

**STUDY ON SOIL EROSION PROPERTIES AND RATE AT SUNGAI
JEMBERAU, TASIK CHINI.**

MUHAMMAD FIRDAUS BIN MUHAMMAD ASRI

AA 13036

**A Final Year Project submitted in partial fulfillment of the requirements for the
award of the degree of Bachelor of Civil Engineering (Hons)**

Faculty of Civil Engineering & Earth Resources

UNIVERSITI MALAYSIA PAHANG

JUNE 2017

ABSTRACT

A study on soil erosion properties and rate at Sungai Jemberau, Tasik Chini. In order to determine the rate of erosion on three type of land surface and their soil properties, several related were soil testing conducted in the Geotechnical Laboratory, UMP. Testing that involved are a particle size distribution and moisture content that were carried out in classify properties of the soil sample. The soil trap area is well graded sand with Cu > 4. The riverside and in the river area also is well graded sand with Cu > 4. The moisture content for riverside and in the river surface are 17.52 and 27.43 respectively. The Revised Universal Soil Loss Equation (RUSLE) to predict the average annual soil loss rate at Sungai Jemberau, Tasik Chini. The result indicates that the average annual soil loss (A) for soil loss measured from soil trap to 7 days start from 23 december 2017 to 29 december 2017 is 9.26×10^{-6} g/m²/day.

ABSTRAK

Satu kajian ke atas sifat-sifat tanah dan kadar hakisan tanah di Sungai Jemberau, Tasik Chini. Dalam usaha untuk menentukan kadar hakisan pada tiga jenis permukaan tanah dan harta tanah mereka, beberapa berkaitan adalah ujian tanah yang dijalankan di Makmal Geoteknik, UMP. Ujian yang terlibat ialah taburan saiz zarah dan kandungan lembapan yang telah dijalankan di hartanah Kelaskan sampel tanah. Kawasan perangkap tanah baik digred pasir dengan Cu> 4. tepi sungai itu dan di kawasan sungai juga adalah baik pasir gred dengan Cu> 4. Kandungan kelembapan untuk tepi sungai dan di permukaan sungai adalah 17.52 dan 27.43 masing-masing. Semakan Kehilangan Tanah Universal Persamaan (RUSLE) untuk meramalkan setahun kadar kehilangan tanah di Sungai Jemberau, Tasik Chini. Hasil kajian telah menunjukkan bahawa purata kehilangan tanah tahunan (A) untuk kehilangan tanah diukur dari perangkap tanah untuk 7 hari bermula dari 23 Disember 2017 hingga 29 Disember 2017 adalah $9.26 \times 10^{-6} \text{ g / m}^2 / \text{hari}$.