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## APPLICATION OF NEW STRATEGIES IN FLOODS MANAGEMENT FOR BIG LOWLAND RIVERS IN SERBIA

R. S. Kolaković<sup>1</sup>, S. S. Kolaković<sup>2</sup>, S. Trajković<sup>3</sup>

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### ABSTRACT

Organized flood defense in the Pannonian Basin begins at the end of the 18<sup>th</sup> century, in fact with the opening of the first educational institution Institutum Geometricum et Hidrotehnicum (1782), which educating civilian engineers in Budapest. Basic strategy for defense against floods near big rivers (Danube, Tisa, Sava, Drava,...) was passive defence with building levees near river channel. This strategy is still applicable today, so over 1,600 km of levees with a height of 4-7 m has been built in Vojvodina. Development of new technology of laser scanning (LiDAR) created conditions for development of real DTM, applicable for 1D and 2D hydraulic models. These technologies have made it possible to develop new strategies for managing flood on big lowland rivers.

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<sup>1</sup> Kolaković R.S., Prof. Dr., Faculty of Technical Sciences in Novi Sad, Trg Dositeja Obradovića 6, Novi Sad, Serbia, e-mail: kolak@uns.ac.rs

<sup>2</sup> Kolaković S.S., Assist. Prof. Dr., Faculty of Technical Sciences in Novi Sad, Trg Dositeja Obradovića 6, Novi Sad, Serbia, e-mail: kolakovic.s@uns.ac.rs

<sup>3</sup> Trajković S., Prof. Dr., Faculty of Civil Engineering and Architecture - University of Niš, Aleksandra Medvedeva 14, Niš, e-mail: slavisa.trajkovic@gaf.ni.ac.rs