

## IAH MAR Commission Newsletter. 2024 July and August

Dear MAR family, please, find attached recent pieces of news about MAR. Despite it has been a very quiet MAR period, here we go...

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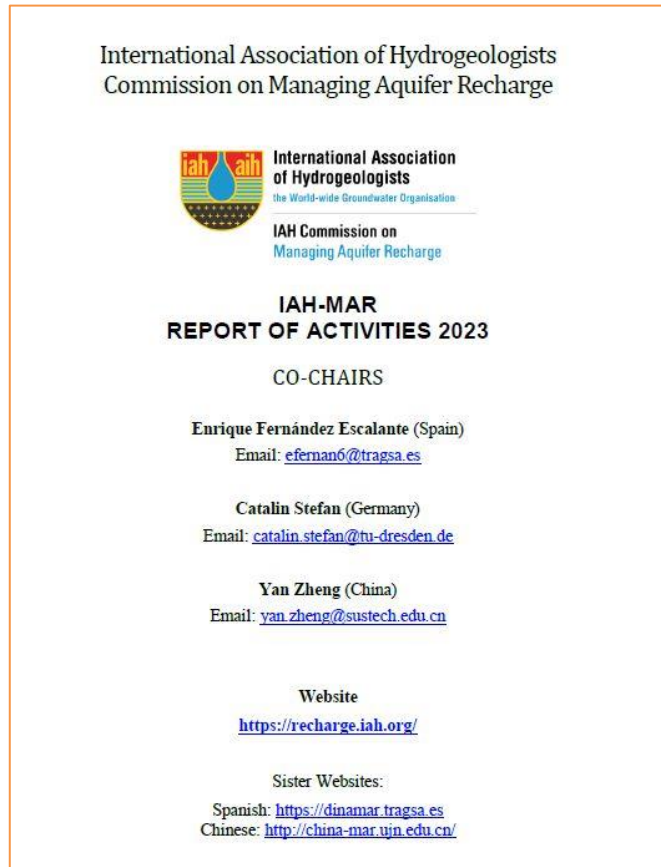
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## PUBLICATIONS ABOUT MAR

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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.



Download the report from our website:

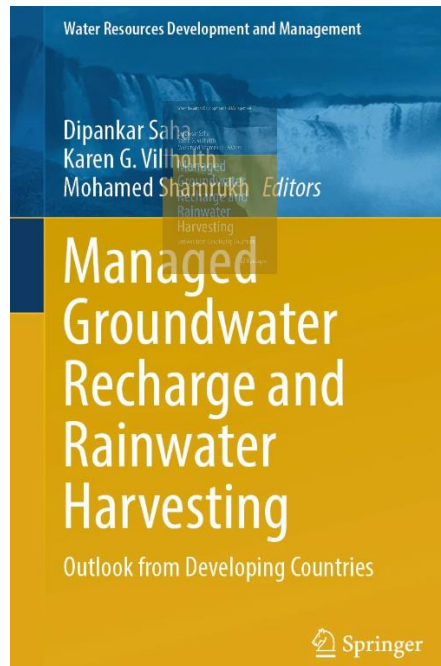
<https://recharge.iah.org/files/2024/04/IAH-MAR-Annual-Report-2023-all.pdf>

## NEW MAR-RELATED PUBLICATIONS

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### Two cases of artificial recharge in Colombia

Chapter of the book (already introduced in the previous newsletter):



More info:

[https://www.researchgate.net/publication/379377025\\_Artificial\\_Groundwater\\_Recharge\\_in\\_Santa\\_Marta\\_and\\_Bogota\\_Colombia](https://www.researchgate.net/publication/379377025_Artificial_Groundwater_Recharge_in_Santa_Marta_and_Bogota_Colombia)

Thank you Carlos Molano for reporting.

## MAR AND MAR-RELATED CONFERENCES AND SEMINARS

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### IAH 2024 Conference. Davos, Switzerland. September. IMMINENT

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”*.

### 20 ORAL SLOTS WILL BE EXPOSED DURING THE MAR SESSION



#### Organization of sessions and role of chairs

To help organize the session please fill in the online form:

[www.iah2024davos.org/sessionchairs](http://www.iah2024davos.org/sessionchairs) by July 31<sup>st</sup>.

#### Session program

- You find the session program on the website under [www.iah2024davos.org/parallel](http://www.iah2024davos.org/parallel)

#### Session format and schedule

- Oral presentation slots are 15 Minutes with 12 Min for the presentation and 3 Min for question and transition.
- In exceptional cases, invited presentations can be 20+10 Min, if there is sufficient time.
- Each session includes one or two slots for short poster pitches.
- In case of no-show, the schedule needs to be maintained as participants tend to switch between sessions to attend specific presentation. They time can be used for a longer discussion or a break.

#### Chairing sessions

- Sessions are chaired by one or two persons. For longer session with multiple blocks, we suggest that each block is chaired by different persons if sufficient chairs are available.
- Ensure diversity and include junior and senior scientists. If you require additional persons to chair your session indicate it in the online form.
- Please indicate in the online form, which of the session chairs/co-chairs will be present and are available to chair sessions.

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

## ISMAR 12. Call for abstracts, STILL OPEN!



12<sup>th</sup> International Symposium  
on Managed Aquifer Recharge

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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 IAH  
SOUTH  
AFRICA



28 April – 2 May 2025  
Stellenbosch | South Africa

For more information please visit <https://ismar12.org.za/>

***“From Theory to Implementation and Operation”***

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

**About nine months to go... ISMAR is going to Africa, covering the 5<sup>th</sup> continent hosting an ISMAR... get ready!**

The Main Theme of ISMAR 12 is “From Theory to Implementation and Operation”, with eight 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 address various MAR methodologies, applications, and developments.

Register for the Symposium from 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 imminently. Three exciting excursions are planned for Day 5 showcasing the latest developments in the field of MAR in South Africa...

Interesting opportunities for sponsorship: <https://ismar12.org.za/sponsorship/>





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

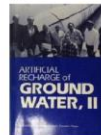
### ISMAR 13. Call for proposals.

Have you thought about hosting an ISMAR? Please, consider hosting ISMAR 13 and contact a co-chair...



## International Symposia on MAR

1. 1988 Anaheim California, USA (ASCE)
2. 1994 Orlando, Florida, USA (ASCE)
3. 1998 Amsterdam, Netherlands (IAH, ASCE & UNESCO)
4. 2002 Adelaide, Australia “
5. 2005 Berlin, Germany “
6. 2007 Phoenix, Arizona, USA “
7. 2010 Abu Dhabi, UAE “
8. 2013 Beijing, P.R. China “
9. 2016 Mexico City, Mexico “
10. 2019 Madrid, Spain
11. 2022 Long Beach, CA, USA
12. 2025 Stellenbosch, S. Africa



## SEMINARS AND WEBINARS

### **Eighth International Symposium on Flash Floods in Wadi Systems**

The Eighth International Symposium on Flash Floods in Wadi Systems (ISFF8) is organized by the National Water and Energy Center, UAE University, on November 4-5, 2024. The two-day symposium will take place in Al Ain City, United Arab Emirates, on the campus of the UAE University. This version will convene on the theme "Flash Floods, Water Harvesting, and Groundwater Recharge Potentials". Continuing to share knowledge, experiences and lessons learned by all participants, ISFF8 organizers welcome presentations from all relevant fields...



More info: <https://conferences.uaeu.ac.ae/isff8/en/index.shtml>

Thank you Peter Dillon for reporting.

### **AGU Fall Meeting (9-13 December 2024, Washington D.C. USA).**



AGU 2024 Fall Meeting session H017 on: Advances in Managed Aquifer Recharge for Groundwater Sustainability.

This session encourages submissions on:

- emerging MAR technologies including injection, vadose zone recharge (e.g., drywells), and surface spreading methods (e.g., infiltration basins, flood-managed MAR);
- water flow and contaminant transport processes during MAR;
- water balance studies investigating the role of MAR in water supply reliability, flood-risk reduction, groundwater quality, drought preparedness, and climate change adaptation;
- hydrologic, ecological and socio-economic benefits of MAR;
- potential institutional challenges, socio-environmental impediments, and unintended consequences associated with intentional groundwater recharge.

Abstract deadline finished on Wednesday July 31<sup>st</sup> 2024 23:59 EDT/03:59 +1 GMT.

SESSION CONVENERS:

**Helen E Dahlke** (University of California Davis), **Sarah Fakhreddine** (Carnegie Mellon University), **Deborah Leslie** (University of Memphis), **Doug Beak** (United States Environmental Protection Agency).

INVITED SPEAKERS:

**Dr. Bridget Scanlon**, University of Texas, Austin  
**Dr. Stephen Ferencz**, Pacific Northwest National Laboratory

More info: <https://agu.confex.com/agu/agu24/gateway.cgi#>

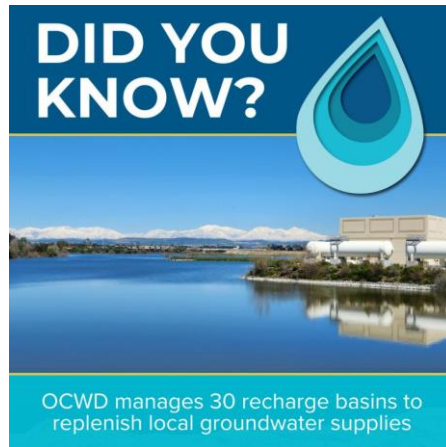
Thank you Helen Dahlke for reporting.



## NEW MAR OR MAR-RELATED ACTIVITIES

### 30 percolation basins at Orange County Groundwater Basin

DYK OCWD manages 30 percolation basins that slowly recharge water back into the Orange County Groundwater Basin while naturally filtering and purifying it? This high-quality water eventually becomes part of north and central Orange County’s drinking water supply...




Read more: [https://www.linkedin.com/posts/orange-county-water-district\\_dyk-ocwd-manages-30-percolation-basins-that-activity-7224837091199700992-IEK7/?utm\\_source=share&utm\\_medium=member\\_desktop](https://www.linkedin.com/posts/orange-county-water-district_dyk-ocwd-manages-30-percolation-basins-that-activity-7224837091199700992-IEK7/?utm_source=share&utm_medium=member_desktop)

<https://www.ocwd.com/what-we-do/groundwater-management/>

WHAT WE DO

- Groundwater Management
  - Engineer & Recharge Reports
  - Groundwater & Location Maps
  - Groundwater Management Plan
  - Groundwater Supplies
- Water Reuse
- Water Quality
- Sound Planning
- Environmental Stewardship
- Research & Development
- Sound Financial Management
- Government/Legislative Affairs



### Groundwater management

Orange County Water District is responsible for managing the vast groundwater basin that provides most of northern and central Orange County’s drinking water. As part of its groundwater management program, OCWD maintains a diversified water supply portfolio to ensure a variety of water sources fill the basin. OCWD’s long history of active management and investment in the local groundwater basin has not only sustained the basin but doubled its annual sustainable yield.

To maintain a healthy basin, OCWD will continue to explore all water supply options, including desalination, cloud seeding, enhanced water reuse, increased stormwater capture, storage partnerships, and more.

<b>160+</b> billion <small>gallons stored in the basin</small>	<b>85%</b> <small>drinking water supply for 19 retailers</small>	<b>2.5 million</b> <small>people served in north and central OC</small>	<b>30</b> <small>recharge basins that store and percolate water into the basin</small>	<b>400</b> <small>District-owned monitoring wells throughout the basin</small>
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**Sources of Water in the Basin:**

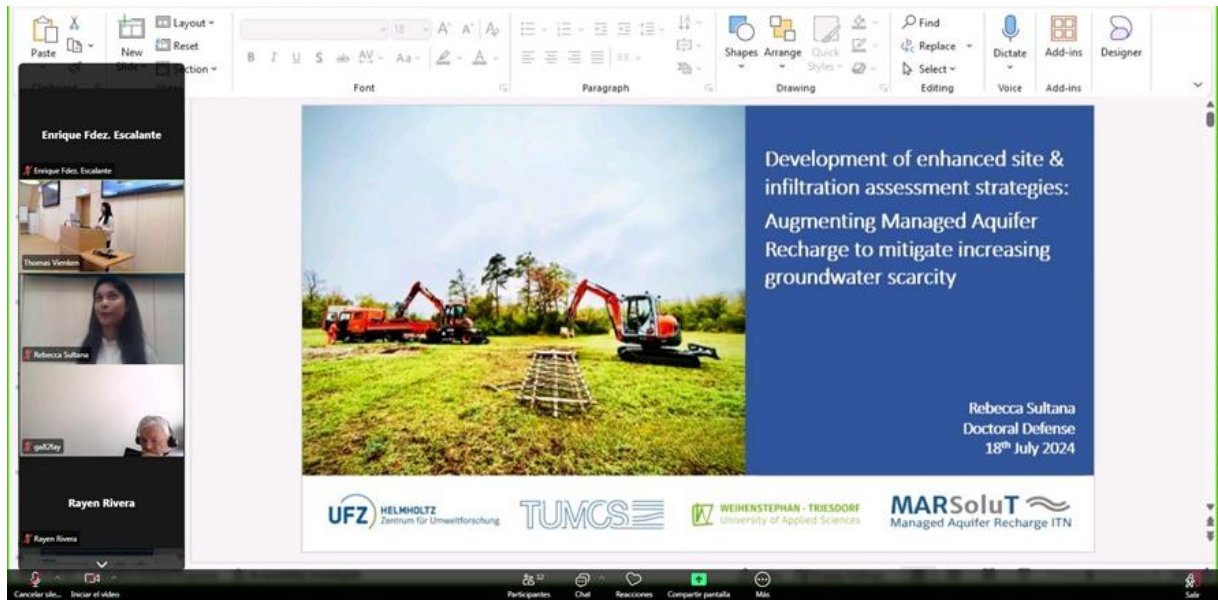
- Santa Ana River
- Stormwater
- Natural recharge such as rainfall
- Imported water from northern California and the Colorado River
- Recycled water from the Groundwater Replenishment System (GWRS)

Thank you Adam Hutchinson for reporting.

## MORE ACTION

### Another thesis on MAR defended recently

Last July 18<sup>th</sup> Rebecca Sultana successfully defended her thesis at Leipzig University: *Augmenting Managed Aquifer Recharge to mitigate increasing groundwater scarcity.*

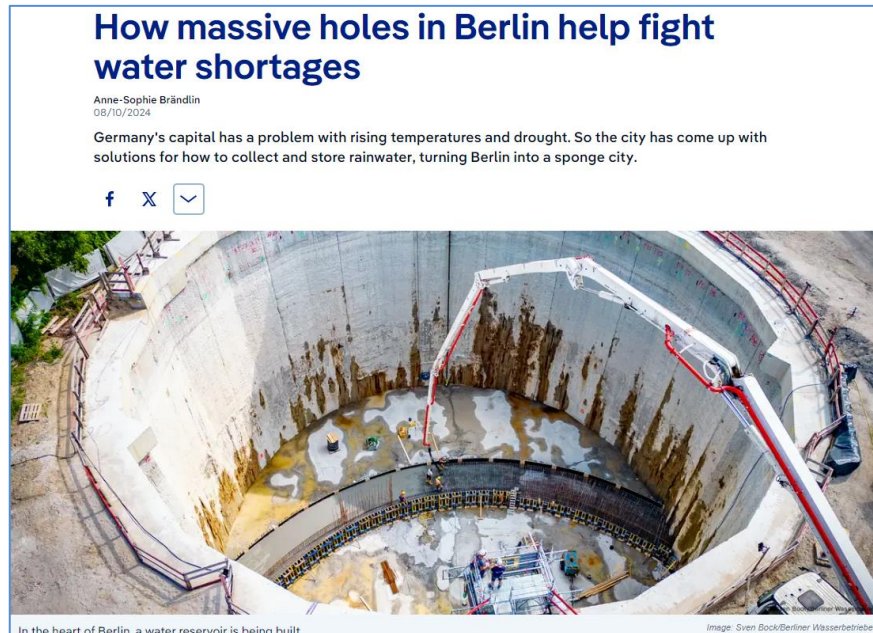


8/12 marsolut ESRs (<https://www.marsolut-itn.eu/people/early-stage-researchers/>) are already Doctors.

Congratulations, Rebecca!

## How massive holes in Berlin help fight water shortages

Germany's capital has a problem with rising temperatures and drought. So the city has come up with solutions for how to collect and store rainwater, turning Berlin into a sponge city...



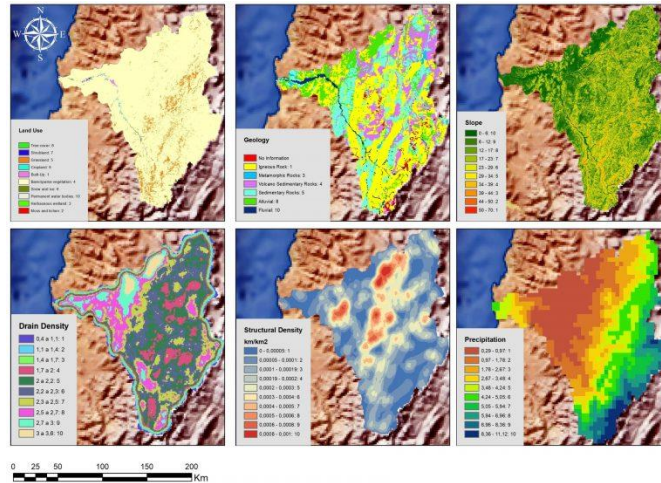
Read more: <https://www.dw.com/en/how-massive-holes-in-berlin-help-fight-water-shortages/a-69864142>

Thank you Anurag Verma for reporting.

## La recarga artificial de acuíferos, una solución para la seguridad hídrica del desierto de Chile (in Spanish)

Investigadores de la **Universidad de Atacama** y del **Centro Avanzado para Tecnologías del Agua (CAPTA)** de la **Universidad de Chile**, desarrollan innovadoras técnicas de hidroinformática para la identificación de las zonas más eficientes y adecuadas para la recarga artificial de acuíferos en el desierto de Atacama...





More info (in Spanish):

<https://www.elmostrador.cl/cultura/ciencia-cultura/2024/07/11/desarrollan-tecnologia-para-la-recarga-artificial-de-acuiferos-en-el-desierto-de-atacama/>

<https://www.iagua.es/noticias/centro-avanzado-tecnologias-agua-capta/recarga-artificial-acuiferos-solucion-seguridad>

## Whatsapp group on Aquifer Recharge Management

This is the link to join the group, with 189 participants today, is changed monthly. Please, access the last IAH-MAR newsletter to access the correct link.



<https://chat.whatsapp.com/EQzVZOK9PmzG8opQbABpqj>

## Previous IAH-MAR Newsletters

Previous newsletters' access:

<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.tragsa.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@tragsa.es](mailto:dinamar@tragsa.es)). We miss pieces of news, especially from Asia

Dr. Enrique Fernández Escalante, on behalf of the IAH MAR Commission co-chairs.  
2024 August 26<sup>th</sup>