

ABSTRACT

BANDARSYAH WAHID SINULINGGA. Sedimentation Rate in the Rancong Beach Area, East Batuphat Village, Muara Satu sub-district, Lhokseumawe City. Hosted by YUDHO ANDIKA and IMANULLAH.

Sedimentation is the process of depositing material from rock that is transported by seawater currents. Sedimentation can result in siltation which interferes with cleanliness, the comfort of beach tourism and the safety of boat lanes. To maintain sedimentation on a beach, accurate sedimentation rate data is needed to determine the siltation. Therefore an important analysis is carried out to determine the value of the sedimentation rate including sediment characteristics and oceanographic factors for the sedimentation process. This research was conducted using a survey method by determining the sampling points by purposive sampling. Sediment data collection was carried out using a sediment trap. Placement of sediment traps placed at 5 stations. Current and tide data are taken daily. Based on the results of the study, it was found that the sedimentation rate was between 5.70-9.33 gr/cm³/day with the characteristics of the predominant sediment at each station varying, stations 5 and 1 were dominated by very hard sand, station 2 was dominated by slightly coarse sand, station 3 is dominated by coarse sand and station 4 is dominated by fine sand. The average current speed ranges from 0.10-0.13 m/s. The highest tide occurred on the second day at 12.23 WIB with a water level of 268 cm, while the lowest low tide occurred on the first day at 18.10 WIB with a water level of 88 cm.

Keywords: Beach, Currents, Sedimentation, Sediment Characteristics, Tides

