THE ELBE RIVER BASIN

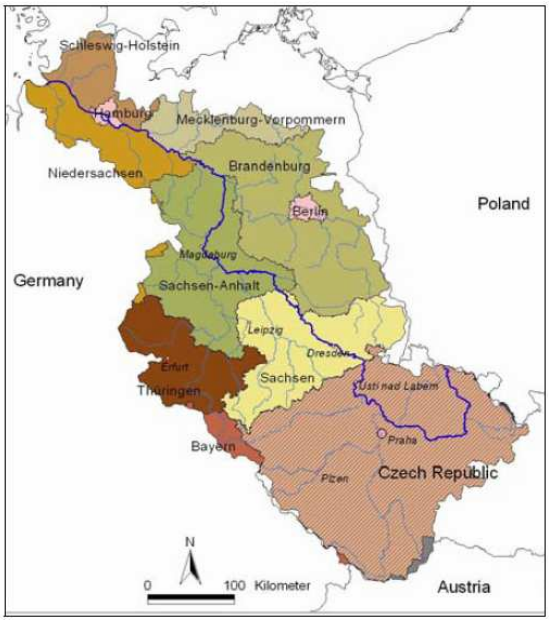
The Elbe River basin (148,268 km²) covers large parts of the Czech Republic and Germany. About 2/3 of the drainage basin area is located in Germany, and 1/3 in the Czech Republic. A negligible part of the basin is located in Austria and Poland. The river length is 1,094 km and the mouth is in the North Sea (considerable tide effects). The basin covers different geographical regions from middle mountain ranges in the west and south to large flatlands and lowlands in the central, northern and eastern part of the basin.

SOCIO-ECONOMIC DESCRIPTION

About 25 million inhabitants live in the basin, therein 76% in Germany. The largest cities are Berlin (3.47 million), Hamburg (1.71 million), Prague (1.21 million), Leipzig and Dresden (both ˜ 0.5 million). The Czech Republic and Eastern Germany have faced major societal and economic transformation processes after the break-down of communism.

WATER MANAGEMENT ORGANISATIONS

For the German Elbe basin, ten federal states have got formal responsibility, whereas the task of the *Flussgebietsgemeinschaft Elbe* is to coordinate and support cooperation but without legal or financial means to implement management actions. At the international level, (1) the *Internationale Kommission zum Schutz der Elbe* (IKSE) is a formalised transboundary coordination organisation, and (2) a ministry conference decides on international issues, supported by the IKSE secretary. Its task is to coordinate and support cooperation without means to implement management actions or measures.



The Elbe basin (Krysanova et al. 2005)

NEWATER PROJECT

For more then four years, NeWater studied and fostered Adaptive Integrated Water Resources Management (AWM) as a concept guiding theory and practice. Taking up the interdisciplinary challenge of managing the river basins as social-ecological systems, NeWater reflected the diversity of perspectives and potential through 37 project partners from Europe, Africa and Central-Asia.

The mainly Czech-German Elbe basin is experiencing all three major water-related problems: extreme events like floods and droughts and inadequate water quality. By conducting a series of stakeholder surveys, various workshops and applied research, NeWater focused on two major research issues: adaptation to climate change in water management and the effects of changing land use and climate on water quality. It was ascertained that the development of a climate change adaptation strategy in the basin had been initiated but was proceeding rather slowly. The workshops enabled the perception of uncertainty in water management by stakeholders and researchers to be clarified, and demonstrated that the simulation game on flood management is a powerful tool for the enhancement of understanding and collaboration between water management authorities and local stakeholders.

NeWater placed a strong emphasis on providing information through eco-hydrological modelling to support WFD implementation and adaptation to climate change in the basin. Identifying proportions of point and diffuse pollution at the river outlet and the hotspots of diffuse pollution facilitated the identification of useful measures for reducing nutrient load and achieving “good ecological status”, as required by the WFD. One of the core characteristics of AWM is to explore different options and measures: here, as a strong tool scenario analysis on climate and land use change was performed for the whole Elbe basin.

(ADDITIONAL INFO ON *WWW.NEWATER.INFO*)

ABOUT TWIN2GO

Twin2Go reviews, consolidates, and synthesises research on adaptive and integrated water resources management in basins around the world. The aim is to draw insights relevant to policy and research on issues around adaptive water governance in the context of climate change, and to make them transferable to other basins. Twin2Go further promotes sharing of research results with practitioners and high level decision makers through effective dialogue.

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