

# **INTERNATIONAL COMMISSION ON WATER RESOURCE SYSTEMS (ICWRS)**

## **Status Report September 2020**

### ***Commission membership***

Andreas Schumann - President  
Barry Croke - President Elect  
Marloes Mul - Vice-President  
Jean-Marie Kileshye Onema - Vice-President  
Jennifer C Adam - Vice-President  
Alberto Viglione - Secretary  
Gökçen Uysal - ECC Representative

### **Associated members:**

Alberto Montanari, Alla Kolechkina, Dan Rosbjerg, Gil Mahé, Guenter Bloeschl, Hafzullah Aksoy, Hubert Savenije, Ian Littlewood, John Ndiritu, Jose Luis Salinas, Junguo Liu, Kate Heal, Kim Young-Oh, Mark Summerton, Mike Simpson, Murugesu Sivapalan, Ronald van Nooyen, Ross Woods, S.K. Jain, Saket Pande, Stephen Mallory, Suxia Liu, Taha Ouarda, Zongxue Xu

## **Description of activities June 2019 - September 2020**

### ***ICWRS Meeting in Cairns***

The main activity of ICWRS in the last 12 months, the 9<sup>th</sup> International Water Resources Management conference in Cairns, Australia, which was planned from July 20<sup>th</sup> to Wednesday 22<sup>nd</sup> 2020 had to be cancelled due to the Covid-19 pandemic. This conference should have been part of our long series of IWRM conferences organised by IAHS-ICWRS, but also interlinked to the Pantha Rhei Scientific Decade (2013-2022) of the IAHS.

The conference would have had two sessions (one on water resource management and the other on Pantha Rhei):

ICWRS: advancing water resource management across the globe; and  
Progress in Pantha Rhei: Change in Hydrology and Society.

We had a good number of interesting contributions and many scientists were interested to take part in this scientific meeting. The water resource management session had 47 abstracts submitted (from 16 countries, including 16 abstracts from China, and 14 abstracts from Australia), while the Pantha Rhei session had 10 abstracts submitted (6

from Australia, 4 from China). Finally, George Kuczera (previous vice-president of ICWRS) was invited to give the Loucks Lecture at the conference. When it became clear that a pandemic was developing, the conference was cancelled in March 2020. Fortunately, financial burdens for the organizers could be avoided. We thank the local organizers for their strong efforts in preparing of this meeting and their enthusiastic work.

### ***ICWRS activity at the IAHS Assembly in Montpellier (2021)***

We decided to use the scientific subjects of the cancelled conference with some modifications based on specific interests of potential participants, which became obvious in reviewing the submitted abstracts for Cairns, to suggest our ICWRS- symposium at the IAHS-Assembly 2021 in Montpellier, France. It will be titled “Water resource management in a changing world: economic, environmental and societal trade-offs and synergies”. The detailed proposal was sent to Christophe Cudennec at June 26<sup>th</sup>. Beside of this symposium ICWRS will become co-convenor of the Flood symposium organized by ICSH and also in a session with ICSIH around the UPH Question 2: How will cold region runoff and groundwater change in a warmer climate (e.g. with glacier melt and permafrost thaw)? Here we are especially interested in impacts on reservoir management in snow-driven hydrological regimes and their adaptation to global warming. ICWRS will be represented by Gokcen Uysal.

### ***Contributions of ICWRS commission to the “Panta Rhei Book” Initiative***

According to the request from the IAHS-president the commission discussed opportunities to support the finalisation of the Panta Rhei Initiative in 2021. ICWRS has a strong interest in Panta Rhei as the Panta Rhei Science Decade (2013-2022) of IAHS is aimed to make improved predictions of the dynamics of hydrology and societies which are most relevant for sustainable water management. The dominant paradigm of ICWRS is Integrated Water Resource Management (IWRM), which has typically involved integration across the entire hydrological cycle, accommodating different water users and including engineering, economic, social, ecological, and legal aspects, and accounting for multiple spatial scales, such as upstream/downstream perspectives. A particular focus of Panta Rhei, in the context of IWRM, has been on the changing interface between the water environment and society in the Anthropocene, resulting from bidirectional socio-hydrologic feedbacks between water and human systems. We have discussed the outline of the Panta Rhei book, provided by Fuqiang Tian, and suggested several contributions from affiliated persons of our commissions to its chapters. A detailed description of these proposals were send to Fuqiang Tian by

the secretary of ICWRS.

**Website**

The website has been updated at the address:  
<http://iahs.info/Commissions--W-Groups/ICWRS-Water-Resources-Systems.do>

Andreas Schumann, President ICWRS  
Barry Croke, President Elect ICWRS  
Alberto Viglione, Secretary ICWRS