

NUTRIENT WORK GROUP MEETING SUMMARY

SEPTEMBER 7, 2021

1:30 p.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)
Rika Lashley Morrison-Maeirle	Point Source Discharger: Small Municipal Systems with Lagoons
Alan Olson Montana Petroleum Association	Point Source Discharger: Non-POTW
Kelly Lynch Montana League of Cities and Towns	Municipalities
Tammy Johnson Montana Mining Association	Mining
John Youngberg Montana Farm Bureau	Farming-Oriented Agriculture
Jay Bodner Montana Stockgrowers Association	Livestock-Oriented Agriculture
Haylie Brown (sub. for Kristin Gardner) Clearwater Resource Council	Conservation Organization: Local
Sarah Zuzulock Zuzulock Environmental Services	Conservation Organization: Regional
David Brooks Montana Trout Unlimited	Conservation Organization: Statewide
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
Mike Anderson (sub. for 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

Representative & Affiliation	Representing
Dan Rostad Yellowstone Conservation District Council	Soil and Water Conservation Districts – East of the Continental Divide
Julia Altemus Montana Wood Products Association	Timber Industry

NOT IN ATTENDANCE: NUTRIENT WORK GROUP MEMBERS

Representative & Affiliation	Representing
Pete Schade Lewis and Clark County Water Quality Protection District	County Water Quality Districts or Planning Departments
Scott Buecker AE2S	Wastewater Engineering Firms

ATTENDANCE: OTHER PARTICIPANTS

Aaron Losing, City of Kalispell
 Alan Olson, Montana Petroleum Association
 Amanda McInnis
 Amelia Flanery, DEQ, Surface Water Discharge Permitting
 Amy Steinmetz, DEQ, Water Quality Division Administrator
 Bill Andrene, City of Butte
 Brian Balmer, USFWS
 Brian Heaston, City of Bozeman
 Carl Sundstrom
 Christina Staten, DEQ, Watershed Protection Section
 Christine Weaver, DEQ, Surface Water Discharger Permitting
 Coralynn Revis, HDR
 Cori Hach
 Darrin Kron, DEQ, Monitoring and Assessment Section Supervisor
 Darryl Barton, DEQ, Compliance and Technical Assistance Section Supervisor
 David Clark, HDR
 David Galt, Montana Petroleum Association
 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
 Erik Makus, EPA Region 8
 Galen Steffens, DEQ, Water Quality Planning Bureau Chief
 George Mathieus, DEQ, Deputy Director
 Griffin Nielsen, City of Bozeman
 Haley Sir, DEQ, Surface Water Discharge Permitting
 Hannah New, DEQ, Surface Water Discharger Permitting
 Hannah Riedl, DEQ, Watershed Protection Section
 Heather Henry, DEQ, Surface Water Discharge Permitting
 Heather McDowell, Sibanye Stillwater
 Jane Madison, DEQ, Water Quality Standards and Modeling Section

Jason Mohr, Legislative Environmental Policy Office
Jeff Dunn, WGM Group
Jeff May, DEQ, Surface Water Discharge Permitting
Jeremy Thompson, City of Sidney
Joanna McLaughlin, DEQ, Surface Water Discharger Permitting
Joe Dauner, Calumet Montana Refinery
Joe Lierow, ExxonMobil Billings Refinery
Jon Kenning, DEQ, Water Protection Bureau Chief
Josh Viall, DEQ, Compliance and Technical Assistance Section
Katie Makarowski, DEQ, QA/QC Officer
Kayla Glossner, DEQ, Surface Water Discharge Permitting
Kristi Kline, Montana Rural Water Systems
Kristy Fortman, DEQ, Watershed Protection Section Supervisor
Kurt Moser, DEQ, Legal Counsel
Logan McInnis, City of Missoula
Loren Franklin, KC Harvey Environmental
Lou Volpe, DEQ, Watershed Protection Section
Louis Engels, City of Billings
Mark Ockey, DEQ, Watershed Protection Section
Matt Wolfe, Sibanye Stillwater
Maya Rao, DEQ, Surface Water Discharge Permitting
Michael Kasch, HDR
Mike Suplee, DEQ, Water Quality Standards and Modeling Section
Moirra Davin, DEQ, Public Information Officer
Myla Kelly, DEQ, Water Quality Standards and Modeling Section Supervisor
Pat Cunneen, City of Butte
Paul Skubinna, City of Great Falls
Peggy Trenk, Treasure State Resources Association
Rebecca Harbage, DEQ, Public Information Officer
Rainie DeVaney, DEQ, Surface Water Discharge Permitting Section Supervisor
Rickey Schultz, HDR
Robin Richards
Ron Kuhler, ExxonMobil Billings Refinery
Ryan Leland, City of Helena
Ryan Sudbury, City of Missoula
Shane LaCasse, CHS
Ted Barber, Meeting facilitator
Tom Osborne, Stillwater-Rosebud Water Quality Initiative
Vicki Watson, University of Montana Watershed Clinic

MEETING INITIATION

Ted Barber, meeting facilitator, welcomed everyone to the meeting just after 1:30 p.m. and went over meeting logistics. Ted took a roll call of Nutrient Work Group members present either via Zoom or in Room 111 of the DEQ Metcalf Building in Helena. Ted then handed the meeting over to Kelly Lynch, Municipalities representative, who thanked DEQ for the opportunity to present.

PRESENTATION BY MUNICIPALITIES AND POINT SOURCE DISCHARGERS

See **Attachment A** for the presentation slides. Kelly went over the presentation outline and then turned it over to Bill Andrene, Superintendent of the Butte Silver Bow Wastewater Treatment Plant (WWTP). Bill gave a brief look into Butte Silver Bow's efforts to reduce nutrients discharged to Silver Bow Creek. A new treatment process was brought online in 2016, which Bill stated removes 96% of nutrients. Capital costs associated with the upgrade totaled \$35 million, with an additional \$700,000 per year in operation and maintenance (O&M) costs. There has been continued reductions in nitrogen as the new process has been optimized. Bill then turned it over to Pat Cunneen to talk about the water quality of Silver Bow Creek. Pat showed graphs demonstrating decreasing nutrient concentrations downstream of the wastewater plant's outfall. Pat then discussed seasonal fish monitoring conducted by Montana Fish, Wildlife and Parks and showed a bar graph of fish counts. He stated that fish populations have declined and do not reflect the fact that nutrient concentrations have decreased. Pat believes Silver Bow Creek is being influenced by other factors, such as stormwater and stream temperature.

Rika Lashley, representative for small point source dischargers, then discussed efforts by the City of Deer Lodge to reduce nutrients to the Clark Fork River. Like the Butte Silver Bow WWTP, Rika stated that Deer Lodge was part of the Voluntary Nutrient Reduction Plan that was published by DEQ in 1998, which established nutrient TMDLs for the Clark Fork River and assigned a wasteload allocation of 0 to the Deer Lodge wastewater treatment plant. The idea was that Deer Lodge would land apply all their effluent; however, they have never been able to secure enough land to do so. Therefore, they invested in an activated sludge treatment plant to remove nutrients, upgrading from a four-cell aerated lagoon. Rika stated that Deer Lodge contends with high inflow and infiltration (I&I) rates, which makes treatment ineffective due to dilution. Capital costs associated with the upgrade totaled \$17 million, with an additional \$200,000 per year in O&M costs. Compliance with the TMDL wasteload allocation of 0 has proved impossible and other ways to reduce nutrients will have to be looked for, as further treatment is very costly for little gain. Additionally, a decreasing rate payer base makes additional financial investments difficult.

Paul Skubinna, Public Works Director for the City of Great Falls, then discussed efforts at the Great Falls WWTP, which discharges to the Missouri River. Paul stated that there is no numeric nutrient criteria for the Missouri River and the segment to which they discharge is not listed as impaired for nutrients. Great Falls operated a basic activated sludge plant with secondary settling. An upgrade was completed in 2016 for \$16 million to a three-stage MLE plant. The new plant achieves approximately 77% removal of total nitrogen (TN) and 85% removal of total phosphorus (TP). In 2017, Great Falls began establishing working relationships with local watershed stakeholders (Sun River Watershed Group and local conservation districts) and conducted optimizations in 2019 and 2020. Great Falls is currently evaluating financial options for a future \$65 million upgrade to biological nutrient removal. Paul then discussed water quality monitoring on the Missouri River and stated they are unable to find a statistical difference in TN and TP data upstream and downstream of the facility. Paul then showed pictures taken two weeks ago along the banks of the river and noted that anecdotally they are not seeing a significant response in algae. Paul then discussed nutrient impacts upstream and downstream of Great Falls and questioned whether septic systems and a downstream fish hatchery impact nutrients in the river. Paul concluded by stating that their plant is getting pretty good nutrient removal and they are yet to see a notable impact to the Missouri River, and that collaboration is the best next step in an adaptive management program.

Susie Turner, Public Works Director for the City of Kalispell and large point source dischargers representative, gave an overview of Kalispell's efforts to improve water quality in Ashley Creek, a

western Montana wadeable stream to which they discharge. Susie stated that Kalispell has a 36-year history in treatment and water quality improvements. In response to a 2001 TMDL document produced by DEQ for Flathead Lake, which included a 25% reduction goal for TP, the city invested \$24 million to reduce TN and TP, which was paid for by rate payers. Kalispell then could not achieve the nutrient criteria that was added to their permit and applied for a variance and conducted optimization efforts. Kalispell is currently conducting site-specific sampling and conceptual modeling to look at an alternative analysis to correctly classify Ashley Creek, which has thus far cost \$500,000. Susie stated this effort has been very collaborative with DEQ and their ultimate goal is to have a scientifically based understanding of Ashley Creek and to be held to applicable nutrient criteria. Susie then stated that even if Kalispell were to move to the next phase of treatment, those investments will not meet the water quality goal for Ashley Creek or Flathead Lake and will create a hardship on rate payers. This will push development into unincorporated areas, which isn't smart growth. To conclude her talk, Susie stated that many TMDLs are outdated, cities have made great investments in response to TMDLs, and a one size fits all approach should not be used. A well laid out AMP process can address this issue, as cities want to make sure investments are a benefit to water quality and won't place extreme costs on rate payers that won't improve water quality.

Louis Engels with the City of Billings Water Reclamation Facility discussed the wastewater process for Billings, which discharges to the Yellowstone River. His slide in the presentation shows a football field, with the discharge of the Yellowstone River (approximately 106-foot pool of water over a football field every hour) and the discharge of the reclamation facility (approximately 2 feet of water over a football field every hour) overlain for scale. Louis stated that if Billings wanted to go to the next level of treatment (0.5 pounds of phosphorus and 20 pounds of nitrogen), this would double the energy load required, and chemicals would increase, as well as time and money. If the city went to reverse osmosis, 20% of the water would have to be disposed of elsewhere (injection wells, for example), which is a consideration to weigh. Louis concluded by saying that now is the opportunity to look at the watershed-scale and other areas where we can improve water quality and we need to be cognizant of what the impacts will be if we upgrade the treatment plant.

Amanda McInnis, the technical representative for municipalities, then discussed a common goal of supporting beneficial uses. She stated that a simple dose-response relationship does not exist for nutrients; the relationship is complicated due to other things going on in the watershed, including habitat issues, stream geometry, flow alterations (a wet vs. dry year or irrigation withdrawals), shade or lack thereof, temperature, and climate change. If we simply focus on nutrients and try to control eutrophication without understanding this, we won't be moving toward supporting beneficial uses. This is not a challenge that is unique to Montana; across the country, point sources and regulating agencies are challenged to handle this. Amanda then discussed how other EPA Region 8 states are doing things that could help, including the use of technology based effluent limits (TBELs) applied as an annual median or annual average value. The state of Utah for example has delayed implementation of nitrogen, and there are incentives for early compliance. The slide in **Attachment A** titled "Region 8 Eutrophication Regulation Status" lays out various standards and limits in place across the region.

Dave Clark, technical representative for large point source dischargers, went over a revised version of the AMP flowchart that was submitted to DEQ in June and provided to the Nutrient Work Group (see **Attachment A**). Dave stated this revision to the flowchart adds realism and more details and incorporates feedback loops to recognize this is an iterative process. He stated there is a potential for an AMP to be developed by a third party and the idea of a conceptual watershed approach or model as a framework to guide the process (that mimics the process taking place on Ashley Creek). The "Schedule &

Timeframes” slide lays out that this is not a linear process and shows timeframes and task responsibilities. The following slides break down each portion of, or block of time in, the AMP process, beginning with a watershed assessment and ending with annual reporting that will support the entire process and keep track of trends. Dave then discussed the idea of a conceptual watershed model (see **Attachment A**). This slide shows stressors of what may impact the watershed across the top, and the body of the diagram shows causal pathways and impacts to beneficial uses. Biological responses are shown horizontally on the bottom.

Dave then discussed effluent limits in an Adaptive Management Plan and stated that it should be recognized that it may not be possible to begin an AMP by knowing what the final inputs of nutrients should be, as this will evolve over time. He stated that it may be infeasible to identify numerical effluent limits in the interim. There can be non-numeric limits in permits: narrative effluent limits based on best management practices (BMPs). Dave concluded by stating the AMP is the best management approach.

Amanda explained what the municipalities and point source dischargers think the AMP framework should look like. She took DEQ’s slide of “Example Permit Conditions Through Time” presented at the August 25 Nutrient Work Group meeting and overlaid blue boxes to show what they think makes sense (see **Attachment A**). A main change is that rather than including response variables in an MPDES permit, they would only be included in the adaptive management plan that is referenced in the permit. Another difference is the consideration of examining whether a waterbody’s classification is appropriate at the start of the process, as well as reviewing impairment determinations. The first phase of the process would also include development of a conceptual watershed model. Amanda stated that if utilities have made big investments, and further investments don’t make a material difference, this question should be asked at the beginning of the process. The next slide “Key Decision Points” was also revised from DEQ’s August 25 Nutrient Work Group meeting presentation. The main change is that reasonable potential analysis is removed from the MPDES permitting process and replaced with “additional actions developed in the AMP.” Amanda stated that all the permit will do is reference the AMP. She further stated that if at the end of the process, you’ve done everything you can do and the stream still doesn’t support its beneficial uses, you need to look at stream reclassification.

Amanda then discussed the nexus between TMDLs and adaptive management plans. She stated that several TMDLs in Montana have wasteload allocations based on old numeric values, and that EPA supported the idea of adaptive management planning as a TMDL, which she referred to as an alt-5 TMDL. She said we also heard Wisconsin talk about this in their August 30 presentation. Amanda stated that it’s critical to get this nexus fixed and accurate. There is precedent in the MS4 permitting process for moving response variables into TMDLs.

In closing, Amanda stated that driving development out into counties is an unintended consequence and the framework they have proposed is the best framework to implement Senate Bill 358 and an adaptive management program.

Discussion

Mike Suplee, Water Quality Science Specialist for DEQ, stated that looking over the process, he didn’t recall seeing a part in the flowchart where a decision gets made as to whether the narrative nutrient standard is attained or not attained. This was a critical part of the flow chart that DEQ put together. Dave Clark responded that they weren’t explicit as to what point this occurs. Their flow chart is more vague because they think this is a process that continues and the key is to prioritize management

actions. Mike responded that everyone would agree it would be wise that if a watershed was concluded to be in good health and no additional work is needed, a POTW would want to know that relatively soon. In DEQ's system, they (the point source in the healthy watershed) just go into a monitoring feedback loop. Dave responded that this is a good comment and maybe you shift to sampling every couple of years depending on the conditions.

Tina Laidlaw, federal regulatory agencies representative, thanked the presenters for sharing great examples. She also stated she would like to highlight that there are other tools that could be helpful such as variances or site-specific criteria. To address Amanda's points, Tina wanted to remind everyone that Wisconsin has numeric nutrient criteria and variances and to enter the AMP process in Wisconsin, you have to have greater than 50% of your phosphorus load coming from nonpoint sources. Tina then stated she was confused over what will be in a permit limit – just the BMPs? Amanda responded that you could have permit language that references the AMP and the BMPs therein – a lot like a MS4 permit. Amanda also stated you could also pull specific actions from the AMP and make them a specific compliance schedule within a permit – could be done either way.

Vicki Watson stated in the Zoom chat box “Very informative presentations -- but will take a while to absorb all that information. The proposed process looks a lot like the TMDL process in many respects. If the numeric standard is replaced by a narrative standard -- will that narrative standard include avoiding degradation from the reference conditions in each ecoregion? Since that was part of developing the numeric standards for each ecoregion. Will the narrative standard allow degradation from the reference condition down to the point where everyone agrees there is a problem?” Amanda responded that this is a good point. The AMP process is set up well to address that concern. It allows all that other context to come into it besides the numeric values. The numeric values are always part of the conversation along with a whole suite of other considerations. So would we expect degradation below the reference condition? I think we move the focus to supporting the beneficial uses and that's what the AMP is about – supporting the beneficial uses. The numeric values are part of that conversation. The AMPs are not developed in a vacuum; they are public documents done in a stakeholder environment. Dave then stated that this is a challenging question. The way the program addresses it allows us to better understand whether numeric concentration values are attainable or actually necessary. Not sure we can answer the question about degradation past the reference condition.

Guy Alsentzer, environmental advocacy organization representative, stated he is uncertain on relating to the regulatory context we're working on. He doesn't see how we reconcile EPA rules about anti-degradation with this approach. This doesn't jive with the Clean Water Act regulatory structure. He also wanted to echo Tina's comments about the broader context. We need to have a truly watershed-based approach. Montana is pretty remedial when it comes to looking holistically on how we're going to have regulatory controls over other sources. If we want to give Senate Bill 358 a chance, there needs to be other tools in the toolbox – like exercising DEQ regulations over septic and better wetland protections. Things that can be explored and verified. Guy also said we need a broader conversation about other tools that are enforceable.

Mike Suplee then asked Amanda's opinion on the minimum watershed site sampling structure that DEQ proposed (including far field sites, are tributary sites necessary, etc.). What are her thoughts on this? Amanda responded that she liked the idea of logical upstream and downstream of POTWs and key tributaries. She further stated the regulatory point is actually the downstream terminus of the HUC unit, however. Some AMPs could have multiple compliance points because they have multiple HUCs. Bigger

dischargers will be fine with a bigger sample size and we probably need something more modest for smaller dischargers – haven't really thought through this through.

Tina Laidlaw then stated she was curious about their thoughts on the proposed response variables and thresholds. Amanda responded she does think some receiving waters have not been classified correctly from the beginning, so maybe the classification on the books is not accurate, but this is the minority of waterbodies. The bed rock of the process goes back to beneficial uses and the beginning step should be revisiting the beneficial uses. The response variables are not black and white. If we have 125 mg/m² as a seasonal average, what if it's 124 or 126? That's not that black and white of a situation and is why we think those kinds of analysis should be done in the AMP. Tina then asked if revisiting the beneficial uses involves collecting data. Amanda responded that you can do a Google Earth use attainability analysis (UAA) in these watersheds pretty quickly - a perfunctory analysis in the beginning. You can see the discord right from the beginning for those waterbodies that are misclassified and can do a one paragraph Google Earth snapshot. Tina followed-up with the statement that EPA would have some thoughts on what would be required for a UAA. Dave Clark added that the ideas about classification may evolve through the AMP process where we learn over time and are better informed as to whether the classification is appropriate and whether beneficial uses can be attained. Dave also stated that a UAA is not a trivial undertaking, and you need a fair amount of maturation of process to support a UAA.

Dave further stated that the way Mike presented things was useful in a conceptual watershed model as a guideline in assessment. However, it is problematic if trying to connect numerically to effluent limits. Questions about spatial and temporal exceedances come into play. We shouldn't be applying these upstream and downstream of a point source discharge. We need to look at allowable spatial and temporal exceedances and whether or not we're achieving support of the beneficial uses through the impaired segment – not a concentration of TN and TP and not a bright line concentration of chlorophyll a benthic algae.

Paul Skubinna wrote in the chat box "On behalf of Great Falls we are interested in seeing a relatively specific concept of what the AMP should look like, similar to what was presented today, from other stakeholders." He further stated that perhaps we can find common ground from other presentations.

Kristy Fortman, Supervisor of DEQ's Watershed Protection Section, stated she heard an emphasis put on addressing nonpoint sources throughout watersheds, which she thought was great. She further stated that she was curious to see if they had thoughts about where the additional funding would come from for those processes. The Wisconsin presentation detailed out that the permittees pay for the projects. Amanda responded that this is the 64 thousand dollar question, and the one thing she liked about Wisconsin is that they have a separate nutrient reduction grant program that prioritized grant dollars based on dollars per pound of nitrogen or phosphorus. She said she liked the structure that you get the most bang for those nonpoint dollars, but thinks that's a separate state-funded program and she didn't have great solutions as to who pays. Dave Clark stated that USDA provides a number of assistance programs through NRCS and things can be done by leveraging other funding sources that go beyond Clean Water Act funds. Kristy responded that Montana has a resource grant working group that includes the NRCS and the state uses the group to stretch out dollars as much as possible.

Kelly Lynch stated in the chat box "To Kristy's point, I think the municipalities think this could vary widely based on the watershed covered in the AMP. Who are the stakeholders? What resources do they bring to the table? Where can state and local resources be prioritized within an AMP and across AMPs in the state? The AMP process will allow us to better target those actions that will give us the best, quickest

results statewide.” Kristy responded verbally that several of our watersheds that have TMDLs also have a watershed restoration plan (WRP) that details out this information. WRPs often don’t include point sources, so this is where they could get in.

Vicki Watson stated in the chat box "Just FYI -- the numeric standards for benthic chlorophyll were correlated with river users view of whether beneficial uses (recreation) were being supported -- and this was published in a peer reviewed paper by Mike Suplee.”

Christine Weaver, a DEQ surface water permit writer, wrote in the chat box “As a permit writer, I am trying to envision how we would permit the "now" protection vs the long-term continuous improvement protection that might be possible through the AMP. One slide earlier mentioned state(s) use of TBELs for point source TN/TP limits. Would cities and towns be supportive of limits similar to the old Circular 12-B HAC limits, as TBELs?” Note that HAC stands for highest attainable condition. Amanda McInnis responded that this is a good comment, and they need to think about that a little.

RULE VS GUIDANCE DOCUMENT

Mike Suplee gave an overview of what will be contained in rule versus a guidance document. He stated that rules are things that have the force of law – typically adopted in the Administrative Rules of Montana (ARM) or in a circular. Circulars are referenced in the ARMs and they too have the force of law. Both are public noticed and go through a public comment period. DEQ responds to public comments and then adopts the rules and circular. In contrast, guidance is not in rule, does not require a public hearing, and changes to those documents can be made in the document and recorded in the document’s history. Guidance documents contain a history table at the front that details the different versions and what was modified through time. Guidance documents do not have to go through rulemaking.

Example of a rule would be: When an AMP monitoring plan is submitted to DEQ, at a minimum, it shall include “a watershed that is defined, at a minimum, by its upstream extent, its downstream extent, the principal tributaries if any need to be included, and the main sampling location to be monitored for the purposes of assessing sources and the direct effects of the point source.” This statement lays out what sites would be needed at a minimum but doesn’t say how to locate them. The guidance document that would be associated with this part of the rule would provide additional detail on this. The department has a spreadsheet available to provide the distance estimates, and the guidance would also recommend what to look for when carrying a site reconnaissance. All those latter things are guidance – they all basically back up and support the rule which says you have to have sites and take a look at these things.

Discussion

Rika Lashley asked why the guidance document has to be done at the same time as the rule language, given that we have so little time. Mike Suplee responded that the devil is in the details. There are certain aspects of this work that the guidance document can point to that we already use. The chlorophyll-a SOP, etc., for example. If we point to a requirement in the rule but no one has any idea how we’re going to do it, that tends to lead to problems. The guidance document could be developed later, but in this case, there are strong feelings that we should get all things developed largely at the same time.

Tina Laidlaw asked if DEQ is including the response variables and thresholds in rule or guidance. Mike responded that those will be in the Circular, and therefore, in rule. But the process by which you collect that data will be in guidance.

George Mathieus, DEQ Deputy Director, stated that he's willing to be persuaded otherwise, but we have to put a package together that EPA approves and understands how we're going to protect water quality and beneficial uses. If there's another way to do it, which is part of the reason EPA is involved in this dialog, I'm all ears.

Rika Lashley asked if there's any way to leave a back door open in the rule. We all agree we don't have enough time to do this. Not a back door to water things down. Is there a way to revisit things or improve them in the future? How much does the rule nail us down? Mike Suplee responded that the guidance document isn't strictly part of the rule package. The rule package contains the rule itself and the Circular and those need to be finalized once we submit them. If want to change those documents after that, we have to go through this rulemaking process all over again. A guidance document, however, could be changed next month.

Kelly stated in the chat "I have mentioned this before, but I still think there is a process for us to adopt an AMP framework to meet the March 1 deadline in SB 358, but follow it up with continued work of this group to develop a full detailed rule package for the implementation of the AMP that could be submitted to EPA for approval. The March 1 deadline is not an EPA deadline." Kelly then verbally stated that she's trying to make the point that March 1 is not EPA's deadline to submit a rule package to them for approval. We could get to the intent of Senate Bill 358 by adopting something by rule that is more of a higher level framework for what we want to see and continue in the following months to come up with a detailed rule package that fills in what we want to see. Amy Steinmetz, DEQ's Water Quality Division Administrator, responded that the first step would have to be extremely vague and where does that get us? Amy then asked Kelly to clarify what she sees the first step looking like. Kelly responded that by March 1, we have to adopt a rule that provides for the development of an AMP. We could get to that point with a very high level framework of how we'll be developing an AMP framework. George Mathieus responded that he sees what Kelly is getting at. However, how do we run a permitting program in the meantime? Kelly responded that she doesn't see it as any different between now and March 1 – continue to do what you're doing now. George followed up by asking Tina's thoughts on that. George further stated that to him, we're sort of in a holding pattern right now. Part of Senate Bill 358 requires us to repeal Circular DEQ 12-A. Once we repeal, where are we without a well laid out definitive program? Kelly responded that she doesn't think that 358 requires you to repeal by March 1.

Ed Coleman with the City of Helena wrote in the chat box "Is there a ballpark estimate as to when the draft rule, guidance, circular will be ready for public dissemination?" Mike Suplee responded that the plan is to have something ready by the end of September for internal review and then get something for people to look at in the early part of October.

PUBLIC COMMENT

Public comment was taken during the meeting and is incorporated into the "Discussion" sections above. Time was also taken at the end of the meeting for additional public comment, but none was received.

CLOSE OF MEETING

The next Nutrient Work Group meeting is scheduled for September 22 from 9 to 11 a.m. A listening session is also scheduled for September 23 from 1 to 3 p.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	Update the AMP flowchart and supporting materials based on TSC feedback	DEQ	In progress
2	Define what P prioritization means	DEQ and TSC	Pending
3	Define roles and responsibilities of DEQ and permittees for AMP process	DEQ	In progress
4	Identify and define what is needed to determine how far upstream and downstream monitoring should occur for a point source	TSC	In progress
5	Put together case study of what DEQ thinks is a reasonable minimum of data collection for large rivers	DEQ	In Progress
6	Provide documents in advance of NWG meetings	DEQ	Ongoing
7	Add timeframes to the Adaptive Management Program flowchart	DEQ and TSC	Ongoing
8	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	Moirra Davin, Christina Staten	Complete

Complete Action Items			
#	Action	Who	Status
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
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

Questions/Topics Flagged for Future Discussions	Meeting Date
Tina asked when will the Monitoring Plan be submitted (is that part of the permitting application)? When will the public get to review what is being proposed for monitoring? Will DEQ have monitoring guidance?	6/10/21
How exactly the public process is incorporated into the different steps in the AMP need to be worked out and flagged that for future discussion.	6/10/21
Consider developing a case study to guide the MT process.	6/10/21
Tina noted, there is talk about doing some downstream analysis, but it could also be that elevated concentrations of nutrients could contribute to an issue that just hasn't yet been manifested, so EPA will be curious how the state plans to address that piece.	6/10/21
Discussion on the nexus between TMDLs and AMPs.	6/10/21
Tina asked where does the NPDES permit application process fit in to this whole process?	6/10/21
Define roles and responsibilities of DEQ and permittees in AMP process	6/21/21

Questions/Topics Flagged for Future Discussions	Meeting Date
How will DEQ apply existing TMDLs- what is the interplay of AMPs and completed/approved AMPs	6/21/21
Define P prioritization and what is intended as site-specific factors.	6/21/21

**ATTACHMENT A: SEPTEMBER 7, 2021 NUTRIENT WORK GROUP MEETING
PRESENTATION SLIDES**