Nutrient Work Group

March 23, 2022

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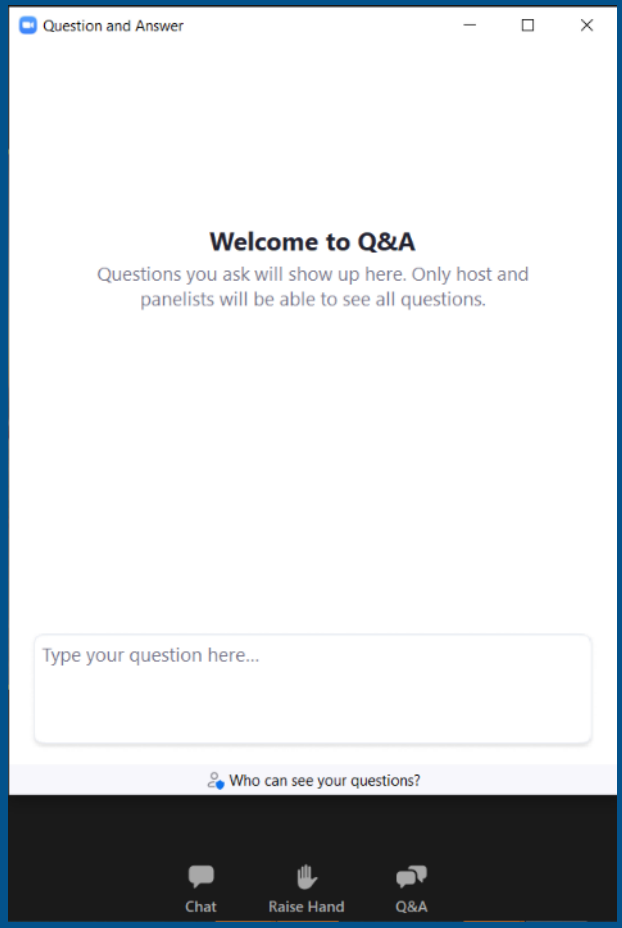
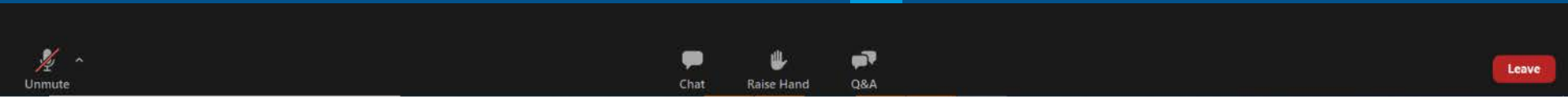
Welcome!

- This meeting has been converted to a webinar
- NWG 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





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Agenda

Meeting Goal: Discussion of items 4 and 5 of discussion proposal document

Preliminaries

- Nutrient Work Group Roll Call
- Follow-up Items

Discussion Document

- Items 4-5 of Discussion Document
  - Proposed Solutions
  - Nutrient Work Group Dealbreakers
- Additional topics as time allows

Public Comment & Close of Meeting

- Public Comment

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Introductions

Nutrient Work Group Members

Interest Group	Representative	Substitute
Point Source Discharger: Large Municipal Systems (>1 MGD)	Louis Engels	
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	Nick Banish	
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	

Group Discussion

- We want to hear from all of you, this is your opportunity to speak into the process
- You are welcome to send us solution-oriented suggestions and we will share them with the team
- We will listen and review all input
- DEQ will take all of the information and make a decision based on science and law.
- DEQ will communicate the decision and reasoning to the group and we will move forward to the next decision point.

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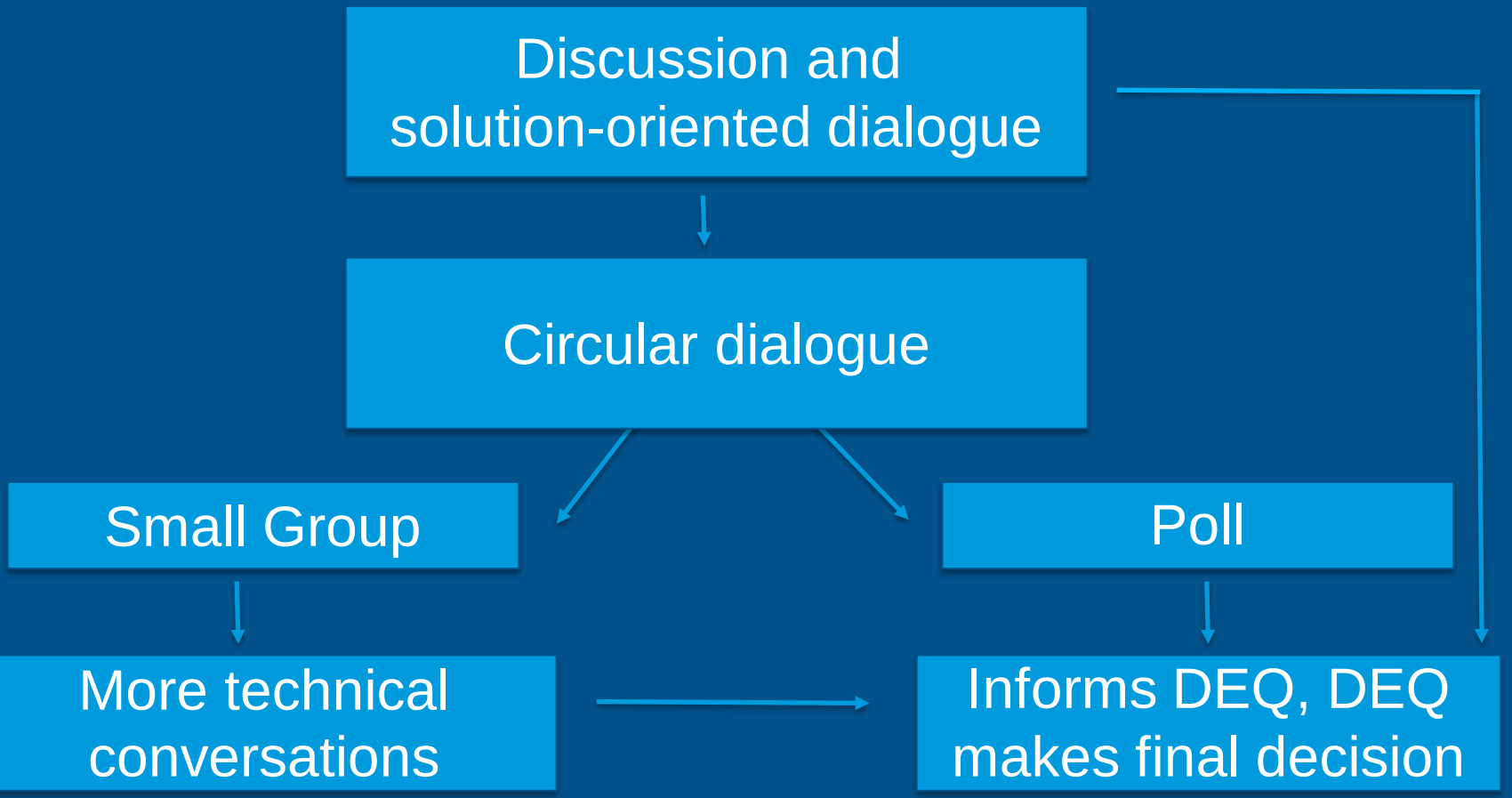
Decision-Making Tree

DEQ is the Final Decision Maker



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Presentation Option

Montana Water Quality Act / Water Quality Planning Process Overview

- **1 hour**
- **Open to the public**
- **If yes, will send a Doodle poll to NWG members to pick a date**

Recap

- Timeline
- Framework rule update
- Nutrient data sources
- Discussed 2d - 3

DISCUSSION DOCUMENT

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4-5

Crosswalk Between League's Proposed Discussion Outline and (1) the Framework Rule and (2) the 10/18/2021 Department Documents (Rule, Circular DEQ-15, Guidance).

Subjects in blue were added to the League's proposal and are subjects that DEQ needs to include and address.

		Associated Section of Existing Documents				
League Topic	**Short Description**	**Framework Rule**	**10/18 Rule**	**Circular DEQ-15**	**Guidance**	**Associated Comment(s) on 10-18-2021 Drafts**
4) Assessment of Treatment Options, Resulting Load Reductions, and Associated Cost	Each point source must provide information regarding current & potential treatment options, their potential load reductions, costs associated with different options, and feasibility	not addressed	New Rule X (4)(a)(i) and (iii) only address this indirectly.	Section 8.3.1	Sections 3.6.7 and 8.3.1.	**Adaptive** Management Program means (c) identifying and assigning treatment options to all discharger in the watershed, considering the relative cost of their feasibility, and the expected water quality improvement, in determining whether to enforce such options or create voluntary incentives and programs for administration by DEQ (League, Industry).
5) Identify and Prioritize Actions for Nutrient Reduction in the Watershed						
5a	Collaboration between permittees, stakeholders, & DEQ to identify actions/tools to reduce watershed nutrients. DEQ to allow permit compliance flexibilities for experimentation with new technologies.	New Rule I (1)(a)(ii)(B) and maybe New Rule I (1)(d)	New Rule X (4)(a)(ii)	Section 8.2, Section 8.3.2	not addressed	**The** permittee has no authority to impose the monitoring plan or the implementation plan on anyone else, including other point and nonpoint sources. (Industry, Eng)
5b	Identify funding sources	not addressed	New Rule X (4)(a)(iv)	Section 8.4	Section 8.4 (placeholder section)	**New** Rule X(4)(a)(iv) requires demonstration of "the ability to fund and implement the plan," yet the permittee has no authority to implement anything beyond its discharge.
5c	Prioritize actions based on cost, feasibility, and degree of expected nutrient reduction	not addressed	not addressed	not addressed	not addressed	**Adaptive** Management Program means (c) identifying and assigning treatment options to all discharger in the watershed, considering the relative cost of their feasibility, and the expected water quality improvement, in determining whether to enforce such options or create voluntary incentives and programs for administration by DEQ (League, Industry).
5d	Develop a schedule to implement actions and evaluate success of actions taken	Not addressed directly; New Rule I (1)(a)(ii)(B) is generally related	New Rule X (4)(a)(iii) and (v)	Section 4.5; Section 8.5	Section 4.5; Section 8.5; Appendix B	**The** document ...contains no discussion of implementation expectations, schedules, or roles. (League).
5e	Final plan submission to DEQ for review and approval; **how** plan is implemented in MPDES permit or TMDL	New Rule I (1)(b)	New Rule X (1) and (4)(b)	Section 1.0 Flowchart	not addressed	**The** AMP should be separate from the MPDES permitting process, but used to inform permit limits when appropriate, much like a TMDL. Keeping the AMP separate from the MPDES permitting process provides a path for watershed-specific science to be developed that can inform MPDES permits as appropriate, whil recognizing and respecting the legal limits of the MPDES permitting program. Foisting watershed-scale requirements onto the permittee exceeds the authority of MPDES program (Industry). **The** absence of a similar table for permitting and the lack of information that describes how the state will consider the pollutants (i.e., TN and TP) for any reasonable potential analysis fails to provide an adequate level of assurance that MDEQ will identify protective levels of both TN and TP for implementation in NPDES permitting decisions.

Topic 4: Highlights

Each point source must provide information regarding current & potential treatment options, their potential load reductions, costs associated with different options, and feasibility

Bill Proponents Recommendations

- AMP to include analysis of ≥ 2 facility nutrient removal options
  - May include alternatives like land ap, side stream trmnt
- AMP to include baseline watershed nutrient loading calcs
- Develop capital costs projections for each option considered
  - Including cost/pound of P, N removal
- Carry out environmental impact analysis of additional energy demands, chemicals, GHG emissions

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BMP Resources

- Montana's Nonpoint Source Management Plan, Appendix A
- 319 Program's Load Reduction Estimation Guide
- https://deq.mt.gov/water/Programs/sw

A.1 Best Management Practices

Table A.1 BMPs

BMP	Description	References: Guidance documents, internet resources, NRCS Practice Standard(s), other literature	Pollutant									Consultant or Engineer Typically Needed Y/N/?
			Nitrogen	Phosphorus	Sediment	Temperature	pH	Salinity	BOD	Pathogens	Toxic Chemicals	
Agriculture												
Clean Water Diversion	Berms, rain gutters, rain barrels, roofing, reservoirs, infiltration basins, vegetated strips, or other structures used to prevent clean runoff or precipitation from picking up pollutants.	Diversion (NRCS 362), Roof Runoff Structure (NRCS 558), Water and Sediment Control Basin (NRCS 638)	X	X	X	X			X	X		?
Corral / Pen Relocation	Moving part or all of an animal confinement facility to prevent or reduce inundation and subsequent off-site transport of pollutants.	Obstruction Removal (NRCS 500), Fence (NRCS 382)	X	X	X	X			X	X		N
Stream Crossing	A stabilized area or structure constructed across a stream to provide a travel way for people, livestock, equipment, or vehicles.	Stream Crossing (NRCS 578), Fence (NRCS 382)		X	X							?
Off-Stream Watering Facility	A permanent or portable device to provide an adequate amount and quality of drinking water for livestock and wildlife. The purpose of the device and its location should be to encourage or enable livestock to obtain water from a source other than a surface water body, or improve livestock distribution.	Watering Facility (NRCS 614)	X	X	X	X			X	X		N
Filter Strip	A strip of permanent, perennial vegetation placed on the downgradient edge of a field, pasture, barnyard, or animal confinement area. The purpose of the strip is to slow down surface runoff, filter out particulate matter, or absorb and use nutrients. If the purpose of the strip is to take up nutrients, then the vegetation must be periodically harvested in order to prevent nutrient buildup. In this situation, grazing would not	Field Border (NRCS 386), Filter Strip (NRCS 393), Hedgerow Planting (NRCS 422), Vegetated Treatment Area (NRCS 635)	X	X	X	X			X	X		N

SECTION 1 – METHOD SUMMARY TABLES

Table 1-1. Method Characteristics

Method Name	Nitrogen	Phosphorus	Sediment	Pre-construction Field Data Required?	Accuracy (estimate)	Time to Learn and Apply (relative)	Skill Level
BEHI	N	N	Y	Y	M	M	M
FS WEPP	N	N	Y	Y	M	M	M
Livestock Deposition Model	Y	Y	N	N	L	L	L
Mass Balance Equation	Y	Y	Y	Y	M	L	L
Pour Point Monitoring	Y	Y	Y	Y	H	L	L
Region 5 Model	Y	Y	Y	N	M	H	H
RUSLE2	N	N	Y	N	M	H	H
STEPL	Y	Y	Y	N	M	H	H
Y = yes, N = no							
L = low, M = medium, H = high							

SECTION 2 - APPLICABLE BEST MANAGEMENT PRACTICES

Table 2-1. Agriculture

Best Management Practice	BEHI (S)	FS WEPP (S)	Livestock Deposition Model (N,P)	Mass Balance Equation (N,P,S)	Pour Point Monitoring (N,P,S)	RUSLE2 (S)	STEPL (N)	STEPL (P)	STEPL (S)	Region 5 Model (N)	Region 5 Model (P)	Region 5 Model (S)
Alley Cropping					Y	Y						
Animal Trails and Walkways		Y	Y									
Animal Waste System			Y									
Buffer Strip			Y	Y	Y	Y						
Canal Fencing			Y									
Clean Water Diversion					Y							
Composting												
Conservation Cover					Y	Y						
Conservation Crop Rotation - ag fields					Y	Y				Y	Y	Y
Conservation Easements										Y	Y	Y

PUBLIC COMMENT

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Questions/ Comments

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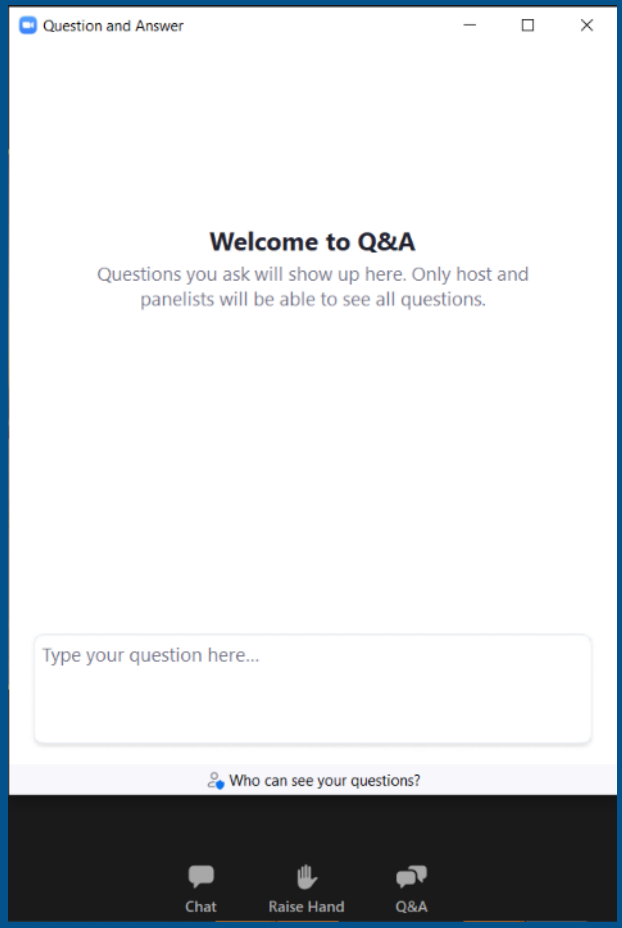
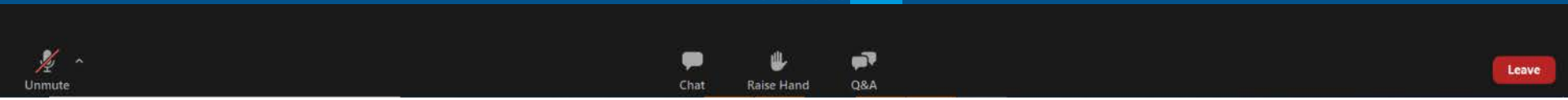
- If calling by phone, press*6 to unmute
- State your name and affiliation before providing your comment





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Next Meeting

- Next Meeting:
  April 13, 2022 at 9 a.m.

Thanks for Joining Us

Contact:
Christina Staten
CStaten@mt.gov

To submit comments or questions

Submit Comments or Questions

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

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