

# Ground Water Protection Council ASR/MAR Workgroup Overview

2020 GWPC Virtual Annual Forum  
September 29, 2020

# ASR/MAR Workgroup Update

- The Aquifer Storage and Recovery (ASR) and Managed Aquifer Recharge (MAR) Workgroup was established by the GWPC Board of Directors on September 15, 2019, with a charge to:
  - Examine, discuss, and make recommendations to the GWPC Board of Directors regarding ASR and MAR issues or topics.
  - Serve as a forum for Federal, State, Tribal, and local government, organizations and public interest, and professional organizations to exchange information, views, and ideas, and to communicate and collaborate on efforts concerning ASR and MAR issues or topics
- ASR/MAR Workgroup Charter was established on February 3, 2020
  - Included statement of purpose, scope, applicability, function, membership; meetings, and procedures (available online)
- ASR/MAR Workgroup Co-chairs started meeting on February 12, 2020
  - Planned and held the first workgroup meeting on February 18, 2020 in San Antonio, TX

# ASR/MAR Workgroup Update

- Co-chairs representing state government, federal government, and practitioner
  - Lorrie Council, Texas Commission on Environmental Quality
  - Karen Feret, U.S. Environmental Protection Agency (EPA)
  - Chi Ho Sham, Eastern Research Group, Inc.
- Leadership team:
  - Doug Beak, U.S. EPA, Office of Research & Development
  - Daniel Wren, U.S. Department of Agriculture
  - Andrea Croskrey, Texas Water Development Board
  - Tim Parker, Parker Groundwater
  - Frederick Bloetscher, Florida Atlantic University
- GWPC Staff
  - Mary Musick
  - Steve Musick

# ASR/MAR Workgroup Update

Co-chairs, leadership team and GWPC staff established the ASR/MAR Workgroup Workplan

- Workplan is a living document
- Overall, the Workplan names Focus Topics for work:
  - Site selection decisions and feasibility analysis
  - Predicting impacts on the aquifer
  - Challenges with ASR wells and the point of compliance
  - How to reduce geochemical interactions with the formation and native groundwater
  - Compiling and providing information on ASR/MAR (e.g., case studies)

# ASR/MAR Workgroup Update, cont.

- Activities for Knowledge Transfer of Focus Topics
  - Technical sessions at meetings
  - Develop training workshops for regulators, researchers, and practitioners
  - Quarterly Webinars
    - 1<sup>st</sup> virtual webinar on ASR in Florida August 6, 2020
    - 2<sup>nd</sup> virtual webinar on MAR under planning
- Develop Reference Library and Glossary of Terms
  - Include references for focus topics on GWPC ASR/MAR Workgroup website
  - Provide links to non-GWPC documents on relevant ASR/MAR issues via hyperlinks and repositories
  - Host slides and notes on presentations of ASR/MAR issues at GWPC meetings
  - Develop a glossary of commonly used terms and definitions in conjunction with other organizations (e.g., NGWA, AWWA)

# ASR/MAR Workgroup Update, cont.

- State Regulation of ASR/MAR – Future Project
  - EPA Inventory of State UIC regulations on aquifer recharge via wells (ongoing)
  - Compilation of State regulations/BMPs on non-UIC MAR requirements
  - Water quality criteria (in situ and transformation)
  - Other efforts associated with the use of additional sources for recharge (e.g., stormwater, produced water) and in the context of the Water Reuse Action Plan
- Financing and Financial Assurance – Future Project
  - Viability of projects and ROIs
  - Financial assurance to cover well closure costs



# ASR - MAR WORKGROUP



Water reuse represents a major opportunity to supplement existing water supplies. Many potential water sources such as industrial process water, agricultural return flows, municipal wastewater, oil and gas produced water, and stormwater can be captured and used for enhanced aquifer recharge.

Established in September 2019, the Aquifer Storage and Recovery - Managed Aquifer Recharge (ASR-MAR) Workgroup was formed to examine, discuss, and make recommendations to the GWPC Board of Directors regarding Aquifer Storage and Recovery (ASR) and Managed Aquifer Recharge (MAR) issues or topics.

The Workgroup serves as a forum for Federal, State, Tribal, and local government, organizations and public interest, and professional organizations to exchange information, views, and ideas, and to communicate and collaborate on efforts concerning ASR and MAR issues or topics. Its efforts are not limited in scope to just UIC issues. The issues that may be examined are broad and may include enhanced or managed aquifer recharge practices that are not regulated by the SDWA UIC program.

[Read the Workgroup Charter](#)

## National Water Reuse Action Plan

The GWPC ASR-MAR Workgroup has been identified in the U.S. EPA National Water Reuse Action Plan (Action 2.7.4) as a leader to increase understanding of current aquifer storage and recovery practices. The action item recognizes that there are differences in how aquifer recharge is described, implemented and managed. The action seeks to better understand the range of aquifer storage and recovery practices and corresponding efforts to ensure the protection and sustainability of groundwater resources. The GWPC Workgroup will facilitate meetings to study and find solutions to the

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# ASR/MAR Workgroup Update

Visit the GWPC ASR/MAR Workgroup Webpage: <http://www.gwpc.org/about-us/divisions/work-groups/asr-mar-workgroup>

- Workgroup Charter
- National Water Reuse Action Plan
- Webinar Recordings
- Workgroup leadership information

# ASR/MAR Workgroup Update

Thank you for your  
attention and participation!



Comments and  
Questions?