



National Association of Wetland Managers

Hot Topics Webinar Series


Advancing the Integration of Clean Water Act Programs with Natural Hazard Mitigation Planning and Implementation



January 17, 2023

Webinar Presenters:

- Marla Stelk, National Assoc. of Wetland Managers
- Ellie Flaherty, U.S. Environmental Protection Agency
- Jenna Moran, Assoc. of State Floodplain Managers



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you can send us a question
in the webinar question box
or call Laura at (207) 892-3399.**

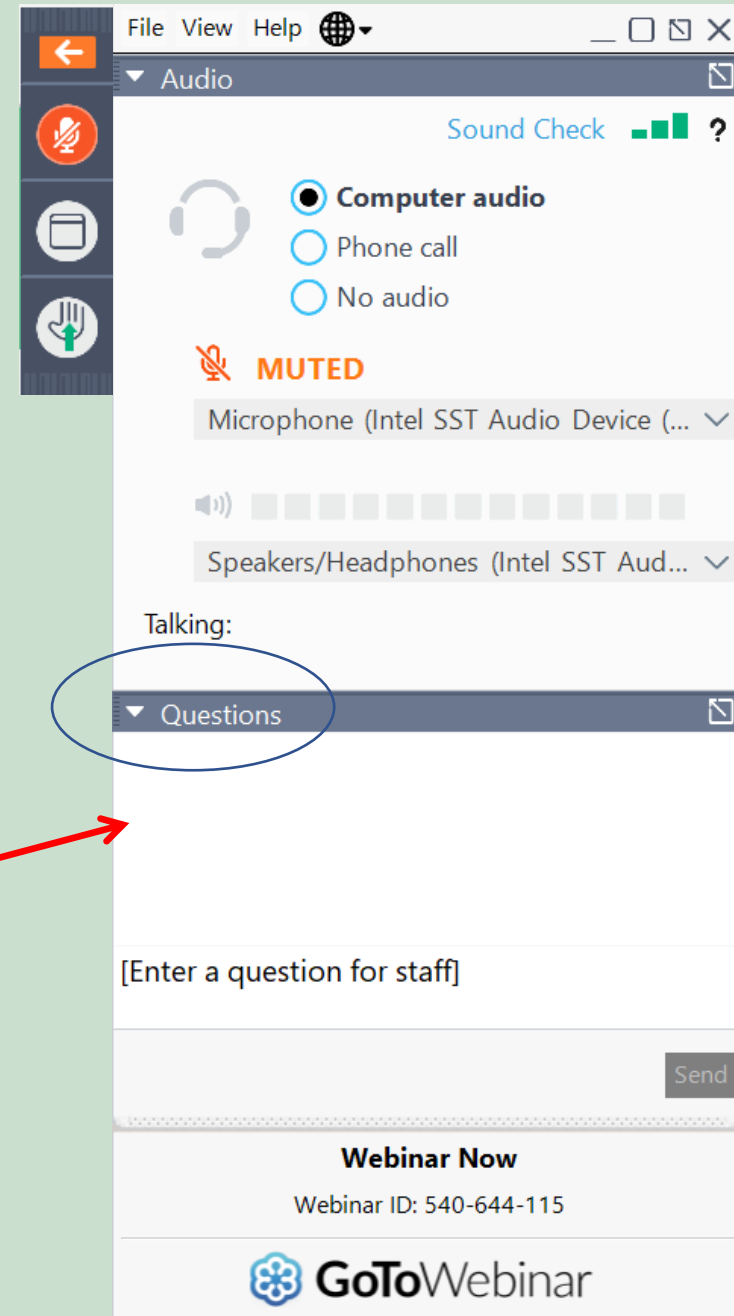
Webinar Tech Tips

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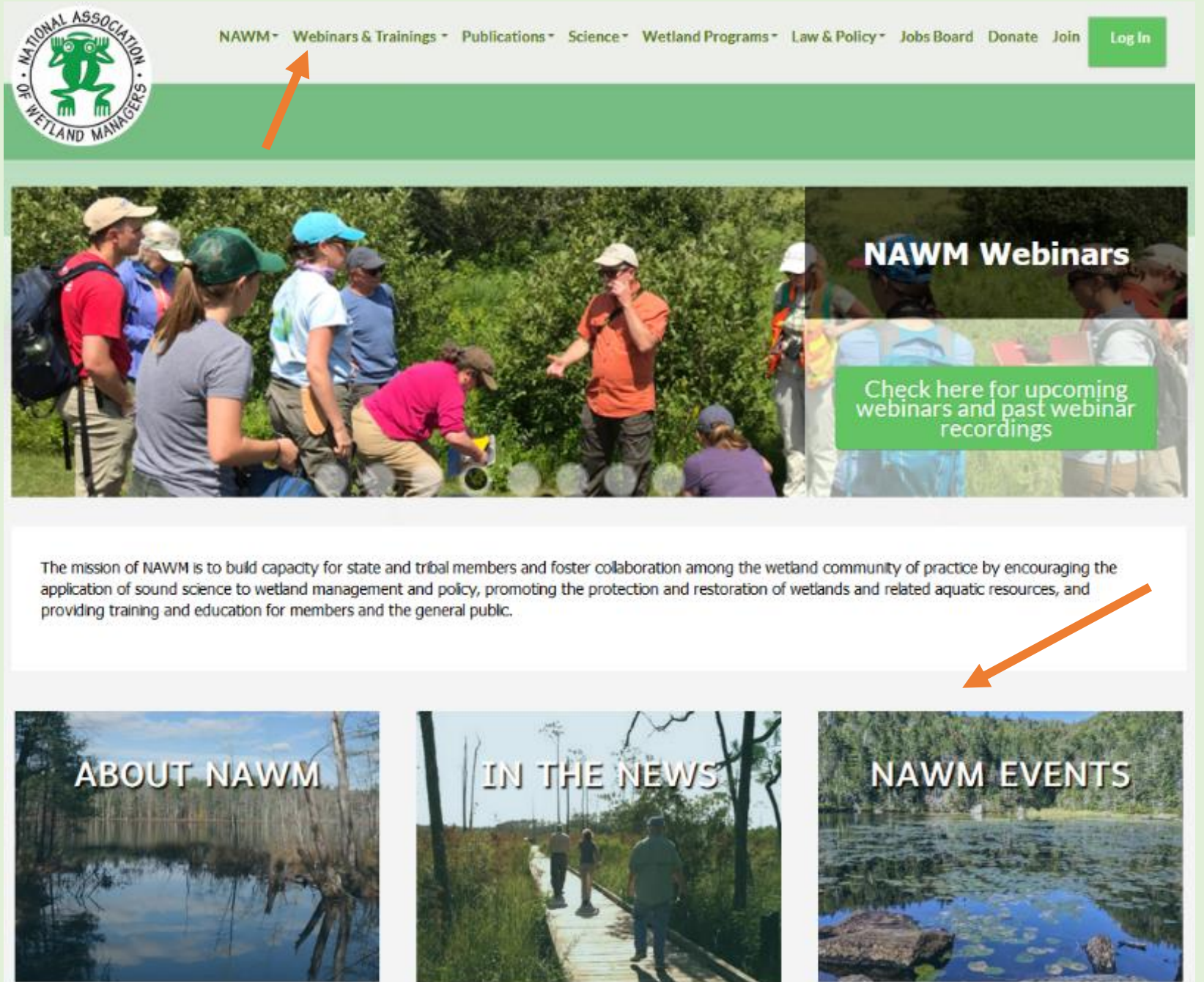
Please submit your questions for the presenters via the question box.

TIP: Close out other non-essential programs on your desktop



NAWM WEBINARS

How to Access
Information about
NAWM Webinars
www.nawm.org



The screenshot shows the NAWM website header with the logo on the left and navigation links: NAWM, Webinars & Trainings, Publications, Science, Wetland Programs, Law & Policy, Jobs Board, Donate, Join, and a Log In button. An orange arrow points to the 'Webinars & Trainings' link. Below the header is a banner image of a group of people in a field. The banner text reads 'NAWM Webinars' and 'Check here for upcoming webinars and past webinar recordings'. Below the banner is a paragraph of text: 'The mission of NAWM is to build capacity for state and tribal members and foster collaboration among the wetland community of practice by encouraging the application of sound science to wetland management and policy, promoting the protection and restoration of wetlands and related aquatic resources, and providing training and education for members and the general public.' An orange arrow points to this paragraph. At the bottom are three tiles: 'ABOUT NAWM' (with a wetland image), 'IN THE NEWS' (with a boardwalk image), and 'NAWM EVENTS' (with a pond image).

NAWM • Webinars & Trainings • Publications • Science • Wetland Programs • Law & Policy • Jobs Board • Donate • Join • Log In

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The mission of NAWM is to build capacity for state and tribal members and foster collaboration among the wetland community of practice by encouraging the application of sound science to wetland management and policy, promoting the protection and restoration of wetlands and related aquatic resources, and providing training and education for members and the general public.

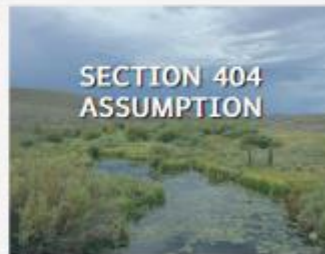
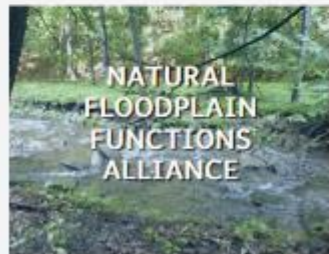
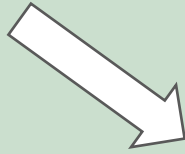
ABOUT NAWM

IN THE NEWS

NAWM EVENTS

NAWM Webinars

(by Webinar Series)



Certificates of Attendance

Who can get Certificates of Attendance?

You must be an attendee during the entire **live** webinar presentation.

You must have registered under your own name or if part of a group, verify your attendance.

You are responsible for sending the NAWM certificate to your accrediting organization.

A link to a page with instructions will be sent to everyone who registered in an e-mail one hour after the webinar ends.

Non-members are required to pay \$25 per certificate.

Using *ClassMarker* to Download your Certificate of Attendance

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This will take you to the “test” where you will **certify your participation.** If you certify your participation, click “yes.”

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Certificates are free for members and **\$25 per certificate for non-members** if claimed no later than 60 days from the live presentation. After 60 days, certificates are \$25 regardless of membership status. Certificates must be requested within one year of the live presentation.

For assistance , please contact **Laura Burchill** at laura@nawm.org or (207) 892-3399.

Moderator

Today's Presenters



Ian Grosfelt
Environmental Analyst
National Association of
Wetland Managers



Marla Stelk
Executive Director
National Association of
Wetland Managers



Ellie Flaherty
Biologist
U.S. Environmental
Protection Agency



Jenna Moran
Senior Project Manager
Association of State
Floodplain Managers

AGENDA

- | | |
|------------------------|--|
| 3:00pm – 3:10pm | Welcome and Webinar Info (Ian Grosfelt, NAWM) |
| 3:10pm – 3:20pm | Project Origins (Marla Stelk, NAWM) |
| 3:20pm – 3:30pm | EPA's Non-Point Source Program (Ellie Flaherty, EPA) |
| 3:30pm – 3:40pm | Project Details (Jenna Moran, ASFPM) |
| 3:40pm – 4:00pm | Q & A Session (Moderated by Ian Grosfelt, NAWM) |



National Association of Wetland Managers (NAWM)

ABOUT

- Established as a 501(c)(3) organization in 1983 by Jon A. Kusler, PhD, Esq. and Scott Hausmann as The Association of State Wetland Managers (ASWM).
- Name changed to National Association of Wetland Managers (NAWM) in 2022.
- Membership is open to all.

MISSION

The mission of the National Association of Wetland Managers (NAWM) is to build capacity for state and tribal members and foster collaboration among the wetland community of practice by encouraging the application of sound science to wetland management and policy, promoting the protection and restoration of wetlands and related aquatic resources, and providing training and education for members and the general public.

VISION

As a result of NAWM's work, the wetland community has access to and effectively uses sound science, policy, and private/public partnerships to preserve, protect, and restore the nation's precious and limited wetlands and related aquatic resources.

Association of State Floodplain Managers

Our Mission

- **Reduce** the losses, costs, and human suffering caused by flooding
- **Protect** the natural and beneficial functions of floodplains without impacting the property rights of others
- **Promote** education, policies and activities that meet this mission



NAWM & ASFPM – A Long Tradition





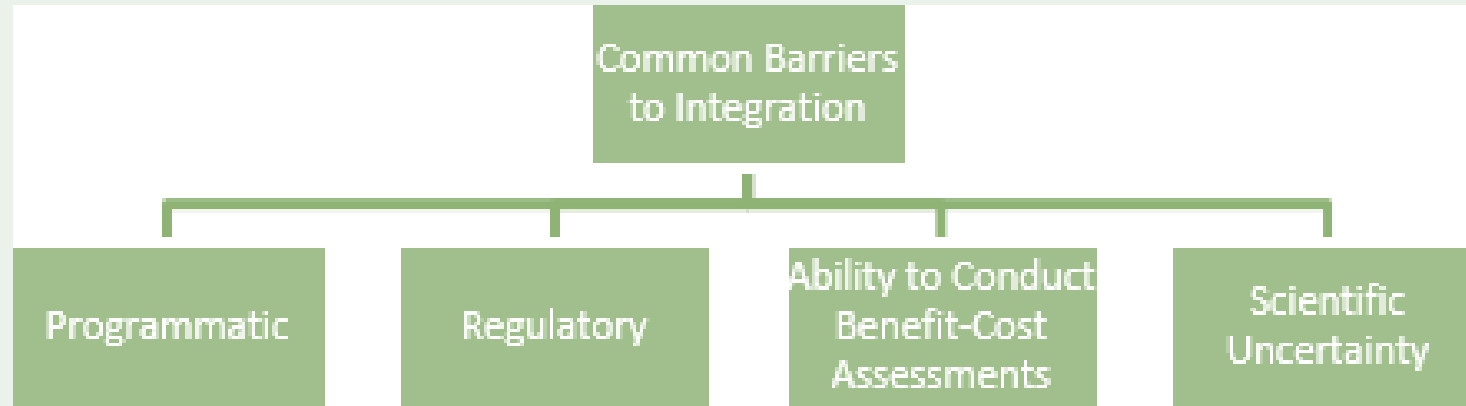
The Wetland-Floodplain Connection

“The bottomland hardwood – riparian wetlands along the Mississippi River once stored at least 60 days of flood water. Now they store only 12 days because most have been filled or drained.” (Environmental Protection Agency <http://www.epa.gov/owow/wetlands/vital/people.html>, Flood Protection, p.2)

Approximately 80% of wetlands are located in floodplains.

Healthy Wetlands, Healthy Watersheds

https://www.nawm.org/pdf lib/watershed/healthy_wetlands_healthy_watersheds_white_paper.pdf



Common Costs of Integration	Common Benefits of Integration
Start-up and meeting costs	Improved efficiency
Staff time reallocation (may not be increased)	Better products and services; reach and depth
Creation of shared/complementary systems	Cost-savings and access to resources
Training & Outreach (may be internal/no added cost)	Stronger relationships and more buy-in
<i>Sometimes funds for shared activities/incentives</i>	Flexibility, innovation and associated resiliency



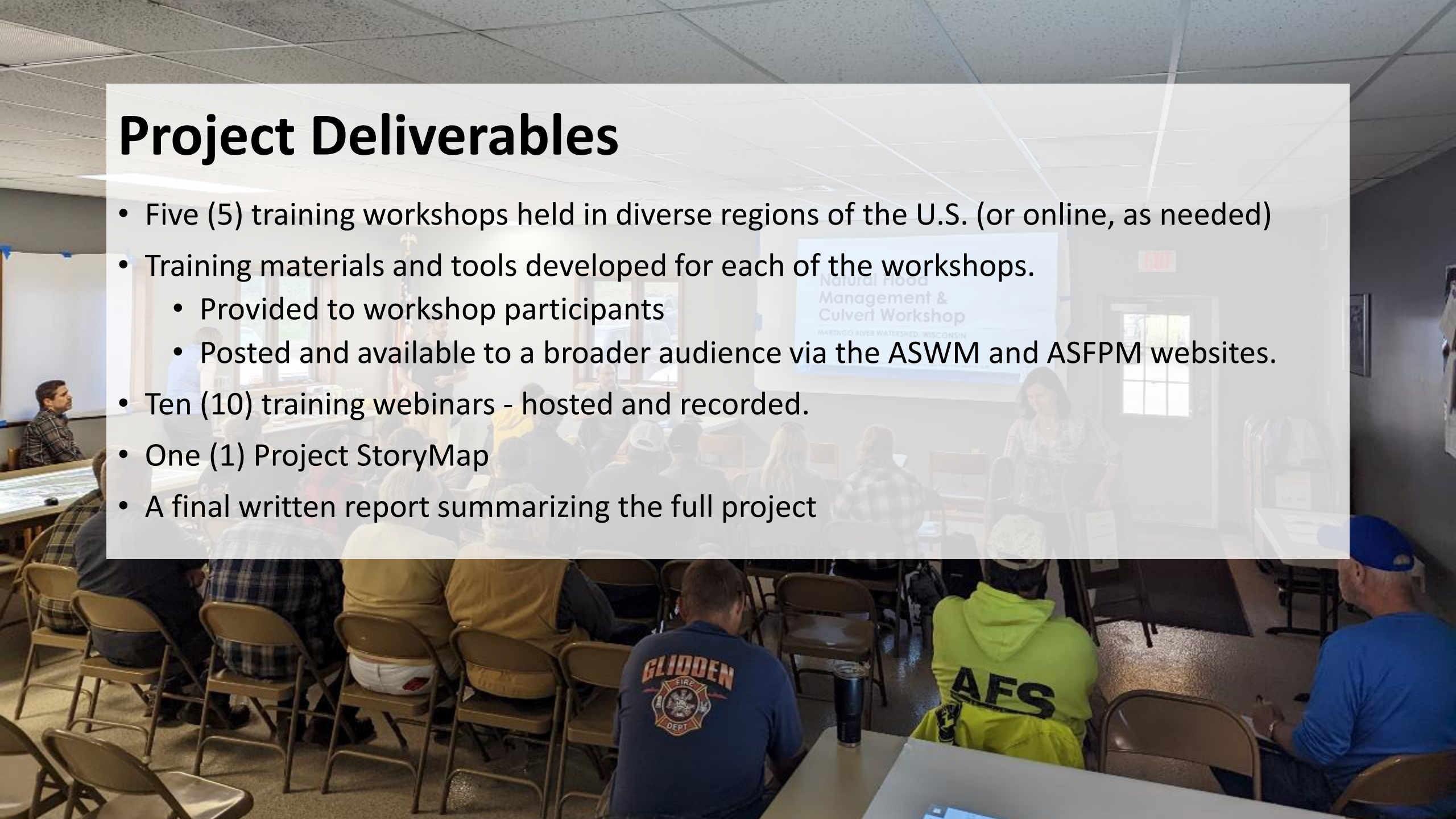
Project Goal

In support of EPA's Office of Water 2022-2026 Climate Adaptation Implementation Plan, this project will advance integration of Clean Water Act programs with natural hazard mitigation planning and implementation.

- **GOAL**: To build relationships and awareness of what is going on in each other's departments/agencies (i.e., what plans exist, what they are currently working on, who to talk to, etc.)
- **OUTCOME**: Two halves of each cohort are working well together and are able to continue their relationship over time – locals are working more closely with their states – state pairs are able to train the trainers.

Project Deliverables

- Five (5) training workshops held in diverse regions of the U.S. (or online, as needed)
- Training materials and tools developed for each of the workshops.
 - Provided to workshop participants
 - Posted and available to a broader audience via the ASWM and ASFPM websites.
- Ten (10) training webinars - hosted and recorded.
- One (1) Project StoryMap
- A final written report summarizing the full project



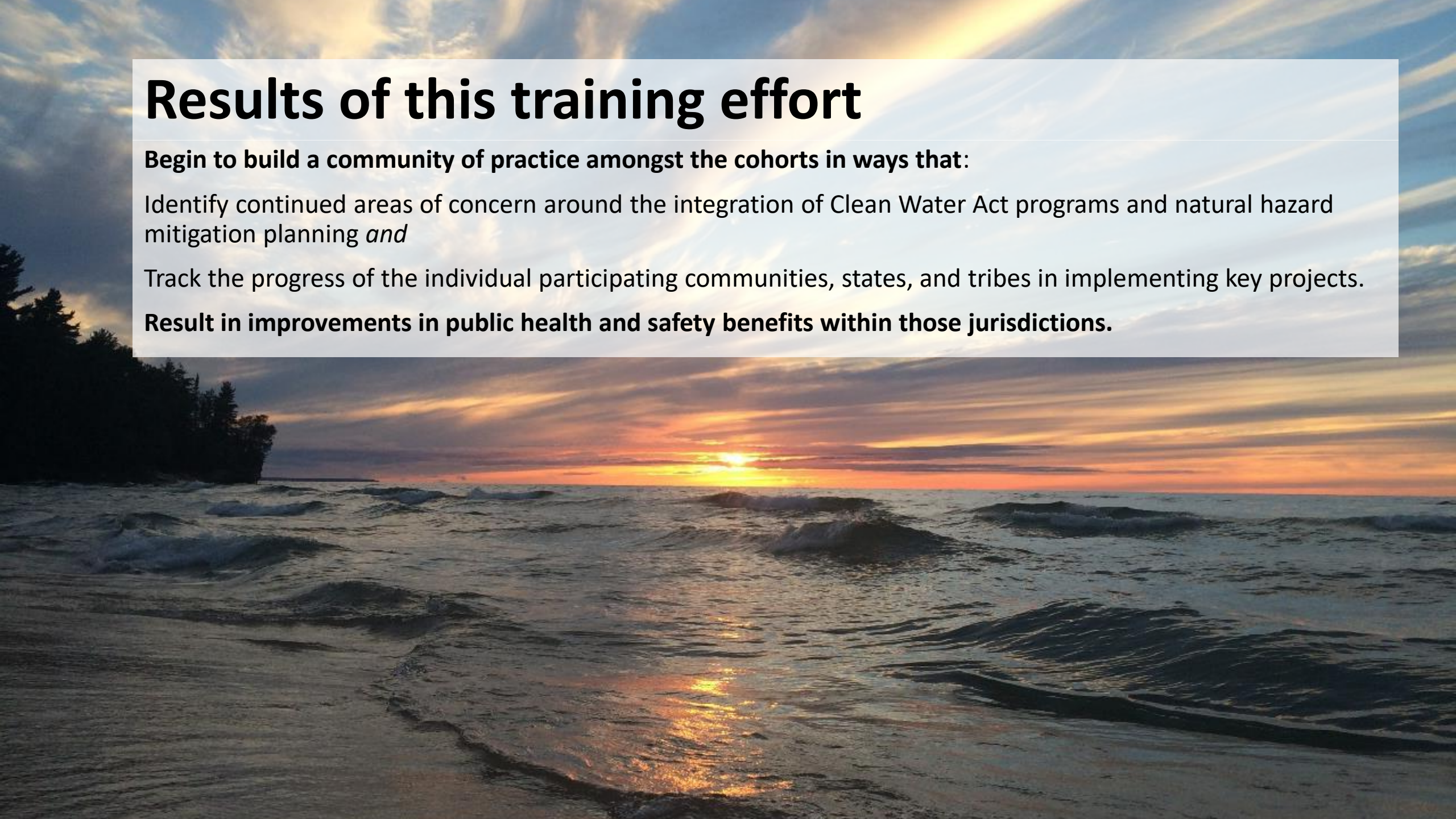
Results of this training effort

Begin to build a community of practice amongst the cohorts in ways that:

Identify continued areas of concern around the integration of Clean Water Act programs and natural hazard mitigation planning *and*

Track the progress of the individual participating communities, states, and tribes in implementing key projects.

Result in improvements in public health and safety benefits within those jurisdictions.



EPA's Nonpoint Source Program



Intro to EPA's Nonpoint Source (NPS) Program



Review connection between NPS management and hazard mitigation planning



EPA goals for cooperative agreement with NAWM and ASWM



Resources and how to get involved

Sources of Pollution Under Clean Water Act

- **'Point sources' regulated under CWA**
 - Any “discernable, confined and discrete conveyance including...any pipe, ditch, channel...[etc] from which pollutants are or may be discharged”
 - Discharges must be regulated in a manner consistent with state/tribal WQS, e.g., NDPDES permits
- **'Nonpoint sources' not regulated or specifically defined**
 - Any source of water pollution that doesn't meet point source definition
 - Polluted runoff from rain or snowmelt carrying natural and anthropogenic pollutants to waters
 - Includes: agriculture stormwater discharge and irrigation return flows

NPS Pollution Comes From Diverse Sources



- **Agriculture**

- Nutrients, sediment, pathogens, pesticides, metals
- Row crop runoff, irrigation water, animal facilities

- **Onsite septic systems** – nutrients, pathogens

- **Acid mine drainage** – abandoned mines, metals

- **Unregulated urban runoff**

- Pathogens, fertilizer, pet waste, oil & grease, construction sediment

- **Forestry**

- Sediment (slides, road construction, fire), temperature

- **Hydro-modification**

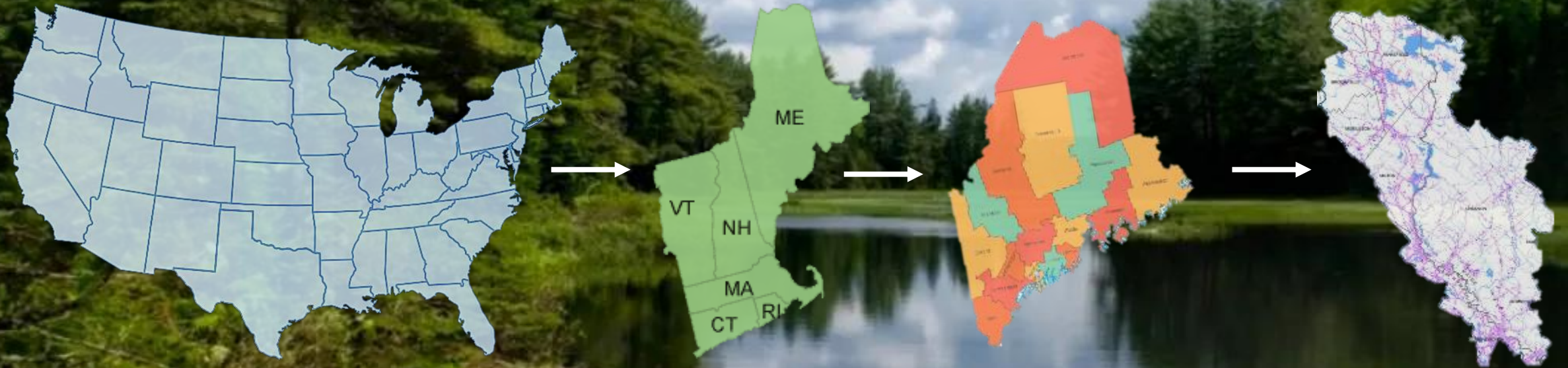
- Dams, channel straightening – sediment, temperature, habitat destruction

§319 of the Clean Water Act

Established in 1987, provides a framework and federal funding for state and local NPS efforts

- 319(b) - State NPS Management Programs (or Plans)
- 319(h) - Grant Program

§319 is a National Program, Influences State Programs, and Powers Local Watershed Projects



Funds distributed to states annually based on formula

- In FY20, \$172M was distributed to states (Tribes \$8M); ~ \$1M to ~ \$8.3M per state
- 40% non-federal match required

Guidelines - Use of funds requires:

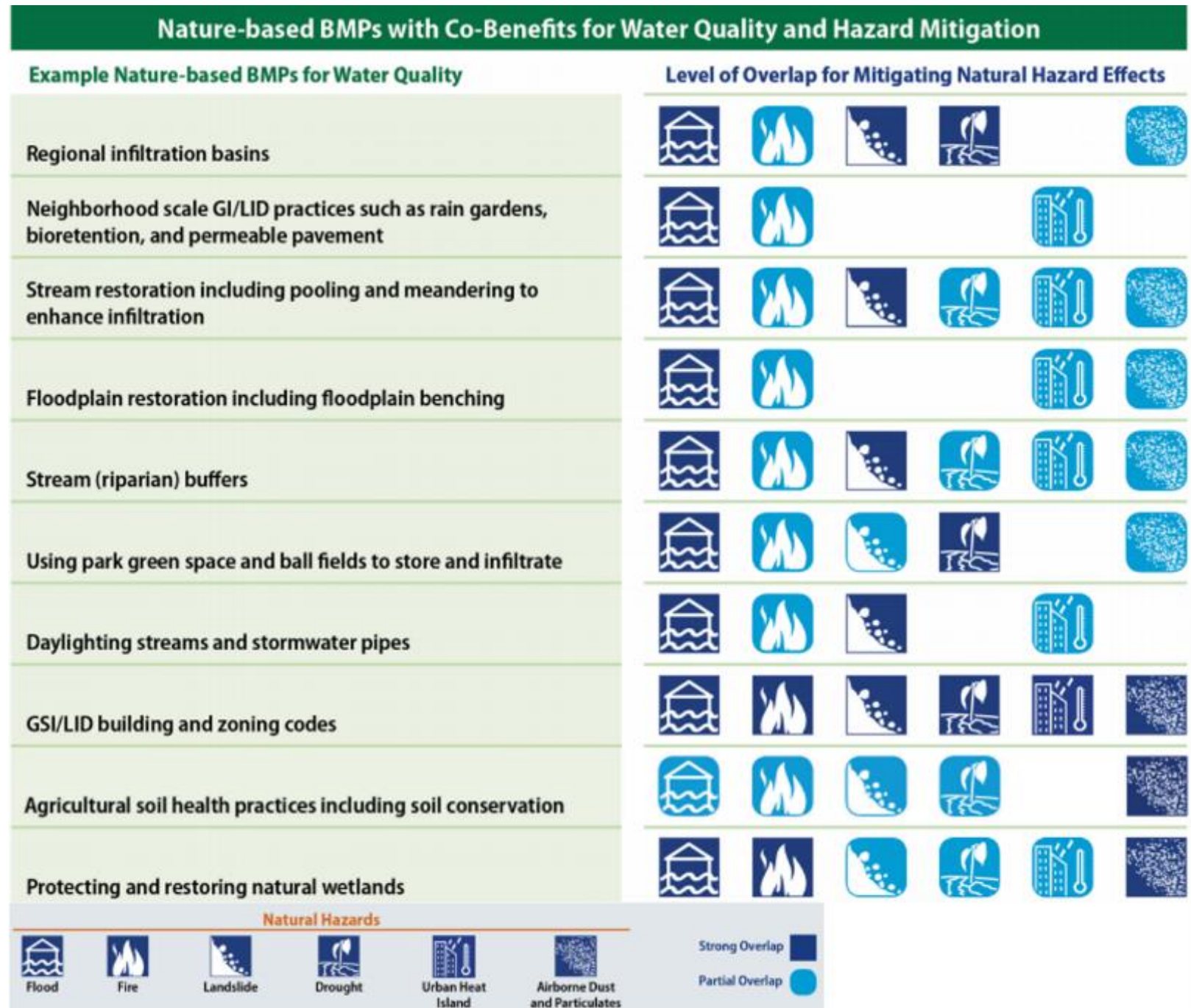
- **Watershed projects** – minimum 50% of funds allocated to support on-the-ground projects
- **NPS program work/staff**

Nature-based Practices with Hazard Mitigation Co-Benefits

Nature-based solutions meet multiple goals by aiming to increase resilience to impacts from natural hazards while protecting, managing, and restoring natural or modified ecosystems.

The examples are not intended to be a complete list of nature-based solutions, or a complete list of mitigation practices.

[Link to full document](#)



The background of the slide shows a bright, sunny day at a park. On the left, there is a multi-story brick building with several windows. In the center and right, there is a playground with a wooden structure and a slide. The ground is covered in green grass, and there are some trees and bushes. The sky is clear and blue.

Putting Ideas Into Practice: GSI and Natural Hazard Mitigation Pilot Projects

- Funded through the Nonpoint Source Management Branch 2017-2019
- Goal: Build regional EPA/FEMA relationships and explore how green infrastructure (GI)/low impact development (LID) practices may be integrated with FEMA hazard mitigation planning to achieve hazard resilience and water quality co-benefits
- Pilots conducted in 9 EPA regions across the country

Resources and Points of Engagement

NPS Webpage - [Hazard Mitigation Resources](#)

Training, presentation/webinar, and document resources

“Creating Co-Benefits Through hazard Mitigation and Water Resource Management”

Entry level, self-paced training explores how FEMA Hazard Mitigation planning and CWA water quality planning can align around nature-based practices.

Other EPA Workgroups/Resources:

[Drinking Water and Wastewater Resilience](#) resources

[EPA Green Infrastructure](#) resources

[Green Infrastructure MS4 Compendium](#)

Cooperative Agreement Project Goals

- Build relationships at federal, state, and community level between emergency management and water quality staff
- Further explore how collaboration between agencies can work in different communities/contexts
- Expand awareness of NBS co-benefits and build capacity to integrate these practices into hazard mitigation/resilience planning
- Develop best practices and case studies to share broadly

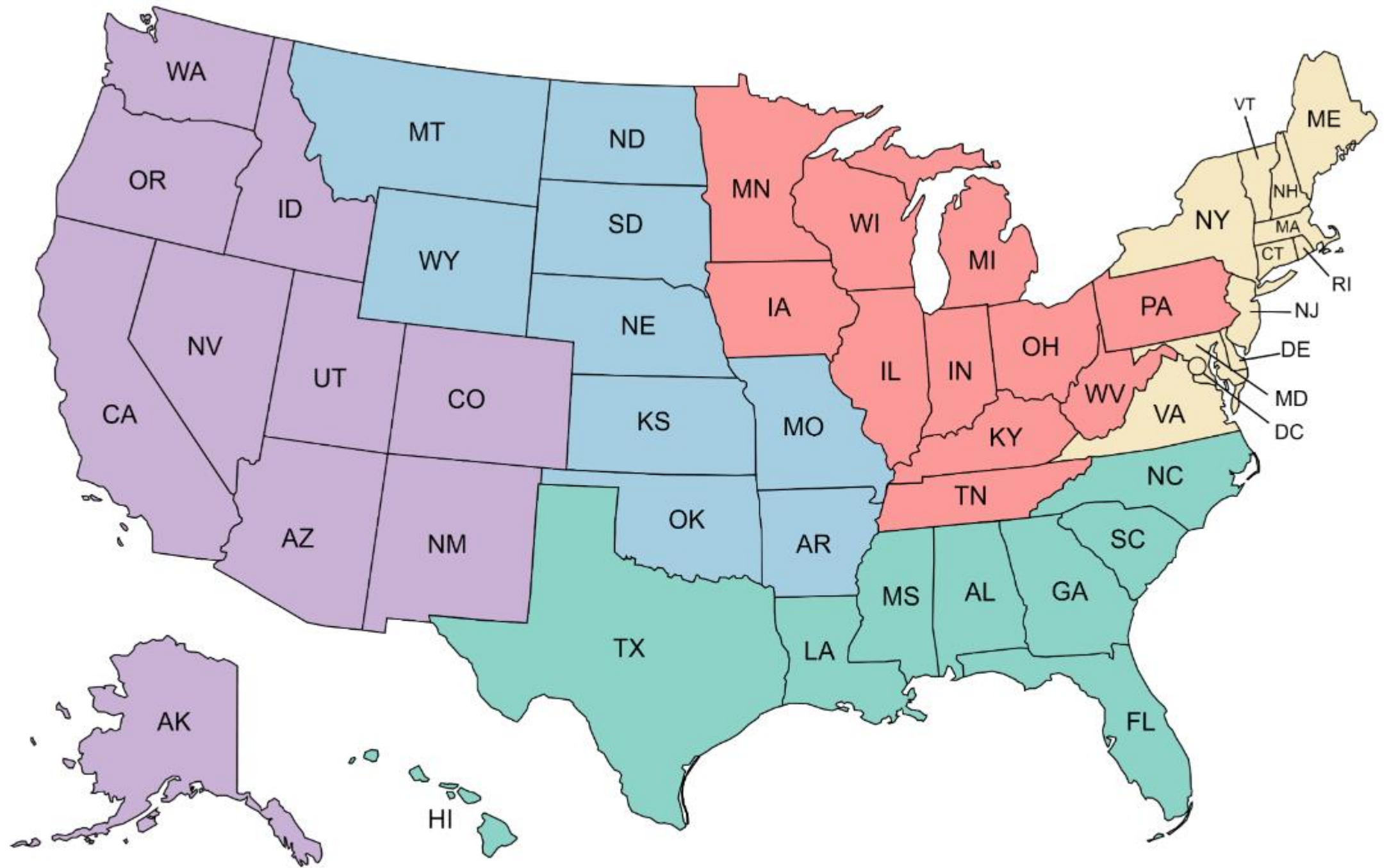
The Cohorts

1 PER YEAR FOR 5 YEARS



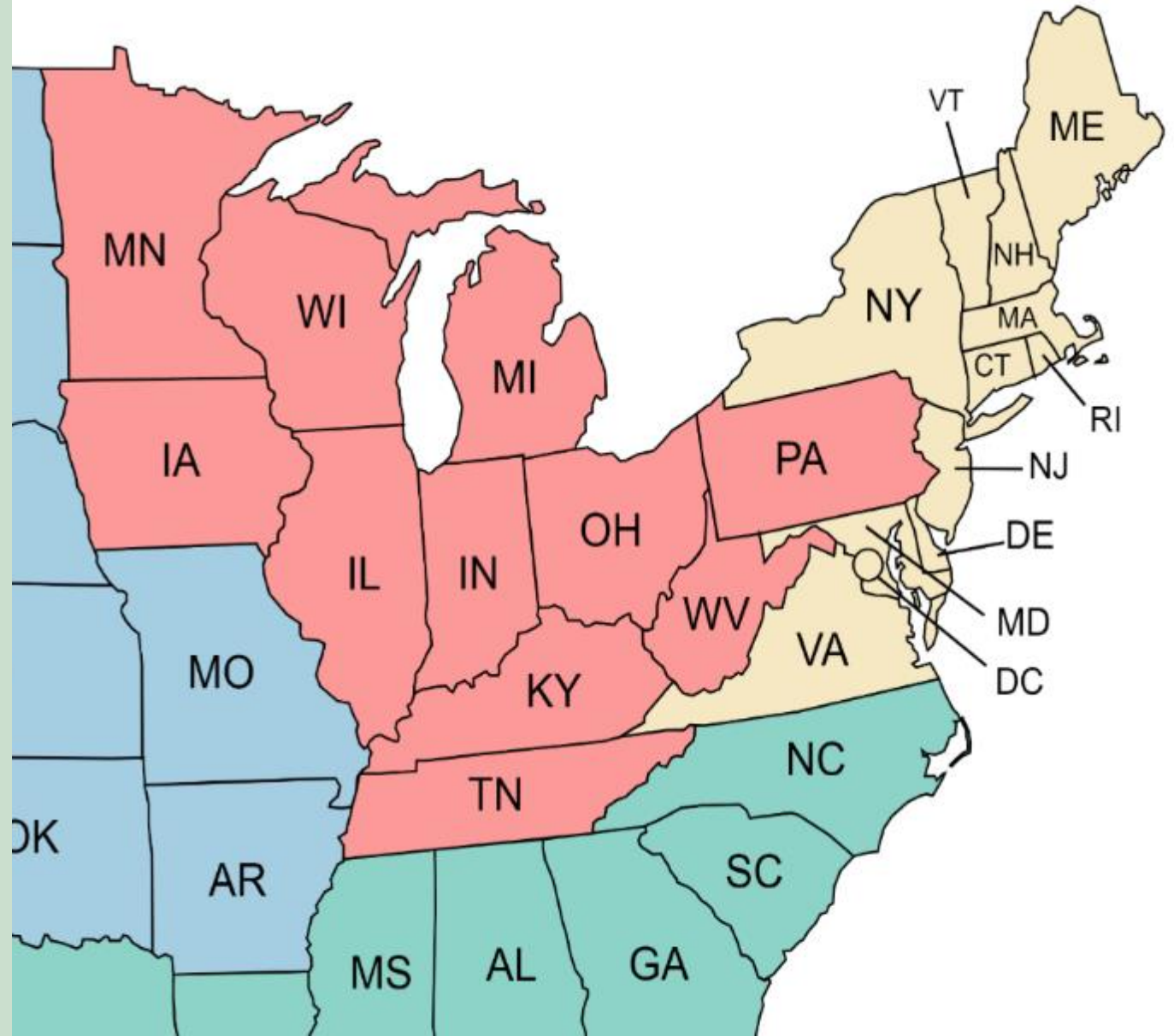
PROJECTED WORKSHOP PARTICIPATION BY GOVERNMENT TYPE

<i>Government Type</i>	<i>Per workshop</i>	<i># Workshops</i>	<i>Total</i>
Local	9 pairs (18 participants)	5	45 pairs (90 participants)
State	9 pairs (18 participants)	5	45 pairs (90 participants)
Tribal	2 pairs (4 participants)	5	10 pairs (20 participants)
Total	20 pairs (40 participants)	5	100 pairs (200 participants)



The project team will contact each state in the region to:

- **Gauge interest** in participating
- **Gather recommendations** on which communities to invite to participate



Training Workshop

2-DAY EVENT, IN-PERSON





Identified Training Topics

Policy & Regulatory	Science	Management
Stafford & Clean Water Acts	Geomorphology	Floodplain management
Permitting requirements	Hydrologic & hydraulic studies	Hazard mitigation
Water quality and quantity	Water cycle basics	Ecosystem services
Local stormwater regulations	Climate and weather	Land use planning
Agencies to know	Future conditions	Cost benefit analysis & equity
Levels of government	Contaminated sediment	Education and outreach
		Integration and partnering



Workshop #1

JUNE 12-14, 2023, CLEVELAND, OHIO

MIDWEST/APPALACHIA COHORT



Supplemental Training Resources

COHORT CALLS, WEBINARS, AND A WEBSITE

Questions?

CONTACT IAN GROSFELT, NAWM ENVIRONMENTAL ANALYST
AT IAN@NAWM.ORG OR 207-892-3399.

