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# WELCOME

## Workshop Terrestrial water systems under climate change

Available knowledge and  
knowledge demands

Hamburg, 27.11.12

## CSC – Synthesis and Prospective Documents

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- Convening panels of experts to **address specific questions:**
- Related to:
  - **climate change**
  - **impacts on natural resources and society**
  - **vulnerability and risks**
  - **mitigation and adaptation needs and strategies**



## The Panel, Generally

- Composed by world-class professionals, with **integrate different disciplinary perspectives** on the subject
- Produce a **balanced report** that represents a consensus of views
- Composed of typically **8 to 15 members, a chair** (to structure and lead the discussions), **a study director** (organization and support) and **guest experts**



## The Panel, „Terrestrial water system under climate change“

- Provide a broad state-of-the-art review of current knowledge on the **state of Earths` terrestrial water system and its expected evolution under projected climate change**
- Consider a **broad range of geographical scales** (global to regional to local)
- Adress the situation in **Europe** and more **specifically in Germany** with respect to **water issues**
- Study will lead to a published report as a part of a **book series**



## The CSC Synthesis report

- To be taken by **governments** and **other decision bodies** as part of their adaptation strategies
- Include a list and short biography of the Panel members, an executive summary, a list of recommendations when appropriate
- **Clearly written** so it can be used by a large non-specialized audience
- Prepared **under responsibilities of the Panel members** after agreement on the content before published
- Documents are **reviewed externally**

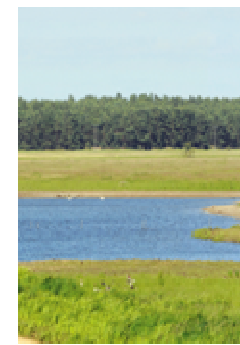
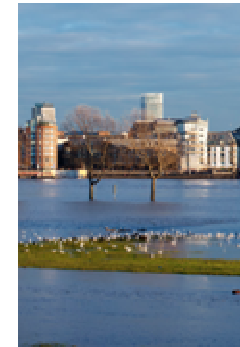


## Central questions for today

- **Terrestrial water systems**: What do we know already and where are the gaps in our knowledge?

### Workshop topics:

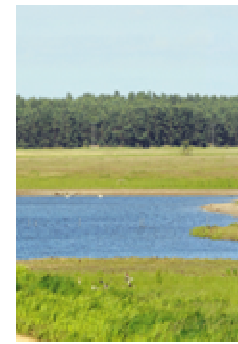
- Is **climate change** a problem or not? Why?
- What **kind of knowledge** is needed for regulations?
- What do **climate impact modelling** studies tell us about how water systems and water bodies may change?
- What do **companies** expect for the next 30 years?



## Central questions for today (cont.)

### Workshop topics (cont.):

- Are the **impacts on water systems** the result of climate change or other environmental pressures?
- What are the effects of more than one stressor regarding the **variability and sensitivity** of the system?
- Is it possible to **monitor** the **vulnerabilities**?
- What kind of changes in **water quality and quantity** can be expected in the future?



## Workshop Agenda (Part 1)

INTRODUCTION	
10.00 – 10.15 h	Welcome and Introduction
10.15 – 11.15 h	<p><b>Dr. Sebastian Kofalk</b> (Bundesanstalt für Gewässerkunde – Federal Institute of Hydrology, Coordinator Research Programme KLIWAS)</p> <p>Climate change: research and decision making in policy development for water systems</p> <p>Discussion</p>
11.15 – 11.40 h	Coffee Break
Terrestrial water systems under climate change – Block #1	
11.40 – 12.05 h	<p><b>Prof. Dr. Daniela Jacob</b> (Climate Service Center, Dep. Climate systems)</p> <p>Climate, water and uncertainties</p>
12.05 – 12.30 h	<p><b>Dr. Christoph Donner</b> (RWW Rheinisch-Westfälische Wasserwerksgesellschaft mbH)</p> <p>Climate Change and Water supply - Consequences and potential adaption strategies from two perspectives Water association and operator</p>
12.30 – 12.55 h	<p><b>Prof. Dr. Petra Döll</b> (University Frankfurt, Institute of Physical Geography, Hydrology Group)</p> <p>Climate change impacts: a global-scale vs. a purely German perspective</p>
12.55 – 13.25 h	Discussion
13.25 – 14.25 h	Lunch Break



## Workshop Agenda (cont.)

<b>Terrestrial water systems under climate change – Block #2</b>	
14.25 – 14.50 h	<b>Dr. Fred Hattermann</b> (Potsdam Institute for Climate Impact Research- PIK) Changes in flood risk
14.50 – 15.15 h	<b>Dipl.-Ing. Regina Gnirss</b> (Berliner Wasserbetriebe – Water supply of Berlin) Be prepared - by using high resolution data, doing complex modelling and building a more flexible net work
15.15 – 15.40 h	<b>PD Dr. Rita Adrian</b> (Leibniz-Institute of Freshwater Ecology and Inland Fisheries) Windows of opportunities: The role of extremes and thresholds in ecological research
15.40 – 16.05 h	<b>Dipl.-Ing. agr. Elisabeth Schulz</b> (Landwirtschaftskammer Niedersachsen - Chamber of Agriculture Lower Saxony) Implications of climate change on irrigation farming in Northeastern Lower Saxony and recent activities for adaptation
16.05 – 17.15 h	Discussion
17.15 – 17.30 h	Closing