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Determine of the total suspended sediment during the neap tide a
Tok Bali Lagoon,Kelantan / Nurul Nadhra Sulaiman.

DETERMINATION OF THE TOTAL SUSPENDED SEDIMENT DURING THE NEAP TIDE AT TOK BALI LAGOON, KELANTAN

By

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LIST OF ABBREVIATIONS

kg/hr	-	kilograms per hour
kg/min	-	kilograms per minute
kg/s	-	kilograms per second
m	-	meter
m/s	-	meter per second
TSS	-	Total suspended solid

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ABSTRACT

The transport of sediment via a lagoon channel during neap tide were studied for the month of July 2005. Water is sampled at 15 minutes intervals for 7 hours. Result shows that the amount of sediment vary between every hours. Nevertheless for the 7 hours sampling there were a net import of sediment into the lagoon in amount from 0.35 kg/hr – 1.56 kg/hr. The ebb tide sediment fluxes were more higher than the flood tide fluxes. Floods tide transport between 0.35 kg/hr – 0.71 kg/hr of suspended sediment within every one hour, while ebb tides transport between 0.52 kg/hr – 1.57 kg/hr resulting the net import and export of suspended sediment. Tidal current velocity was stronger during the ebb tide (average 0.13 m/s) compared to during flood tide (average 0.11 m/s). The amount of suspended sediment was found to be higher with increasing current velocity.

ABSTRAK

Pengukuran jumlah enapan terampai yang masuk melalui alur ke kawasan lagun semasa pasang surut anak telah dikaji pada bulan Julai 2005. Sampel air telah diambil bagi mendapatkan nilai enapan yang terampai pada setiap 15 minit selama 7 jam. Keputusan yang diperolehi mendapati jumlah enapan adalah berbeza bagi setiap jam. Jumlah enapan yang masuk ke dalam kawasan lagun adalah diantara 0.35 kg/hr – 1.56 kg/hr. Jumlah enapan yang masuk pada fasa surut adalah lebih tinggi berbanding fasa pasang. Semasa air pasang, jumlah enapan yang masuk adalah di antara 0.35 kg/hr – 0.71 kg/hr manakala semasa air surut, jumlah enapan yang keluar adalah di antara 0.52 kg/hr – 1.57 kg/hr. Halaju arus semasa surut adalah lebih tinggi (purata 0.13 m/s) berbanding semasa air pasang (purata 0.11 m/s). Jumlah enapan terampai di dapati meningkat dengan peningkatan nilai halaju arus.