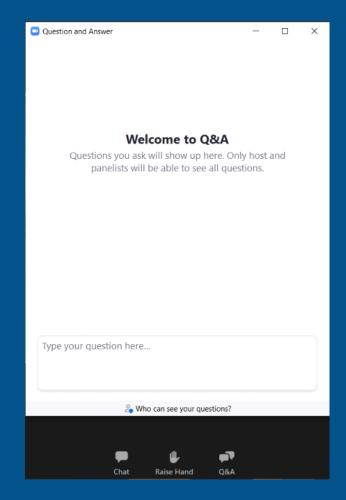




Welcome!

- 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















Agenda

Meeting Goal: Discuss the new rulemaking timeline, reasonable potential analysis, and have a Q&A session to answer questions on the rulemaking documents.

Preliminaries

Nutrient Work Group Roll Call

Rulemaking Timeline Update

Reasonable Potential Analysis

Rulemaking Documents Q&A

Public Comment & Close of Meeting

Public comment



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	Matt Vincent	
Farming-Oriented Agriculture	Karli Johnson	
Livestock-Oriented Agriculture	Ellie Brighton	
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	Pete Cardinal	
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	



Rulemaking Timeline Update



2021 to 2023 - Conceptual review and initial drafting

November 14, 2023 - Final NWG meeting of 2023

December 5, 2023 - Provide materials to WPCAC

December 13, 2023 - Rulemaking presentation to WPCAC

January 16, 2024 - Rulemaking overview to WPIC

January 26, 2024 - Rulemaking update to WPCAC

Rulemaking Timeline

* Dates subject to change

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

NWG = Nutrient Work Group

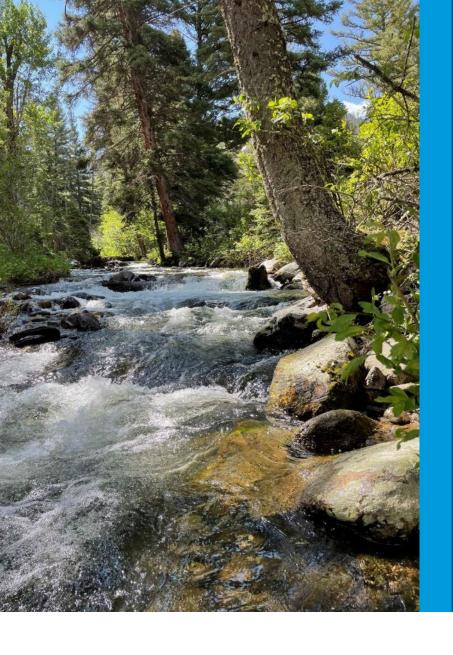
WPCAC = Water Pollution Control Advisory Council

WPIC = Water Policy Interim Committee

SOS = Secretary of State

MAR = Montana Administrative Record

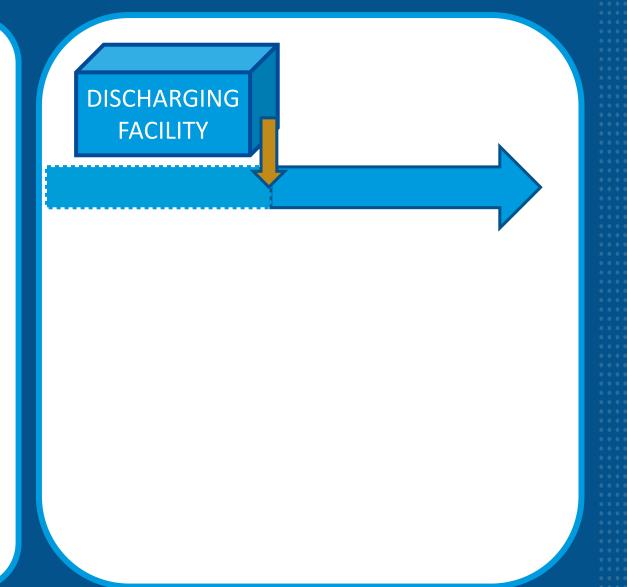




Reasonable Potential Analysis

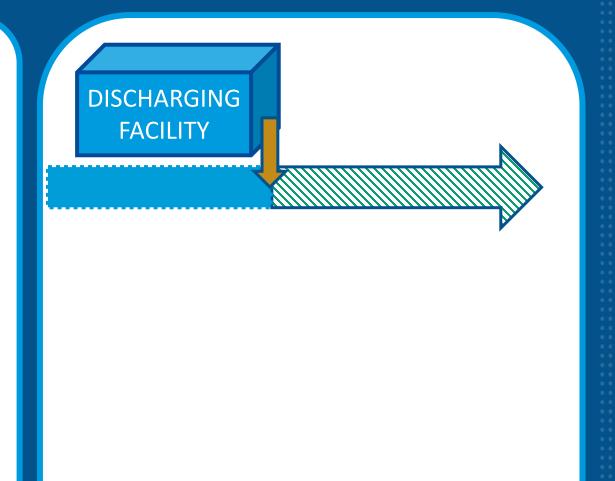


- 40 CFR 122.44(d)(1)(i)



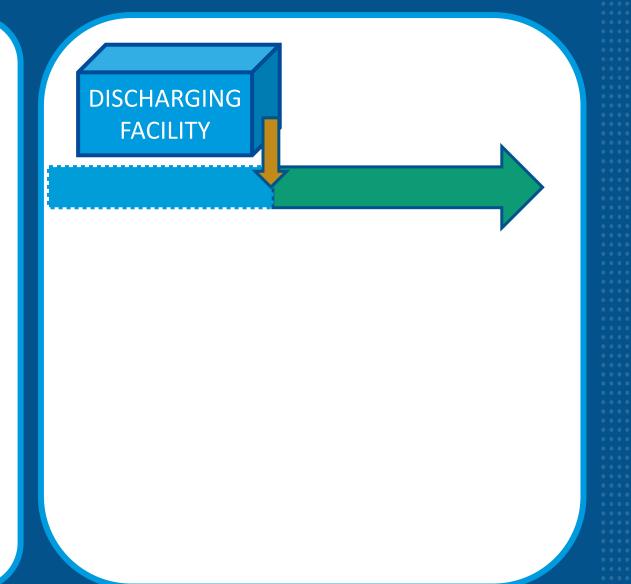


- 40 CFR 122.44(d)(1)(i)





- 40 CFR 122.44(d)(1)(i)





- 40 CFR 122.44(d)(1)(i)

DISCHARGING FACILITY

Quantitative RP, calculated using a mass-balance approach, with preestablished critical conditions:

$$C_sQ_s+C_eQ_e=C_dQ_d$$



- 40 CFR 122.44(d)(1)(i)

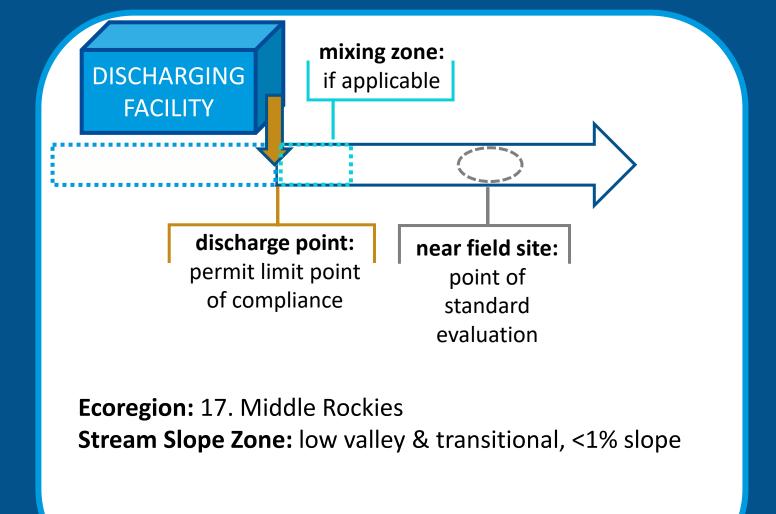
DISCHARGING FACILITY

Quantitative RP, calculated using a mass-balance approach, with preestablished critical conditions:

$$C_sQ_s+C_eQ_e=C_dQ_d$$

This approach is workable for causal variables, but not for response variables.





Benefical Use and Applicable Zone			Causal Variable		Response Variable (threshold)				
Beneficial Use	Stream Slope Zone*	Macroinvertebrate Zone*	TP, TN (<i>see</i> ecoregional nutrient concentration ranges in Table 2-3)	DO Delta [†]	Benthic Chla; AFDW	% filamentous algae bottom cover	Macroinvertebrates		
Recreation	Western and transitional ecoregions, <u>all</u> stream/medium river water surface slopes	n/a	х		X (150 mg Chla/m²; 35 g AFDM/m²)	X (30% cover)			
Aquatic Life	Western and transitional ecoregions, streams/medium rivers with ≤1% water surface slope		х	X (3.0 mg DO/L)			X Beck's Biotic Index v3 (18.7)		



	В	enefical Use and Applicable Z	one	Causal Variable	Response Variable (threshold)				
Benefici	ial Use	Stream Slope Zone*	Macroinvertebrate Zone*	TP, TN (see ecoregional nutrient concentration ranges in Table 2-3)	DO Delta [†]	Benthic Chla; AFDW	% filamentous algae bottom cover	Macroinvertebrates	
Recrea	ation	Western and transitional ecoregions, <u>all</u> stream/medium river water surface slopes	n/a	х		X (150 mg Chla/m²; 35 g AFDM/m²)	X (30% cover)		
Aquatio	ic Lite	Western and transitional ecoregions, streams/medium rivers with ≤1% water surface slope	Low Valleys and Transitional ^a	х	X (3.0 mg DO/L)			X Beck's Biotic Index v3 (18.7)	

RECREATION CRITERIA

Benthic Chl-a:

 $<150 \text{ mg Chl-}a/\text{m}^2$

% fil. algae cover

<30% cover

TN:

 $<980 \mu g/L$

TP:

 $<60 \mu g/L$

AFDW:

 $35 g/ m^2$



E	Benefical Use and Applicable Z	one	Causal Variable		Response Variable (threshold)				
Beneficial Use	Stream Slope Zone*	Macroinvertebrate Zone*	TP, TN (see ecoregional nutrient concentration ranges in Table 2-3)	DO Delta [†]	Benthic Chla; AFDW	% filamentous algae bottom cover	Macroinvertebrates		
Recreation	Western and transitional ecoregions, <u>all</u> stream/medium river water surface slopes	n/a	х		X (150 mg Chla/m²; 35 g AFDM/m²)	X (30% cover)			
Aquatic Life	Western and transitional ecoregions, streams/medium rivers with ≤1% water surface slope		х	X (3.0 mg DO/L)			X Beck's Biotic Index v3 (18.7)		

AQUATIC LIFE CRITERIA

Beck's 3:

> 18.7

TN:

<980 μ g/L

TP:

 $<60 \mu g/L$

DO delta:

<3.0 mg DO/L

Ĺ	Benefical Use and Applicable Zone				Causal Variable		Response Variable (threshold)			
	Beneficial Use	Stream Slope Zone*	Macroinvertebrate Zone*	TP, TN (see ecoregional nutrient concentration ranges in Table 2-3)		DO Delta [†]	Benthic Chla; AFDW	% filamentous algae bottom cover	Macroinvertebrates	
	Recreation	Western and transitional ecoregions, <u>all</u> stream/medium river water surface slopes	n/a		х			X (150 mg Chla/m²; 35 g AFDM/m²)	X (30% cover)	
	Adulatic Lite	Western and transitional ecoregions, streams/medium rivers with ≤1% water surface slope	Low Valleys and Transitional ^a		х		X (3.0 mg DO/L)			X Beck's Biotic Index v3 (18.7)

RECREATION & AQUATIC LIFE CRITERIA

Benthic Chl-a:

 $<150 \text{ mg Chl-}a/\text{m}^2$

% fil. algae cover

TP:

<60 μg/L

<30% cover

TN:

<980 μg/L

AFDW:

 35 g/m^2

Beck's 3:

> 18.7

DO delta:

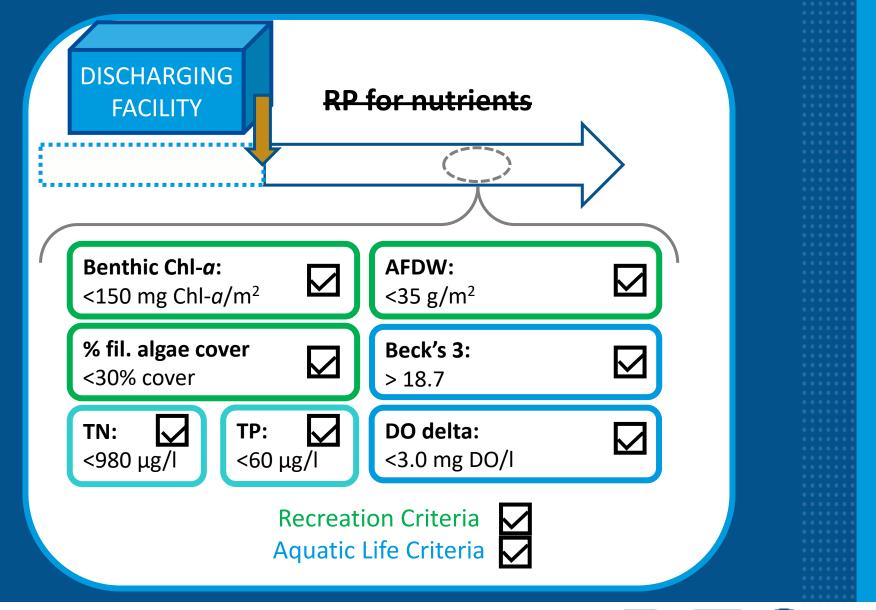
<3.0 mg DO/L

	Benefical Use and Applicable Zone				Causal Variable		Response Variable (threshold)			
Benef	eficial Use	Stream Slope Zone*	Macroinvertebrate Zone*	TP, TN (see ecoregional nutrient concentration ranges in Table 2-3)		DO Delta [†]	Benthic Chla; AFDW	% filamentous algae bottom cover	Macroinvertebrates	
Rec	creation	Western and transitional ecoregions, <u>all</u> stream/medium river water surface slopes	n/a		х			X (150 mg Chla/m²; 35 g AFDM/m²)	X (30% cover)	
Aqua	iatic Life 🚺	Western and transitional ecoregions, streams/medium rivers with ≤1% water surface slope	Low Valleys and Transitional ^a		х		X (3.0 mg DO/L)			X Beck's Biotic Index v3 (18.7)

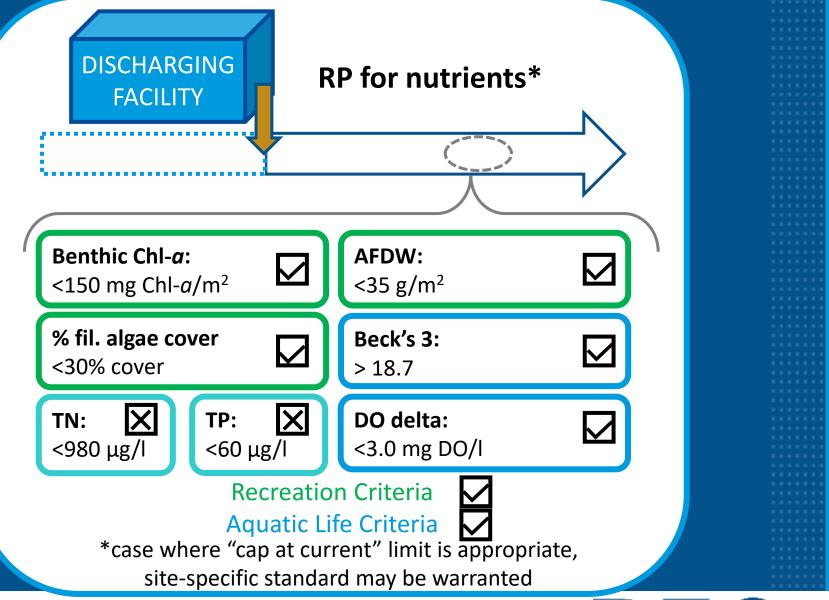
RECREATION & AQUATIC LIFE CRITERIA

Benthic Chl-a: <150 mg Chl-a/m ²		AFDW: 35 g/m ²	
% fil. algae co <30% cover	ver 🔲	Beck's 3: > 18.7	
TN:	TP:	DO delta: <3.0 mg DO/l	

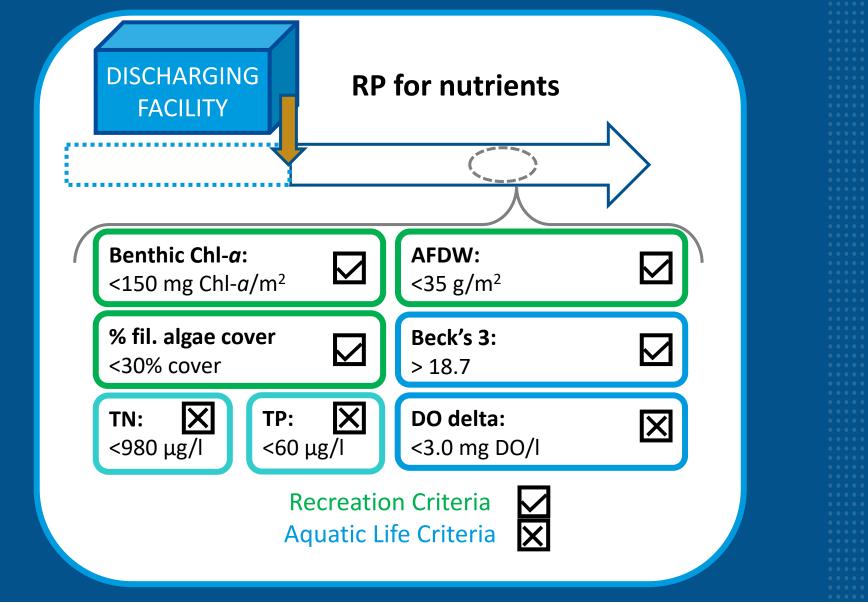




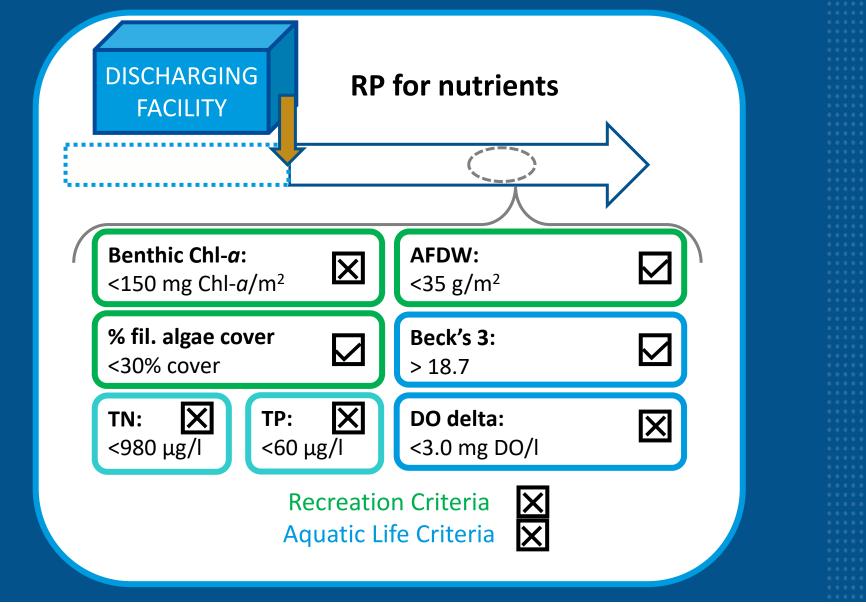




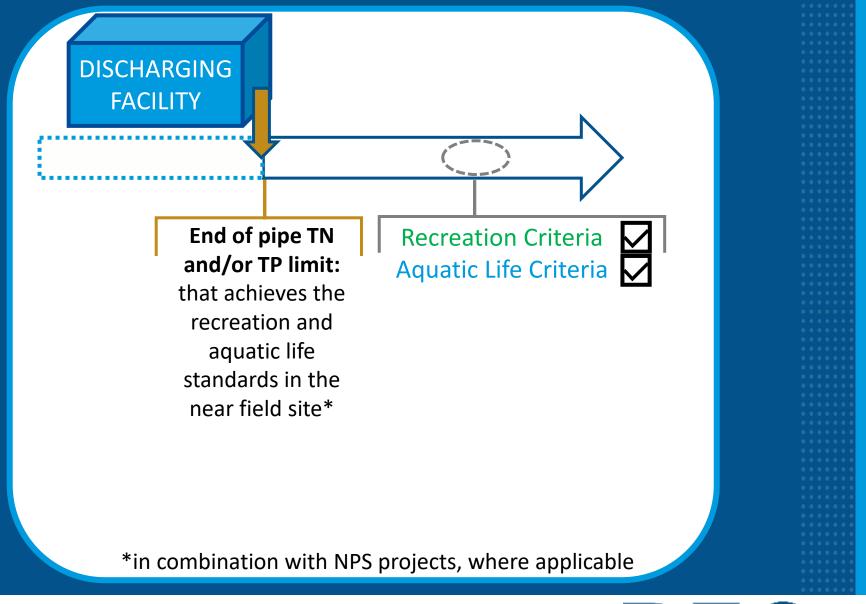




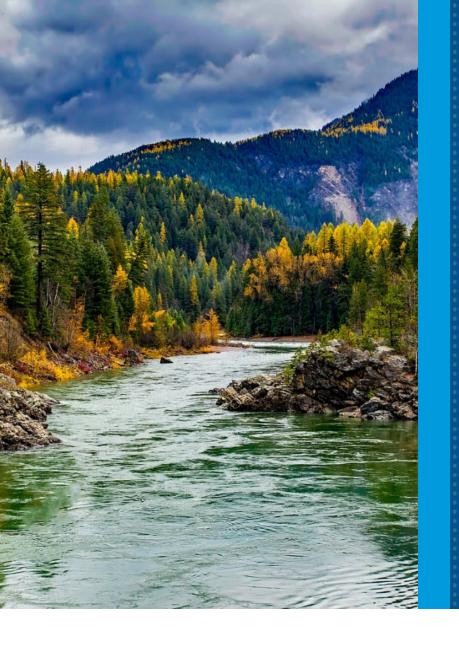






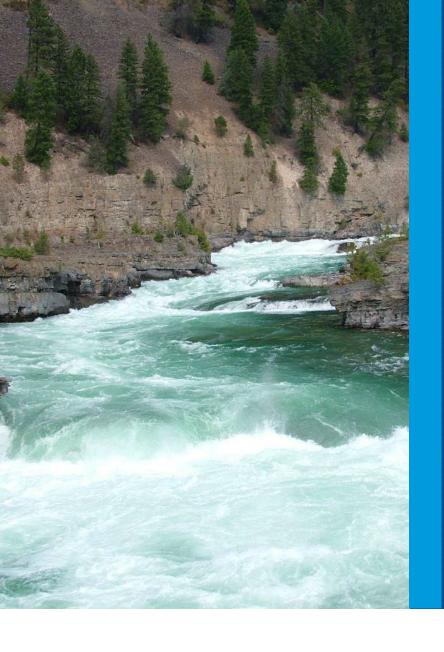






Rulemaking Documents Q & A





Future NWG Meetings



Future NWG Meetings

- DEQ is open to other venues for feedback as needed.
 Some suggestions: a video call between parties, written submitted Q&A, and phone calls to DEQ experts for clarifications
- DEQ values NWG member input and will continue listening as the rules are implemented.
- DEQ anticipates future NWG meetings on an as-needed basis to provide updates and hear concerns.



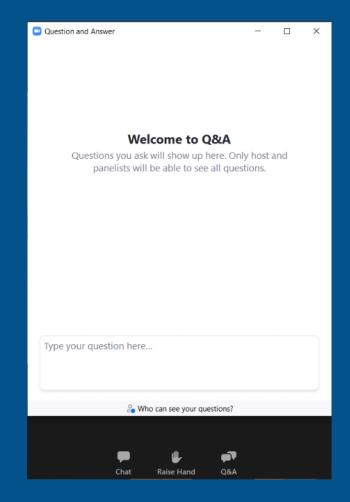


Public Comment



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















Thanks for Joining Us

Contact:
Kyle Milke
kyle.milke@mt.gov

To submit comments or questions





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

