

FINAL ISMAR12 CONGRESS PROGRAMME

28 April to 2 May 2025

The following programme is final. The organizer reserves the right to make adaptations onsite if deemed necessary.

Symposium Hotel: Protea Hotel Stellenbosch and Conference Centre

Address: Techno Ave, Techno Park, Stellenbosch

<https://maps.app.goo.gl/Rwo216k3Gz82Ae7dA>

The pre-symposium workshops and the symposium three day programme takes place at the hotel.

MONDAY 28 April 2025	
Venue 1	Workshop 1: Achieving Successful Groundwater Recharge and Recovery Through Wells - David Pyne
08:30 - 10:30	Workshop
10:30 - 11:00	COMFORT BREAK
11:00 - 13:00	Workshop
13:00 - 14:00	LUNCH
Venue 1	Workshop 2: Technical solutions for IWRM by means of MAR schemes - Enrique Fernández Escalante
14:00 - 16:00	Workshop
16:00 - 16:30	COMFORT BREAK
16:30 - 18:00	Workshop
Venue 2	Workshop 3: Hydrogeochemistry and Managed Aquifer Recharge (MAR) - Speciation Modelling of Mixing Waters - <i>Corné Engelbrecht</i>
08:30 - 10:30	Workshop
10:30 - 11:00	COMFORT BREAK
11:00 - 13:00	Workshop
13:00 - 14:00	LUNCH
Venue 2	Workshop 4: MAR Scheme Design Considerations for Bore Recharge (Science meets Engineering) - Russell Martin
14:00 - 16:00	Workshop
16:00 - 16:30	COMFORT BREAK
16:30 - 18:00	Workshop
18:00 - 19:30	Welcome Cocktail – Protea Hotel Stellenbosch

Lunch is included for all workshop participants taking place both in the morning and the afternoon.

TUESDAY 29 APRIL 2025	
Plenary	Opening Session
8:30 - 8:45	F Fourie, ISMAR12 Local Organising Committee: <i>Welcome and Introduction to ISMAR12</i>
8:45 - 9:25	Opening Address: IAH-SA (Kevin Pietersen), IAH-MAR (Commission - Co Chair) and IAH (Vice President: Sub-Saharan Africa - Seifu Kebede Gurmesssa)
09:30 - 10:00	Adam Hutchinson, Keynote speaker: <i>Managed Aquifer Recharge: Restoring Our Connection to Water and to Ourselves.</i>
10:00 - 10:30	Ricky Murray (103), Keynote speaker: <i>Kolomela Mine - ten years of borehole injection in a shallow unconfined aquifer for surplus mine water disposal.</i>
10:30 - 11:00	COMFORT BREAK
Parallel 1	MAR for water supply purposes - Domestic/Municipal, Agricultural and Mining Session chairs: Fanus Fourie & Amy Allwright
11:00 - 11:15	77. D. McGibbon, K. Riemann, K. Woolf, D. Allpass, and P. Marais: <i>Cape Flats Aquifer Management Scheme - Benefits of MAR for making the City of Cape Town a more resilient city (South Africa).</i>
11:15 - 11:30	132. D. Gonzalez, J. Guillaume, L. Peeters, P. Wyrwoll, J. Vanderzalm, and D. Page: <i>A Framework for Estimating Costs of Managed Aquifer Recharge for Different Scales and Conditions under Uncertainty.</i>
11:30 - 11:45	76. J. Prinsloo, K. Riemann, and D. Allpass: <i>Refurbishment of the Atlantis Water Resource Management Scheme - benefits of MAR in improving water supply resilience.</i>
11:45 - 12:00	64. S. Belser, and D Pyne: <i>Aquifer Storage and Recovery (ASR) Well Design in Salt-water Intruding Coastal Aquifers - a case study.</i>
12:00 - 12:15	20. B. De La Loma González, S. Espinosa, M. Minoves, and M. Ganzer: <i>Reclaimed Water for Managed Aquifer Recharge: A tool for water security in Barcelona.</i>
12:15 - 12:30	148. N. Vermaak, S.A. (Fanus) Fourie, E. Lukas, A. Lukas, and G. Tredoux : <i>The Impact of MAR and Recovery on the Langebaan Road Aquifer Unit, Western Cape, South Africa.</i>
12:30 - 12:45	14. J. De Beer: <i>MAR Development Using Infiltration Ponds in River Beds for Water Supply and Drought Relief to a Drought Prone Area.</i>
12:45 - 13:00	107. D. Mulder: <i>Managing Aquifer Sustainability through Resource Protection Zones: Application of fundamental hydrogeological principles for assessing the viability of Managed Aquifer Recharge (MAR) for a small town's water supply scheme</i>

13:00 - 14:00	LUNCH
Parallel 1	Panel Discussion: MAR in Africa SADC-GMI
14:00 - 16:00	Panel discussion
16:00 - 16:30	COMFORT BREAK
16:00 - 17:00	Poster Session in the exhibition venue
17:00 - 18:00	WATER TASTING
TUESDAY 29 APRIL 2025	
Parallel 2	MAR Methods and technologies Session Chairs: Kes Murray & Danita Hohne
11:00 - 11:15	1. N. Hartog , G. Schout, S. Beernink, and L. Brokx: <i>Overlooked: Non-uniform flow distribution across wellscreens for ASR of fresh water in saline aquifers.</i>
11:15 - 11:30	32. Q. Hull , M. Milczarek, and J. Keller: <i>Comparison of a Large Field Scale Dataset with Soil Texture Based Estimates of Managed Aquifer Recharge Suitability.</i>
11:30 - 11:45	119. E. Fernández Escalante : <i>Hydrogeological Studies to Determine a MAR Site Feasibility, Pragmatic Approach: Example for Santiuste Basin MAR site, Central Spain.</i>
11:45 - 12:00	11. N. Sharma , M.F. Alam, P. Pavelic, and A. Sikka: <i>Evaluating the Efficiency of Managed Aquifer Recharge Interventions in the Ganges Basin, India.</i>
12:00 - 12:15	25. P. A. M. Doulikom , M. Koïta, Y. Rossier, J.M. Vouillamoz, C.A. Biau, F. Lawson, M.B. Kafando, O.R. Yonaba, and L.A. Mounirou: <i>Design and Implementation of High-potential MAR System</i>
12:15 - 12:30	74. K. Woolf , D. MiGibbon, K. Riemann, and D. Allpass: <i>MAR in the Cape Flats Aquifer: A case study on injection methods and borehole design.</i>
12:30 - 12:45	114. S. Kreipl , A. van Doorn, H. Merton, M.M.A. Groen, M. Bakker, and B.M. van Breukelen: <i>Utilizing Horizontal Wells for Aquifer Storage and Recovery: lessons from a pilot study on Texel Island, the Netherlands.</i>
12:45 - 13:00	86. A. Hutchinson and co-author is M. Becker and P. O'Connell: <i>Mounded or Clogged? Using fiber optic distributed temperature sensing to diagnose and monitor basin behavior.</i>
13:00 - 14:00	LUNCH
Parallel 2	MAR Methods and technologies Session Chairs: Ricky Murray & Awodwa Magingi
14:00 - 14:15	70. T. Dorsch , M. Hussein, and M. Al Dajani: <i>Key aspects of the Management of One of the Largest ASR Systems in the World.</i>

14:15 - 14:30	137. M. van der Schyff , T. Kanyerere, and S. Clarke: <i>Field Pilot Study on Enhancing MAR: evaluating activated charcoal's effectiveness for water quality in Atlantis.</i>
14:30 - 14:45	118. E. Fernández Escalante , S. Fernández Cordero, and N. Crespo Arribas: <i>Checking 20 Infiltration Methods to Determine an Accuracy Ranking Using a Digital Twin, Santiuste Basin, Los Arenales Living Lab, Spain</i>
14:45 - 15:00	105. R. Glaude , N. Simon, and S. Brouyère: <i>Quantifying Infiltration Rates within a Managed Aquifer Recharge Pilot Site using Distributed Temperature Sensing Technology.</i>
15:00 - 15:15	2. N. Hartog , G. Schout, and T. Sweijen: <i>Aquifer Storage and Recovery: Design considerations from science to practice.</i>
15:15 - 15:30	78. S. Martos-Rosillo , N. N. Fernández, J. Jódar, and C. Marín-Lachado: <i>Ancestral Nature-based Solutions for Managed Aquifer Recharge in Spain.</i>
15:30 - 15:45	91. S. Sasidharan , R. Goncalves de Souza Gomes, S. Kumar, E.J. Bertrand, B.S. Bracamontes, and T.T.M.E. Silva: <i>Multibeneficial Managed Aquifer Recharge: Integrating advanced monitoring and novel source water for groundwater sustainability.</i>
15:45 - 16:00	104. R. Glaude , S. Brouyère, S. Lacorte, A. Jurado, and E. Pujades: <i>Batch Experimenta: a tool to evaluate the fate of organic contaminants in MAR prefeasibility studies.</i>
16:00 - 16:30	COMFORT BREAK
16:00 - 17:00	Poster Session in the exhibition venue
17:00 - 18:00	WATER TASTING

TUESDAY 29 APRIL 2025

Parallel 3	Workshop: Integrated strategies in design of new MAR schemes to minimise clogging - Declan Page
11:00 - 13:00	Workshop
13:00 - 14:00	LUNCH
Parallel 3	Workshop: Part 1: Overview of American Society of Engineers (ASCE) Standard Guidelines for Managed Aquifer Recharge Surface Spreading Facilities (ASCE/EWRI 69-19): Managed Aquifer Recharge Concepts and Planning - Adam Hutchinson and Mike Milczarek
14:00 - 16:00	Workshop
16:00 - 16:30	COMFORT BREAK
16:00 - 17:00	Poster Session in the exhibition venue
17:00 - 18:00	WATER TASTING

WEDNESDAY 30 April 2025	
Parallel 4	MAR in relation to environmental, sustainability and climate change adaptation Session Chairs: Kornelius Riemann & Daniela Benedicto van Dalen
08:30 - 08:45	164. N. Devau , G. Picot-Colbeaux, A. Manlay, V. Debois, P. Goderniaux, L. Jehanno, and B. Meire: <i>Is Managed Aquifer Recharge an Option to Tackle Dysfunction in Sewer Network Induced by Groundwater Flow Infiltration on the Urban Community of Lens-lévin (Northern France)?</i>
08:45 - 09:00	158. K. Murray: <i>A Case Study of MAR for Sustainable Mine Water Management in Southern Africa.</i>
09:00 - 09:15	120. E. Fernández Escalante , J.D. Henao Casas, C. Moreno de Guerra Per, M.D. Maza Vera, and C. Moreno Valverde: <i>Unmanaged Recharge of Aquifers from Transverse Structures in Spanish River Courses: a GIS-based comparison between intentional and unintended MAR figures.</i>
09:15 - 09:30	106. E. van Houtte , T. Rogier, J. van Eeghem, and J. Verbauwheide: <i>Water Recycling Combined to Managed Aquifer Recharge in the Dunes: long time experience at Kiksijde (Flanders, Belgium).</i>
09:30 - 09:45	66. A. González-Ramón , A. Fernández-Ayuso, M. Rodríguez-Rodríguez, H. Aguilera, T. Zakaluk, N. Naranjo, C. Marín-Lechado, J. Jódar, and S. Martos-Rosillo: <i>Preliminary Hydrological Assessment of "Pesqueras" in Gredos Mountain Range (Spain) as Ancestral Artificial Recharge Systems.</i>
09:45 - 10:00	100. J. Melady , and R. Dougherty: <i>Managed Aquifer Recharge for Thermal Loading Mitigation and Enhancement of Instream Habitat.</i>
10:00 - 10:15	18. L. R. Lazarus: <i>MAR: A Vital Component in Designing Livable Urban Waterways for Environmental Restoration in Cape Town.</i>
10:15 - 10:30	128. T. Mumberg , L. Ahrens, P. McCleaf, and P. Wanner: <i>A Swedish Case Study on Tracing Per- and Polyfluoroalkyl Substances (PFAS) through a MAR System.</i>
10:30 - 11:00	COMFORT BREAK
Parallel 4	MAR in relation to environmental, sustainability and climate change adaptation Session Chairs: Philani Msimango & Andrew Johnstone
11:00 - 11:15	30. M.B. Demlie , and H. Msweli: <i>Assessing the Potential of Managed Aquifer Recharge from Treated Wastewater in the Greater Durban Metropolitan Region, South Africa.</i>
11:15 - 11:30	101. V. Parry , R. Schneuwly, K. Carden, H. Thouin, C.G. Bryan, N. Baran, C. Soulier, and G. Alexis: <i>Potential Bioindicators of Aquifer Health: a preliminary investigation at a Cape Flats stormwater infiltration pond.</i>

11:30 - 11:45	6. T. Mathivha , N. Vermaak, A. Magingi, and P.J. Oberholster: <i>Potential Ecological Impacts of Managed Aquifer Recharge on Wetlands in the Langebaan Road Aquifer Unit.</i>
11:45 - 12:00	149. C. Cherubini , M. Sufyan, G. Martelli, and D. Goi: <i>MAR as an Effective Climate Change Adaptation Mechanism: a case study in Friuli Venezia Giulia Region, Italy.</i>
12:00 - 12:15	35. S.N. Singh , V.M. Patel, and Y. Atterwala: <i>Managed Aquifer Recharge through Precast Modular Systems with High-performance Recharge Wells Using Johnson Screens and Rain Quantification Systems in Gujarat's Varied Terrain - Case studies.</i>
12:15 - 12:30	157. T. Madlala : <i>Isotopic Investigation of Groundwater-Surface Water Interactions in Managed Aquifer Recharge Systems: a case study of the Lower Berg River Catchment, Western Cape Province, South Africa.</i>
12:30 - 12:45	111. B. Makhahlela , V. Parry, R. Schneuwly, S. Fernandes, P. Msimango, K. Carden, H. Thuin, J. Harris, and C.G. Bryan: <i>Microbial Biodiversity and Geochemistry of the Atlantis MAR Site: Initial developments towards a biosurveillance toolkit.</i>
12:45 - 13:00	129. N. Weisbrod , T. Turkeltaub, E. Bar-Zeev, and A. Furman: <i>Revisit the SAT: Can we improve its efficiency and operation?</i>
13:00 - 14:00	LUNCH
Parallel 4	MAR in relation to environmental, sustainability and climate change adaptation Session Chairs: John Okedi & Andrew Johnstone
14:00 - 14:15	113. A. Gutierrez , B. Mouglin, J. Nicolas, V. Bault, C. Lasher-Scheepers, P. Msimango, L. Fisher-Jeffes, and A. Ncube: <i>Near Real Time Groundwater Forecast for the MAR Projects of Cape Town, South Africa.</i>
14:15 - 14:30	43. C. Stefan , J. Glass, A. Conrad, R. Heim, A. Chkirbene, K. Khemiri, C.F. Panagiotou, T. E. Leitão, T.N. Martins, M.M. Oliveira, M. Horovitz, K. Alpes, S. Ghannem, R. Bergillos, and J. Andreu: <i>The MAR Agreements: A new governance approach for advancing the MAR implementation.</i>
14:30 - 14:45	16. L. Mhlanga , J. Prinsloo, K. Riemann, A. Roychoudhury, and R. Chow: <i>Assessing the Effectiveness of Permeable Reactive Barriers in Managed Aquifer Recharge Systems.</i>
14:45 - 15:00	51. M. Camporese , R. Chow, A. Furman, B. Gatto, C. Lauvernet, C. Massari, and A. Szymkiewicz: <i>Aiming at Sustainable Aquifer Recharge to Enhance Resilience of Groundwater Services under Increased Drought Risk.</i>
15:00 - 15:15	143. D. Page , J. Vanderzalm, K. Barry, D. Gonzalez, J. Awad, and C. Seidl: <i>Lessons from the Rise and Fall of Managed Aquifer Recharge (MAR) in Langhorne Creek Region to Manage Drought Resilience.</i>

15:15 - 15:30	139. T. van Dooren , K. Raat, N. Hartog, and G. Zwolsman: <i>Optimizing MAR in Coastal Dunes by Extracting Brackish Groundwater: a field pilot in the Netherlands.</i>
15:30 - 15:45	117. H. Ndakola , and J. Okedi: <i>Groundwater Quantity and Quality Assessment for Aquifer Recharge in Ohangwena Region, Namibia.</i>
15:45 - 16:00	54. M.F. Alam , M.E. McClain, A. Sikka, and S. Pande: <i>Planning Sustainable and Equitable Managed Aquifer Recharge Interventions: An agent-based socio-hydrology approach.</i>
16:00 - 16:30	COMFORT BREAK
	AGM
16:30 - 17:30	IAH MAR Commission Annual General Meeting
18:00 - 22:00	Gala Dinner at Root 44 Restaurant in Stellenbosch

WEDNESDAY 30 April 2025

Parallel 5	Quality and Clogging Issues: Predictions and Management in Basins and Bores Session Chairs: Reynold Chow & Yazeed van Wyk
08:30 - 08:45	156. V. Troelstra , A. Störiko, and B.M. van Breukelen: <i>Pathogen Transport and Fate During Riverbank Filtration.</i>
08:45 - 09:00	38. S. Mangwana , B. Vandala, and G. Mahed: <i>Groundwater Geochemistry of the Fractured Aquifer in Gqeberha: Implications for Managed Aquifer Recharge.</i>
09:00 - 09:15	95. C. Engelbrecht: <i>Injection Bore Clogging Prediction and Management: Case studies from Southern Africa and Australia.</i>
09:15 - 09:30	31. M. Milczarek: <i>Soil Aquifer Treatment, Pathogens and Organic Carbon Removal Revisited.</i>
09:30 - 09:45	39. U.E. Bollmann , C.N. Albers, T.M.M. Karlsson, J.H. Christensen, and A.R. Johnsen: <i>Stormwater Runoff in European Cities: Risk of urban groundwater pollution due to SUDS?</i>
09:45 - 10:00	153. A. Hutchinson , <i>Removal of Suspended Solids and Water Quality Improvements from Riverbed Filtration - Eight Years of Demonstration Testing in Orange County California.</i>
10:00 - 10:15	145. D. Page , J. Awad, J. Vanderzalm, G. Puzon, F. Mathes, M. Taylor, J.-W. Liu, G. Dojchinov, A. Warden, C. Turnadge, K. Barry, J. Wiley, R. Rojas, J. Wu, L. Ling, S. Currie, and J. Jaeger: <i>Cost Effective Clogging Management During Managed Aquifer Recharge.</i>
10:15 - 10:30	124. L. Augustin , and T. Baumann: <i>Monitoring Dynamics in River Water Quality and Quantity of the River Günz in Bavaria (GER).</i>
10:30 - 11:00	COMFORT BREAK

Parallel 5	Quality and Clogging Issues: Predictions and Management in Basins and Bores Session Chairs: Reynold Chow & Julian Conrad
11:00 - 11:15	26. D. Botha , J.C. Truter, E. Bester, and G.M. Wolfaardt: <i>Engineered Fungal Biofilms in a Novel Biosensor for the Real-time Monitoring of Estrogenic Endocrine Disrupting Chemicals.</i>
11:15 - 11:30	40. U.E. Bollmann , T.B. Bech, N. Vermaak, A. Magingi, S. Clarke, C.K. Hansen, and J. Aamand: <i>Fate of Pathogens and Organic Micropollutants in MAR: Enhancing removal efficiency by reactive layers.</i>
11:30 - 11:45	89. R. Nardacci , M. Widdowson, C. Bott, C. Wilson, D. Holloway, and J. Sparks: <i>Investigating MAR Well Clogging Potential for Highly Purified Wastewater in a Deep Coastal Plain Aquifer.</i>
11:45 - 12:00	131. A. Furman , N. Katsevman, and N. Weisbrod: <i>Addressing the Soil Aquifer Treatment Bottleneck.</i>
12:00 - 12:15	150. T. Pichler , S. Koopman, and H. Prommer: <i>Molybdenum Mobility during Managed Aquifer Recharge in Carbonate Aquifers.</i>
12:15 - 12:30	141. R. Martin : <i>Clogging Indicators: Werribee ASR case study.</i>
12:30 - 12:45	112. R. Schneuwly , K. Carden, and C.T. Tanyanyiwa: <i>Natural Attenuation of Stormwater Contaminants During Infiltration and Storage in a Shallow Primary Aquifer.</i>
12:45 - 13:00	60. M. Mokhehi , L. Towers, A. Roychoudhury, and R. Chow: <i>Assessing the Risks of Emerging Contaminants from Treated Effluent as Source Water in Atlantis.</i>
13:00 - 14:00	LUNCH
Parallel 5	MAR for water supply purposes - Domestic/Municipal, Agricultural and Mining Session Chairs: Kes Murray & Amy Allwright
14:00 - 14:15	22. D. Hohne , F. Fourie, P. Lourens, and S. Esterhuysen: <i>A MAR Framework in the South African Context for Fractured Rock Aquifer.</i>
14:15 - 14:30	42. M. Villagrán , L. Piepers, K.H. Jensen, T.O. Sonnenborg, and M. Huysmans: <i>Can a Local Solution Have a Regional Impact? Evaluating the influence of weirs in agricultural drainage ditches in Flanders, Belgium.</i>
14:30 - 14:45	4. A. Magingi , F. Fourie, N. Vermaak, P.J. Oberholster, and T. Mathivha: <i>Assessment of Wetlands as an Indicator for MAR site selection in Langebaan Road Aquifer.</i>
14:45 - 15:00	3. E.A.J. Derks , and R. Dijkema: <i>Assessing Managed Aquifer Recharge by Indigenous Communities in Mountainous Watersheds of Oaxaca, Mexico.</i>
15:00 - 15:15	23. A. Ross : <i>Water Banking to Increase Water Security and Resilience to Drought.</i>

15:15 - 15:30	127. T. Hanna: <i>Critical Aspects of Well Design for MAR.</i>
15:30 - 15:45	12. D. Benedicto van Dalen: <i>Infiltration Water Quality Concerns and Policy Development of ASR Systems: a comparison study of three case studies in the Netherlands.</i>
15:45 - 16:00	162. S. Brouyère, S. Durieux, R. Glaude, P. Orban, J.-M. Comprère, and J. Derouane: <i>Managed Aquifer Recharge in WALlonia: the MARWAL project.</i>
16:00 - 16:30	COMFORT BREAK
	AGM
16:30 - 17:30	IAH MAR Commission Annual General Meeting
18:00 - 22:00	Gala Dinner at Root 44 Restaurant in Stellenbosch
WEDNESDAY 30 April 2025	
Parallel 6	Workshop: Recent advancements in MAR feasibility mapping - Catalin Stefan
08:30 - 10:30	Workshop
10:30 - 11:00	COMFORT BREAK
Parallel 6	Workshop: Part 2: American Society of Engineers (ASCE) Standard Guidelines for Managed Aquifer Recharge Surface Spreading Facilities (ASCE/EWRI 69-19): Design, O&M, Data Collection and Site Characterization Methods - Adam Hutchinson and Mike Milczarek
11:00 - 13:00	Workshop
13:00 - 14:00	LUNCH
Parallel 6	Panel discussion : Aquifer management, the microbiome and biosurveillance - from science to operations BGRM
14:00 - 16:00	Panel discussion
	AGM
16:30 - 17:30	IAH MAR Commission Annual General Meeting
18:00 - 22:00	Gala Dinner at Root 44 Restaurant in Stellenbosch

THURSDAY 1 May 2025	
Parallel 7	MAR for water supply purposes - Domestic/Municipal, Agricultural and Mining Session Chairs: Julian Conrad & Nicolette Vermaak
08:30 - 08:45	161. A. Palma , and M.I. Victor Franco: <i>Managed Aquifer Recharge Plan for Mexico City.</i>
08:45 - 09:00	98. L. Speijer , M. Zawadzki, M. Maertens, W. Boënne, J. Dams, and M. Huysmans: <i>Sub-irrigation as Managed Aquifer Recharge Technique: The impact on groundwater levels and flow.</i>
09:00 - 09:15	125. T. Baumann , and L. Augustin: <i>Coupling Stormwater Protection and Water Suppl for Hop Gardens: first results from a pilot plant.</i>
09:15 - 09:30	53. S.R. Dennis , A. Johnstone, J. Tanner, R. Powell, and D. Diongue: <i>Managed Aquifer Recharge from Rooftop Rainfall Collection to Ensure Sustainable Off-the-grid Groundwater Supply.</i>
09:30 - 09:45	34. L. Piepers , M. Villigrán, J. van Orshoven, M. Huysmans, and J. Diels: <i>Assessing the Regional Impact of Weirs in Agricultural Drainage Ditches Using a Numerical Model: A case study in northeastern Belgium.</i>
09:45 - 10:00	140. S.A. (Fanus) Fourie , and D. Hohne: <i>The Design and Implementation of Aquifer Recharge Enhancement Schemes in South Africa</i>
10:00 - 10:15	142. J. Vanderzalm and co-author D. Page, S. Priestley, A. Deslandes, H. Groves, S. Kim, and C. Seidl: <i>Upper King River Managed Aquifer Recharge (MAR).</i>
10:15 - 10:30	88. M. Faneca Sanchez , J. King, G.O. Essink, and M. van der Vat: <i>Conceptual Design of a MAR System for a Brackish Aquifer in the Mekong Delta, Vietnam.</i>
10:30 - 11:00	COMFORT BREAK
Parallel 7	MAR for water supply purposes - Domestic/Municipal, Agricultural and Mining, etc. and Awareness, Education and training on MAR Session Chairs: Ricky Murray & Yazeed van Wyk
11:00 - 11:15	28. D.L. Carnow , and T.O.B. Kanyerere: <i>Using Digital Transformative Technologies to Detect, Screen and Remediate CEC's and POPS, Cape Flats Aquifer, South Africa.</i>
11:15 - 11:30	58. P. Jokela , J. Mäki-Torkko, and R. Rämä: <i>A 30-year-old Managed Aquifer Recharge Project for Drinking Water Production: Lessons learned.</i>
11:30 - 11:45	52. M. Schirmer , D. La Cecilia, and C. Moeck: <i>Large-scale and Long-term MAR Application of an Important Swiss Water Supply Company.</i>

11:45 - 12:00	84. J. Okedi , and K. Manoharan: <i>Building Resilience in Water Supply with Managed Aquifer Recharge with Recycled Wastewater - case of Paarl Town in South Africa.</i>
12:00 - 12:15	5. R. Martin , J. Frdelja, and D. Trigg: <i>Direct Harvesting of Roof Rainwater for MAR across New Urban Developments in Ballarat.</i>
12:15 - 13:00	LUNCH
Parallel 7	Awareness, Education and training on MAR Session Chairs: Kornelius Riemann & Philani Msimango
13:00 - 13:15	5. D. Benedicto van Dalen : <i>Oasis Flow: An assessment tool for municipal water footprint and Managed Aquifer Recharge across three European pilot sites - MARCLAIMED project.</i>
13:15 - 13:30	81. P.S. Juuti , T.S. Katko, J.J. Hukka, and P. Dillon: <i>Engaging with stakeholders proved vital for uptake of Managed Aquifer Recharge in Community Water Supplies.</i>
13:30 - 13:45	126. S. Hlahla , A. Abrams, L. Grootboom, and K. Carden: <i>Developing a Local Implementation Guideline for Managed Aquifer Recharge in Combination with Blue-green Infrastructure.</i>
13:45 - 14:00	62. E. Fernández Escalante , H. Barbosa, and E. López-Gunn: <i>Co-managed Aquifer Recharge (CO-MAR): Evolution of the concept due to Spanish and Peruvian stakeholders participation.</i>
14:00 - 14:15	V. Matta , D. Duncan, E. Shaylor, L. Verstraete, and C. Stefan: <i>MAR in humanitarian contexts</i>
Plenary	Closing ceremony Session Chair: Fanus Fourie
14:15 - 14:45	Closing keynote: 67. P. Dillon: <i>Testing the robustness of MAR policy settings for Water Supply Security under Climate Change.</i>
14:15 - 14:45	Thank you notes and handing over to ISMAR13
THURSDAY 1 May 2025	
Parallel 8	Suitability Mapping to Site Selection Session Chairs: Danita Hohne & Daniela Benedicto van Dalen
08:30 - 08:45	8. C. Stefan , T. N. Martins, A. Chkirbene, K. Khemiri, C. F. Panagiotou, S. Ghannem, R. Bergillos, and G.Y. Ebrahim: <i>Guiding Principles for Geospatial MAR Feasibility Mapping.</i>
08:45 - 09:00	97. A. Gutierrez , J. Perrin, A. Brugeron, Y. Caballero, A. Pécastaings, M. Boru, D. Deferso, N. Adela and A. Adugna: <i>Managed Aquifer Recharge Suitability Mapping in Eastern Ethiopia (Dire Dawa, Harar, Jijiga areas).</i>
09:00 - 09:15	68. B. Vandala , and G. Mahed: <i>Managed Aquifer Recharge Site Selection in the Nelson Mandela Bay Using Different Multi-criteria Decision Analysis Techniques.</i>

09:15 - 09:30	44. T.S. Bording , E.A. Auken, and P.K. Maurya: <i>Ground-based TEM for Efficient Pre-investigation of Managed Aquifer Recharge Sites.</i>
09:30 - 09:45	75. P. Geldenhuys , K. Riemann, J. Prinsloo, J. Weitz, E. Wise, and D. Allpass: <i>Proposed Expansion of the Atlantis Aquifer: An integrated approach combining geophysics and remote sensing investigations.</i>
09:45 - 10:00	133. D. Gonzalez , D. Page, and L. Peeters: <i>Managed Aquifer Recharge Opportunity Mapping in New South Wales.</i>
10:00 - 10:15	37. D. Archer , C.J. Truter, V. Rambau, P. Msimango, and G. Wolfaardt: <i>Exploring the Relationship between Effect-based Analysis, Emerging Pollutants, and Conventional Water Quality Parameters in a Threatened Coastal Aquifer.</i>
10:15 - 10:30	115. N. Igwebuike , T. Halihan, and T. Kanyerere: <i>Geophysical Applications in Managed Aquifer Recharge: insights from coastal and karst aquifer systems.</i>
10:30 - 11:00	COMFORT BREAK
Parallel 8	Regulatory Lessons: Safe and Reasonable Requirements for Testing to Operating Session Chairs: Nicolette Vermaak & Awodwa Magingi
11:00 - 11:15	121. E. Fernández Escalante , J.D. Henao Casas, and R. Calero Gil: <i>Water Quality from Spanish Managed Aquifer Recharge (MAR) Sites to Support National-scale Guidelines Avoiding Maximun Allowable Concentrations.</i>
11:15 - 11:30	63. M. Sapiano , E. Fernández Escalante, C. Schutz, and O. Gaerty: <i>Governance of Managed Aquifer Recharge: Insights from the European Union's regulatory framework.</i>
11:30 - 11:45	21. D. Hohne , F. Fourie, P. Lourens, and S. Esterhuyse: <i>Legislative Issues in South Africa for the Implementation of MAR Schemes.</i>
11:45 - 12:00	163. G. Pico-Colbeaux , N. Devau, M. Pettenati, and J.-C. Maréchal: <i>MAR's Strategy Back in France Following the Latest Consecutive Droughts.</i>
12:00 - 12:15	57. F. Fourie , and S. Singh : <i>The Artificial Recharge Strategy of South Africa: The ongoing cycle of research, knowledge generation and implementation.</i>
12:15 - 13:00	LUNCH
Parallel 8	The Economics of MAR Session Chairs: John Okedi & Kes Murray
13:00 - 13:15	24. A. Ross : <i>Benefits and Costs of Water Banking: An integrated water governance solution</i>
13:15 - 13:30	134. C. Seidl , D. Page, and S. Wheeler: <i>Managed Aquifer Recharge in Australian Water Legislation, Regulation and Policy: and anticommons problem?</i>

13:30 - 13:45	92. Da. Mance , B.H. Černeha, and Di. Mance: <i>Economic Institutional Mechanism Design of Managed Aquifer Recharge: Insights from the BLUE RECHARGE Project.</i>
13:45 - 14:00	M. Arinaitwe , and J. Okedi: <i>IOT-based Data and Analytic Hierarchy Process to Map Groundwater Recharge with Stormwater.</i>
14:00 - 14:15	M.F. Alam , P. Pavalic, J. Lautze, and A. Sikka: <i>Managed Aquifer Recharge to Co-manage Floods and Droughts: Transferring lessons from Asia to Africa.</i>
Plenary	Closing ceremony Session Chair: Fanus Fourie
14:15 - 14:45	Closing keynote: 67. P. Dillon: <i>Testing the robustness of MAR policy settings for Water Supply Security under Climate Change.</i>
14:45 - 15:15	Thank you notes and handing over to ISMAR13
THURSDAY 1 May 2025	
Parallel 9	Session commences at 11:00
08:30 - 10:30	
10:30 - 11:00	COMFORT BREAK
Venue 3	Workshop Part 1: Analysis of implemented MAR scheme failure: selected global case studies - Constantin Seidl
11:00 - 12:15	Workshop
12:15 - 13:00	LUNCH
Venue 3	Workshop Part 2: Analysis of implemented MAR scheme failure: selected global case studies - Constantin Seidl
13:00 - 14:15	Workshop
Plenary	Closing ceremony Session Chair: Fanus Fourie
14:15 - 14:45	Closing keynote: 67. P. Dillon: <i>Testing the robustness of MAR policy settings for Water Supply Security under Climate Change.</i>
14:45 - 15:15	Thank you notes and handing over to ISMAR13

FRIDAY 2 May 2025

Field Excursions departing from the hotel. All delegates booked on the field excursions will receive the full itinerary of the excursion they selected.

Pre-booking for the excursions, when registering to attend the symposium, is essential.

Depart 08:00	Field Excursion 1 The Atlantis Water Resource Management Scheme Field Excursion Sponsored by EDRS
Depart 08:00	Field Excursion 2 The Cape Flats Aquifer Management Scheme
Depart 08:00	Field Excursion 3 The Elandsfontein Phosphate Mine and Langebaan Road Aquifer MAR schemes Field Excursion Sponsored by GEOSS

ISMAR12 SYMPOSIUM PRELIMINARY POSTER PROGRAMME
28 April to 2 May 2025

POSTER PRESENTATIONS	
Slot	Poster information
1	96. J. Myburgh , P. Ravenscroft, and T. Bell: <i>Implementaton of Managed Aquifer Recharge for Sustainable Municipal Water Supply, Prince Albert, South Africa</i>
2	7. C.F. Panagiotou , J. Glass, and C. Stefan: <i>Assessing the Impact of Managed Aquifer Recharge in Akrotiri Coastal Aquifer (Cyprus) via Groundwater Modelling</i>
3	72. T. Funiselo , and T. Kanyerere: <i>Investigating Groundwater Hydrodynamics of Managed Aquifer Recharge System for Improved Sustainable Groundwater Supply, Limpopo, South Africa</i>
4	50. A. Nicholls , <i>Interpretation of groundwater modelling scenarios for Managed Aquifer Recharge, Langebaan Road, South Africa</i>
5	90. K. Nkokou , L. Baloyi, and G. van Dyk: <i>Managed Aquifer Recharge (MAR) for Rural Water Supply: Groundwater mapping for Carnavon</i>
6	36. J. Clearwater, V. Cypaite, and K. Daines : <i>Volsung: What Can Groundwater Modelers in MAR Applications Learn from the Geothermal Energy Industry</i>
7	82. T. Mabula , and K. Masindi: <i>Evaluating the Hydrogeological Environment of Johannesburg and Surrounding Areas for Managed Aquifer Recharge</i>
8	47. Q. Nasson , and T. Kanyerere: <i>Characterizing Palaeochannel Aquifer Systems to Support Groundwater Development for Improved Augmentation of Water Supply Systems, Western Cape, South Africa</i>
9	122. H.E. Mapindani , and T. Kanyerere: <i>Assessment of Aquifer Performance in Remediating Groundwater Contaminants, Polokwane Managed Aquifer Recharge Scheme, South Africa</i>
10	79. N. Ndema , S. Clarke, and T. Hlatywayo: <i>Evaluating the Possible Microplastic Contamination in a Managed Aquifer Recharge System</i>
11	61. M. Sapiano , C. Schütz, E. Fernández Escalante: <i>MARSOLUT-policy-brief: Essentials on Managed Aquifer Recharge for policy makers and water managers</i>
12	85. H. Barbosa , H. Casas, K. Schwartz, and M. Gilek: <i>Managed Aquifer Recharge Skewed Towards Technical and Physical Models: What does it mean in practice?</i>
13	73. J. Jódar , T. Zakaluk, A. González, and C. Marin: <i>Medieval System of Managed Aquifer Recharge in Sloping Aquifers of Sierra Nevada (Spain)</i>
14	94. Di. Mance , B.H. Černah, and Da. Mance: <i>Examples of Managed Aquifer Recharge Practices on the Croatian Coast</i>
15	27. K. Masindi , T.M. Mabula, Z. Khuzwayo, and L.K. Motaung: <i>Assessment of Potential Managed Aquifer Recharge Sites in Johannesburg, South Africa: A GIS and remote sensing approach.</i>