

## INTERNATIONAL COMMISSION ON WATER RESOURCE SYSTEMS (ICWRS)

### Status Report June 2021

#### *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, Christophe Cudennec, Dan Rosbjerg, George Kuczera, Gil Mahé, Guenter Bloeschl, Hafzullah Aksoy, Hubert Savenije, Ian Littlewood, John Ndiritu, Jose Luis Salinas, Junguo Liu, Kate Heal, Kim Young-Oh, Liliang Ren, Mark Summerton, Mike Simpson, Murugesu Sivapalan, Ronald van Nooyen, Ross Woods, Salvatore Grimaldi, Sharad K. Jain, Saket Pande, Stephen Mallory, Suxia Liu, Taha Ouarda, Zongxue Xu

### Description of activities September2020 –June 2021

#### *ICWRS activity at the IAHS Assembly in Montpellier (2022)*

We decided to use the scientific subjects of the cancelled conference in Cairns (2020) 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 2022 in Montpellier, France. It is titled “Water resource management in a changing world: economic, environmental and societal trade-offs and synergies”.

Beside of this symposium ICWRS will become co-convenor (through commission members) of the following sessions: “Floods: Processes, Forecasts, Probabilities, Impact Assessments and Management” (Schumann, Viglione), “Stochastic Hydrology with contributions on methodologies and applications, for modeling, forecasting, change assessment, and uncertainty quantification” (Viglione), “Extremes in hydroclimatic systems” (Viglione), “Quantifying uncertainty in hydrological systems: A Bayesian point of view” (Viglione), “Groundwater sustainability in a changing climate: modeling and experimental analyses from urban, agricultural and ecological contexts” (Croke), “Hydrology, new tools and innovative measurements and citizen science in Africa” (Mul, Kileshye Onema), and “Cold region runoff and groundwater change” (Uysal).

#### *Virtual meeting of ICWRS*

A virtual meeting of ICWRS was held on January 25, 2021, with 14 attendees. Discussion focused primarily on possible future meetings of the commission, including discussing possible the possibility of an on-line conference, involvement in the WaterNet conference in October 2021, and the delayed IAHS meeting in 2022. This led to work on setting up an on-line discussion on future directions for ICWRS.

#### *Involvement of ICWRS in other conferences*

Jean-Marie Kileshye Onema contributes to the organisation of WaterNet conference, South Africa October 2021, a virtual event. Jean-Marie and Marloes Mul are going to run the ICWRS session under IAHS as co-convenor to the event. This experience should be reflected in the Africa session in Montpellier 2022.

Marloes Mul contributes to the FRIEND/IAHS 4th international conference on the hydrology of African Large River Basins, to be held in Cotonou, Bénin, 16-20 Nov 2021. During the conference, a first synthesis will be presented from a discussion on the 23 UPH from the African point of view, promoted by the FRIEND-Water UNESCO/IHP program, together with the IAHS Africa Committee and the ICSW.

### ***ICWRS blog on LinkedIn***

In order to promote an online discussion of our community, a LinkedIn ICWRS group has been created and is soon to be made public. The focus of this group is on the future directions of ICWRS. Input from the community are invited, particularly at the scale of potential topics for symposia at future IAHS and IUGG assemblies, though more targeted ideas are also welcome. The President and President Elect have prepared statements regarding where the commission currently is and possible foci for research activities in the near future. Also comments from two past presidents (Dan Rosbjerg and Slobodan Simonovic) have been collected and will be made available for the online discussion.

### ***Contributions of ICWRS commission to the coming benchmark book of “Panta Rhei”***

Regarding the work on the Panta Rhei book, Alberto Viglione is the main author of Chapter 6 "Human-Flood Systems". Suxia Liu is co-author of Chapter 8 "Agricultural Human-Water Systems" on behalf of ICWRS. Two other ICWRS staff members are involved in other chapters of the book (i.e., Alberto Montanari, Guenter Bloeschl). Since there are at least two other chapters on water systems (Chapter 9: Transboundary Human-Water Systems, Chapter 10: Global Human-Water Systems), active participation on the part of ICWRS could have been more pronounced. This was partly due to the cancellation of the 2019 workshop on Panta Rhei in Cairns. However, this fact also spurred discussion of future work topics for ICWRS.

### ***Others***

At the end of June 2021, the change of presidency of ICWRS will be held. 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