



## **Evolution of canals system linking the Vistula, Dnieper and Neman basins**

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The aim of this study is to reconstruct landscape changes in the Polesie Region - one of the largest European swampy areas (Belarus), as a result of the creation and operation of a network of canals.

From the 16th century efforts were undertaken to connect the Polish areas located in the drainage basins of the Black Sea and Baltic Sea with canals. Already in 1631 the Polish Sejm (parliament) approved the project to build a canal linking the River Berezina (Dnieper basin) with the River Neris (Neman basin). However, the complicated political and economic situation of the country did not allow doing this.

Only in the second half of the 18th c. hetman Ogiński financed the construction of a canal linking the Dnieper and Neman basins. The canal connecting the River Szczara (Neman basin) with the River Jasiołda (Pripyat basin) was named after its creator – the Ogiński Canal.

At the same time the construction of the Królewski (Royal) Canal linking the River Muchavets (Vistula basin) and the River Pina (Pripyat basin) was under way. The construction of the canal was completed in 1783. The winding channels of the Pina and Muchavets were straightened, and the numerous canals feeding the waterway system drained vast area of marshes and wetlands of the Polesia Region. The last element that connects the catchments of the Vistula and Neman is the Augustów Canal built in the years 1825-1839 (linking the catchments of the Biebrza and Neman).

Numerous changes in political boundaries in the watershed area between the Black Sea and the Baltic Sea drainage basins caused the destruction of the hydraulic structures. All the analysed canals were completely destroyed during the two world wars. In the last 200 years the amount and type of locks and weirs has changed. For example, there were no weirs on the Royal Canal in the late 18th c., in the middle of the 19th c. there were 22 such structures, while now that number has gone down to 10.

All canals were created for economic reasons, i.e. of the need for floating of timber and food. Currently, in most cases they are tourist attractions only. Only the Królewski Canal, known as the Dnieper-Bug Canal, plays a very important transportation role in the economy of Belarus.

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