

Cycle de conférences LCH



Annonce de conférence Lundi 20.01.2014 à 17:15, GC C30 (génie civil)

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Driftwood: Risk analysis and engineering measures

Transported driftwood during floods may lead to accumulations and blockages at river bridges or weirs and can result in excessive scour or an increase in backwater that may lead to flooding of the nearby areas. Although driftwood related problems occur predominantly in forested mountainous regions, driftwood may eventually reach densely populated lowland areas.



Figure 1: Driftwood accumulation at Weir Perlen during 2005 Flood event (Photo: Swiss Air Force)

Therefore, this presentation gives an overview on driftwood risk analysis and retention measures in large Alpine rivers. Several methods on how to determine the potential driftwood volume for a given catchment area are presented, including a driftwood transport diagram that indicates how much driftwood is expected at a certain location along the river.

Furthermore, methods on how to determine the likelihood of driftwood blockage at river bridges are presented in order to identify endangered structures prior to a flood. Finally, new driftwood retention structures for large Alpine rivers are presented, where the driftwood is retained in a bypass channel next to the main river.

La conférence sera donnée en anglais. Durée env. 45 minutes, suivie d'une discussion.

Prof. Dr Anton SCHLEISS