

Dear Ladies and Gentlemen, dear MAR family, good day!

Please, have a look on these MAR news for 2023 March

IAH MAR Commission Newsletter. 2023 March

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The Resilience of Groundwater to Change in the Indo-Gangetic Basin

Presentations on MAR from the professor Custodio (in Spanish)

Water in the International Court of Justice: Recent Developments. IWRA seminar recorded.

20th anniversary of the official starting point of MAR at Los Arenales aquifer. CyL, Spain

New order published in California to use water from extreme events for MAR. Press release

Public consultation on the EU's Horizon Research and Innovation Programmes 2014-2027. Deadline is over, expecting results

Whatsapp group on Aquifer Recharge Management

Previous IAH-MAR Newsletters and IAH-MAR Commission on Twitter

IAH-MAR Commission's sister Web sites

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IAH MAR Commission Forum

NEW MAR PUBLICATIONS

11st International Symposium on Managed Aquifer Recharge. Materials

Videos and slides of the presentations (GRAC Website):

<https://www.grac.org/ismar-speaker-presentations/>

ISMAR 11 program <https://recharge.iah.org/files/2022/08/ISMAR-Draft-Program.pdf>

ISMAR-11 onsite-guide https://recharge.iah.org/files/2022/08/ISMAR-11-onsite-guide_c.pdf

ISMAR 11 abstract book (160 pg) <https://recharge.iah.org/files/2022/09/ISMAR11-abstracts-book.pdf>

ISMAR 11 presentations and videos (external link) <https://www.grac.org/ismar-speaker-presentations/>

P-ISMAR 11 mini-book (external link to DINAMAR, IAH-MAR's sister site)

<https://dinamar.tragsa.es/file.axd?file=/PDFS/P-ISMAR-11.pdf>

ISMAR-11 field trips <https://recharge.iah.org/files/2022/08/ISMAR-11-Field-Trips2.pdf>

Managed Aquifer Recharge. A key to sustainability. Journal Water special issue. Deadline almost here!

Selected papers on MAR, specially presented at ISMAR 11, are published in this Special Issue of the open-access Journal WATER.

EVERYONE IS INVITED TO SUBMIT! Despite the official deadline is over, editors still accept papers. *Publishing cost: 50% of APCs, as exposed in the website.*

Seven papers have been published by now, and some others coming...

https://www.mdpi.com/journal/water/special_issues/Aquifer_Recharge.

Guest editors:

Enrique Fernandez Escalante (Spain)

Catalin Stefan (Germany)

Christopher J. Brown (USA)

June Mirecki (USA)



IAH-MAR Commission. Memory of activities 2022 submitted to IAH.

IAH-MAR co-chairs have submitted very recently the summary of the activities conducted by the Commission during 2022. Dr. Marco Petitta, our Vice President for West and Central Europe, on behalf of IAH, has responded our submission in these terms:

“thanks a lot for your impressive work. We know very well that your Commission is one of the more active...”

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 2022

CO-CHAIRS

Enrique Fernández Escalante (Spain)

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Email: catalin.stefan@tu-dresden.de

Yan Zheng (China)

Email: yan.zheng@sustech.edu.cn

Website

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

Sister Websites:

Spanish: <https://dinamar.tragsa.es>

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

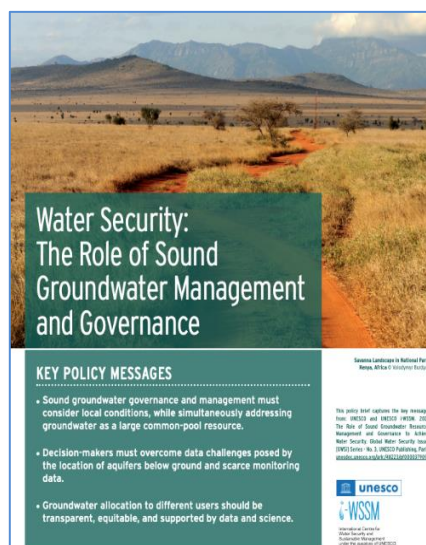
The summary is only a selection and it does not include the numerous activities resulted from different projects on managed aquifer recharge such as project-related workshops, training courses, field trips etc. For a much more detailed report of MAR-related activities, see the series of newsletters of the IAH-MAR Commission: <https://recharge.iah.org/newsletters>. The summary is available in our site: www.recharge.iah.org

Thank you very much Marco and IAH Board for encouraging MAR and the activity that we all carry out...

NEW MAR-RELATED PUBLICATIONS

IWRA's Policy Brief on Water Security

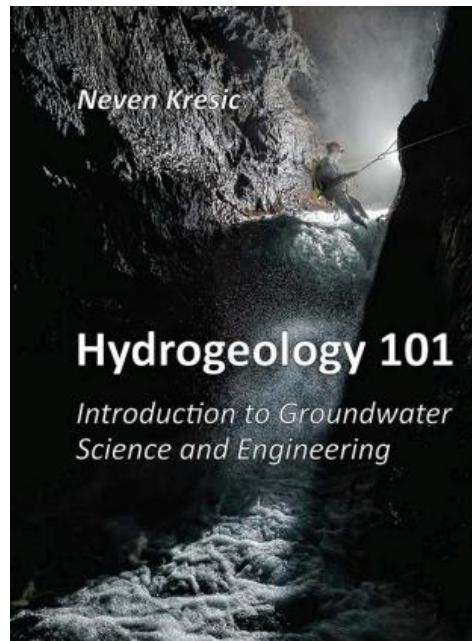
IWRA has just published a Policy Brief on Water Security: The Sound of Groundwater Management and Governance.



Book Access: <https://www.iwra.org/iwra-policy-brief-no-23/>

Hydrogeology 101. Introduction to Groundwater science and engineering. By Neven Kresic

A new book on general hydrogeology with special attention paid on karst systems. Despite it has not been written by “MARers”, it includes accurate MAR developments.



Download freely:

https://www.un-igrac.org/sites/default/files/resources/files/Kresic_Hydrogeology%20101_corrected.pdf

MAR CONFERENCES

NGWA MAR conference.

Managed Aquifer Recharge: Unleashing Resiliency, Protecting Groundwater Quality
(conference #5029)

Date: April 24-25, 2023
Location: San Antonio, Texas





More info:

<https://www.ngwa.org/detail/event/2023/04/24/default-calendar/23apr5029>

MAR-RELATED CONFERENCES AND SEMINARS

UNESCO-IWRA conference: Emerging Pollutants: Protecting Water Quality for the Health of People and the Environment. 2023 January 17th – 19th. RESULTS

The International Water Resources Association (IWRA), in partnership with UNESCO-IHP, organized the UNESCO-IWRA Online Conference on “Emerging Pollutants: Protecting Water Quality for the Health of People and the Environment”.

The presentations and proceedings of the sessions are available here.

More info and results: <https://iwraonlineconference.org/>

<https://iwraonlineconference.org/recordings-23/>

Some MAR presentations were interspersed in sessions 2 and 4, Emerging pollutants and Groundwater: <https://iwraonlineconference.org/recordings-23/>

16:30-18:00 - Abstract Session 2: Emerging pollutants and groundwater

Moderator:
Robert Kalin
Professor, Strathclyde University, Glasgow
Scotland

Co-Moderator:
Malcolm Gander
Environmental Manager, United States
Department of Defence



Abstract Session 2: Emerging Pollutants and Groundwater (UNESCO - IAH AII)

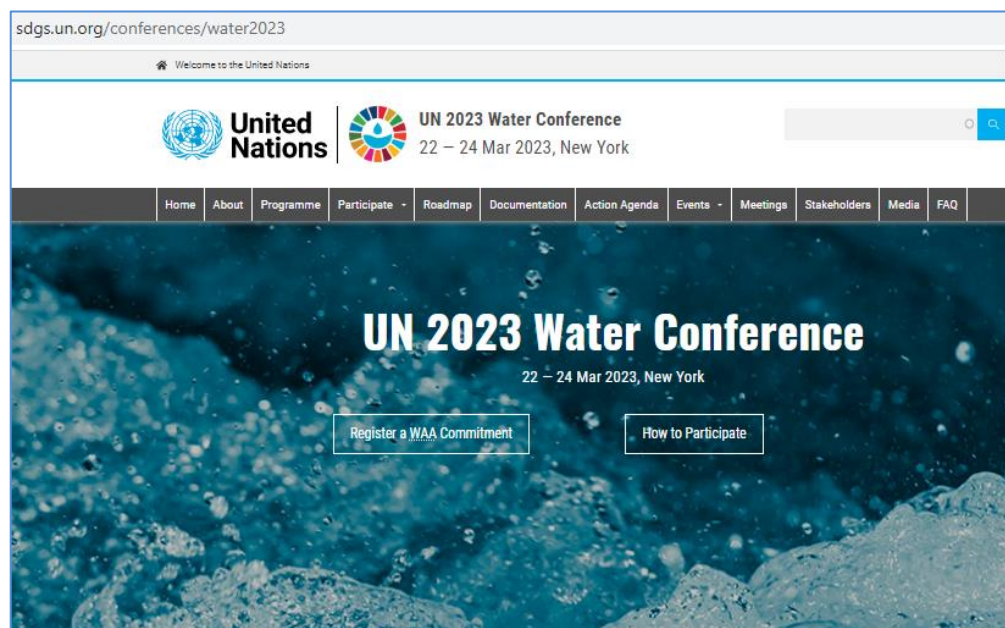
- Anthropogenic organic compounds and their transformation products
- Anthropogenic particles (plastics and other engineered particles)
- Microbiological contaminants of emerging concern e.g. viruses and microbial resistance
- Contaminant mixtures or 'cocktails'
- Groundwater ECs have a different profile compared to surface waters due to subsurface transport and residence times
- Emerge as result of:
 - Changes in use/new manufactured products
 - Advances in analytical techniques (e.g. QTOF- MS methods; omics)
 - Better monitoring
- Much less well characterised than in surface water - perception of lower risk for groundwater
- By definition ECs typically do not have a regulatory standard

+ SW-GW interactions, MAR, SUDS etc

Ver en YouTube 11:24

UN 2023 water Conference. 22 to 24 March 2023

Conference on the Midterm Comprehensive Review of the Implementation of the Objectives of the International Decade for Action, "Water for Sustainable Development", 2018–2028 from **22 to 24 March 2023** at the United Nations Headquarters in New York.



More info: <https://sdgs.un.org/conferences/water2023>

VII Congreso colombiano de hidrogeología. Medellín, Colombia, 20 to 24 March 2023

On going the 7th Colombian groundwater conference.



Dr. Niels Hartog (KWR) has imparted a first day course: Sustainable water supply using managed aquifer recharge (MAR): potential, performance and pitfalls.

Several presentations on MAR are announced in the program, but not a specific session has been organized in this occasion.

2023 SGMA Implementation Summit and Workshop. Wed, Jun. 7 - Thu, Jun. 8, 2023, Los Angeles.

The 2023 SGMA Implementation Summit and Workshop has opened. Registration. <https://lnkd.in/gnU9Y-3A>

This program is brought to you through a partnership with the [Association of California Water Agencies](#) and the event will be held at the beautiful [Kimpton Sawyer Hotel](#) in Downtown Sacramento.

Learn more about it in our Winter Edition of HydroVisions found here: <https://lnkd.in/gsqW9yH9>

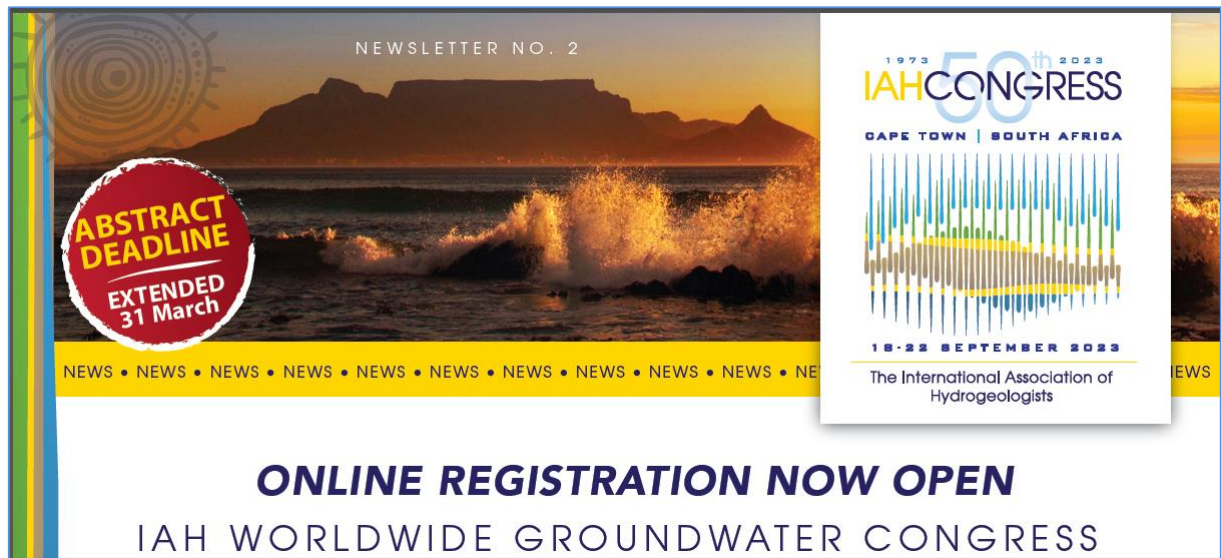


For more information or if interested in participating/providing input/leading a conversation, reach out to: [Lisa Porta, P.E.](#) or [Adam Hutchinson, PG, CHG](#)

50th IAH congress. Cape Town, South Africa. September 18th to 22th

Under the title "Groundwater: A Matter of Scale" the next IAH Congress will take place in Cape Town, South Africa. Abstracts can be submitted until March 31st

IAH MAR Commission co-chairs by the moment have not organized a plenary because of doubt about their attendance. Please, in case any IAH-MAR member may host a MAR meeting, that would be really appreciated. Contact co-chairs in case you fancy doing that! We'll support you.



NEWSLETTER NO. 2

ABSTRACT DEADLINE
EXTENDED
31 March

1973 **50th** 2023
IAH CONGRESS
CAPE TOWN | SOUTH AFRICA

18-22 SEPTEMBER 2023

The International Association of
Hydrogeologists

ONLINE REGISTRATION NOW OPEN

IAH WORLDWIDE GROUNDWATER CONGRESS

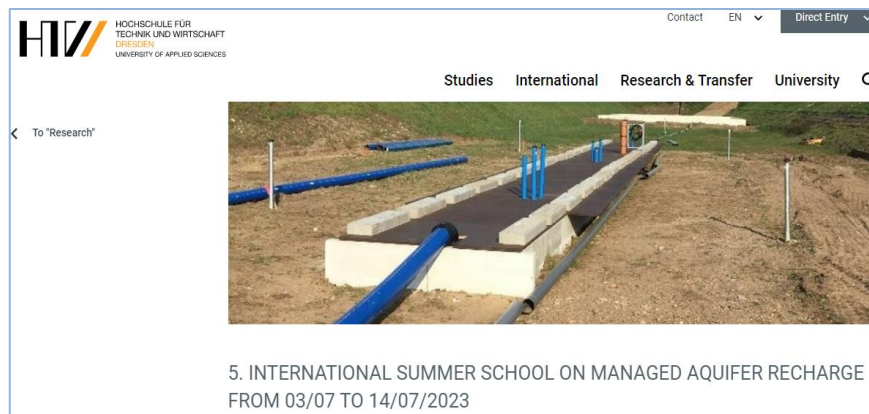
More info: <https://iah2023.org.za/>

This city will also host our tri-annual meeting ISMAR 12 in 2025. Good luck for the organizers!!

5 International Summer School on Managed Aquifer Recharge, MARISS, from 3 July to 14 July 2023

The next and last free-of-charge summer school, MARISS 2023, will take place from 3 July to 14 July 2023. The deadline for registration is 28 February 2023.

Organizers would appreciate it if you could inform your colleagues, friends, and co-workers about this.



More info:

<https://www.htw-dresden.de/en/university/faculties/civil-engineering/studies/subject-areas/water-sciences/research/planned-research-topics>

XVIII World Water Congress. 11–15 September 2023. Beijing. Call for abstracts still open

IWRA's [XVIII World Water Congress](#) (11–15 September 2023), taking place in Beijing, People's Republic of China, is just over seven months away!

Under the overarching theme on "Water for All: Harmony between Humans and Nature", the XVIII World Water Congress will focus on promoting the coordination and balance between the water needs of humans and nature.

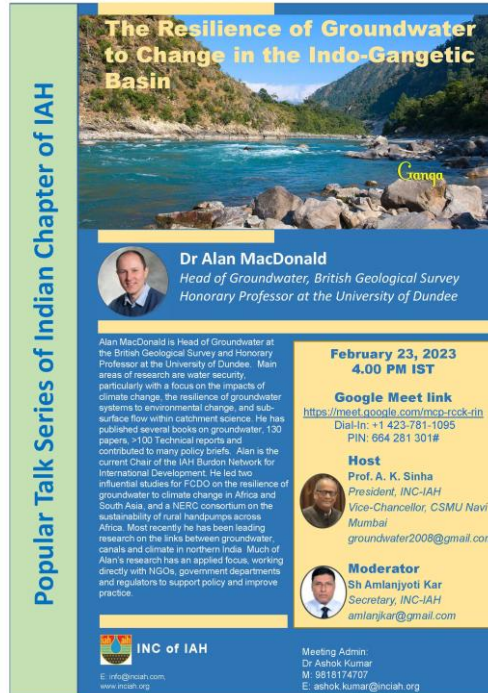
We invite you to read the [Second Announcement brochure](#) to find out more about the upcoming XVIII World Water Congress, including the benefits of attending, key milestones on the road to Beijing, the High-Level Panels, themes and sub-themes, information on the call for abstracts, special sessions, and side events, as well as key dates to keep in mind, the tentative programme, registration fees, and the latest news about travelling to China...



SEMINARS

The Resilience of Groundwater to Change in the Indo-Gangetic Basin

The presentation was exposed last February 23th organized by IAH INC. Check the flyer for more info.



Popular Talk Series of Indian Chapter of IAH

The Resilience of Groundwater to Change in the Indo-Gangetic Basin

Dr Alan MacDonald
Head of Groundwater, British Geological Survey
Honorary Professor at the University of Dundee

Alan MacDonald is Head of Groundwater at the British Geological Survey and Honorary Professor at the University of Dundee. Main areas of research are water security, particularly with a focus on the impacts of climate change, the resilience of groundwater systems to environmental change, and sub-surface flow within catchment science. He has published several books on groundwater, 130 papers, >100 Technical reports and contributed to many policy briefs. Alan is the current Chair of the IAH Dundee Network for International Development. He led two influential studies for ICDO on the resilience of groundwater to climate change in Africa and South Asia, and a NERC consortium on the sustainability of rural handpumps across Africa. Most recently he has been leading research on the links between groundwater, canals and climate in northern India. Much of Alan's research has an applied focus, working directly with NGOs, government departments and regulators to support policy and improve practice.

February 23, 2023
4.00 PM IST

Google Meet link
<https://meet.google.com/mpc-rckk-rin>
Dial-in: +1 423 781 1095
PIN: 664 281 3018

Host
Prof. A. K. Sinha
President, INC-IAH
Vice-Chancellor, CSMU Navi Mumbai
groundwater2008@gmail.com

Moderator
Sh Amlanjyoti Kar
Secretary, INC-IAH
amlanjyoti@gmail.com

INC of IAH
E: info@inciah.com
www.inciah.org

Meeting Admin:
Dr. Ashok Kumar
M: 9818174707
E: ashok.kumar@inciah.org

A link for the recording will be provided shortly.

Presentations on MAR from the professor Custodio (in Spanish)

Recarga de las aguas subterráneas y su aplicación en un marco de incertidumbre a abordar. <https://youtube.com/live/ObE0EDUd3XU?feature=share>



MÁSTER EN HIDROGEOLOGÍA Y MODELACIÓN
Ciclo de Conferencias

UNIVERSITAT DE BARCELONA
Facultat de Ciències de la Terra

CSIC
CONSEJO SUPERIOR DE INVESTIGACIONES CIENTÍFICAS

id2020
INICIATIVA DE INVESTIGACIÓN DE LA UNIVERSIDAD DE BARCELONA

"Recarga de las aguas subterráneas y su aplicación en un marco de incertidumbre a abordar"

Presencial: Aula Magna, Facultat de Ciències de la Terra, Universitat de Barcelona.
C/Martí i Franquès, s/n, Barcelona.
Online: canal YouTube Facultat de Ciències de la Terra.
<https://youtube.com/live/ObE0EDUd3XU?feature=share>

Emilio CUSTODIO, Dr.I.I.
Real Academia de Ciencias de España
Departamento de Ingeniería Civil y Ambiental, Grupo de Hidrología Subterránea, Universidad Politécnica de Cataluña (UPC), Barcelona
Asociado IUNAT, Universidad de Las Palmas de Gran Canaria 2023 CIHGM-UB-41
mt.hidrogeologia.modeltzaco@ub.edu

08-03-2023, 15,00 CET

Múltiples aspectos de las acciones de recarga artificial de acuíferos. https://youtu.be/wQ_Cdfv_ciM



Facultad de Ingeniería
 Universidad Autónoma de Chihuahua
 Maestría en ingeniería en hidrogeología



Múltiples aspectos de las acciones de recarga artificial de acuíferos



Lunes 13 de marzo de 2023, 9:00 Chihuahua

Contenido:
 Conocimiento general
 Definiciones
 Recarga artificial y capacidad
 Actuaciones simples y complejas
 Recarga en el Bajío Llobregat
 Recarga de aguas regeneradas
 Consideraciones sobre la gestión

Emilio CUSTODIO, Dr. J.L.,
 ♦ Real Academia de Ciencias de España
 ♦ Grup d'Hidrologia Subterrània, Departament d'Enginyeria Civil i Ambiental,
 Universitat Politècnica de Catalunya (UPC), Barcelona
 ♦ Asociado IUNAT, Universidad de Las Palmas de Gran Canaria

2023-CHIHUAHUA-01

Cycle of conferences organized by the University of Chihuahua.



UACH
 UNIVERSIDAD AUTÓNOMA DE
 CHIHUAHUA



CICLO DE CONFERENCIAS RENAGUA

FACULTAD DE INGENIERÍA

CRONOGRAMA

| | |
|--|---|
| <p>13 MARZO Emilio Custodio Múltiples aspectos de las acciones de recarga artificial de acuíferos 9:00 A.M.</p> | <p>14 MARZO Hernán Ramírez Impactos del cambio climático en el sector agua en México 4:00 P.M.</p> |
| <p>14 MARZO Enrique Vivoni Uso de una constelación de satélites para estudiar hidrología en zonas áridas 4:30 P.M.</p> | <p>15 MARZO Wener Ochoa Métodos de investigación científica para la gestión del agua 4:00 P.M.</p> |
| <p>15 MARZO Elvira Medina Contaminación del agua y los problemas de salud 4:30 P.M.</p> | <p>16 MARZO Denisse Arévalo Análisis de Conciencia hídrica 4:00 P.M.</p> |
| <p>16 MARZO Beatriz Angulo Calidad de agua en tiempos modernos, una visión geotécnica 4:30 P.M.</p> | <p>17 MARZO Juan Ramírez Estudios hidrodinámicos en tratamiento de aguas 4:00 P.M.</p> |
| <p>17 MARZO Socorro Espino Presencia de arsénico en la cuenca del Río Conchos 4:30 P.M.</p> | <p>Para más información M.I. Miguel Ángel González Núñez Coordinador de la Maestría en Ingeniería en Hidrología hidrologia.fing@uach.mx</p> |




+Ciencia



FACULTAD DE INGENIERÍA

Water in the International Court of Justice: Recent Developments. IWRA seminar recorded.

The full recording of this webinar and PDFs of the presentations will shortly be available on our website at www.iwra.org/webinars

NEW MAR OR MAR-RELATED ACTIVITIES

20th anniversary of the official starting point of MAR at Los Arenales aquifer. CyL, Spain

Last March 11st has been the 20th anniversary for the first MAR system at Los Arenales aquifer, CyL, Spain. This date is when the Minister officially open the valve. The tests were conducted from a year before, and specific studies since 1999.

It has been working not stopping recharging for irrigation during this whole period. Technicians in charge propose a toast, cheers!



It has been a long journey and plenty of information and experience has been gained in these sites; e.g.

In Spanish:

<https://dinamar.tragsa.es/pdf/IF-hh7-v34c.pdf>

https://www.imta.gob.mx/biblioteca/libros_html/manejo-recarga-acuiferos-ehl.pdf

In English (chapter 1):

<https://unesdoc.unesco.org/ark:/48223/pf0000379093>

New order published in California to use water from extreme events for MAR. Press release

Peninsula360 press has published an article “Emiten orden para usar agua de inundaciones para recargar y almacenar agua subterránea en California” (californian but in Spanish).



Read the article: https://peninsula360press.com/es_mx/almacenar-agua-subterranea-en-california/

Public consultation on the EU's Horizon Research and Innovation Programmes 2014-2027. Deadline is over, expecting results

The European Commission Services are currently running the largest ever public consultation held on the past, present and future of the EU's Horizon research and innovation programmes 2014-2027. Through this consultation, you are able to share your views on:

- The ex-post evaluation of Horizon 2020
- The mid-term evaluation of Horizon Europe
- The Horizon Europe Strategic Plan 2025-2027



The screenshot shows the European Commission's public consultation page. The header includes the European Commission logo and the text "European Commission" and "EUSurvey". The main heading is "PUBLIC CONSULTATION ON THE PAST, PRESENT AND FUTURE OF THE EUROPEAN RESEARCH & INNOVATION FRAMEWORK PROGRAMMES 2014-2027". Below this, there is a progress bar showing 17% completion. A checkbox option is available: "Save a backup on your local computer (disable if you are using a public/shared computer)". The main content area is titled "Public consultation on the past, present and future of the European Research & Innovation Framework programmes 2014-2027". There is a note: "Fields marked with * are mandatory". A navigation bar at the bottom includes "Pages", "INTRODUCTION", "ABOUT YOU", and "KEY LESSONS". On the right side, there is a "Contact" section with the text "RTD-PUBLIC-CONSULTATION: HORIZON@ec.europa.eu", a "Download PDF version" link, a "Save as Draft" button, and a "Report abuse" link.

For any questions related to the consultation, please contact RTD-PUBLIC-CONSULTATION-HORIZON@ec.europa.eu

MORE ACTIONS

Whatsapp group on Aquifer Recharge Management

This is the link to join the group, with about 150 participants:

<https://chat.whatsapp.com/I4K5HclxszyEbrszDj1HQd>

Previous IAH-MAR Newsletters

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

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

That's all by now... **please, keep reporting** (dinamar@tragsa.es).
Thank you in advance and have a happy 2023 World Water Day!!

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

2023 March 22nd (WWD)

IAH-MAR Commission on Twitter



@IAHMARCom

<https://twitter.com/IAHMARCom>

IAH-MAR Commission's sister Web sites

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



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



@4dina_mar

Linked-in groups on MAR

Managed Aquifer Recharge, DINA-MAR

<https://www.linkedin.com/groups/4690290/>

Aquifer Storage and Recovery (ASR)

<https://www.linkedin.com/groups/2183513/>

MARSoluT - MAR Solutions Training Network

<https://www.linkedin.com/groups/7453856/>

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>
