

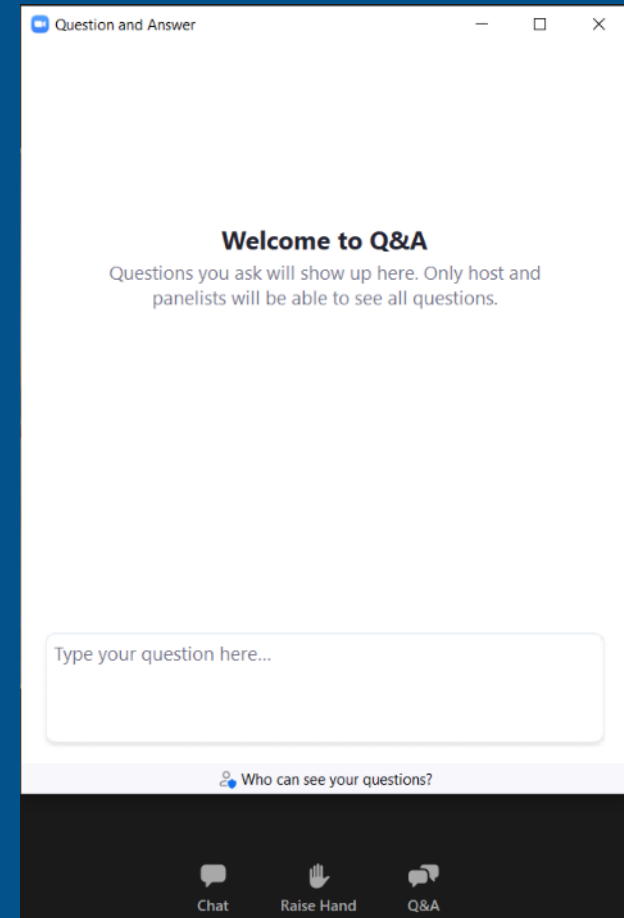


Nutrient Work Group

November 30, 2022

Welcome!

- This meeting is 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



Unmute

Chat

Raise Hand

Q&A

Leave

Agenda

Meeting Goal: Provide and discuss a case study on implementing narrative nutrient standards in MPDES permits

Preliminaries

- Nutrient Work Group Roll Call

DEQ Updates

Case Study

- Overview of the Proposed Process
- Implementing Narrative Nutrient Standards in MPDES Permits

Public Comment & Close of Meeting

- Public Comment
- Next Meeting Date & Topics to Discuss During Session
- Meeting Summary

Roll Call

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	Rachel Cone	
Livestock-Oriented Agriculture	Raylee Honeycutt	
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	None
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	None



DEQ Updates

DEQ Updates

- Welcome Kyle Milke: AMP Scientist
- Updated draft rule package will be available December 5

Remaining Topics to Discuss

- AMP process
- TMDL – AMP interaction
- Addressing EPA's technical comments in August 2021 letter on response variables and thresholds
- Translation of the narrative for all CWA programs
- AMP – MPDES permit interaction
- Reasonable potential analysis
- Nutrient assessment method process
- Protection of downstream uses
- Revised guidance document
- Revised rule language
- Case study



Case Study

Purpose of Work

Development of an adaptive management program which provides for an incremental watershed approach for protecting and maintaining water quality.

- ✓ Reasonably balances all factors impacting a water body
- ✓ Prioritizes the minimization of phosphorus, taking into account site-specific conditions
- ✓ Identifies the appropriate response variables affected by nutrients and associated impact thresholds in accordance with the beneficial uses of the waterbody
- ✓ Considers options pertaining to whether the point source is new or existing and whether the receiving water body is considered impaired or unimpaired

SB 358 & NWG Side-by-Side

SB 358 Section	Description	Rule Package			
	Transition for nutrient standards	New Rule 1	Circular DEQ-15	AMP Guidance	Repealer
1(1)	Adopt rules related to narrative nutrient standards through the NWG.	Addressed primarily through New Rule 1 and Circular DEQ-15. AMP Guidance will provide guidance support for the rules.			N/A
1(2)	Develop an adaptive management program: needs to provide for an incremental watershed approach for protecting and maintaining water quality.	Rule provides incremental approach through focus on TP, flexibility provided to meet effluent limits, and through incorporation by reference of DEQ-15.	Same as Rule but provides additional detail as to phased/stepped approach. Compliance schedule and interim limits.	Addressed primarily through New Rule 1 and Circular DEQ-15. AMP Guidance will provide a more detailed guidance support for the rules. Different department work units may have program-specific guidance.	
1(2)(a)	Reasonably balances all factors impacting a water body.	Rule requires examination of factors impacting a water body and through incorporation by reference of DEQ-15.	Sections 2.0 - 10.0 (Section 8.0)		
1(2)(b)	Prioritizes the minimization of phosphorus, taking into account site-specific conditions.	2(a)(i-vii) provides considerations the department must consider when evaluating if TP prioritization is appropriate for a discharge facility.	Section 3.0 provides additional detail to support requirements in New Rule 1 2(a)(i-vii). Identification of limiting nutrient in waterbody.		
1(2)(c)	Identifies the appropriate response variables affected by nutrients and associated impact thresholds in accordance with the beneficial use of the waterbody.	Rule requires response variable monitoring/continued response variable monitoring to ensure beneficial uses are protected and narrative nutrient standards are achieved.	Section 5.0 addresses response variables and thresholds associated with the Western and Eastern ecoregional zones.		

SB 358 & NWG Side-by-Side

SB 358 Section	Description	Rule Package			
	Transition for nutrient standards	New Rule 1	Circular DEQ-15	AMP Guidance	Repealer
1(3)	In developing subsection (2) rules, the department shall consider options pertaining to whether the point source is new or existing and whether the receiving water body is considered impaired or unimpaired.	Through incorporation by reference of DEQ-15.	Section 10.0	Addressed primarily through New Rule 1 and Circular DEQ-15. AMP Guidance will provide a more detailed guidance support for the rules. Different department work units may have program-specific guidance. Primarily captured in Reasonable Potential Guidance Document - Draft RPA Guidance on website.	N/A
	Board to amend rules				
3	The board of environmental review shall amend ARM 17.30.201, 507, 516, 602, 619, 622-629, 635, and 715 to delete all references to department circular DEQ-12A, department circular DEQ-12B, base numeric nutrient standards, and nutrient standards variances.	N/A			Department now has this authority and will include amendments with overall nutrient rule package.
	Department to amend rules				
4	The department of environmental quality shall amend ARM 17.30.602 to delete all references to department circular DEQ-12A, department circular DEQ-12B, base numeric nutrient standards, and nutrient standards variances.	N/A			Department will include amendments with overall rule package.

Case Study Assumptions

- Municipality upgraded mechanical plant in 2012
- Wadeable Stream
- Phosphorus-limited stream
- Impaired – DEQ has monitoring and assessment data
- TMDL complete – DEQ knows the % of TN and TP in the stream coming from different sources
- No downstream concerns

Reasonable Potential

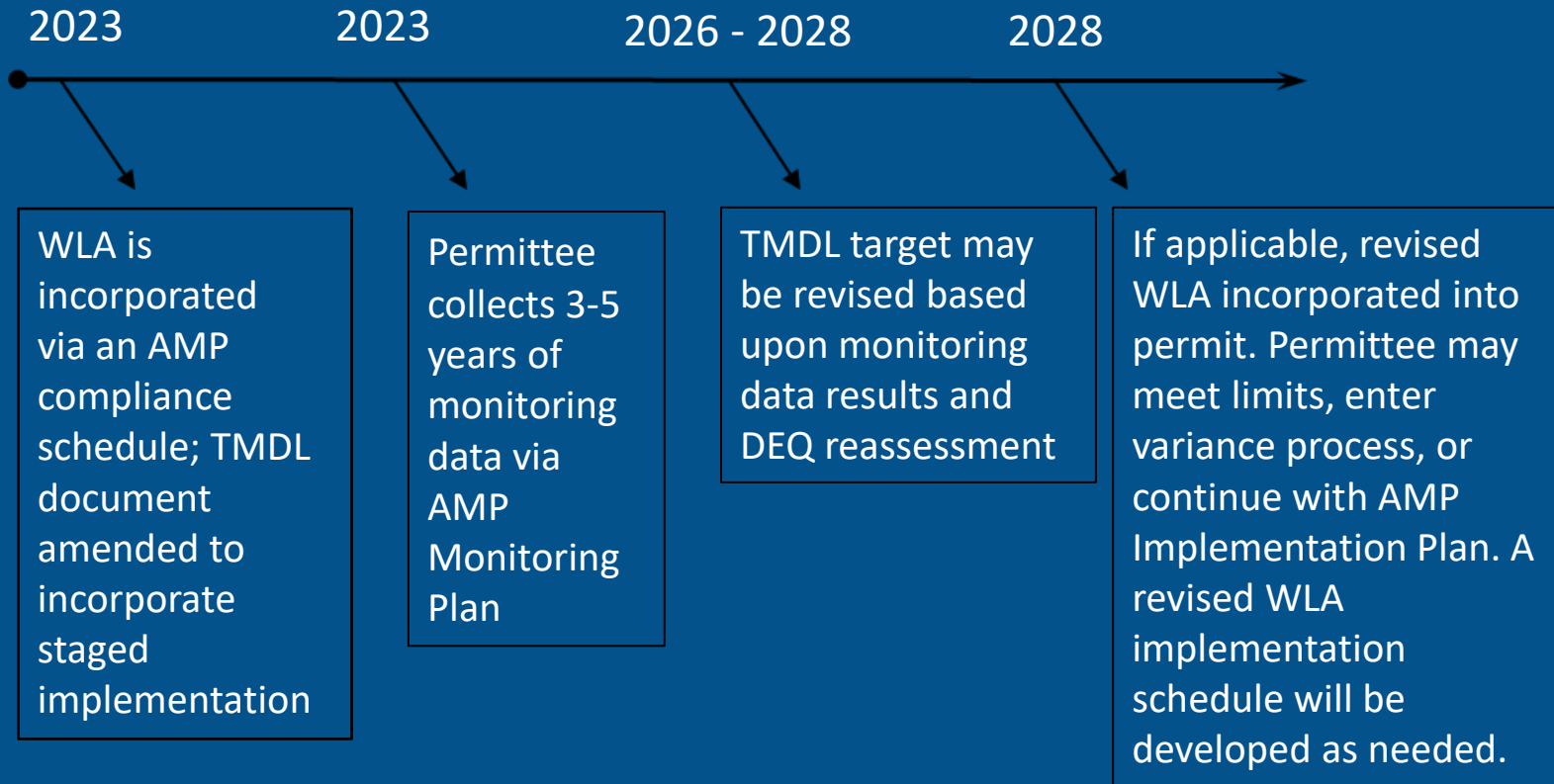
- Impaired = the municipality is contributing to the exceedance of the water quality standard

AMP

- Monitoring indicates most TP in the summer is coming from the municipality, while most TN comes from nonpoint source
 - P-prioritization
- TMDL updates
 - Staged WLA implementation schedule added to existing TMDL to reflect the AMP approach
 - Future: TMDL amended to reflect the narrative standard and AMP data
- AMP establishes optimization targets and watershed priorities

Staged WLA Implementation

When the TMDL target represents concentrations below the current limits of treatment technology for TN or TP:



Numeric Permit Limits (TP-based)

- Permit keeps existing TN limits
- Existing TP limits remain until 4 years after issuance.
- New Interim TP limits (beginning year 4)
 - Consistent with the AMP
 - TP concentration of an optimal plant (for example 1.0 mg/L)
 - DEQ found TP can be reduced on average 25% through basic optimization
- Final effluent limits (beginning year 15)
 - Compliance-schedule-like: Data from the impairment listing indicates the high end of the ecoregional range is appropriate
 - Variance-like: highest attainable condition (HAC)

Narrative Limits

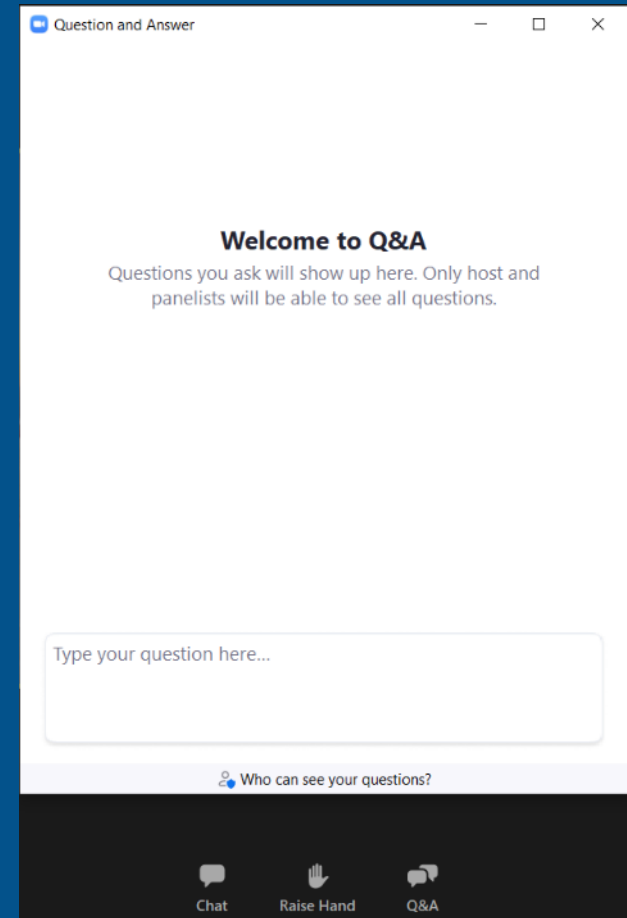
- Optimization of the wastewater treatment plant (WWTP)
- Report on potential for nutrient trading capacity of the watershed
- Identify approaches to public outreach and education on nutrients
- Investigate regulatory approaches to managing septic systems to extent allowable under State or local law.



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



Unmute

Chat

Raise Hand

Q&A

Leave



Next Meeting

Next Meeting

- Wednesday, December 14, 2022, 9 – 11 a.m.
DEQ encourages NWG members to attend in person

Topics to Discuss During Session

- MEANSS Model and Nutrient Trading
- How to select approvable nonpoint source projects / BMPs
- The transition period: interim permit limits and staged TMDL wasteload allocations
- Funding and resources

Meeting Summary

An updated, draft rule package will be available for review on December 5 that reflects the conclusions shown in today's case study, protects water quality through a watershed approach, and meets Senate Bill 358 requirements

Thanks for Joining Us

Contact:
Christina Staten
CStaten@mt.gov

To submit comments or questions



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

