

# POTENTIAL TRANSBOUNDARY GROUNDWATERS IN CROATIA

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Croatia has active regional cooperation - water management issues dealt with on the basis of bilateral agreements (with Hungary, Slovenia, and Bosnia-Herzegovina; agreements with Serbia and Monte Negro are being negotiated). General international cooperation is governed by the Convention on the Protection and Use of Transboundary Watercourses and International Lakes (Helsinki Convention, 1992) and the Protocol on Water and Health of the Helsinki Convention (2006). In the Black Sea Basin, international cooperation is regulated by the Convention on Cooperation for the Protection and Sustainable Use of the Danube River (Danube Convention, Sofia, 1994); Croatia is an active member of the International Commission for the Protection of the Danube River (ICPDR) and a member of the International Sava River Basin Commission. In the Adriatic Sea coastal region, Croatia is a party to various international treaties and agreements, particularly the Barcelona Convention and its six protocols. As a candidate country for the EU membership (2005), the Republic of Croatia has committed to cooperate with the European Commission and EU Member States in the area of water management. Current and future activities for Croatia is EU WFD implementation which also include sustainable management of such transboundary aquifers common approaches to prevent, control and reduce pollution, based on joint objectives and institutional frameworks with neighbours. Under way is also the preparation of river basin district management plans, analysis of potential transboundary aquifers, because Croatia must define them through bilateral cooperation with neighbouring countries; definition of transboundary water bodies and establishment of bilateral cooperation with neighbouring countries for harmonization of data on such aquifers. Croatia has potential transboundary aquifers with four neighbours Serbia, Hungary, Slovenia and Bosnia and Herzegovina. They are potential, because they must be clarified and defined through bilateral cooperation and agreement.

Groundwater represents about 90% of all abstracted water quantities for public water supply in the Republic of Croatia. The average population coverage with public water supply systems is 76%. In general, two aquifer types are present, as follows: (i) intergranular, in the Panonian region; and (ii) karstic, of secondary fracture-cavernous porosity, in the Dinarides. Groundwater from both areas is mainly of good quality. There are 128 municipal companies in Croatia with concessions for water supply, which use 407 groundwater abstraction sites of total capacity 22,741 l/s.