

SEDIMENT TRANSPORT PROCESSES DURING A FLUSHING EVENT OF A UN-OFF RIVER PLANT IN AUSTRIA

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The run-off river power station Bodendorf is the head storage of the upstream first series of power stations at the river Mur. The mean annual sedimentation rate for this reservoir is about 40.000 m³. Since 1994 flushings with drawdown are undertaken at regular intervals. An initial channel and groins at the beginning of the reservoir were installed in 2003 for enhancing the efficiency of the flushings. In June 2004 a flushing was carried out which was supervised by the Department of Hydraulic Engineering and Water Resources Management. Echo sounder surveyings before and after the flushing, measurements of suspended sediment concentration, bed load transport and hydraulic gauging were done (1) to determine a sediment balance of the flushing event, (2) to evaluate the effects of the groins and the initial channel and finally (3) to get data for numerical modelling concerning hydraulics and sediment of the flushing events. The purpose of this work, which was performed for the Interreg IIIb Project ALPRESERV (www.alpreserv.org), is an improvement of the flushing management at run-off river plants.