



## **Flood hazard and a rapidly growing capital in the floodplain: Social response on major 18th-century Danube floods in Pest (East-Budapest)**

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Due to its floodplain location, Pest was especially prone to damages caused by great flood events. Before water regulation works, the greatest flood events, and the highest rate of destruction occurred during ice jam floods. Whereas in the first half of the 18th century Pest is restricted to the medieval downtown located on a higher terrain (Danube terrace), from the mid 18th century onwards the rapidly growing population established suburbs around the downtown in the lower-lying flood plain. Thus, while in the first half of the century floods were more dangerous for the harvest in the agricultural lands, in the second half of the century at the same place suburbs, urban areas with thousands of inhabitants were prone to the same danger.

In the first half of the century at least three particularly large flood events, in 1712, 1732 and 1744, caused increasing problems in the close vicinity of the town (and its lands), the second half of the century - as part of a climatic anomaly (Maldá) famous of its weather extremes - was characterised by two extreme (in 1775 and 1799), at least two larger (1789 and 1795) and some more, medium-sized ice jam floods. While in terms of damaged houses the loss was only some dozens in the early part of the century, several hundreds of houses - actually, complete suburbs were erased by floods in 1775 and 1799.

In the poster presentation a series of known damaging 18th-century floods, occurred at Pest, is presented, the short-term impacts (e.g. damages), and medium-, long-term administrative responses as well as related long-term landscape changes influenced by floods and flood protection are discussed. Another important aim of the poster is to present the main reasons why in the 18th century these great ice jam floods caused much greater damages (e.g. percentage of collapsed houses in suburbs) in Pest protected by dams than, for example, in the Buda suburbs with no dams, partly also located in high flood-risk areas, in the immediate vicinity of the Danube.