



## **800 years of watermills' operation on rivers of the Central and Northern Poland**

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Interdisciplinary research team composed of: a historian, ethnologist-conservation specialist, GIS software specialists, hydrologist and geomorphologist, take on the task of reconstruction of the cultural landscape of river valleys during the last 800 years.

The aim of the research is temporal and spatial reconstruction of changes in development degree of rivers within the lower Vistula river basin. Temporal scope of research covers the period since the beginning of the 13th century to the beginning of the 21st century. Author presents the environmental and economical causes of watermills location's diversity.

The study area comprises lower part of the Vistula river basin with a total area of about 39,500 sq km (20% of the total area of basin). The main source of research are cartographical and archival materials. Additionally there are conducted terrain studies (leveling, hydrometric measurements, inventory and catalog works of hydraulic structures). Its results will help to restore the size of the impoundment within the lower Vistula river basin over the last 800 years.

The analysis of the collected materials proves that the water of the rivers used to be dammed up every 2-3 kilometres. Studies led to the reconstruction of the location, size as well as time span of about 1500 watermills. Natural hydrographical systems were modified very often with complicated mill stream systems. Such a situation lasted throughout centuries, even when the mills ceased to exist.

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