

International Conference

Water in the Anthropocene:
Challenges for Science and Governance

Indicators, Thresholds and Uncertainties
of the
Global Water System

21-24 May 2013
Bonn, Germany



WHY ANTHROPCENE? Emergence of a Paradigm

- Nowadays humankind even exceeds nature in terms of changing all facets of Earth system functioning
- Therefore, we have entered a new geological epoch that needs a corresponding name



The *ANTHROPOCENE*

<http://www.anthropocene.info/assets/bgs/5-content-bg.jpg>



Is *Anthropocene* a New Concept?

- No, but not well known as global warming:
- Web-Hits for ***Anthropocene***:
2003: 416; 2010: 350.000; 2012: 560.000
- Web-Hits for ***Global Warming***: 159.000.000



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2003: 416; 2010: 350.000; 2012: 560.000
 - Web-Hits for *Global Warming*: 159.000.000
 - But ***Anthropocene is a more effective paradigm*** in describing cumulative impact of civilization, resulting in global warming...as just one of many ways in which humans have modified the Earth.
The Paradigm has a broader scope than global warming – as human footprints are larger than that.



Water In the Anthropocene

- Human activities impact the global water system as part of the Earth system, and change the way water moves around the globe like never before.
- Managing freshwater use wisely in the planetary water cycle has become a key challenge to reach environmental sustainability.
- Identify **Key challenges for Science and Governance**



Importance of this conference

- The conference is:
 - the **capstone event of GWSP**
 - a platform to set the future agenda of global water research in the spirit of Future Earth
 - synthesis of decade long GWSP research
 - platform for co-design, future co-production, more collaborations, more integrated ideas



Broad Themes

**Theme 1: Global Water System
Current State and Future Challenges**

**Theme 2: Global dimensions in
Change of River Basins**

**Theme 3: Balancing Water Needs
for Humans and Nature**

Future Plenary-

“Future Earth: Future of Water” Plenary:

Together for a Sustainable Water Future:

Science meets Practice and Politics



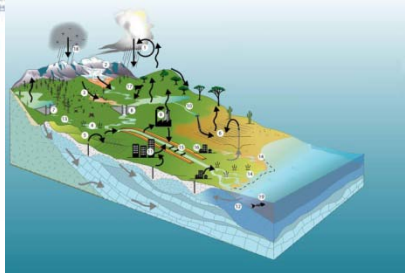
Theme 1: Global Water System Current State and Future Challenges

IMPROVING AND USING THE TOOLS:
Data Integration and the Precision of Indicators



ACCOUNTING FOR A SCARCE RESOURCE:
Virtual Water and the Global Water System

GETTING THE BIG PICTURE:
Assessing Global Water Resource Availability



ASSESSING INTERLINKAGES FOR SUSTAINABILITY:
The Links between Global Carbon, Water and Nutrient Cycles

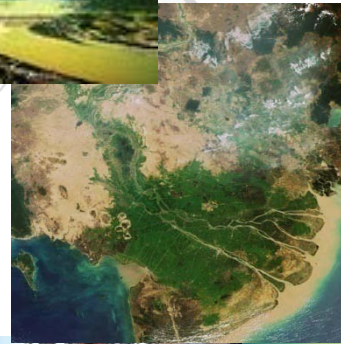


COPING WITH UNCERTAINTIES - RISKS, EXTREMES AND VARIABILITY:
Challenges for Science and Practice



Theme 2: Global Dimensions of Change in River Basins

ADAPTING TO CHANGE AT DIFFERENT LEVELS:
Adaptive Water Governance in Large Basins



AT THE MARGIN:
Dynamics and Vulnerability of Delta Systems

WATER GOVERNANCE AND POLITICS:
Hydropolitics in River Basins, Water Rights and Institutions



RIVERS AND THE NEXUS:
Water, Energy and Food Security in Large Basins



BASINS AND AQUIFERS:
Integrated Water Resources Management at Large Scale



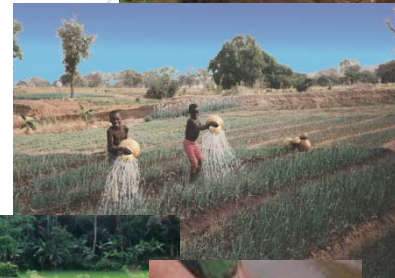
Theme 3: Balancing Water Needs for Humans and Nature

TRADE OFFS AND CHOICES FOR SOCIETY AND ENVIRONMENT:
Ecosystem Services - Challenges for Science and Practice

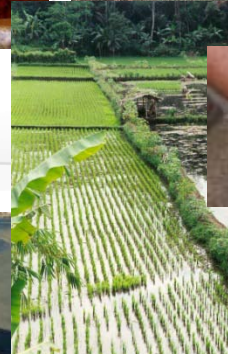


BRINGING TOGETHER WHAT BELONGS TOGETHER: *Integrated Land and Water Management for Sustainability*

'BLUE GOLD'? THE VALUE AND PRICE OF WATER: *Cultural, Ethical and Economic Approaches*



SHARING WATER, SHARING KNOWLEDGE: *Challenges and Solutions for Global Water Governance*



ENVIRONMENTAL FLOWS - ACCOUNTING WATER QUANTITY AND QUALITY: *Assessing and Valuing the Resource*



Future Plenary- *“Future Earth: Future of Water”*

- Address the ***“Freshwater Agenda for a Sustainable Future Earth”*** synthesizing existing knowledge, future requirements for water research and the much needed collaboration between science, policy and practice.



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- Address the **institutional set-up for future freshwater research** agenda drawing on the success of the existing global environmental change programs and projects.



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- Address the institutional set-up for future freshwater research agenda drawing on the success of the existing global environmental change programs and projects.
- Feature both leading researchers as “***Knowledge Generators***” from the Earth sciences and “***Knowledge Consumers***” from water policy, planning and management for a fruitful and solution-oriented discussion.



Conference Program

FIRST DAY

21st May 2013

Time	Theme	Venue
	Registration	
13.00-15.00	Global Plenary	
15.00-15.30	Coffee break	
15.30-17.00	Plenary – Theme 1	

SECOND DAY

22nd May 2013

Time	Theme	Venue
9.00-10.30	Session 1	At least 10 parallel sessions and venues
10.30-11.00	Coffee break	
11.00-12.30	Plenary – Theme 2	
13.00-14.00	Lunch Break	
14.00-15.30	Session 2	At least 10 parallel sessions
15.30-16.00	Coffee break	
16.00-17.30	Session 3	At least 10 parallel sessions



Conference Program

THIRD DAY

FOURTH DAY

23 rd May 2013		
Time	Theme	Venue
9.00-10.30	Session 4	At least 10 parallel sessions
10.30-11.00	Coffee break	
11.00-12.30	Plenary – Theme 3	To be decided
13.00-14.00	Lunch Break	
14.00-15.30	Session 5	At least 10 parallel sessions
15.30-16.00	Coffee break	
16.00-17.30	Session 6	At least 10 parallel sessions
17.30 – Dinner	Poster Session and Reception	

24 th May 2013		
Time	Theme	Venue
08.30-10.00	Synthesis Plenary	
10.00-10.30	Coffee break	
10.30 – 13.00	Future Plenary, Press Conference	

Each session will have six presenters. Each oral presentation is of 10 minutes followed by 5 minutes discussion. Please note that 10 is the upper limit for the number of parallel sessions.

Each session will include two poster session. 5 minutes presentation will be



The Keynote Speakers

- **Joseph Alcamo**
United Nations Environmental Programme (UNEP), Nairobi, Kenya
- **Joachim von Braun**
Center for Development Research (ZEF), University of Bonn, Germany
- **Stuart Bunn**
Australian Rivers Institute, Griffith University, Australia
- **Uschi Eid**
Vice-Chair, UN Secretary General's Advisory Board on Water and Sanitation
- **Pavel Kabat**
International Institute for Applied Systems Analysis (IIASA), Laxenburg, Austria
- **Claudia Pahl-Wostl**
Institute for Environmental Systems Research, University of Osnabrueck, Germany
- **Johan Rockström**
Stockholm Resilience Centre, Stockholm University, Sweden
- **James Syvistki**
University of Colorado, USA
- **Roland Schulze**
University of KwaZulu-Natal, South Africa
- **Charles Vörösmarty**
Global Environmental Sensing and Water Sciences Initiative, The City University of New York, USA



Contributing Partners

- ALL SSC members (present)
- Representatives from GEC programmes
- Representative of GEC projects (ESGP, GEWEX, GLP)
- UNEP (Joseph Almaco)
- United Nations University (Jakob Rhyner)
- UN-DPC (Reza Ardakanian)
- CSIRO (Bill Young, Michael Raupach)
- IWMI (Vladimir Smakhtin)
- UNESCO-IHE
- TU Dresden (Peter Krebs)
- German Development Institute (Ines Dombrowski)
- Centre for Coastal Research, Germany (Hartwig Kremer)
- University of Washington Seattle (Robert Naiman , Dennis Lettenmaier)
- Umea University, Sweden (Christer Nilsson)
- Southern Cross University, Australia. (Caroline Sullivan)
- Rhodes University, South Africa (Jay O´Keeffe)
- University of Tokyo (Toshio Koike, Taikan Oki)
- University of KwaZulu-Natal, South Africa (Roland Schulze)
- Centro de Ciencias do Sistema Terrestre, Brazil (José Marengo)



Special Sessions

- Special sessions based on the [three conference themes](#) and Future Global Water Research
- Different formats - Panel discussion, different number of speakers
- Special sessions will be fully integrated into the [conference programme](#)
- Scheduled by the [conference organizers](#) to avoid overlap or competition with parallel sessions on similar topics



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Special Sessions

- The organizer of the special sessions may invite participants to the special session
- Special sessions
 - CSIRO
 - IWMI
 - DIE
 - UN-DPC
 - UNU-EHS
 - ZEF
 - TU-Berlin
 - UFZ
 - University of Kassel
 - GEC projects
(GEWEX, GLP, ESGP)
- **More??**
 - Joint Session of GEC programs

Poster session

- Abstracts for posters based on the three conference themes
- There will be a **poster exhibition** as well as **5-minutes-presentations** within poster sessions.



Abstract Submission

- Abstract Submission: Deadline Oct 30th 2012
- Abstract Submission Special Session:
 - Deadline extended till Oct 30th 2012
 - Most likely will be extended by one more month.
 - Software (WinAbstract)
 - Abstract Review Process will start soon: November
 - Notification of accepted contributions:
1st January 2013
- Full paper submission (online): 1st January- 1st March 2013

The Venue



MARITIM Hotel Bonn

Godesberger Allee (Access Kurt-Georg-Kiesinger-Allee 1)

53175 Bonn

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Email: info.bon@maritim.de





Funding Source

- **BMBF**



Bundesministerium
für Bildung
und Forschung

- **DFG**

DFG

Deutsche
Forschungsgemeinschaft

- **Registration fees**

Fees and Registration

- Early bird rate for registration:
1st January – 28th February 2013
400 €
- Normal payment rate for registration:
1st March 2013 onwards
500 €
- The conference fee covers lunches, coffee breaks, conference dinner, proceedings and the social event.
- Venue charges: 48 € delegate fee per person/day and other expenses ►

Products

Targeted Conference Proceedings

The targeted conference proceeding novel type of proceedings of the '*Water in the Anthropocene*' conference.

It will be a synthesis and forward looking strategic document rather than a mere collection of papers and presentations.

Special issues in Journals



Open Questions

1. How best can we use Conference as a platform to shape Global Water Research agenda?
2. What could be the other products of GWSP conference?
3. What could be role and focus of the special sessions?
4. What best can we promote the Conference through GWSP and GEC network?



Further opinion

1GEC JOINT SESSION-Topic, format.

Registration fees- Reduce Fees??

Journal special issue- Which journals??



Thank you for your attention!

Visit our conference web page
<http://www.gwsp.org/conference2013.html>

