

Assessing of water quality and sedimentation problems in Lata Sungai Limau, Malaysia

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ABSTRACT

Sedimentation problem and water quality deterioration are the occurrences happened along the river basin especially at main river basin in Malaysia. The main objective of this study to review the sedimentation problems and water quality deterioration level in the Lata Sungai Limau, Terengganu, Malaysia. 11 sampling stations were chosen from upstream until downstream. There are four mains contributed in this study such as water quality parameters, distribution of sediment grain size, concentration of total suspended solids (TSS) and river discharge (Q) respectively. From leave-one-out method showed chemical oxygen demand and TSS are the most importance water quality variables with river discharge (Q). The formation of sediment load per day falls between 53.540 kg/d (Station 2) and 1,164.394 kg/d (Station 5) for all sampling stations contributed. The result showed the sizes of sediment recorded phi -0.011 and phi 0.768 with very rough particle sizes which are between phi 1.00 and phi 0.00. All parties involved need to take responsibility and be more aware to environmental deterioration and awareness. This research conducted to enlighten the public about the importance of the environment, especially river basins.

Keywords: Sedimentation; water quality deterioration; Lata Sungai Limau; suspended sediment; leave-one-out method

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