

# STATEWIDE TMDL ADVISORY GROUP (STAG) MEETING SUMMARY

## MARCH 11, 2024

**Hybrid Meeting: DEQ Metcalf Room 111 and via Zoom**

**8:30 a.m.**

To supplement this meeting summary, see **Attachment A** for a copy of the presentation given by DEQ. Both this summary and the meeting agenda can be found on the STAG website at:

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

### ATTENDANCE: STAG MEMBERS

STAG Member & Affiliation	Representing
Brian Heaston City of Bozeman	Point Source Dischargers
Brian Sugden American Forest Management, Inc.	Forestry Industry
David Brooks Montana Trout Unlimited	Water-Based Recreation
Elli Brighton Montana Stock Growers Association	Livestock-Oriented Agriculture
Greg Bryce Hydrometrics, Inc.	Mining
Jeff Schmalenberg MT Dept. of Natural Resources and Conservation	State Trust Land Management
Jordan Tollefson Northwestern Energy	Hydroelectric Industry
Karli Johnson Montana Farm Bureau	Farming-Oriented Agriculture
Michael Bias Fishing Outfitters Association of Montana	Fishing-Related Business
Rebecca Boslough (substitute) MACD Executive Director	Conservation Districts East and West of the Continental Divide
Ryan Leland City of Helena	Municipalities

### ATTENDANCE: OTHER PARTICIPANTS

Andy Ulven, DEQ, Water Quality Planning Bureau Chief

Christina Staten, DEQ, TMDL Section Supervisor

Darrin Kron, DEQ, Monitoring and Assessment Section

Hannah Riedl, DEQ, Nonpoint Source and Wetlands Section Supervisor

Katie Makarowski, DEQ, Standards and Modeling Section Supervisor

Heather Henry, DEQ, TMDL Section

Jane Madison, DEQ, Monitoring and Assessment Section

Kyle Milke, DEQ, TMDL Section  
Lisa Anderson, DEQ, TMDL Section  
Tiffany Lynden, DEQ, Nonpoint Source and Wetlands Section  
Theresa Froehlich, DEQ, Program Support Specialist  
Aaron Losing, City of Kalispell  
Ed Coleman, City of Helena  
Gabe Johnson, Navajo Transitional Energy Company  
Gina Hoff, U.S. Bureau of Reclamation  
John Iverson, Treasure State Resources Association  
Loren Franklin, Lone Mountain Land Company  
Matt Vincent, Montana Mining Association  
Mary Harlow, no affiliation provided  
Nathan Bartow, Bison Engineering  
Peter Brumm, EPA Region 8  
Rickey Schultz, HDR Engineering  
Selena Sauer, Crowley Fleck PLLP  
Stephen Coe, Water & Environmental Technologies  
Susie Turner, City of Kalispell  
Vicki Watson, University of Montana Professor Emeritus

## MEETING INITIATION

Christina Staten, DEQ's TMDL Section Supervisor, started the meeting just after 8:30 a.m. and went over meeting logistics and Zoom controls. Christina used an organizational chart for the Water Quality Planning Bureau to introduce DEQ staff. She conducted a roll call of STAG members and then the meeting agenda was reviewed. It was noted that there will be an update from the DEQ Nonpoint Source and Wetlands Section if time allows.

## STAG OVERVIEW

Christina outlined STAG responsibilities as codified at 75-5-702, Montana Code Annotated (MCA), slides 7-9 of **Attachment A**. She informed the group that the STAG consists of 14, DEQ-appointed members and has no officers, quorum requirements, or decision-making authority. STAG serves as an advisory group to DEQ and, because of its diversity, helps shape TMDL priorities. She reminded the group that they represent interest groups and may need to consult with those groups prior to providing feedback on issues. Those interest groups were copied on the solicitation email sent in February 2024. The term limit for STAG members is two years and members will be solicited again at the end of their term. If a STAG member can no longer serve, please inform Christina Staten and she will solicit a replacement for you.

Christina then moved on to discuss the option of having a STAG chair. As an informal group, a chair is not required, however John Youngberg served as chair for a long time. He assisted with running meetings and solicited participation from members. She requested feedback from the group on if they'd like to have a chair and proposed voting at the next meeting, then opened the floor for discussion with the advisory group.

## Discussion

David Brooks, water-based recreation representative, asked if having a chair helped DEQ and if it made things smoother. Christina responded that it did help and provided examples of how John assisted in the past. Jordan Tollefson, hydroelectric industry representative, agreed that it was helpful to have someone leading the group and to have a unified voice. Ryan Leland, municipalities representative, also agreed, stating that it is a positive to have someone leading the group so that it's led by an independent chair rather than DEQ. Brian Sugden, forestry industry representative, seconded the comments, stating that the leadership is valuable and in the past the chair initiated conversations with DEQ to convene the group. Christina thanked everyone for their feedback and the group will proceed with nominating a chair. She asked when the group would like to nominate someone. Greg Bryce, mining industry representative, suggested voting at the next meeting to allow time for the group to discuss. Christina said that the nomination will be on next meeting's agenda.

## TMDL OVERVIEW

Christina presented an overview of what a TMDL is and the benefits of developing TMDLs, slides 11-12 of **Attachment A**. She defined a TMDL as total maximum daily load, which is the maximum amount of a pollutant a waterbody can have and still be healthy. TMDLs provide a pathway for meeting water quality standards and ensuring waterbody health. She explained that waterbodies are identified for TMDL development when it has been determined that the waterbody is not meeting the water quality standards for a specific pollutant. The most common TMDLs in Montana are nutrients, metals, E. coli, and sediment.

Christina then explained that TMDLs are required by the Montana Water Quality Act and the federal Clean Water Act. TMDL documents incorporate both regulated (permitted facility) and non-regulated (nonpoint source) pollution sources. TMDLs address cumulative impacts in a watershed by looking at significant sources of pollutants that impact water quality. TMDL documents guide future work by identifying future restoration work and help local communities and landowners determine the best ways to protect water quality.

## Discussion

No discussion.

## TMDL PRIORITY AREAS

Christina discussed priority areas for TMDL development and introduced the DEQ TMDL Section staff. The team is comprised of five TMDL planners, four of those positions are filled, and one adaptive management scientist who will be working with the Adaptive Management Program for implementation of the narrative nutrient standards.

Christina then returned to the discussion regarding TMDL priorities and commitments to EPA, slide 15 of **Attachment A**. She said DEQ is required to report where we're developing TMDLs to EPA every two years. We were originally working under EPA's Vision 1.0, which was a 10-year commitment, and have begun Vision 2.0. To cover the period between Visions 1.0 and 2.0, we are required to report what EPA is calling a Bridge Metric covering the period from 2023-2024. The TMDL projects in the Bridge Metric must be identified as either slated for completion or under development. These projects included the Bitterroot River Nutrient Protection Plan (completed in 2023 by Hannah Riedl), Beaverhead Watershed

Nutrient TMDLs (in development, assigned to Troy Clift), Red Rock Watershed Nutrient TMDLs (in development, assigned to Lisa Anderson), and Ashley Creek Nutrient and Sediment Revision to the Flathead-Stillwater TMDL (in development, assigned to Kylie Bogle). Christina noted that the Ashley Creek revision is in response to an update to the Flathead Lake watershed model which changed the source assessment loadings for Ashley Creek.

Christina presented draft priorities for EPA Vision 2.0 which include Upper Gallatin excess algae, Smith River nutrients, Upper Missouri River nutrients and metals, and Clarks Fork Yellowstone River watershed TMDLs, slide 16 of **Attachment A**. Christina stated that there may be TMDL revisions and considerations of ARPs in coordination with the Adaptive Management Program, which could influence TMDL workload. She described the TMDL Development Status map showing TMDL priority areas, completed TMDLs, and areas where we haven't completed all TMDLs. The advisory group was asked for feedback on priorities and input on where DEQ should be working.

## Discussion

Jordan Tollefson stated that the plan as presented is good and it's good to see that the team is staffed up again. He asked Christina if she feels like she has the resources to complete the presented work. Christina responded that yes, she does feel like we have the resources, and the team will be at full capacity. Jordan followed up by asking about the status of the Yellowstone TMDL and if there's a timeline for completion. Christina responded that it is a future priority, and it was not presented since there is no timeline for it. Additionally, DEQ will have to contract out for completion of the model before DEQ will be able to conduct an assessment and reassess the Yellowstone's priority. Darrin Kron, DEQ's Monitoring and Assessment Section Supervisor, followed up that there may be challenges during reassessment since DEQ has data for the numeric nutrient standards, but future monitoring may be required as we may not have response variable data for all segments.

Greg Bryce inquired as to the status of the Otter Creek TMDL. He stated that Otter Creek had a lot of data collected for a TMDL and then the project was shuttered. He expressed concern over the data aging and that completing the TMDL does not seem like a large effort. He strongly encouraged DEQ to complete the Otter Creek TMDL. Greg also asked if DEQ is currently writing TMDLs to the numeric nutrient criteria or response variables. He wanted to know how TMDLs will change once the narrative nutrient standards are completed. Christina responded that there is a draft Otter Creek TMDL, that the data is getting older, and it's on DEQ's unofficial list to complete – it hasn't been committed to EPA. She stated the DEQ hears his feedback however there are other areas in the state where the local communities are ready to implement TMDLs and our time is better served completing those. Christina addressed the question regarding nutrient standards: the Beaverhead and Red Rocks TMDLs are being written to the numeric standards in Circular DEQ-12A because those are the currently effective standards. When 12A is repealed, Circular DEQ-15 and the upper end of the ecoregional range will be used. Andy Ulven, DEQ's Water Quality Planning Bureau Chief, responded that it's a priority to complete the Beaverhead and Red Rocks TMDLs and the wasteload allocations provided in the document will provide an implementation schedule for the standards transition. He said TMDLs can be revised in the future if needed, but they will have a pathway to assist dischargers.

Brian Heaston, point-source dischargers representative, asked for an explanation of the difference between a protection plan and a TMDL. Christina responded that TMDLs are written for an impaired water and are approved by EPA, while protection plans are for waters that are not impaired but may be trending toward impairment. Protection plans are accepted, not approved, by EPA.

Brian Heaston stated that the Yellowstone River would be a great candidate for an AMP due to the number of point source dischargers and it would provide the state and dischargers the opportunity to work through the AMP process. He asked for clarification on the criteria being used for the Beaverhead and Red Rocks TMDLs. Christina confirmed that the wadeable streams criteria is being used for those projects and the upper end of the ecoregion range in Circular DEQ-15 will be used for new nutrient TMDLs. Brian H. cautioned DEQ on moving forward with the numeric criteria when the legislature said it no longer exists and that they were clear on application of 12A. He stated that we need to give the Beaverhead a chance to do an ARP under the AMP using Circular DEQ-15 before a nutrient criteria wasteload allocation is developed. Christina responded that DEQ will consider his comments.

Brian Heaston inquired as to EPA's perspective on implementation of the narrative nutrient criteria in TMDL development. Christina responded that EPA will be responsible for approving DEQ's new rules and accepting or not accepting the change to water quality standards. She explained that once the change is in place, TMDLs are written to the applicable water quality standards. She stated that DEQ has had many conversations with EPA regarding the nutrient standards however DEQ hasn't specifically discussed with EPA how TMDLs will be written in the future. Overall, TMDLs are required to be written to the applicable water quality standard.

David Brooks cautioned that the new standards are not in place yet. He stated that the legislature may have passed the bill, but the rules are not effective, and the numeric standards are what we have for nutrient TMDLs. He then asked about the Big Hole TMDLs and recent concerns about water quality and quantity. He would like to know if the TMDL is going to be revised and what future work plans are. He also wanted to know if DEQ is working with local groups to collect data. Christina responded that the team is developing a TMDL implementation evaluation (TIE) for the Big Hole and are currently looking at what is in the TMDL, what work has been completed, and if we think reassessment is appropriate. She mentioned that there may be a future nutrients TMDL for the mainstem, if it is impaired, as there were sampling efforts for excessive algae last year. Darrin Kron commented that DEQ has responded to two different algae blooms which have been monitored over the last four years. He added that we have been supporting volunteer monitoring efforts and are planning on using that data for assessment of nutrients.

Greg Bryce seconded what Brian Heaston said regarding the Beaverhead. He stated that there may be future challenges when dealing with a wasteload allocation based on 12A and DEQ should move with caution. Christina said that his comments will be taken into consideration and DEQ will discuss and address this at the next meeting.

Brian Sugden inquired about the status of the Kennedy Creek, Blackfoot-Nevada Creek, and Bitterroot TIEs. Christina responded that the Kennedy Creek metals TIE is complete and the Bitterroot and Blackfoot-Nevada Creek are in progress; the team has started the Big Hole TIE and the Lower Gallatin is next. Also, she stated all completed TIEs are posted online.

David Brooks asked what the TIE acronym means. Christina explained that it's a TMDL Implementation Evaluation and it's an evaluation to determine if: the waterbody is now meeting the water quality standard, BMPs need more time in place, or more or different BMPs are needed. David followed up with a question regarding coordination with private groups to collect water quality data. Christina answered that DEQ works with all entities to compile a full assessment of the completed work. In the Big Hole, coordination is with the Big Hole Foundation and agencies, such as FWP, to determine what projects are

on the ground. Darrin commented that Monitoring and Assessment has been working with FWP to make sure we're collecting the correct information.

Brian Heaston asked if TIEs focused on looking at nonpoint sources or are wasteload allocations also evaluated. Christina responded that TIEs are mainly focused on nonpoint sources but wasteload allocations are evaluated if they are present.

## **TMDL PRIORITIZATION FRAMEWORK**

Christina presented the framework used to prioritize TMDL development, slide 20 of **Attachment A**. She explained that DEQ is working on developing EPA Vision 2.0 commitments and that Montana usually develops TMDLs on a watershed scale. Also, Montana is unique because these prioritization factors are in law at 75-5-702, MCA. She provided an example prioritization factor: receipt of a new MPDES permit application for a facility that will discharge a pollutant for which the receiving water is impaired. In that case, DEQ has 180 days to complete the TMDL. She said additional considerations associated with the Adaptive Management Program will occur, such as considering where AMPs are being developed or are effective and where TMDLs may need to be developed or revised based on AMP results.

Christina reviewed slide 21 of **Attachment A**, which lists the prioritization factors included at 75-5-702, MCA, and highlighted that DEQ must consult with STAG when prioritizing TMDL development. She elaborated on the AMP considerations after New Rules 1 and 2 for narrative nutrient standards are adopted. TMDL development will be coordinated with active AMPs to the extent possible. Also, TMDL revisions will be prioritized when data collected by a permittee indicate a different nutrient target is more appropriate. For watersheds without existing nutrient TMDLs, an AMP may be submitted to EPA as an Advance Restoration Plan (ARP). She cautioned that acceptance of an ARP by EPA may cause DEQ to lower the TMDL priority ranking. She highlighted that TMDL revisions and ARP development will still be prioritized using the factors at 75-5-702, MCA, and in consultation with the STAG.

She discussed two new issues that DEQ is required to address as part of EPA's Vision 2.0: environmental justice and climate change, slide 23 of **Attachment A**. She stated that these issues are not inherently part of Montana's priority factors and DEQ will have to explain how they'll be incorporated in Vision 2.0 TMDLs. Christina discussed how these issues are currently incorporated in the TMDL process. For environmental justice she provided the following examples: collaborating with tribal governments, traveling to local watersheds for meetings, and accommodating ranching and farming needs when scheduling meetings. For climate change she provided the following examples: prioritizing watersheds more vulnerable to increased stream temperatures, developing protection plans for areas susceptible to impairment, working on assessment methods for lake eutrophication that address harmful algal blooms (HABs), evaluating future flow conditions as part of source assessment for pollutants tied to flow. She noted that DEQ recommends and funds floodplain and water storage improvement projects as part of TMDL implementation. She then opened the floor for discussion with the STAG members.

## **Discussion**

Jordan Tollefson asked if AMPs can be submitted to EPA as ARPs for pollutants other than nutrients. Andy Ulven responded that EPA may be able to provide clarity there. He said that his understanding is that ARPs can apply to any pollutant. DEQ is open to ARPs if local groups/entities are interested, especially if they're moving forward work in watersheds where DEQ isn't currently working.

Brian Heaston reiterated that DEQ should give ARPs a chance to work under Circular DEQ-15 and the first order of priority for new TMDLs should be to allow the AMP process to play out, then move forward with a TMDL if water quality doesn't improve.

Brian Sugden stated that environmental justice and climate change impacts never occurred to him. He asked if they could play into use classification and if the Water Quality Standards Section is considering climate change. Katie Makarowski, Section Supervisor of the Water Quality Standards and Modeling Section, responded that for any use classification change – moving from one to another or developing a subcategory of class – then a Use Attainability Analysis (UAA) is required and those are site specific. The factors that may drive a UAA will vary wildly across the state. She said that she isn't seeing areas where environmental justice and climate change have been used in standards development, but the foundation of standards development exists to take them into account.

Greg Bryce asked how protection plans are implemented when working through a discharge permit or other regulatory frameworks and if there is any public comment. Christina responded that protection plans do have a public comment period and the Bitterroot was released for public comment. She said that protection plans do not have an impact on permitted discharges. Hannah Riedl, DEQ's Nonpoint Source and Wetlands Section Supervisor, explained that the Bitterroot was developed because the Nonpoint Source Section takes a watershed approach, the Bitterroot being the first watershed, and they wanted to provide the protection plan as a resource for the watershed. Greg commented that it sounds like a good way to protect watersheds. Christina thanked him for his feedback and let the group know that she can send the framework to anyone interested in seeing it.

Jordan Tollefson commented that data availability has been used in prioritization and asked if that's still the case. He said that if people are collecting data, then there must be an interest from the people and that should be taken into consideration. Christina responded that yes, DEQ can take that into consideration.

Brian Sugden asked how long the Otter Creek data is good for if the TMDL isn't on the priority list. Christina responded that there is not a time limit for TMDL development, while Monitoring and Assessment does have a timeframe for making impairment determinations. For TMDLs, we look at what changes have occurred in the watershed and determine if we need more data. Brian S. then asked if completing Otter Creek in the next 3-5 years is realistic. Christina responded that the TMDL is more complex than it seems because there's a downstream tribal standard that is more stringent than the Montana water quality standard. When the TMDL was released for public comment, the Northern Cheyenne commented that downstream uses are not protected. She added that the TMDL may require modeling before completion, and she'll follow up at the next meeting.

## **WATER QUALITY MONITORING & ASSESSMENT ACTIVITIES**

Darrin Kron, DEQ's Monitoring and Assessment Section Supervisor, presented on monitoring and assessment activities. He stated that many of the projects have already been introduced since his team's work is aligned with the TMDL section. He explained that his section monitors water quality across the state in a target fashion and publishes the 303(d) impaired waters list, which are waters that are not meeting the state's water quality standards. He reviewed slides 27-29 of **Attachment A**. He gave an update on the Gallatin River assessment request received for the river above Gallatin Gateway. Under 75-5-702, MCA, DEQ has 90 days to respond to an assessment request. The assessment yielded a listing for algae growth, which is a narrative nutrient standard. He stated that the river is meeting the numeric

12A standards and there's a bureau-wide effort to study the situation. The impaired segment was added to the 2020 Integrated Report via an addendum. Darrin continued that the next Integrated Report will be a combined 2022/2024 submittal. DEQ has issued a call for data and are working on assessment; there is a list of 100 assessment units to be updated. He let the group know that the team is currently completing data organization for nutrients and are evaluating known parameters but the next Integrated Report submittal to EPA will be delayed until the narrative standards are approved by EPA. He also shared that EPA requested several assessment methods to be updated before the IR submittal.

Darrin provided a list of ongoing monitoring and 303(d) assessment projects the section is currently working on, see slide 28 of **Attachment A**. Additionally, data from the volunteer monitoring network will be incorporated. He stated that DEQ has been monitoring fish tissue and PFAS, which is an emerging contaminant/pollutant. He mentioned a couple of projects that are missing from the list: Big Hole River algae blooms and metals in the Upper Blackfoot mining area after remediation. He clarified that some of these projects are tied to success stories, which is when a TIE identifies water quality improvements after TMDL implementation such as Kennedy Creek.

Darrin gave an update on the assessment methods that are being updated and the timeline for completion. The first phase of development is Spring 2024 and will include dissolve oxygen, pH, ammonia, temperature, and Lake Koocanusa selenium. Phase 2 will be submitted with the 2022/2024 IR, see slide 29 of **Attachment A** for the list of methods being worked on. Darrin then opened the floor for discussion with STAG members.

## Discussion

Greg Bryce asked for clarification on the IR and which Rattlesnake Creek is being monitored. Darrin responded that it is the one in Missoula and they're monitoring for flow modification because a low-head dam was removed.

## UPDATE ON NUTRIENT WATER QUALITY STANDARDS

Katie Makarowski, DEQ's Standards and Modeling Section Supervisor, updated the group on the narrative nutrient standards rulemaking package and associated timeline. She began the presentation with a big picture revisit of the history of Montana's nutrient standards, see slide 31 of **Attachment A**. She said that Montana's narrative provision aimed at preventing conditions that lead to undesirable aquatic life has been in place prior to the adoption of numeric water quality standards for specific waterbodies in the State in 2014. Those numeric standards were additional protections to the narrative standards. In 2021 the Legislature passed SB 358 which included directives for the state: adopt rules related to narrative nutrient standards, remove references to the numeric rules, and development an Adaptive Management Program, which is an incremental watershed approach to protect water quality. In August 2020, DEQ convened the Nutrient Work Group and has held 45 meetings, 40 of these were after SB 358 was signed in April 2021. Consultation has continued over this time and DEQ has also held meetings with individuals, interest groups, and subsets of interest groups.

Katie then discussed the new rule package, see slide 32 of **Attachment A**. She noted there are two new rules. New Rule I is the translation of narrative nutrient standards and incorporation of Circular DEQ-15. She explained there are a series of translators used to address beneficial uses and are laid out using a combined criteria approach to water quality standards. The combined criteria approach looks at causal and response variables together to determine if narrative nutrient standards are met for each waterbody. New Rule II is the implementation of the Adaptive Management Program for narrative



nutrient standards. She stressed that this new approach is an optional compliance approach for implementation within the MPDES program to address nutrient sources in watersheds. She stated that Circular DEQ-15, which lays out procedures and policies, is part of the nutrient rule package. In addition to the new rules, there are a series of existing rules needing to be amended or repealed.

Katie revisited the rulemaking timeline and shared where DEQ is in the process, see slide 33 of **Attachment A**. She said that from 2021 through 2024, DEQ was in a period of developing the concept and rulemaking package in consultation with the Nutrient Work Group. She highlighted key dates looking forward. She pointed out the revised rule package was sent to WPCAC and WPIC on March 8<sup>th</sup>. She explained it is a requirement for DEQ when adopting water quality standards to provide WPCAC with the rules prior filing with the Secretary of State to allow feedback and comment. The rule package will be discussed at the March 15<sup>th</sup> WPCAC meeting, and the meeting is open for public comment. Katie then shared DEQ intends to file the proposal notice with the Secretary of State on April 16<sup>th</sup> and publish in the MAR on April 26<sup>th</sup>. The public hearing is scheduled for June 10<sup>th</sup> and is a great opportunity for public participation. She clarified the public comment period is April 26<sup>th</sup> through June 10<sup>th</sup> and it's an important opportunity to participate in the rule making process. The adoption notice would be published on October 4<sup>th</sup>, then submitted to EPA for review and approval under the Clean Water Act.

## **Discussion**

Ryan Leland stated municipalities have concerns over the rules and they do not believe DEQ has listened. He asked for clarification on if the existing numeric standards will still be in the permit along with the narrative standards and how that will work. Katie prefaced her response that MPDES is not present in the meeting to respond. She said that DEQ is working to repeal the numeric standards and will be replacing them with a combined criteria translator. She was unsure if it's an accurate characterization that numeric standards will still be in place as the causal and response variables will ensure beneficial uses will be supported. MPDES permits have some basis in numbers and the combined criteria would be used to inform permits.

Ryan Leland followed up that his interest group does not understand how permits are going to be written and how municipalities are going to implement them. He expressed concern that point sources are going to have to foot the bill for treatment and he is struggling to see how an AMP is going to be beneficial to municipalities when they will not be getting credit for nonpoint source reductions. Andy Ulven responded that there's guidance in the rule package that was sent out on Friday and the benefit of an AMP to a discharger, noting it's an optional compliance route, is that it gives everyone time to address nonpoint sources. Andy continued that DEQ is viewing this process as a multiple permit cycle, 2-4 cycle, 10–20-year period, that allows the permittee to focus on nonpoint sources and not immediately prioritize facility treatment upgrades. There is savings in that municipalities may not have to pay for or plant upgrades immediately and can look to nonpoint source reduction and optimization first. Andy said that DEQ's confident in our ability to implement and address and track changes, then look for a net result and its ultimately the beneficial uses we're trying to protect.

## **PUBLIC COMMENT & CLOSE OF MEETING**

Christina Staten thanked everyone for their attendance and provided a summary of topics to discuss at the next meeting: Chair nomination, TIEs, and Beaverhead and Otter Creek TMDL follow up and to send out the prioritization framework. She then solicited public comment and reviewed how to use the Zoom controls.

## Discussion

Vicki Watson, University of Montana, asked about reinitiating watershed restoration plans (WRPs) in the Clark Fork basin using the existing TMDLs and updated data and if they would be accepted considering the narrative nutrient standards. She prefaced the question with background on the previous WRP efforts. Christina Staten responded that it is not a waste of time to revisit the WRPs as the TMDLs are still effective and the change in standards doesn't change the strategies you can do locally to make improvements. The 9 elements of a WRP can be based on the existing TMDLs and be accepted by DEQ.

Matt Vincent, Montana Mining Association, commented that he appreciates the work DEQ has done through the Nutrient Work Group and small groups and wanted to point out that the revised rules have been amended and changed again last Friday. He commented that they have not had a chance to see the differences in the new rule package. He reserved his right to comment in more detail in another venue. He also acknowledged the issues and concerns raised by other STAG members regarding the use of 12A in TMDL development and use of the revised rules.

Mary Harlow, member of the public, provided a comment via the Zoom Q&A function voicing support for numeric standards and that narrative standards support the polluters. She commented that the monitoring program seems loose; nutrients are the problem with algae blooms; and that an adaptive management plan will not affect the polluters and it will allow standards to be loosened to allow for more pollution. Christina Staten responded that SB 358, which is state law, required DEQ to move to use of the narrative standards. Andy also responded that we appreciate the comments and concerns, however DEQ feels confident that the narrative standards can be as protective as numeric standards. He provided that the rules are published on DEQ's website and that DEQ would be happy to discuss the technical details. Christina then provided her email address to Mary for follow up.

Ed Coleman, City of Helena, stated he was unaware of the revised rule package and asked if all changes are identified in the new documents or if there's a cheat sheet that outlines the changes. Andy responded that at the January WPIC and WPCAC meetings DEQ was asked to allow additional time for the Nutrient Work Group to review the package and DEQ did receive additional feedback in the form of comments and suggested changes. After the February 26<sup>th</sup> Nutrient Work Group meeting, DEQ reviewed all the comments, submissions seeking clarification, and provided recommendations which informed the updated rule package. The changes are enumerated and will be presented at Friday's WPCAC meeting. Ed then asked when the WPCAC materials will be available, and Andy said he would follow up after the meeting. Katie Makarowski noted that the nature of consultation is that we receive feedback and do our due diligence to incorporate changes as feedback dictates. Now that DEQ is heading into the initiation of the rulemaking process, we will enter the formal comment period when the package is published in the Montana Administrative Register (MAR). All changes to the rules from public comment will be noted in the adoption notice at the end of the rules. She said that from a procedural standpoint, DEQ provided additional time in which we continued to receive extensive comments and edits, some of those changes were important for clarity. Additional information will be provided at WPCAC on Friday.

Christina Staten closed the meeting and said that she will send out a Doodle poll to schedule the next meeting this fall.

The meeting ended at 10:17 a.m.

## **ATTACHMENT A: MARCH 11, 2024 MEETING PRESENTATION**



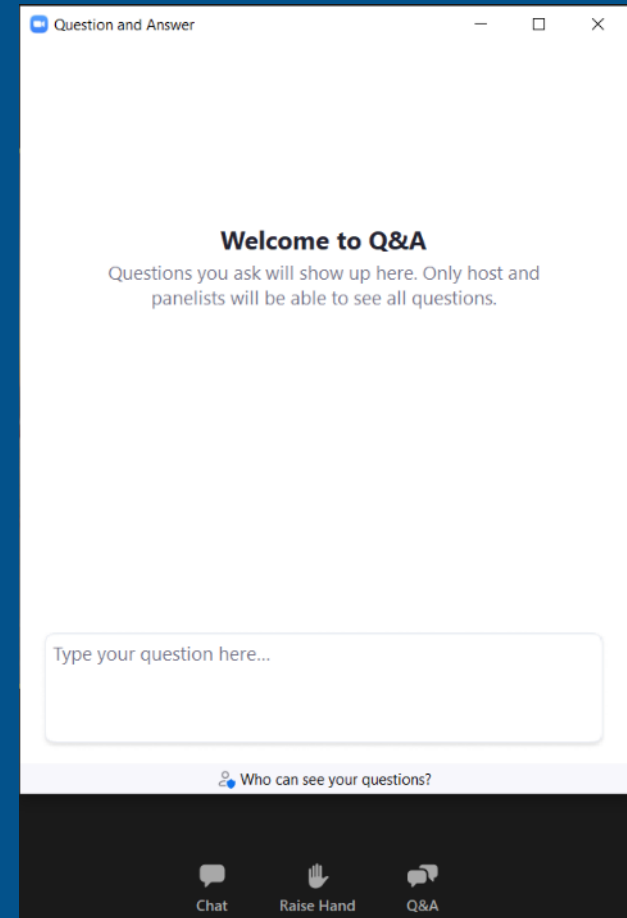
# Statewide TMDL Advisory Group

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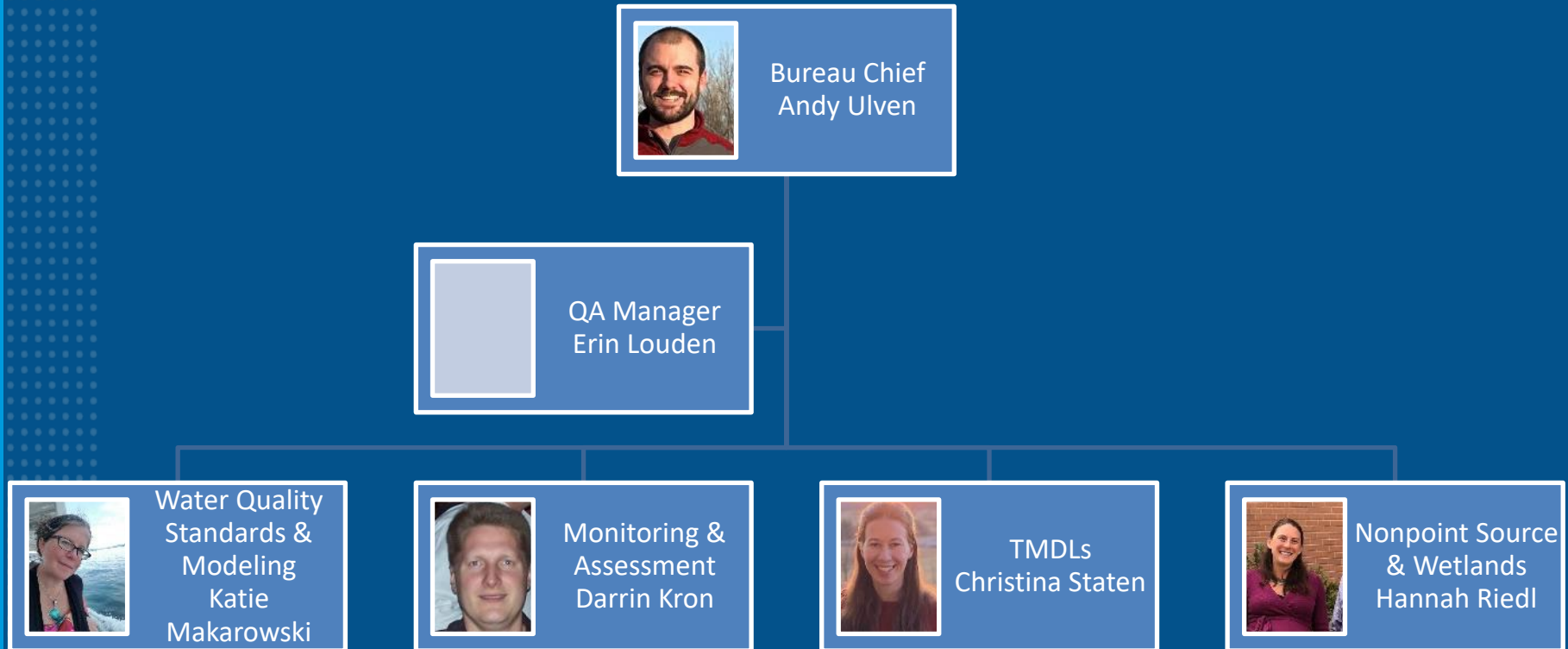
March 11, 2024

# Welcome!

- This meeting is a webinar
- STAG members will be panelists
- Members of the public can raise their hand or use the Q&A feature to ask questions during the public comment portion of the meeting
- \*9 raises your hand if you're on the phone
- State your name and affiliation before providing your comment



# Water Quality Planning Bureau



# STAG Roll Call

STAG Member & Affiliation	Representing	Term End Date
Karli Johnson Montana Farm Bureau	Farming-Oriented Agriculture	January 31, 2026
Ellie Brighton Montana Stockgrowers Association	Livestock-Oriented Agriculture	January 31, 2026
Frank Szollosi Montana Wildlife Federation	Conservation or Environmental Interest	January 31, 2026
David Brooks Montana Trout Unlimited	Water-Based Recreation	January 31, 2026
Brian Sugden Sugden Forest Environmental, LLC	Forestry Industry	January 31, 2026
Ryan Leland City of Helena	Municipalities	January 31, 2026
Brian Heaston City of Bozeman	Point Source Dischargers	January 31, 2026
Greg Bryce Hydrometrics	Mining	January 31, 2026
Vacant	Federal Land Management Agencies	
Jeff Schmalenberg Dept. of Natural Resources & Conservation	State Trust Land Management Agencies	January 31, 2026
Vacant (Substitute: Becca Boslough) Montana Association of Conservation Districts	Conservation District Supervisor – East	
Vacant (Substitute: Becca Boslough) Montana Association of Conservation Districts	Conservation District Supervisor – West	
Jordan Tollefson Northwestern Energy	Hydroelectric Industry	January 31, 2026
Mike Bias Fishing Outfitters Association of Montana	Fishing-Related Business	January 31, 2026

# Agenda

## **STAG Overview**

- Member Roles and Responsibilities
- Discussion of STAG Chair Position

## **TMDL Prioritization Framework and TMDL Priority Areas**

- Overview of TMDLs and Prioritization Framework
- Current and Planned TMDL Priority Areas

## **Water Quality Monitoring & Assessment Activities**

- 2024 Water Quality Monitoring Projects
- Water Quality Integrated Report Update
- Assessment Methods Development & Comment Opportunities

## **Update on Nutrient Water Quality Standards**

- Status of SB358 Rulemaking to Interpret Narrative Standards and Develop an Adaptive Management Program

## **Public Comment & Close of Meeting**

- Discussion of Next Meeting Topics and Meeting Date
- Public Comment

## **As Time Allows: Nonpoint Source & Wetlands Program Updates**

- Call for Applications
- Alternative Restoration Plans





# Statewide TMDL Advisory Group Overview

- Christina Staten, TMDL  
Section Supervisor



# STAG Advisory Role

- Authorized under 75-5-702(10), MCA
- Comprised of 14 members representing broad base of water-related interests
- Members are appointed by DEQ Director
- Does not have officers, require quorums, or have decision-making authority
- Members serve in advisory capacity to the department on topics such as:
  - TMDL development priorities
  - Water quality assessment methods
  - TMDL implementation monitoring

**Because of the STAG's diversity in representation of interest groups across Montana, it can play an important role in formulating Montana's water quality policy**





# Member Responsibilities

- You are representing an interest group in Montana
- Attend meetings twice a year
- Renewable two-year term limit (solicitations occur at term end dates)
- Notify the department if you're stepping down from your position



# STAG Chair Discussion

- Informal
- Meeting facilitation assistance
- Agenda feedback



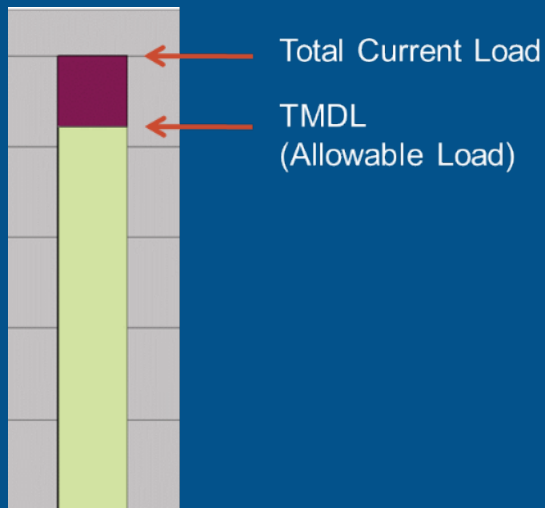


# TMDL Overview

- Christina Staten, TMDL  
Section Supervisor

# Total Maximum Daily Loads (TMDLs)

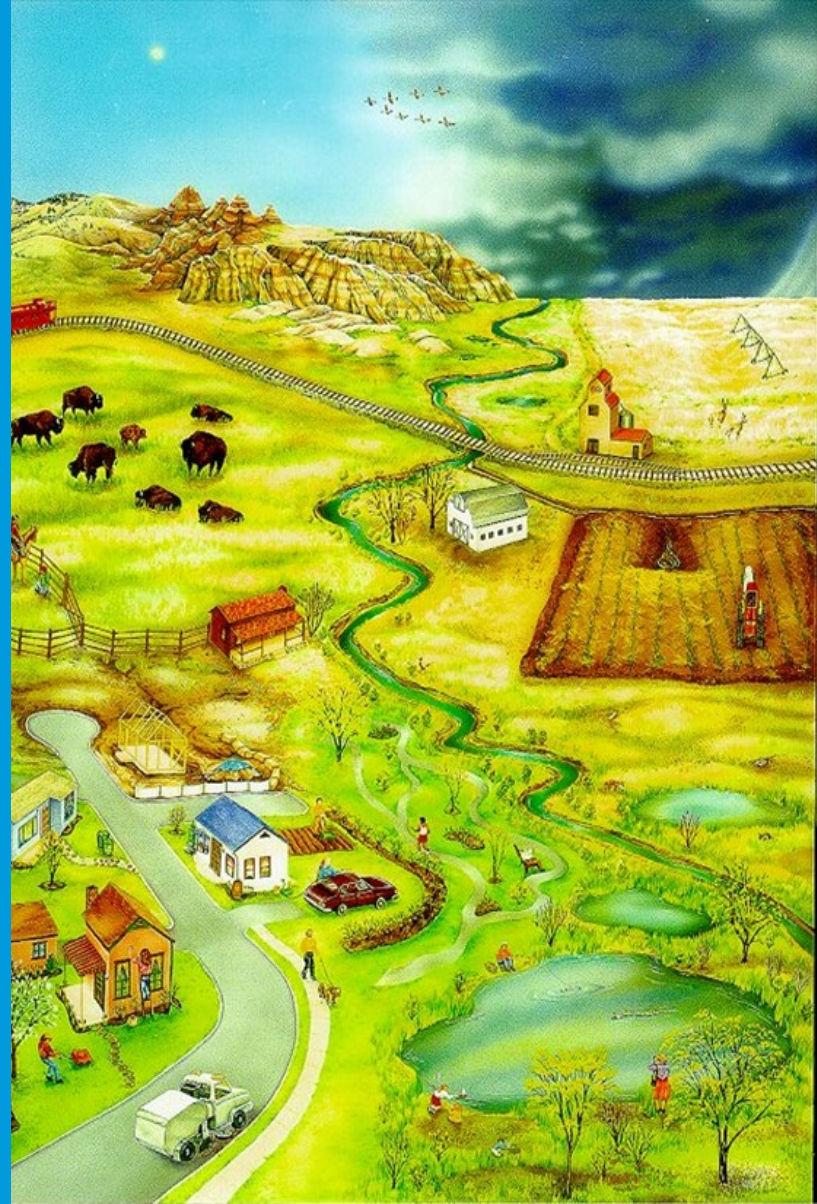
- “Math and the path”
- Pollution budget or diet for a waterbody
- TMDLs are developed for each waterbody-pollutant impairment identified on the impaired waters list





# Benefits of TMDLs

- Incorporate multiple source types, both regulated and non-regulated
- Address cumulative impacts
- Guide future restoration work and prioritization of projects
- Help the local community and landowners identify the best ways to protect water quality





# TMDL Priority Areas

- Christina Staten, TMDL  
Section Supervisor



# TMDL Section Staff

## 5 TMDL Planners

- Heather Henry
- Troy Clift
- Lisa Anderson
- Kylie Bodle
- 1 planner in hiring process

## 1 Adaptive Management Program Scientist

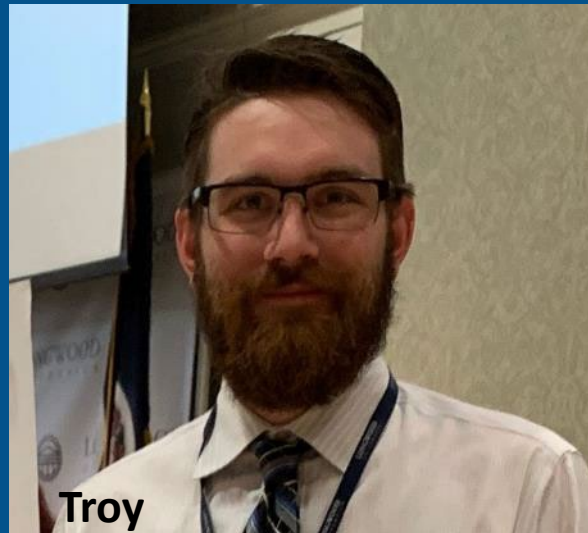
- Kyle Milke



**Kyle**



**Heather**



**Troy**



**Lisa**

# 2023-2024 TMDL Priorities

## Bridge Metric:

- Bitterroot River Nutrient Protection Plan (completion)
- Beaverhead Watershed Nutrient TMDLs (development)
- Red Rock Watershed Nutrient TMDLs (development)
- Ashley Creek (Flathead-Stillwater) Nutrient & Sediment Addendum (development)





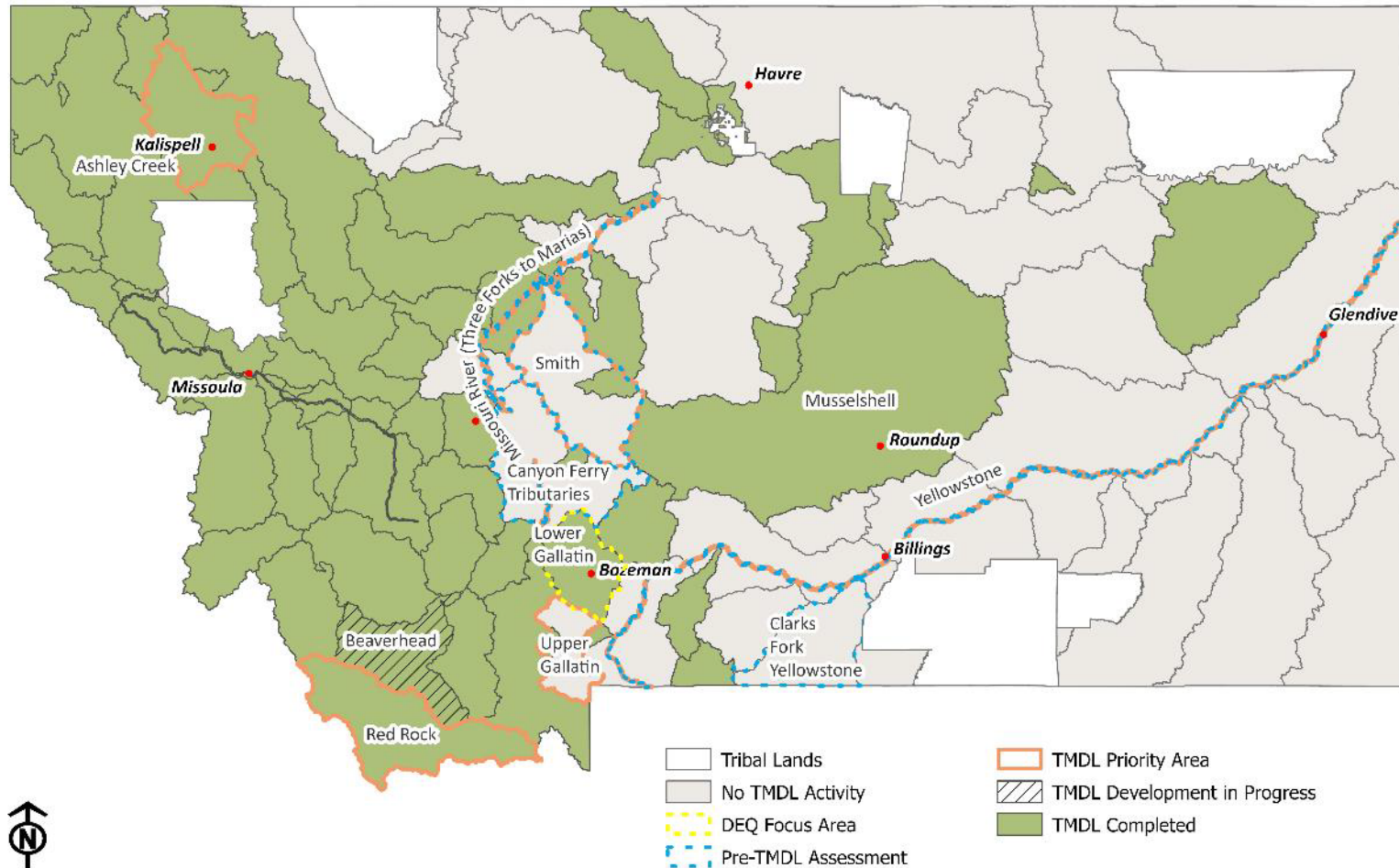
# Draft TMDL Priorities Beyond 2024 (Vision 2.0)

- Upper Gallatin - excess algae
- Smith River - nutrients
- Upper Missouri River - nutrients, metals
- Clarks Fork Yellowstone River
- TMDL revisions and consideration of ARPs in tandem w/AMP



# TMDL Development Status & Schedule

## TMDL Development Status



0 25 50 100 Miles

11/15/2023 - DEQ Water Quality Planning Bureau

**DEQ**  
Montana Department  
of Environmental Quality



# STAG Feedback / Discussion





# TMDL Prioritization Framework

- Christina Staten, TMDL Section Supervisor

# Vision 2.0 Prioritization Approach

- Watershed scale approach by TMDL planning areas
- State law prioritization factors (75-5-702, MCA)
- New individual MPDES permit applications
- Adaptive Management Plan (AMP) considerations
- STAG input



# TMDL Prioritization Factors

- New, individual discharge permit application
- TMDL implementation considerations
- Program coordination
- Resource value
- Potential impact to use (human health and aquatic life)
- Impairment characteristics (severity and magnitude)
- Court determinations
- General waterbody characteristics (size, importance)



**Per 75-5-702, MCA, DEQ must consult with the STAG when prioritizing waters for TMDL development**



# AMP Considerations

- TMDL development or revision may be coordinated with active AMPs, to the extent possible
- TMDL revision will be prioritized when data collected by a permittee indicate a different nutrient target is more appropriate
- For watersheds without existing nutrient TMDLs, AMPs may be submitted to EPA as advance restoration plans. Acceptance by EPA may prompt DEQ to lower the TMDL priority ranking.

**TMDL revisions and ARP development will still be prioritized in accordance with 75-5-702, MCA, and in consultation with the STAG**



# Addressing Environmental Justice and Climate Change

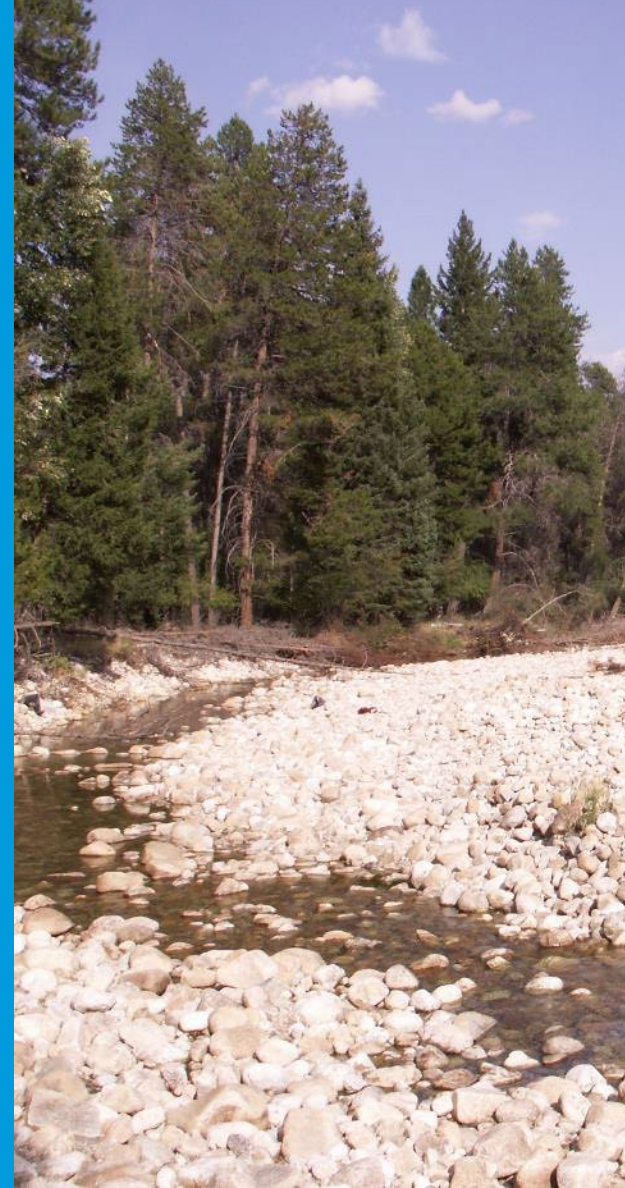
- Required for Vision 2.0 framework
- Not inherently part of Montana's priority factors
- EJ addressed by:
  - Collaborating with tribal governments
  - Traveling to local watershed for meetings
  - Accommodating ranching/farming needs when scheduling meetings





# Addressing Climate Change

- Prioritizing watersheds more vulnerable to increased stream temperatures (excess algae listings)
- Developing protection plans for areas susceptible to impairment
- Addressing HABs when developing lake TMDLs for eutrophication
- Evaluating future flow conditions as part of source assessment for pollutants tied to flow
- TMDL implementation: recommending and funding floodplain and water storage improvement projects





# STAG Feedback / Discussion





# Water Quality Monitoring & Assessment Activities for 2024

- Darrin Kron, Monitoring & Assessment Section Supervisor

# Water Quality Monitoring & Assessment Activities

**Darrin Kron, Water Quality Monitoring and Assessment Section Supervisor**

- Gallatin River Assessment Request
  - Under provision 75-5-702(3)
  - Excessive Algae Growth Impairment
  - Added 2020 IR
- Next IR Submittal will be combined 2022/2024
  - Call for data and assessment work
  - Data organization and partial analysis
  - Delayed by implementation of narrative nutrient standards and implementing more pollutant assessment methods





# Water Quality Monitoring & Assessment Activities

Ongoing Monitoring or 303d Assessment Projects:

- Yellowstone River
- Upper Missouri River
- Smith River
- South Fork Judith
- Upper Gallatin
- Gallatin Focus Area
- Bitterroot Focus Area
- Clark Fork River
- Volunteer Monitoring Support Program
- Big Spring Creek
- Clark Canyon Reservoir
- Lake Mary Ronan
- Rattlesnake Creek
- Kennedy Creek
- Goat Creek
- Lake Koocanusa/Kootenai River
- PFAS Statewide
- Clarks Fork of Yellowstone



# Water Quality Monitoring & Assessment Activities

## Assessment Method Development:

### Phase I – Spring 2024

- Dissolved Oxygen – All waters
- pH – All waters
- Ammonia – All waters
- Temperature – Streams/Rivers

### Phase II – With 2022/24 IR

- Wadable Stream Nutrient Assessment  
Method Update - to coincide or follow SB358 rules
- Lake and Reservoir Eutrophication  
(Algae, HABs, Nutrients)
- Large River Eutrophication  
(Algae, Nutrients)
- Use of Fish Tissue Toxics Data  
(Mercury, PCBs, Dioxins)







# Update on Nutrient Water Quality Standards

- Katie Makarowski,  
Water Quality Standards &  
Modeling Section Supervisor

# Transition to Narrative Nutrient Standards

Senate Bill 358 (2021) required DEQ to:

- Adopt rules related to narrative nutrient standards
- Delete references to numeric nutrient standards
- Develop an Adaptive Management Program (incremental watershed approach to protecting water quality).

Consultation with Nutrient Work Group

- 45 meetings since August 2020
- 40 since SB 358 signed into law in April 2021



# Narrative Nutrient Rulemaking

## New Rule I - TRANSLATION OF NARRATIVE NUTRIENT STANDARDS

- Translators identify causal and response variables and thresholds to protect beneficial uses; used to determine if narrative nutrient standard is met

## New Rule II - IMPLEMENTATION OF THE ADAPTIVE MANAGEMENT PROGRAM FOR NARRATIVE NUTRIENT STANDARDS

- New, optional compliance approach implemented within MPDES permitting program to address nutrient sources in watersheds

Circular DEQ-15

Amend and repeal related rules



# Rulemaking Timeline

\*dates subject to change

**2021 to 2024** - Conceptual review and initial drafting;  
Consultation with Nutrient Work Group

**March 8, 2024** – Revised rule package to NWG and WPCAC

**March 15, 2024** - Rulemaking update to WPCAC

**March 18, 2024** - Rulemaking overview to WPIC

**April 16, 2024** - File proposal notice with SOS

**April 26, 2024** - Proposal notice published in MAR

**April 26 – June 10, 2024** - Public comment period

**June 10, 2024** - Public hearing

Respond to comments; modify adoption notice

**September 24, 2024** - File adoption notice with SOS

**October 4, 2024** - Adoption notice published in MAR

Submit to EPA

**NWG** = Nutrient Work  
Group

**WPCAC** = Water Pollution  
Control Advisory Council

**WPIC** = Water Policy  
Interim Committee

**SOS** = Secretary of State

**MAR** = Montana  
Administrative Record

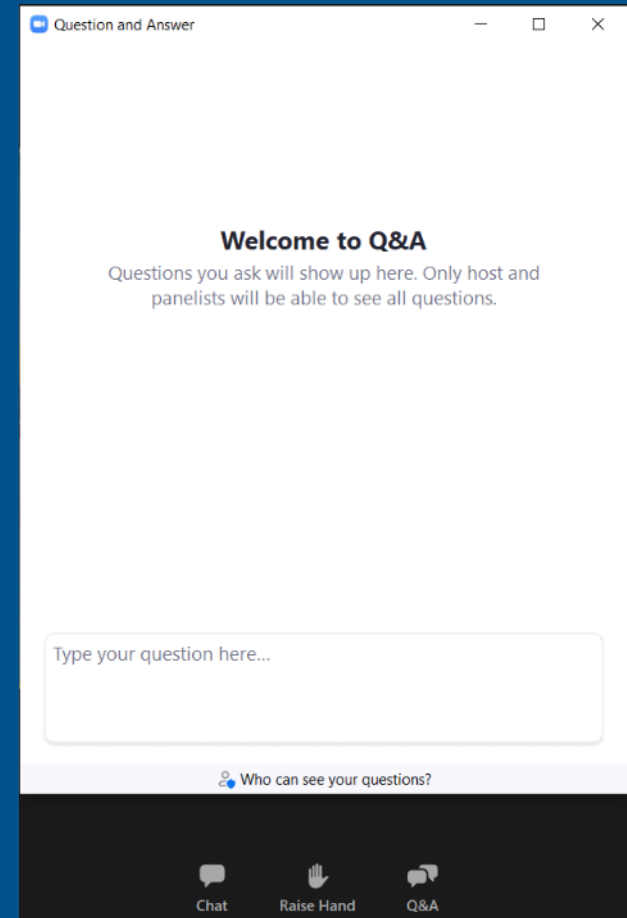
# Close of Meeting

- Discussion of Next Meeting Topics and Meeting Date
- Public Comment



# Questions/ Comments

- Raise hand (\*9 if on the phone) or type questions into the Q&A
- DEQ will unmute you if you wish to provide your comment orally
- If calling by phone, press\*6 to unmute
- State your name and affiliation before providing your comment



Leave

# Thanks for Joining Us

Contact:

Christina Staten, CStaten@mt.gov



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