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

Attached some MAR-related news for 2021 November.

INDEX:

11st International Symposium on Managed Aquifer Recharge, ISMAR 11.

On behalf of GRA, ISMAR 11 organizers and the IAH-MAR Commission, we cordially invite you to attend the 11th International Symposium on Managed Aquifer Recharge (ISMAR11), April 2022 in Long Beach, CA.

ISMAR 11 website: https://www.ismar11.net/
GRA event page: https://lnkd.in/gXn6YNz
Register as a Sponsor or Exhibitor: https://lnkd.in/g6Sb6ur
View the Sponsorship Opportunities booklet: https://lnkd.in/gKqA4nh
Along with the email - Facebook, LinkedIn, Instagram and Twitter all have posts about ISMAR11 on GRAC: www.grac.org
Preliminary agenda: https://www.grac.org/media/files/files/4407fbbd/ismar-2022-preliminary-agenda-flyer.pdf

Please, remember that ismar10.net, the previous conference´s site is not available any longer.

ISMAR 12. Call for expressions of interest

IAH, IAH-MAR Commission, UNESCO and ASCE call for the expressions of interest.

Those institutions willing to host the premier symposium on MAR, ISMAR 12 in 2025, please, inform IAH-MAR Commission co-chairs using the site´s contact link in the browser: https://recharge.iah.org/contact-us

Expressions of interest will be very welcome. The process to select the hosting city should be completed before the end of 2021. We encourage you to host an ISMAR, it is an unforgettable experience!!.

NEW MAR SITES

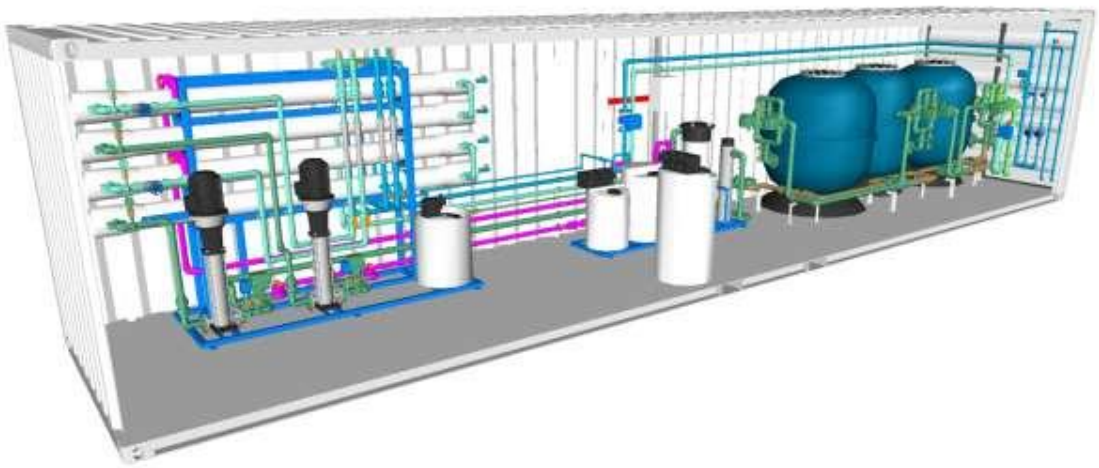
NEW SAT-MAT experience in Spain. Balearic Islands

Northline and Amphos 21 start the project "Pilot test of reuse of reclaimed water for the recovery of overexploited aquifers" of the General Directorate of Water Resources of the Balearic Government, Spain.

The project consists of a pilot plant that is sized to produce two lines of 100 m^3 / d and up to 200 m^3 / d continuously, which will be injected into the aquifer through two wells. The injected water control network consists of a total of 12 newly built piezometers and existing wells, which will be equipped with water pressure and quality sensors, in addition to being sampled throughout the lifetime of the project, one year. Since the source water has high organic matter content, a five-phase treatment and a chemical pre-treatment will be carried out before osmosis.

For further information, please contact:

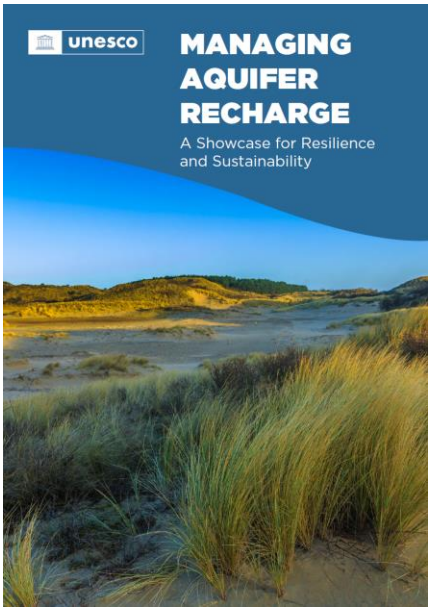
Camilo Fernández cfernandez@northline.es
Jordi Guimerà jordi.guimera@amphos21.com



RO plant Project for tertiary water treatment before well injection.

NEW OUTSTANDING PUBLICATIONS ON MAR OR MAR-RELATED

Managing Aquifer Recharge: A Showcase for Resilience and Sustainability



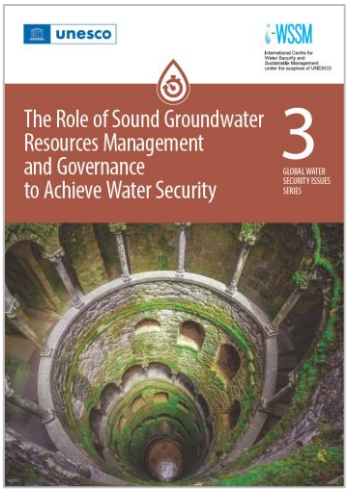
Zheng, Y., Ross, A., Villholth, K and Dillon, P. (eds) (2021) Managing Aquifer Recharge: A Showcase for Resilience and Sustainability. UNESCO-IAH Publication.

This 379 page 30MB book provides accounts of 28 MAR schemes from around the world by the implementers and operators. Many schemes are long-lived, demonstrating success in improving quantity and quality of water supplies and buffering them against drought and emergencies by communities from village to state, and trans-boundary level. A benefit-cost analysis shows that MAR offers a 50% reduction in costs compared to the best alternatives. When evaluated for its environmental and social sustainability using a basic qualitative technique specifically developed for this book, most schemes are found to be sustainable.

Available at: https://unesdoc.unesco.org/ark:/48223/pf0000379962

Global Water Security Issues (GWSI) Case Studies: Water Security and the Sustainable Development Goals. 2020 Edition.

The new 2020 GWSI and i-WSSM edition is finally on line. This book includes MAR-related chapters.



Download freely from: https://unesdoc.unesco.org/ark:/48223/pf0000379093

Previous GWSI-i-WSSM books:
2018: https://unesco-iwssm.org/board/select?bbsNo=0000000068&nttSn=20
2019: https://unesco-iwssm.org/board/select?bbsNo=0000000064&nttSn=35

Future book. Invitation to contribute. Artificial recharge to groundwater and rain water harvesting: issues and learning from the developing countries

ARTIFICIAL RECHARGE TO GROUNDWATER AND RAIN WATER HARVESTING: ISSUES AND LEARNING FROM THE DEVELOPING COUNTRIES

Call for Contributions

ABOUT THE MONOGRAPH

Globally, groundwater is one of the most critical natural resources. With its contributions to agriculture, potable water supply, industries and its immense economic and ecological importance, this resource plays a great role in meeting the Sustainable Development Goals (SDGs). Supporting billions of small and marginal farmers around the world, it acts as a hedge against water insecurity, drought, food vagaries, and water borne diseases. The relatively higher resilience of groundwater against the onslaught of climate change is widely accepted. Rainwater Harvesting and Artificial Recharge is considered as the key supply side intervention to sustain the resilience of water and food security of communities around the world. The rationale is to recharge and store more water underground for enhanced and sustained water access by plants, ecosystems, and people. Storing water in soil and aquifer protects the resource from accelerated evaporation due to temperature rise under climate change. It is relatively cheap to implement, and obviates relocation of people from the flooding areas in case of major dams.
Many practices linked to these two technique (artificial groundwater recharge and rain water harvesting) are on trial around the world. The knowledge accumulated and the innovations adopted are reported to produce better outcomes. The impact of these interventions on sustaining, and in many cases, rejuvenating the groundwater resource are encouraging. However, success depends on wide ranging factors like biophysical, technical, agricultural, ecological, socio-economic, institutional and legal issues. Having strong ownership and engagement with local communities and stakeholders is the key issue. The interventions need to be integrated into broader water, land and ecosystem management policies and practices.
The Proposed monograph presents success stories and challenges encountered, science and technology being adopted, and the socio-economic impact created by rainwater harvesting and artificial recharge in developing countries of the world. Government-supported initiatives through policymaking, regulation and ongoing large projects from different countries are showcased in this monograph along with community-driven approaches.
The roadmap for enhancing benefits from such interventions, particularly in water-stressed regions of emerging economies, located in different climatic, geographical and geologic regions, will also be discussed.

ABOUT THE NAM S&T CENTRE

The Centre for Science and Technology of the Non- Aligned and Other Developing Countries (NAM S&T Centre), New Delhi is an Inter- governmental Organization with a Membership of 47 countries spread over Asia, Africa, Middle East and Latin America. The Centre was set-up in 1989 in New Delhi, India in pursuance of the decisions of various NAM Summits with the objective of promoting mutually beneficial cooperation among the NAM and other developing countries for collective self-reliance.
The Centre undertakes a variety of programmes, including organization of International Workshops, Conferences and Training Courses, and implementation of Collaborative S&T Projects. It also offers short-term Research Fellowships to Scientists and Technologists from developing countries in association with the Centres of Excellence in various countries. The Centre also brings out books, monographs and other scientific publications in different subjects that are of interest to developing countries. The Centre's activities provide opportunity for scientist–to–scientist contact and interactions, familiarizing participants on the latest developments and techniques in the subject areas, identification of the requirements of training and expert assistance, locating technologies for transfer between the Members and other developing countries, and dissemination of STI information etc.
In addition, the Centre encourages Academic- R&D-Industry Interactions in the developing countries through its NAM S&TIndustry Network.

Centre for Science and Technology of the Non-Aligned and Other Developing Countries (NAM S&T Centre)

Core-6A, 2nd Floor, India Habitat Centre, Lodhi Road, New Delhi-110003, India. Tel: +91-11-24645134, 24644974 Fax: +91-11-24644973
E-mail: namstcentre@gmail.com Website: http://www.namstct.org

New Monograph Series

IN ASSOCIATION WITH

MANAV RACHNA INTERNATIONAL INSTITUTE OF RESEARCH AND STUDIES
GRIPP LED BY: iWMI

ABOUT THE EDITORS

Dr. Dipankar Saha is a Former Member, Central Ground Water Board (CGWB) and Former Member Secretary, Central Ground Water Authority, Govt of India. He spearheaded the National Aquifer Mapping and Management Programme in India. His area of specialization is groundwater exploration and management; contaminant behavior in aquifer environment; issues, policies and practices in the domain of sustainable groundwater management. He received Ph.D. from one of the prestigious Indian Institute of Technology and authored more than 55 publications in international journals. He is recipient of the prestigious National Geoscienece Award in India and has edited two books published by Springer; a. Water Governance- challenges and prospects and b. Clean and sustainable groundwater, and also coedited a special volume of the Journal of Hydrology: Regional. Dr. Saha is widely travelled, led the Govt of India Delegation and delivered many invited talks in India and abroad. He remained consultant to International Agencies and now is in the Board of Water for People India Trust. Presently he is the Chair Prof of Centre for Advance Water Technology and Management, a Centre of Excellence devoted to water and environment issues, at Manab Rachna International Institute of Research and Studies located at National Capital Region, Delhi.

Dr. Mohamed Shamrukh is a Professor of Environmental and Water Resources Engineering (early retired, Minia University).He recently worked as an expert on "Water Resources & Environment" at the Ministry of Municipality and Environment, Doha. Dr. Shamrukh was also a postdoc research associate in Texas A&M University at Qatar and visiting Research Scholar in main campus in Texas. He received Ph.D. from Minia University (Egypt) under joint system with Texas A&M University (USA) in 1999 and both Masters (1995) and Bachelors (1989) from Minia University. He published more than 43 papers in international journals and conferences besides two books and two chapters. His NATO book by Springer Publisher "Riverbank Filtration for Water Security in Desert Countries" is well known. He is a reviewer for scientific journals, conferences and research funding agencies. He was a member of mid-term review for 1st National Development Strategy in Qatar. He was honored with the Junior Scientist Visit Development Grant to USA from Egypt (2006). He participated in Saudi Arabia Cloud Seeding Project in 2007/2008 and Florida Weather Modification Project in 2019.

Dr. Karen G. Villholth, Principal Researcher, leads the Groundwater Portfolio at IWMI (International Water Management Institute). She is Coordinator of the Groundwater Solutions Initiative for Policy and Practice (GRIPP), a global partnership of 30 international organizations supporting sustainable development, use and management of groundwater. Her areas of work include research, policy advice, and capacity development on inter alia: trans-boundary aquifers, irrigation and food security, groundwater resources assessment/modelling, climate change and adaptation, natural/green infrastructure, and groundwater management and governance.
Karen holds a Ph.D. in Hydrogeology and a M.Sc. in Chemical Engineering from Technical University of Denmark and a M.Sc. in Civil Engineering from University of Washington, USA. She worked for DHI-Water and Environment and Geological Survey of Denmark and Greenland. She is Editor of eight books and special issues and author of more than 80 peer-reviewed international journal articles.

More information:
https://www.iwmi.cgiar.org/about/staff-list/karen-villholth/https://www.linkedin.com/in/karen-grothe-villholth-2187911b/https://twitter.com/KVillholth.

TIMELINE	TENTATIVE ACTIVITY
August - September 2021	*Preparatory Work and Editorial Consultations*
October 2021	*Formal Invitations to Authors for Submission of Papers/Chapters*
November 2021	*Receipt of Tentative title, Scope of paper along with a few keywords*
December 2021 – February 2022	*Receipt of Full Papers/Chapters*
March 2022	** Submission of Book Proposal to a Reputed Publisher*
March – May 2022	*Editing and Revision of Papers*
June 2022	*Submission of Full Manuscript to the Publisher*
July – September 2022	*Publication Process*
October 2022	*Publication of Monograph*

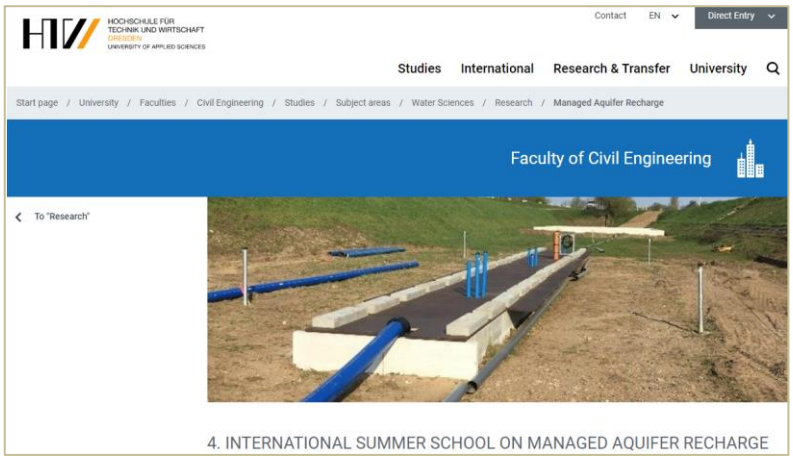
(*) Efforts would be made to publish the Monograph through Springer Nature, Singapore.

Thank you Drs. Dipankar and Vilholth for reporting.

COURSES AND WEBINARS

MARISS 4 International Summer School on Managed Aquifer Recharge.

29.08. - 09.09.2022, Dresden, Germany



The Division of Water Sciences at the Dresden University of Applied Sciences is organising the 4th International Summer School "Managed Aquifer Recharge" (MARISS) from 29.08 to 09.09.2022. Due to climate change, groundwater recharge, in addition to demand management, is an important measure to conserve, convey and safeguard groundwater systems and to protect and improve water quality. Managed aquifer recharge - MAR-, also called groundwater recharge, water banking and artificial recharge, is the targeted recharge of water in aquifers for later recovery or environmental benefit. Read more…

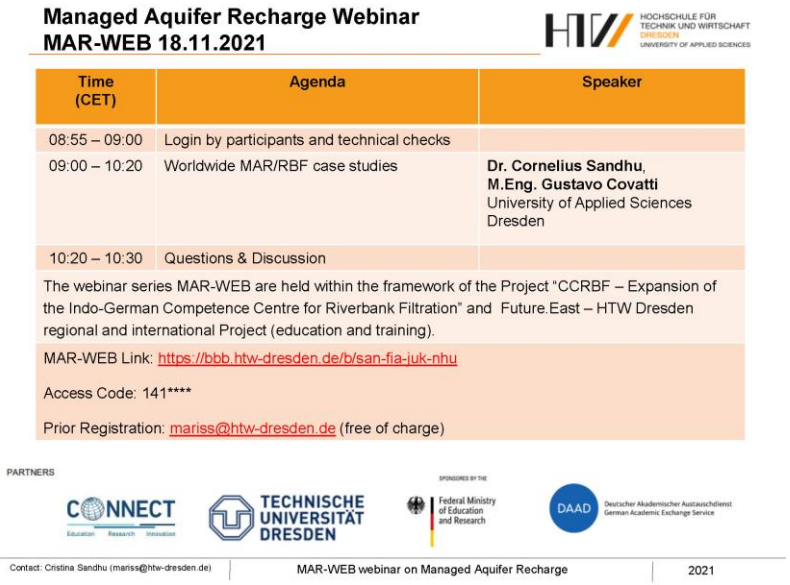
http://www.htw-dresden.de/mariss

Dresden University MAR-WEB webinars on Managed Aquifer Recharge 2021

The division of Water Sciences, HTW Dresden has organized a
MAR-WEB webinar on Managed Aquifer Recharge 2021
17.03; 14.04; 19.05; 16.06; 13.10; 18.11; 15.12.
09:00 - 10:30 (Central European Time).

https://bbb.htw-dresden.de/b/san-fia-juk-nhu

The record of the webinar will be available shortly in their website.



Managed Aquifer Recharge Webinar
MAR-WEB 18.11.2021

HTW Hochschule für Technik und Wirtschaft Dresden University of Applied Sciences

Time (CET)	Agenda	Speaker
08:55 – 09:00	Login by participants and technical checks	
09:00 – 10:20	Worldwide MAR/RBF case studies	**Dr. Cornelius Sandhu**, **M.Eng. Gustavo Covatti** University of Applied Sciences Dresden
10:20 – 10:30	Questions & Discussion	

The webinar series MAR-WEB are held within the framework of the Project "CCRBF – Expansion of the Indo-German Competence Centre for Riverbank Filtration" and Future.East – HTW Dresden regional and international Project (education and training).

MAR-WEB Link: https://bbb.htw-dresden.de/b/san-fia-juk-nhu

Access Code: 141****

Prior Registration: mariss@htw-dresden.de (free of charge)

PARTNERS

CONNECT Education Research Innovation | TECHNISCHE UNIVERSITÄT DRESDEN | Sponsored by the Federal Ministry of Education and Research | DAAD Deutscher Akademischer Austauschdienst German Academic Exchange Service

Contact: Cristina Sandhu (mariss@htw-dresden.de) | MAR-WEB webinar on Managed Aquifer Recharge | 2021

Thank you Cristina Sandhu for reporting

Managed Aquifer Recharge and its role in climate change resilience in Africa

Thu 25 Nov 2021, 10-11:30 CET. Convener: IWMI. Co-Convenors: GEOSS and BGR

Water scarcity is expected to become more critical in the future due to climate change, and improved utilization of available water resource is therefore urgent to enhance resilience. Managed aquifer recharge (MAR), the purposeful recharge of water to aquifers for subsequent recovery, is used globally to replenish groundwater resources. Despite clear scope for this technology in Africa, the prevalence and range of MAR experiences in Africa is limited. The objective of this session is to review and synthesize MAR experience in Africa, fostering awareness and appreciation of MAR among stakeholders and various implementing agencies, strengthening capacity for its planning, implementation and management, better registration and documentation of MAR cases, and promoting research, monitoring and evaluation.

The session was a presentation and dialogue around the experience and perspectives of MAR in Africa. To realize the full potential of MAR in Africa, fostering awareness, enabling policy for MAR implementation, exploring feasibility of expansion of MAR, especially in geographic regions of high inter-annual variability and increasing water demand, are essential. This can be supported through research to gauge success and unpack and address the potential challenges and critical stakeholder dialogue. The session consisted of 7 presentations, followed by a moderated panel discussion to outline further challenges and prospects of MAR in Africa.

The session output/lessons-learned will be taken forward and presented in IGAD 2nd water dialogue forum to be held in Entebbe, **Uganda on 25-27 January 2022**.

Thank you Kes Murray, GEOSS, for reporting

IV International Congress Smart Water Chihuahua 2021 includes a MAR session (in Spanish)

On December 2nd and 3rd, 2021, the IV International Congress Smart Water Chihuahua 2021 will take place, a mixed face-to-face and virtual event, Smart Water is focused on advances in global water management, especially in the field of water reuse. The conference involves several speakers from the Americas, Europe and Israel.

The event has been organized by the National Water Commission (CONAGUA), the Central Water and Sanitation Board of Chihuahua (Mexico), together with the University of Chihuahua, the Mexican chapter of the International Association of Hydrogeologists, etc.

Free of charge, registration and program are available at:
https://www.jcas.gob.mx
https://bit.ly/ProgramaFinal_Smart_Water

Venue: Chihuahua´s Convention Center.

Access via Zoom platform:
https://us02web.zoom.us/j/82119946135?pwd=eWh0Rlc5ZUhVVHJwRy9laDlGODBHUT09 ID: 821 1994 6135 Access code: 091646 09:00 A.M. (GMT -7:00).

Thank you Dr. Carmen Navarro for reporting.

Save the date: International Conference on Riverbank Filtration, 27-29 September 2022 in Dresden, Germany

The conference is organised by the University of Applied Sciences Dresden (more information will be provided in the next newsletters).

Thank you Dr. Catalin Stefan for reporting. INOWAS

MORE ACTIONS

Whatsapp group on Aquifer Recharge Management

Scan the QR code.

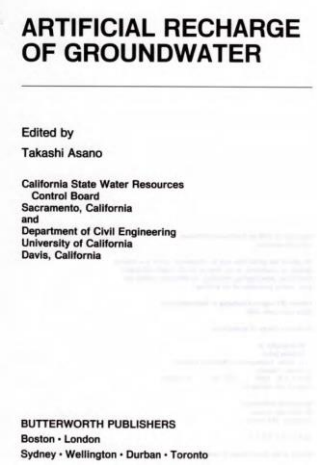
WhatsApp Group

Aquifer recharge management

Old publications on MAR (another drop of nostalgia…)

The selected drop is…

Artificial recharge of groundwater, Takashi Asano, 1985.



Download:
https://www.asersagua.es/Asersa/Archivos/Artificial%20Recharge%20of%20Groundwater.pdf

IAH Commission on Managing Aquifer Recharge. Twitter account

Please, follow the Twitter account of the IAH Commission on Managing Aquifer Recharge at https://twitter.com/IAHMARCom

Previous IAH-MAR Newsletters

Please, remember that you can access the previous newsletters in our website:
https://recharge.iah.org/newsletters

And that´s all by now… please, keep reporting (dinamar@tragsa.es).

Thank you very much for your kind attention
Best regards

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

International Association of Hydrogeologists
Commission on Managing Aquifer Recharge

@IAHMARCom

Please, remember you can book freely in the IAH MAR Commission Forum: https://lists.flinders.edu.au/mailman/listinfo/iah-mar.listcgs to stay informed on MAR issues.

Sister sites:

http://china-mar.ujn.edu.cn/ University of Jinan

https://dinamar.tragsa.es/

@4dina_mar

Get ready for the next main event on MAR:
www.ismar11.net