



## **The EU Project AquaTerra addresses emerging Issues on Pollution of the Soil-Groundwater-River System in European Catchments**

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To date, the behaviour of organic and inorganic pollutants in soils, sediments, ground- and surface water at catchment or regional scale is poorly understood. This lack of understanding results in part from yet to be defined quantification methods for emerging compounds such as pesticides or pharmaceuticals. On the other hand, a lack of knowledge of loading, mobility and sorption behaviour of organic and inorganic pollutants leads to uncertainties about their fate and transport in the environment. The new EU 6th Framework Integrated Project “AquaTerra” now addresses these issues and aims to provide the foundations for an improved understanding of the behaviour of environmental pollutants. Based on field- and laboratory data, various scale numerical models of the groundwater-soil-sediment-river system will be developed and applied within AquaTerra. Specifically, these models will operate on biogeochemical, climatological, and material flux data and will enable anticipation of adverse trends in soil functioning and the water cycle. In most instances these trends result from global and local change. Models will also integrate key biogeochemical and hydrological processes from the laboratory to the river basin scale. AquaTerra has been active since the 1st June 2004 and will run for a five year period. The project comprises a multidisciplinary team of 45 partner organisations from 12 EU countries, Romania, Switzerland and Serbia. It will investigate the influence of pollutants on sediments, soil and water in selected areas of four European river basins (Danube, Elbe, Ebro, Meuse) and a small French catchment the Brévilles. The work is divided into 10 sub-projects that address hydrological, flux, biogeochemical, monitoring, trend and modelling issues as well as integrating EU policy and training aspects.