

WATER CoRe Survey

Recommendation of publications

(Version 4, February 2013)

This is a selection of publications from the WATER CoRe Survey with several documents which are highly recommendable to read if you are concerned with water scarcity and drought issues. For more results and detailed bibliographic information please consult the WATER CoRe Survey database.

1. General documents

Addressing the challenge of water scarcity and droughts in the European Union: Communication from the Commission to the European Parliament and the Council

Survey Document-ID: 1-3

<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2007:0414:FIN:EN:PDF>

http://ec.europa.eu/environment/water/quantity/pdf/comm_droughts/impact_assessment.pdf

http://ec.europa.eu/environment/water/quantity/pdf/comm_droughts/ia_summary_en.pdf

The Communication paper stresses out the main challenges regarding water scarcity and drought within the European Union and proposes policy orientation, referring to best-praxis-examples. Together with its follow-up reports, it is the basis for the EU water scarcity and drought policy.

Third Follow-up Report to the Communication on water scarcity and droughts in the European Union

Survey Document-ID: 114-115

<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2011:0133:FIN:EN:PDF>

<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=SEC:2011:0338:FIN:EN:PDF>

The Third Follow up Report, issued in March 2011, assesses the progress of European policy regarding water scarcity and drought four years after the issue of the Communication. It focuses on the integration of water scarcity and drought policy into the Blueprint for safeguarding Europe's Water. As a road map for policy, the commission staff working program is appended to the Third Follow up report. It picks up the main objectives of water scarcity and drought policy from 2007 and describes the progress and the gaps in EU-wide context.

Water resources across Europe: Confronting water scarcity and drought

Survey Document-ID: 10

http://www.eea.europa.eu/publications/water-resources-across-europe/at_download/file

The report summarizes facts about water scarcity and drought in Europe and provides important background information in figures, maps and tables. The report is outlined according to the DPSIR (Driving force, Pressure, State, Impact and Response) assessment framework. Therefore, the key driving forces for water scarcity and droughts as well as impacts are described. The key sectors of water use (industry, public, agriculture) are analyzed and the report ends up with a conclusion on future water resource management in Europe.

Water Scarcity and Drought: towards a European Water Scarcity and Drought Network (WSDN)

Survey Document-ID: 9

http://water.eionet.europa.eu/ETC_Reports/GapAnalysis_WSD_13.07.2009_v3.pdf

This report aims to identify links and overlaps on National and European level: It proposes a structure for a WSDN to bridge and coordinate the existing initiatives. Furthermore, it proposes a Water Scarcity and Drought indicator system (WSDiS) as DPSIR-Framework (Drivers – Pressures – State – Impact – Response). The report provides information about the EU roadmap in terms of WS&D and gives an overview of initiatives at national, European as well as international level. It subdivides the European Countries in four geographical zones in order to express their different concernment regarding WS&D. European institutions and networks as well as some international actors are categorized to their contributing to (1) research, (2) observation, (3) monitoring, (4) knowledge enhancement (regarding dissemination knowledge and raising stakeholder awareness) and (5) funding. As a result of this assessment, some statements about what is missing and needed are given.

Water scarcity and drought in the European Union

Survey Document-ID: 47

http://ec.europa.eu/environment/pubs/pdf/factsheets/water_scarcity.pdf

This fact sheet gives a short overview of the issue and the EU policy. Furthermore, it gives suggestions for water saving in everyone's household. Therefore, the document is useable e.g. for public information on water scarcity and drought.

2012 Blueprint to safeguard Europe's water resources

Survey Document-ID: 102

http://ec.europa.eu/environment/water/pdf/blueprint_leaflet.pdf

This leaflet gives a first overview on the objective and content of the "blueprint to safeguard Europe's water resources", which is planned to be released at the end of 2012. The Blueprint aims to ensure water in good quality and sufficient quantity for all authorised uses in a long term. Among others, objectives are the better integration of other policy fields (e.g. agriculture, energy...) in water policy and a better implementation of water policy. The blueprint will be based on analysis of river basin management plans (WFD), on a review of the water scarcity and drought policy, on the evolution on water resources and on the outcome of the fitness check of EU freshwater policy, where gap analysis were carried out. As related to EU's 2020 strategy, an implementation of the blueprint's policy recommendations by 2020 is envisaged.

Update:

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.

Sustainable water use in Europe – Part 1: Sectoral use of water

Survey Document-ID: 109

http://www.eea.europa.eu/publications/Environmental_Issues_No_19

This report gives a broad overview on the driving forces of water consumption and the sectoral use of water. Furthermore, it provides an overview on policy actions (WFD, Groundwater Action Programme...) taken so far. Because the report is from 1999, some data may not be up-to-date. Despite that, the report is worth to read due to its comprehensive and well-structured analysis of sectoral water use.

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)

2. Water demand side management (general)

Sustainable water use in Europe – Part 2: Demand management

Survey Document-ID: 110

http://www.eea.europa.eu/publications/Environmental_Issues_No_19

The part 2 of the report "Sustainable water use in Europe" provides water demand management strategies. This includes technical approaches (including water reuse) as well as economical instruments. Furthermore, integrated water management strategies are introduced.

Towards efficient use of water resources in Europe

Survey Document-ID: 132

<http://www.eea.europa.eu/publications/towards-efficient-use-of-water>

This EEA-report provides an overview of water resource efficiency in Europe. It gives an introduction in the EU water efficiency policy, including the blueprint, water efficiency measures, also with regard on the linkage between water and energy sector, economic instruments and information management.

3. Water demand side management (technical)

Study on water efficiency standards – Final report

Survey Document-ID: 14

<http://www.waterefficiency.eu>

The study as report for the European Commission analyses the existing water efficiency standards in Europe and the need for EU-wide standards, especially regarding the Ecodesign directive (2005/32/EC). The report provides a compilation of water use products in residential and commercial buildings (taps, toilet flushes), in industry and agriculture. On the project website, further information is available.

4. Water demand side management (economical)

Financing irrigation water management and infrastructure – A review

Survey Document-ID: 88

<http://www.tandfonline.com/doi/abs/10.1080/07900627.2010.489308>

This paper reviews research on factors affecting the level and value of irrigation infrastructure investments. It also reviews research on policy instruments for sustaining irrigation infrastructure, considering both market and institutional approaches.

Virtual water trade

Survey Document-ID: 89

<http://www.unesco-ihe.org/content/download/2615/26917/file/Report12-hoekstra.pdf>

This conference proceeding comprises 16 articles on virtual water trade. Part 1 (global studies) comprises an introduction in the concept of virtual water as well as articles about virtual water trade, virtual water and food production, a discussion about water resource thresholds, an article regarding global governance and finally an article raising the question: Virtual water - virtual benefits? The second part contains case studies amongst others from Middle East, Egypt, Lebanon, Japan, Afghanistan, Thailand and Vietnam.

Irrigation water pricing – The gap between theorie and praxis

Survey Document-ID: 52

http://www.iwmi.cgiar.org/Publications/CABI_Publications/CA_CABI_Series/Water_Pricing/protected/

This book, edited by F. Molle and J. Berkoff, contains several case studies and reviews on irrigation water pricing around the world.

5. Drought management

Drought management plan report - Including agriculture, drought indicators and climate change aspects

Survey Document-ID: 53

http://ec.europa.eu/environment/water/quantity/pdf/dmp_report.pdf

The drought management report provides an overview on drought causes and the concernment of the EU-member states. It discusses derogations (according to WFD article 4.6) when or where drought events hinder the achievement of WFD objectives. The report delivers a framework for drought management plans with a special focus on transboundary basins. It aims to establish an early warn system for drought events and provides proposals concerning structure, indicators and thresholds for an early warn system. The report also picks up the related issues agriculture, groundwater and climate change.

Water scarcity management in the context of the WFD

Survey Document-ID: 49-51

http://circa.europa.eu/Public/irc/env/wfd/library?l=/framework_directive/scarcity_droughts/technical_report_2006/scarcity_report/ EN_1.0 &a=d

http://circa.europa.eu/Public/irc/env/wfd/library?l=/framework_directive/scarcity_droughts/technical_report_2006/scarcity_appendixpdf/ EN_1.0 &a=d

http://circa.europa.eu/Public/irc/env/wfd/library?l=/framework_directive/scarcity_droughts/technical_report_2006/scarcity_summarypdf/ EN_1.0 &a=d

Although not emphasize in the document title, this technical report includes water scarcity *and droughts*, the first as one aspect of the topic “imbalances in water demand and supply”. The report carries out a detailed survey on causes and impacts of these issues and stresses out approaches towards an integration of water scarcity and drought management in the WFD, e.g. by implementing of “drought management subplans” in the river basin management plans when indicated. The Appendix contains the scientific background and definitions and a summary for policy makers.

Sustainable water use in Europe – Part 3: Extreme hydrological events: floods an droughts

Survey Document-ID: 111

http://www.eea.europa.eu/publications/Environmental_Issues_No_21

Part 3 of the report "Sustainable water use in Europe" focus on extreme hydrological events: After a short introduction on both issues, the report starts up with a description of driving forces, pressure, impacts and types of flood and recent flood events as well as possible response measurements. The second part is dedicated to droughts, also describing driving forces, pressure factors, impacts and types of droughts and ends up with an insight into drought policy.

Drought management guidelines

Survey Document-ID: 112

http://www.iamz.ciheam.org/medroplan/guidelines/archivos/guidelines_english.pdf

As a summary result of the MEDROPLAN-Project, these guidelines give an overview on drought management. It describes the organizational framework of drought management, methods of risk evaluation as well as for operational drought management.

6. Adaptation to climate change

Climate Change 2007 - Synthesis report

Survey Document-ID: 73-74

http://www.ipcc.ch/publications_and_data/ar4/syr/en/contents.html

http://www.ipcc.ch/publications_and_data/ar4/syr/en/contents.html

The synthesis report gives an overview about the main results of the 4th IPCC Assessment Report. The observed changes of climate are described and analyzed; future projections and their possible impacts are shown. Finally, mitigation and adaptation strategies are discussed. The report comes along with a summary for policy makers.

Climate Change and Water

Survey Document-ID: 78

http://www.ipcc.ch/publications_and_data/publications_and_data_technical_papers.shtml

This technical paper is one of several papers of the IPCC which analyses climate change in the context of a special issue. The document analyses the relationship between water and climate change. Observed and projected changes of climate parameters related to water, impacts and responses, sectoral analysis, the relation between mitigation measures and water, implementations for policy- and decision making as well as gaps of knowledge are the topics of this report.

Adapting to climate change: Towards a European framework for action – White Paper

Survey Document-ID: 54

http://eur-lex.europa.eu/Result.do?checktexts=checkbox&TypeAffichage=sort_key&page=1&idReq=1&Submit22=GO

The White Paper proposes a legislative EU-framework to integrate climate change adaption in the EU policies. This contains increasing resilience of – among others – agriculture and forestry, biodiversity, ecosystems and water, health and social policies. It provides an approach for financing the measures and for regarding the external dimensions and proposes the initiation of an Impact and Adaption Steering Group.

River basin management in a changing climate

Survey Document-ID: 58

http://circa.europa.eu/Public/irc/env/wfd/library?!=/framework_directive/guidance_documents/management_finalpdf/ EN_1.0_&a=d

The guidance document of Common Implementation Strategy for the Water Framework Directive (CIS) describes principles for implement actions within the second and third river basin management planning cycles. It refers to the White Paper “Adapting to climate change” and provides 11 key principles for river management planning. In the annex, additional sources of information and ongoing projects are given.

Climate change and water adaptation issues

Survey Document-ID: 69

http://www.eea.europa.eu/publications/briefing_2007_1/at_download/file

This briefing document gives a brief overview on climate change adaptation in water sector.

Guidance on water and adaptation to climate change

Survey Document-ID: 67

http://www.unece.org/env/documents/2009/Wat/mp_wat/ECE_MP.WAT_30_E.pdf

This guide faces the challenges of water sector regarding climate change adaptation. It formulates key principles, describes the institutional framework of international policy on climate change adaptation, provides information on impact and vulnerability assessment, financial matters and a guideline for evaluation of climate change adaptation strategies.

Managing the Risks of Extreme Events and Disasters to Advance Climate Change

Adaptation (SREX)

Survey Document-ID: 116 (summary), 133 (full version)

<http://ipcc-wg2.gov/SREX/>

The Special Report on Managing Risks of Extreme Events and Disasters to Advance Climate Change Adaptation (SREX) integrates perspectives from several research communities studying climate science, climate impacts, adaption to climate change and disaster risk management.

Climate change, impacts and vulnerability in Europe 2012 - An indicator-based report

Survey Document-ID: 146

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)

7. Communication & participation

Public Participation in Relation to the Water Framework Directive

Survey Document-ID: 66

http://circa.europa.eu/Public/irc/env/wfd/library?l=/framework_directive/guidance_documents/guidancesnos8spublicspar/EN_1.0_&ad

The guidance document discusses possibilities of public participation within the Water Framework directive by distinguishing three qualitative steps of public participation: "information supply", "consultation" and "active involvement". Annex I provides a compilation of public participation techniques (e.g. public hearings, creative sessions, Interactive Geographic Information Systems...). Annex II delivers factsheets with examples of public participation in water management projects around Europe.

The Aarhus Convention - An Implementation Guide. Securing citizens' rights through access to information, public participation, access to justice for a healthy environment

Survey Document-ID: 123

<http://www.unece.org/fileadmin/DAM/env/pp/acig.pdf>

This Guide helps policy maker and politicians to deal with the "Aarhus Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters". It provides both a general overview and a detailed article-by-article analysis of the Convention.

Harmonising Collaborative Planning - Learning together to manage together - Improving participation in water management

Survey Document-ID: 124

<http://www.harmonicop.uos.de/handbook.php>

This handbook is meant for practitioners of (regional) water management. It is the final output of the HarmoniCOP project. It presents innovative support for the follow up of social learning in participatory processes of water management.

Participation in climate change adaptation

Survey Document-ID: 125

http://www.grabs-eu.org/downloads/Expert_Paper_Climate_Participation_FULL_VERSION%28mk3%29.pdf

This Expert Paper is one of the first studies on community participation in climate change adaptation in the cities and urbanised regions of Europe. It explores the connection between, on the one hand, the challenge that climate change poses to our urban environments and their communities, and, on the other, involving communities in developing and implementing adaptation plans.