

Project title:

International Water Research Alliance Saxony (IWAS) – model region Eastern Europe

Abstract:

The International Water Research Alliance Saxony - IWAS (www.iwas-initiative.de) aims to contribute to an Integrated Water Resources Management in hydrologically sensitive regions by developing specific system solutions as a response to some of the most pressing water-related problems of our time. IWAS is a project of the Helmholtz Centre for Environmental Research - UFZ, the Dresden Technical University and the Stadtentwässerung Dresden (member of German Water Partnership). IWAS analyses specific research questions within five world regions based on some of the most pressing water problems worldwide in the fields of water supply and sanitation, water and agriculture, ecosystem services and extreme events and processes.

The countries of the former Soviet Union which border on the European Union are under pressure to adapt to new environmental standards (e.g. the EU water framework directive). IWAS investigates the development of surface water quality in response to the influences of agricultural, industrial and urban activities. As an example for regions in similar conditions, questions of urban water management, the development of adequate technologies, aspects of Ecosystem Services and socio-economic analyses are investigated along the river Western Bug, which borders the Ukraine, Belarus and Poland. The main aims of the subproject are: 1) system analysis to evaluate the past and current state, 2) development of model-based future scenarios, 3) derivation of management options for the catchment, 4) conception of economic and innovative measures and 5) capacity development for administrations, universities and companies.

Scenario planning is considered by: the set up of the regional climate model CCLM, the development of land-use projections derived from long-term multitemporal remote sensing data, demographic - and economic development.

Consistency of those will be ensured by a common methodology for scenario planning and ex-ante analysis and assessment.