

Preliminary Programme

Water in the Anthropocene: Challenges for Science and Governance

Indicators, Thresholds and Uncertainties of the Global Water System

2013 May 21-24
Bonn, Germany

WATER IN THE ANTHROPOCENE

Until the industrial revolution, human beings and their activities played an insignificant role influencing the dynamics of the Earth system, the sum of our planet's interacting physical, chemical, and biological processes. Today, humankind even exceeds nature in terms of changing the biosphere and affecting all other facets of Earth system functioning. A growing number of scientists argue that humanity has entered a new geological epoch that needs a corresponding name: 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. Thus, managing freshwater use wisely in the planetary water cycle has become a key challenge to reach global environmental sustainability.

This conference will provide the platform to present global and regional perspectives of world wide experiences on the responses of water management to global change in order to address issues such as variability in supply, increasing demands for water, environmental flows, and land use change.

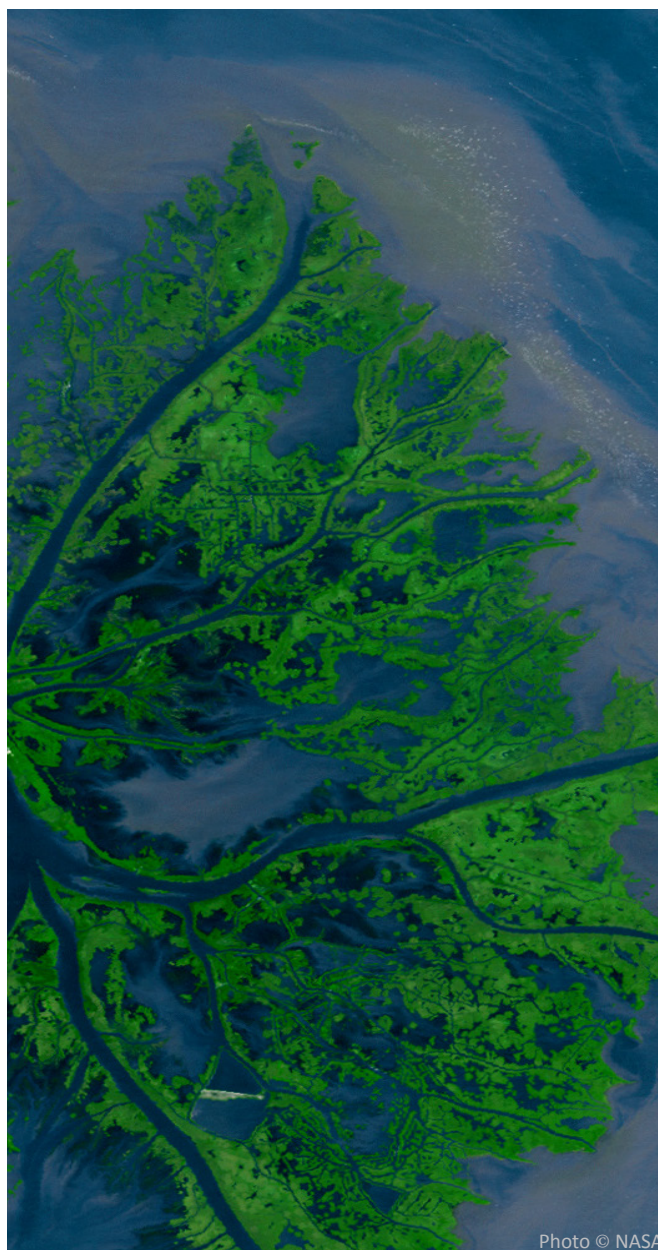


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It will help to build links between science and policy and practice in the area of water resources management and governance, related institutional and technological innovations and identify in which ways research can assist policy and practice in the field of sustainable freshwater management.

Participants from all continents and dealing with various water-related problems are expected to attend this conference.

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SCIENTIFIC PROGRAMME COMMITTEE

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Earth System Governance Project, Lund University,
Sweden

PRELIMINARY SESSION SCHEDULE

Time	Day 1: Tuesday, May 21, 2013	Day 2: Wednesday, May 22, 2013	Day 3: Thursday, May 23, 2013	Day 4: Friday, May 24, 2013
9.00		PLENARY THEME 1	PARALLEL SESSIONS	SYNTHESIS PLENARY
9.30		Charles Vörösmarty (moderator), Pavel Kabat,		Charles Vörösmarty, Claudia Pahl-Wostl,
10.00		James Syvitski		Richard Lawford
10.30		Coffee Break	Coffee Break	
11.00		PARALLEL SESSIONS	PLENARY THEME 3	Coffee Break
11.30			Claudia Pahl-Wostl (mod.), Stuart Bunn,	FUTURE PLENARY
12.00			Stefanie Engel	András Szöllösi-Nagy & Ute Weber (moderators),
12.30		Lunch	Lunch	Fritz Holzwarth, Lidia Brito, Uschi Eid
13.00	OPENING PLENARY			Jakob Rhyner, Stephen Foster, Eun-Kyung Park
13.30	Charles Vörösmarty, Claudia Pahl-Wostl,	PLENARY THEME 2	PARALLEL SESSIONS	PRESS CONFERENCE
14.00	Johan Rockström, Joe Alcamo,	Richard Lawford (moderator),		
14.30	Wilfried Kraus	Joachim von Braun, Roland Schulze		
15.00	Coffee Break	Coffee Break	Coffee Break	
15.30	PARALLEL SESSIONS	PARALLEL SESSIONS	PARALLEL SESSIONS	
16.00				
16.30				
17.00	POSTER SESSIONS	POSTER SESSIONS	POSTER SESSIONS	
17.30	(Theme 1)	(Theme 2)	(Theme 3)	
18.00				
18.30				
19.00	Ice Breaker		Conference Dinner	
19.30				
20.00				
20.30				

PLENARY PROGRAMME WITH KEYNOTE SPEAKERS

GLOBAL (OPENING) PLENARY

Charles Vörösmarty Global Environmental Sensing and Water Sciences Initiative, CUNY, USA

Claudia Pahl-Wostl Institute for Environmental Systems Research, University of Osnabrueck, Germany

Johan Rockström Stockholm Resilience Centre, Stockholm University, Sweden

Joseph Alcamo United Nations Environmental Programme (UNEP), Nairobi, Kenya

GLOBAL WATER SYSTEM: CURRENT STATE AND FUTURE CHALLENGES

(Theme 1)

Charles Vörösmarty (moderator) Global Environmental Sensing and Water Sciences Initiative, CUNY, USA

Pavel Kabat International Institute for Applied Systems Analysis (IIASA), Laxenburg, Austria

James Syvitski University of Colorado Boulder, USA

GLOBAL DIMENSIONS OF CHANGE IN RIVER BASINS

(Theme 2)

Richard Lawford (moderator) Center for Earth Observation Sciences, University of Manitoba, Canada

Joachim von Braun Center for Development Research (ZEF), University of Bonn, Germany

Roland Schulze University of KwaZulu-Natal, South Africa

BALANCING WATER NEEDS FOR HUMAN AND NATURE

(Theme 3)

Claudia Pahl-Wostl (moderator) Institute for Environmental Systems Research, University of Osnabrueck, Germany

Stuart Bunn Australian Rivers Institute, Griffith University, Australia

Stefanie Engel ETH Zürich, Zürich, Switzerland

SYNTHESIS PLENARY

Charles Vörösmarty Global Environmental Sensing and Water Sciences Initiative, CUNY, USA

Claudia Pahl-Wostl Institute for Environmental Systems Research, University of Osnabrueck, Germany

Richard Lawford Center for Earth Observation Sciences, University of Manitoba, Canada

FUTURE PLENARY Future Earth: Future of Water

“Together for a Sustainable Water Future. Science meets Practice and Politics”

András Szöllösi-Nagy (moderator) UNESCO-IHE Institute for Water Education, Delft, The Netherlands

Ute Weber (moderator) German Research Foundation (DFG), Bonn, Germany

Fritz Holzwarth German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU), Bonn, Germany

Lidia Brito Division of Science Policy and Capacity-Building at the United Nations Educational, Scientific and Cultural Organization (UNESCO), Paris, France

Uschi Eid Vice-Chair, UN Secretary General's Advisory Board on Water and Sanitation

Jakob Rhyner United Nations University (UNU), Bonn, Germany

Stephen Foster Global Water Partnership, Stockholm, Sweden

Eun-Kyung Park Korea Water Forum, Korea



SPECIAL SESSIONS

Institution	Session Organizer(s)	Topic
University of Kassel, Helmholtz Center for Environmental Research (UFZ)	Martina Flörke, Ilona Bärlund	“Do we have a sound basis for predicting future water resources?”
Global Energy and Water Exchanges Project (GEWEX)	Peter J. van Oevelen	Data, models and uncertainties in the Global Water Cycle
University of Dresden (TU Dresden)	Edeltraud Günther	Scenarios as an Interdisciplinary Method in Global Water Research
Global Water System Project (GWSP)	Charles Vörösmarty	Evidence of humans’ impact in the global water system
Helmholtz Centre Potsdam, German Research Centre for Geosciences (GFZ)	Bruno Merz, Katy Unger-Shayesteh	Water Availability in Central Asia: Understanding and Coping with Changes in Runoff in a highly Water-stressed Region
GWSP	Richard Lawford	The State of Monitoring and Future Innovations in Earth Observations
International Institute for Applied Systems Analysis (IIASA)	Bill Cosgrove, David Wiberg	Water futures and solutions: developing a new generation of integrated world water scenarios
GWSP	Anik Bhaduri, Hong Yang	Economics of Virtual Water
Consultative Group on International Agricultural Research (CGIAR)/International Water Management Institute (IWMI)	Claudia Ringler	The Energy-Water Nexus in River Basins across the Developing World
GWSP Africa, University of KwaZulu Natal	Sabine Stuart-Hill	Global change in southern African watersheds: Vulnerabilities, Responses and Opportunities
German Development Institute (DIE)	Waltina Scheumann, Ines Dombrowsky	Governing the energy-water-environment nexus related to hydropower projects
United Nations University (UNU) - Institute for Environment and Human Security (EHS)	Fabrice Renaud	Tipping points of water-related ecosystem services in Deltas under climate change
Land-Ocean Interactions in the Coastal Zone (LOICZ)	Hartwig Kremer	Deltas

SPECIAL SESSIONS

Institution	Session Organizer(s)	Topic
CGIAR/IWMI	Claudia Ringler	Water-Energy Tradeoffs across Scales
GWSP	Richard Lawford	Regional Perspectives on Basin Responses to the W-E-F Nexus
GWSP	Richard Lawford, Claudia Ringler	Towards an integrated approach to the Water-Energy-Food Nexus
University Indianapolis, University Newcastle	Jason M. Kelly	Rivers of the Anthropocene: the problem of human agency
EcoPolicy	Elena Nikitina	Best practices in enhancing water governance in river basins: A critical reflection on barriers and opportunities
Institute for Technology and Resources Management in the Tropics and Subtropics (ITT), Cologne University of Applied Sciences	Lars Ribbe	The Nexus of Water, Energy and Food Security in the Eastern Nile Basin
University of Oxford	Dustin Garrick	Diagnostic assessment of multi-scale governance dilemmas in federal rivers: innovations in theory, methods and metrics
Commonwealth Scientific and Industrial Research Organisation (CSIRO)/International Union for Conservation of Nature (IUCN)	Carol Couch, Mark Smith	Challenges and Approaches for Managing Environmental Flows in Complex Catchments
Center for Development Research (ZEF), University of Bonn	John Lamers	Linking Integrated Land and Water Resources Management with Ecosystem Services Assessment
University of Waterloo	Derek Armitage	Enhancing science-policy interactions in transboundary water governance
GWSP	Claudia Pahl-Wostl, Joyeeta Gupta, Anik Bhaduri	Water Security: Challenges for research and policy
GWSP	Claudia Pahl-Wostl	Environmental water needs and multi-level water governance: managing sustainable water uses
University of Waterloo	Derek Armitage	Enhancing science-policy interactions in transboundary water governance

SPECIAL SESSIONS

Institution	Session Organizer(s)	Topic
GWSP, United Nations Environmental Programme (UNEP), UNU-EHS	Janos Bogardi	International Water Quality Guidelines for Aquatic Ecosystems
Leibniz Institute of Freshwater Ecology and Inland Fisheries (IGB), European Association of Zoos and Aquaria (EAZA)	Klement Tockner, Jaime García-Moreno	Biodiversity of Freshwater Ecosystems: Status, Trends, Pressures, and Conservation Priorities
Earth System Governance Project (ESG), GWSP	Ruben Zondervan, Joyeeta Gupta	Earth System Governance – Navigating Water in the Anthropocene
GWSP	Claudia Pahl-Wostl	Global Water Governance – a multi-level challenge
GWSP	Janos Bogardi	Capacity Development: A key challenge of putting sustainable water resources management into practice

CONFERENCE VENUE

The conference will be held at Maritim Hotel Bonn, Germany. The facilities for parallel sessions, poster sessions and welcome reception are excellent at the venue. Refreshments and lunches will be provided during the conference.

As the first German hotel, the Maritim Hotel Bonn received the Sustainability Award by 'Green Globe' and the 'European Association of Event Centres (EVVC)' in July 2010. Since 2007 the Maritim Hotel Bonn is member of the project 'Sustainable Bonn' and has constantly improved its environmental performance.

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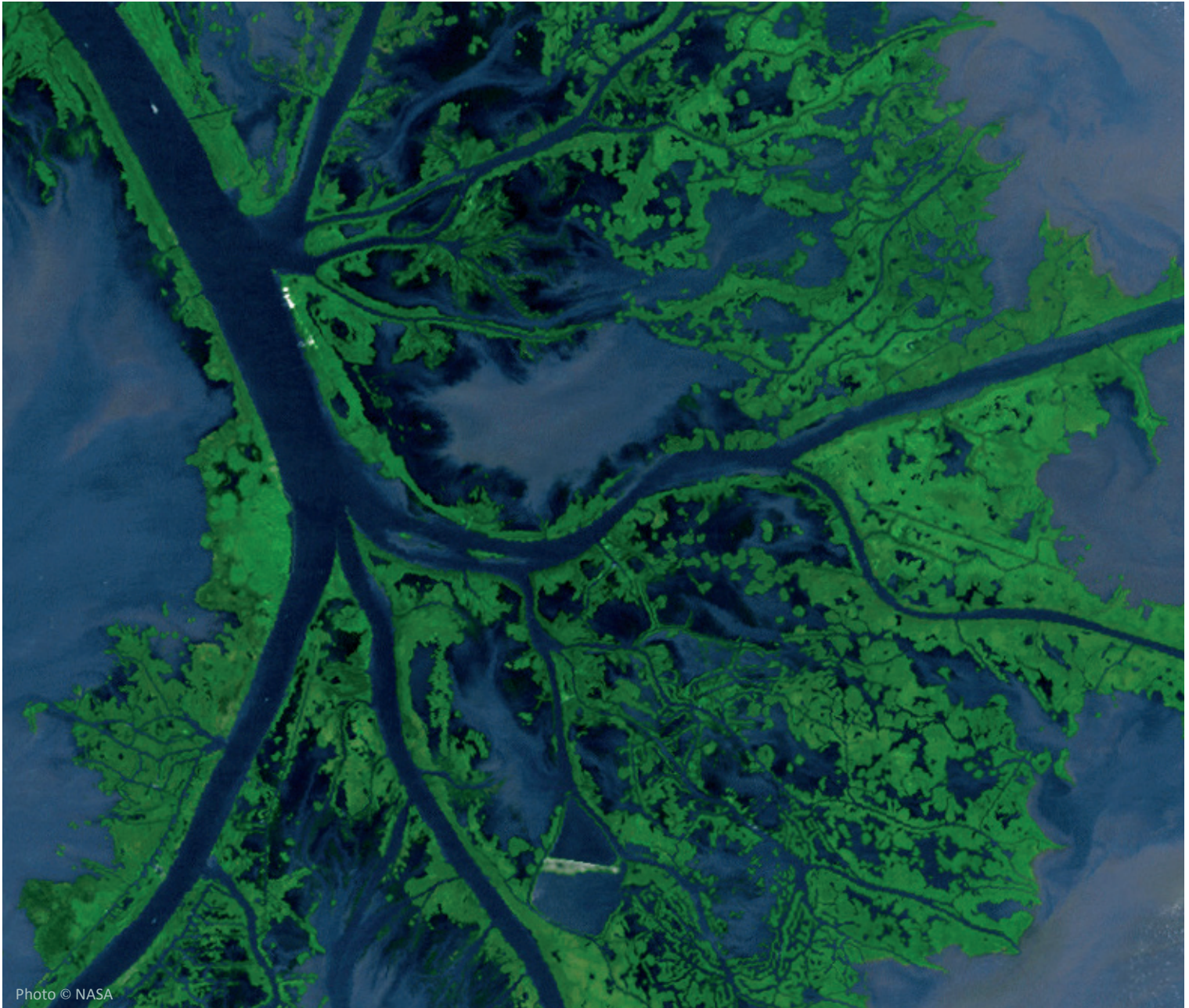


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