

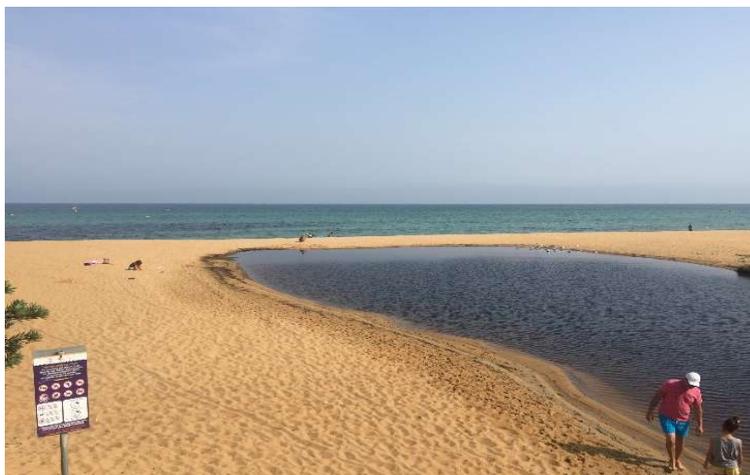
EstuaryWatch Report

January 2020

Bruce Ferres

EstuaryWatch measurements and observations were made by Bruce Ferres and Jan Jones on Sunday 19 January.

After the dynamic and constantly changing estuarine conditions experienced in late Spring and early summer Balcombe Estuary has now entered a typically stable summer phase. The sandy berm is well established and since Christmas has resisted all attempts, both natural and artificial, at a breakthrough.



The current sandy berm is over 16 m wide. Estuary waters remain perched above the bay waters even at high tide.

This means that the estuary waters trapped in the basin have backed up causing some minor flooding and have become warmer than the average 19 degrees being recorded for Port Phillip Bay. Water is now lapping just below the rotunda jetty surface.



The estuary water level is just below the rotunda jetty. January 19, 2020.

Unfortunately the YSI 2030 multi meter used for measuring a range of parameters has been malfunctioning for some months. It has not been possible to accurately record dissolved oxygen levels since last October and this month the probe that measures salinity refused to calibrate and work satisfactorily. Melbourne Water has been contacted about this latest problem. We have requested a thorough servicing of the meter or its replacement with a new one as a matter of urgency as the quality of our longer-term data sets are now being compromised.

Although difficulties have been experienced with some measurements the turbidity and pH (acidity) tests have continued and show, that at least in respect of these two measures, the estuary is currently in good health. All test stations returned turbidity results of <10 NTU. This is an excellent result given that the entrance has remained closed this month and that still, warmer waters can sometimes become clouded due to increased algal decomposition.

MPSC has confirmed that the \$150,000 set aside in the 2018 budget is still available for the construction of a Gross Pollutant Trap (GPT) for the Henley Avenue outfall drain. Peter McMahon and Bruce Ferres will be meeting on-site with council officers early in February to inspect the sediment deposits and discuss this project further. MPSC is seeking further funding from Melbourne Water for this project. Even if constructed the key to the success of an effective GPT lies in constant maintenance and so on-going resourcing will be required.

Our thanks to Helen Carroll and George Murley for their continued assistance with EstuaryWatch.