

Terrestrial water systems under climate change: available knowledge and knowledge demands



Information

PD Dr. Steffen Bender [study director] steffen.bender@hzg.de +49 (0) 40 226 338 432

Partners

- Harry Vereecken, Research Center of Jülich (FZJ) [Chair of the Panel]
- David Behar (San Francisco Public Utilities Commission, USA)
- Dietrich Borchardt (UFZ Leipzig)
- Michael Butts (DHI, Denmark)
- David Dudgeon (University of Hongkong)
- Nicola Fohrer (University of Kiel)
- Janet Hering (Eawag, Switzerland)
- Wolfgang Kinzelbach (University Zürich, Switzerland)
- Richard Lawford (University of Manitoba Winnipeg, Canada)
- Claudia Pahl-Wostl (University Osnabrück)
- Mark Smith (IUCN, Switzerland)

Funding

GERICS funds

Project Duration

- Start: 01.10.2011
- End: 30.10.2013

Objectives

 State-of-the-art, authoritative science report focusing on terrestrial water systems under climate change in Germany

CONTEXT

Water is needed by many users in many different sectors. Until now water related problems in Germany are generally the result of too much or too little rain. The synthesis report gives an overview of the current understanding of water issues (surface and subsurface systems) from the global to the local scale in Germany. Additionally, the report will try to answer the following questions: What will happen to the water sector in the future? Will there be more competition for water in the future? What do we know already and where are the gaps in our knowledge?

METHODS

- The report is established by a panel of well-known experts representing different disciplines, who offer different perspectives and have complementary views on the given question. Show the "grey areas" or domains that are not covered by all definitions or which are evaluated in a different way
- The model around which this report is developed and produced is similar to the model implemented by the National Research Council (NRC) in the USA.

PROJECT OVERVIEW

What do water companies expect for the next 30 years? Are the impacts on water systems the result of climate change or other environmental pressures? What kind of changes in water quality and quantity can be expected in the future? What kind of knowledge is needed for regulations? This synthesis report summarizes the current knowledge, gives recommendations and highlights open questions.

- 1st Panel meeting in Hamburg (Feb. 2012)
- Literature research: "Impacts of climate change on terrestrial water systems in Germany: Survey of current projects" (June 2012)
- 2nd Panel meeting in Hamburg (Nov. 2012)
- International Workshop on behalf of the Panel (Nov. 2012)
- Final synthesis report after a review process (autumn 2013)

PRODUCTS

- Synthesis reports: Terrestrial water systems under climate change available knowledge and knowledge demands. (English and German)
- Network of water experts (companies, administration and sciences)

Contact: Climate Service Center Germany, Fischertwiete 1, 20095 Hamburg, Tel. +49(0) 40 226 338-0, www.gerics.de