



**NATIONAL DRINKING WATER ADVISORY
COUNCIL**

**BRIEFING ON MDBP WORKING GROUP
OCTOBER 11, 2023**

**CO-CHAIR OVERVIEW OF EMERGENT
RECOMMENDATIONS**

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Briefing Backdrop

1. The Working Group recommendations remain under active discussion.
2. Revisions, some potentially substantial, are anticipated across several of the recommendations.
3. Current Working Group member support varies depending on the recommendation – consensus building ongoing.
4. Working Group Meeting 12, October 31, is target for landing final recommendations.
5. November 2 contingency meeting held on Working Group member calendars.
6. Per Working Group procedures:
 1. Where consensus not reached, non-attributed, alternative perspectives will be captured directly in the report.
 2. Each Working Group member invited to provide up to three pages of attributed comments for inclusion as an attachment to the final report.

Recommendations Overview



MDBP Working Group Report Cross-Cutting Themes

- WG recommendations positioned as supporting a focus for EPA rules revision evaluation.
- Emphasis on delivering equitable outcomes across all communities irrespective of community and PWS capacity and vulnerabilities – need to address affordability and real support for Environmental Justice and overburdened communities to ensure that no community or household gets left behind.
- There is an understanding that new requirements can place pressure on the affordability of drinking water services (especially small, rural, and EJ communities), and the recommendations seek to reflect a strong emphasis – consistent with the commitment to delivering equitable outcomes – on enhanced support.
- Recommendations reflect a problem-based emphasis and seek to establish positive incentives for identifying and addressing problems proactively.
- Recommendations are assembled to work together to advance equitable public health improvement, even as individual recommendations, in and of themselves, can act to advance public health and improved PWS performance.
- Recommendations span from source water to tap and invoke SDWA changes, other federal authorities (e.g., TSCA, CWA, CAA), and a mix of regulatory and non-regulatory interventions.

WG Recommendations and NDWAC Charge Topics

WG Emergent Recommendations

- R1: Disinfectant Residual
- R2: Premise Plumbing
- R3: DBP MCL Data and Analysis Gaps
- R4: Precursor Control
- R5: Finished Water Storage Tanks
- R6: Chloramination Practice
- R7: Consecutive Systems
- R8: Contaminant Source Control
- R9: Environmental Justice
- R10: PWS TMF Capacity
- R11: Primacy Agency Capacity
- R12: Overall MDBP Data and Analysis Gaps

NDWAC Consensus Recommendation Topics

- Disinfectant residuals and opportunistic pathogens
- Regulated and unregulated DBPs
- Finished water storage facilities
- Distribution system water quality management
- Source water approach, including DBP precursor removal
- Mischaracterized ground water under the direct influence of surface water (GWUDI) systems
- Sanitary Surveys
- Water Safety Plans
- Consecutive and small systems

WG Recommendations and NDWAC Charge Areas

WG Emergent Recommendations

- R1: Disinfectant Residual
- R2: Premise Plumbing
- R3: DBP MCL Data and Analysis Gaps
- R4: Precursor Control
- R5: Finished Water Storage Tanks
- R6: Chloramination Practice
- R7: Consecutive Systems
- R8: Contaminant Source Control
- R9: Environmental Justice
- R10: PWS TMF Capacity
- R11: Primacy Agency Capacity
- R12: Overall MDBP Data and Analysis Gaps

NDWAC Charge Areas

- Advancing public health protection while balancing the risks of microbial control with managing disinfection byproduct formation.
- Addressing public health concerns caused by opportunistic pathogens (e.g., Legionella), disinfection byproducts (e.g., unregulated haloacetic acids), and possibly other emerging contaminants.
- Addressing implementation challenges to reduce the burden of existing MDBP regulations while maintaining or enhancing public health protection.
- Ensuring efficient simultaneous compliance with other drinking water regulations when implementing any proposed revisions to the MDBP rules.
- Additional potential non-regulatory approaches that may improve public health protection from the contaminants under consideration.
- Opportunities to advance environmental justice in regulatory revisions to equitably protect consumers' health, particularly disadvantaged and historically underserved consumers.

Recommendation 1: Disinfectant Residual

Address the potential for no or low disinfectant residual in surface water PWS distributions systems (DS)

1. Important to acknowledge the potential to exacerbate DBP challenges.
2. Link to clear requirement for EPA to provide assistance to overcome DBP challenges.
3. Three-part approach:
 1. Adopt a national numeric minimum disinfectant residual requirement.
 2. Establish and require adoption of a disinfectant residual sampling and monitoring approach that will provide an enhanced understanding of areas within the distribution system that have low or no disinfectant residual.
 3. Establish a revised disinfectant residual compliance basis that reduces the potential for areas of distribution systems to experience low or no disinfectant residual on a repeat basis.

Recommendation 2: Premise Plumbing

EPA should advance a national building water quality improvement initiative based on an enhanced partnership among federal agencies and state SDWA oversight agencies.

1. Leverage existing ASDWA, CDC, EPA partnership to establish program framework that incentivizes improved premise plumbing safety WRT opportunistic pathogens.
2. Conduct analysis to: understand current incentives landscape; establish framework to identify high-risk buildings; identify further incentives for WMP uptake; and characterize current building, energy, and plumbing codes influences (e.g., unintended consequences of energy conservation).
3. Expand initial partnership to building owner stakeholders consistent with Item 2 analysis.
4. Build out risk-based building water management promotional program.
5. Develop/implement *Legionella* public awareness campaign for smaller-scale building owner/occupiers.

Recommendation 3: DBP MCL Data and Analysis Gaps

Address data and analysis gaps associated with DBPs of emerging concern.

1. Generate nationally representative occurrence, health effects, and treatment data on regulated and unregulated DBP groups – includes development of EPA-approved analytical methods for DBPs of emerging concern.
2. Key areas for EPA data gathering and analysis:
 1. HAA exposure
 2. Chloramination DBP mixtures
 3. HAN – occurrence, health risks, control strategies
 4. Iodinated DBPs – occurrence, health risks, control strategies

Recommendation 4: Multi-Benefit Precursor Control

Establish a PWS source water evaluation screening requirement and, under defined conditions, provide additional mandatory treatment to reduce DBP formation and disinfectant demand.

1. Develop enhanced precursor control rooted in a problem-based, treatment technique requirement.
2. Examine during regulatory development analysis a three-part framework:
 1. Source water screening – identify vulnerable precursor conditions
 2. Potential for targeted new monitoring
 3. Targeted application of treatment technique for enhance precursor control
3. Offramp based on current operations/conditions, and treatment technique flexible response options

Recommendation 5: Finished Water Storage Tanks

Address finished water storage tank vulnerabilities by establishing a national inspection and cleaning as needed requirement; supported by a review and update as needed of current storage tank O&M guidance.

1. Institute a national finished water storage tank inspection and cleaning as needed requirement to fill the current gap left by limited state-level regulatory efforts for storage tanks.
2. Review of current finished water storage tank guidance to identify gaps and update guidance accordingly, as well as provide for additional guidance in support of implementing a national inspection and cleaning as needed requirement.

Recommendation 6: Chloramination

Improve chloramination practices to promote control of microbial contamination and DBP formation potential and improve overall consistency of water quality.

1. Regulatory and non-regulatory approaches actively under discussion.
2. Areas of interest include:
 1. Chlorine conversion periods
 2. Effective practices for managing key operational parameters (e.g., chlorine/ammonia ratio)
 3. Role of Nitrification Control Plans

Recommendation 7: Consecutive Systems

Improve water quality and regulatory compliance rates for consecutive systems.

1. Regulatory and non-regulatory approaches actively under discussion.
2. Areas of interest include:
 1. Improved partnership between wholesalers and consecutive systems
 2. Problem-based trigger for coordinated action between partners

Recommendation 8: Source Control

Leverage non-SDWA authorities to:

1. Prevent the introduction of potential drinking water contaminants into the water cycle (e.g., TSCA)
2. Restrict discharge into all source waters those constituents that contribute to the formation of DBPs or growth potential for opportunistic pathogens and introduction of frank pathogens (e.g., CAA, CWA)

Recommendation 9: Environmental Justice

Conduct analyses to characterize the current gap in MDBP rule implementation faced by public water systems serving communities with environmental justice concerns. Provide strategies for ensuring this gap is filled and to work toward more equitable implementation of the MDBP rules across demographic groups. Ensure that new requirements can be implemented consistently, with sufficient additional resources provided to equitably receive the benefits anticipated to result from the rule revisions.

1. Seeks to ensure equitable access across all communities to the intended outcomes of any MDBP rule revisions.
2. Three Action Areas:
 1. EPA analysis account for existing and potential disparate impacts to communities with EJ concerns.
 2. Structure MDBP rule revisions to enable and incentivize problem solving and proactive improvement – emphasis placed on providing needed resources and addressing affordability in combination with Recommendation 10.
 3. Improve community access to timely information.

Recommendation 10: PWS TMF Capacity

Provide and align additional TMF capacity for small, rural, and underserved communities consistent with new demands placed on PWS by MDBP rules revisions.

1. Recognized that some PWS, particularly small, rural, and underserved (including low income of all sizes) systems, currently operate in a capacity constrained context - changes made to MDBP rule requirements may impose additional pressure on maintaining compliance and meeting desired financial sustainability and system resiliency objectives.
2. Enhanced problem identification and problem-solving resources for water systems serving EJ communities as well as for any water system with persistent non-compliance with SDWA regulations and requirements.
3. New MDBP rule requirements must come with additional resources targeted specifically to support the PWS implementation demands associated with MDBP rule revisions and address anticipated affordability challenges.
4. The current costs associated with addressing water quality and supply reliability issues, as well as the recognition of how poor water quality and unreliable supply contribute to the ongoing and cumulative disadvantages experienced in EJ communities calls for a substantially increased commitment of resources to these efforts.
5. Four Action Areas:
 1. Prepare Action Plan (based on unmet needs analysis) to target additional technical and financial assistance to small, rural, and underserved communities, as well as water systems with persistent non-compliance.
 2. Evaluate and improve operator certification with an emphasis on distribution system management.
 3. Address affordability - make permanent the Low-Income Household Water Assistance, or similar, Program (LIHWAP).
 4. Establish strong incentives for PWS to require training for their Board members.

Recommendation 11: Primacy Agency Capacity

Address SDWA Primacy Agency capacity needs associated with the new demands anticipated from MDBP rule revisions.

1. Recognizes that SDWA Primacy Agency programs currently operate in a capacity constrained context and that changes made to MDBP rule requirements may impose additional pressure on Primacy Agency ability to support effectively the new implementation demands.
2. To the extent existing Primacy Agency capacity constraints contribute to an inequitable gap in the delivery of safe drinking water across communities, this gap may only increase under the demands of further requirements, unless means are undertaken to lessen this gap.
3. Two Action Areas:
 1. Identify and direct ample capacity resources for Primacy Agencies to implement new MDBP rule requirements: training; funding; guidance; peer support; public notice; PWS TMF capacity.
 2. Adjust Sanitary Survey implementation to reflect MDBP rule revisions.

Recommendation 12: Data and Analysis Gaps

Undertake efforts to address key MDBP-related data and analysis gaps.

1. Source Water Data and Analysis Gaps
2. Treatment Data and Analysis Gaps
3. Distribution System Data and Analysis Gaps
4. Premise Plumbing Data and Analysis Gaps
5. Enabling Environment Data and Analysis Gaps



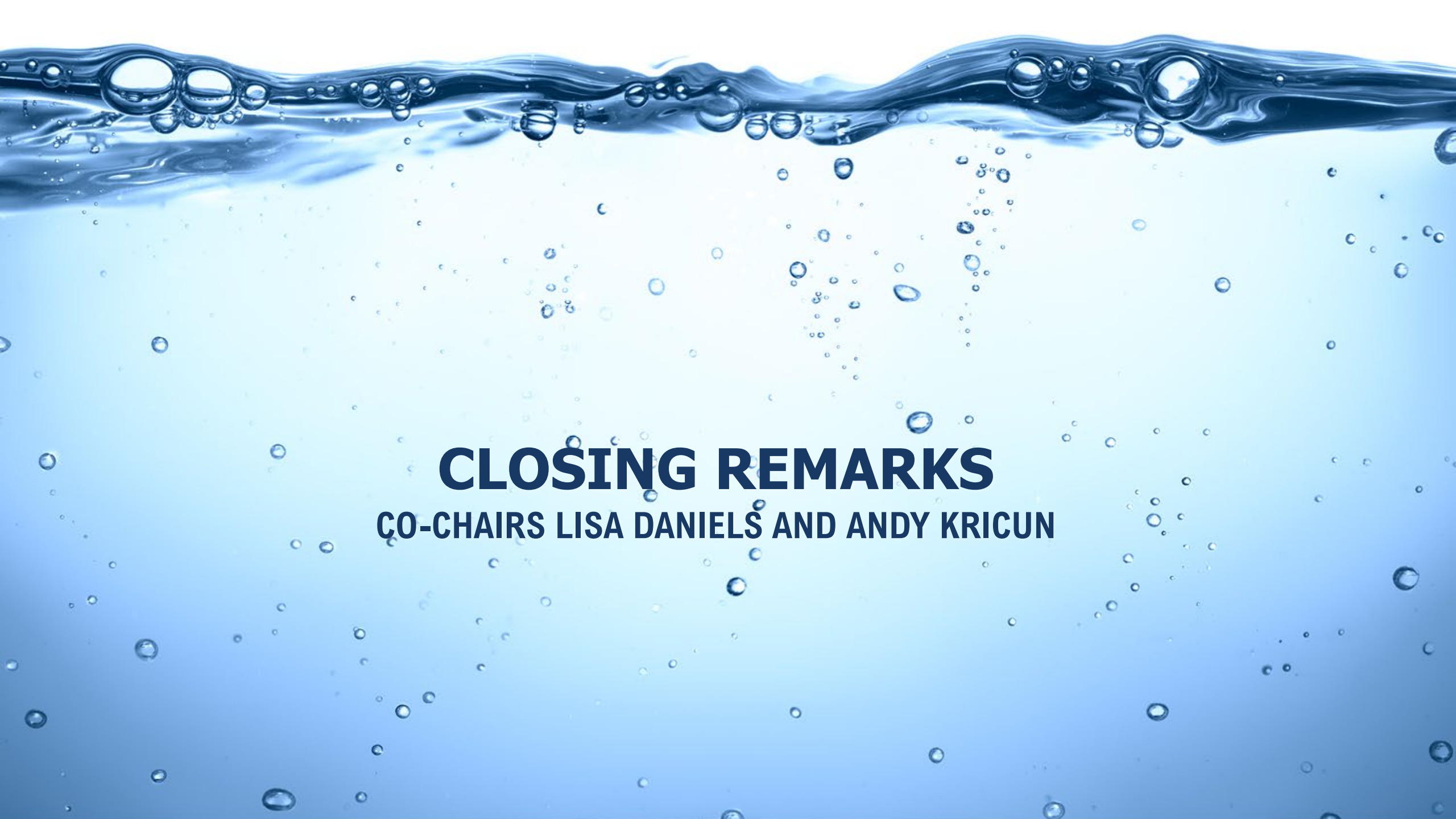
NEXT STEPS

Working Group Path Forward

- October 16 - Report mark up to WG members
 - Will include degree of support template
 - GWUDI determination path forward
 - Recommendation 12 – emphasis for identified data and analysis gaps
 - Member follow-up on Alternative Perspectives
- October 24 - Comments and support template returned from ALL MEMBERS
- October 31 – Meeting 12 - Final report vetting
- November 2 - Meeting 13 – contingency
- November 6 – Attributed comments due
- November 7 - WG report circulated for final review (if needed)
- November 10 – WG report submitted to NDWAC

MDBP NDWAC Working Group Membership

- Elin Betanzo - Founder of Safe Water Engineering LLC.
- Scott Borman - General Manager, Benton/Washington Regional Public Water Authority
- John Choate - General Manager, Tri County Regional Water Distribution District
- Dr. Kay Coffey - Public Water Supply Engineering Manager and Group Project Adviser, Oklahoma Department of Environmental Quality Water Quality Division
- Dr. Jeffrey Griffiths - Professor of Public Health and Community Medicine, Tufts University School of Medicine
- Michael Hotaling -Facilities Manager (Retired), Newport News Waterworks Department
- Jolyn Leslie - Regional Engineer, Washington State Department of Health
- Rosemary Menard - Water Director, City of Santa Cruz
- Bill Moody - Director of the Bureau of Public Water Supply, Mississippi State Department of Health
- Erik Olson - Senior Strategic Director, Health & Food, Natural Resources Defense Council
- Dr. Benjamin Pauli - Assistant Professor of Social Science, Department of Liberal Studies, Kettering University
- Nancy A. Quirk - General Manager, Green Bay Water Utility
- Lisa Ragain - Principal Water Resources Planner, Metropolitan Washington Council of Governments
- Alex Rodriguez - President & CEO, Diversity Consulting Group
- Lynn Thorp - National Campaigns Director, Clean Water Action/Clean Water Fund
- Gary Williams - Executive Director, Florida Rural Water Association



CLOSING REMARKS
CO-CHAIRS LISA DANIELS AND ANDY KRICUN



MEETING CLOSURE

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