Project "Cultural landscapes of mountain and highland river valleys" supported by a grant from Norway through the Norwegian Financial Mechanism in the framework of Polish-Norwegian Research Fund



# TWENTIETH-CENTURY CHANNEL CHANGES ON THE MIDDLE RABA RIVER AND POSSIBILITIES FOR THE RIVER RESTORATION

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#### **Presentation content**

Channel changes on the middle Raba River and their causes

Effects of the channel change: changes in flood hazard

Effects of the channel change: changes in the ecological state of the

Restoration measures proposed for the middle Raba

**Conclusions** 





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#### **Conclusions**

The middle Raba incised deeply during the 20th century in response to the straightening and narrowing of its channel in the course of channelization works which increased transport capacity of the river at the time of decreasing catchment sediment supply.

The increase in flood hazard to downstream river reach has been observed following the deep channel incision in the middle course of the Raba. With the simplification of physical habitat conditions caused by the river channelization, the Raba exhibits a moderate ecological state which needs to be improved in order to fulfil the requirements of the Water Framework Directive.





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## **Conclusions**

Allowing the river to develop its channel freely within a delimited corridor is postulated as a restoration measure aiming to reestablish the dynamic geomorphic equilibrium, to increase the retention of flood water in the floodplain areas and to improve the ecological integrity of the middle Raba.



