

Examples of possible water management measures for elimination of climate change impacts on water resources

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Abstract The paper describes the results of a study that aimed to propose adaptation measures suitable for eliminating or reducing water scarcity problems in two basins that are administered by Ohře River Basin authority (of the Czech Republic), which initiated and also sponsored the implementation of the project. The basins are located in a low precipitation region in the Czech Republic and their hydrological conditions have deteriorated during the last two decades, and are probably already affected by impacts of the initial stages of climate change. The main problems occur during drought periods, when river discharges drop below minimum ecological flows the river water is excessively polluted by wastewater discharges from urban areas and the water resources are insufficient to meet water use requirements for the purposes of agriculture, which is a very important economic sector in this region. The results of the study also show controversial problems associated with implementation of the EU Water Framework Directive.

Key words water scarcity; drought; climate change; adaptation measures; Bilan model; EU Water Framework Directive