



Water resources of the border regions of Vojvodina Province, Serbia, in the scope of WFD implementation

S.B. Marković (1), Z. Svirčev (2), S. Krstić (3), J. Plavša, F.F. Gaál (4)

(1) Chair of Physical Geography, Faculty of Natural Sciences, University of Novi Sad, Trg Dositeja Obradovića 3, 21000 Novi Sad, Serbia, (2) Department of Biology and Ecology, Faculty of Natural Sciences, University of Novi Sad, Trg Dositeja Obradovića 2, 21000 Novi Sad, Serbia, (3) Institute of Biology, Faculty of Natural Sciences, Skopje, Macedonia, (4) Department of Chemistry, Faculty of Natural Sciences, University of Novi Sad, Trg Dositeja Obradovića 3, 21000 Novi Sad, Serbia,

The Water Frame Directive (WFD) has been developed in a process of more than five years of discussions and negotiations between a wide range of experts, stakeholders and policy makers. This process has stressed the widespread agreement on key principles of modern water management resulting in an overall objective to reach good water quality status of European Union (EU) member countries by 2015. Being a non EU member country, Serbia has so far paid very little attention to WFD implementation and development. Nonetheless, having in mind the EU perspective of the country, but also the urgent need to prevent further deterioration of the water quality, Vojvodina Province has started the process as described in five parts corresponding to the sub-sections within WFD (Annex II Section 1), namely: 1. Characterisation of surface water body types; 2. Ecoregions and surface water body types; 3. Establishment of type-specific reference conditions for surface water body types; 4. Identification of pressures; and, 5. Assessment of impacts.

In this study we focus on northern sub-regions of the Autonomous Province of Vojvodina, Republic of Serbia. Thus, defined by border lines with Hungary and Romania and the Danube and Tamiš rivers, the investigated area covers 13,598 km² or 63.2 % of Vojvodina Province territory. Investigated area has a population of 1,357,199 inhabitants according to census in 2002, with average population density of nearly 100 persons/km². This area includes 29 municipalities and 255 settlements. It is a typical lowland area with uniform relief conditions and similar geological characteristics. Hy-

drological conditions in the investigated area provide the possibilities for a permanent exchange of the surface and ground waters. Continental climatic conditions caused a deficit in the water budget of investigated area. According to this, importance of transit surface waters is a crucial hydrological component in the investigated region. General characteristics of the surface and ground waters regime are determined by complex natural processes and human impact. Interdisciplinary investigation of water resources of this border area underline several main problems for successful implementation of WFD, development of River Basin Management (RBM) and Integrated Water Resources Management (IWRM) as flood risks, changes of the water regime and water quality.

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