

DRINKING WATER PROTECTION ZONES – INTERNATIONAL PROSPECTIVE

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In the region of the European Union and neighbouring countries large part of drinking water is coming from the aquifers. Groundwater is usually stable water resource with high chemical and quantitative status which is suitable as drinking water resource. In spite of these natural prerequisites groundwater as a drinking water resource must be protected to prevent its deterioration from various anthropogenic influences. Usual practice for the protection of drinking water resources is establishment of drinking water protection zones which are also referred as drinking water safeguard zones. They are defined as zones defined within the space of the recharge zones with different protection regimes. Among countries and states in Europe different practices in establishing drinking water protection zones exist; they are differing according to the established practices as well as national legislation.

In the lecture analysis of the implementation of the drinking water protection zones in the border region between Austria and Slovenia and in the Adriatic Ionian region (Italy, Slovenia, Croatia, Bosnia and Herzegovina, Serbia, Montenegro, Albania and Greece) will be presented. Detailed analysis will be given on the theoretical background of the implementation of drinking water protection as well as their legislation framework. Recommendations for the implementation of better practices for drinking water protection zones at the national level will be given as well as guidelines for the protection of cross-border and trans-boundary drinking water resources. As a final step need for common international standards and European wide recommendations for the drinking water protection zones design and implementation will be discussed.