

NUTRIENT WORK GROUP MEETING SUMMARY

OCTOBER 27, 2021

9:00 a.m.

Hybrid Meeting: Zoom and DEQ Room 111

ATTENDANCE: NUTRIENT WORK GROUP MEMBERS

Representative & Affiliation	Representing
Susie Turner City of Kalispell	Point Source Discharger: Large Municipal Systems (>1 MGD)
Shannon Holmes City of Livingston	Point Source Discharger: Middle-Sized Mechanical Systems (<1 MGD)
Alan Olson Montana Petroleum Association	Point Source Discharger: Non-POTW
Kelly Lynch Montana League of Cities and Towns	Municipalities
Pete Schade Lewis and Clark County Water Quality Protection District	County Water Quality Districts or Planning Departments
Tammy Johnson Montana Mining Association	Mining
Jay Bodner Montana Stockgrowers Association	Livestock-Oriented Agriculture
Kristin Gardner Gallatin River Task Force	Conservation Organization: Local
Sarah Zuzulock Zuzulock Environmental Services	Conservation Organization: Regional
Guy Alsentzer Upper Missouri Waterkeeper	Environmental Advocacy Organization
Guy Alsentzer (sub. for Wade Fellin) Upper Missouri Waterkeeper	Water or Fishing-Based Recreation
Andy Efta U.S. Forest Service, Northern Region	Federal Land Management Agencies
Tina Laidlaw U.S. Environmental Protection Agency	Federal Regulatory Agencies
Jeff Schmalenberg MT Dept. of Natural Resources and Conservation	State Land Management Agencies
Samantha Tappenbeck Flathead Conservation District	Soil and Water Conservation Districts – West of the Continental Divide
Dan Rostad Yellowstone Conservation District Council	Soil and Water Conservation Districts – East of the Continental Divide
Julia Altemus Montana Wood Products Association	Timber Industry

Representative & Affiliation	Representing
Scott Buecker AE2S	Wastewater Engineering Firms

NOT IN ATTENDANCE: NUTRIENT WORK GROUP MEMBERS

Representative & Affiliation	Representing
Rika Lashley Morrison-Maeirle	Point Source Discharger: Small Municipal Systems with Lagoons
John Youngberg Montana Farm Bureau	Farming-Oriented Agriculture
David Brooks Montana Trout Unlimited	Conservation Organization: Statewide

ATTENDANCE: OTHER PARTICIPANTS

Aaron Losing, City of Kalispell
 Abbie Ebert, DEQ, Monitoring & Assessment Section
 Abigail St. Lawrence, Montana Building Industry Association
 Amanda McInnis
 Amelia Flanery, DEQ, Surface Water Discharge Permitting
 Amy Steinmetz, DEQ, Water Quality Division Administrator
 Brian Balmer, U.S. Fish and Wildlife Service
 Brian Heaston, City of Bozeman
 Chris Dorrington, DEQ, Director
 Christina Staten, DEQ, Watershed Management Section
 Christine Weaver, DEQ, Surface Water Discharge Permitting
 Christy Meredith, DEQ, Watershed Management Section
 Coralynn Revis, HDR
 Cori Hach, Legislative Services Division
 David Clark, HDR
 Ed Coleman, City of Helena
 Elena Evans, Missoula Valley Water Quality District
 Eric Regensburger, DEQ, Water Quality Standards and Modeling Section
 Eric Trum, DEQ, Watershed Protection Section Acting Supervisor
 Erik Makus, EPA Region 8
 George Mathieus, DEQ, Deputy Director
 Griffin Nielsen, City of Bozeman
 Haley Sir, DEQ, Surface Water Discharge Permitting
 Hannah New, DEQ, Surface Water Discharge Permitting
 Heather Henry, DEQ, Surface Water Discharge Permitting
 Jane Madison, DEQ, Water Quality Standards and Modeling Section
 Jason Mohr, Legislative Environmental Policy Office
 Jeff Dunn, WGM Group
 Joanna McLaughlin, DEQ, Surface Water Discharge Permitting
 Joe Lierow, ExxonMobil Billings Refinery
 John Bernard
 Jon Kenning, DEQ, Water Protection Bureau Chief

Katie Makarowski, DEQ, QA Officer
Kayla Glossner, DEQ, Surface Water Discharge Permitting
Kristi Kline, Montana Rural Water Systems
Kurt Moser, DEQ, Legal Counsel
Logan McInnis, City of Missoula
Loren Franklin, KC Harvey Environmental
Louis Engels, City of Billings
Mark Ockey, DEQ, Watershed Protection Section
Mary Fabsiak, Colorado stakeholder
Matt Wolfe, Sibanye Stillwater
Michael Suplee, DEQ, Water Quality Standards and Modeling Section
Mike Koopal, Whitefish Lake Institute
Mikindra Morin, Northern Plains Resource Council
Melinda Horne, DEQ, Surface Water Discharge Permitting
Michael Kasch, HDR
Moirav Davin, DEQ, Public Information Officer
Nick Danielson, DEQ, Media Specialist
Paul Skubinna, City of Great Falls
Peggy Trenk, Treasure State Resources Association
Rainie DeVaney, DEQ, Surface Water Discharge Permitting Section Supervisor
Rebecca Harbage, DEQ, Public Policy
Rickey Schultz, HDR
Ryan Koehnlein, DEQ, Water Quality Monitoring and Assessment Section
Ryan Leland, City of Helena
Ryan Sudbury, City of Missoula
Shane LaCasse, CHS Inc.
Ted Barber, Meeting facilitator
Tim Burton, Montana League of Cities and Towns
Tom Kuglin, Helena Independent Record
Trevor Selch, MT Fish, Wildlife & Parks
Vicki Watson, University of Montana Watershed Clinic
Vicki Marquis, Holland & Hart

MEETING INITIATION

Ted Barber, meeting facilitator, welcomed everyone to the meeting just after 9:00 a.m. and went over the meeting agenda. Ted then took a roll call of Nutrient Work Group members present either via Zoom or in Room 111 of the DEQ Metcalf Building in Helena.

George Mathieus, DEQ's Deputy Director, then gave opening remarks. George thanked everyone for their hard work and recognized their time is valuable. He stated that DEQ has consistently heard from Nutrient Work Group members that we need more time to ensure a thoughtful process is developed that everyone understands. On October 13, he was asked by WPIC (Water Policy Interim Committee) if more time was needed, and George responded yes. George committed to the legislature that DEQ would report back to them at their July 2022 meeting on the final rulemaking. George stated that the department believes it has the latitude in statute to take more time, but also believes we still have a rule commitment to achieve by March 1, 2022. We are trying to balance our commitment to meet the deadline set by the legislature with the stated need from this work group for more time to get this right.

Moving forward, we will work to develop a framework rule package that outlines the essential components of the AMP program. Additionally, we will bring forward a rule that repeals 12A, in line with Senate Bill 358 requirements. These efforts will run in parallel with the larger rulemaking exercise that establishes the details of a new approach to narrative nutrient standards.

George clarified that we have three rulemaking efforts ahead of us for 2022. By March 1, we will have a framework that describes the essential elements of the AMP. Also in March, we will repeal Circular DEQ-12A. By July, we will have a larger rule package that includes rule, circular, and guidance for the entire AMP program. George stated that the department concurs that more time is needed to discuss, gain understanding, and make changes necessary to the current draft rule package. We are committed to do this with the Nutrient Work Group. This will be a refinement. We do not have the latitude for a revamp. A lot of good work has already been done and we are not starting from zero. It's the department's job to protect beneficial uses and develop and implementable process. Moving forward, the department will provide the Nutrient Work Group with the framework on Monday, November 1, and will discuss it at the November 3 meeting. We are still on the same timeline to meet the March deadline for the framework rulemaking.

For the larger rulemaking, George stated that the department will take Nutrient Work Group comments and listen to the group's discussion. Then DEQ will formulate priority areas of the rule package that need clarification or changes. This will allow us to set a schedule for the larger rulemaking package. With the expectation of a July completion date. George further stated that he has heard concerns that the group needs more time. Nothing is final and this is not a formal public comment period. We will go through several iterations before we have a rule package ready for public consumption. George concluded by stating this how the department works together with the work group and that it is DEQ's intent to work with the group to make a better process; it's the point of having a work group.

CIRCULAR DEQ-12A REPEAL

Myla Kelly, Supervisor of DEQ's Water Quality Standards and Modeling Section, went over slide 9 of **Attachment A**. She stated that Senate Bill 358 directs the department to repeal 12A, which is an administrative process that has three major pieces: remove most rule language added in 2014 for the 12A/12B adoption, with the exceptions shown on the slide; removal of references to DEQ-12A in the administrative rules of Montana; and adding new criteria for nonsignificant changes in water quality for total nitrogen and total phosphorus, as stipulated in SB358. Myla concluded by stating that the repeal of 12A is a change in a water quality standard, therefore, DEQ will be submitting this to EPA for approval under the Clean Water Act.

DRAFT RULE PACKAGE OVERVIEW

Amy Steinmetz, DEQ's Division Administrator of the Water Quality Division, went over slides 11 through 15 of **Attachment A**. Amy reiterated that the Nutrient Work Group will be getting a framework of the rules on Monday which will form the basis of what will go to WPCAC (Water Pollution Control Advisory Council) on November 19. She stated that today we are still working through the draft rule package that the Nutrient Work Group received last Monday and their comments are still due on Friday (10/29/21). The purpose of the draft rule package was to describe implementation of narrative nutrient standards and describe the AMP. Amy then went over slide 11 which shows how the rules, circular, and guidance work together. The statute, rule, and circular have the force of law and guidance is policy. Amy stated that rules should be clear, concise, and easy to understand, so we don't go into technical detail in our

rules. The Circular tells the regulated community how to do what the rule tells you to do. The guidance provides more background, explanation, and technical support. The process to change each of these documents is outlined on the slide. Amy stated that each piece works together and builds on the other.

Amy then went over an example of how each piece fits together. Slide 12 shows a piece from the rule on compliance. Slide 13 then shows more detail on that piece in Circular. Slide 14 expands even further with the guidance document. Amy concluded with slide 15 showing our relationship with federal law. The federal Clean Water Act sets the minimum bar for water quality protection nationally. We must implement federally delegated programs consistent with federal regulations, and we have to submit our water quality standards to EPA for review and approval for them to become applicable.

AMP CASE STUDY

Rainie DeVaney, Supervisor of DEQ's Surface Water Discharge Permitting Program, went over slides 17 through 24 of **Attachment A**. Rainie stated she will be presenting two case studies; the first is a minor POTW with one point source in the watershed, and the second is a multi-discharger watershed with a modeling component. She also clarified that these are not the case studies presented in the guidance document. Slide 18 provides an overview of Case 1: a lagoon with a continuous discharge into a medium river that is not impaired for nutrients. It's pre-AMP permit conditions contain no limits for nutrients. When looking at all the information presented on the slide comprehensively, it is determined that there is no reasonable potential to cause or contribute to an exceedance of the narrative standard. Slide 19 then shows a summary of changes to their permit based on this determination, which includes the submission of an AMP watershed monitoring plan and a monitoring schedule set per the requirements of what's in the draft Circular DEQ-15. Slide 20 then shows a visual representation of what this minor POTW might see for monitoring since increased monitoring would be the largest change for them. The summary of required monitoring parameters in the bottom left of the slide is based on table 4.2 in draft Circular DEQ-15.

Slide 21 shows a map of case study two: a watershed with several dischargers to a large river with no nutrient impairment. Slide 22 then provides an overview of the receiving water and information specific to one major industrial discharger in the watershed. Slide 23 shows the types of anticipated changes permittees could see in this watershed for phase one of their permit. Rainie stated that the outcomes shown here are for illustrative purposes only; DEQ didn't actually run a model for this scenario. Slide 24 shows phase two permit conditions.

NUTRIENT WORK GROUP DISCUSSION

Kelly Lynch, municipalities representative, wrote in the Zoom chat box "Thank you, George. Just want to confirm: there will be a framework of AMP and repeal of 12A to meet the March 1 deadline. DEQ will provide a draft of that on 11/1 to the NWG, for discussion at the NWG meeting on 11/3. Our comments on the existing draft we received on 10/18 are still due on Friday, 10/29?" George Mathieus responded verbally: yes, on November 1, we will give you the framework and repealer language. Comments are still due on Friday, October 29. If you need more time, tell us that in your comments. George said he also stated that he envisions multiple iterations and that it's important that we have a dialog; it ensures a better process.

Mikindra Morin with Northern Plains Resource Council asked in the chat box "Did DEQ announce when they plan to begin the public comment period?" George responded verbally that he did not make that

announcement. Generally, we're still on the pathway for the March 1 deadline, it will just be a different package. We will still follow the same process we've been outlining on when we go to WPCAC and start public comment. Mike Suplee then stated that the formal public comment period will begin on December 24, based on the schedule.

Tina Laidlaw, federal regulatory agencies representative, asked if DEQ had a sense of what the framework will look like compared to the draft rules. George Mathieus responded that it's a framework. It will outline everything we need, but not as comprehensive and detailed. It will lay out the pathway for what we will ultimately develop and submit later in the year.

Guy Alsentzer, representative for environmental advocacy organizations, asked about the first AMP case study example. Guy stated we're talking about a non-nutrient impaired stream and the presumption that a discharger into an impaired stream would have reasonable potential. Are we contemplating this is just a dilution game and there's no reasonable potential? Guy further stated that without some sort of clear benchmarking, we're essentially waiting for hot spot pollution to occur, and then asked if DEQ could elaborate on the difference in the procedures. Rainie DeVaney responded and referred back to slide 19. She stated that this is a facility that even under our numeric criteria did not have a reasonable potential to cause or contribute to an exceedance of the narrative standard, given the quality of the effluent and the receiving water. Water quality based effluent limits are required when there is reasonable potential to cause or contribute. George Mathieus then stated that this is just one example and by no means represents the entire population of permits we're dealing with.

Vicki Watson asked in the chat box "not sure I understood examples -- were both case studies in watersheds that had no nutrient impairments? if so, what about what happens in watersheds that do have nutrient impairments?" Rainie DeVaney responded verbally: yes, both of these examples were for receiving waterbodies with no impairments; did not present a case study with impairments. Rainie further stated that when the receiving water is impaired, it does change the conversation -- won't go into this today but want to acknowledge the outcomes would look different. George Mathieus stated that the complexities associated with that required more discussion and preparation than we had time for.

Kelly Lynch stated that she would like to respond to Guy's comments. She stated that our members are committed to clean water. We've done more to clean and protect our surface waters than anyone else. We're literally and figuratively at our limit, financially and biologically. We had to have the variance to meet the standards. When that was challenged, we had no choice but to come to the legislature with a change. Our high level concern with this proposal is it's still myopically focused on the point sources -- where is the bigger picture of the watershed? Where is the process by which everyone in the process participates? It looks more like a beefed up monitoring plan, which is not the innovative approach we wanted to see. Kelly stated they will share more details in their comments on Friday.

Dave Clark, technical representative for large point source dischargers, wrote in the chat box "Case Study 2 calls for "End 2025 reduce TP effluent concentration 20%..." What is the expectation for implementation? Beginning in 2025? Completed in 2025?" Rainie DeVaney responded verbally that if this was a real, live outcome, the permit would be clear and would give a date and that would be a conversation we would be having with the regulated communities in the watershed.

Amanda McInnis, technical representative for municipalities, asked in the chat box "Is the reasonable potential analysis you reference in the examples done with the numeric values?" Rainie DeVaney

responded verbally that the reasonable potential to cause or contribute to an exceedance of the narrative standard is essentially an outcome of what I've been talking about as a qualitative reasonable potential analysis. Since we are under a narrative water quality standard, we are looking at assessing that based on the summary of the information you see on the slide (slide 18) (e.g., design flow relative to low flow, etc.) – this is what a permit writer will be looking at.

Tammy Johnson, mining representative, wrote in the chat box “For watersheds with multiple MPDES permits, it appears as though your draft rule makes each permittee dependent on every other permittee for compliance. Do I understand correctly?” Rainie DeVaney responded verbally that she doesn't think she would state it that way – would say that since we are developing monitoring plans and implementation plans at a watershed scale, there is that expectation that entities would work together to come up with responsibilities for the watershed scale monitoring. She would say same thing for the modeling efforts – can't have a major discharger independently developing a model; they would need to be working on it together with minor dischargers.

Guy Alsentzer stated that he is compelled to say that his organization's position has never been about saying any particular sector needs to have a finger pointed at them. What's concerning is that we're entering into a reactive procedure, walking back the idea of being preventative. He echoes Kelly's concern that this process fails to incorporate nonpoint sources and fails to look at other ways in which DEQ can exercise its authority to work on nonpoint source pollution. This is a square peg in a round hole.

Dave Clark wrote in the chat box “In Case Study 2 with both Industrial and Municipal dischargers, who is preparing the AMP?” Rainie DeVaney verbally responded that as proposed for today, the AMP contains two components: the watershed monitoring plan and the implementation plan. Dischargers will have to work together to determine who is responsible for quantifying loads of nutrients, etc. As far as an implementation plan, if looking at a water quality model, will need folks to work on this together.

Tammy Johnson wrote in the chat box “Dave's question is good. It is not clear [which] permittee has responsibility for creating the AMP. It could place the entire burden and expense on the permits [whose] permit is nearest to renewal, and sets up a confusing scenario.” Rainie DeVaney responded verbally that she disagrees. The draft rules we have today have attempted to separate the due date and development requirements for watershed scale monitoring plans – have divorced them from renewal deadlines.

Susie Turner, large point source dischargers representative, wrote in the chat box “For case 1: If RP is a No, then why would the discharge have to monitor. Couldn't this just be looked at again in the next permit renewal phase?” Rainie DeVaney responded verbally that if the reasonable potential outcome is “no,” that means we aren't required to implement new or more stringent water quality based effluent limits, but need to continue to monitor.

Guy Alsentzer asked if DEQ contemplates the more refined version coming out sometime after the framework is put forward in March to contemplate changes to DEQ's approach to nonpoint sources? Guy further stated that DEQ has controls for subdivisions, which is a big element of concern. What are those more in depth policy issues you intend to tackle? George Mathieus responded that the point of this dialog and this group is the sky is the limit. The program needs to be all encompassing.

Samantha Tappenbeck, conservation districts west of the continental divide representative, asked if it could be clarified what DEQ's regulatory authority is over nonpoint source pollution. Where can she find

this in statute? Kurt Moser, DEQ legal counsel, responded that when you look in statute, you won't really find that because we don't have direct authority over nonpoint sources and neither does the Clean Water Act. TMDLs are planning tools; they help advise and provide guidance, but they aren't the kind of regulation that is associated with point sources. That was also clear during Senate Bill 358 and was even stated in the testimony – there will be opportunities to reduce nonpoint source pollution as a result of partnerships with point sources.

Samantha then wrote in the chat box “that sounds like a Watershed Restoration Plan.”

Kelly Lynch wrote in the chat box “I just want to make sure that our silence is not interpreted to be consent or lack of concern. It's just difficult to be detailed with our comments in this format. But please know that our goal here is to see a program developed where all of the stakeholders in a watershed can look at all the existing conditions and sources of nutrients and prioritize actions to take after an evidence-based cost-benefit analysis of what can be accomplished in the watershed to most effectively, efficiently, affordably, and feasibly reduce inputs to the waterbody. The POTWs expect to and are willing to help fund those actions.”

PUBLIC COMMENT

Public comment was taken during the meeting and is incorporated into the “Nutrient Work Group Discussion” section above. Time was also taken at the end of the meeting for additional public comment, but none was received.

CLOSE OF MEETING

Ted Barber went over slide 26 of **Attachment A** to remind the group that the deadline to submit comments on the draft comprehensive rule package is Friday, October 29.

The next meeting is scheduled for November 3 from 9 to 11 a.m. George Mathieus stated that from his perspective, this meeting will be a great time to set the path forward.

The meeting was ended at 10:12 a.m.

SUMMARY OF ACTION ITEMS

As Nutrient Work Group and Technical Subcommittee meetings have been combined, the action items below now contain those from both previous Nutrient Work Group meetings and Technical Subcommittee meetings. All noted in progress or pending Technical Subcommittee responsibilities now fall to the Nutrient Work Group. No new action items were recorded in this meeting.

In-Progress Action Items			
#	Action	Who	Status
1	Define what P prioritization means	DEQ and TSC	Pending
2	Provide documents in advance of NWG meetings	DEQ	Ongoing
3	Summarize SOPs for sampling nutrients	DEQ	Ongoing

Complete Action Items			
#	Action	Who	Status
1	Distribute the flowchart and supporting materials to the TSC in a format to provide comments/track changes	Rainie DeVaney, Mike Suplee	Complete
2	Consider other measures that may trigger action (Box 7 of flowchart)	TSC	Complete
3	Clarify in the supporting documents that the narrative standards are those referenced in the Administrative Rules of the Montana of the State of Montana.	Rainie DeVaney, Mike Suplee	Complete
4	Define the overall work for the AMP by the June 23 Nutrient Work Group meeting	TSC	Complete
5	Provide information to the TSC on how to get on the agenda for a future meeting	Rainie DeVaney, Mike Suplee	Complete
6	Schedule two TSC meetings between each Nutrient Work Group	Rainie DeVaney, Mike Suplee	Complete
7	Set up Teams TSC collaboration site. Send invite email. Post comments received from TSC members and draft DEQ documents	Moirav Davin, Christina Staten	Complete
8	Update AMP definition based on TSC feedback. Share out to TSC.	Rainie DeVaney, Mike Suplee	Complete
9	Decide whether medium sized rivers should be broken out	TSC	Complete
10	Add the draft approach for determining watersheds to Teams for feedback from TSC	Mike Suplee	Complete
11	Reorganize technical subcommittee Teams folders so they are more intuitive	DEQ	Complete
12	Receive written comments from League of Cities and Towns	Amanda McInnis	Complete
13	Medium rivers definition	Mike Suplee	Complete
14	Create bibliography of nutrient-related literature	DEQ	Complete
15	Provide feedback from the TSC about the time component in the flow chart	TSC	Complete
16	Receive feedback from TSC on time component of each flowchart step.	TSC	Complete
17	Get Microsoft Teams up and running for NWG and TSC members	DEQ	Complete
18	Address the question of nonpoint source participation in the AMP process	DEQ, NWG	Complete
19	Consensus opinion of farming and nonpoint source community on this process and what they think is possible or realistic	Nonpoint source representatives	Comment noted
20	Create responsibility chart for adaptive management program	DEQ and TSC	Complete
21	Summarize the process for determining a wadeable stream vs large river	DEQ	Complete

Complete Action Items			
#	Action	Who	Status
22	Add groundwater to the adaptive management program framework	DEQ and TSC	Complete
23	Provide copy of EPA action letter on Utah's headwater streams	DEQ	Complete
24	Update the AMP flowchart and supporting materials based on TSC feedback	DEQ	Complete
25	Define roles and responsibilities of DEQ and permittees for AMP process	DEQ	Complete
26	Identify and define what is needed to determine how far upstream and downstream monitoring should occur for a point source	TSC	Addressed
27	Add timeframes to the Adaptive Management Program flowchart	DEQ and TSC	Addressed
28	Put together case study of what DEQ thinks is a reasonable minimum of data collection for large rivers	DEQ	Complete

ATTACHMENT A: OCTOBER 27, 2021 NUTRIENT WORK GROUP MEETING PRESENTATION SLIDES

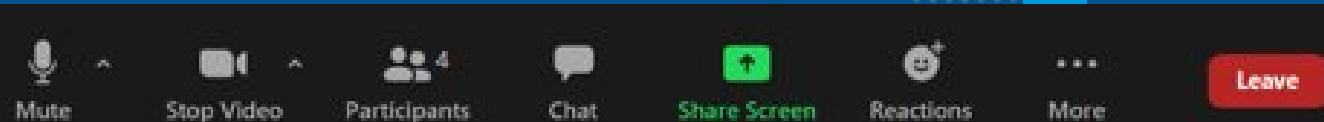
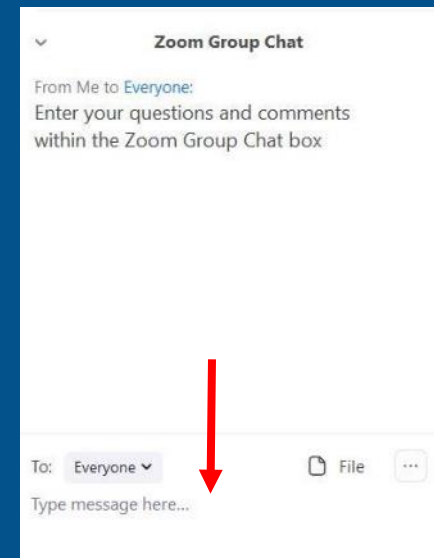
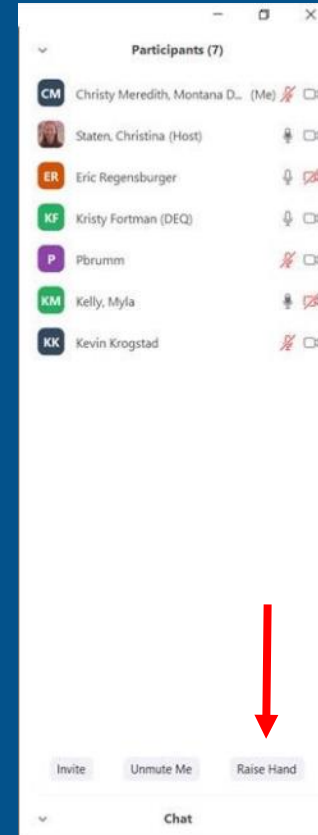
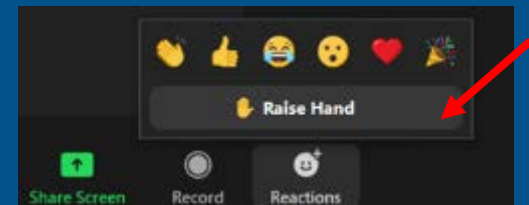


Nutrient Work Group Session Eight

October 27, 2021

Welcome!

- Please keep your microphone muted until called on
- Only NWG Members may participate during discussions
- Please reserve public comment until the end
- *6 unmutes your phone
- State your name and affiliation before providing your comment
- Enter questions in the chat box or raise hand
- Turning off your video feed provides better bandwidth
- Please sign-in to the chat box with name and affiliation



Agenda

Meeting Goal: Provide an overview of the draft rule package and present a case study of the Adaptive Management Program

9:00 a.m. Welcome and NWG Roll Call (Ted Barber, Facilitator)

9:10 a.m. Circular DEQ-12A Repeal (Myla Kelly)

9:15 a.m. Draft Rule Package Overview (Amy Steinmetz)

9:35 a.m. AMP Case Study (Rainie DeVaney)

10:05 a.m. Public Comment

Introductions

DEQ Staff

- Christopher Dorrington, Director
- George Mathieus, Deputy Director
- Kurt Moser, Legal Counsel
- Moira Davin, Public Relations
- Amy Steinmetz, Water Quality Division Administrator
- Jon Kenning, Water Protection Bureau Chief
- Rainie DeVaney, Discharge Permitting Section Supervisor
- Galen Steffens, Water Quality Planning Bureau Chief
- Myla Kelly, WQ Standards & Modeling Section Supervisor
- Kristy Fortman, Watershed Protection Section Supervisor
- Darrin Kron, WQ Monitoring & Assessment Section Supervisor
- Michael Suplee, Water Quality Science Specialist

Introductions

Nutrient Work Group Members

Interest Group	Representative	Substitute
Point Source Discharger: Large Municipal Systems (>1 MGD)	Susie Turner	
Point Source Discharger: Middle-Sized Mechanical Systems (<1 MGD)	Shannon Holmes	
Point Source Discharger: Small Municipal Systems with Lagoons	Rika Lashley	
Point Source Discharger: Non-POTW	Alan Olson	
Municipalities	Kelly Lynch	
Mining	Tammy Johnson	
Farming-Oriented Agriculture	John Youngberg	
Livestock-Oriented Agriculture	Jay Bodner	
Conservation Organization - Local	Kristin Gardner	
Conservation Organization – Regional	Sarah Zuzulock	
Conservation Organization – Statewide	David Brooks	
Environmental Advocacy Organization	Guy Alsentzer	
Water or Fishing-Based Recreation	Wade Fellin	
Federal Land Management Agencies	Andy Efta	
Federal Regulatory Agencies	Tina Laidlaw	
State Land Management Agencies	Jeff Schmalenberg	
Water Quality Districts / County Planning Departments	Pete Schade	
Soil & Water Conservation Districts – West of the Continental Divide	Samantha Tappenbeck	
Soil & Water Conservation Districts – East of the Continental Divide	Dan Rostad	
Wastewater Engineering Firms	Scott Buecker	
Timber Industry	Julia Altemus	

Ground Rules

- Speak one at a time – refrain from interrupting others.
- Wait to be recognized by facilitator before speaking.
- Facilitator will call on people who have not yet spoken before calling on someone a second time for a given subject.
- Share the oxygen – ensure that all members who wish to have an opportunity to speak are afforded a chance to do so.
- Be respectful towards all participants.
- Listen to other points of view and try to understand other interests.
- Share information openly, promptly, and respectfully.
- If requested to do so, hold questions to the end of each presentation.
- Remain flexible and open-minded, and actively participate in meetings.



Roles and Responsibilities

The Nutrient Work Group is an advisory group to DEQ.

Members agree to:

- Provide specific local expertise, including identifying emerging local issues;
- Review project reports and comment promptly;
- Attend as many meetings as possible and prepare appropriately;
- Complete all necessary assignments prior to each meeting;
- Relay information to and from their broader interest group counterparts after each meeting and gather information/feedback from their counterparts as practicable before each meeting;
- Articulate and reflect the interests that NWG members bring to the table;
- Maintain a focus on solutions that benefit the entire state;
- Present recommendations for the rulemaking throughout the planning process.



Circular DEQ-12A Repeal Overview

DEQ-12A Repeal

- Remove most rule language added in 2014 12A/12B adoption. Exceptions:
 - Keep 14Q5 dilution value for TN and TP in MPDES/MGWPCS permits
 - Re-insert non-significance criteria for total inorganic nitrogen and total inorganic phosphorus into ARM 17.30.715(1)(c)
- References to DEQ-12A (and 12B) removed;
 - Rules affected: ARM 17.30.507, 17.30.516, 17.30.602, 17.30.619, 17.30.622 thru 17.30.629, 17.30.635, 17.30.660, 17.30.702, 17.30.715;
- Add new criteria for nonsignificant changes in water quality for TN and TP in ARM 17.30.715 as adopted in 75-5-317(2)(u) per SB 358.



Draft Rule Package Overview

How Rule, Circular, and Guidance Work Together

	Law			Policy
	Statute	Rule	Circular	Guidance
Contents	Directs DEQ to develop rules	What has to be done	How to do it	More background, explanation, and technical support
Process to Change	Legislature must change	Department rulemaking	Department rulemaking	Stakeholder review and notice of changes

Each builds on the other, layering details

Example - Rule

(b) Permittees must select a compliance option in the initial and each subsequent submission of the watershed scale monitoring plan. The compliance options are described Department Circular DEQ-15. The selected compliance option will be used during the entire term of the MPDES permit. Permittees may not request or select a different compliance option during the term of the permit.

Example - Circular

5.2. SIMPLE METHOD

Permittees must monitor each applicable response variable at the department-approved near field upstream and downstream sites. Sampling events for a specific parameter must be within the defined index period, at the minimum frequency described in the permit, and may not exceed 24 hours between upstream and downstream sample collection. Sampling events at near field sites located upstream and downstream of a point source are paired (i.e., they occur on the same day or within a day of one another). If, during any one of these paired sampling events, the concentration, density, or biological metric (HBI) at the downstream near field site(s) exceeds that of the upstream near field site(s) then the permittee is not in compliance with the response variable effluent limit. Similarly, if a response variable with a specified threshold is exceeded at the downstream near field site(s), then the permittee is not in compliance with the response variable effluent limit.

5.3. EXACT BINOMIAL TEST METHOD

This method carries out a statistical evaluation of the threshold-based response variable data and then combines those results with the response variable data which do not have thresholds. Threshold-based response variable data are allowed to have a certain exceedance rate; that is, a certain percentage of sampling events may exceed the thresholds without necessarily resulting in a non-compliance

Example - Guidance

5.2. GUIDANCE FOR THE EXACT BINOMIAL TEST METHOD

The department has available an Excel spreadsheet tool by which the number of allowable exceedences of a response variable threshold can be calculated for any given sample size. **The Excel file name is "MT-NonComplianceTool_test1" and it has two tabs; users only need to use the tab labelled "BTNonCompliance."** In the upper left-hand corner, ensure that cell B5 = 0.27, cell B6 = 0.1, and cell B7 = 0.25, then push the large gray square button located near cell G23. The spreadsheet will then provide the number of exceedences for each sample size, in columns D and C, that indicate that the allowable exceedance rate has been surpassed. So long as the number of exceedences is less than that indicated in column D, the allowable exceedance rate has been attained and, as described in Table 5-2 of **Circular DEQ-15**, the conclusion is "pass." (In contrast, if the number of exceedences is greater than or equal to the value in column D, the conclusion is "fail.") Evaluation should be carried out independently for each response variable dataset (e.g., in the western ecoregional zone that would be for Chla/AFDW, and % bottom cover by filamentous algae).

For response variable data that do not have thresholds (e.g., the macroinvertebrate HBI metric), users should compute an arithmetic average for all the data available up to that time. For example, if four years of sampling has been completed and there are four HBI scores of 3.0, 4.5, 5.2, and 3.5, the arithmetic average would be 4.05.

The results from the Exact Binomial Test spreadsheet can then be combined with the averaged results from the non-threshold based response variables per the tables in Section 5.3 of **Circular DEQ-15**. Those tables and the conditions of the MPDES permit will inform permit compliance.

Relationship with Federal Law

Federal Clean Water Act (CWA)

Sets minimum bar for water quality protection nationally

Federally Delegated Montana holds primacy to implement some Clean Water Act programs. Montana must implement these federally delegated programs consistent with applicable federal regulations.

Cooperative Federalism Montana interacts cooperatively with the federal government to solve common problems. EPA is our main federal counterpart. Water quality standards rules we adopt must receive EPA review and only become applicable for CWA purposes after EPA approval.

Case Studies



Two Case Studies

- Case Study One
 - Minor POTW with One Point Source in Watershed
- Case Study Two
 - Multi-discharger Watershed

Case 1: POTW with One Point Source in Watershed

Facility Information

- Lagoon with continuous discharge
- Pre-AMP Permit Conditions:
 - Nutrient Monitoring Requirements: Effluent TN/TP
 - Nutrient Limits: None
- Design Flow: 0.2 mgd

Receiving Water/Watershed

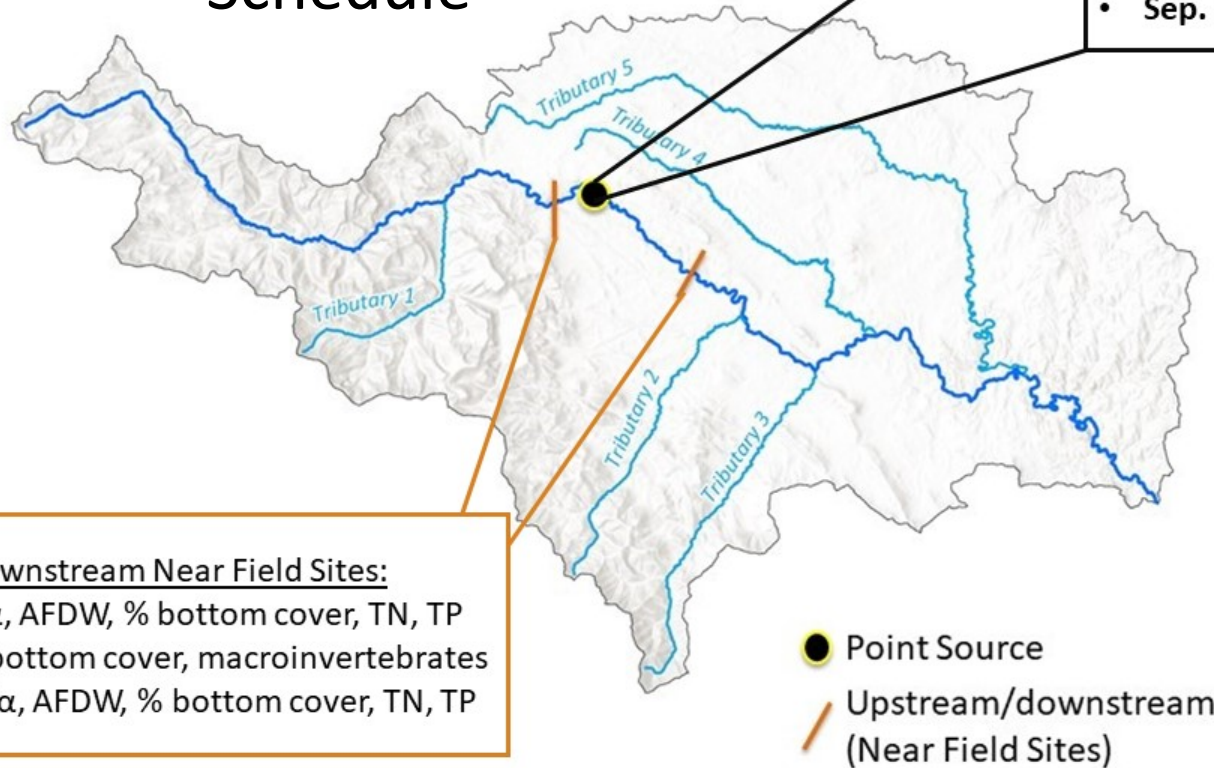
- Ecoregional Zone: Western
- Waterbody size: Medium River
- Low Flow: 1,000 mgd
- Impairment Status: Not listed for nutrients

Reasonable potential to cause or contribute to an exceedance of narrative standard? No

Case 1: POTW with One Point Source in Watershed

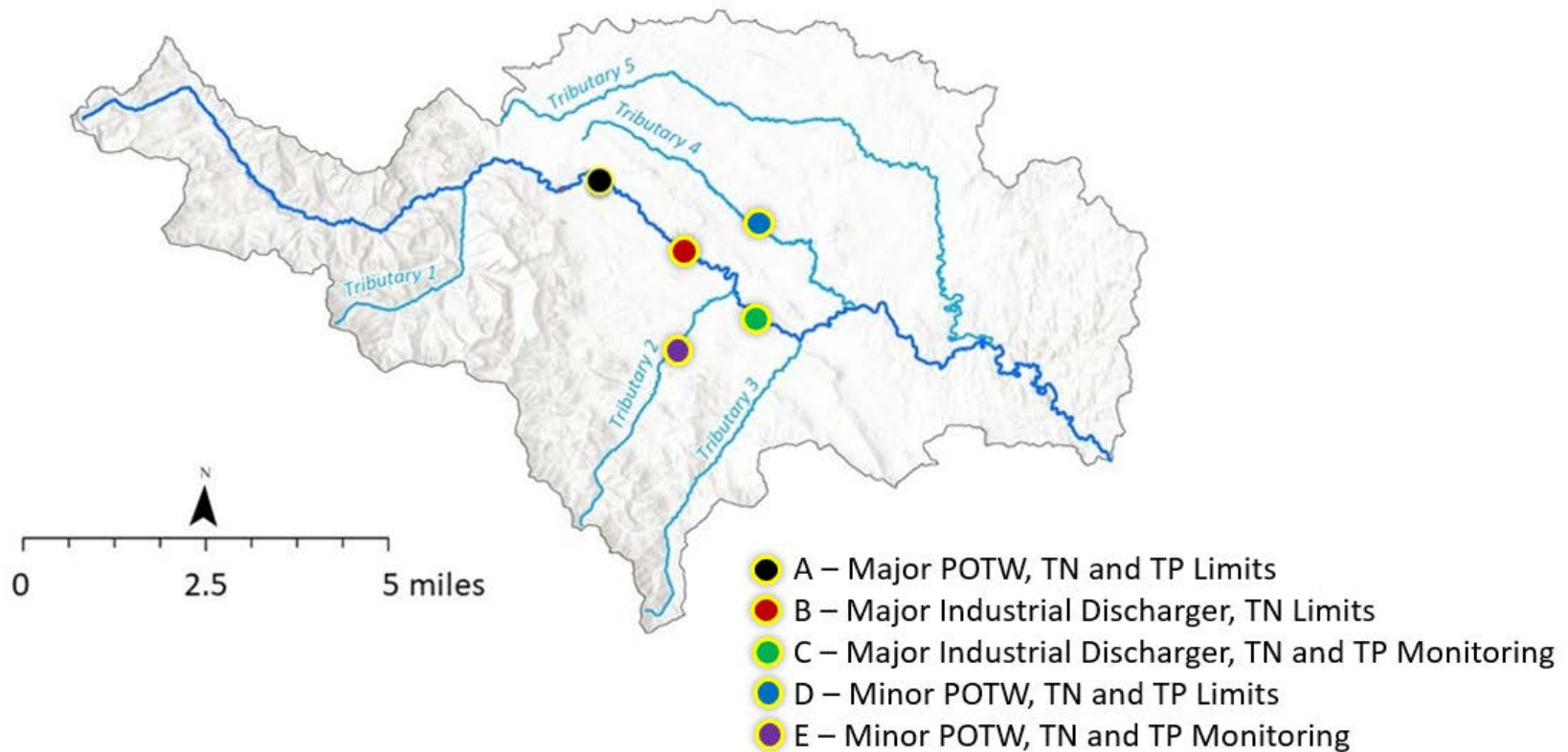
- AMP Watershed Monitoring Plan submitted to and approved by DEQ
 - Implemented upon approval
- AMP Watershed Monitoring Plan
 - Monitoring Requirements (July 1 – September 30, annually)
 - Effluent: monthly TN, TP
 - Near Field Downstream: TN, TP, and response variables (schedule per DEQ-15)
 - Near Field Upstream: TN, TP, and response variables (schedule per DEQ-15)
 - Nutrient Limits: None
 - Annual Report required
- Upcoming Permit Renewal: AMP incorporated into permit

Case 1: Example Monitoring Schedule



Schedule based on Table 4.2 in Draft Circular DEQ-15

Case 2: Watershed with Several Dischargers, Large River, No Nutrient Impairment



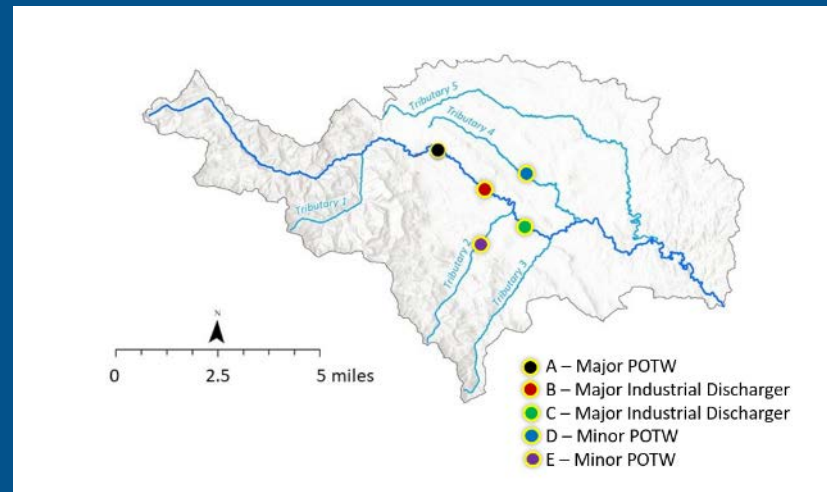
Case 2: Watershed with Several Dischargers, Large River

Facility B – Major Industrial Discharger

- Current Permit Conditions
 - Monitor nitrogen and phosphorus
 - Nutrient limits – Cap at current load
 - Nitrogen – 97 lb/day
 - Phosphorus – 76 lb/day
- Design flow 1.5 mgd
- Design flow: receiving water 670:1

Receiving Water/Watershed

- Waterbody size: Large River
- Low Flow: 1,005 mgd
- Not impaired for nutrients



Phase I Permit Conditions

- DEQ assembles preliminary watershed inventory
 - Notifies all permitted dischargers in the watershed by June 30, 2022.
- Point sources partner on AMP watershed monitoring plan
 - Propose plan to DEQ by March 1, 2023
 - Implement plan immediately after obtaining DEQ approval
 - Model results due December 2024

Phase I Permit Renewal Conditions	
Permit Type	Permit Renewal Requirements
A – Major POTW	2022 – 2024: AMP watershed monitoring plan End 2025 reduce TP effluent concentrations by 20% and TN concentrations 3.6%
B – Major Industrial	
C – Major Industrial	
D – Minor POTW	2022 – 2024: AMP watershed monitoring plan End 2025: optimize facilities nutrient reductions, reduce TP loads by .3 lb/day
E – Minor POTW	
All permittees submit annual reports summarizing monitoring efforts and plans for upcoming year	

Phase 2 Permit Conditions

Phase 2 Permit Conditions	
Permit Type	Permit Renewal Requirements
A – Major POTW	2024-2026: Continue AMP watershed monitoring plan Maintain 2025 reductions required Plan and implement non-point source upstream reductions
B – Major Industrial	
C – Major Industrial	
D – Minor POTW	2024 – 2026: Continue AMP watershed monitoring plan Maintain 2025 reductions required, continue optimization efforts
E – Minor POTW	
All permittees submit annual reports summarizing model results	

Nutrient Work Group Discussion and Feedback

Comment Timeline

October 18: Draft Rule Package Provided to NWG for NWG Review and Comment

October 27: NWG Meeting to Review Draft Rule Package

October 29: Comments Due from NWG Members

November 3: NWG Meeting to Review Comments and Draft Rule Package

Comment Submittal

Preferred Method: Submit Comments in MS Teams
(use track changes and save file with your affiliation name)

Secondary Method: via Email: CStaten@mt.gov



Next Meeting

Next Meeting

- Wednesday, November 3: 9 – 11 a.m.

Topic:

- Discuss NWG comments
- Review draft rule package
- What's still being developed

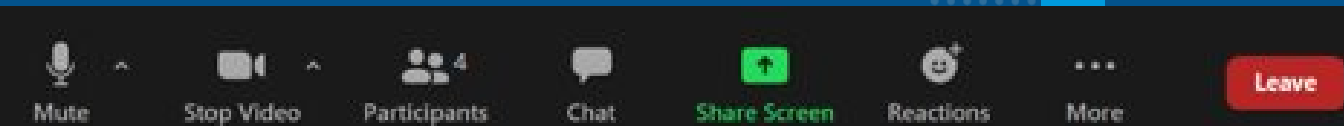
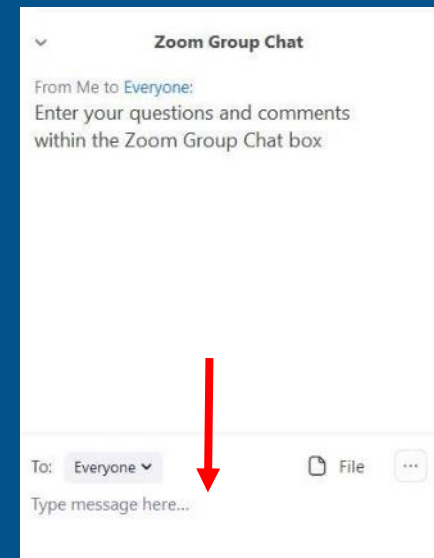
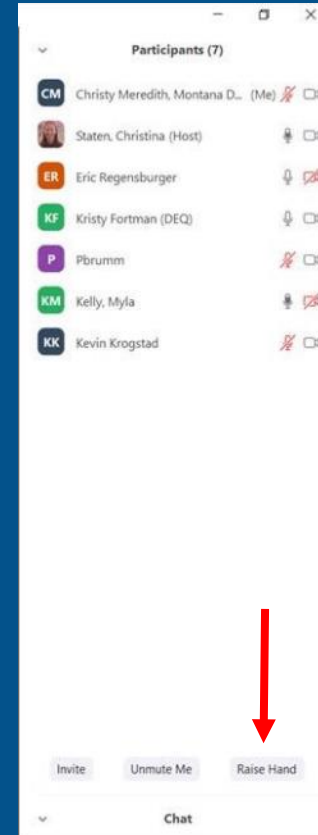
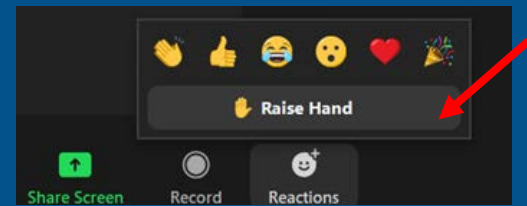




Public Comment

Questions/ Comments

- Raise hand or type questions into the chat
- Please keep your microphone muted until called on
- If calling by phone, press*6 to unmute
- State your name and affiliation before providing your comment



Thanks for Joining Us

Contact:
Christina Staten
CStaten@mt.gov

To submit comments or questions



<https://deq.mt.gov/water/Councils>

