

Dear MAR family, good afternoon!

## IAH MAR Commission Newsletter. 2024 April-May

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## PUBLICATIONS ABOUT MAR

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### IAH-MAR Commission. Report of activities 2023

The Managing Aquifer Recharge (MAR) Commission has submitted to IAH the memory of activities during 2023. Co-chairs thank all members their word spreading the MAR message around!

International Association of Hydrogeologists  
Commission on Managing Aquifer Recharge



International Association  
of Hydrogeologists  
the World-wide Groundwater Organisation

IAH Commission on  
Managing Aquifer Recharge

**IAH-MAR  
REPORT OF ACTIVITIES 2023**

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Website  
<https://recharge.iah.org/>

Sister Websites:  
Spanish: <https://dinamar.tragsa.es>  
Chinese: <http://china-mar.ujn.edu.cn/>

Download the report from our website:  
<https://recharge.iah.org/files/2024/04/IAH-MAR-Annual-Report-2023-all.pdf>

## Managed Groundwater Recharge and Rainwater Harvesting

New springer book on MAR with special focus on developing countries.

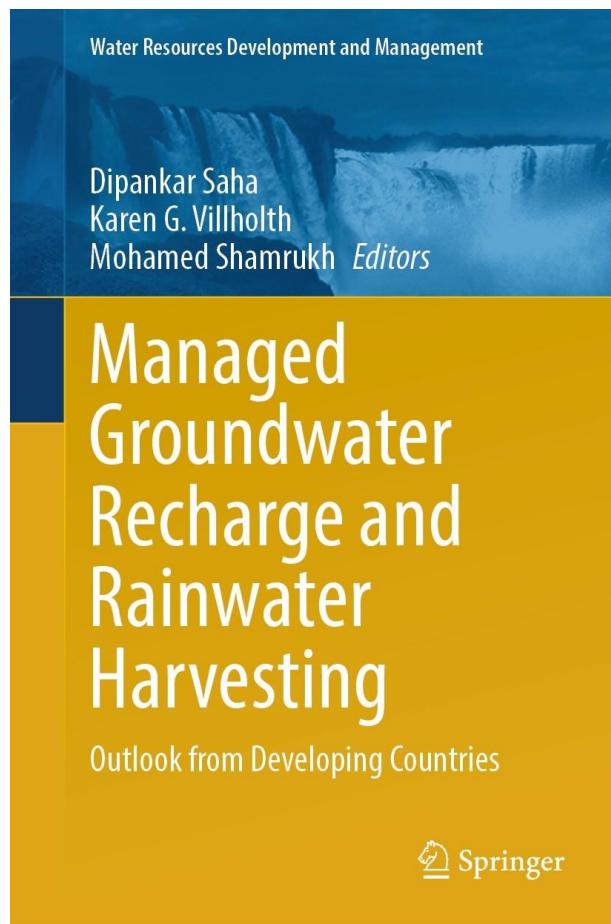
Highlights how groundwater recharge enhancement and rainwater harvesting help in making water resources sustainable.

Provides case studies of these applications in developing countries to resolve the water crises.

Discusses sustainability of water and climate change adaptation via groundwater recharge, water harvesting, and storage.

Editors:

Dipankar Saha,  
Karen G. Villholth,  
Mohamed Shamrukh



More info:

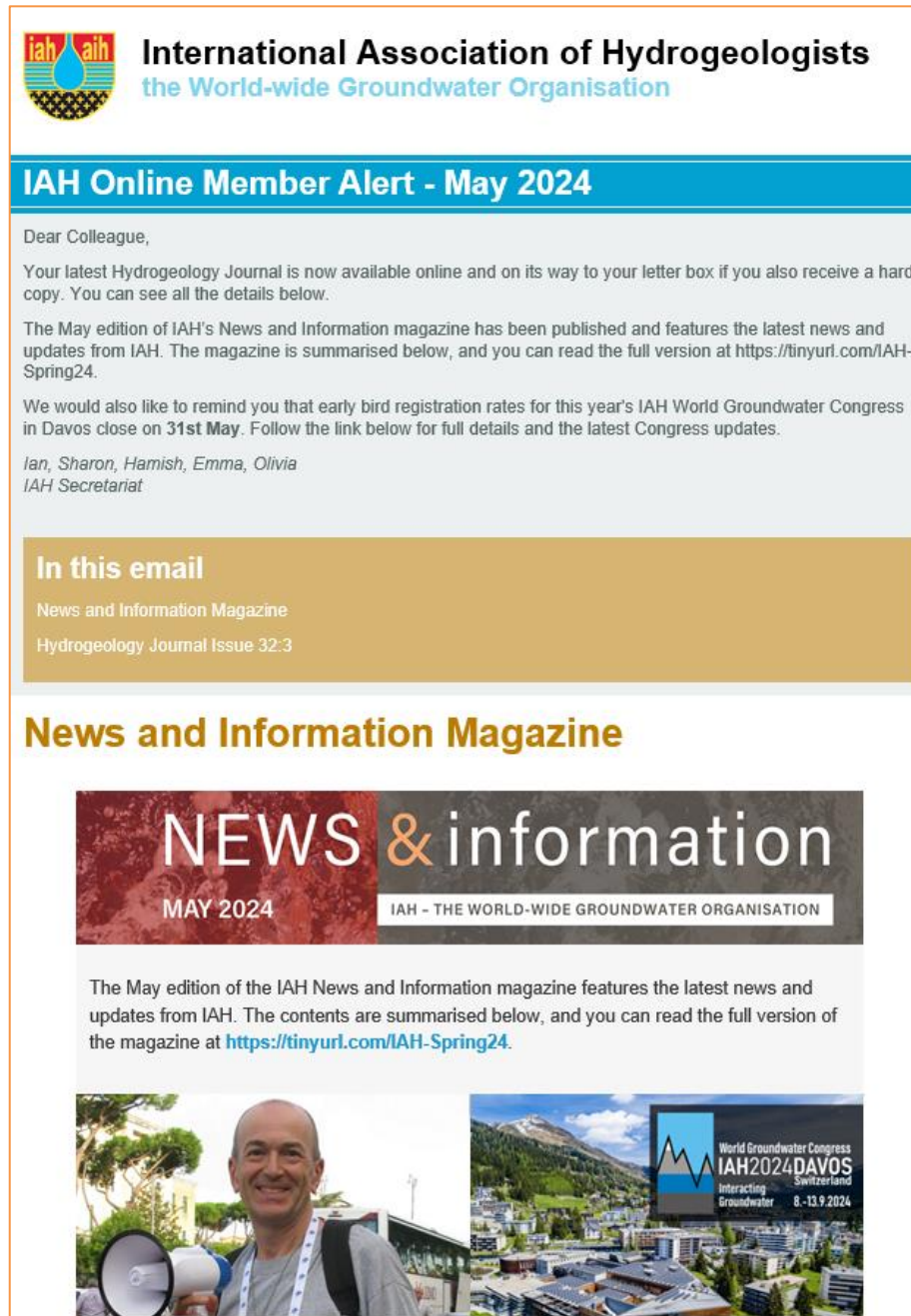
<https://link.springer.com/book/10.1007/978-981-99-8757-3>


Thank you Paul Pavelic for reporting.

## NEW MAR-RELATED PUBLICATIONS

### IAH on line member alert. 2024 May edition just released...

The May edition of IAH's News and Information magazine has been published and features the latest news and updates from IAH. The magazine is summarised below, and you can read the full version at <https://tinyurl.com/IAH-Spring24>.



 **International Association of Hydrogeologists**  
the World-wide Groundwater Organisation

### IAH Online Member Alert - May 2024

Dear Colleague,

Your latest Hydrogeology Journal is now available online and on its way to your letter box if you also receive a hard copy. You can see all the details below.

The May edition of IAH's News and Information magazine has been published and features the latest news and updates from IAH. The magazine is summarised below, and you can read the full version at <https://tinyurl.com/IAH-Spring24>.


We would also like to remind you that early bird registration rates for this year's IAH World Groundwater Congress in Davos close on **31st May**. Follow the link below for full details and the latest Congress updates.

*Ian, Sharon, Hamish, Emma, Olivia*  
IAH Secretariat

#### In this email


- News and Information Magazine
- Hydrogeology Journal Issue 32:3

### News and Information Magazine



**NEWS & information**  
MAY 2024 IAH - THE WORLD-WIDE GROUNDWATER ORGANISATION

The May edition of the IAH News and Information magazine features the latest news and updates from IAH. The contents are summarised below, and you can read the full version of the magazine at <https://tinyurl.com/IAH-Spring24>.



World Groundwater Congress  
**IAH2024 DAVOS**  
Interacting Groundwater  
Switzerland  
8 - 13.9.2024

If you have any comments on this alert please contact [swarden@iah.org](mailto:swarden@iah.org)

## Spring 2024 - California's Groundwater...

Semi-annual Conditions Updates are more frequent supplements to the comprehensive 5-year California's Groundwater (Bulletin 118) Updates <https://water.ca.gov/calgw>, and also provide additional perspective on the near-real-time data availability through California's Groundwater Live. <https://sgma.water.ca.gov/CalGWLIVE/>



URL:

[https://data.cnra.ca.gov/dataset/ae160cf2-51d8-450d-82cc-2708e63ccd95/resource/ba12c11f-b8b8-4d37-a9e4-13c2d7831285/download/may\\_2024\\_semi\\_annual\\_groundwater\\_conditions\\_report\\_v3.pdf](https://data.cnra.ca.gov/dataset/ae160cf2-51d8-450d-82cc-2708e63ccd95/resource/ba12c11f-b8b8-4d37-a9e4-13c2d7831285/download/may_2024_semi_annual_groundwater_conditions_report_v3.pdf)

## Presentación del libro "Agua subterránea. Visibilizando lo invisible"

Scant Info received. We'll try and find more...



<https://www.youtube.com/watch?v=u6OpiM3JU-w>

Thank you Werner Ochoa for informing.

## MAR AND MAR-RELATED CONFERENCES AND SEMINARS

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### ISMAR 12. Call for abstracts **IMMINENT!**



*“From Theory to Implementation and Operation”*

*28 April – 2 May 2025 – Stellenbosch, South Africa*

**1 year to go. ISMAR is going to South Africa, are you ready?**

The Main Theme of ISMAR 12 is “From Theory to Implementation and Operation”, with 8 Sub-themes to guide abstract submissions for consideration.

A detailed expansion of each sub-theme on the ISMAR12 website, <https://ismar12.org.za/> is provided to help clarify the Sub-themes for both presenters and attendees. The Sub-themes were selected to address various MAR methodologies, applications, and developments.

Feel free to browse through the Sub-themes and submit one or more abstracts for either oral presentations or posters by Oct 2024.

Register for the Symposium in June 2024 to secure your attendance at the workshops, presentations, networking, and tours. The Sponsorship/Exhibition Prospectus and the Call for Pre-Conference Workshops for Day 1 will be available in the next few weeks. Three exciting excursions are planned for Day 5 showcasing the latest developments in the field of MAR in South Africa...

**The Call for Abstracts is coming out in May.**





**ISMAR12** | STELLENBOSCH  
 SOUTH AFRICA  
 28 APRIL - 2 MAY 2025

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**International Symposium on  
 Managed Aquifer Recharge**

Theme

**From *Theory* to  
*Implementation* and  
*Operation***

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**28 April – 2 May 2025**  
**Stellenbosch | South Africa**

For more information please visit <https://ismar12.org.za/> (active 1 March 2024)

More info: <https://ismar12.org.za/>

## ISMAR 13. Call for proposals. Open!

Have you thought about hosting an ISMAR?  
 By the moment, there are not candidacies to host ISMAR 13.  
 Please, consider it seriously and contact a co-chair... (India is so lovely)

<ol style="list-style-type: none"> <li>1. 1988 Anaheim California, USA (ASCE)</li> <li>2. 1994 Orlando, Florida, USA (ASCE)</li> <li>3. 1998 Amsterdam, Netherlands (IAH, ASCE &amp; UNESCO)</li> <li>4. 2002 Adelaide, Australia</li> <li>5. 2005 Berlin, Germany</li> <li>6. 2007 Phoenix, Arizona, USA</li> <li>7. 2010 Abu Dhabi, UAE</li> <li>8. <b>2013 Beijing, P.R. China</b></li> <li>9. <b>2016 Mexico City, Mexico</b></li> <li>10. <b>2019 Madrid</b></li> <li>11. <b>2022 Palm Beach California</b></li> <li>12. <b>2025. South Africa...</b></li> </ol>	         
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## The SGMA implementation summit & workshop

June 5- 6, 2024 at the Kimpton Sawyer Hotel in Sacramento  
Day One: 8:30am - 6:00pm | Day Two: 8:30am - 12:00pm



Once again, we are working in collaboration with the ACWA Groundwater Committee and SGMA Implementation Subcommittee to bring you this interactive collaborative event... Last year this event sold out!

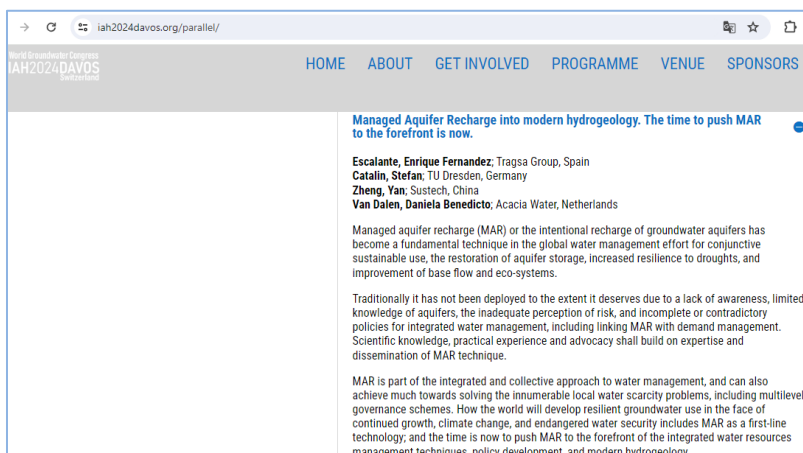
Read more... [interactive collaborative event](#)

## IAH 2024 Conference. Davos, Switzerland. September

The IAH 2024 conference will take place in Davos, 2024, September 8-13<sup>th</sup>.

There is a specific session on MAR: “Managed Aquifer Recharge into modern hydrogeology. The time to push MAR to the forefront is now”.

**Provisionally, 20 ORAL SLOTS have been permitted by organizers for the MAR session**



World Groundwater Congress  
IAH2024 DAVOS  
Switzerland

HOME ABOUT GET INVOLVED PROGRAMME VENUE SPONSORS

**Managed Aquifer Recharge into modern hydrogeology. The time to push MAR to the forefront is now.**

Escalante, Enrique Fernandez: Tragsa Group, Spain  
Catalin, Stefan: TU Dresden, Germany  
Zheng, Yan: Sustech, China  
Van Dalen, Daniela Benedicto: Acacia Water, Netherlands

Managed aquifer recharge (MAR) or the intentional recharge of groundwater aquifers has become a fundamental technique in the global water management effort for conjunctive sustainable use, the restoration of aquifer storage, increased resilience to droughts, and improvement of base flow and eco-systems.

Traditionally it has not been deployed to the extent it deserves due to a lack of awareness, limited knowledge of aquifers, the inadequate perception of risk, and incomplete or contradictory policies for integrated water management, including linking MAR with demand management. Scientific knowledge, practical experience and advocacy shall build on expertise and dissemination of MAR technique.

MAR is part of the integrated and collective approach to water management, and can also achieve much towards solving the innumerable local water scarcity problems, including multilevel governance schemes. How the world will develop resilient groundwater use in the face of continued growth, climate change, and endangered water security includes MAR as a first-line technology; and the time is now to push MAR to the forefront of the integrated water resources management techniques, policy development, and modern hydrogeology.



More info: <https://www.iah2024davos.org/>

## BSMAR18 Symposium has finished successfully

BSMAR 18 Symposium has taken place in Arizona from April 3-6, 2024.



Results will be posted at: <https://ahssymposium.org/bsmar/>

## Regional Hybrid Training Workshop on “Groundwater governance: lessons learned, challenges and solutions”. April 23-24, 2024, Tehran, Iran

Contributing more than 50% in providing water for economic, social, and cultural processes, groundwater resources are highly valuable in Iran, However, climate change, prolonged droughts, and excessive overexploitation have threatened the sustainability of these strategic resources.



IAH-MAR Commission has cooperated in the organization of the workshop.

More info:

<https://rcuwm.ir/news/groundwater-governance-lessons-learned-challenges-and-solutions/>

## SEMINARS AND WEBINARS

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### Legislating and Implementing Solutions for Emerging Contaminants (GRA Seminar, April 18<sup>th</sup>)

GRA's 2024 Groundwater Law and Legislation Forum! Delve has been the latest legal and legislative intricacies impacting California's groundwater management in an interactive day of learning and engaging discussions.



The poster features a dark blue background with a colorful, low-poly geometric pattern on the left side. The text is white and yellow. It includes the logos for the Groundwater Resources Association of California and Brownstein. The main text reads: '10 YEARS INTO SGMA AND REMAINING ISSUES • PROPOSITION 218 • WATER STORAGE AND GROUNDWATER RECHARGE • PFAS AND EMERGING CONTAMINANTS • AND MORE!'. Below this, it says 'THE GROUNDWATER RESOURCES ASSOCIATION & BROWNSTEIN PRESENT THE LAW & LEGISLATION FORUM' in large, bold letters, followed by 'APRIL 18, 2024 | ELKS TOWER, DOWNTOWN SACRAMENTO'. At the bottom, it invites attendees to join for an interactive day of learning and engaging discussions around the most current legal and legislative issues affecting California groundwater!

## NEW MAR OR MAR-RELATED ACTIVITIES

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### Groundwater Recharge California

Groundwater recharge is a key strategy throughout California to manage water through climate-driven weather extremes, including prolonged drought and periodic intense storm events...

<https://water.ca.gov/Programs/Groundwater-Management/Groundwater-Recharge>



Read more:

<https://data.cnra.ca.gov/dataset/california-s-groundwater-semi-annual-conditions-updates/resource/ba12c11f-b8b8-4d37-a9e4-13c2d7831285>

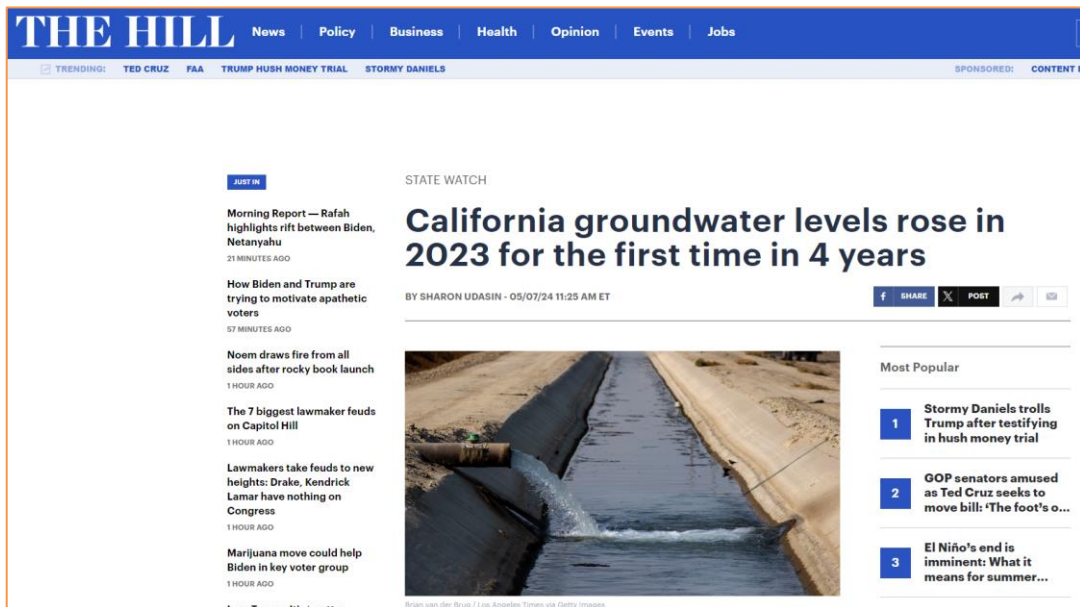
<https://water.ca.gov/News/News-Releases/2024/Mar-24/Understanding-the-Underground-DWR-Completes-First-Phase-of-Innovative-Groundwater-Mapping-Program>

## MORE ACTION

### MAR news from California!

Managed aquifer recharge was vital in increasing groundwater levels after four years of decline.

"Managed groundwater recharge involves purposefully replenishing supplies by injecting excess water into an aquifer. The 4.1 million acre-feet recharge volume was equivalent to the entire storage capacity of Shasta Lake, the largest above-ground reservoir in California."



<https://thehill.com/homenews/state-watch/4648836-california-groundwater-levels-rose-2023-first-time-four-years/>

It is great to see how this technique can work at large scales!

Thank you José Henao for reporting.

## Hydraulic regeneration of the Huacachina oasis in Ica, Peru

MAR-related interesting article in the Peruvian press about the hydraulic regeneration of the Huacachina oasis in Ica, Peru, thanks to anthropic techniques.

Our friend Roberto Navarro played an important work in this activity, and he might broaden some Info.

<https://andina.pe/agencia/noticia-huacachina-peligro-ingemmet-advierte-descenso-nivel-agua-y-plantea-solucion-980814.aspx>



Our colleague Fluker Peña (et al) published a related interesting technical report years ago...

Fluker et al: <https://repositorio.ingemmet.gob.pe/handle/20.500.12544/370>

Roberto and Pancho presented the problem and solutions in ISMAR 10 conference: <https://dinamar.tragsa.es/post/tras-la-clausura-de-la-web-ismar10-net-los-principales-resultados-se-han-trasladado-a-dinamar-tragsa-es>

## Some more MAR-related news from Mexico

[https://www.clarin.com/rural/claves-gestionar-agua-lluvia-disponible-suelo-campana-fina\\_0\\_qCzNPNnnWn.html](https://www.clarin.com/rural/claves-gestionar-agua-lluvia-disponible-suelo-campana-fina_0_qCzNPNnnWn.html)

## Whatsapp group on Aquifer Recharge Management

This is the link to join the group, with 191 participants today:



<https://chat.whatsapp.com/DGh9YGv833OAXr6yQ65liN>

## Previous IAH-MAR Newsletters

Please, remember that you can access the previous newsletters in our website:

<https://recharge.iah.org/newsletters>

## IAH-MAR Commission on Twitter (X)



**@IAHMARCom**

<https://twitter.com/IAHMARCom>

## IAH-MAR Commission's sister Web sites

<http://china-mar.ujn.edu.cn/>



<https://dinamar.traqsa.es/>



@4dina\_mar

<https://www.linkedin.com/groups/4690290/> (536 members)

## IAH MAR Commission Forum

Please, remember you can book freely in the IAH MAR Commission Forum:

<https://lists.flinders.edu.au/mailman/listinfo/iah-mar.listcgs>

That's all by now... **please, keep reporting** ([dinamar@traqsa.es](mailto:dinamar@traqsa.es)). We miss pieces of news, especially from Asia

Dr. Enrique Fernández Escalante, on behalf of the IAH MAR Commission co-chairs.

2024 May 10<sup>th</sup>

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