Two Dimensional Finite Element Modelto Calculate the Influence of Channel Width Variation in Alluvial Channels on Bed Transport Capacity With Constant Value of Manning Coefficient

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Abstract

The effect of change of channel width on bed load and transport load of sedimentation for given discharge are studied. The transport load is a mathematical function of change in channel width . The phenomena of transport load of sedimentation in a meandering alluvial channels are significant problems in river engineering and important factor that effects on the works of river control . The finite element model is developed to determine the effect of change of channel width on bed load capacity to (2.5 km) length of the Euphrates river within hit city used value of manning roughness is (0.028). Calculated the optimum width actualized maximum transport capacity .