



Basin Leaders Forum

Building Water Security, Climate Resilience & Sustainable Management across Basins

WEDNESDAY 12 OCTOBER 2016 / SESSION A - 10:30 - 12:15 / SESSION B - 13:15 - 15:00 / SKY ROOM

WHAT IS THE BASIN LEADERS FORUM? AND WHO WILL TAKE PART?

Protecting basins and restoring those that are already degraded should be a priority to ensure a balanced approach to development that sustains cities and industries and the ecosystems they rely on.

The Basin Leaders Forum will provide an opportunity for water resource managers from sectors across river basins (e.g. cities, mining, energy, industry, agriculture, etc) to share knowledge and experiences and explore viable pathways for sustainable economic, social and environmental development of catchment areas. The Forum will include lessons and experiences of what tools and approaches have worked and not worked in convincing various stakeholders on the need for long term continued investment into river basin management (e.g. Report Cards, modelling, visualisation tools etc).

Furthermore, the Basin Leaders Forum will be a stepping stone for development of an "Action Agenda for Sustainable Basin Management" which will provide guidance for a bottom up approach to basin management especially involving urban and industrial areas through their actions at the catchment level.

WHY IS THE BASIN LEADERS FORUM IMPORTANT?

River basins are the lifeblood of nations. From the earliest civilisations they have strongly influenced human settlement and growth. Their degradation is a danger to both water flows and water quality that provide domestic water supply, food and energy for cities, industries and the catchments they rely on.

Over 50% of the global population lives in cities and this is expected to increase to 70% by 2050. This equates to an extra 2.5 billion people living in cities. Much of the current and projected growth is in areas that have water scarcity or in cities with water and sanitation systems that do not provide complete coverage. At the same time, increased water abstractions and

use, together with more irregular patterns of water availability due to climate change, is leading to pressure on city water supplies and competition for water resources with other water users within the catchment (such as energy and agricultural producers). Yet, continued economic development for cities and industries within a catchment area requires water security.

How can we achieve water security and build climate resilience within our watersheds in the coming decades?
What actions need to be taken today to achieve sustainable management of basins that also can benefit from growing urban centres?

WHAT WILL BE THE STRUCTURE OF THE BASIN LEADERS FORUM?

The Forum will be structured around two sessions dedicated to basin leaders and joint session(s) with the utility, cities, and regulators leaders. Sessions within the Basin Leaders Forum will have a mix of roundtable and panel discussions to maximize knowledge and experience sharing. The discussions will center on theoretical and empirical evidence of proven interventions and current practical approaches towards building resilience and fostering sustainability in basins. Fostering resilience means supporting innovation and experimentation – allowing room for developing innovative management approaches, learning from the outcomes and acting on those lessons learned.

THE BASIN LEADERS FORUM WILL BE FOLLOWED BY THE JOINT SESSION

Cooperation across Scales to Ensure Water Security

12 October, 15:30 - 17:00, Sky Room

This session will facilitate discussions among utility, urban, basin, regulatory leaders to identify the challenges and opportunities for cooperation across scales.

SESSION A / 10:30 - 12:15 /

WHAT ARE THE POTENTIAL PATHWAYS TOWARDS STRENGTHENING AND MAINTAINING RESILIENCE WITHIN BASINS?

This session will focus on innovative approaches and tools that are being applied within basins and how these are building resilience. The discussions in this session will align with the keynote from the Congress plenary on 'Simplifying the complexities of water resources management' which will precede the Basin Leaders Forum on October 12th.

10:30 - 10:40 Welcome and setting the scene

Dr. Ger Bergkamp
Executive Director, International Water Association
Introduction to the session
Prof. Paul Greenfield
Emeritus professor, University of Queensland

10:40 - 11:05 Panel Discussion

Chair: Dr. Ger Bergkamp
Executive Director, International Water Association

Presentations will focus on the dynamic interrelationships between human, ecological and technological components and how can basins move beyond the concept of 'engineering resilience' towards a much more dynamic and flexible system.

Prof. James E. Ball - *Vice-President, International Association for Hydro-Environment Engineering and Research (IAHR)*

Dr. Paul Bowen - *Director, Environmental Sustainability, Coca-Cola*

Dr. Christian H. Severin - *Senior Environmental Specialist, Global Environment Facility (GEF)*

11:05 - 11:50 Roundtable discussions

Facilitator: Dr. John Riddiford
Chair, IWA Watershed and River Basin Management Specialist Group

Discussions will be around a case study focusing on sharing experiences including tools, approaches and case studies highlighting how to achieve resilience now and in the future. Guiding questions include:

- How can the complexities and dynamic inter dependencies of the components of resilience be translated into decision making and actions?
- What actions need to be taken around management of basins that will sustain growing urban and industrial centres of the future?
- What tools and approaches are working (or not) to mitigate the impacts of climate impacts or environmental challenges including floods and droughts?
- What is needed to increase investment in sustainable infrastructure including natural infrastructure as part of a resilience approach?

SESSION B / 13:15 - 15:00

HOW CAN LONG TERM ENGAGEMENT AND INVESTMENT WITHIN A BASIN BE SUSTAINED?

This session within the Basin Leaders Forum will reflect on transformational actions that have supported development in basins along with obstacles and how they were addressed. Understanding the effects of water crises in the future will require better ways to understand, model and visualize how and where such crises could occur.

13:15 - 13:40 Keynote Presentation

Keynote: Dr. Sanjay Pahuja
Senior Water Resources Specialist, World Bank
'Too Many Good Intentions? A Common Roadblock to Sustaining Engagements and Investments in River Basins.'

Presenter introduced by Dr. Katerina Schilling

13:40 - 14:00 Panel Discussion

Chair: Mr. Ganesh Pangare
Regional Director Asia Pacific, International Water Association (IWA)

Presentations of historical timelines of basins which showcases investments, infrastructure and policies including what has worked and what has not worked, and what has enabled long term continued investment into river basin management.

H.E. Yue Zhongming - *Commissioner, Yellow River Conservancy Commission*

Mr. James Purtill - *Director-General, Department of Natural Resources and Mines, Queensland Government*

Prof. Jane Doolan - *Professorial Fellow in Natural Resource Governance, University of Canberra*

14:00 - 14:40 Roundtable discussions

Facilitator: Dr. John Dore
Senior Water Resources Specialist, Australia's Department of Foreign Affairs and Trade (DFAT)

Discussions will be around a specific basin timeline focusing on sharing experiences including challenges and how they were overcome around improving water management across a basin, and how this has affected different stakeholders (especially cities and industries). Guiding questions include:

- How has the development of infrastructure been decided? What have been the impacts both positive and negative? How has the infrastructure development specifically affected (benefited) cities and industry?
- What policies and management approaches have been successful and why? What have been the impacts? How were approaches taken to scale?
- Financial instruments that have driven investment in basin development. How has this affected water resources and the economic development of the basin? What have been the costs and

SESSION A / 10:30 - 12:15 /

WHAT ARE THE POTENTIAL PATHWAYS TOWARDS STRENGTHENING AND MAINTAINING RESILIENCE WITHIN BASINS?

Roundtable Moderators

Trevor Bishop - *Head of Water Resources, Environment Agency, UK Government*
Topic: Climate adaptation plans

Dr. Simon Funge-Smith - *Senior Fishery Officer, Food and Agriculture Organization (FAO) Fishery & Aquaculture Department*
Topic: Recognizing and valuing the ecosystem services of freshwater fisheries in aquatic ecosystems

Dr. Cameron Wearing - *Principal Policy Officer, Seqwater*
Topic: Resilient Rivers

Paul Glennie - *Senior Technical Advisor, UNEP-DHI*
Topic: Water use & hydrological modelling in the Nile Basin

Robert Speed - *Director, Okeanos Pty Ltd*
Topic: Basin planning and river restoration

Dr. Royal Chitadron - *Director, Hydro and Agro Informatics Institute (HAI)*
Topic: Flood and drought management in Thailand

Simone De Kleermaeker - *Regional coordination Oceania, Expert forecasting systems, Deltares*
Topic: Bangladesh Delta Plan 2100

Claire Andersen - *Director, Department of Environment and Heritage Protection, Queensland Government*
Topic: Improving Great Barrier Reef Water Quality

11:50 - 12:15 Feedback

Summary of the key principles achieve resilience within basins.

SESSION B / 13:15 - 15:00

HOW CAN LONG TERM ENGAGEMENT AND INVESTMENT WITHIN A BASIN BE SUSTAINED?

Roundtable Moderators

Dr. Katerina Schilling - *Knowledge Management and Capacity Building Coordinator, International Association of Water Supply Companies in the Danube River Catchment Area (IAWD)*
Topic: Danube Basin, Europe

Dr. Sutat Weesakul - *Deputy Director, Hydro and Agro Informatics Institute (HAI)*
Topic: Chao Phraya Basin, Asia

Dr. Simon Hausler - *Team Leader (Basin Plan Implementation), Department of Natural Resources and Mines, Queensland Government*
Topic: Murray-Darling Basin, Australia

Dr. Verno Jonker - *Technical director, Water Resources Management, Aurecon*
Topic: Nile Basin, Africa

Dr. Geoffrey Chavula - *Director, Shire River Basin Agency (SRBA)*
Topic: Shire River Basin, Africa

Darren Moor - *Executive Director, Central Region, Department of Natural Resource and Mines, Queensland Government*
Topic: Fitzroy Basin, Australia

Dr. Stanley Liphazdi - *Group Executive, Water Research Commission*
Topic: Orange-Senqu River

Ian Atkinson - *CEO, International RiverFoundation*
Topic: Murray-Darling Basin, Australia

14:40 - 15:00 Feedback

Summary of the key principles of successful/unsuccessful water resource development across basins.