



# IAH COMMISSIONS AND NETWORKS

## REVIEW FORM

(Please submit the final form to [marco.petitta@uniroma1.it](mailto:marco.petitta@uniroma1.it))

### Background:

The reform of the IAH Commissions and Networks (C+Ns) was completed in 2011, which set up a procedure for initiating and reviewing the progress of these groups in IAH. This procedure allows both renewal of existing C+Ns, midterm review of progress, and the creation of new commissions and networks. In setting up the new commissions and networks, it was established that a review would be undertaken in the middle and end of each period of license, with the intention of informing the IAH Executive and Council about the progress with the work of the Commissions and Networks. This would be compared with the initial work plans and commitments set out by the commissions and networks in their proposals.

Now, we are at the end of the current license period for the 2023 and 2024, which has had a license period of 4/6 years. As part of the renewal process, you are invited to submit a final report on their activities by answering the questions below. If you have any queries about the way to complete the form, please contact Marco Petitta, Vice-President for Programme and Science ([marco.petitta@uniroma1.it](mailto:marco.petitta@uniroma1.it)).

The final version of this document must also be sent to the same email address, in MS WORD or pdf format.

### Review Questions:

1	<b>Name of your Commission or Network</b>	Commission on Groundwater Quality (GWQ)	
1.1	<b>Name and email contact(s) of the responsible(s) person for this Commission of Network</b>	Thomas Boving Chair – IAH GWQ Chair - Dept. Geosciences University of Rhode Island Woodward Hall Rm. 314 Kingston, RI 02881 USA Email: <a href="mailto:tboving@uri.edu">tboving@uri.edu</a>	Dan Lapworth Co-Chair – IAH GWQ Principal Hydrogeochemist Head of Station, BGS- Wallingford, Oxfordshire OX10 8BB UK Email: <a href="mailto:djla@bgs.ac.uk">djla@bgs.ac.uk</a>
1.2	<b>Request for an extension of the mandate (yes/no, 4 or 6 years)</b>	Yes (6 years)	

2	Provide the address of your website	<a href="https://gwquality.iah.org/">https://gwquality.iah.org/</a>
2.1	Is the website regularly maintained and updated?	Yes
2.2	If you still don't have a website, please explain the reason	N/A
3	List the activities which you were committed to organize (see your original proposal – if you do not have a copy, I can send one). See also Annex A below.	<p>Below are commission's six main activities:</p> <ul style="list-style-type: none"> <li>• Advance our understanding and research on all aspects of groundwater quality, from both geogenic and anthropogenic sources.</li> <li>• Provide new evidence for policy makers on groundwater quality status and constraints including emerging and intensifying water quality challenges for drinking water provision and other uses.</li> <li>• Promote and coordinate the advancement of groundwater quality research within existing networks and commissions within IAH as well as externally.</li> <li>• Promote knowledge exchange and training to equip hydrogeologists working in this area with the best available information and tools.</li> <li>• Disseminate research in this field to the global research community and engage with the key international agencies (e.g. WWQA, UNICEF, WHO, UNESCO, JMP).</li> <li>• Enhance awareness on groundwater quality challenges, including health considerations, for water stakeholders.</li> </ul>
3.1	List the activities you have organized in the context of the list above	<ul style="list-style-type: none"> <li>• Commission members Seifu Kebede and Dan Lapworth, besides others, published a paper in STOTEN in 2022 in which the authors present an initial analysis of the extent of groundwater salinization in Africa (incl. maps), bringing together groundwater salinity data (n = 12,255) from across the continent. <a href="https://doi.org/10.1016/j.scitotenv.2022.154283">https://doi.org/10.1016/j.scitotenv.2022.154283</a></li> <li>• In September 2020, our commission conducted an online survey of the groundwater community to tailor and prioritize the commission's activities. One of the main objectives of the survey was to find out which groundwater quality topics are important to the participants. The survey consisted of 21 questions, and it was answered by 140 people. A follow up survey is planned for later this year.</li> <li>• In 2021, our commission published a special issue in STOTEN, titled "Groundwater quality: global challenges and opportunities" (<a href="https://www.sciencedirect.com/special-issue/10GTCPSCFN2">https://www.sciencedirect.com/special-issue/10GTCPSCFN2</a>). The commission proposed a second Special Issue titled "Navigating 21st Century Challenges in Groundwater Quality" to STOTEN and expects it to be published in early 2026.</li> <li>• Members of the commission published on PFAS in IHA Technical Insight Series. This publication is titled "PFAS –</li> </ul>

		<p>Groundwater’s Dark Matter”  <a href="https://iah.org/education/professionals/technical_insight_series">https://iah.org/education/professionals/technical_insight_series</a></p> <ul style="list-style-type: none"> <li>• Published Technical Insight Paper on <a href="#">Microplastics in Groundwater</a></li> <li>• Participated in Friends of Groundwater network as IAH representatives. As part of this the commission contributed to the first FOG report <a href="#">Assessing groundwater quality: a global perspective</a></li> <li>• Participated and helped secure funding for an IGRAC project funded by WWQA and contributed to a report for WWQA <a href="#">Guidelines for the assessment of groundwater quality</a></li> <li>• Co-chaired sessions at the last 4 IAH congresses on groundwater quality</li> <li>• Developed and shared a video on <a href="#">groundwater quality</a></li> </ul>
3.2	<b>Activities still planned for the rest of your period of license</b>	<ul style="list-style-type: none"> <li>• Follow up member survey. The survey questionnaire is currently reviewed by an external ethics committee before distribution to our commission members and others.</li> <li>• Special issue titled “Navigating 21st Century Challenges in Groundwater Quality” was proposed to STOTEN and is being reviewed currently.</li> <li>• Develop session on groundwater monitoring for IAH congress 2025</li> <li>• Developing a session on groundwater quality for IAH congress 2026</li> <li>• Expanding salinity mapping work with IGRAC and FOG to provide an updated global assessment of groundwater salinity 2025-26</li> <li>• Started working with FOG and IGRAC on a perspective paper on the need for improved global groundwater quality monitoring 2025</li> </ul>
3.3	<b>Please indicate other activities organized that were not planned initially</b>	The engagement with the FOG was not originally planned but has formed a critical element of the commission's work representing IAH in this forum.
3.4	<b>Please provide any reports you may have made on these activities</b>	<p>Please refer to our website for summaries and links to reports <a href="https://gwquality.iah.org/">https://gwquality.iah.org/</a></p> <p>See links to reports and outputs in section 3.1</p>
3.5	<b>Please indicate any activities you have organized jointly with other groups or organisations</b>	<p>The committee organized technical sessions and commission meetings at several IAH Annual conferences, most recently in 2024 Davos where we jointly held a session with</p> <p>Also, we have close working relationships with the International Groundwater Resources Assessment Centre (IGRAC), Friends of Groundwater (FOG), the World Water Quality Alliance (WWQ) and IAH LUNA, besides other organizations. Members of our commission serve on committee of these organizations.</p>

3.6	<b>Please provide any comments on difficulties found in the organization of your activities</b>	One difficulty has been to keep members from across many different time zones engaged in the commission. Finding a meeting time that works for all will be impossible. But we are committed to being more inclusive and are looking for ways to engage with a wider group geographically.
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4	<b>Deliverables</b>	
4.1	<b>Have you sent annual reports for your commission or network for 2021-22-23?</b>	Yes, these were sent on request on previous years.
4.2	<b>Have you prepared any monographs or maps that were planned?</b>	Yes, a groundwater salinity map was published in 2022 (see section 3.1)
4.3	<b>Have commission members made contributions to IAH Blue or Green Book Series?</b>	No
4.4	<b>Other publications (meeting compilations, brochures, etc.)</b>	Yes, please see sections 3.1. and 3.5.

5	<b>Other information (any other information you want to mention)</b>	We have steadily grown the committee membership over the last 2 years keeping a strong focus on ECR and EDI in selecting candidates.
5.1	<b>Please indicate if you have received any funding support from within IAH and/or from other external groups or partners</b>	Our commission's inaugural session at UNESCO in Paris was sponsored by UNESCO, UNESCO also helped to support the first video we prepared on groundwater quality in 2021.
5.2	<b>Relation between IAH Executive and the Commissions and Networks (feel free to send any information about contacts, support, etc., you feel could be changed or improved)</b>	<p>There has been regular representation at commission meetings from the Executive (Dave and Jane).</p> <p>We have reached out to the Karst commission about a joint Technical Insight Paper and may look to invite a member of the karst commission (and potentially other networks) to join the committee to facilitate greater collaboration/information sharing.</p>

6	<b>How many meetings of its members has the Commission or Network organized?</b>	Our commission meets on monthly basis.
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6.1	<b>Dates and locations of these meetings and estimated number of participants at each one</b>	Currently, the commission members meet on the first Tuesday every month at 11:00 AM EST. On average, 7 to 9 members attend.
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7	<b>Please use this space to insert any other information or to send any comment you haven't had the opportunity to insert in any of the previous points</b>	
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Date and signature of the person(s) responsible for completing this form



T.Boving

Kingston RI – Feb. 05, 2025

Dan Lapworth

D.Lapworth

Wallingford Oxon – 12/02/25

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**ANNEX A**

<p>Point 3. Refer here to the general activities listed in the original Application Form, point 8:</p> <p>(add also the other activities you mentioned in point 9 of the Application Form)</p>	<p><i>Group Meetings</i> <i>Sessions at Conferences</i> <i>Stand-alone Specialist Meetings/Symposia</i> <i>Training Workshops</i> <i>Exchange of Knowledge</i> <i>Dissemination of Knowledge</i> <i>Research</i> <i>Liaison / Interaction with other groups / organisations</i> <i>Education</i> <i>Expert Advice e.g. to UN / Governments</i></p>
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