

IAHS Bureau: International Commissions (IC)

President Name: Barry Croke

International Commission: International Commission on Water Resource Systems (ICWRS)

Names of participants and role(s) of each officer:

Role	Name of person	Activities/Responsibilities (e.g. communication)
President	Barry Croke	lead, communication
Past-President	Andreas Schumann	
President-elect	Pedro L.B. Chaffe	organizing event
VP	Emmanouil Anagnostou	online meeting discussions
VP	Suxia Liu	online meeting discussions
VP	Alberto Viglione	online meeting discussions
Secretary	Gökçen Uysal	reporting, communication, leader of the two commission papers (2024 & 2025)
ECC	Chris Leong	Online ECC meetings and commission tasks

Which UPH(s) does the Commission contribute to? (No 1-23: check https://www.tandfonline.com/doi/full/10.1080/02626667.2019.1620507)

UPH 22) What are the synergies and trade-offs between societal goals related to water management (e.g. water-environment-energy-food-health)?

UPH 23) What is the role of water in migration, urbanisation and the dynamics of human civilisations, and what are the implications for contemporary water management?

Others of interest:

UPH 1) Is the hydrological cycle regionally accelerating/decelerating under climate and environmental change, and are there tipping points (irreversible changes)?

UPH 3) What are the mechanisms by which climate change and water use alter ephemeral rivers and groundwater in (semi-) arid regions?

UPH 4) What are the impacts of land cover change and soil disturbances on water and energy fluxes at the land surface, and on the resulting groundwater recharge?

UPH 9) How do flood-rich and drought-rich periods arise, are they changing, and if so why?

UPH 10) Why are runoff extremes in some catchments more sensitive to land-use/cover and geomorphic change than in others?

UPH 18) How can we extract information from available data on human and water systems in order to inform the building process of socio-hydrological models and conceptualisations?

Which Theme and WG of HELPING Decade the Commission contribute to? (See current status here https://iahs.info/Initiatives/Topic-for-the-Next-IAHS-decade/helping-working-groups/)

Theme 1: HELPING with global and local interactions

- 1.1 REHYDRATE REtrieve historical HYDRologic dATa & Estimates
- 1.9 Deep Explanation & Evaluation for Practices in Hydrological Changes (DEEPHY)



1.11 Hydrologic Design - Solutions & Communication

How – in which form will the results be presented? (collaborative paper, workshop, etc) Collaborative manuscript, report, summer courses and workshops

Work plan for 2025

PERIODICAL COMMISSION WORKSHOP

The 10th International Symposium on Integrated Water Resources Management (IWRM) is scheduled to take place in 2026, with the venue to be confirmed—either Canberra or Cairns, Australia

EGU Leonardo Applications has been made with the following information:

The 10th International Symposium on Water Resources Management - IWRM / 11th EGU Leonardo Symposium Decision Support and Co-Design in Water Resources Systems: Empowering Local Voices in Global Frameworks

September 2026, three half days, 9am-1pm, 2.30 pm 6.30 pm

The conference will address the growing need for resilient and inclusive water resource management in the face of accelerating global change. Climate variability, land-use transitions, demographic pressures, and increasing socio-economic complexity continue to challenge conventional water governance models. Despite scientific progress, the gap between hydrological research and real-world decision-making remains significant. This symposium aims to bridge that gap by promoting systems-based approaches that integrate scientific insight, local knowledge, and participatory decision-making. It aligns closely with the goals of the IAHS HELPING decade (2023–2032), emphasizing co-designed solutions and stakeholder engagement The conference also aligns with the EGU Leonardo Conference Series as it will support focused dialogue, interdisciplinary collaboration, and early-career participation.

The 10th edition builds on the legacy of IWRM symposia organized by ICWRS, particularly the 9th IWRM in Brazil (2024), while introducing a renewed focus on science-to-practice pathways. Hosting the event in Australia—a region confronting acute water security and climate resilience challenges—adds regional relevance and global significance.

Key topics include:

- Adaptive and resilient water systems design
- Decision support and co-design tools
- Local-global integration in water governance
- Trade-offs and synergies across societal, environmental, and economic domain.

COMMUNITY PAPER

The paper titled "Integrated Water Resources Management in the HELPING Decade" is nearing completion and is planned to be submitted before the next IAHS Roorkee meeting in October, 2025.

Tentative abstract



Integrated water resources management must solve hydrological, socioeconomic and technical aspects of competing water uses and propose solutions to address the increasing complexity of water resources systems. However, learning from local hydrologists experience and engaging local communities and policymakers in long-term, science-based decision making remains a challenge. Here, we derive from example cases globally several methods and solutions that address water resources sustainability and could potentially bridge the gap between theory and application. The common challenges among the example cases include population growth, climate change, land use change, population distribution and migration, and the intricate interactions between people and the environment. Solutions include adaptation and capacity building, water storage, ecosystem protection and restoration, political decisions, citizen and community participation, and green economy principles. As proposed in the HELPING decade, the strategies highlighted here are aligned with global sustainability goals, offer actionable pathways to enhance resilience and ensure effective adaptation to evolving water-related challenges.

DIGITAL WATER GLOBE

The commission members have been creating accounts and uploading test cases and profiles.

OTHER INITIATIVES

Chris has submitted Proposal for Oceania Region Committee of the IAHS (similar to Latin-America Region and Africa Region)

Guidelines for filling the Workplan:

"PERIODIC COMMISSION WORKSHOP"

This workshop is organized by the Commission. It should be an IAHS event, not a session during a conference. It can be co-organized with other Commissions or other organizations. In the latter case the role of IAHS should be clearly identifiable in the organization.

Typically, such workshops have an annual frequency, have a relatively small number of participants (in the range of 40-100), and are particularly precious for collecting the community and focusing on common and emerging research topics.

In the work plan table are expected information about the Commission Workshop.

If the Commission has already finalized the organization, the webpage link of the workshop and the date and the venue should be specified. If the Commission has just started to plan and organize, the date and venue or the available information should be specified. If the Commission recently held the workshop, few summary information should be included in the table and the report link or the pdf should be provided.

The report format is simple and described below:

First page: Commission name, title of the workshop, date, venue, Group Picture of the event

Second page: Statistical summary of the workshop: number of participants, Countries, number of oral presentations, number of posters (if they were present).

From the third page: Scientific Program Last page: list of participants (EDI?)

"COMMUNITY PAPER"

The final aim of the Commission is to shed light on research topics related to the Commission as well. Collecting the community and working together the expected outcome is to provide a community paper that summarizes milestones or crucial emerging topics.

In the work plan table, some information on the community paper status are expected. For instance, it would be useful to know if the commission has been planning the community paper, the topic, authors, the percentage of development, and when it is expected to be submitted. This information is crucial for coordinating such activity with the HSJ Editors.

You can find some examples here:

MOXXI



CANDHY UPH

"DIGITAL WATER GLOBE"

As you know the DWG is finally active: https://dwg.smhi.se/dwg/ and we are looking forward to receiving the contribution from the IAHS community on case-studies and links to data and IAHS publications.

Since our community is shaped by the Commissions, Committees and Working Groups we invite you to advertise the DWG and include all the officers' Personal profiles in the visualisation tool (linked to other items).

The information requested in the table is the number of items that you plan to include in the DWG during the next months and the number you did in the last period.