

## WATER CoRe Survey

### New publications

#### February 2013

*This is a selection of recently published publications from the WATER CoRe Survey. For more results and detailed bibliographic information please consult the WATER CoRe Survey database.*

#### [Global Monthly Water Scarcity - Blue Water Footprints versus Blue Water Availability](#)

Survey Document-ID: 141

<http://www.waterfootprint.org/Reports/Hoekstra-et-al-2012-GlobalMonthlyWaterScarcity.pdf>

Freshwater scarcity is a growing concern, placing considerable importance on the accuracy of indicators used to characterize and map water scarcity worldwide. We improve upon past efforts by using estimates of blue water footprints (consumptive use of ground- and surface water flows) rather than water withdrawals, accounting for the flows needed to sustain critical ecological functions and by considering monthly rather than annual values. We analyzed 405 river basins for the period 1996–2005. In 201 basins with 2.67 billion inhabitants there was severe water scarcity during at least one month of the year. The ecological and economic consequences of increasing degrees of water scarcity can include complete desiccation during dry seasons, decimation of aquatic biodiversity, and substantial economic disruption. (Summary quoted from source)

#### [Computer-supported games and role plays in teaching water management](#)

Survey Document-ID: 142

<http://www.waterfootprint.org/Reports/Hoekstra-2012-GamesRoleplaysWaterManagement.pdf>

Computersupported games and role plays offer the potential of creating an environment in which different disciplines come together and in which students are challenged to develop integrated understanding. ... The two examples illustrate that play sessions inspire participants to think about the functioning of systems as a whole and to develop good cooperative courses of action, whereby both uncertainties about the system and the presence of different values and perspectives among participants play a role. (Summary quoted from source)

#### [European waters — assessment of status and pressures](#)

Survey Webresource-ID: 143

<http://www.eea.europa.eu/publications/european-waters-assessment-2012>

This report's results present good and robust European overviews of the data reported by the first RBMPs, and of the ecological status and pressures affecting Europe's waters. Europe's waters are affected by several pressures, including water pollution, water scarcity and floods. Major modifications to water bodies also affect morphology and water flow. To maintain and improve the essential functions of our water ecosystems, we need to manage them well. (Summary quoted from source)

#### [European waters — current status and future challenges - Synthesis](#)

Survey Document-ID: 144

<http://www.eea.europa.eu/publications/european-waters-synthesis-2012>

This report is a synthesis of the main messages from nine EEA reports dealing directly or indirectly with water ecosystems or the pressures acting upon them. It is the last in the series of reports published by the EEA in support of water year 2012. It seeks to first provide an overview of the state of Europe's waters and the pressures acting on those waters. It then looks in greater detail at the

economic and social factors driving these pressures, and concludes with a summary of the societal and policy challenges that must be met if water is to be managed sustainably. (Summary quoted from source)

### **[Water resources in Europe in the context of vulnerability - EEA 2012 state of water assessment](#)**

Survey Document-ID: 145

<http://www.eea.europa.eu/publications/water-resources-and-vulnerability>

This report describes how the natural cycle of water availability is continuously coming under threat from a variety of different pressures like droughts and water scarcity, pollution, and flood risks which all increase the vulnerability of the freshwater ecosystems and societies. Land use, water abstraction and climate change are human-induced changes that alter the natural flow regimes that exist in water bodies. (Summary quoted from source)

### **[Climate change, impacts and vulnerability in Europe 2012 - An indicator-based report](#)**

Survey Document-ID: 146

<http://www.eea.europa.eu/publications/climate-impacts-and-vulnerability-2012>

This European Environment Agency (EEA) report presents information on past and projected climate change and related impacts in Europe, based on a range of indicators. The report also assesses the vulnerability of society, human health and ecosystems in Europe and identifies those regions in Europe most at risk from climate change. Furthermore, the report discusses the principle sources of uncertainty for the indicators and notes how monitoring and scenario development can improve our understanding of climate change, its impacts and related vulnerabilities. (Summary quoted from source)

### **[Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the regions - A Blueprint to Safeguard Europe's Water Resources](#)**

Survey Document-ID: 151

<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:52012DC0673:EN:NOT>

The Blueprint to Safeguard Europe's Water Resources is a strategy for ensuring that enough good quality water is available to meet the needs of people, the economy and the environment.

### **[Increasing drought under global warming in observations and models](#)**

Survey Document-ID: 152

<http://www.nature.com/nclimate/journal/v3/n1/pdf/nclimate1633.pdf>

The author concludes "that the observed global aridity changes up to 2010 are consistent with model predictions, which suggest severe and widespread droughts in the next 30–90 years over many land areas resulting from either decreased precipitation and/or increased evaporation." (Summary quoted from source)