

## **IAH MAR Commission Newsletter. 2026 September-October. Issue n° 58.**

Dear IAH-MAR group, please, find recent information about Managing Aquifer Recharge.

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-

## ISMAR 13 might be delayed (Roorkee, India, October 20-22, 2027?)

Despite the organizing committee had released this leaflet, they have recently announced a possible modification to the beginning of 2028, in order to avoid a certain overlap with the IAH conference in Mexico.

**Themes for ISMAR-13**

|                                                                                        |                                                                         |
|----------------------------------------------------------------------------------------|-------------------------------------------------------------------------|
| <b>T1</b><br>Climate-Resilient<br>Managed Aquifer<br>Recharge Systems                  | <b>T2</b><br>Artificial Intelligence,<br>Digital Twins and<br>Smart MAR |
| <b>T3</b><br>Financing MAR:<br>Investments, Economics<br>and Water Security<br>Markets | <b>T4</b><br>Urban MAR and<br>Sponge-City<br>Infrastructure             |
| <b>T5</b><br>MAR and Circular<br>Water Economy                                         | <b>T6</b><br>Nature-Based Solutions<br>and Ecosystem-<br>Centered MAR   |
| <b>T7</b><br>Managed Aquifer<br>Recharge for<br>Agricultural Resilience                | <b>T8</b><br>MAR in Coastal Aquifers<br>and Small Islands               |
| <b>T9</b><br>Emerging Contaminants,<br>Water Quality and Risk<br>Governance            | <b>T10</b><br>MAR Monitoring,<br>Remote Sensing and<br>Hydroinformatics |
| <b>T11</b><br>Community-Centered<br>and Indigenous<br>Recharge Systems                 | <b>T12</b><br>MAR Policy, Governance<br>and Legal Frameworks            |
| <b>T13</b><br>Energy, Carbon and<br>MAR Nexus                                          |                                                                         |

**13<sup>th</sup> INTERNATIONAL  
SYMPOSIUM ON MANAGED  
AQUIFER RECHARGE  
ISMAR-13**

Recharging the Future: Innovations  
in Managed Aquifer Recharge for  
Water Security

**October 20-22, 2027**

**Roorkee, India**

Organized jointly by




National Institute  
of Hydrology  
(NIH), Roorkee,  
India

Indian National Chapter of the  
International Association of  
Hydrogeologists (INC-IAH)  
&  
Commission on Managed Aquifer  
Recharge

**About the Conference**

The International Symposium on Managed Aquifer Recharge (ISMAR) is the premier international event on MAR research and practice, held every 3 or 4 years under the auspices of the International Association of Hydrogeologists (IAH), the American Society of Civil Engineers (ASCE), and the United Nations Educational, Scientific, and Cultural Organization (UNESCO). This series of conferences advances the goal of IAH's Commission on MAR "to expand water resources and improve water quality in ways that are appropriate, environmentally sustainable, technically viable, economical, and socially desirable".

The present Conference aims at bringing Scientists, Researchers, Students, Engineers, Water Resources Specialists, Government Administrators, NGOs, and all those interested in groundwater and environmental problems to a common platform and offer the opportunity to exchange ideas, knowledge, experience, techniques, and know-how in various aspects of groundwater research carried out in the last few decades in India and elsewhere.

**Key Dates**

Abstract Submission till 31<sup>st</sup> March 2027

Early Bird Registration till 30<sup>th</sup> April 2027

Please, keep an eye on further information once organizers inform about the final details.



### International Symposia on MAR

- 1988 Anaheim California, USA (ASCE)
- 1994 Orlando, Florida, USA (ASCE)
- 1998 Amsterdam, Netherlands (IAH, ASCE & UNESCO)
- 2002 Adelaide, Australia
- 2005 Berlin, Germany
- 2007 Phoenix, Arizona, USA
- 2010 Abu Dhabi, UAE
- 2013 Beijing, P.R. China
- 2016 Mexico City, Mexico
- 2019 Madrid, Spain
- 2022 Long Beach, CA, USA
- 2025 Stellenbosch, S. Africa
13. 2028 Roorkee, India





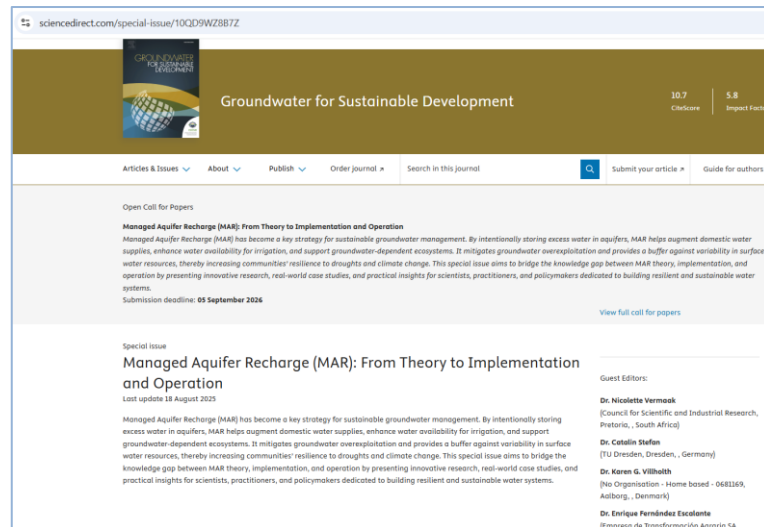





## PUBLICATIONS ABOUT MAR

### ISMAR 12's GSD special issue

The special Issue on MAR born after ISMAR 12 continues. The submission deadline is over and some articles are still under review. 19 papers are already on line.



Link to the SI: <https://www.sciencedirect.com/special-issue/10QD9WZ8B7Z>

## French BRGM publications on MAR (national framework and methodological guideline)

The BRGM report and th one of the French Ministry are already online:  
<https://infoterre.brgm.fr/rapports/RP-75655-FR.pdf>



*In French MAR is introduced by the French expression “Recharge maîtrisée d’aquifère”.*

**MAR from France → 2 new reports (in french)**

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE, DE LA BIODIVERSITÉ ET DES NÉGOCIATIONS INTERNATIONALES SUR LE CLIMAT ET LA NATURE

➤ <https://www.ecologie.gouv.fr/>  
➤ <https://www.ecologie.gouv.fr/dossiers/commement-mieux-gerer-ressource-eau/plan-eau-3-enjeux-53-mesures>

**Official Ministry announcement coming soon**

BRGM mag n°3 : Faire face aux sécheresses | BRGM  
<https://infoterre.brgm.fr/rapports/RP-75655-FR.pdf> (very soon)

**National Framework**  
Considering Managed Aquifer Recharge Projects  
Report Document  
Ministry for Ecological Transition, Biodiversity and International  
Negotiations on Climate and Nature  
2026

**Methodological guideline**  
Managed Aquifer Recharge in France: current situation,  
experience feedback and perspectives  
Report Document  
BRGM  
2026

**Cadrage national**  
Envisager les projets de recharge maîtrisée des aquifères  
Heure 22 du plan d'action pour une gestion résiliante et concertée de l'eau



01 La recharge maîtrisée des aquifères, une réponse aux déséquilibres quantitatifs actuels et futurs

02 Dans quels objectifs mobiliser les projets de recharge maîtrisée des aquifères ?

03 Rester attentif aux impacts des projets de recharge maîtrisée des aquifères sur la ressource souterraine et les milieux aquatiques

Mai 2026

**Recharge maîtrisée des aquifères en France : état des lieux, retours d'expériences et perspectives**

BRGM

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Thank you, Geraldine Picot, for reporting.

## Aquifer Storage and Recovery and Aquifer Recharge with Reclaimed Water in Texas

Aquifer storage and recovery (ASR) and aquifer recharge (AR) are types of water supply management projects defined in Texas Water Code § 27.151 and § 27.201, and are most often used for water storage or replenishment.

# Aquifer Storage and Recovery and Aquifer Recharge with Reclaimed Water in Texas

by Andrea Croskrey and James Golab



**TEXAS WATER  
DEVELOPMENT BOARD**

February 2026

[www.twdb.texas.gov](http://www.twdb.texas.gov)

More info and download: [texasstatewaterplan.org](http://texasstatewaterplan.org)

Thank you, Dave Kreamer, for reporting.

## IGRAC. The Underground Update Vol. 16 - Sept. 2026

Major MAR Portal Update, New Guide on Groundwater in Humanitarian Contexts, European Drought and 51 Countries Sharing Groundwater Data for WMO Report

*In Volume 16 of Underground Update, you will find the September 2026 highlights. We are sharing a major MAR Portal update including 3,640 Managed Aquifer Recharge sites across 97 countries and freely downloadable MAR illustrations and animations.*

We also look back on the launch of the latest State of Global Water Resources report, with a record number of 51 countries sharing groundwater data...



More info: <https://igrac.substack.com/p/the-underground-update-vol-16-sept>

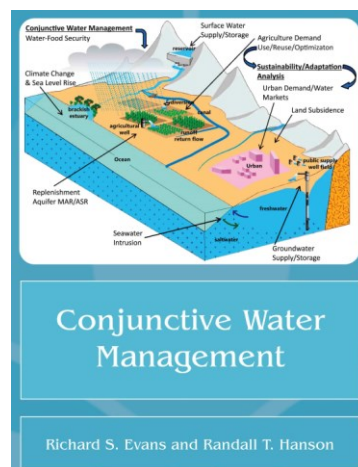
Thank you, Dave Kreamer, for reporting.

## NEW MAR-RELATED PUBLICATIONS

### The groundwater's project. Conjunctive water management

*Conjunctive water management (CWM), is at the heart of what is most limiting to the effective use of freshwater resources for societal and environmental good. CWM refers to the planned, coordinated use of surface water, groundwater, and any other water sources within the management area, along with the management of demand for water, land use, and energy, to optimize use of the water resources and sustain ecological systems. The better-known term, conjunctive use (CU), excludes the well-being of ecosystems as an objective and may also exclude some sources of water. CWM and CU represent the movement and use of all the water everywhere and all the time within the area of interest, and as such, the water is considered to be in compartments of a single system with water continually moving within and exchanging between these compartments...*

Managed aquifer recharge is mentioned 16 times in the text.



Download: [gw-project.org](http://gw-project.org)

## MAR AND MAR-RELATED CONFERENCES AND WORKSHOPS

### Budapest IAH 2026 conference has had two sessions on MAR

The 53rd World Congress of the International Association of Hydrogeologists (IAH) was held in Budapest on 14–18 September 2026 under the theme “Groundwater – A Key Multi-Resource”. According to Eötvös Loránd University (ELTE), the event brought together approximately 856 specialists from over 70 countries. Key topics included water security, scarcity, climate change adaptation and sustainable groundwater management.

Highlights included plenary sessions on groundwater’s role in the 2026 UN Water Conference, the launch of the Budapest Declaration on Groundwater, and technical field visits.

Managed Aquifer Recharge (MAR) featured in two dedicated sessions: “Managed Aquifer Recharge: Essential for Groundwater Security?” and “Managed Aquifer Recharge for Climate Change Adaptation”. Presentations covered water quality, drought resilience, nature-based recharge, modelling and international case studies.

The IAH-MAR Commission hosted the session 5.4 (28 oral presentations) Managed aquifer recharge for climate change adaptation and the annual plenary: IAH-MAR Commission PLENARY 2026: Room 2, September 17th, 19 h.



More info: <https://iah2026budapest.com/congress-topic/>



IAH 2026

World Groundwater Congress

53<sup>rd</sup> Congress of the International Association of Hydrogeologists

14-18 September 2026

Budapest Congress Center



### Budapest Groundwater Declaration

18 September 2026

This Statement represents the collective outcome of discussions held throughout the 2026 International Association of Hydrogeologists World Groundwater Congress and highlights the groundwater community's key messages. The participants of the IAH Congress in Budapest call for the urgent need for stronger action on groundwater:

1. Groundwater is the most important freshwater reserve globally, sustaining human life, ecosystems and all sectors of society: water and food security, green energy transition, mineral resources, health, well-being, and climate resilience.
2. Groundwater and surface water form one interconnected resource and must be managed through a One Water approach, holistically addressing water quantity and quality issues.
3. Sustainable groundwater stewardship requires the integration of scientific and technical, local, societal and Indigenous knowledge systems, together with the active participation of communities and stakeholders in decision-making.
4. Groundwater management must adopt a multi-decadal perspective, with coordinated action at local, national, regional and transboundary scales, to safeguard resources for future generations.
5. Solving groundwater challenges require transdisciplinary approaches involving natural sciences, engineering, social sciences, law and economics.
6. Art, culture, education and communication are essential to make groundwater visible and meaningful to people, recognizing its cultural and spiritual importance.
7. Investing in groundwater knowledge, monitoring, protection, capacity building, and responsible use is investing in a resilient, sustainable, and more just future. This requires strengthened vocational and academic education and strong institutions, but also long-term, secure, and local employment pathways.
8. Groundwater contributes to sustainability and all Sustainable Development Goals. Therefore, groundwater should be recognized through specific sustainability targets and indicators.
9. Groundwater must be placed at the centre of policies and sustainable solutions worldwide, and included in climate and investment plans.

The Congress highlighted the essential contribution of the hydrogeology community, which provides a global pool of expertise, innovative methods, and practical solutions to support science-based decision-making and address these challenges.

Note: We invite governments, donors and partners to consider the messages of this Statement and support the actions needed to secure groundwater for present and future generations. We hope that the 2026 United Nations Water Conference will place groundwater firmly at the heart of global water discussions and commitments. IAH has actively engaged in the preparation of the 2026 UN Water Conference, including participation in UN dialogues and an IAH Position Paper on Groundwater with practical recommendations for action.



## VII Congreso nacional de manejo de agua y gestión de cuencas, noviembre 2026, Guanajuato (México) (in Spanish)

La Universidad de Guanajuato (UG) será sede del VII Congreso Nacional de Manejo de Agua y Gestión de Cuencas 2026, *“Revertir el deterioro para garantizar la vida”*. Del 9 al 13 de noviembre de 2026, los Espacios Magnos del Campus Guanajuato se transformarán en un lugar para la articulación de saberes, la construcción de propuestas y la incidencia en la gestión hídrica y ambiental del país.



Sesión 7: Gestión integral de acuíferos y recarga artificial.

Para más detalles sobre la convocatoria e inscripciones al VII Congreso Nacional de Manejo de Agua y Gestión de Cuencas 2026, visita la página: <https://vii-congreso-cuencas-2026.org.mx>

### **AGU Annual Meeting 2026. Sessions on MAR**

AGU Annual Meeting 2026. December 7–11, 2026, San Francisco, California, USA

**H016: Advances in Managed Aquifer Recharge for Groundwater Sustainability**

Info: [https://www.linkedin.com/posts/helen-dahlke-446916a\\_agu26-groundwater-managedaquiferrecharge-share-7480648398925111298-mF3y/?utm\\_source=share&utm\\_medium=member\\_desktop&rcm=ACoAAATbUsYBniGYw-D82SCFUMAchFrpT-xO20k](https://www.linkedin.com/posts/helen-dahlke-446916a_agu26-groundwater-managedaquiferrecharge-share-7480648398925111298-mF3y/?utm_source=share&utm_medium=member_desktop&rcm=ACoAAATbUsYBniGYw-D82SCFUMAchFrpT-xO20k)

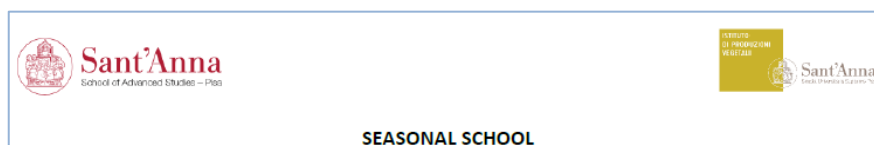
**H040. Climate proofing our water supply through upscaling managed aquifer recharge**

Info: [Climate Proofing Our Water Supply Through Upscaling Managed Aquifer Recharge I Poster](#)

More info: <https://www.agu.org/annual-meeting>

### **Seasonal school WAT-CHANGE - Water-related ecosystem services and nature-based solutions. Course dates: 9 – 13 November 2026**

A one-week crash-course on nature-based solutions at Scuola Superiore Sant'Anna – Pisa (Italy).



*The programme combines state-of-the-art research, hands-on field experience, and direct interaction with leading scientists, practitioners, and policymakers working on nature-based solutions for climate resilience.*

*Climate change is increasingly challenging conventional approaches to water resources management, creating an urgent need for low-energy, low-impact solutions that enhance the resilience of ecosystems, societies, and economies...*

The Seasonal School is organised within the EU PRIMA INVESTWATER project  
<https://investwater-prima.com/>

Apply to the Seasonal School: <https://www.santannapisa.it/it/formazione/seasonalschool/wat-change-water-ecosystem-climate-change-26-27>

## SEMINARS AND WEBINARS

### IAH-MAR COMMISSION WEBINAR SERIES

Seminar 11<sup>st</sup> presentations are available in our site: <https://recharge.iah.org/online-mar-seminars>



The poster for the 11th Online MAR Seminar features a dark blue background with white wavy lines. At the top left is the IAH-AIH logo. The title 'Online MAR Seminars' is in large white font, followed by '#11. Long-standing experience in MAR' in orange. The date and time 'Wednesday, 2 September 2026, 15:30 – 17:00 PM CEST' are in white. A QR code is in the top right. Below the title are three circular portraits of speakers: Emmanuel Van Houtte, Gabriel de los Cobos, and Petri Jokela. Their names and affiliations are listed below each portrait. Three quotes are provided in white text. At the bottom, the booking and Zoom link is given.

International Association  
of Hydrogeologists  
The World-wide Groundwater Organisation  
IAH Commission on  
Managing Aquifer Recharge

Online MAR Seminars  
#11. Long-standing experience in MAR  
Wednesday, 2 September 2026, 15:30 – 17:00 PM CEST  
<https://recharge.iah.org/online-mar-seminars>

**Emmanuel Van Houtte**  
FORMER AQUADUIN  
BELGIUM  
"Lessons learned from about 40 years' MAR experiences in Belgium"

**Gabriel de los Cobos**  
FORMER GESDEC  
SWITZERLAND  
"The MAR of the Geneva aquifer (CH-F): after more than 40 years of successful operation, what are the next challenges?"

**Petri Jokela**  
TURKU WATER SERVICES  
FINLAND  
"Decades of drinking water treatment using MAR in Finland: aspects of sustainability and resiliency"

Booking and Zoom link: <https://recharge.iah.org/online-mar-seminars>

**Emmanuel van Houtte** (Former Aquaduin, Belgium): *Lessons learned from about 40 years' MAR experiences in Belgium*

**Gabriel de los Cobos** (Former Gesdec, Switzerland): *The MAR of the Geneva aquifer (CH-F): after more than 40 years of successful operation, what are the next challenges?*

**Petri Jokela** (Turku, Finland): *"Decades of drinking water treatment using MAR in Finland: aspects of sustainability and resilience"*

### MAR workshop in India. 19-20 August

*After two intensive days of technical sessions in Chandigarh, we spent the past two days where this work truly belongs: on the ground in rural Punjab...*



Read more: <https://lnkd.in/p/eAEfCcfB>  
<https://lnkd.in/p/eAEfCcfB>

Thank you, Salini Sasidharan for reporting

## State-of-the-art of managed aquifer recharge in Southern Africa

The WRC set the task of determining the state-of-the-art of Managed Aquifer Recharge in Southern Africa. The project was structured around the following objectives:

1. Evaluate current MAR practices and potential
2. Develop advanced MAR methodologies
3. Strengthen regulatory and policy frameworks
4. Enhance capacity and stakeholder frameworks
5. Promote regional integration and knowledge sharing

**STATE-OF-THE-ART OF MANAGED AQUIFER RECHARGE IN SOUTHERN AFRICA**

**MAR Workshop**  
 14 – 16 September 2026  
 CSIR Stellenbosch Seminar Room, Block A, 11 Jan Cilliers Street, Stellenbosch, 7600  
 In-person booking: [NVermaak@csir.co.za](mailto:NVermaak@csir.co.za)  
 (by Thursday, 10 September 2026 @ 12:00 please)  
<https://teams.microsoft.com/meet/34746526764873?p=7ZW3kzLOnebrcQkNS>



Figure 1: Atlantis Coastal Basins  
 (Photo: N. Vermaak, 9 June 2026)



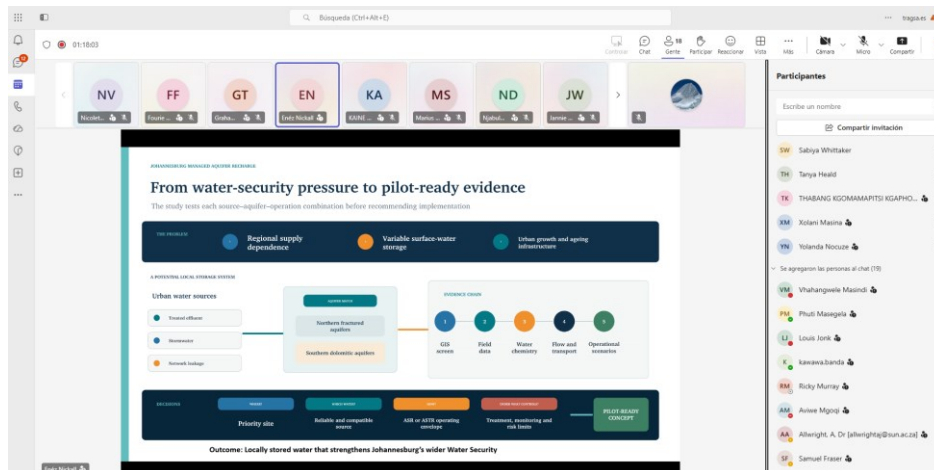









More info: <https://lnkd.in/p/eTGsBD7t>



The conference was recorded. The link will be shared by the organizers for the next newsletter.

Thank you, Nicolette Vermaak, Fanus Fourie... for reporting.

### IAH-IWA-IAHS Common Webinar Series. First Webinar - 23 September 2026

The IAH Urban Groundwater Network (IAH-UGN, <https://urbangw.iah.org/>) is pleased to announce the launch of a new IAH-IWA-IAHS Common Webinar Series, designed to strengthen communication, knowledge exchange, and collaboration across the international groundwater and urban water communities.

The series will explore a central question:

How can we make groundwater more visible in the global water agenda?

This question is particularly relevant in urban environments, where groundwater plays a critical yet often under-recognised role in water security, infrastructure resilience, and sustainable development. Through regular webinars and future joint initiatives, the series will create opportunities for knowledge sharing and identifying common research priorities, developing collaborative projects, and strengthening connections across the international groundwater and urban water communities.



We kindly invite you to register for the webinar using the following link: IAH-IWA-IAHS Common Webinar Series. First Webinar – 23 September 2026.

Thank you, Dr. Radu Gogu, for reporting.

### PRIMA INVESTWATER project's webinar in GEOFLUID. 2026 Oct. 9<sup>TH</sup>

*La ricarica in condizioni controllate delle falde in Italia: bilancio e prospettive a dieci anni dall'entrata in vigore del D.M. 100/2016. Workshop organizzato da Istituto di Produzioni*

## Vegetali - Scuola Superiore Sant'Anna di Pisa nell'ambito del progetto EU PRIMA INVESTWATER

| Programma provvisorio |                                                                                                                                                                                                                                      |
|-----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 10.30 - 10.45         | 2016-2026: Dieci anni di sperimentazione e applicazioni della ricarica delle falde in condizioni controllate in Italia<br>R. Rossetto - Scuola Superiore Sant'Anna                                                                   |
| 10.45 - 11.05         | L'impatto del cambiamento climatico sulle acque sotterranee e il possibile contributo della ricarica delle falde in condizioni controllate<br>A. Casasso - Politecnico di Torino                                                     |
| 11.05 - 11.25         | Dall'impegno per il territorio alla ricarica della falda: il progetto MAR di Sanpellegrino nel bacino del Fiume Brenta<br>M. Meggiorin - Ramboll Italia, A. Negri - Sanpellegrino                                                    |
| 11.25 - 11.45         | Quando i campi ricaricano gli acquiferi: l'Agricultural Managed Aquifer Recharge come risposta alle nuove sfide climatiche<br>L. Alberti, P. Colombo e C. Medina Montecinos - Politecnico di Milano                                  |
| 11.45 - 12.05         | Aree Forestali di Infiltrazione (AFI): una tecnica MAR per mitigare la contaminazione da nitrati delle acque sotterranee nella Zona Vulnerabile da Nitrati di Arborea (Sardegna)<br>A. Carletti - Università degli Studi di Cagliari |

Presentations to be posted on the internet. We'll inform when organizers share the link.

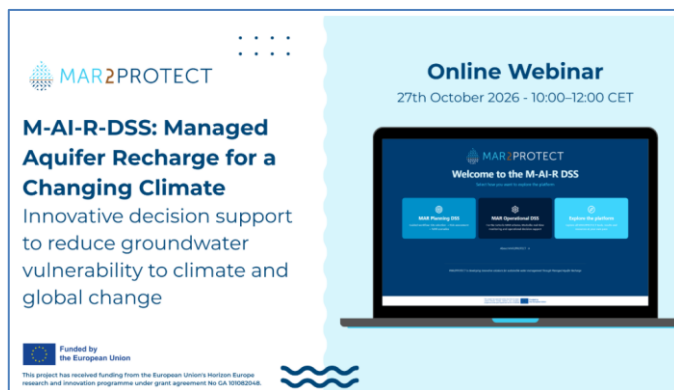
## MAR2PROTECT project's webinar. 2026 Oct. 27<sup>th</sup>

AI-powered support for climate-resilient groundwater management.

Developed by MAR2PROTECT, M-AI-R-DSS is an innovative AI-driven platform designed to help stakeholders plan, assess and operate Managed Aquifer Recharge (MAR) systems.

Combining strategic planning tools, risk assessment, real-time monitoring and operational support, the platform empowers water managers and decision-makers to strengthen groundwater resilience in the face of climate change and increasing water scarcity.

Join this online event to explore how digital innovation and artificial intelligence can support smarter, more sustainable groundwater management.



**MAR2PROTECT**

**M-AI-R-DSS: Managed Aquifer Recharge for a Changing Climate**

Innovative decision support to reduce groundwater vulnerability to climate and global change

**Online Webinar**  
27th October 2026 - 10:00-12:00 CET

Funded by the European Union  
This project has received funding from the European Union's Horizon Europe research and innovation programme under grant agreement No GA 101002046

More info: <https://mar2protect.eu/mairdss/>

## NGWA webinar on virus attenuation and position paper. 2026 Oct. 27<sup>th</sup>

Options for communities pursuing supplemental water supplies are increasingly restricted. As a result, interest in MAR has become widespread in order to manage

*water supply during droughts and provide increased water supply reliability. Viruses in source water are among the primary contaminants of concern in MAR operations...*



More info:

<https://www.ngwa.org/detail/event/2026/10/27/default-calendar/virus-attenuation-in-managed-aquifer-recharge-ngwa-s-newest-position-paper>

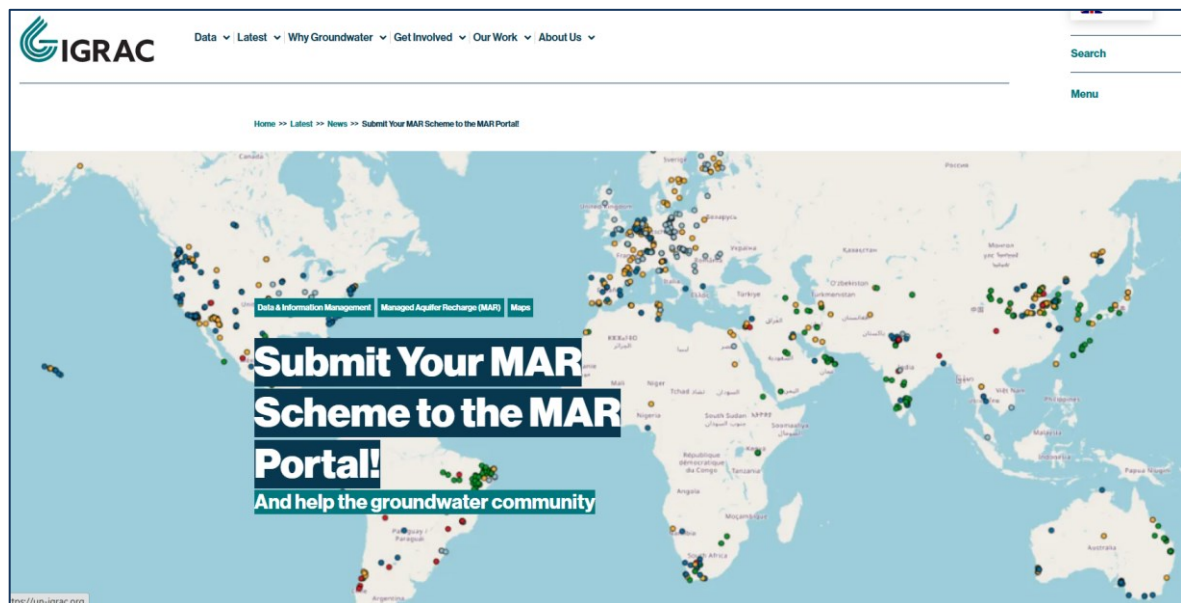
Position Paper: [https://www.ngwa.org/docs/default-source/default-document-library/virus-attenuation-in-mar\\_final.pdf?sfvrsn=b8c5643\\_1](https://www.ngwa.org/docs/default-source/default-document-library/virus-attenuation-in-mar_final.pdf?sfvrsn=b8c5643_1)

More position papers of NGWA: <https://www.ngwa.org/get-involved/advocacy/position-papers>

## NEW MAR OR MAR-RELATED ACTIVITIES

### IGRAC MAR Portal update. Call for action

To submit info: <https://un-igrac.org/latest/news/submit-your-mar-scheme-to-the-mar-portal/>



Thank you, Andy Pearson, for the information.

## MAR in San Bernardino Valley

*I am so proud and grateful to have led the team that finally got this major piece of water supply infrastructure done - 12 months ahead of schedule and on budget! We also restored 200 acres of endangered species habitat, recharged stormwater while still under construction, and importantly, proved that interdisciplinary collaboration is the way to get water projects built! Thanks **California Municipal Utilities Association** for the award and recognition of this critical project for the Inland Empire. And many thanks to our project partners and contractors!*



Read more: <https://lnkd.in/p/ekSytMDT>

Thank you, Heather Dyer, for reporting.

## Doug Bartlett has received the Martin Van Couvering Memorial Service

An active member of this commission has been recently awarded; CONGRATULATIONS, DOUG!! 😊

*We're proud to share that **Doug Bartlett** has received the prestigious Martin Van Couvering Memorial Service to the Institute Award from the **American Institute of Professional Geologists**. Presented at AIPG's National Conference in Duluth, MN, this award recognizes exceptional leadership, service, and dedication to the Institute and the geoscience profession.*

Read more:

<https://lnkd.in/p/eubqZQy5>

<https://lnkd.in/p/e3X3TgYC>

<https://lnkd.in/p/eKqHHubA>



## New thesis on MAR in Italy

Muhammad Sufyan has informed the defense of his thesis in 2024, October

*I am delighted to share that I have successfully completed my PhD in Environmental and Energy Engineering Science at the University of Udine, Italy.*

*My doctoral research focused on Managed Aquifer Recharge (MAR) as a strategy to address groundwater depletion driven by growing demand and climate change impacts in the Friuli Venezia Giulia region of northeastern Italy. Through groundwater modelling and water quality assessments, the study evaluated the potential of MAR to enhance groundwater availability and support sustainable water resources management...*



Read more: <https://lnkd.in/p/eNFw-ATP>

CONGRATULATIONS, MUHAMMAD!! 😊

## MORE ACTION

### El proyecto MAR2Protect presenta una plataforma de inteligencia artificial... (in Spanish)

*El proyecto europeo MAR2Protect presenta M-AI-R-DSS: recarga gestionada de acuíferos frente al cambio climático, una nueva plataforma digital basada en inteligencia artificial diseñada para apoyar la planificación y gestión de los acuíferos en un contexto de creciente presión sobre los recursos hídricos...*



Read more: <https://www.tecnoaqua.es/noticias/20261024/mar2prootect-gestion-acuiferos-aguas-subterrneas>

### Recarga inducida por bombeo (in Spanish)

J.C. Baquero has published a new post explaining the induced recharge concept.



Read more: [https://www.linkedin.com/posts/juan-carlos-baquero-%C3%BAbeda-22851280\\_recargaabrinducida-share-7511120340144537600-RPsG/](https://www.linkedin.com/posts/juan-carlos-baquero-%C3%BAbeda-22851280_recargaabrinducida-share-7511120340144537600-RPsG/)

## **MAR in the Media. Press releases**

### **Brazil**

<https://spanish.news.cn/20261020/83345be88fd34c9cb0f2fdbd469b1531/c.html>

### **Chile**

<https://ucvradio.cl/news/embalse-los-aromos-llega-a-su-maxima-capacidad-gracias-a-recarga-artificial-y-asegura-suministro-de-esval-para-2027/>

<https://www.elespectador.com/ambiente/blog-el-rio/como-saciamos-la-sed-de-el-nino/>

### **Germany**

[https://www.youtube.com/watch?v=CnX23KFrr\\_U](https://www.youtube.com/watch?v=CnX23KFrr_U)

### **Mexico**

<https://tv4noticias.com/busca-sapal-infiltrar-agua-tratada-en-acuifero/>

<https://www.youtube.com/watch?v=d5qmphfDz6Y>

### **USA**

[https://www.kpcw.org/enespanol/2026-10-01/oasis-management-close-to-becoming-vail-resorts-insider?\\_amp=true](https://www.kpcw.org/enespanol/2026-10-01/oasis-management-close-to-becoming-vail-resorts-insider?_amp=true)

<https://maderatribune.com/es/mid-completes-fairmead-recharge-project/>

## **Call for book chapters**

**Managed Aquifer Recharge Systems Design and Planning: Site Selection, Modeling, and Performance Optimization**

*CRC Press (Taylor & Francis) is inviting international contributors for the edited volume Managed Aquifer Recharge Systems Design and Planning: Site Selection, Modeling, and Performance Optimization. Researchers and practitioners with expertise in hydrogeology, MAR engineering, groundwater modeling, GIS, water quality, monitoring, policy, and international case studies are warmly invited to express their interest.*

Prospective contributors are encouraged to contact **Dr. Fiaz Hussain** (engr.fiaz (a) uaar.edu.pk) for the Table of Contents, author guidelines, and further information.

**CALL FOR CONTRIBUTIONS**

# MANAGED AQUIFER RECHARGE SYSTEMS DESIGN AND PLANNING

Site Selection, Modeling, and Performance Optimization

A comprehensive reference on the science, engineering, modeling, design, and implementation of Managed Aquifer Recharge (MAR) systems for sustainable groundwater management.

**TABLE OF CONTENTS (VERSION 2.0 – FINAL)**

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- 3 Infiltration Processes and Subsurface Flow Dynamics
- 4 Water Quality, Source Water, and Geochemical Constraints in MAR Systems

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- 6 GIS-Based Suitability Mapping and Multi-Criteria Decision Analysis
- 7 Integrating Groundwater Vulnerability Assessment into MAR Planning

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**PART V – IMPLEMENTATION AND APPLICATIONS**

- 14 MAR Implementation in Diverse Hydroclimatic Settings
- 15 Regulatory, Permitting, and Institutional Considerations for MAR Implementation

Case Studies (8–10 global case studies integrated throughout the book)

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**WHY CONTRIBUTE?**

- Be part of an authoritative global reference on MAR systems
- Share your expertise with an international audience
- Enhance the impact and visibility of your research
- Contribute to solutions for global water security and climate resilience

**KEY FEATURES OF THE BOOK**

- Covers the complete MAR workflow: from science to implementation
- Integrates site selection, numerical modeling, engineering design, performance optimization, and sustainability
- Includes reclaimed wastewater and alternative source waters for MAR
- Explains major modeling platforms: MOOFLW, FEFLOW, MT3DMS/MT3D-USGS, and HYDRUS
- Focuses on engineering solutions with real-world applications
- Includes 9–10 international case studies across diverse hydroclimatic settings

**GLOBAL CASE STUDY REGIONS**

Asia and South Asia, Australia and Oceania, North America, Latin America, Europe and the Mediterranean, Africa and Fragile Contexts

Each case study will highlight hydrogeological settings, site selection, engineering design, modeling, performance optimization, and lessons learned.

**POTENTIAL TOPICS OF INTEREST**

- Hydrology and aquifer characterization
- Infiltration & unsaturated zone processes and recharge dynamics
- Water quality, geochemistry, and clogging
- GIS, remote sensing, and decision support tools
- Groundwater modeling and simulation
- Injection well and surface recharge design
- Monitoring, performance evaluation and optimization
- Risk, uncertainty, and sustainability
- Policy, regulation, and institutional frameworks
- Field case studies and lessons learned

**LET'S COLLABORATE FOR SUSTAINABLE GROUNDWATER FUTURES**

Your contribution can help shape the future of Managed Aquifer Recharge and global water security.

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Join a global community of experts advancing Managed Aquifer Recharge. Knowledge. Collaboration. Impact. For Water. For Future. Sustainable Groundwater. Sustainable Tomorrow.

## Whatsapp group on Aquifer Recharge Management

The group congregates 206 participants today. Invitation link:

<https://chat.whatsapp.com/GI98fO0B9LI4A3os1AMSB2>

## Previous IAH-MAR Newsletters

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

## IAH-MAR Commission on Twitter (X)

## 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/> (583 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>

**The IAH MAR list has 373 members today... you are invited to join!**

That's all by now... **please, keep reporting** ([dinamar@tragsa.es](mailto:dinamar@tragsa.es)).

Dr. Enrique Fernández Escalante, on behalf of the IAH MAR Commission co-chairs,  
Dr<sub>s</sub>. Catalin Stefan and Yan Zheng.

2026 October 29<sup>th</sup>

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