

عنوان مقاله:

Flow Pattern and Delta Characteristics in a Dam Reservoir

محل انتشار:

چهارمین کنفرانس بینالمللی رفتار بلندمدت و فنآوریهای نوسازی سازگار با محیط زیست سدها (سال: 1396)

تعداد صفحات اصل مقاله: 10

نویسندگان:

.kazem gomar - PhD Student, Civil and Environmental Engineering Department, Tarbiat Modares University

.masoud ghodsian - Professor, Water Research Institute, Tarbiat Modares University

.seyed ali ayuobzadeh - Professor, Water Research Institute, Tarbiat Modares University

خلاصه مقاله:

Floods, with huge amount of water and sediment, play an important role in deposition and distribution of sediment in reservoirs. In this paper, the flow pattern and characteristics of delta in a reservoir are experimentally studied using steady and unsteady flows of water and sediment. The experiments were carried out using triangular and trapezoidal hydrographs. The bed load sediment particles were deposited in the reservoir mouth forming a delta. Investigating the flow pattern revealed that, in spite of the full symmetry in geometry and hydraulic conditions of upstream flow, the flow in the reservoir was asymmetric. It was found that although the characteristics of delta depend on the flow pattern, but the flow pattern may be in turn affected by the sedimentation. Sedimentation lead to formation of unstable flow due to fluctuation in flow direction in the reservoir. The specification of delta including: deviation of delta, its length and shape .was also addressed in this paper. An exponential equation was developed to predict the length of delta

کلمات کلیدی: Flow Pattern, Sedimentation, Reservoir, Flood Flow, Unsteady Flow

لینک ثابت مقاله در پایگاه سیویلیکا:

https://civilica.com/doc/680140

