

Influence of the head shape on open-channel flow behaviour along groyne arrangements: numerical analysis

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The adequate maintenance of these hydraulic structures plays a vital role in order to fulfil the previously mentioned objectives.

The mismanagement of our natural resources can derive on the malfunctioning of the river training infrastructure. In contradiction, a proper management can add an extra value to the training structures and their objectives.

Fig. above: Groyne in the river *San* in Poland after the flood wave of 2013.

Fig. below: Groyne in the Dutch *Waal*. Groynes can acquire additional recreational and architectural purposes.



Bed load transport





Sediments, step 0 Smooth Contour Fill (Mean) of Erosion (m).

Bed and suspended load transport





We (Natalia and Oscar – also the team of the department of hydraulic engineering of the Wrocław University of Science and Technology) invite you to check the poster and discuss for the details of our research (presented in the poster) as well as for the details of our R+D project (Enhancing the navigations conditions for the Odra River)



