

## GEOLOGICAL CONDITIONS FOR THE CONSTRUCTION OF THE RIVER SPREČA'S BASIN REGULATION ON D. DOBOŠNICA-MIRIČINE

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*Spreča's depression belongs to neo-tectonic area of the Pannonian Basin, which was predisposed to Neotectonic movements of Alpine orogenesis. Morphologically and geotectonically complex area has arisen from differences of complex endogenic dynamics and geomorphologic processes. It is filled with Miocene and Pliocene-Quaternary sediments. On the north and northeast, depression is divided from Semberia and low Posavina by mountain horsts of Trebava and Majevisa. On the southwest, the depression is divided from valleys of the rivers of Bosna, Krivaja and Drinjača, by eroded mountain cliffs of Ozren, Konjuh and Javornik, and on the very east part, it is divided from the Drina Valley by fold and hill Snagovo in which the Spreča's source is situated.*

*The Spreča's bed in length of approximately 8.5 km on direction Donja Dobošnica-Miričina is unordered and its riversides are devastated and overgrown with very frequent meandering and devastation of coastal parts and frequent transgression as well. The whole observed trace is situated in Quaternary sediments made of sand, gravel, clay, sand clay and clayish gravel. Such sediments are subjected to processes of erosion, transport, devastation and meandering of the river's flow. In order to stop frequent transgression of the valley in which cultivated areas are situated and to prevent from further bed's devastation, the Spreča River's flow regulation has been estimated in the mentioned trace.*

*In this paper geological-tectonic structure has been elaborated in detail, then hydrogeological and engineering geological characteristics of the terrain in direction of Donja Dobošnica-Miričina. Detailed geologic map and characteristic profile has been done for the observed terrain.*

**Key words:** *Spreča River, bed, regulation, devastation, geological-tectonic structure, hydrogeology, engineering geological characteristics of the terrain*