International Association of Hydrogeologists
the World-wide Groundwater Organisation

IAH Commission on
Managing Aquifer Recharge

Online MAR Seminars

#1. Introduction to managed aquifer recharge

Tuesday, 11 Feb 2025, 4:00 – 5:30 pm CET

https://recharge.iah.org/online-mar-seminars

CATALIN STEFAN

Technische Universität Dresden
Germany

"Implementation of managed aquifer recharge (MAR) worldwide – the MAR portal"

ENRIQUE FERNÁNDEZ ESCALANTE

TRAGSA Group
Spain

"Managed aquifer recharge (MAR): Classification and inventory of typologies at the international level"

YAN ZHENG

Southern University of Science and Technology
China

"The 21st century water quality challenges for managed aquifer recharge: towards a risk-based regulatory approach"

International Association of Hydrogeologists

the World-wide Groundwater Organisation

IAH Commission on Managing Aquifer Recharge

Catalin Stefan
Enrique Fernández Escalante
Yan Zheng
IAH-MAR Commission co-chairs

https://recharge.iah.org

International Association of Hydrogeologists (IAH) Commission on Managing Aquifer Recharge

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

Photo: ISMAR10, Madrid, Spain

- Promotes the securing and expanding of water resources
- Encourages research, development and adoption of improved practices
- Facilitates international exchange of information between members

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

Current working groups:

Clogging and its management
MAR for Sustainable Development
Economics of MAR
MAR Regulations
MAR Suitability Mapping
Urban MAR
MAR in Conferences

Former working groups

Global MAR Inventory
60 years History of MAR
MAR to MARket
Call to Action on Groundwater Management

MAR Communities of Practice:

Australia, Italy, China, Latin America

Our website https://recharge.iah.org

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IAH Commission on Managing Aquifer Recharge

International Association of Hydrogeologists

WELCOME | ABOUT THE COMMISSION | EVENTS | WORKING GROUPS | COMMUNITIES | COLLABORATIONS | RESOURCES | ISMAR

Welcome

Attendees at ISMAR10, Madrid, May 2019 – the latest triennial symposium of IAH-MAR, UNESCO and ASCE

Welcome to the website of the International Association of Hydrogeologists Commission on Managing Aquifer Recharge (IAH-MAR). Here you can discover what our working groups are doing and contribute to their current projects, you can download resources on MAR, connect with people, get information on symposia coming up, and join our email list to stay informed of latest news. We also have sister sites in Spanish and Chinese.

Managed Aquifer Recharge

Managed aquifer recharge, also called groundwater replenishment, water banking and artificial recharge, is the purposeful recharge of water to aquifers for subsequent recovery or environmental benefit. It embraces methods such as riverbank filtration, stream bed weirs, infiltration ponds and injection wells, and uses natural water sources and appropriately treated urban stormwater, sewage and other waste waters to increase groundwater storage, protect and improve water quality,and secure drought and emergency supplies. Its growing scientific base supports its rapidly increasing use as a vital management tool in the sustainable use of the world's water resources.

Latest News

AGU24 MAR session at AGU2024 in Washington, USA, 9-13 December 2024

ISMAR12

ISMAR12 STELLENBOSCH SOUTH AFRICA 28 APRIL-2 MAY 2025

Latest updates

CURRENT PROJECTS THAT YOU CAN JOIN

- New working group: MAR in Conferences. Coordinator: Daniela Benedicto van Dalen
- New working group: Urban MAR. Coordinator: Niels Hartog
- LatinMAR Community of Practice – a new initiative to advance MAR in Latin America. Coordinator: Adriana Palma
- MAR Suitability Mapping Working Group. Coordinator: Jose Bonilla
- Contributions to a second monograph on clogging-focussing on its management – Clogging Working Group. Coordinator: Russell Martin
- Groundwater Solutions Initiative for Policy and Practice (GRIPP) – a Collaborative International Project, Coordinator: Karen Villholth

IAH Commission on Managing Aquifer Recharge

International Association of Hydrogeologists

WELCOME | ABOUT THE COMMISSION | EVENTS | WORKING GROUPS | COMMUNITIES | COLLABORATIONS | RESOURCES | ISMAR

ISMAR Symposia

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 goals 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".

Symposia attract attendance of national and international regulators, researchers and practitioners in all facets of MAR, including hydrogeology, geochemistry, microbiology, modeling, economics, and water resources management. Themes covered include water quality, design and construction, operation and maintenance, economics, monitoring and modeling, regulations and management, adaptation to climate change, land subsidence prevention and remediation, and thermal energy storage.

This dedicated page provides an overview on past ISMAR symposia and serves as an online repository for conference materials such as books of proceedings, abstracts etc. We warmly recommend also the collection of Proceedings of the Biennial Symposium on Managed Aquifer Recharge (BSMAR) organised in the US by the Groundwater Resources Association of California and Arizona Hydrological Society.

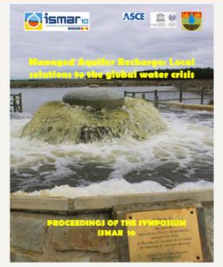
ISMAR12
12th International Symposium on Managed Aquifer Recharge

"From Theory to Implementation and Operation"

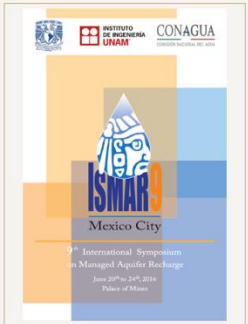
28 April – 2 May 2025 – Stellenbosch, South Africa

The 12th International Symposium on Managed Aquifer Recharge (ISMAR12) will be held in the wine heartland of South Africa, Stellenbosch, from 28 April to 2 May 2025. The main theme "From Theory to Implementation and Operation" places the focus on the latest research, implementation of MAR sites and the practicality of operating MAR schemes. The 8 Sub-themes cover multiple aspects in the field of MAR in the domestic/municipal, agricultural, and mining sectors. Oral and Poster presentations, multiple workshops and social interactions will allow the delegates to present innovative solutions and discuss pressing societal challenges. Various exhibit opportunities and sponsoring opportunities exist. Pre-conference courses will allow the delegates to gain practical knowledge for

ISMAR PROCEEDINGS BOOKS



Proceedings of ISMAR10



Abtracts book of ISMAR9

Dr. Catalin STEFAN
Research Group INOWAS, Technische Universität Dresden

The MAR Portal

Implementation of managed aquifer recharge (MAR) worldwide

Series of Online MAR Seminars
Seminar #1. Introduction to managed aquifer recharge

Online, 11 February 2025

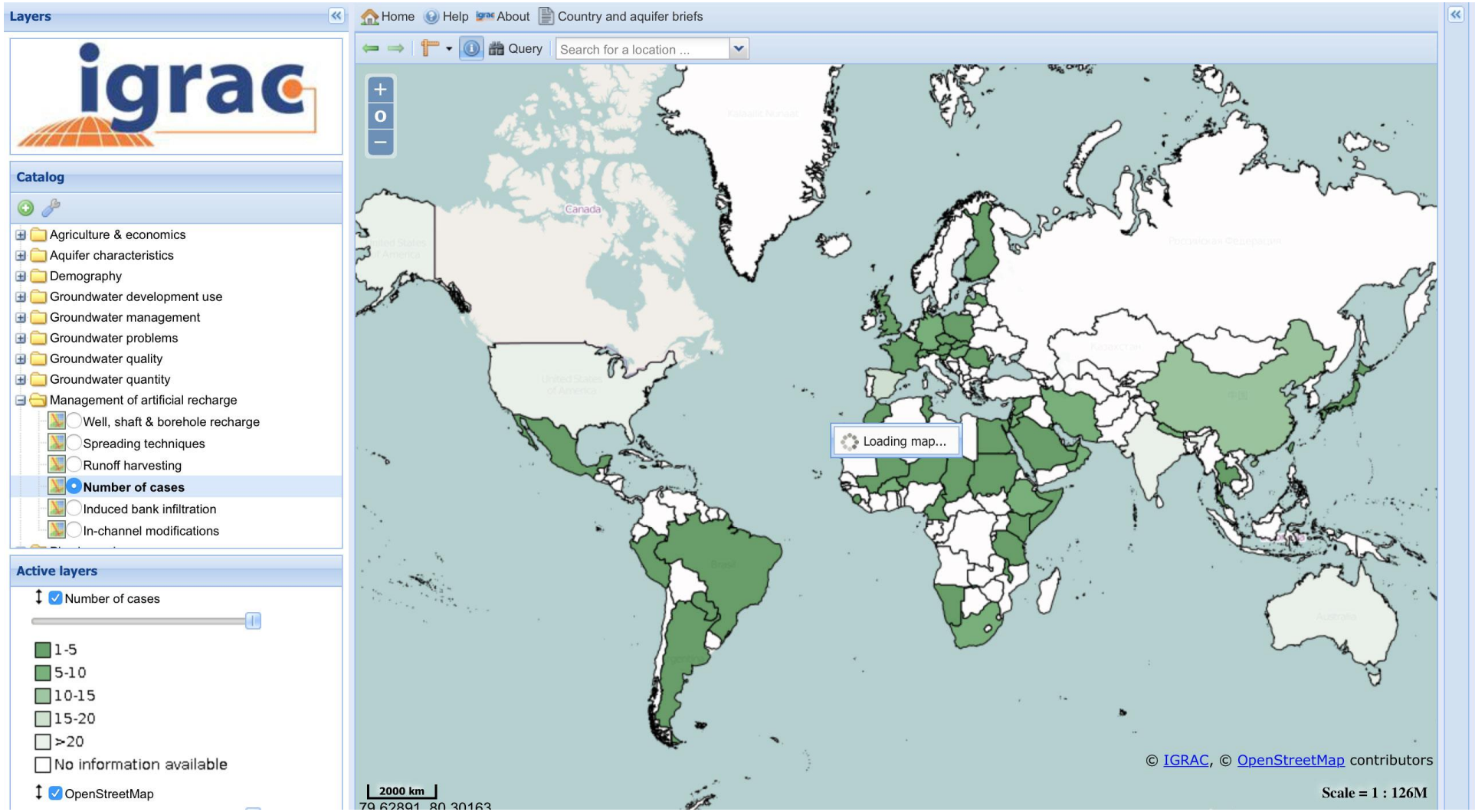
Lessons learned (?)

- What are the most used MAR methods and what makes them successful?
- What are the MAR objectives and how is the water used after infiltration?
- How much water can be really recovered by using MAR?
- What are the factors that trigger MAR implementation (demand-driven, political will, policy-related etc.)?
- What are the lessons learned from the historical development of MAR?
- etc…

Infiltration wells in Salisbury, Australia

Recharge basins in Yahvne, Israel

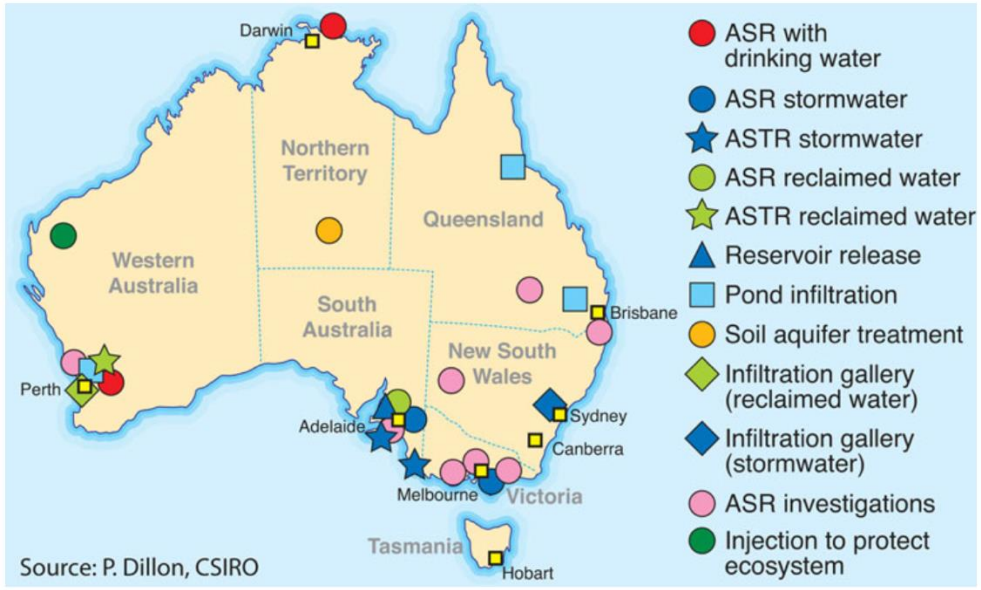
Previous MAR inventories



"Global Inventory on Artificial Recharge" (2004)

Previous MAR inventories

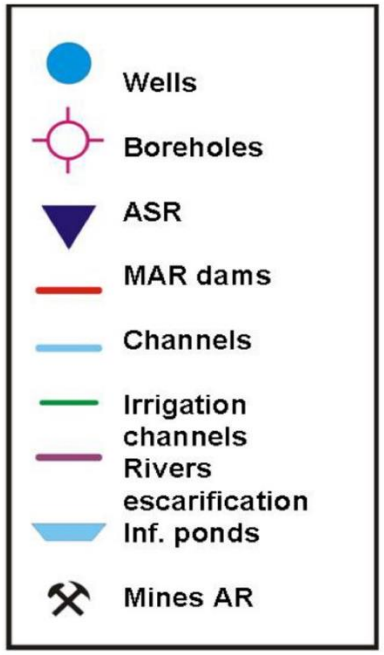
MAR sites in Australia (2011)

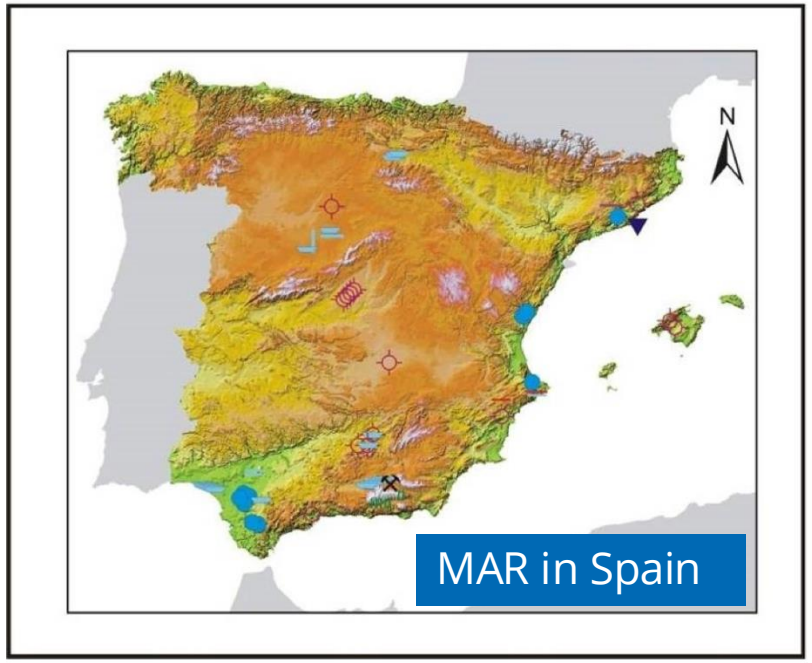


Australia | 24 MAR sites

Source: Ward and Dillon, 2012
Hydrogeology Journal 20(5):943-956

DINA-MAR, 2009



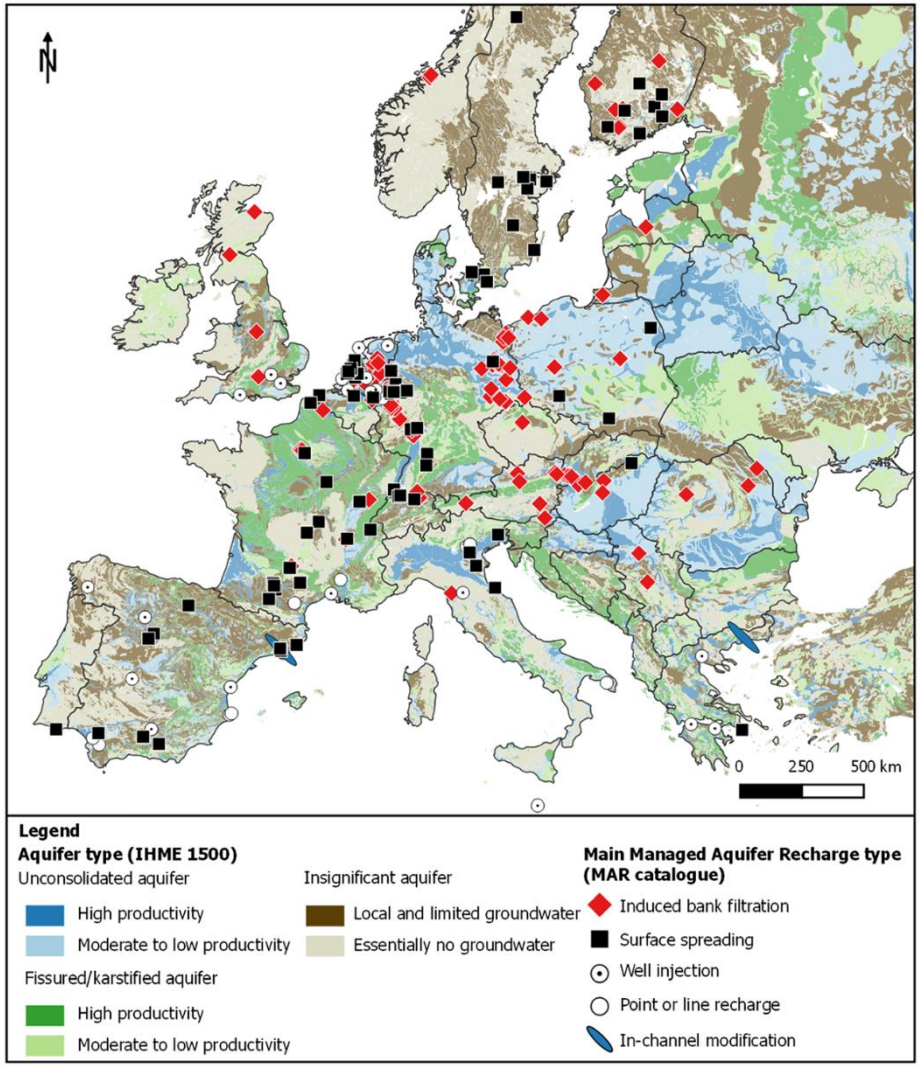


Development of Managed Aquifer Recharge in China

Wang, W.; Zhou, Y.; Sun, X.; Wang, W.

China has a long history in managed aquifer recharge (MAR). The historic development can be divided into 4 stages based on a summary of typical MAR projects. The first stage is MAR applied to agricultural production, the second is MAR applied to industrial production and alleviation of agricultural problems, the third is MAR applied to ecological protection and the increase in urban water supplies, and the fourth is multi-source MAR. In addition, geothermal reinjection and ground source heat pumps are also effective uses of MAR. Nevertheless, the MAR framework is defective, there is a lack of water quality studies, and the recharge rate of most projects is low. However, China has achieved a great effect on industrial and agricultural production, ecological protection, drinking water supplies and urban reclaimed water reuse, amongst others. But there are still many issues to be improved. A feasible, convenient and economic technique of MAR which fits local hydrogeological conditions needs to be developed and guidelines for both MARs and management regulations to ensure the successful running of MAR projects also need to be established. MAR will make a great difference to improving potable water quality, alleviating geological hazards, long distance water diversion, urban water supplies, agriculture irrigation, etc. (Author)

Previous MAR inventories



Hydrogeol J (2017) 25:1909–1922
DOI 10.1007/s10040-017-1554-8

REPORT

Inventory of managed aquifer recharge sites in Europe: historical development, current situation and perspectives

C. Sprenger[1] · N. Hartog[2] · M. Hernández[3] · E. Vilanova[4] · G. Grützmacher[5] · F. Scheibler[6] · S. Hannappel[6]

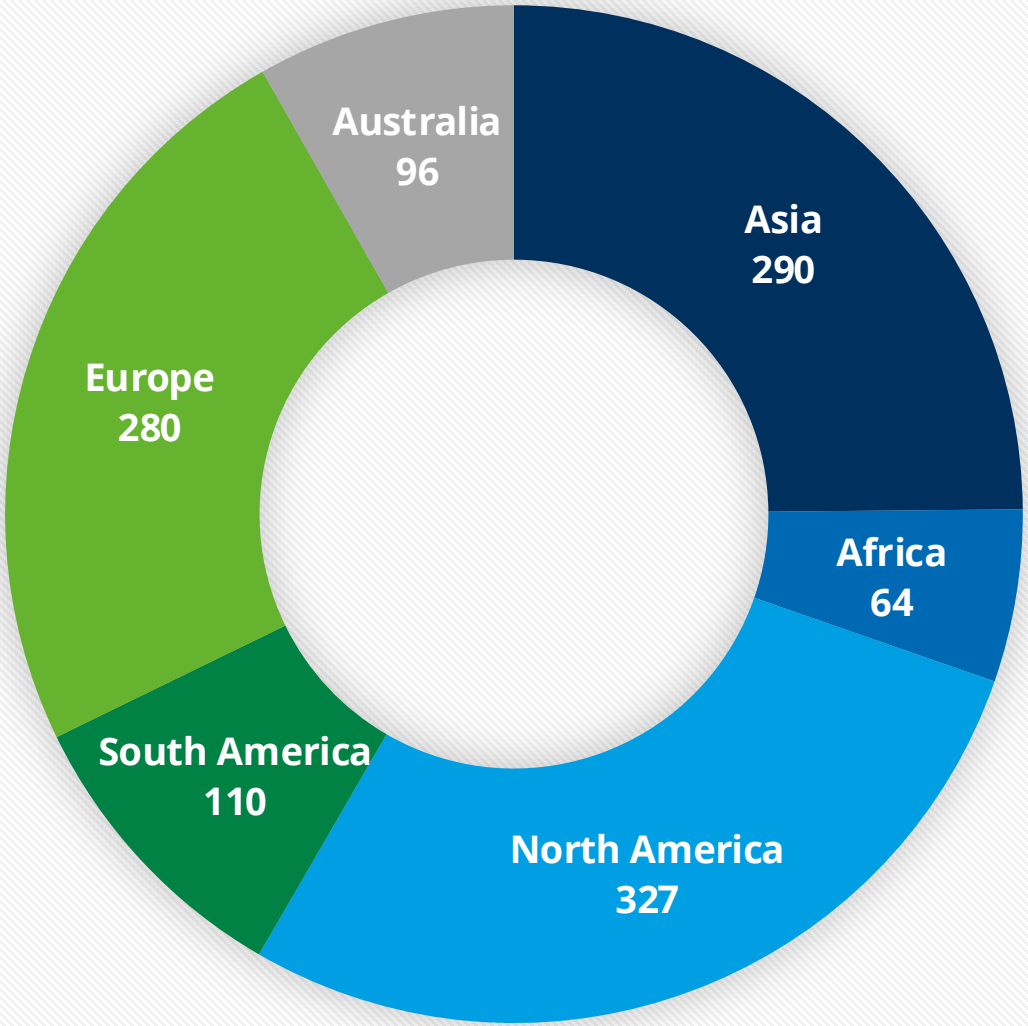
Received: 8 June 2016 / Accepted: 6 February 2017 / Published online: 16 March 2017

Abstract Different types of managed aquifer recharge (MAR) schemes are widely distributed and applied on various scales and for various purposes in the European countries, but a systematic categorization and compilation of data has been missing up to now. The European MAR catalogue presented herein contains various key parameters collected from the available literature. The catalogue includes 224 currently active MAR sites found in 23 European countries. Large quantities of drinking water are produced by MAR sites in Hungary, Slovakia, the Netherlands, Germany, Finland, Poland, Switzerland and France. This inventory highlights that, for over a century, MAR has played an important role in the development of European water supply and contributes to drinking-water production substantially. This development has occurred autonomously, with "trial-and-error" within the full range of climatically and hydrogeologically diverse conditions of the European countries. For the future, MAR has the potential to facilitate optimal (re)use and storage of available water resources and to take advantage of the natural purification and low energy requirements during MAR operations. Particularly with respect to the re-use of wastewater treatment-plant effluent and stormwater, which is currently underdeveloped, the use of MAR can support the public acceptance of such water-resource efficient schemes. Particularly for the highly productive and urbanized coastal zones, where the pressure on freshwater supplies increases by growing water demand, salinization and increased agricultural needs for food production (such as along the Mediterranean and North Sea coasts), MAR is expected to be increasingly relied on in Europe.

Keywords Artificial recharge · History of hydrogeology · Future · Europe

Introduction

MAR case studies collected



SOURCES

Journal articles
Technical reports
Academic theses
Conference papers
Newspaper articles
Printed books
Governmental reports
Personal communications
Websites
etc…

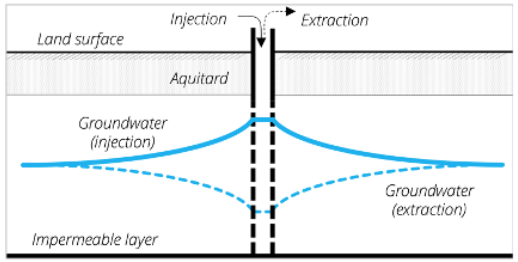
Data quality

Table 1 List of entries in the MAR inventory database

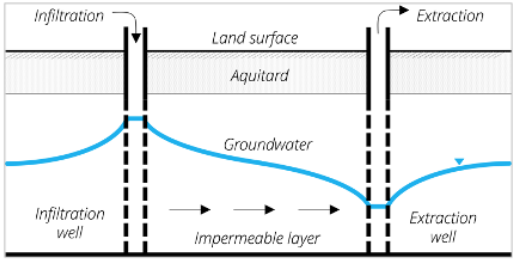
1. General information					
1	Site name[a] (100%)	7	Operator contact (14%)	13	Influent source[a] (96%)
2	Country[a] (100%)	8	Year operation start[a] (66%)	14	Effluent final use[a] (73%)
3	City (56%)	9	Year of publication (99%)	15	Main objective[a] (82%)
4	Latitude[a] (98%)	10	Year shut down (2%)	16	Specific objective (n.a.)
5	Longitude[a] (98%)	11	Main MAR type[a] (100%)	17	Mean annual rainfall (n.a.)
6	Operator name (33%)	12	Specific MAR type[a] (100%)	18	Mean annual evaporation rate (n.a.)
2. Operational parameters					
19	No. of infiltration structures (15%)	25	Annual recharged volume (21%)	31	Average extracted volume (7%)
20	No. of infiltration wells (27%)	26	Volume rainwater harvested (2%)	32	Recovery efficiency (3%)
21	Average filter depth (7%)	27	Average infiltration rate (3%)	33	Residence time (11%)
22	Reservoir storage capacity (12%)	28	Number observation wells (5%)	34	Distance horizontal passage (12%)
23	Reservoir surface area (13%)	29	Number recovery wells (18%)	35	Pre-treatment (17%)
24	Recharge efficiency (2%)	30	Average filter depth (15%)	36	Post-treatment (7%)
3. Hydrogeological properties					
37	Aquifer hydraulic conductivity (16%)	40	Aquifer name (7%)	43	Development water table (3%)
38	Aquifer transmissivity (5%)	41	Aquifer confinement (28%)	44	Water table depth before (8%)
39	Aquifer thickness (21%)	42	Aquifer type (15%)	45	Water table depth after (1%)
4. Water quality parameters					
46	Water quality monitoring (6 parameters) (< 1%)	47	Hydrochemical parameters (109 parameters) (< 1%)		

MAR methods considered

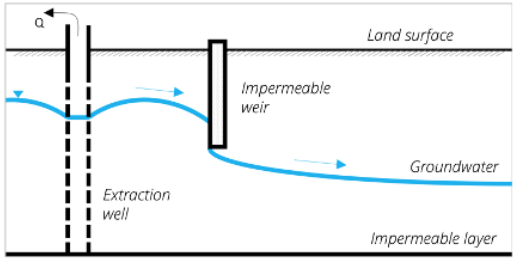
ASR



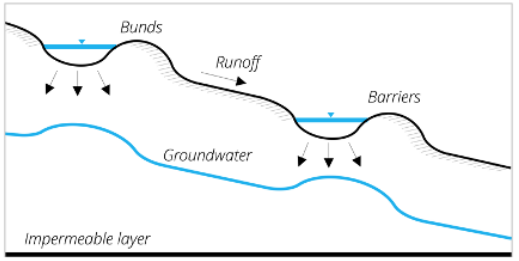
ASTR



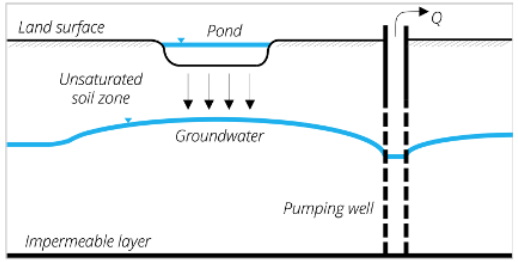
Subsurface dam



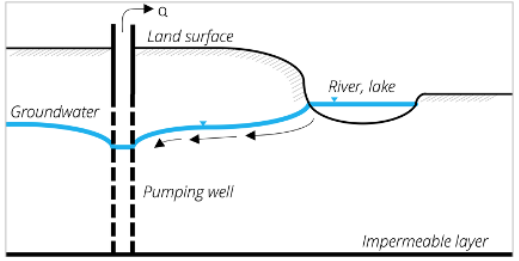
Barriers and bunds



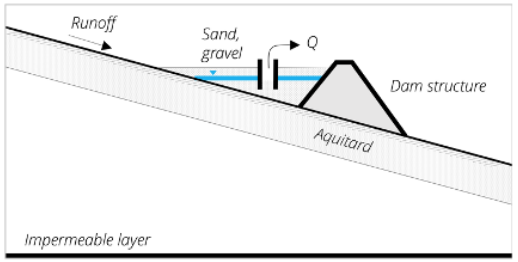
Infiltration ponds



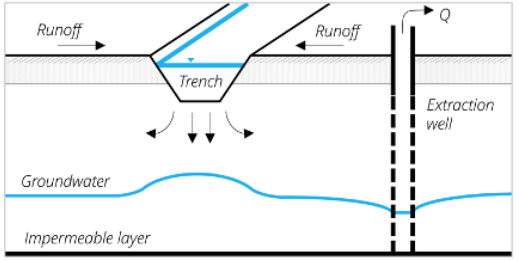
Riverbank filtration



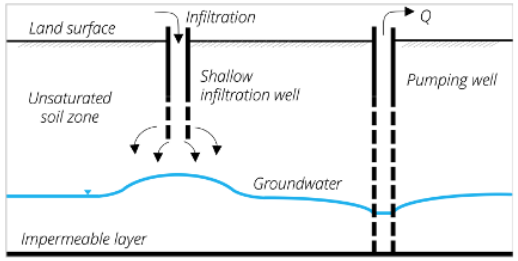
Sand dam



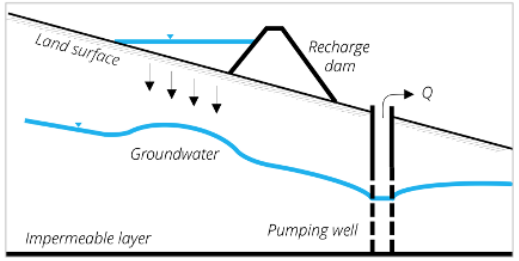
Infiltration trenches



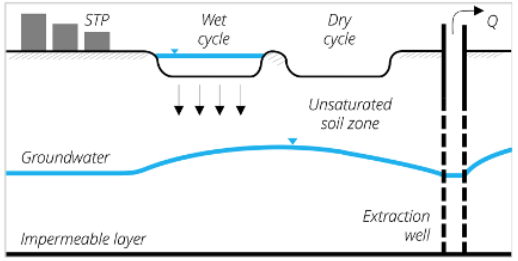
Shallow wells



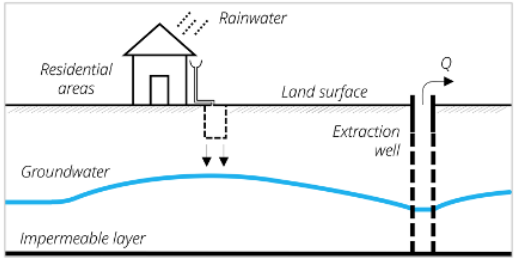
Recharge dams



Soil aquifer treatment

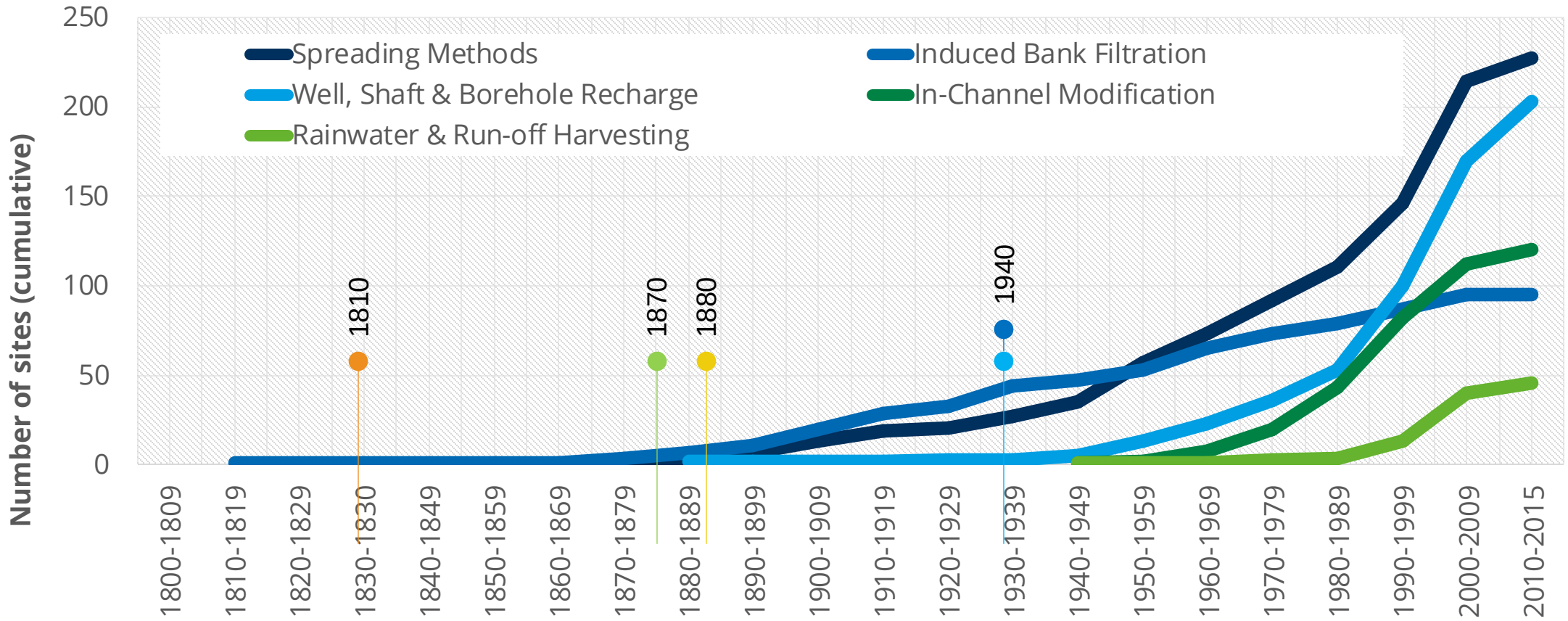


Rooftop water harvesting

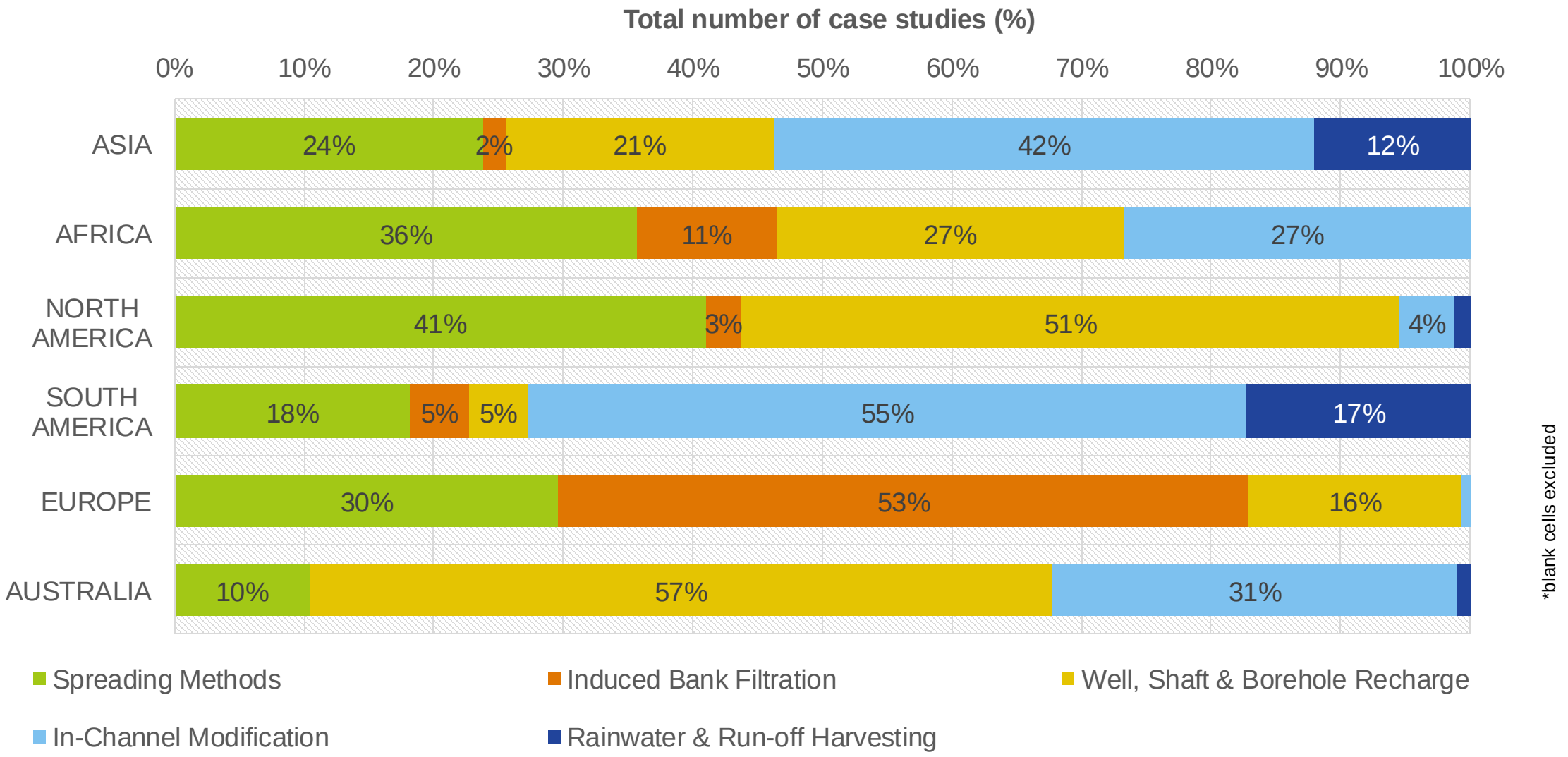


Read more: https://www.inowas.com/mar/

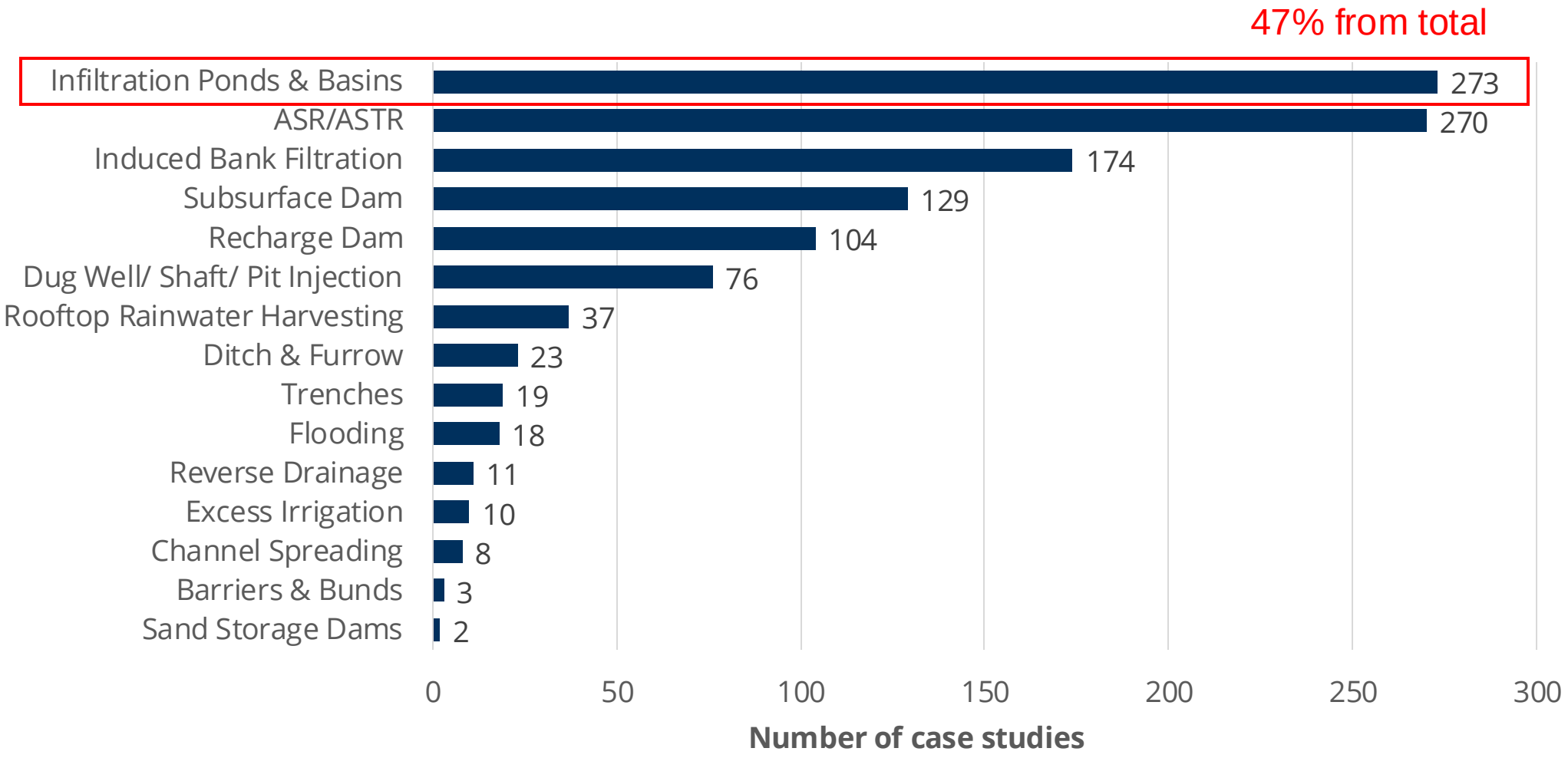
Historical MAR development



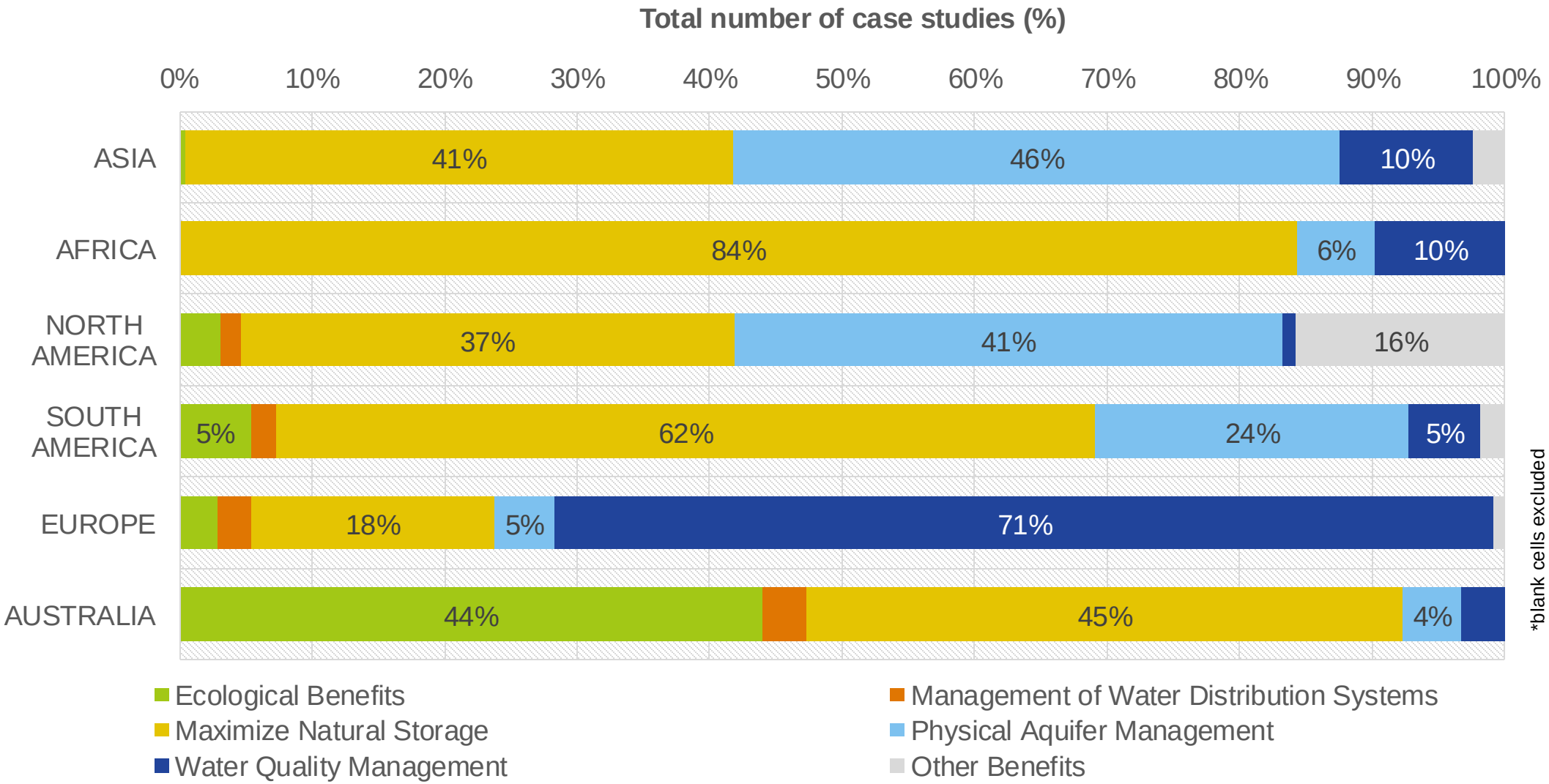
Main MAR methods



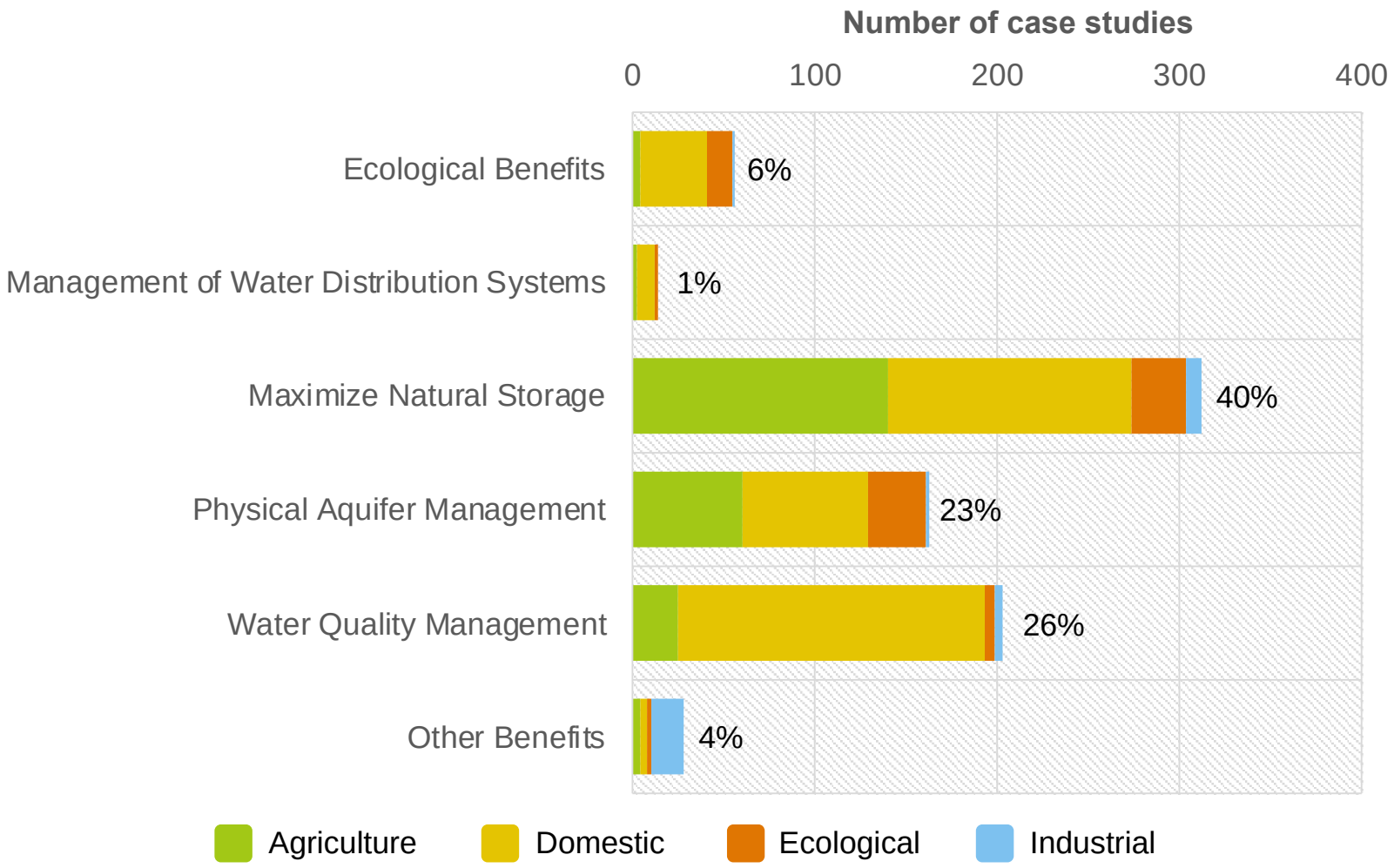
Specific MAR types



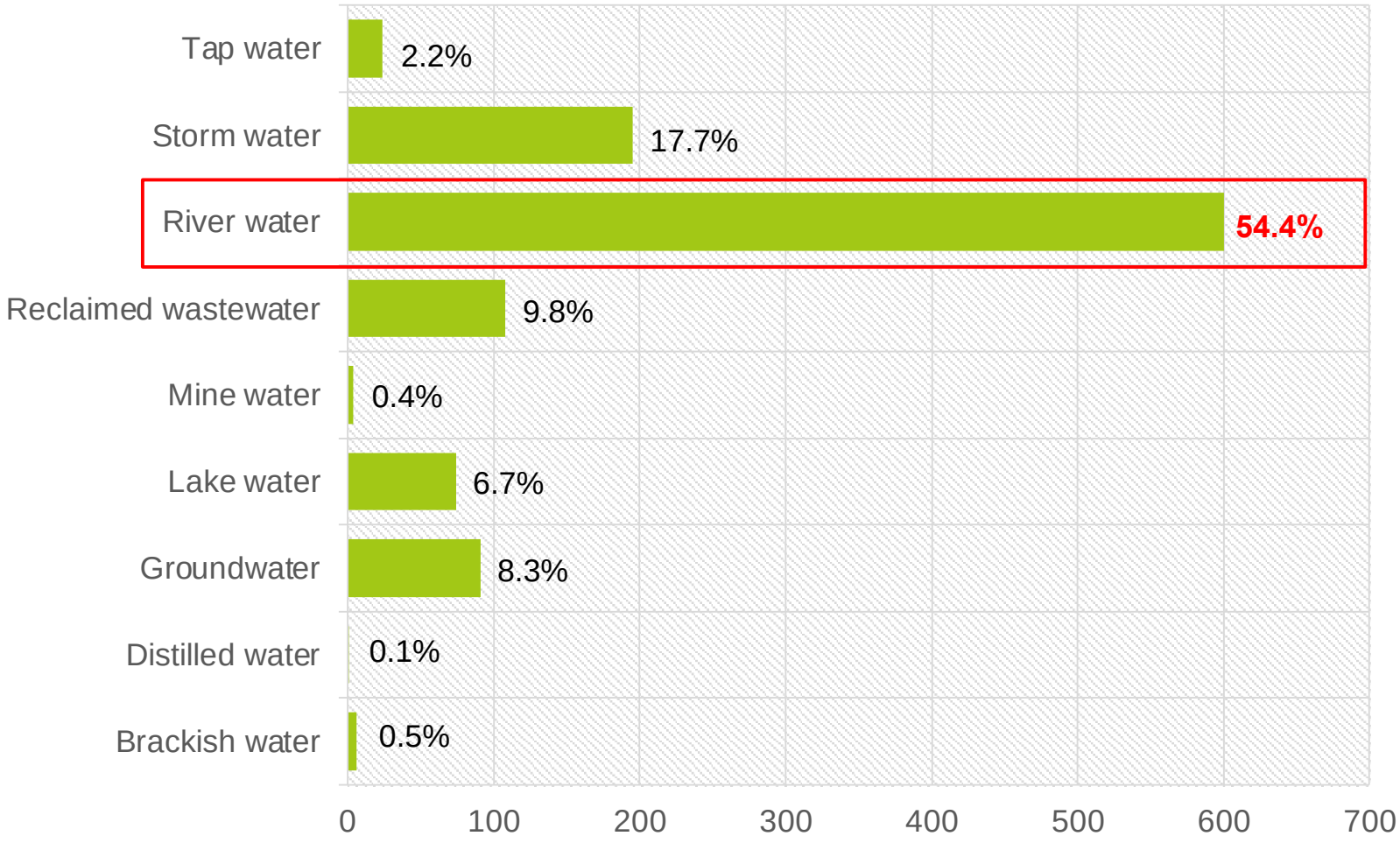
MAR objectives



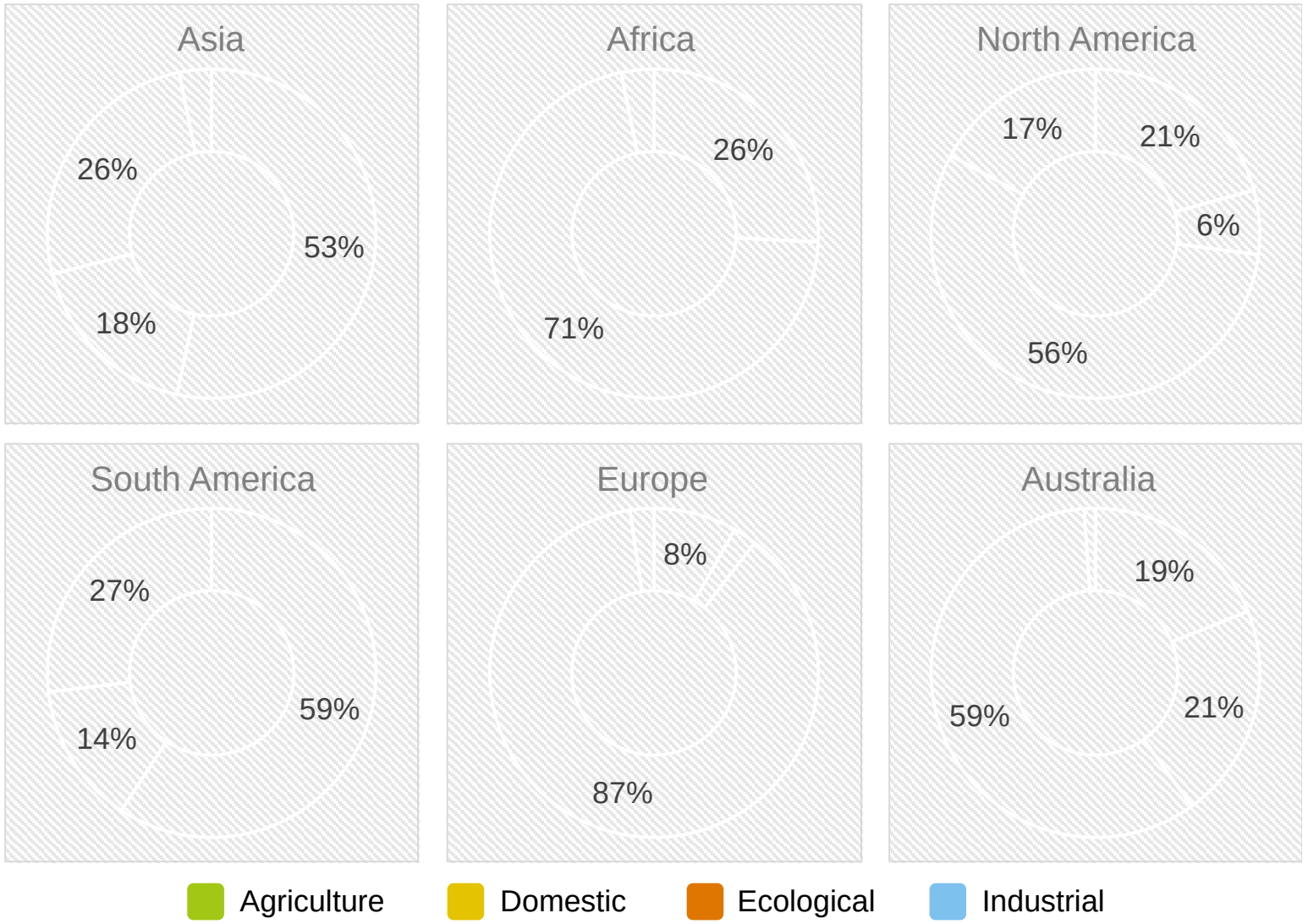
MAR objectives and final water use

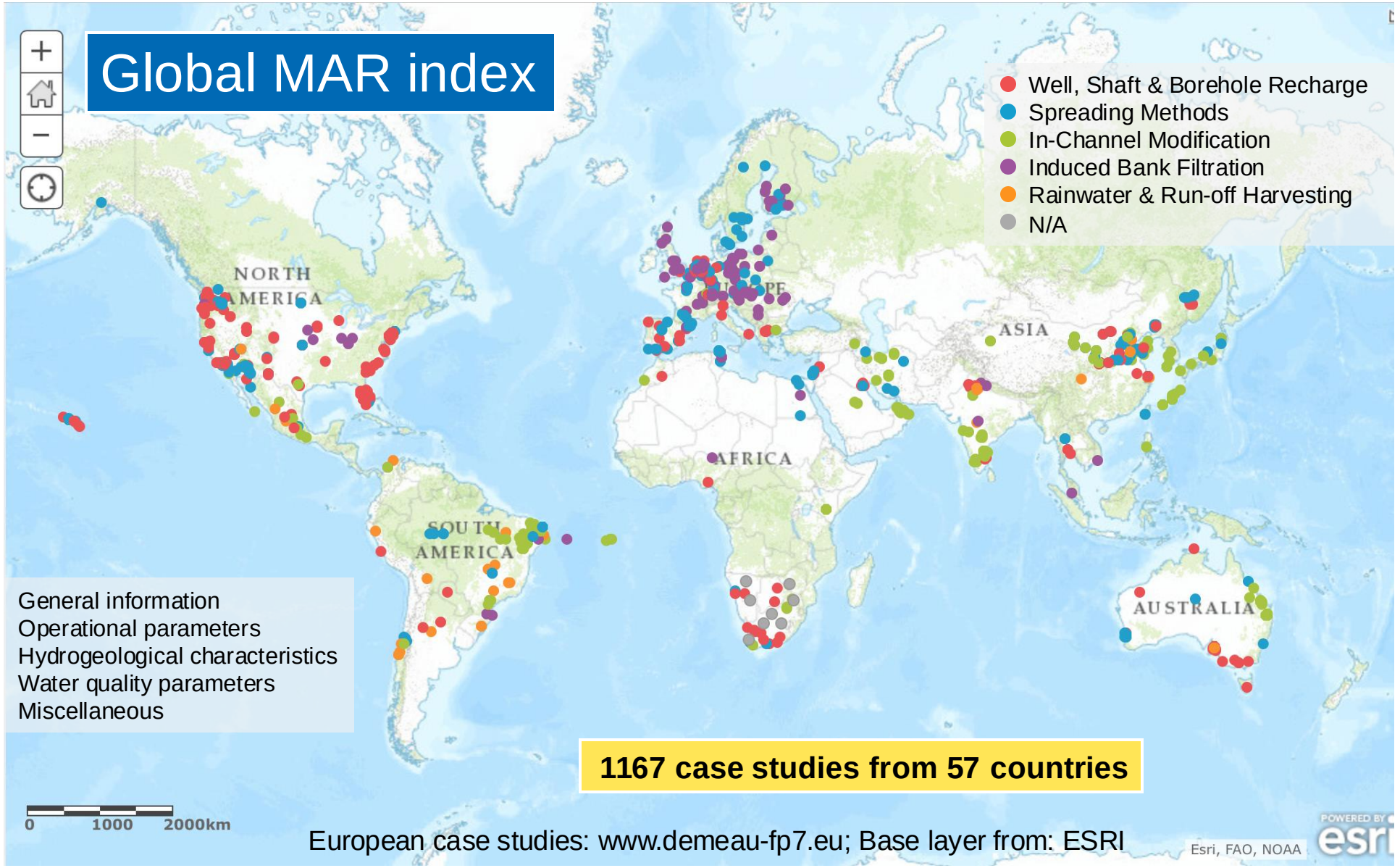


Infiltration water

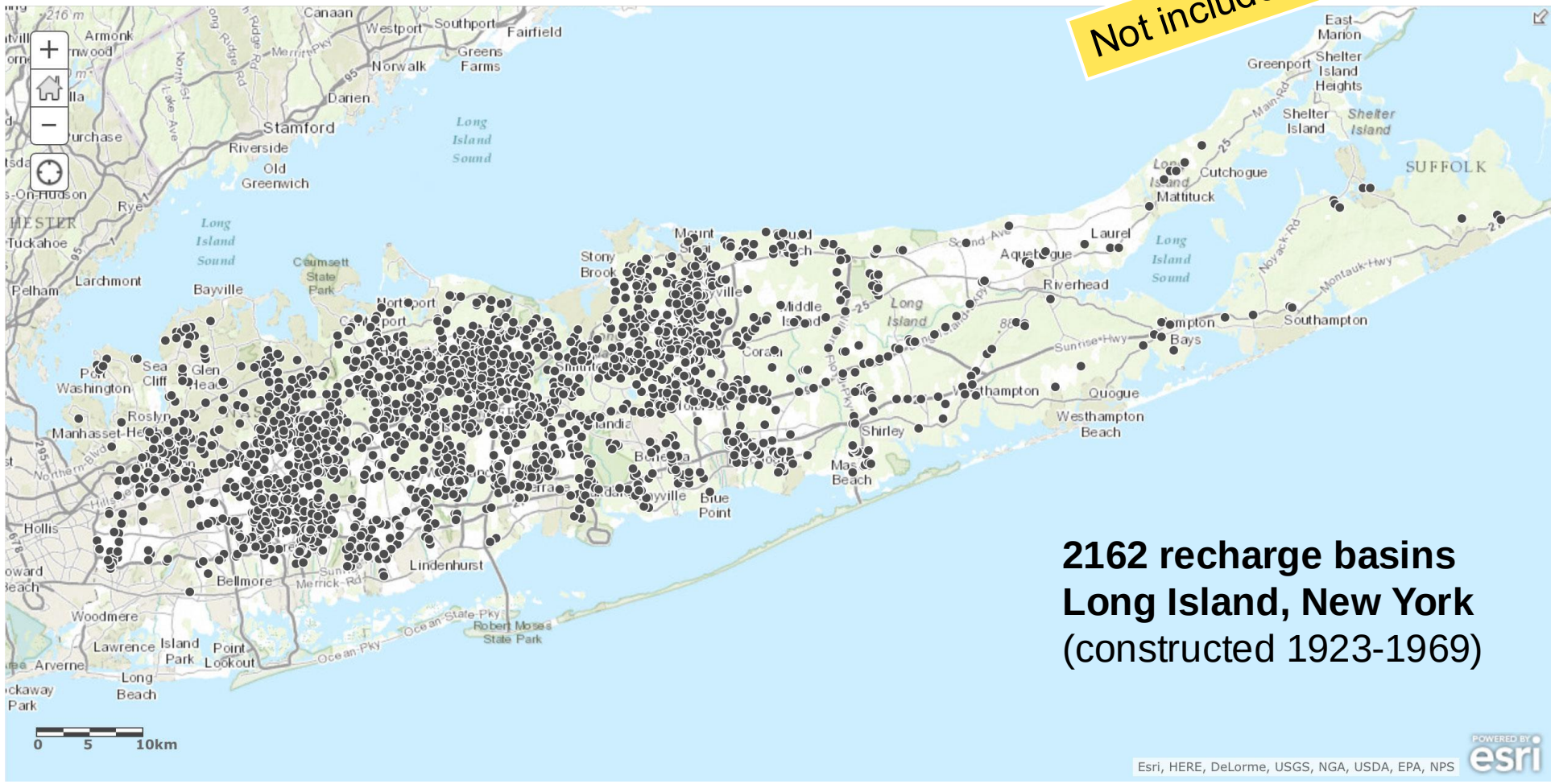


Final water use




Global MAR index
Well, Shaft & Borehole Recharge
Spreading Methods
In-Channel Modification
Induced Bank Filtration
Rainwater & Run-off Harvesting
N/A
NORTH AMERICA
EUROPE
ASIA
AFRICA
SOUTH AMERICA
AUSTRALIA
General information
Operational parameters
Hydrogeological characteristics
Water quality parameters
Miscellaneous
1167 case studies from 57 countries
0 1000 2000km
European case studies: www.demeau-fp7.eu; Base layer from: ESRI
Esri, FAO, NOAA
POWERED BY esri

Additional databases

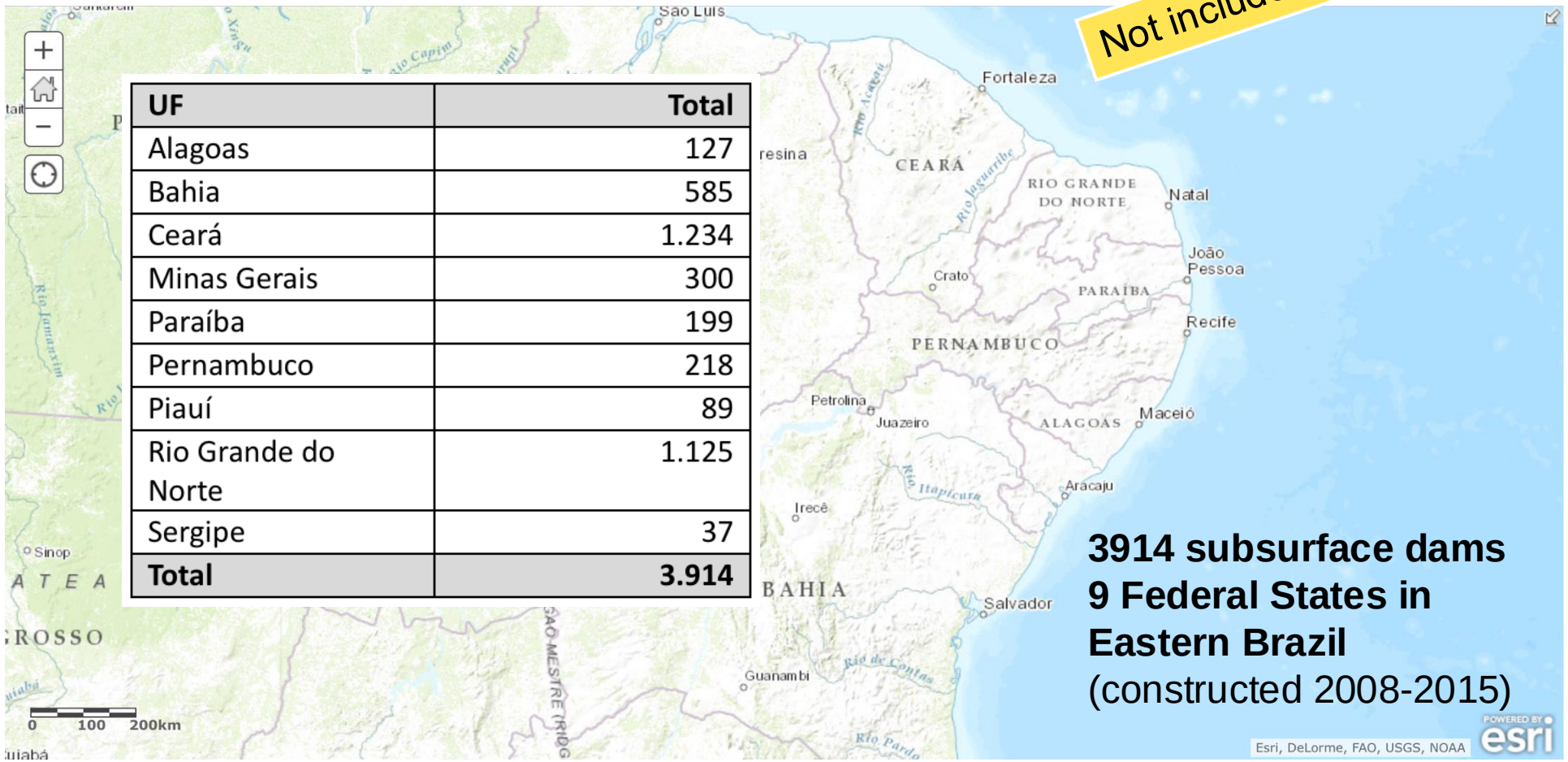


Source: G.E. Seaburg and D.A. Aronson, USGS:
"Catalogue of Recharge Basins on Long Island, New York, in 1969". Bulletin 70/1973

Additional databases

Not included in this study

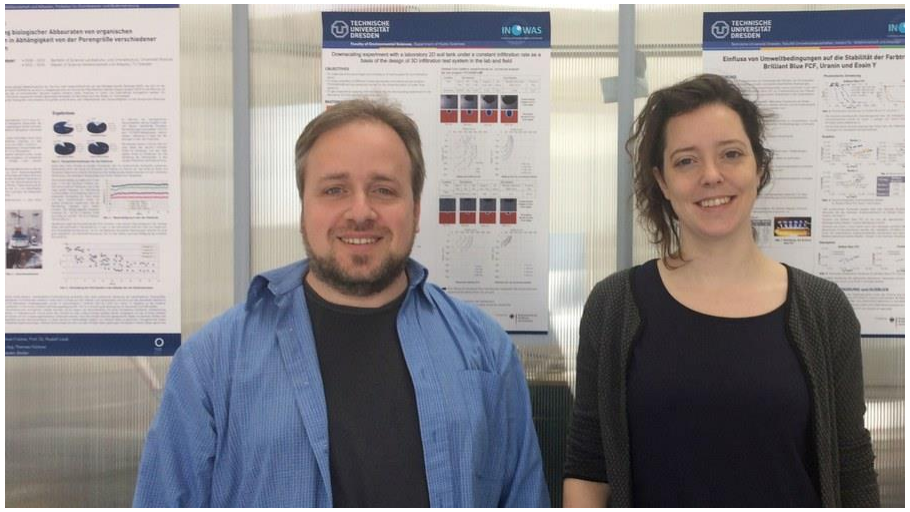
UF	Total
Alagoas	127
Bahia	585
Ceará	1.234
Minas Gerais	300
Paraíba	199
Pernambuco	218
Piauí	89
Rio Grande do Norte	1.125
Sergipe	37
Total	**3.914**



3914 subsurface dams
9 Federal States in Eastern Brazil
(constructed 2008-2015)

Source: Instituto Brasileiro de Geografia e Estatística, 2015 (personal communication)

Global Web-based MAR portal



Catalin Stefan (TUD), Nienke Ansems (IGRAC)

Arnaud Sterckx, IGRAC

Sustainable Water Resources Management (2018) 4:153–162
https://doi.org/10.1007/s40899-017-0212-6

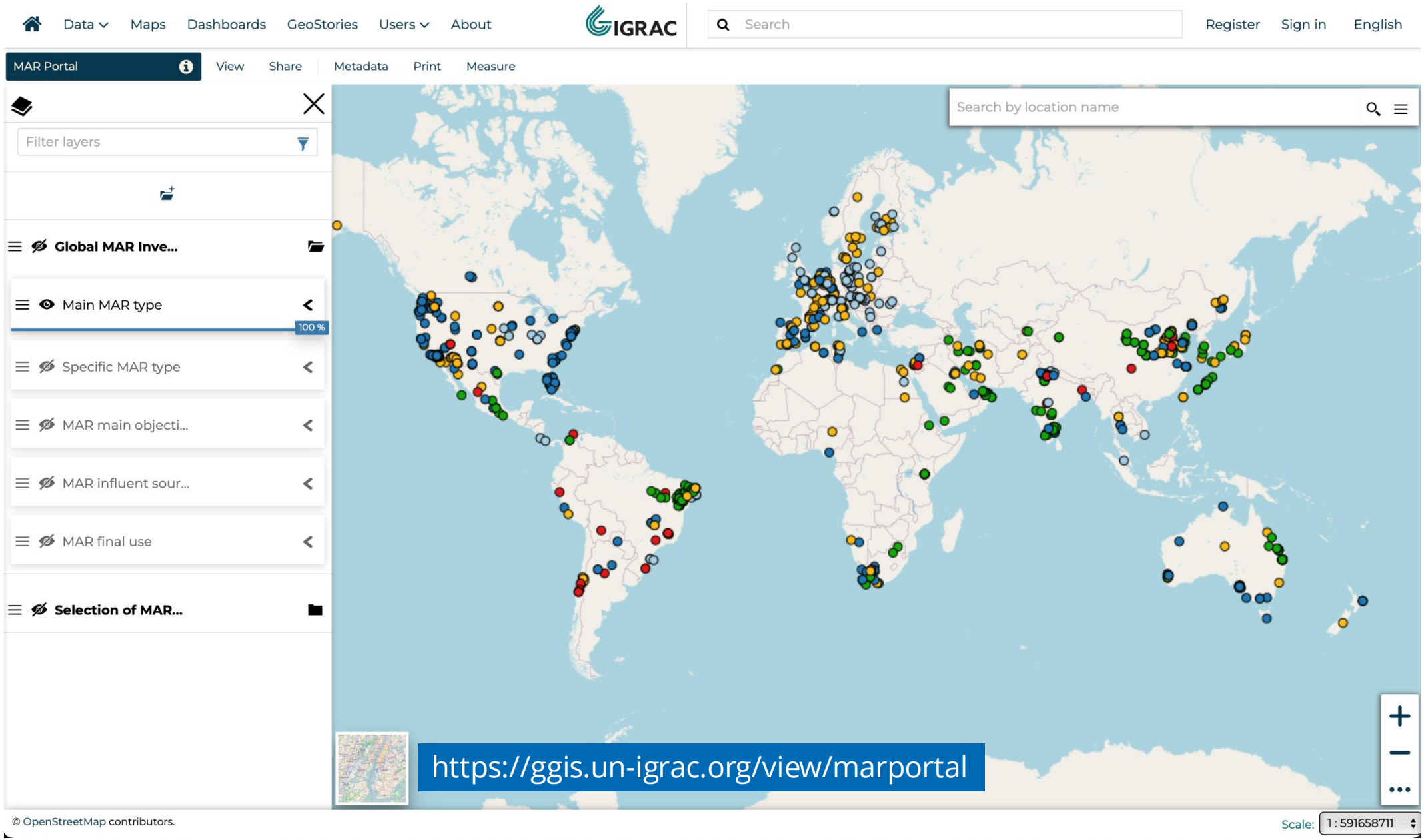
ORIGINAL ARTICLE

Web-based global inventory of managed aquifer recharge applications

Catalin Stefan[1] · Nienke Ansems[2]

Received: 30 October 2016 / Accepted: 18 December 2017 / Published online: 22 December 2017

Abstract
Managed aquifer recharge (MAR) is being successfully implemented worldwide for various purposes: to increase groundwater storage, improve water quality, restore groundwater levels, prevent salt water intrusion, manage water distribution systems, and enhance ecological benefits. To better understand the role of MAR in sustainable water management and adaptation to climate and land use change, about 1200 case studies from 62 countries were collected and analyzed with respect to historical development, site characterization, operational scheme, objectives and methods used, as well as quantitative and qualitative characterization of in- and outflow of water. The data harvested was used for the compilation of a global inventory of MAR schemes, whose main goal is to provide access to existing MAR projects and techniques and demonstrate their benefits. To increase the availability and facilitate continuous update of the MAR inventory, an MAR web-based portal was developed and integrated into IGRAC's Global Groundwater Information System. The MAR portal contains a "data layer catalog" containing the data arranged in a systematic way, a "map viewer" to visualize the selected data on a geographic location, and a "features panel" providing tabular output of the selected data. By facilitating access and promoting international sharing of information and knowledge on MAR, the web-based MAR portal aims to increase awareness of MAR as a viable solution for sustainable groundwater resources development and management, and to provide a new tool for better planning of MAR at regional and global scale.


Data
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© OpenStreetMap contributors.
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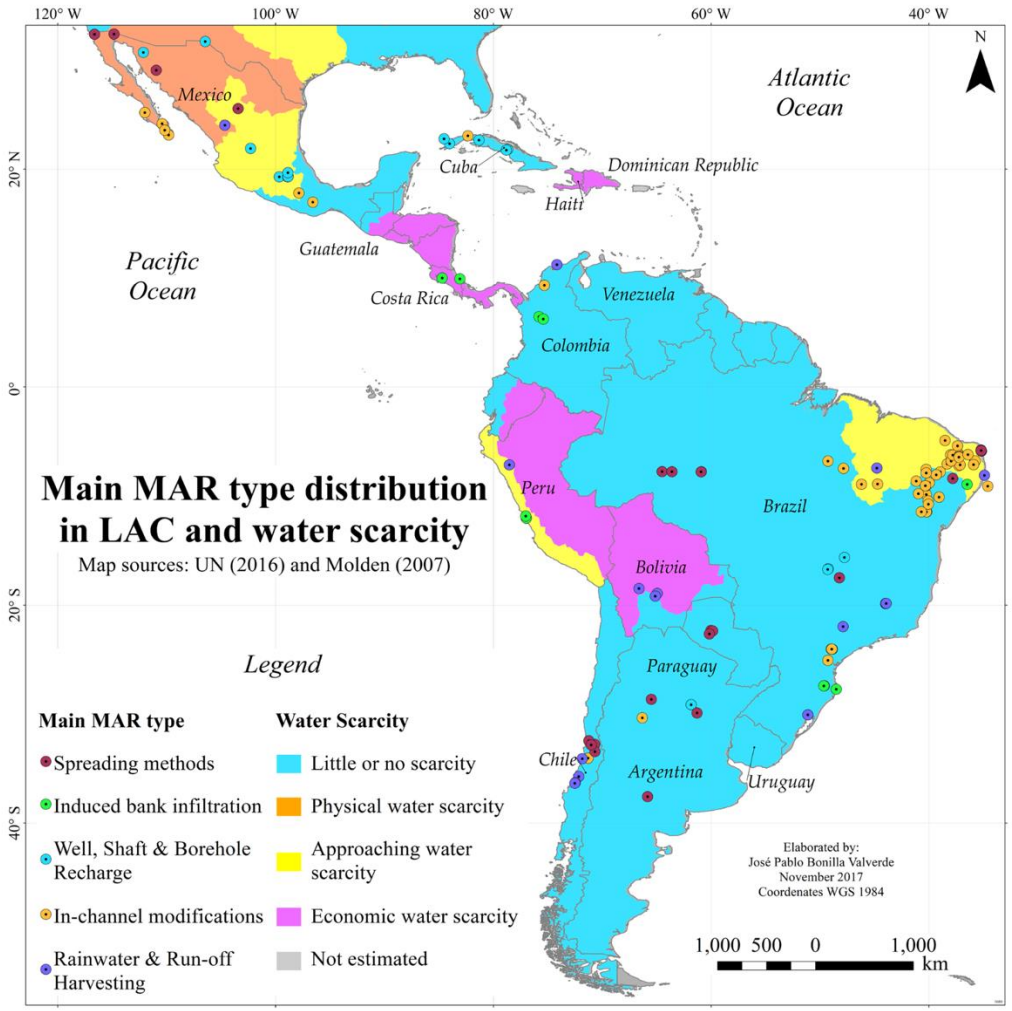
Derivations and follow-ups



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https://doi.org/10.1007/s40899-018-0231-y

ORIGINAL ARTICLE

Inventory of managed aquifer recharge schemes in Latin America and the Caribbean

José P. Bonilla Valverde[1,2] · Catalin Stefan[2] · Adriana Palma Nava[3] · Eduardo Bernardo da Silva[2] · Hugo L. Pivaral Vivar[2]

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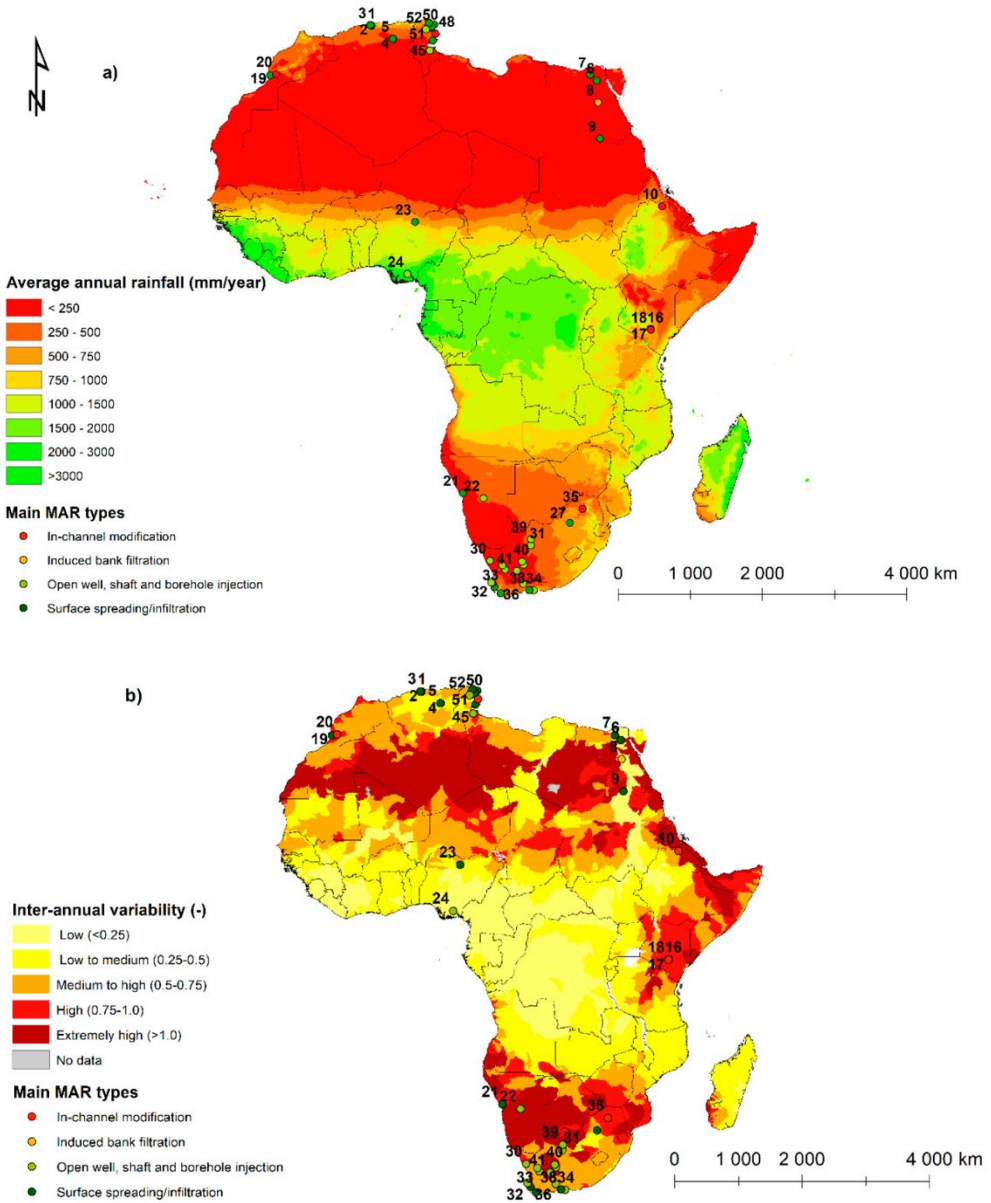
Abstract
Managed aquifer recharge (MAR) is being used worldwide as a tool to overcome distinct water management challenges. An analysis of MAR case studies from different countries in Latin America and the Caribbean (LAC) was carried out as part of a larger study focused on the compilation of a global inventory of MAR schemes which aims at providing guidance for the planning and implementation of new MAR projects. The MAR case studies were collected from freely available scientific publications. These were classified according to the specific MAR type developed, main objective and the source of the influent water. Most reported cases (>60%) were found in Brazil, followed by Mexico and Chile. The main MAR type reported in LAC is in-channel modification, which represents more than half of the reported MAR schemes, and the main influent water used is river water and storm water (together accounting for >90% of cases). Approximately two-thirds of the MAR cases in LAC were developed to maximize natural storage. Publication of freely available scientific reports on MAR in LAC is scarce; however, this is not due to lack of MAR projects, but rather suggests insufficient motivation in sharing experiences with the international scientific community. Nevertheless, MAR has been successfully implemented in at least ten LAC countries. For four of these, estimates of annual recharge volume are available—Mexico (156 Mm^3), Cuba (115 Mm^3), Peru (36 Mm^3) and Costa Rica (4 Mm^3)—and a further 30 Mm^3 are crudely but conservatively calculated for the remaining LAC countries (mostly in Brazil) bringing the total to approximately 340 Mm^3. The application of MAR is expected to grow further as a sustainable and reliable tool to address challenges related to climate, population and economic changes.

Keywords Managed aquifer recharge · Latin America and the Caribbean · Global inventory of MAR schemes · MAR per population index

Derivations and follow-ups



water

MDPI

Article

Managed Aquifer Recharge in Africa: Taking Stock and Looking Forward

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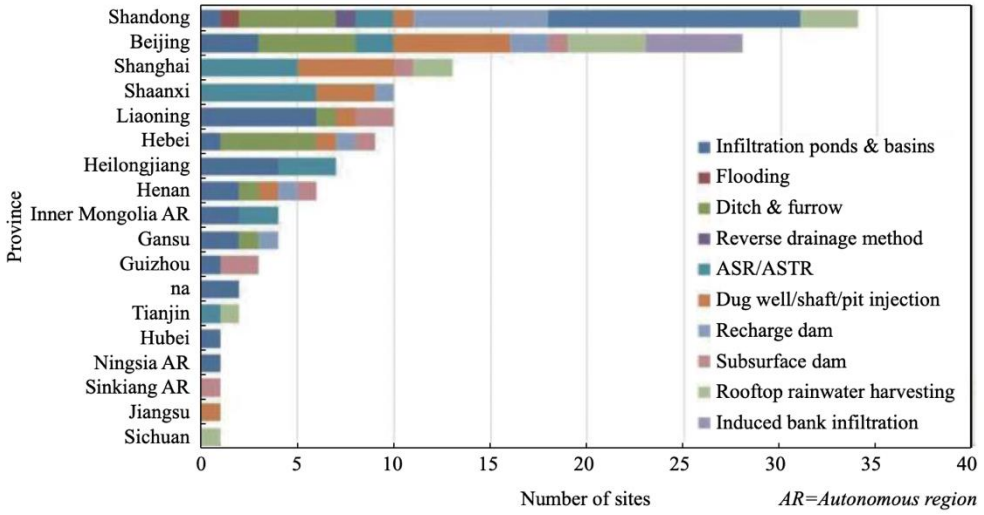
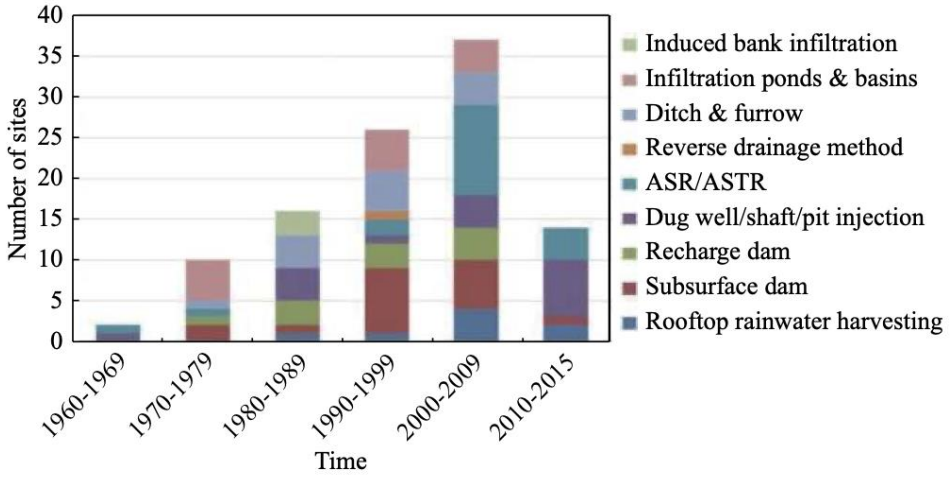
Abstract: Climatic variability and change result in unreliable and uncertain water availability and contribute to water insecurity in Africa, particularly in arid and semi-arid areas and where water storage infrastructure is limited. Managed aquifer recharge (MAR), which comprises purposeful recharge and storage of surface runoff and treated wastewater in aquifers, serves various purposes, of which a prominent one is to provide a means to mitigate adverse impact of climate variability. Despite clear scope for this technology in Africa, the prevalence and range of MAR experiences in Africa have not been extensively examined. The objective of this article is provide an overview of MAR progress in Africa and to inform the potential for future use of this approach in the continent. Information on MAR from 52 cases in Africa listed in the Global MAR Portal and collated from relevant literature was analyzed. Cases were classified according to 13 key characteristics including objective of the MAR project, technology applied, biophysical conditions, and technical and management challenges. Results of the review indicate that: (i) the extent of MAR practice in Africa is relatively limited, (ii) the main objective of MAR in Africa is to secure and augment water supply and balance variability in supply and demand, (iii) the surface spreading/infiltration method is the most common MAR method, (iv) surface water is the main water source for MAR, and (v) the total annual recharge volume is about 158 Mm^3/year. MAR schemes exist in both urban and rural Africa, which exemplify the advancement of MAR implementation as well as its out scaling potential. Further, MAR schemes are most commonly found in areas of high inter-annual variability in water availability. If properly

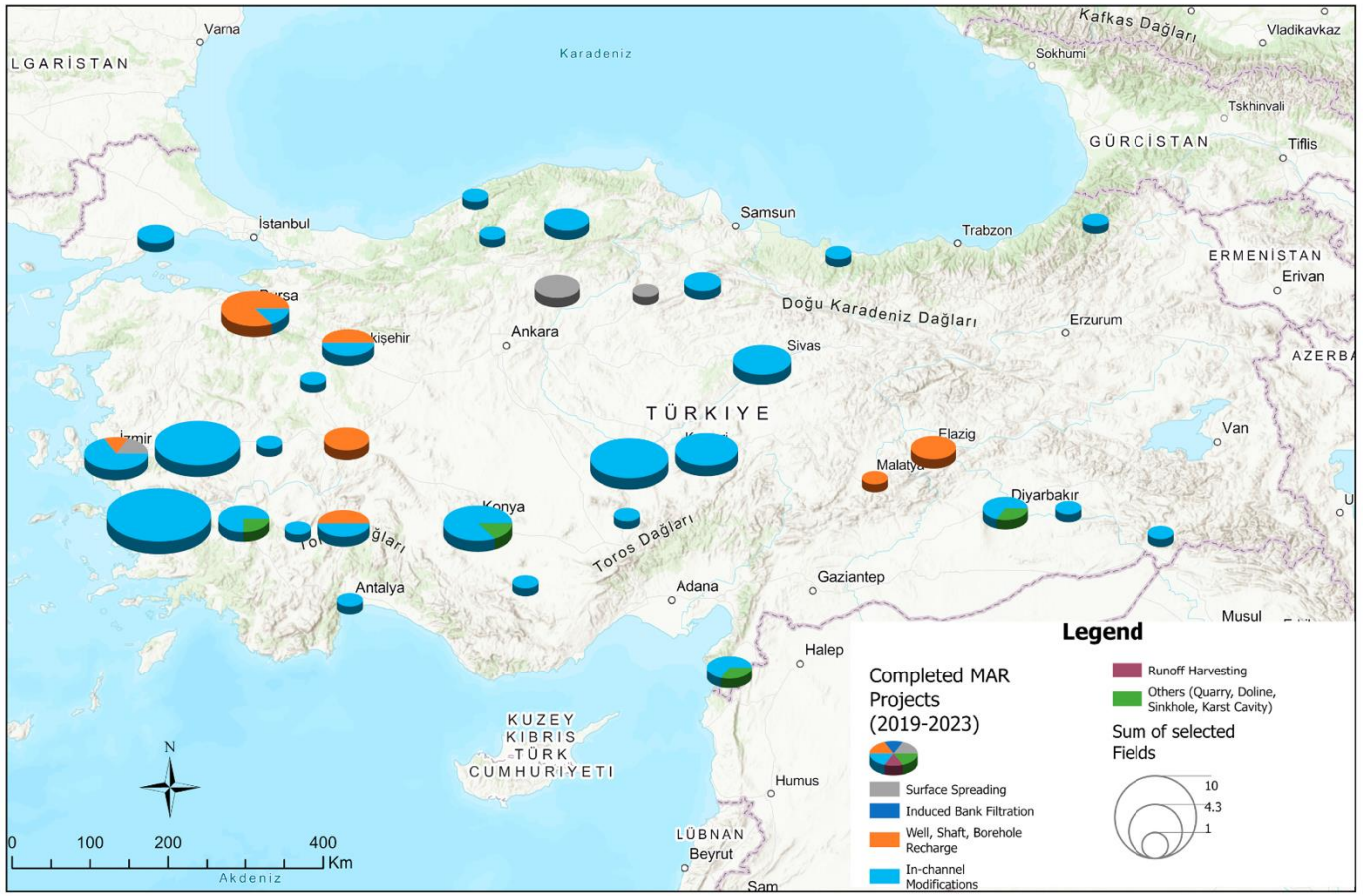
Derivations and follow-ups

2022 Journal of Groundwater Science and Engineering Vol.10 No.1: 57—69





Derivations and follow-ups



water

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Review

An Overview of Historical Development, Current Situation, and Future Prospects of Managed Aquifer Recharge in Türkiye

Mehmet Korkut [1,2,*], Niels Hartog [2,3] and Vural Yavuz [1,4]

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Abstract: Climate change, rapid population growth, and unsustainable water use in industry and agriculture have all significantly harmed the quantity and quality of groundwater resources. Managed aquifer recharge (MAR) offers a solution to these challenges, encompassing a variety of methods and strategies for protecting and improving groundwater systems. This article provides a complete overview of MAR in Türkiye, concentrating on its historical development, current situation, and future prospects. MAR has been increasingly used to combat water scarcity since the 1960s, particularly in arid and semi-arid regions in Türkiye with significant groundwater depletion. The majority of completed managed aquifer recharge (MAR) projects in Türkiye employ in-channel modifications, accounting for 77%. This is followed by well recharge techniques and surface spreading methods, with values of 16% and 4%, respectively. Future projects are expected to focus on the southeastern and central regions, with in-channel modifications increasing to 90%. In comparison, methods such as well recharge (6%), surface spreading (3%), and other methods are limited. Despite the growing application of MAR, Turkey requires strong regulatory frameworks to ensure the safe and successful implementation of these methods, including groundwater quality, source water regulations, and geological concerns regionally. MAR can promote sustainable water management by minimizing the effects of population growth and climate change on groundwater resources.

Keywords: artificial recharge; managed aquifer recharge; water management; Türkiye

TECHNISCHE UNIVERSITÄT DRESDEN

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Online, 11 February 2025

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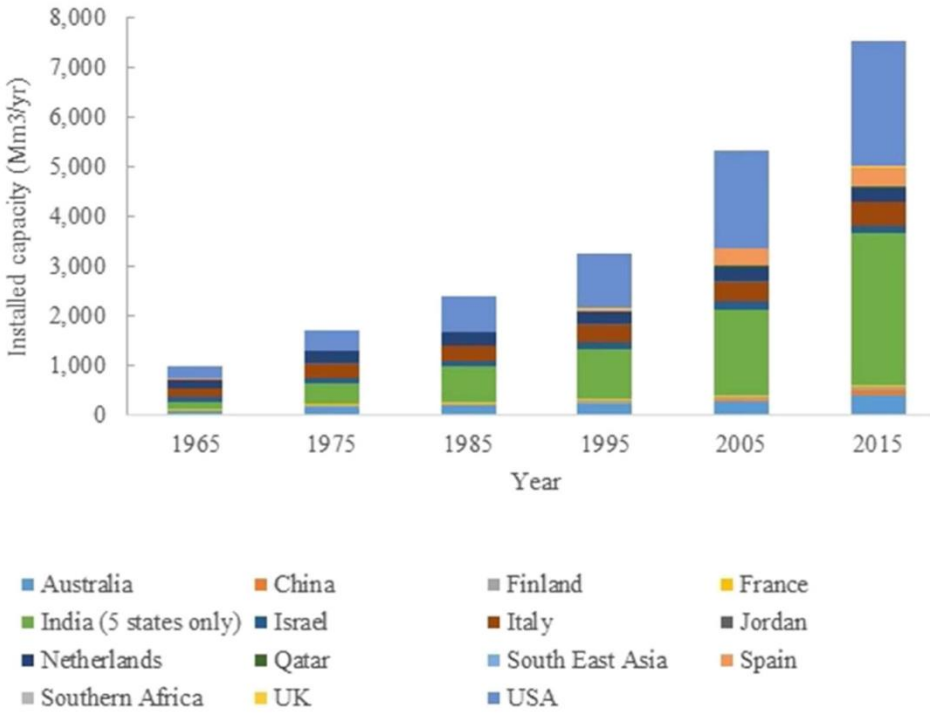
Revised: 18 January 2025
Accepted: 24 January 2025
Published: 5 February 2025

Derivations and follow-ups



Hydrogeology Journal (2019) 27:1–30
https://doi.org/10.1007/s10040-018-1841-z

502 citations (!!!)

PAPER

Sixty years of global progress in managed aquifer recharge

P. Dillon[1,2] · P. Stuyfzand[3,4] · T. Grischek[5] · M. Lluria[6] · R. D. G. Pyne[7] · R. C. Jain[8] · J. Bear[9] · J. Schwarz[10] · W. Wang[11] · E. Fernandez[12] · C. Stefan[13] · M. Pettenati[14] · J. van der Gun[15] · C. Sprenger[16] · G. Massmann[17] · B. R. Scanlon[18] · J. Xanke[19] · P. Jokela[20] · Y. Zheng[21] · R. Rossetto[22] · M. Shamrukh[23] · P. Pavelic[24] · E. Murray[25] · A. Ross[26] · J. P. Bonilla Valverde[27] · A. Palma Nava[28] · N. Ansems[29] · K. Posavec[30] · K. Ha[31] · R. Martin[32] · M. Sapiano[33]

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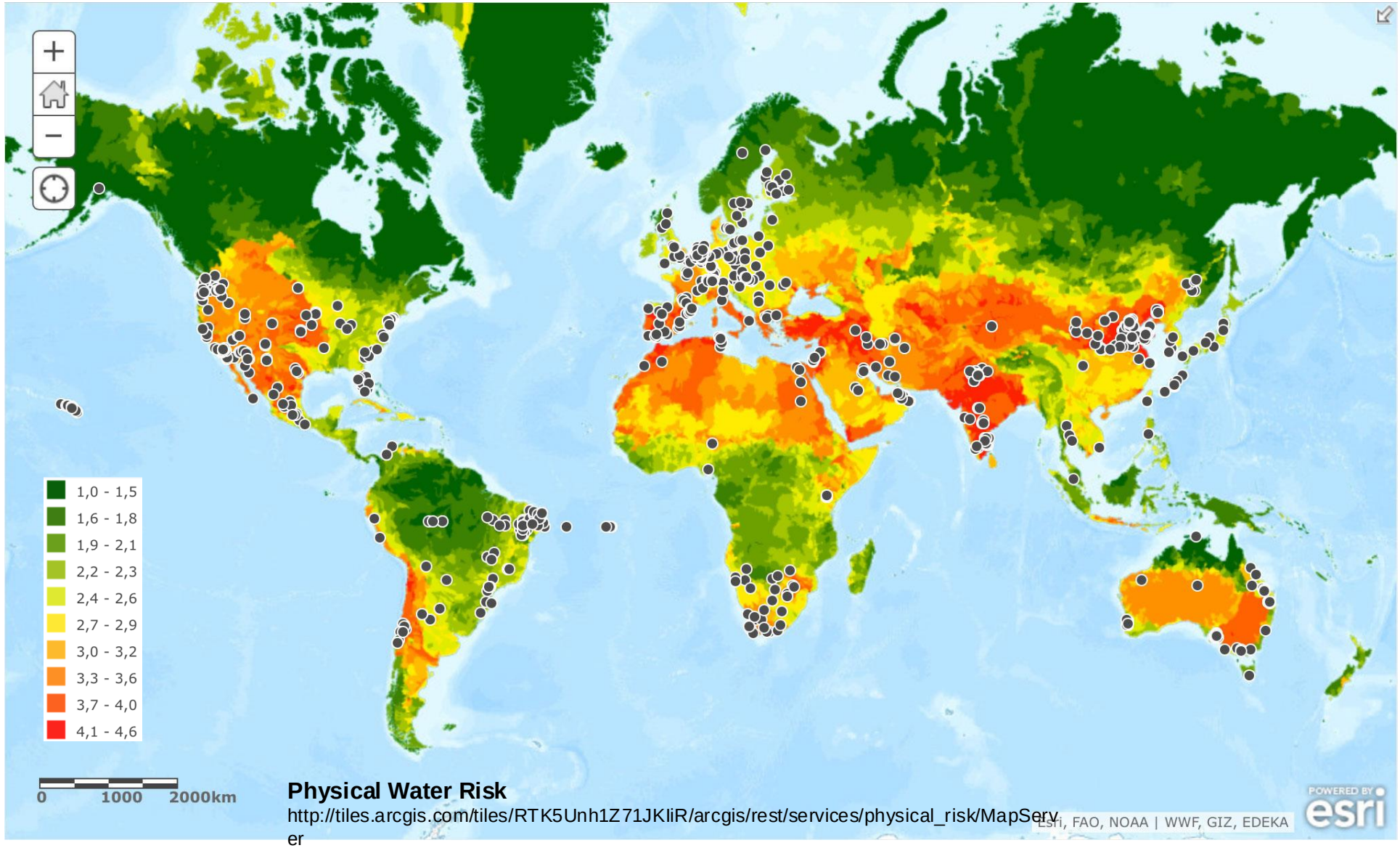
Abstract
The last 60 years has seen unprecedented groundwater extraction and overdraft as well as development of new technologies for water treatment that together drive the advance in intentional groundwater replenishment known as managed aquifer recharge (MAR). This paper is the first known attempt to quantify the volume of MAR at global scale, and to illustrate the advancement of all the major types of MAR and relate these to research and regulatory advancements. Faced with changing climate and rising intensity of climate extremes, MAR is an increasingly important water management strategy, alongside demand management, to maintain, enhance and secure stressed groundwater systems and to protect and improve water quality. During this time, scientific research—on hydraulic design of facilities, tracer studies, managing clogging, recovery efficiency and water quality changes in aquifers—has underpinned practical improvements in MAR and has had broader benefits in hydrogeology. Recharge wells have greatly accelerated recharge, particularly in urban areas and for mine water management. In recent years, research into governance, operating practices, reliability, economics, risk assessment and public acceptance of MAR has been undertaken. Since the 1960s, implementation of MAR has accelerated at a rate of 5%/year, but is not keeping pace with increasing groundwater extraction. Currently, MAR has reached an estimated 10 km^3/year, ~2.4% of groundwater extraction in countries reporting MAR (or ~1.0% of global groundwater extraction). MAR is likely to exceed 10% of global extraction, based on experience where MAR is more advanced, to sustain quantity, reliability and quality of water supplies.

Placing MAR in a context…



Physical Water Risk

http://tiles.arcgis.com/tiles/RTK5Unh1Z71JKIiR/arcgis/rest/services/physical_risk/MapServer

International Association of Hydrogeologists
the World-wide Groundwater Organisation

IAH Commission on
Managing Aquifer Recharge

Online MAR Seminars

#2. MAR in humanitarian context

Tuesday, 11 March 2025, 4:00 – 5:30 pm CET

Registration: https://recharge.iah.org/online-mar-seminars

Invited Speaker:

JAY MATTA

UNICEF

Jay Matta is a seasoned hydrogeological expert with over 25 years of experience across local government, consulting firms, private industry, and global organizations. His expertise spans roles as a Hydrogeological expert, **WASH** (Water, Sanitation, and Hygiene) Manager, and **IFRC** (International Federation of Red Cross and Red Crescent Societies) Coordinator, particularly in the Asia Pacific region.

More recently, Jay has held significant global positions with organizations such as the **Global WASH Cluster**, **UNHCR** (United Nations High Commissioner for Refugees), and currently **UNICEF**, where he serves as the Principal Hydrogeologist addressing the global **"Water Security for All"** initiative.

He also extends his expertise to UNICEF country offices, offering in-depth support for water scarcity, resource assessments, and technical guidance, alongside contributing to global webinars, reports, and technical initiatives.