

Microbial and Disinfection Byproducts Rule Revisions Working Group

Meeting 11: October 5, 2023, 11:00am-6:00pm ET



OFFICE OF GROUND WATER
AND DRINKING WATER



WELCOME

Rob Greenwood, Ross Strategic

Elizabeth Corr, DFO, U.S.EPA OGWDW

Yu-Ting Guilaran, Deputy Office Director, U.S. EPA OGWDW

Segment 1: Agenda Review & Meeting Procedures





OPENING REMARKS

Lisa Daniels & Andy Kricun, WG Co-Chairs

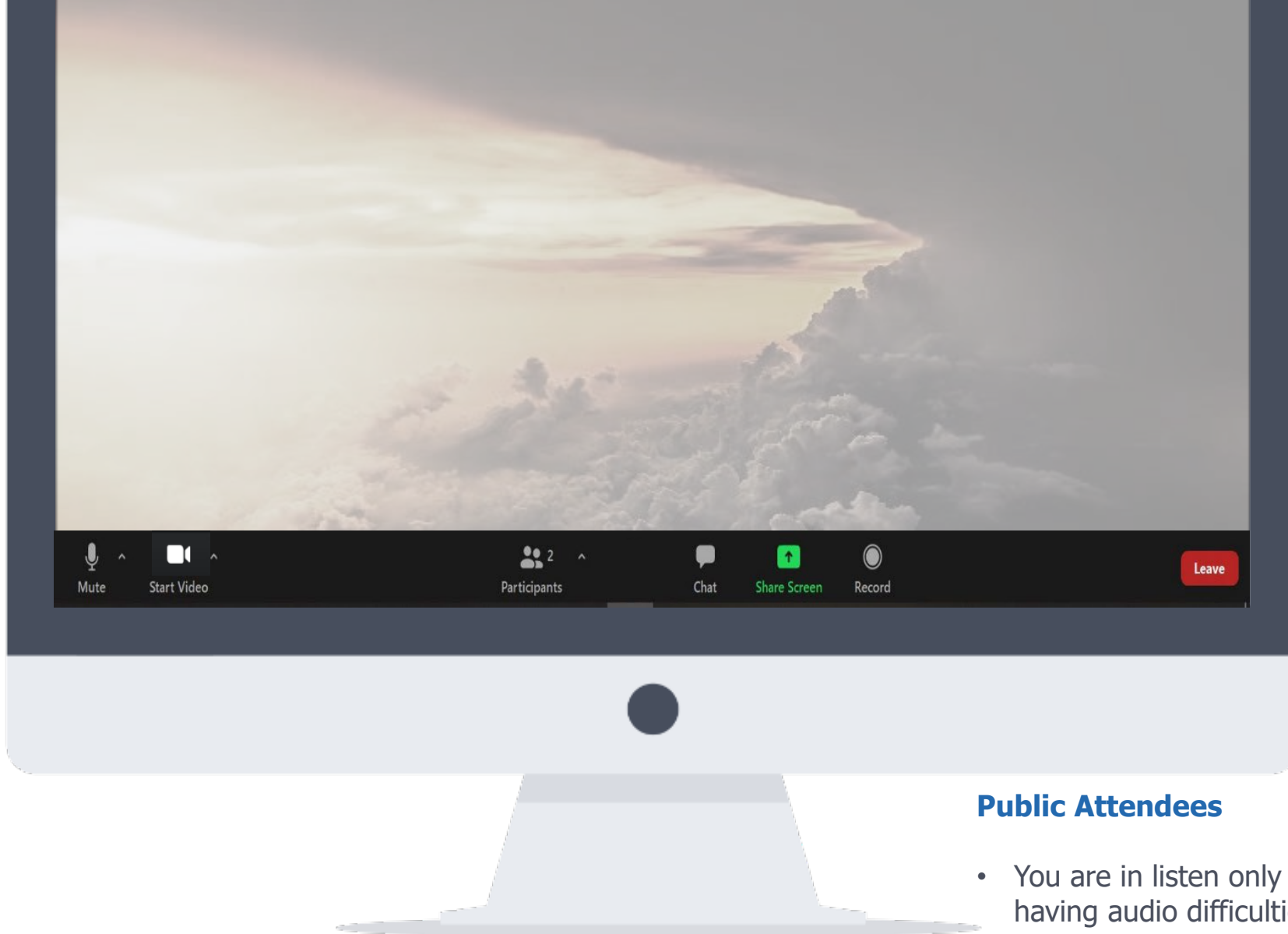
Today's Virtual Meeting: Zoom Controls

This meeting is **not** being recorded



The Zoom menu bar appears at the bottom of the Zoom window once the meeting begins.

If you don't see the menu bar, move your mouse slightly and the bar will appear.



Public Attendees

- You are in listen only mode and will not be able to unmute. If you are having audio difficulties send an email to taner.durusu@cadmusgroup.com
- Any comments you may have can be sent to MDBPRevisions@epa.gov or to Public Docket: www.regulations.gov / Docket ID Number: EPA-HQ-OW-2020-0486

EPA AND FACILITATION TEAM



Eric Burneson
EPA OGWDW, Standards
and Risk Management
Division Director



**Crystal Rodgers-
Jenkins**
EPA OGWDW,
Deputy Director,
Standards and Risk
Management Division



Ryan Albert
EPA OGWDW, Chief
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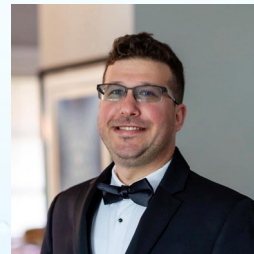
Rob Greenwood
Ross Strategic



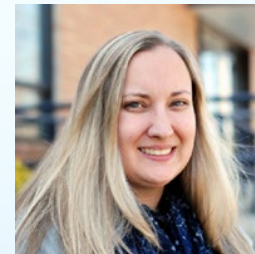
Sarah Faust
Ross Strategic



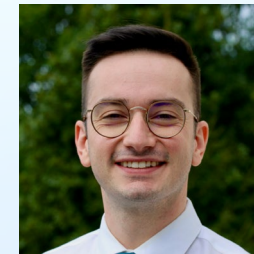
Dana Stefan
Ross Strategic



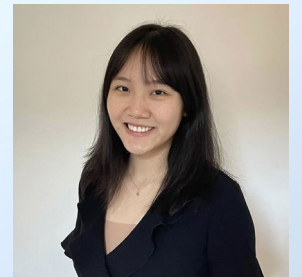
Leeland Gotlieb
Cadmus



Erin Mateo
Cadmus



Taner Durusu
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Rebecca Xiong
Cadmus

Today's Agenda

- | | |
|--------------------|---|
| 11:00-12:30 | • Segment 1: Agenda Review and Meeting Procedures |
| | • Segment 2: Review Draft Recommendations |
| | 15 Minute Break (12:30-12:45 pm ET) |
| 12:45-1:45 | • Segment 3: Vet Recommendations 9 (Environmental Justice) |
| | 60 Minute Lunch Break (1:45-2:45 pm ET) |
| 2:45-4:30 | • Segment 3: cont.: Vet Recommendation 9, cont. TBD. |
| | • Segment 4: Vet Recommendations 3 (Data and Analysis Gaps with DPBs of emerging concern) and 4 (Multi-Benefit Precursor Control) |
| | 15 Minute Break (4:30-4:45 pm ET) |
| 4:45-6:00 | • Segment 4: cont.: Vet Recommendations 3 and 4 |
| | • Segment 5: Recommendations Path Forward |
| | • Segment 6: Closing |

Segment 2: Review Draft Recommendations

Facilitated Discussion



Initial Draft Report: Overview

- Prepared and used formatted report template.
- Rolled in recommendations text - R4 and R9 updated text; all other recommendations as provided in advance of M10.
- Included Background text – drawn primarily from existing, public sources.
- Included Level of Support and Alternative Perspectives Sections (to be completed).
- Continued updating and refining sources.
- Retrospective Look:
 - Meeting 8 (April 19) – initial intervention ideas – breakout groups
 - Meeting 9 (June 27 – 29) – translate intervention ideas into emergent recommendations – common understandings, problem characterization, interventions and implementations actions documents – initial straw polling
 - Meeting 10 (September 14) – initial draft recommendations with request for comments in advance of meeting
 - Meeting 11 (October 5) – continued vetting of recommendations (advance check in with all WG members)

General Report Observations

- Process Overview: inadequate characterization of the results of problem characterization - differing work group member agreement/disagreement about the adequacy/completeness of problem characterization is not reflected in the report (e.g., limited ability to differentiate between contribution of recreational, PWS, and premise water quality to cases of water borne disease).
- Technical Analysts: section does not provide accurate description of participation – TAs were not organized to provide cogent input to the Working Group – references to TAs as a rationale for a recommendation should be removed.
- Concern that formatted report visually conveys text is more thoroughly vetted than is currently the case.

Recommendations: Full Support Opportunity - Observations

- **Recommendation 2: Premise Plumbing**
 - **Opportunity for Full Support**
 - Make a requirement for federally controlled buildings
 - Clarity that the recommendation applies strictly to the building side of the water quality partnership
 - All of government approach
- **Recommendation 5: Storage Tanks**
 - **Opportunity for Full Support**
 - Background Section: Salmonella outbreak text is problematic – not a fair/complete representation of the event.
 - Reference to sanitarians may lack experience is left unaddressed in this and Recommendation 11.
- **Recommendation 8: Source Control**
 - **Opportunity for Full Support**
 - Make clear there is not tie to MDBP rule revisions – this is other statutes.
 - Proactively looking for problem conditions and addressing with requirements.
- **Recommendation 11: Oversight Capacity**
 - **Opportunity for Full Support**

Recommendation 10: TMF Capacity - Observations

- **Opportunity for Full Support**
- 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.
 - The economic capacity of the community is almost always a key factor underlying water quality or supply reliability challenges.
 - Systems lacking the financial resources to reinvest in water system facilities will often choose to defer taking action to address identified and understood issues because they can't identify a way to fund the work.
 - This approach is certainly understandable in the context in which it is made, but will also, inevitably, lead to dealing with the consequences of the problem on an ongoing basis over time.
 - When those consequences lead to or contribute to negative health consequences for consumers, however, lack of action is not only unacceptable it is unethical.
- 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.
- Recommend assessing how many systems in each EPA regions have TMF needs that are currently unmet and to address the issue of the miss-match between program resources (and the potential miss-match of how program funds are prioritized for spending) and priority needs with an action plan on which states and EPA agree to fund the program at necessary levels over the term needed to substantially address the needs.

Recommendation 1: Disinfectant Residual - Observations

- **Opportunity for Significant Support**
- Acknowledge the potential to exacerbate DBP challenges.
- Emphasize that sampling and monitoring approach should support understanding storage tank discharge water quality.
- Link to clear requirement for EPA to provide assistance to overcome DBP challenges.
- Fix “scientifically based” – suggests current approach is not such – also be clear what this means.
- Fix “hydraulic map” – hydraulic model.
- “Regularly planned investigative sampling” clarify what this means.

Recommendation 6: Chloramination - Observations

- **Mixed Support Pending Further Discussion**
- In-depth review of impact on chloramination uptake and what the affordable alternatives will be.
- Requirements are necessary for overburdened systems to obtain access to federal funding.
- Additional requirements:
 - Provide a minimum free chlorine contact time (or CT) prior to the addition of ammonia, such that the formation of the highly toxic DBP nitrosamine, e.g., NDMA, is lowered
 - Maintain a 4.5:1 to 5:1 chlorine to ammonia dose ratio
 - Ammonia in plant effluent <0.1 mg/L
 - Maintain consistent pH around 8.0 in the distribution system
 - Distribution system chloramine minimum set based on nitrification risk point
 - Monitor nitrite and nitrate in the distribution to identify whether nitrification is happening per MDBP sampling plan (recommendation 1 part 2 option 1-3).
 - Use proactive nitrification sampling and management requirements to prevent the need for chlorine burn
 - If they must chlorine burn, must sample DBPs and lead during burn.
 - If only burns longer than X period, then monitoring if multiple burns.
- Coupled with adequate funding, provision of enhanced and appropriate TMF capacity, and a water affordability program included in recommendations 9-11, all systems would have access to TMF to install and safely maintain appropriate treatment to reduce MDBP health risks and would not need to limit the use of appropriate technology based on water affordability.

Recommendation 7: Consecutive Systems - Observations

- **Mixed Support Pending Further Discussion**
- Strong interest in 1) strengthening the partnership and, 2) improving consecutive system leverage – but how?
- Don't get EPA into the contract business – Part 2 Guidance.
- Is this a regulatory approach or elements to be negotiated between parties – what is the regulatory how? Part 1
- Will need money and assistance to fix problems.
- Increase wholesale responsibility.

15 Minute Break

12:30-12:45 pm ET

Segment 3: Vet Recommendations 9 (Environmental Justice)

Facilitated Discussion



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60 Minute Lunch Break

1:45-2:45 pm ET

Segment 3: cont.: Vet Recommendation 9, cont.

Facilitated Discussion



Segment 4: Vet Recommendations 3 (Data and Analysis Gaps with DBPs of emerging concern) and 4 (Multi-Benefit Precursor Control)

Facilitated Discussion



Recommendation 3: MCL Data and Analysis Gaps - Observations

- **Recommendation 3: MCL Data and Analysis Gaps**
 - **Opportunity for Full Support Pending R4 Outcome**
 - Part 2, Item 2 – implication that chloramination is better for DBPs.
 - Add “stopgap” trigger for further action if analysis indicates need.
 - More emphasis on health effects data.
 - Add in generating a better understanding of source water TOC, alkalinity, and bromide along with use of chlorination and chloramination - needed to better understand national-level baselines and inform risk management strategies.

Recommendation 4: Precursor Control

- Updated R4 based on M10 polling: problem based, treatment technique requirement.
- Streamlined Background section.
- Merged Surface Water Evaluation Requirements and Provide Additional Treatment into three Elements to provide a progressive, problem-based, step up from initial screening to treatment technique requirement.
- Most text pulled from September 14 meeting text – just rearranged to create a framework.
- Positioned as a recommended approach for EPA to evaluate during rules revision.
- Explicitly calls out the HRRCA requirement.
- Three Elements:
 - Element 1: Vulnerability Screening – variety of options for conducting screening, as well as an off ramp depending on operating conditions.
 - Element 2: New Monitoring – establishes a baseline for either precursors of concern or DBPs of concern that, at defined levels would trigger treatment technique requirements under Element 3.
 - Element 3: Treatment Technique – Item 2 is impractical! Flexibility in treatment response.
- Observations:
 - It is premature to add wastewater influence as part of a vulnerability assessment process – add to Recommendation 3 for further data and analysis.
 - Seeking alternative source water is, in most cases, unrealistic.

15 Minute Break

4:30-4:45 pm ET

Segment 4: cont.: Vet Recommendations 3 and 4

Facilitated Discussion



Segment 5: Recommendations Path Forward

Facilitated Discussion



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Our Path Forward

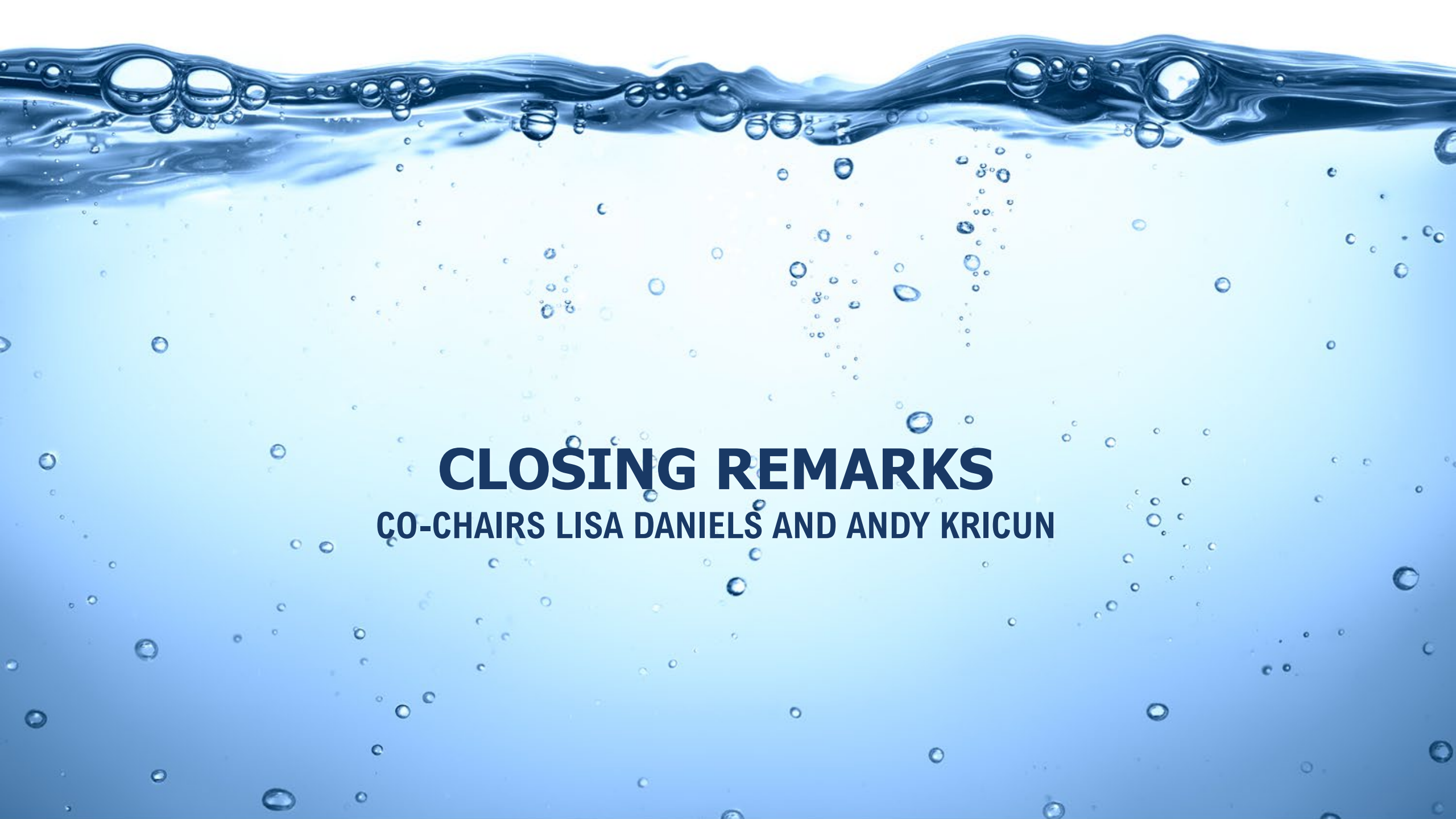
- Recommendations Cross-Cutting Themes – Food for Thought
 - WG recommendations positioned as supporting a focus for EPA rules revision evaluation.
 - Emphasis on delivering equitable outcomes across all communities irrespective of community and PWS capacity and vulnerabilities – need affordability and real support for EJ and overburdened communities.
 - Recommendations reflect a problem-based emphasis and seek to establish positive incentives for identifying and addressing problems proactively.
 - Recommendations are assembled as a package – they 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.

Our Path Forward

- October 11 - NDWAC briefing
 - Introductions – very quick go around
 - Co-Chairs will present
 - WG members that are also full NDWAC members invited to supplement Co-Chair briefing
 - All other WG members welcome to engage, but we will need to be mindful of time limitations
 - Focus is on preparing NDWAC members to receive and deliberate effectively on the WG report – answer questions, provide background
- 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

Segment 6: Closing





CLOSING REMARKS
CO-CHAIRS LISA DANIELS AND ANDY KRICUN

The background of the slide is a close-up photograph of water. A horizontal line of ripples and bubbles runs across the top third of the image. Below this line, the water is clear and blue, filled with numerous small, spherical bubbles of varying sizes that appear to be rising or falling. The lighting is bright, creating highlights on the water's surface and within the bubbles.

MEETING CLOSURE

ELIZABETH CORR, U.S.EPA, DFO