

Abstrak

Sungai Cibeet merupakan anak Sungai Citarum. Panjang Sungai Cibeet 101km dengan hulu berada di Gunung Lemo dan hilir di Sungai Citarum. Sungai ini membawa sedimen ke Sungai Citarum dan salah satu penyumbang sedimen terbesar ke Sungai Citarum. Penelitian Angkutan sedimen Sungai Cibeet dibatasi hanya pada sedimen dasar. Penelitian angkutan sedimen dilakukan dengan pengujian laboratorium dan perhitungan dengan HEC-RAS. Pengujian laboratorium dilakukan dengan alat circular flume. Pada HEC-RAS, metode yang digunakan adalah Engelund-Hansen, Meyer-Peter and Muller, dan Yang. Hasil angkutan sedimen dengan metode Meyer-Peter and Muller paling mendekati dengan hasil pengujian laboratorium. Perbedaan rata-rata yang didapat antara 24,54 % hingga 50,25 % tergantung pada debit alirannya.

Kata Kunci: *Sungai Cibeet, Angkutan Sedimen Dasar, HEC-RAS*

Abstract

Cibeet River is a tributary river of the Citarum River. Length of the Cibeet River is 101km with its upstream located on Lemo Mountain and downstream on the Citarum River. This river carries sediment to the Citarum River and is one of the largest supplier of sediment to the Citarum River. Research The Cibeet River sediment transport is only bedload sediment transport. Sediment transport research is carried out by laboratory testing and calculation by HEC-RAS. Laboratory testing is carried out with a circular flume. At HEC-RAS, the method used is Engelund-Hansen, Meyer-Peter and Muller, and Yang. The results of sediment transport with the Meyer-Peter and Muller method are the closest to the results of laboratory testing, between 24.54 % to 50.25 % depends on the flow of water.

Keywords: *Cibeet River, Bedload Sediment Transport, HEC-RAS*