Manual for the CHARM tool on interdisciplinary reservoir management

In this file you will find a tool that allows you to look through the most common implications of reservoir operation. You can expect specific characteristics and more general information. The tool is intended to assist in the different steps of operation to ensure a smooth and conflict-free operation of the reservoir system and the connected catchment area. The recommendations given are derived from the CHARM (CHAllenges of Reservoir Management) research project, which investigated the parameters, sediments, biofilm, cyanobacteria, greenhouse gases and social implications. This tool, as a conceptual model, is intended to provide an overview of the interrelationships and challenges of reservoir management in a case study perspective from Germany and be available to a broad audience and the public.

**When moving through these recommendations for action, always click on arrows**

**and boxes to get to the beginning, or to the next point. The graphical elements are activated via interlinkages between the sheets and will automatically guide you to the corresponding page. Arrows will bring you to an external website with further information on the topic. The central part is containing a matrix of the most common environmental and legal issues concerning resertvoirs and displays interaction of the different items and influences. This can be understood as an information based, via Delphi questioning on the opinion of the experts of the CHARM research project. However, this list is not meant to be a holitic approach, but rather a case study of the reservoirs researched in this project. The Matrix of the most common implications of reservoir management in a central European (or more specific German context) offers an opportunity to look into challenges and opportunities in operating water reservoirs.**

The five points correspond to the topics investigated in the **CHARM** (www.charm-bw.de) research project.