600 V2 #3 was used and there were no problems with the equipment.

Lower Canning run: ELL (08:20) downstream to KEN (09:52) on the Kepa. Crew of Amanda Page and Vaughan Smith. The YSI 6600 V2 #1 was used and there were no problems with the equipment.

Weather & tide conditions: Conditions were fine with up to 90% cloud cover and an east south easterly breeze of up to 2 knots. The tide was flooding during the sampling period and water was flowing over the Kent St weir boards. Perth recorded 2.8 mm of rainfall during the week prior to the morning of sampling (Bureau of Meteorology).

Additional samples: No additional samples were taken.

Oxygenation: Nicholson Road and Bacon Street oxygenation plants were operational the week prior to sampling.

Canning Estuary (downstream of Kent St Weir): The Canning Estuary was mostly saline throughout with the exception of brackish surface water at RIV and CASMID. Water was well oxygenated to oxygenated throughout all sites with the exception of hypoxic bottom water at CASMID. Water temperature ranged from 24.9 to 28.8 °C.

Lower Canning River (upstream of Kent St Weir): The Lower Canning River was fresh throughout all sites. Surface water was well oxygenated to oxygenated at all sites. Bottom water was well oxygenated to oxygenated at most sites with the exception of low oxygen bottom water at GRE, KS7 and ELL and low oxygen to hypoxic bottom water at PAC. Water temperature ranged from 22.9 to 26.5 °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

Canning River Estuary - Physical-chemical Profile - 7th February 2017