



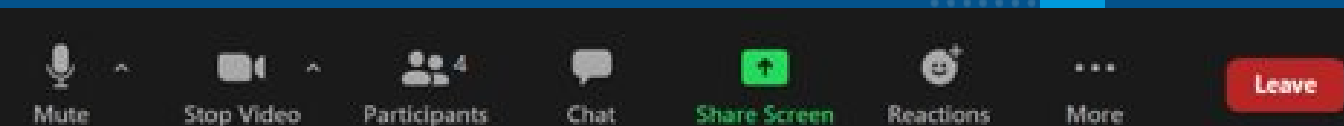
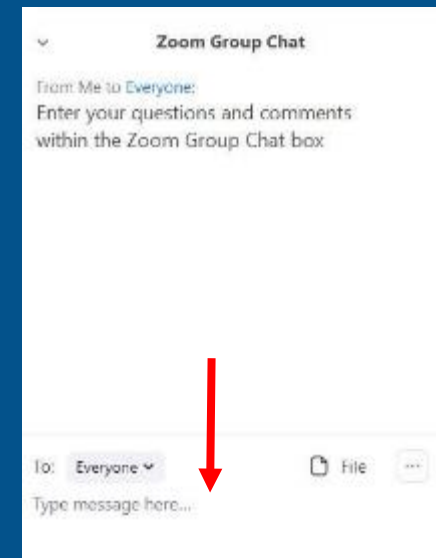
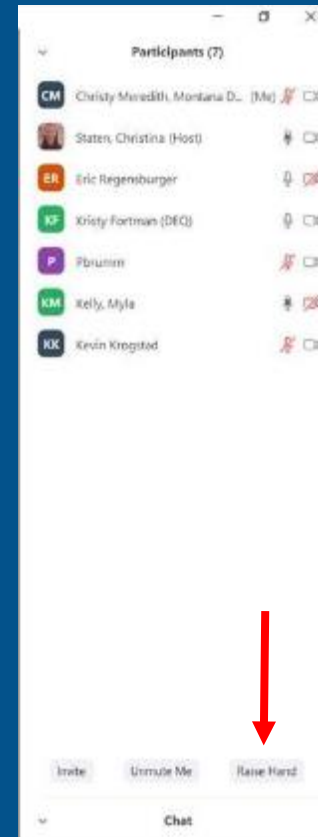
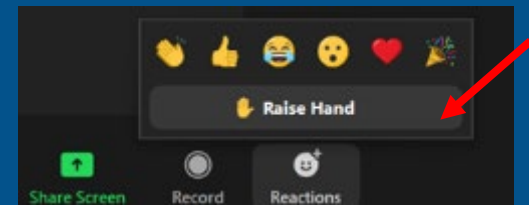
# Nutrient Work Group Technical Subcommittee Session Three

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July 6, 2021

# Welcome!

- Please keep your microphone muted until called on
- TSC Members may participate during discussions
- Please reserve public comment until the end
- \*6 unmutes your phone
- State your name and affiliation before providing your comment
- Enter questions in the chat box at any time
- Turning off your video feed provides better bandwidth
- Please sign-in to the chat box with name and affiliation



# Agenda

## Meeting Goal: Begin defining extent of AMP watersheds

- 1:05 p.m. Welcome
- 1:10 p.m. Introductions (Ted Barber, Facilitator)
- 1:15 p.m. USGS Hydrologic Unit Code system for defining watersheds. Major categories of waterbodies (wadable streams, medium rivers, large rivers)
  - Discussion on proposed system, pros/cons of breaking out medium rivers
- 2 p.m. Limits of an AMP watershed:
  - Discussion Points
    - How far Upstream: Important considerations particularly pertaining to large rivers
    - How far Downstream: Estimating the location(s) where sampling to assess point-source downstream effects occur
    - Considerations for how far downstream of a point source the AMP watershed should extend
- 2:45 p.m. Open Public Discussion & Close of Meeting
  - Discussion of next meeting topics and next subcommittee meeting
  - Meeting Close

# Introductions

## Facilitator

- Ted Barber

## DEQ Staff

- Michael Suplee, Water Quality Science Specialist
- Rainie DeVaney, Discharge Permitting Section Supervisor
- Amy Steinmetz, Water Quality Division Administrator
- Jon Kenning, Water Protection Bureau Chief
- Galen Steffens, Water Quality Planning Bureau Chief
- Myla Kelly, WQ Standards & Modeling Section Supervisor
- Kristy Fortman, Watershed Protection Section Supervisor
- Darrin Kron, WQ Monitoring & Assessment Section Supervisor

# Introductions

## Nutrient Work Group Technical Subcommittee Members

Interest Group	Representative	Substitute
Point Source Discharger: Large Municipal Systems (>1 MGD)	Dave Clark	
Point Source Discharger: Middle-Sized Mechanical Systems (<1 MGD)	Vacant	
Point Source Discharger: Small Municipal Systems with Lagoons	Rika Lashley	
Point Source Discharger: Non-POTW	Shane Lacasse	
Municipalities	Amanda McInnis	
Mining	Matt Wolfe	
Farming-Oriented Agriculture	John Youngberg	
Livestock-Oriented Agriculture	Vacant	
Conservation Organization - Local	Vacant	
Conservation Organization – Regional	Guy Alsentzer or Sarah Zuzulock	
Conservation Organization – Statewide	Guy Alsentzer or Sarah Zuzulock	
Environmental Advocacy Organization	Guy Alsentzer or Sarah Zuzulock	
Water or Fishing-Based Recreation	Guy Alsentzer or Sarah Zuzulock	
Federal Land Management Agencies	Andy Efta	
Federal Regulatory Agencies	Tina Laidlaw or Erik Makus	
State Land Management Agencies	Jeff Schmalenberg	
Water Quality Districts / County Planning Departments	Pete Schade	
Soil & Water Conservation Districts – West of the CD	Samantha Tappenbeck	
Soil & Water Conservation Districts – East of the CD	Dan Rostad	
Wastewater Engineering Firms	Coralynn Revis	
Timber Industry	Julia Altemus	

# Ground Rules

- Speak one at a time—refrain from interrupting others.
- Wait to be recognized by the facilitator before speaking.
- Facilitator will call on people who have not yet spoken before calling on someone a second time for a given subject.
- Share the oxygen—ensure that all members who wish to have an opportunity to speak are afforded a chance to do so.
- Be respectful towards all participants.
- Listen to other points of view and try to understand other interests.
- Share information openly, promptly and respectfully.
- If requested to do so, hold questions to the end of each presentation.
- Remain flexible and open-minded, and actively participate in meetings.



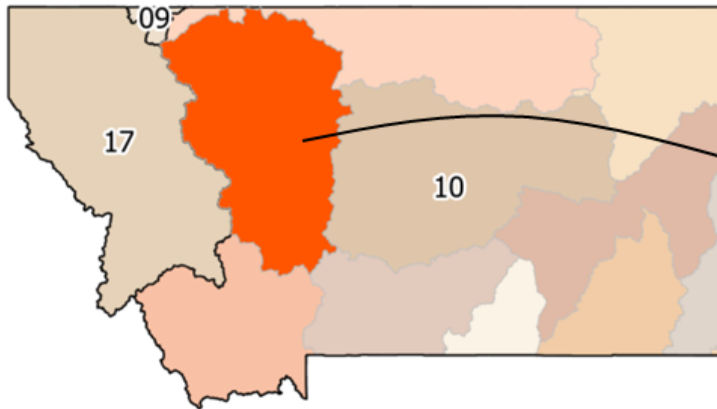


**Water Resource Regions**

The map displays the following regions and their associated counts:

- Pacific Northwest (17)
- California
- Great Basin
- Upper Colorado
- Lower Colorado
- Rio Grande
- Texas-Gulf
- Arkansas-White-Red
- Upper Mississippi
- Missouri (10)
- Souris Red Rainy
- Great Lakes
- Ohio
- Tennessee
- South Atlantic Gulf
- Mid Atlantic
- New England
- Caribbean
- Alaska
- Hawaii

# HUCs (Hydrologic Unit Codes)

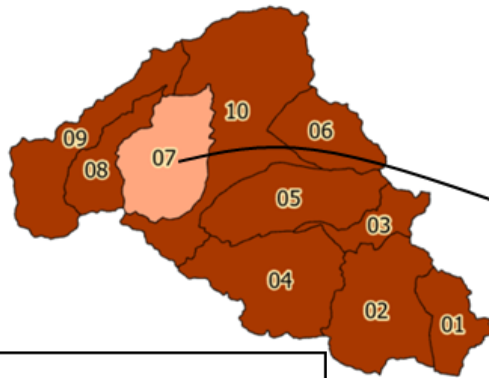
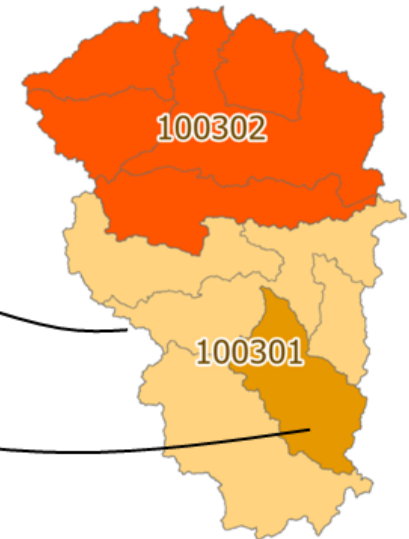


2-Digit Hydrologic Unit  
10 – Montana Region

4-Digit Hydrologic Unit  
1003 – Missouri-Marias

6-Digit Hydrologic Unit  
100301 – Upper Missouri

8-Digit Hydrologic Unit  
10030103 – Smith



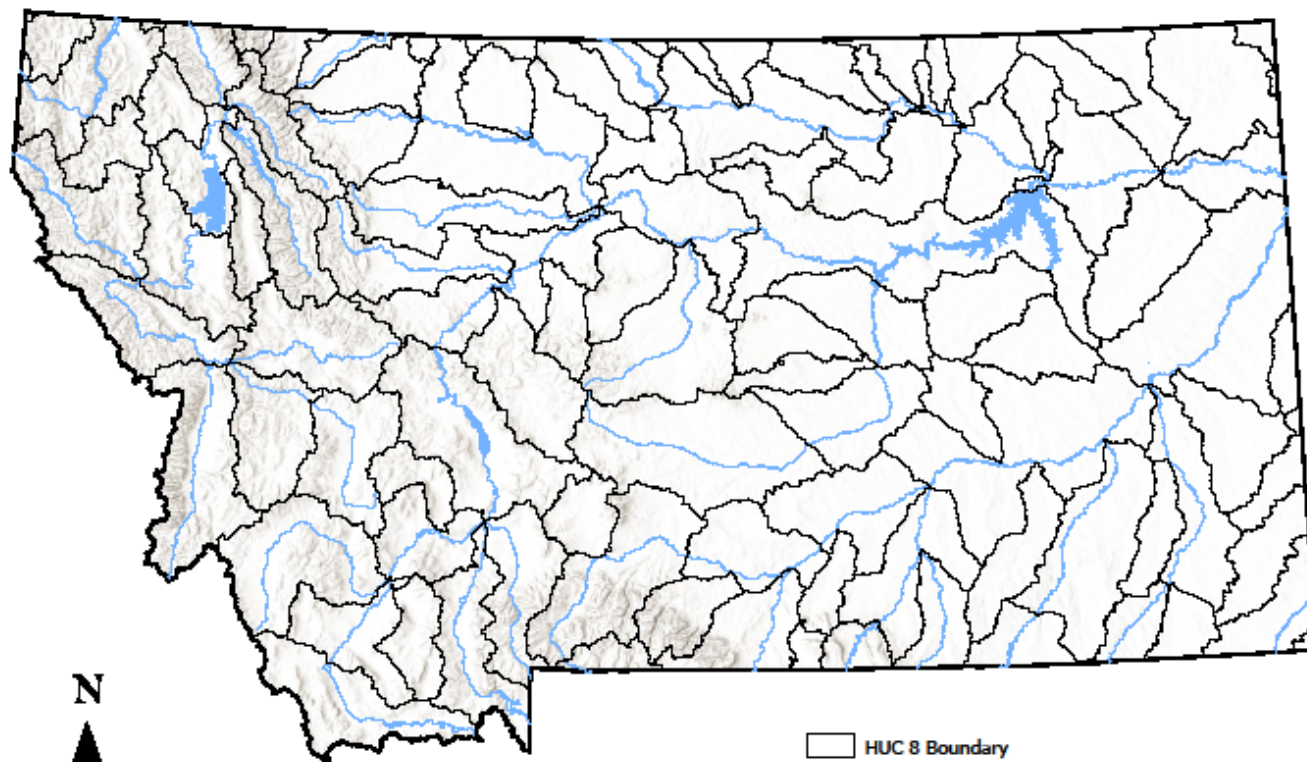
10-Digit Hydrologic Unit  
1003010302 – South Fork  
Smith River

12-Digit Hydrologic Unit  
100301030207 – Woods  
Gulch Creek





# HUC 8 Boundaries in Montana



- HUC 8 Boundary
- Major Rivers
- Major Lakes
- MT State Boundary

0 25 50 100 Miles

Esri, USGS

# Montana's Large Rivers

## Large river segments within the state of Montana.

River Name	Segment Description
Big Horn River	Yellowtail Dam to mouth
Clark Fork River	Bitterroot River to state-line
Flathead River	Origin to mouth
Kootenai River	Libby Dam to state-line
Madison River	Ennis Lake to mouth
Missouri River	Origin to state-line
South Fork Flathead River	Hungry Horse Dam to mouth
Yellowstone River	State-line to state-line

Yellowstone River



# Medium Rivers

- *Examples:*
  - Marias River
  - Blackfoot River
  - Smith River
  - Clarks Fork Yellowstone River
  - Bitterroot River
  - Jefferson River
  - Big Hole River
  - And many others...
- Not as clearly defined as large rivers
- Department sampling methods for these waterbodies developing



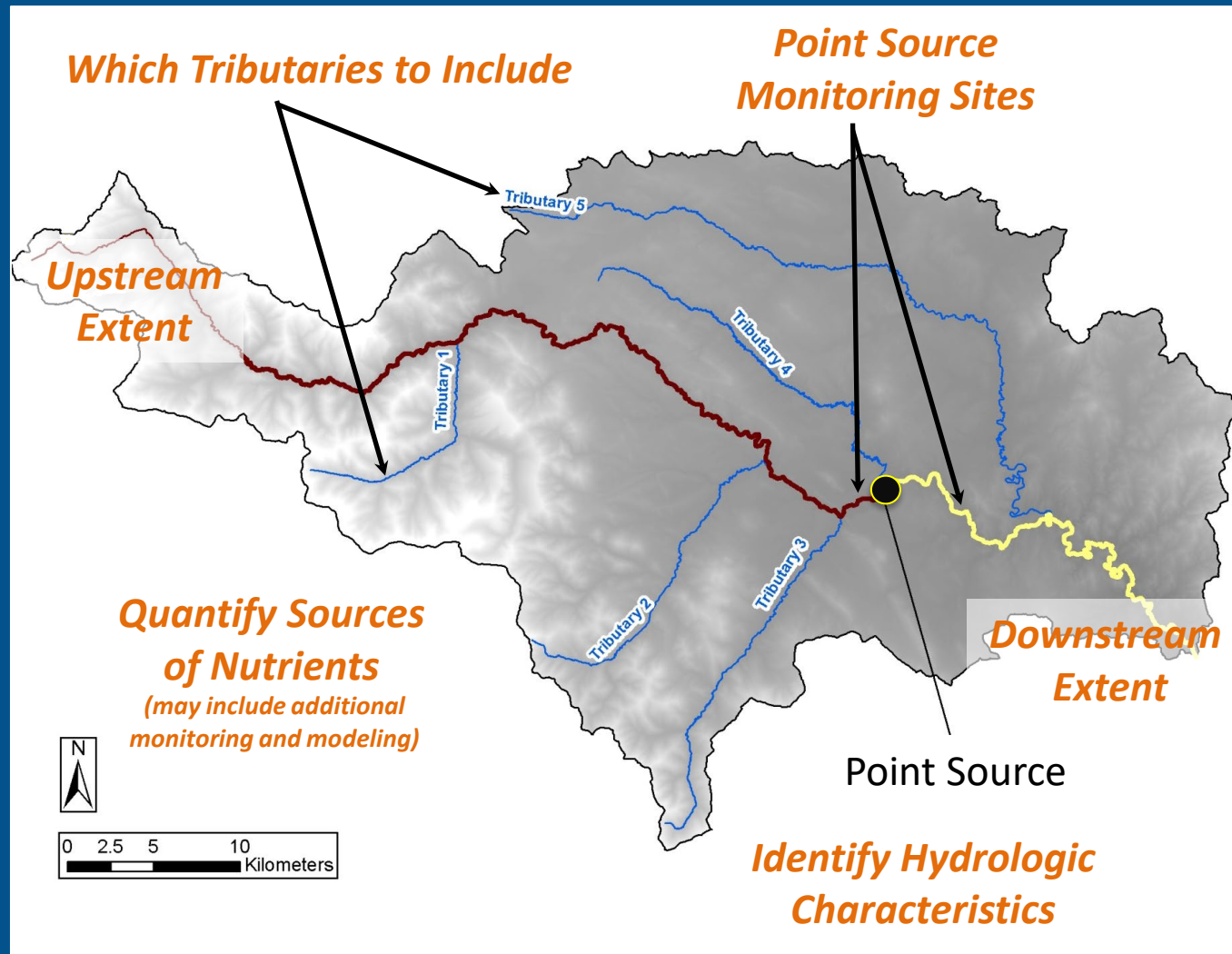


# Wadable Streams

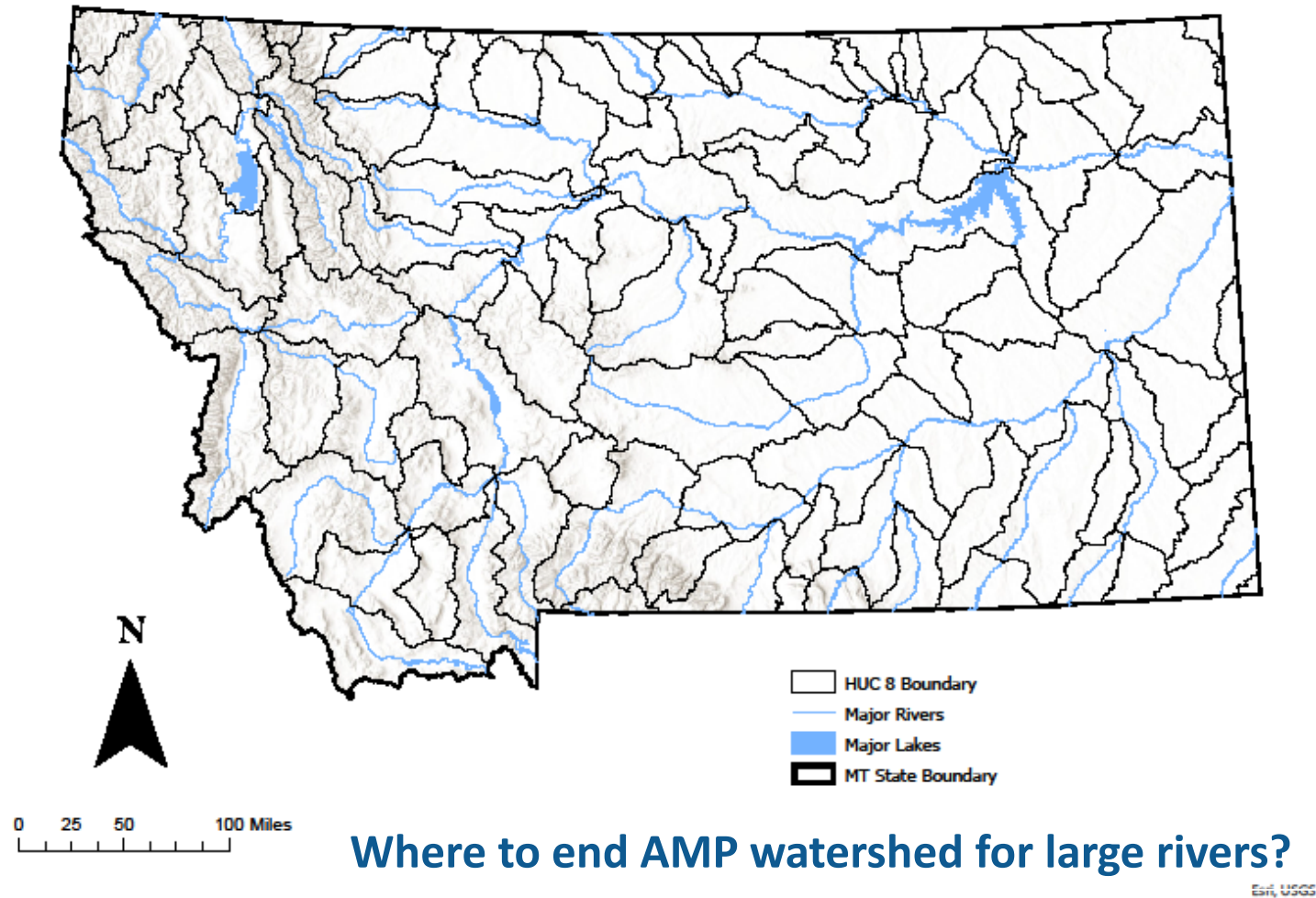
- Common throughout western and eastern Montana
- Department sampling and assessment protocols developed to an advanced degree



# Key Considerations When Defining an AMP Watershed



# HUC 8 Boundaries in Montana



Where to end AMP watershed for large rivers?



# Draft Approach for Determining Watershed

- Under an adaptive management plan the watershed must be defined, at a minimum, by its upstream extent, its downstream extent, the principal tributaries included, and the main sampling locations to be monitored for purposes of assessing sources and the direct effects of the point source.
- Proposed watersheds will be reviewed by the department. The department will (a) approve the watershed as described, or (b) make recommendations for an alternative layout. The department will have final review and approval on all AMP watersheds.
- For purposes of monitoring and assessment, the point source receiving waterbody will be identified as a wadable stream, *medium river?* or large river.





# Public Comment & Close of Meeting

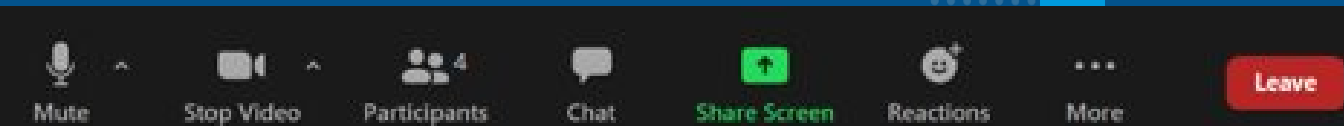
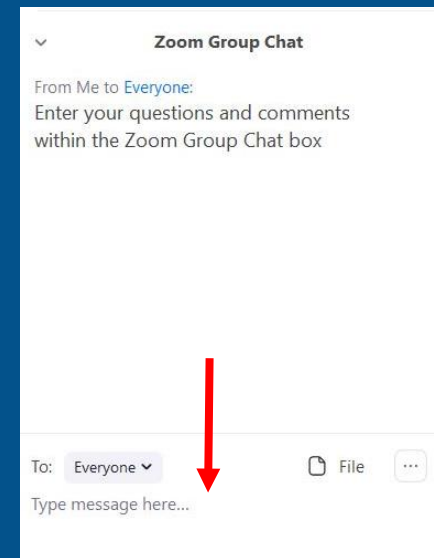
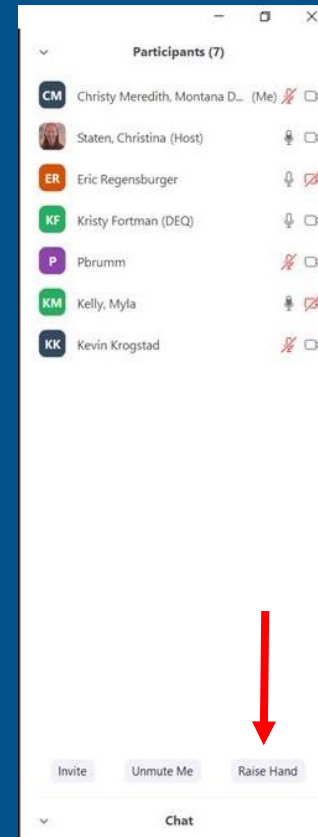
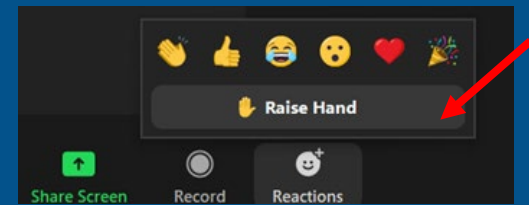
# Next Meetings

- Technical Subcommittee Meeting:
  - Wednesday, July 16 from 9-11 a.m.
  - Ongoing discussion of watershed scale under the adaptive management program
- Nutrient Work Group Session 3
  - July 28, 2021, 9-11 AM



# Questions/ Comments

- Raise hand or type questions into the chat
- Please keep your microphone muted until called on
- If calling by phone, press\*6 to unmute
- State your name and affiliation before providing your comment



# Thanks for Joining Us

## Contact:

Mike Suplee, MSuplee@mt.gov

Rainie Devaney, RDevaney@mt.gov

To submit comments or questions



» Submit Comments or Questions

<http://deq.mt.gov/water/resources/nutrientworkgroup>