



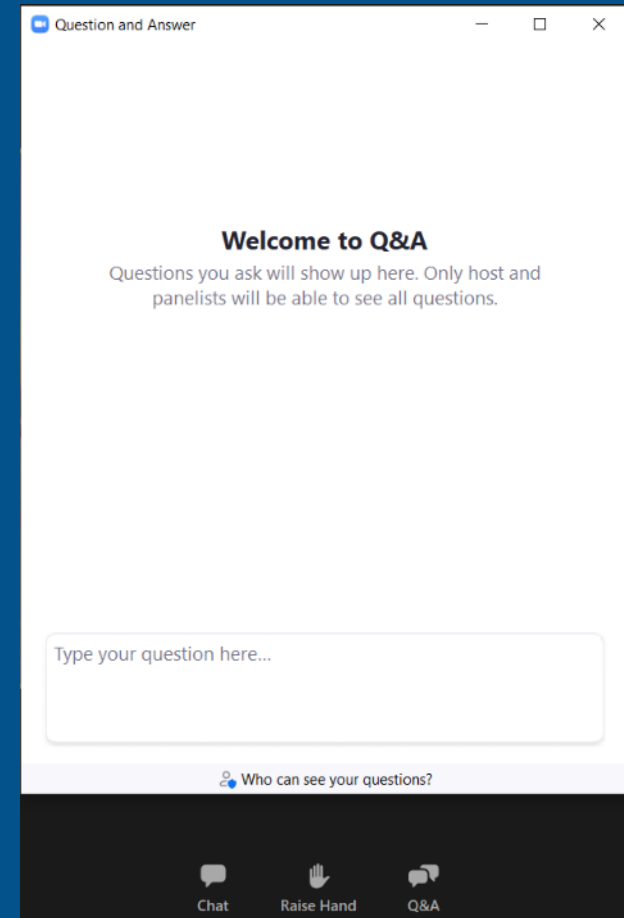
# Nutrient Work Group

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February 26, 2024

# 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: 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

# RULEMAKING TIMELINE

\* Dates subject to change

**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

**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

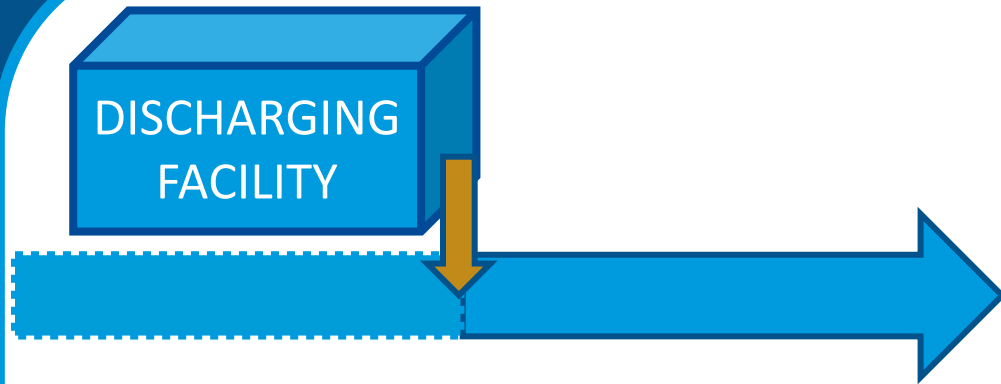




# Reasonable Potential Analysis

“Limitations must control all pollutants or pollutant parameters (either conventional, nonconventional, or toxic pollutants) which the Director determines are or may be discharged at a level which will cause, have the **reasonable potential to cause, or contribute** to an excursion above any State water quality standard, including State narrative criteria for water quality.”

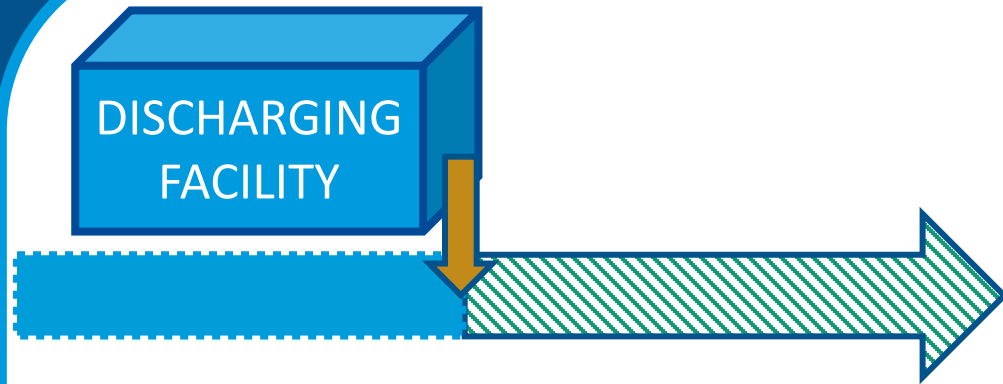
- 40 CFR 122.44(d)(1)(i)





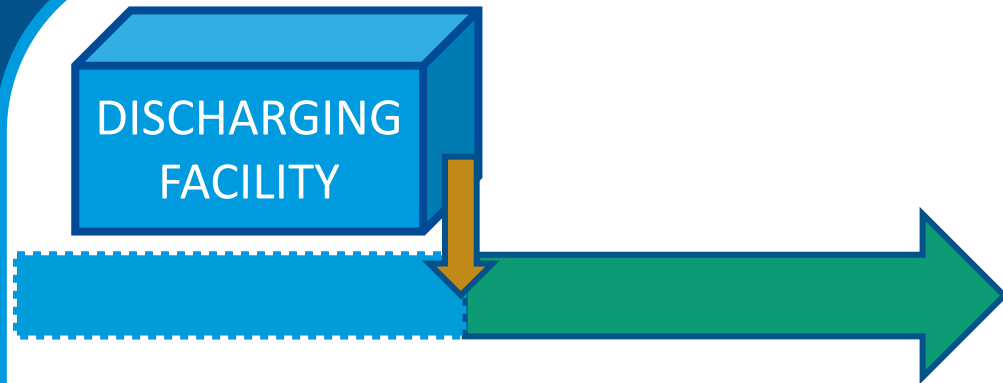
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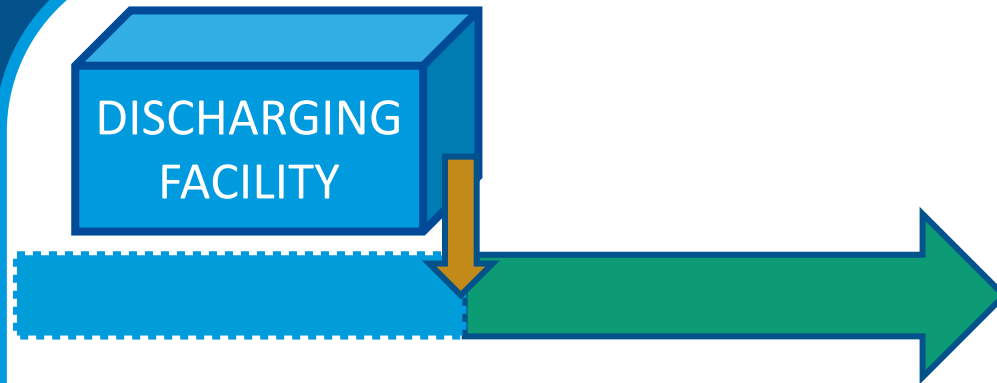
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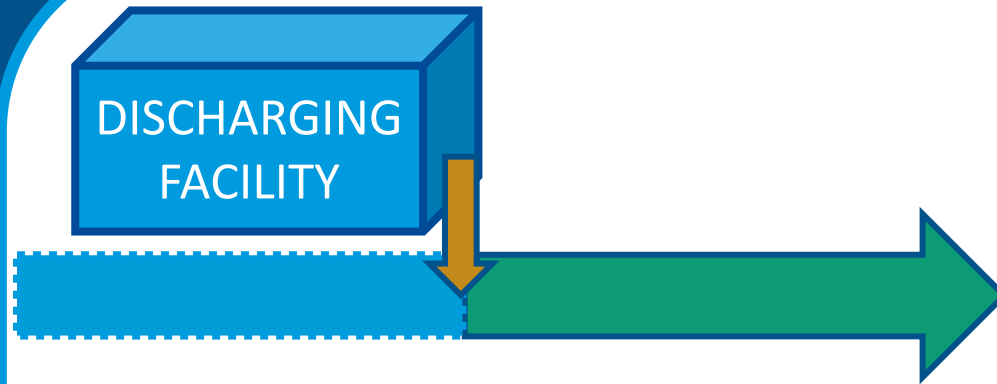


Quantitative RP, calculated using a mass-balance approach, with pre-established critical conditions:

$$C_s Q_s + C_e Q_e = C_d Q_d$$

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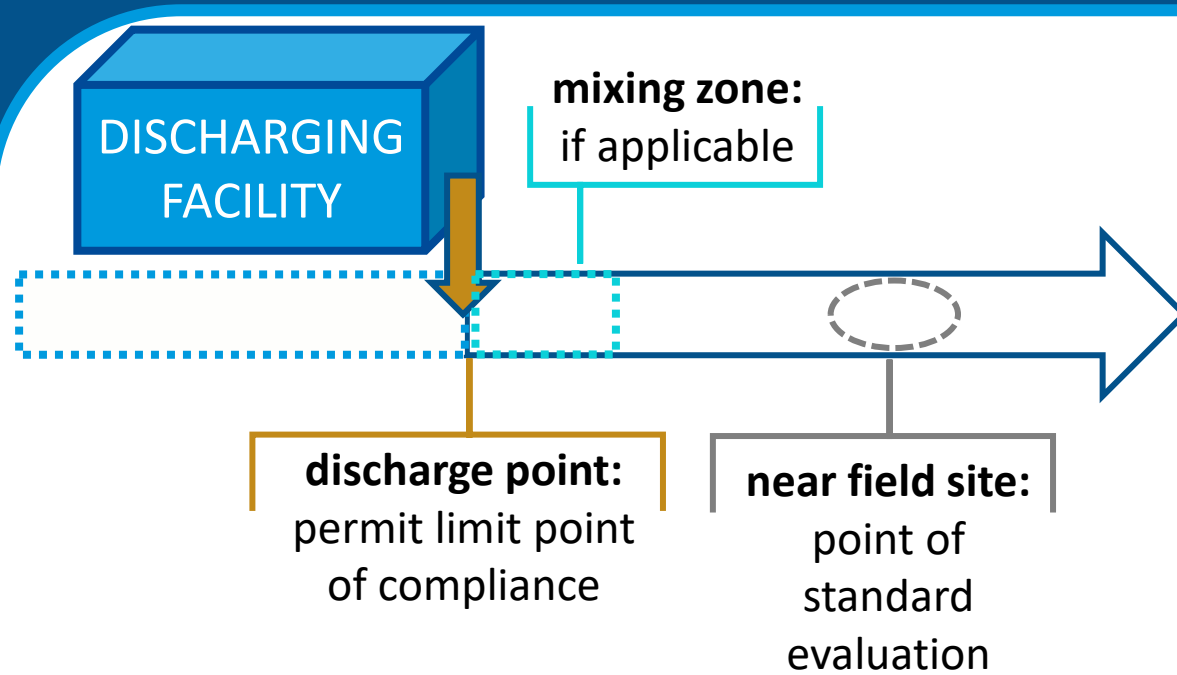
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Quantitative RP, calculated using a mass-balance approach, with pre-established critical conditions:

$$C_s Q_s + C_e Q_e = C_d Q_d$$

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



**Ecoregion:** 17. Middle Rockies

**Stream Slope Zone:** low valley & transitional, <1% slope

## ER: 17 Middle Rockies, low valley & transitional, <1% slope

| Beneficial 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 <sup>†</sup>         | Benthic Chl <sub>a</sub> ; AFDW   | % filamentous algae bottom cover | Macroinvertebrates              |
| Recreation                         | Western and transitional ecoregions, <u>all</u> stream/medium river water surface slopes | n/a                                       | X   |                               | X (150 mg Chl <sub>a</sub> /m <sup>2</sup> ; 35 g AFDW/m <sup>2</sup> ) | X (30% cover)                    |                                 |
| Aquatic Life                       | Western and transitional ecoregions, streams/medium rivers with ≤1% water surface slope  | Low Valleys and Transitional <sup>a</sup> | X   | X (3.0 mg DO/L)               |   |                                  | X Beck's Biotic Index v3 (18.7) |

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### RECREATION CRITERIA

**Benthic Chl-*a*:**

<150 mg Chl-*a*/m<sup>2</sup>

**AFDW:**

35 g/ m<sup>2</sup>

**% fil. algae cover**

<30% cover

**TN:**

<980 µg/L

**TP:**

<60 µg/L

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### AQUATIC LIFE CRITERIA

**TN:**  
<980 µg/L

**TP:**  
<60 µg/L

**Beck's 3:**  
> 18.7

**DO delta:**  
<3.0 mg DO/L



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### RECREATION & AQUATIC LIFE CRITERIA

**Benthic Chl-*a*:**

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**AFDW:**

35 g/m<sup>2</sup>

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**Beck's 3:**

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DISCHARGING FACILITY

~~RP for nutrients~~

**Benthic Chl-*a*:**  
<150 mg Chl-*a*/m<sup>2</sup>



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<35 g/m<sup>2</sup>



**% fil. algae cover**  
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**Beck's 3:**  
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Recreation Criteria

Aquatic Life Criteria



## RP for nutrients\*



|   |                                     |                                      |                                     |
|---|-------------------------------------|--------------------------------------|-------------------------------------|
| <b>Benthic Chl-<i>a</i>:</b><br><150 mg Chl- <i>a</i> /m <sup>2</sup> | <input checked="" type="checkbox"/> | <b>AFDW:</b><br><35 g/m <sup>2</sup> | <input checked="" type="checkbox"/> |
| <b>% fil. algae cover</b><br><30% cover                               | <input checked="" type="checkbox"/> | <b>Beck's 3:</b><br>> 18.7           | <input checked="" type="checkbox"/> |
| <b>TN:</b> <input checked="" type="checkbox"/><br><980 µg/l           | <input checked="" type="checkbox"/> | <b>DO delta:</b><br><3.0 mg DO/l     | <input checked="" type="checkbox"/> |
| <b>TP:</b> <input checked="" type="checkbox"/><br><60 µg/l            | <input checked="" type="checkbox"/> |                                      |                                     |

Recreation Criteria   
 Aquatic Life Criteria

\*case where "cap at current" limit is appropriate,  
 site-specific standard may be warranted

DISCHARGING FACILITY

## RP for nutrients

**Benthic Chl-*a*:**  
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**AFDW:**  
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Recreation Criteria

Aquatic Life Criteria

DISCHARGING FACILITY

## RP for nutrients

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**TN:**   
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**TP:**   
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<3.0 mg DO/l

Recreation Criteria   
Aquatic Life Criteria



**End of pipe TN and/or TP limit:**  
that achieves the recreation and aquatic life standards in the near field site\*

Recreation Criteria   
Aquatic Life Criteria

\*in combination with NPS projects, where applicable



# Rulemaking Documents Q & A





# Future NWG Meetings

# Future NWG Meetings

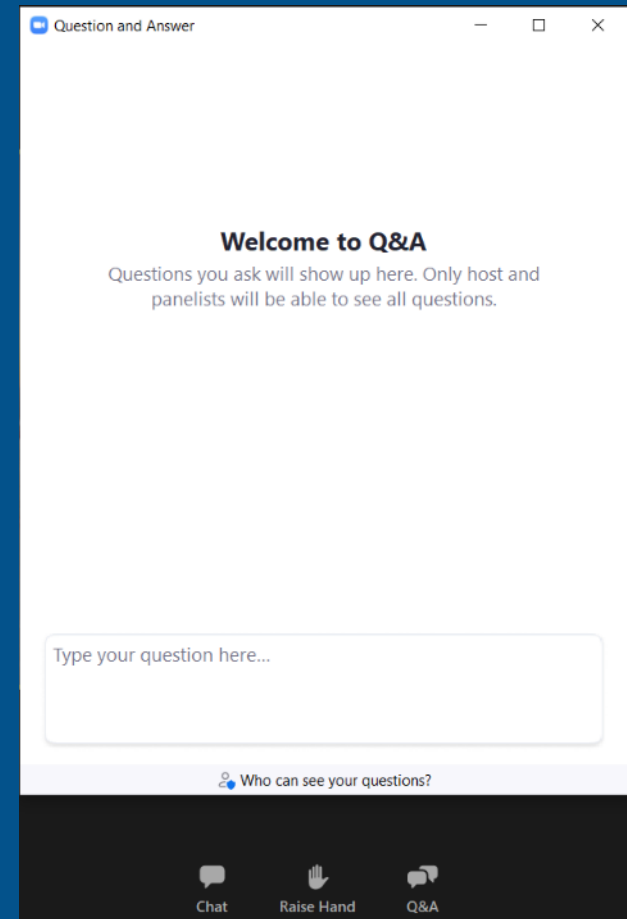
- DEQ is open to other venues for feedback as needed. Some suggestions: a video call between parties, written submitted Q&A, and phone calls to DEQ experts for clarifications
- DEQ values NWG member input and will continue listening as the rules are implemented.
- DEQ anticipates future NWG meetings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



Unmute

Chat

Raise Hand

Q&A

Leave

# Thanks for Joining Us

Contact:

Kyle Milke

[kyle.milke@mt.gov](mailto:kyle.milke@mt.gov)

To submit comments or questions



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

