Welcome

Maria Brandt | Outreach & Development Director
Coalitions & Collaboratives | co-co.org

IN PERSON

BIANNUAL CONFERENCE & WORKSHOP

FIELD DAYS

training on-site

&

WEBINARS

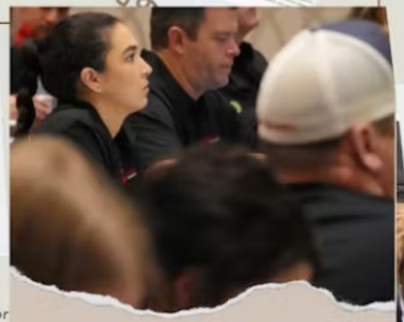
ONLINE

Scholarships *(Conference & Wor*
- Fund scholarships for indiv communities, ensuring div
- Support professional deve emerging leaders in the fi

Agenda Development *(Conferer*
- Partner with us in shaping addresses the most pressi
- Suggest & coordinate key session topics to enhance

Staffing *(Conference & Worksho*
- Volunteer or staff to assist registration & participant
- Offer expertise & manpow hands-on training is impac

Donation Support *(Conference &*
- Establish partnerships with & businesses



COMMUNITY WILDFIRE MITIGATION BEST PRACTICES TRAINING

The CWMBP national-level training is designed for current or future mitigation specialists, wildfire program leads and others who work with residents and their communities, to become more efficient and effective at reducing wildfire risk.

REVOLVING LOAN FUND

Bridge funding for project implementation for conservation collaboratives. Funding is designed to increase the efficiency and impact of existing investments.

COMMUNITY NAVIGATORS

Community Navigators support community-based partners to access federal funding opportunities, create partnerships, and build capacity for wildfire risk mitigation and climate resilience.

AIM GRANT

CCOCO offers a unique wildfire mitigation funding opportunity for a wide variety of capacity-building activities, including personnel, planning and wildfire risk reduction work on non-federal land.

CO-CO.ORG

AFTER THE FLAMES

After the Flames" signifies not just a strategic framework. This framewo our approach to post-disaster respo encompassing a holistic strategy fo workforce development, policy refinement, program innovation, and resource provision.

This ATF event is the nation's l

ATF

GOALS

Provide Direct Non-Federal Post Fire Support

Build a Skilled Post Wildfire Workforce
Increase leadership capacity to help communities respond to & recover from wildfires.

Expand Post Wildfire Support Systems
Strengthen post-fire response to reduce impacts on communities & ecosystems.

Raise Awareness & Share Resources
Convene non-federal post-fire experts & practitioners to share resources, collaborate, & learn.

After the Flames

brought to you by Coalitions & Collaboratives

After the Flames is a comprehensive suite of services, too resources aimed at providing direct support to communities wildfire.

Over the last 38 years, wildfires have burned an average of 5.2 acres annually in the United States. Many remain inconsequent some exceed 300,000 acres, accompanied by the need to reb homes, businesses & infrastructure. The long-term costs to co & ecosystems include flooding, debris flows & long-term impa incurring costs well beyond the year of the burn. Loss of hom infrastructure due to flooding are examples of post-wildfire's impacts on people, communities & economies. These events major shifts in ecosystem composition & structure, often per changing the landscape. Much of the recovery & restoration borne by state & local entities, & by residents & businesses the fire scar.

Drawing on over 20 years of experience in post-wildfire re Coalitions & Collaboratives (COCO) established After the in 2019. This initiative offers a range of programs designe national capacity for wildfire recovery, ultimately aiming t impact on communities and ecosystems.

PROGRAM CONTACT
Maria Brandt | Maria.Brandt@co-co.org

COMMUNITY MITIGATION ASSISTANCE TEAM

The CMAT works closely with Incident Management Teams, the U.S. Forest Service or other land management agencies, and community residents and leaders to identify mitigation opportunities before fire impacts the community.

COLDFIRE SEQUESTRATION

Coldfire is a group of mycology researchers investigating the use of native fungi to heal and improve our forests with the forest ecology itself. Fungal-produced composts have been scientifically proven to hold twice as much carbon. This could provide an opportunity in which to increase our carbon stores naturally and safely.

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NEWSLETTER

DONATE

WE ARE TEAM COCO

Here to mentor and support, or connect you to the appropriate resources. Email us at coco@co-co.org.

2432 S. Downing St. Suite 200 | Denver, Colorado 80210 | 719-412-3747

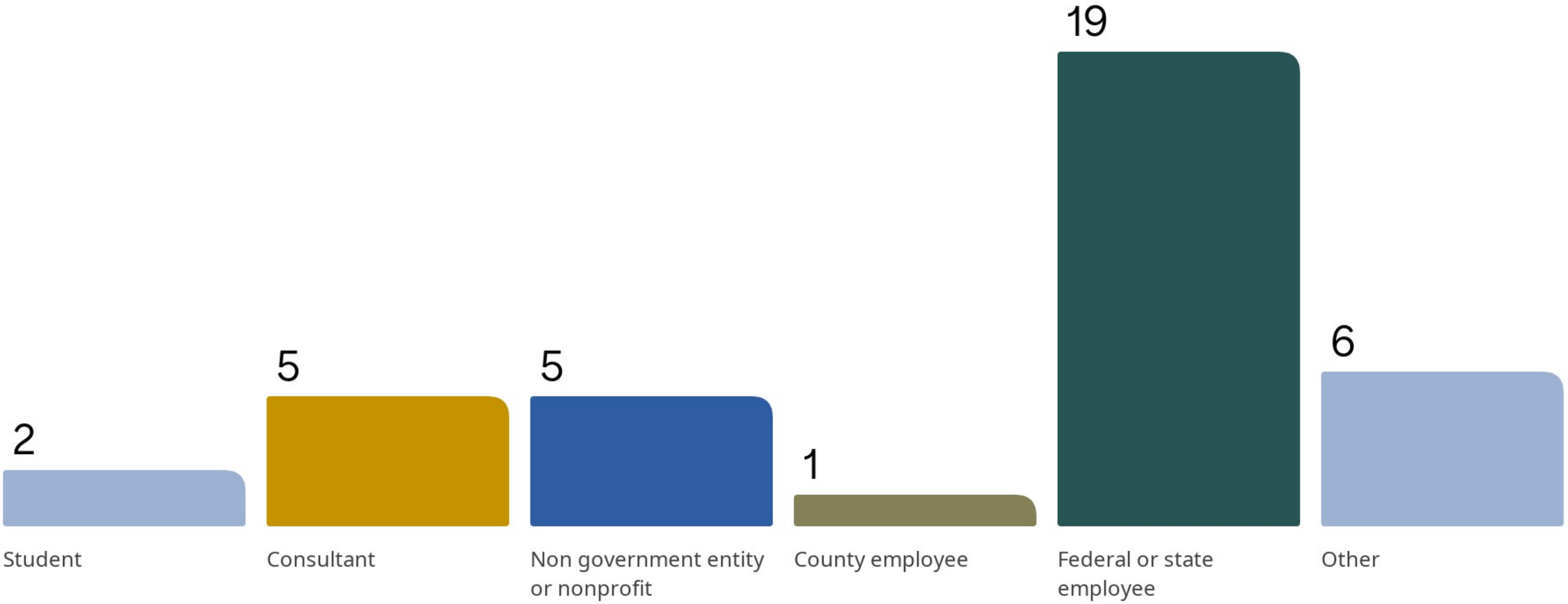
Using Mentimeter

- Scan the QR code or enter menti.com into your computer's web browser
- Enter the code given in the QR box or info bar above
- Follow along and participate in the webinar

Discussions, Polling, Q&A

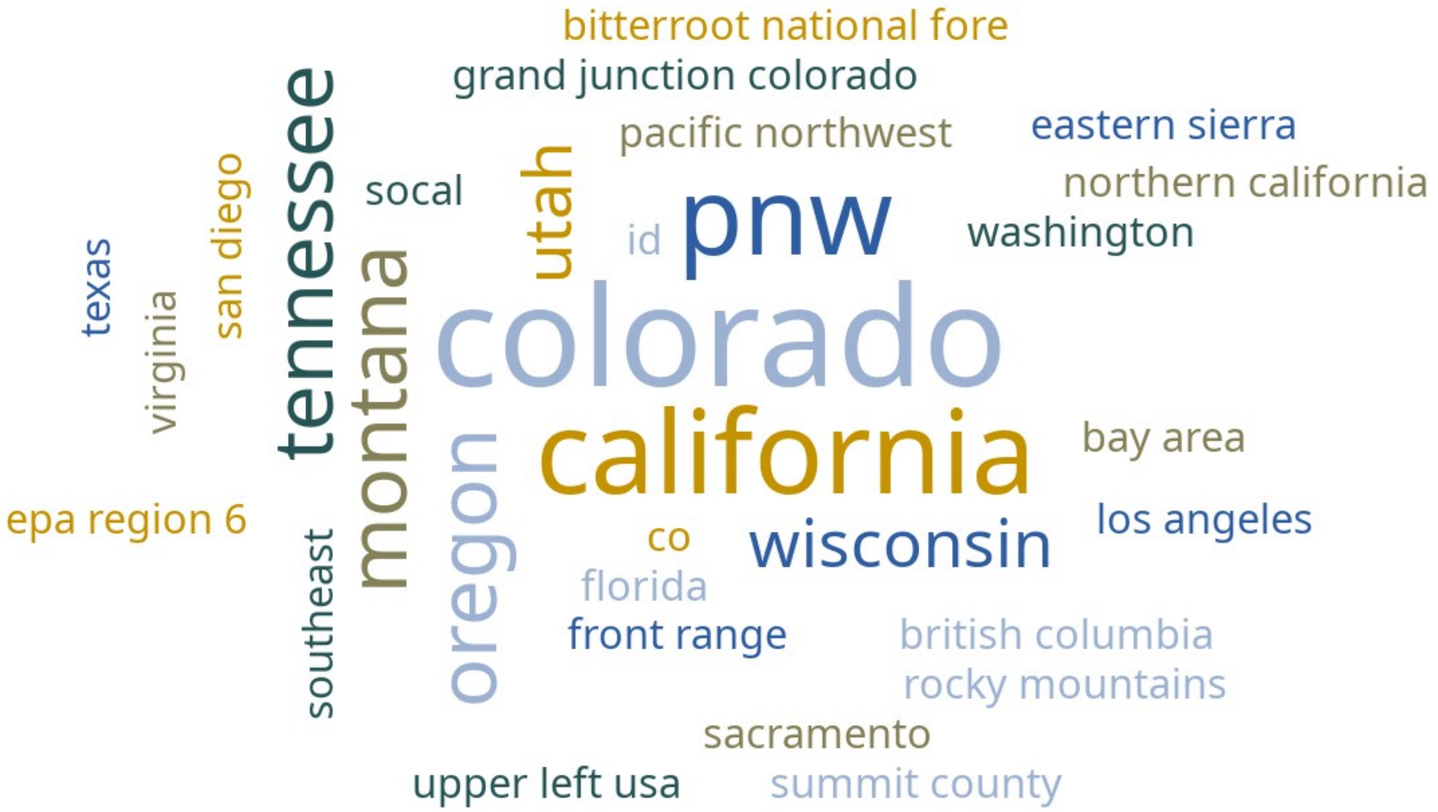
- Polling is anonymous. Please be respectful & professional.
- Please note we will try to address all questions and comments in the webinar
- Monitoring Zoom Q&A, but please consider adding to Menti first

I'm a


2
5
5
1
19
6
Student
Consultant
Non government entity or nonprofit
County employee
Federal or state employee
Other

What geographic location are you joining us from?

57 responses



What do you hope to get from this webinar?

Information about post fire recovery

Guidance on wildfire recovery plan development and where to start

Ways to address pre-fire mitigation to help with post-fire recovery

More background and reference resources for post-fire components of a CWPP.

Recovery

Planning goals and mitigation goals on addressing areas of potential debris flows in fire-prone areas.

A starting point for developing an assessment program.

Knowledge and build relationships in the WFWG

What do you hope to get from this webinar?

Restoration tips.

better understanding of BAER

Learn more about baer methods and practices

Post Fire Recovery

A better understanding of your program

A better understanding on how to perform some of the post-fire hazard assessments for erosion and debris flow.

Linking federal response to local entities

Framework for post-fire response to put into our CWPP

What do you hope to get from this webinar?

Wildfire Mitigation

Recovery tips

Clear understanding and tools to assist with post fire assessment processes.

Post-fire response

Limits of modeling

Understanding federal processes for BAER maps. Colorado is considering trying to build out a State BAER team to help assist on non-federal lands.

Weed strategies.

A better understanding of the processes associated with post-wildfire/assessment. Anything geospatial is appreciated!

What do you hope to get from this webinar?

Learn more about BAER

More awareness of BAER operations and how that model can help our communities.

How fed BAER and private land BAER efforts are coordinated.

Cara Sponaugle, National Post-Fire Program Leader Post-Disaster Recovery Team USFS

After completing a few degrees focusing on forest soils, Cara caught the firebug several years ago with the Burned Area Emergency Response (BAER) program evaluation of post-fire landscape effects. As a result, she has worked for over 20 years as a soil scientist & post-fire specialist across the US.

Cara has been serving as the National Post-fire Program Lead for the USFS since 2019 & recently assisted the governments of Greece, Portugal, Canada & India with post-fire response.

USAID
FROM THE AMERICAN PEOPLE

Post-fire Assessment and Management Workshop

Cara Sponaugle, National Post-Fire Program Leader, US Forest Service

Credits:

Scott Dehnisch, Wildfire Unit Leader, US AID-Bureau of Humanitarian Assistance

Dave Callery, Deputy Post-Fire Program Leader, US Forest Service

Post-fire Response and Recovery is part of the Fire Management Cycle

The Four Phases of Post-fire Response

Repair

Short-term – starts before fire containment

Repair damage from fire suppression activities

Emergency Response

Short-term – within 1 year of the fire

Manage the higher risk of post-fire flooding and debris flows

Rehabilitation

Mid-term – within 5 years of the fire

Repair infrastructure damaged by the fire and aiding natural recovery in high-priority areas

Recovery

Long-term

Restoring ecosystem functions to desired condition

Emergency Response

What is post-fire risk management?

- Identify imminent post-wildfire threats to critical values
- Take immediate actions to manage unacceptable risks

The BAER Process

Identify critical values

Assess for threats

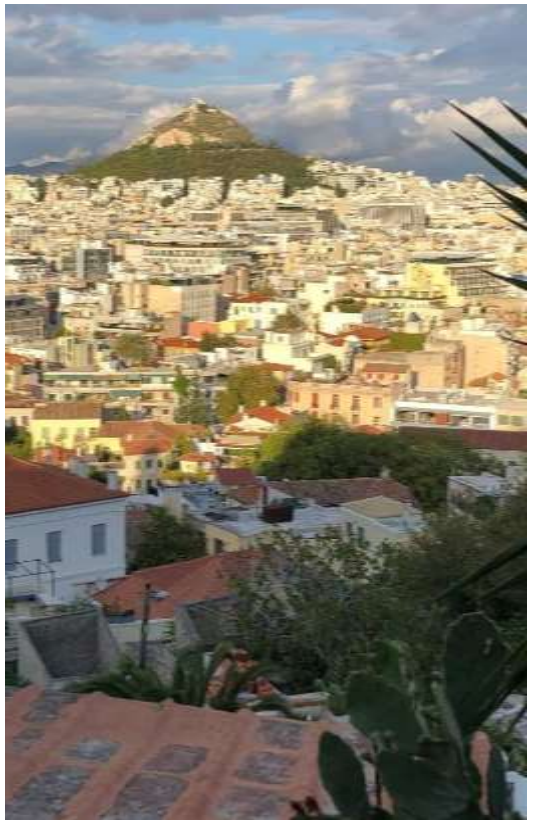
Evaluate risk

Develop response strategy

Implement the strategy

Critical Values identified by Portugal (USAID)

Critical Values identified by Greece (USAID)



Critical Values used in British Columbia BAER Demonstration

Critical Values – ETART (OR, HI)

ETART – Federal Disaster Declaration, State requested through FEMA - Erosion Threat Assessment and Reduction Teams

USFS Critical Values

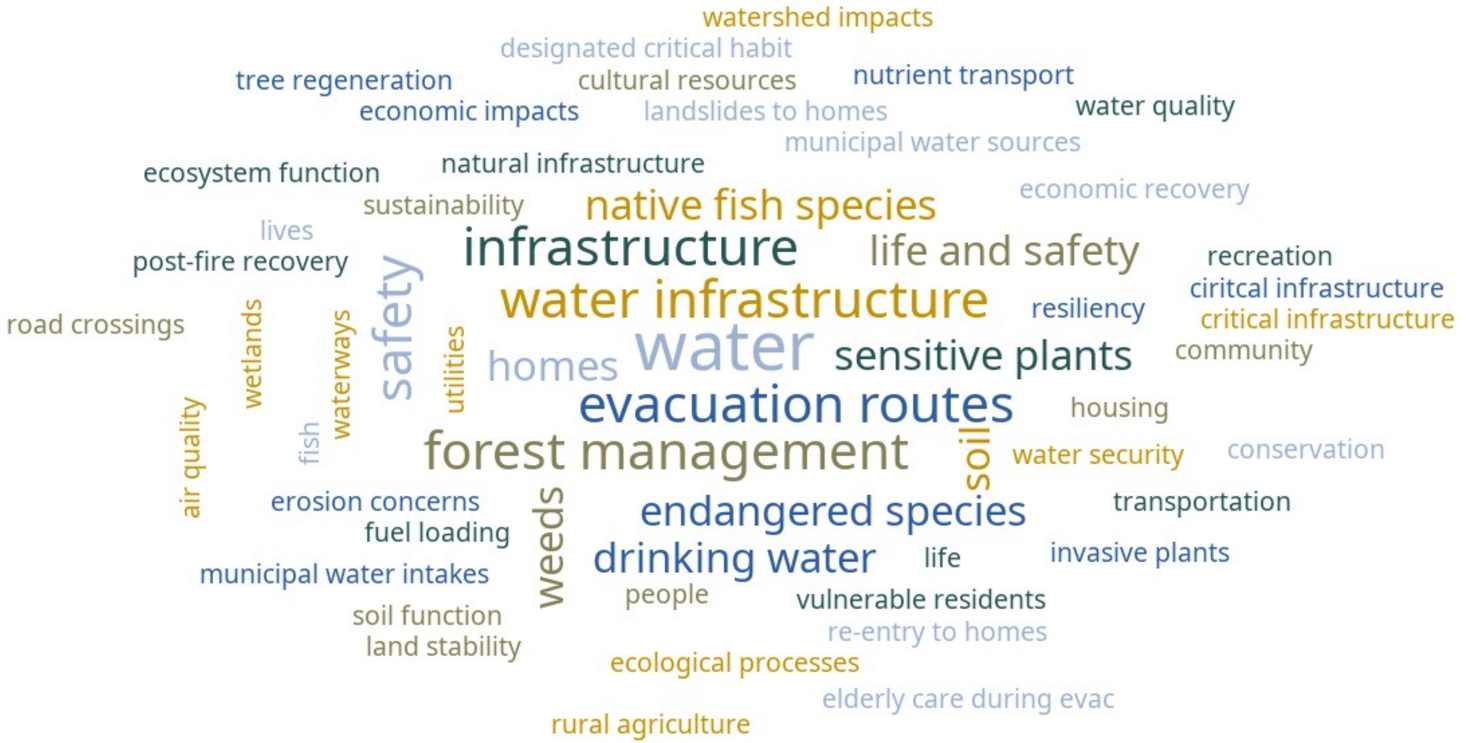
- People
- Infrastructure
- Special natural and cultural resources

On NFS lands

What are your priority or critical values?

What are your priority or critical values?

79 responses



The BAER Process

Identify critical values

Assess for threats

Evaluate risk

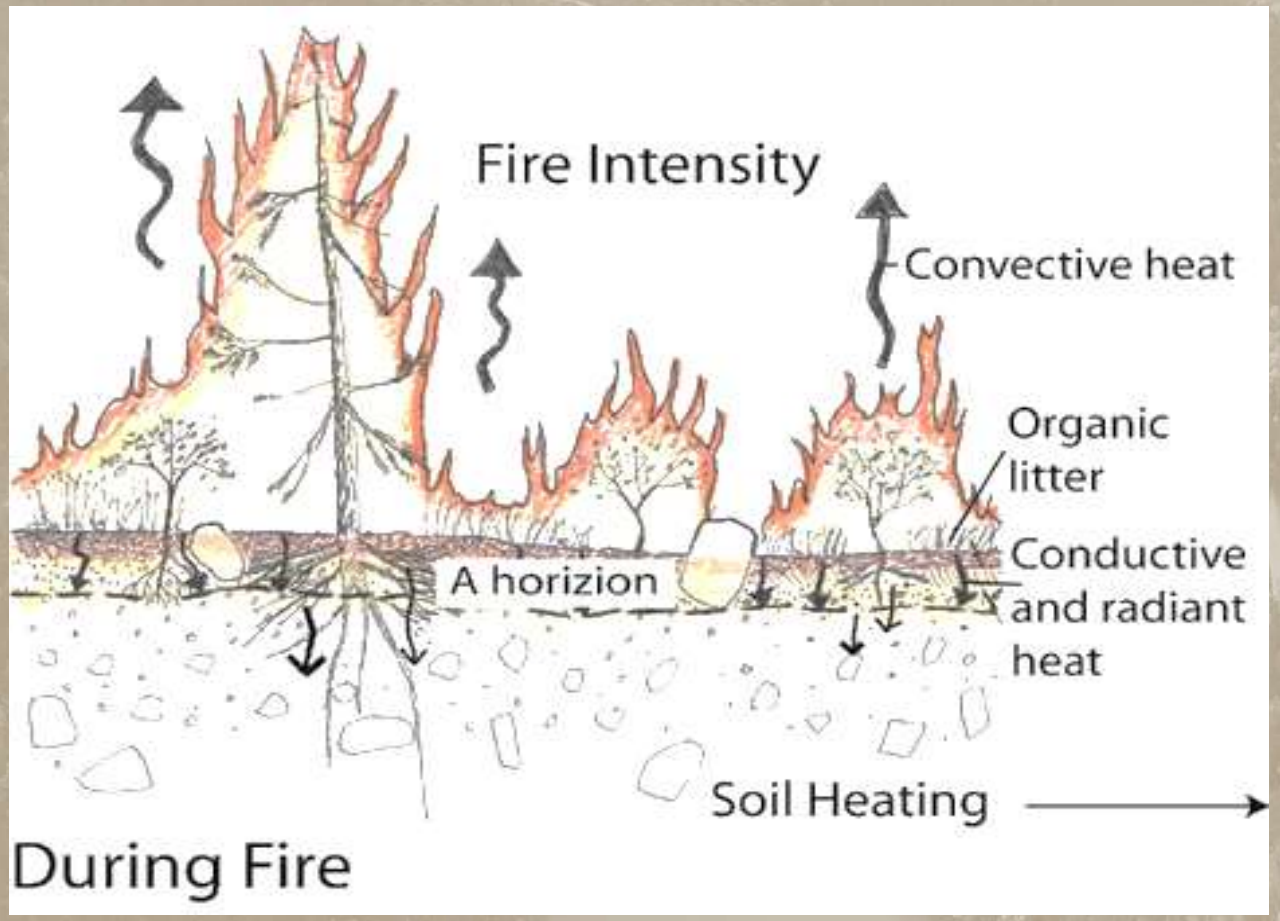
Develop response strategy

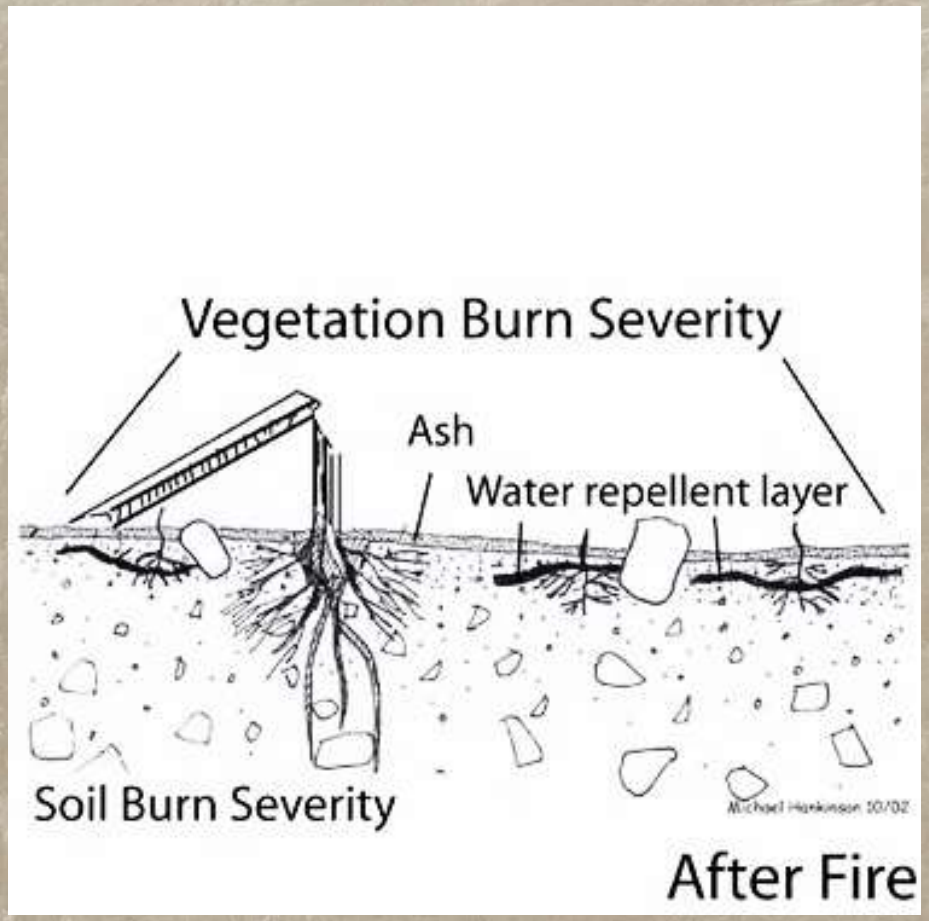
Implement the strategy

Post-Fire Threats

- Soil erosion and sedimentation
- Increased flooding
- Rock fall and debris flows
- Dead and falling trees
- Invasive Species

Burn Severity: Vegetation versus Soil





USDA

United States
Department
of Agriculture

Forest Service

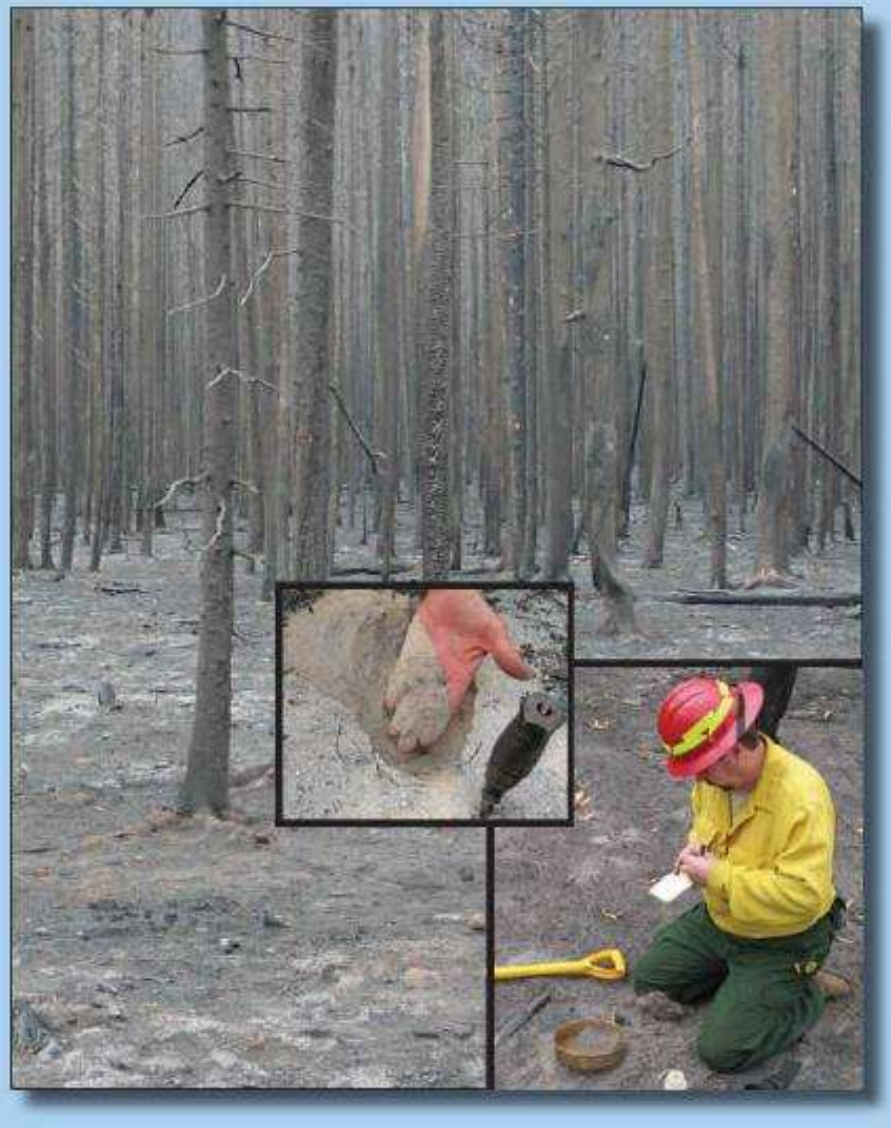
**Rocky Mountain
Research Station**

General Technical Report
RMRS-GTR-243

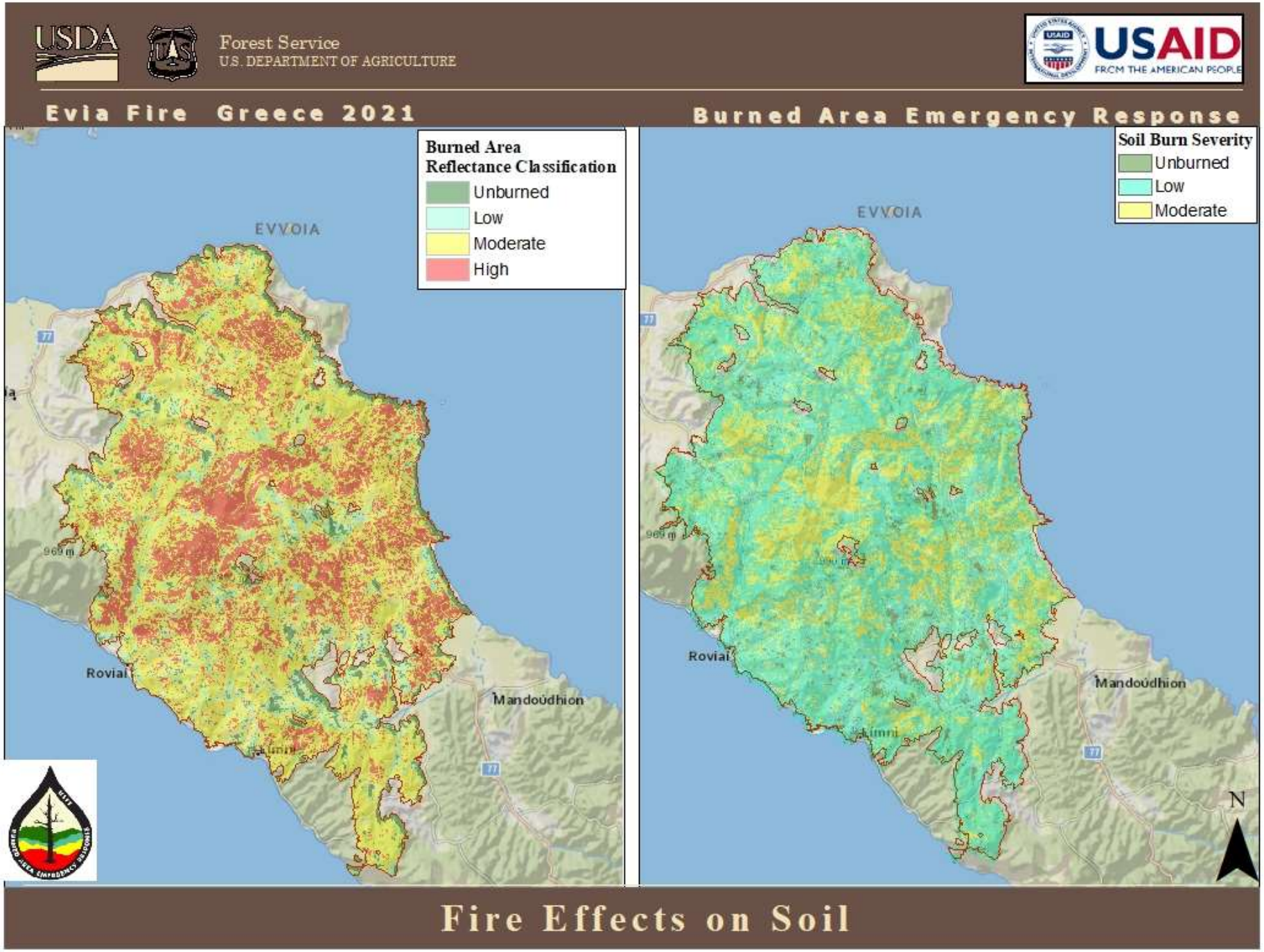
October 2010

Field Guide for Mapping Post-Fire Soil Burn Severity

Annette Parsons, Peter R. Robichaud, Sarah A. Lewis,
Carolyn Napper, and Jess T. Clark



Greece 2021 Evia Island Fire



Hydrologic Response

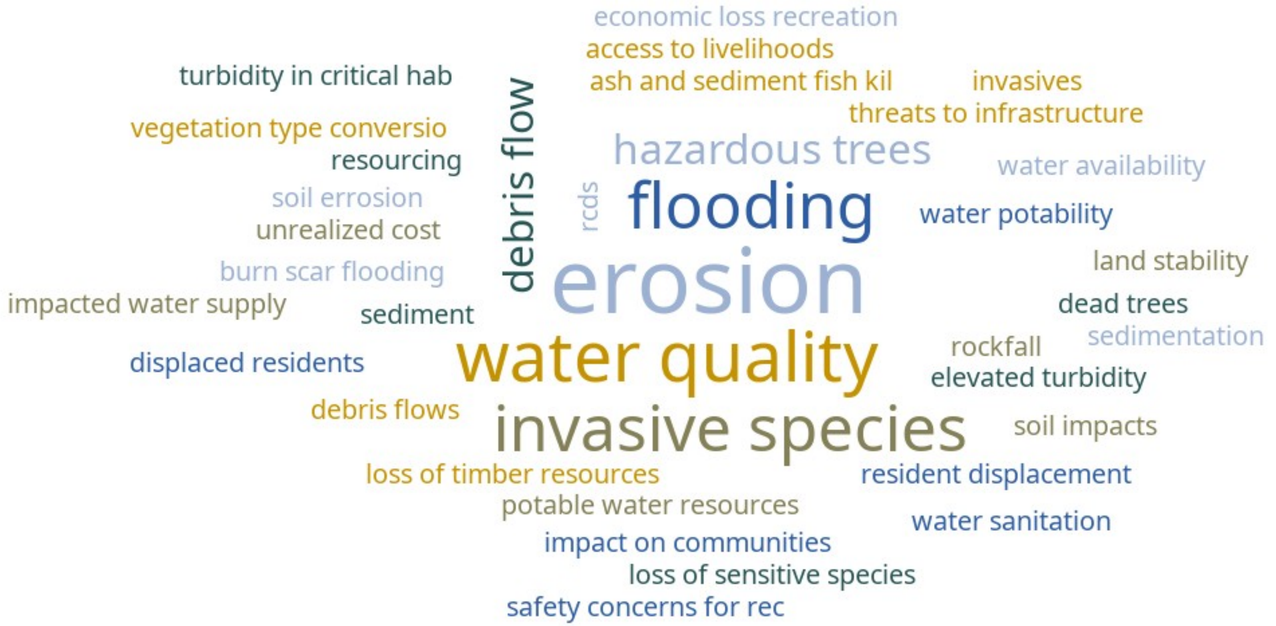
Geologic Response

What are the post-fire threats of concern?

What are the mechanisms of failure?

What are the post-fire threats of concern?

58 responses



The BAER Process

Identify critical values

Assess for threats

Evaluate risk

Develop response strategy

Implement the strategy

What are the likely damaging events?

When do they usually occur?

Risk

- How likely is a storm to cause damage?
- What is the probable level of damage?

FSWEPP

ERMiT

WEPPcloud-EU

USGS
science for a changing world

Landslide Hazards Program

Post-Fire Debris-Flow Hazards

About Newsletters Soft

US Army Corps of Engineers

HOME > SOFTWARE > HEC-HMS

HEC-HMS

Predictive Tools

Predictive tools

- Are local tools available?
- Who are the local specialists?

What predictive tools or local specialists do you have accessible to inform assessments?

use USFS tools (WEPP, ermit)

USGS

We would need to use outside resources

USDA

Local Forest Service

we create our own BARC map following the BAER process

Soil scientists and Hydrologist at forest and regional level.

Vibrant Planet

What predictive tools or local specialists do you have accessible to inform assessments?

Forest Supervisors and Forest Managers within my region

previous baer reports

State assessments and soil studies

Academics

USFS, DNR, other outside resources

Colorado Water Conservation Board - Wildfire Ready Action Plans

Oregon Dept of Forestry specialists

Colorado Forest Restoration Institute

What predictive tools or local specialists do you have accessible to inform assessments?

NRCS

RCDs

Vibrant planet Land Tender

NRCS districts

Watershed coalitions

State university studies and reports

local specialists (hydro, botany, heritage, etc_

How quickly do the burned areas recover? How many years of elevated risk?

Risk

- Determine emergency action needs?
- Prioritize across the landscape?

The BAER Process

Identify critical values

Assess for threats

Evaluate risk

Develop response strategy

Implement the strategy

Prioritize the needs and develop a response strategy

- Is there an effective treatment to manage the risk?
- What can be done before damaging storms?

Treatments

- Objective: protect values
- Many methods have been tested
- Effectiveness varies
- Know what works in your area
- Political pressure may influence decisions

Effectiveness Monitoring

- What worked?
- What did not work?
- Who will monitor effectiveness?

United States Department of Agriculture

Forest Service

Rocky Mountain Research Station

General Technical Report RMRS-GTR-228

A Synthesis of Post-Fire Road Treatments for BAER Teams: Methods, Treatment Effectiveness, and Decisionmaking Tools for Rehabilitation

Randy B. Foltz, Peter R. Robichaud, and Hakjun Rhee

Effectiveness of post-fire soil erosion mitigation treatments: A systematic review and meta-analysis

Antonio Girona-García [a,*], Diana C.S. Vieira [a], Joana Silva [a], Cristina Fernández [b], Peter R. Robichaud [c], J. Jacob Keizer [a]

[a] Centre for Environmental and Marine Studies (CESAM), Department of Environment and Planning, University of Aveiro, Aveiro 3810-193, Portugal
[b] Centro de Investigación Forestal-Lourizán, Xunta de Galicia, P.O. Box 127, 36080 Pontevedra, Spain
[c] U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station, 1221 S. Main Street, Moscow, ID 83843, USA

The BAER Process

Identify critical values

Assess for threats

Evaluate risk

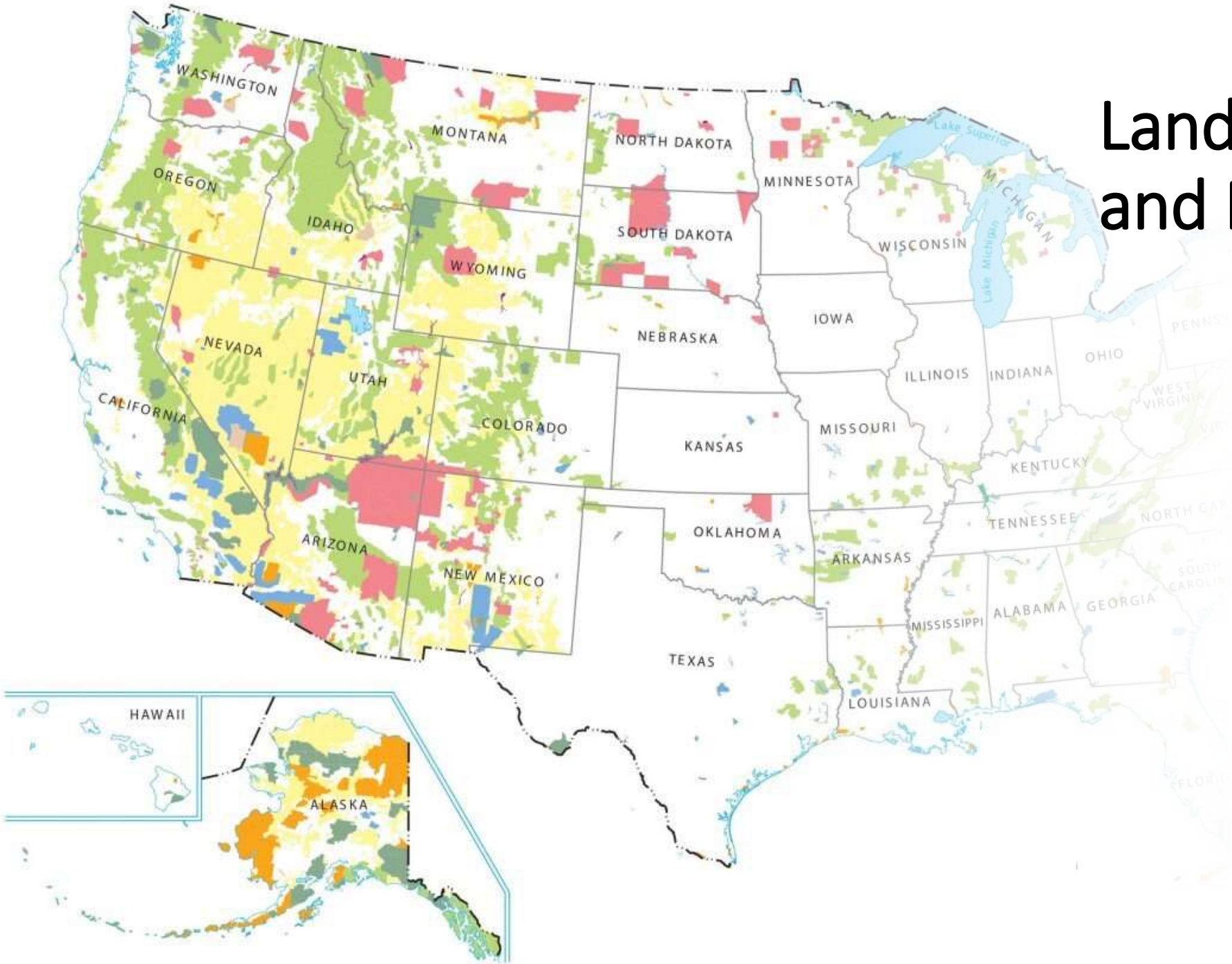
Develop response strategy

Implement the strategy

Implementation of Risk Mitigation Work

- Source of funding
- Timing of funding
- Who will do the work?
- When will work be done?

Preparing for floods



Land Ownership and Responsibility

Who is responsible for…

- Data collection/prediction
- Post-fire risk mitigation
- Early warning
- Public safety
- Post-fire flood response

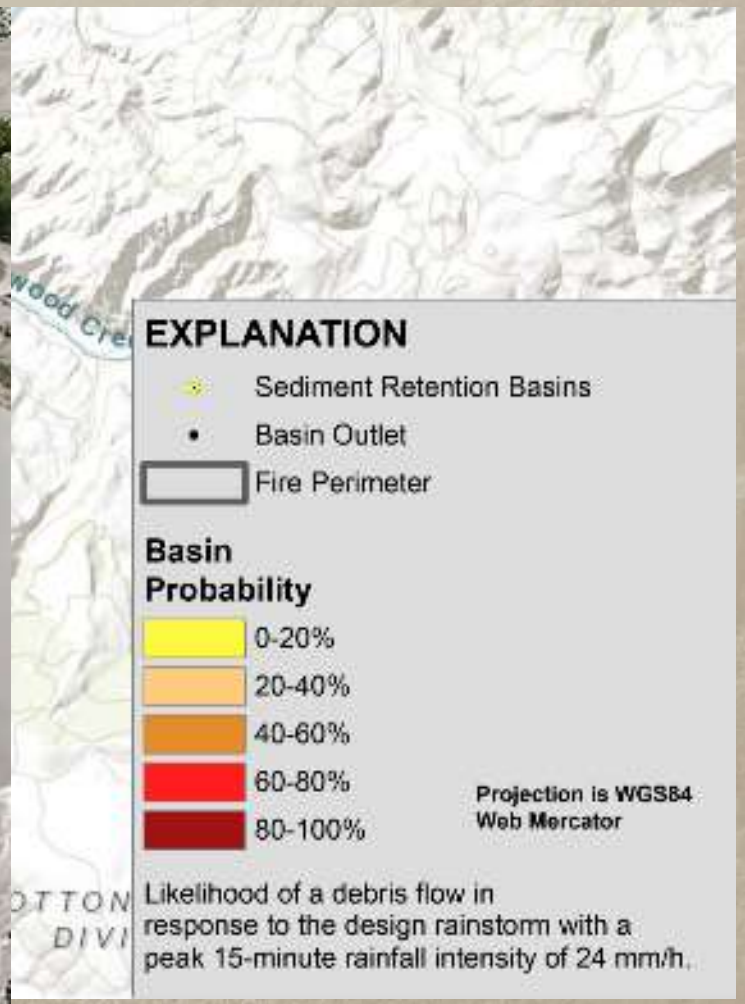
Post-fire response is a partnership with multiple agencies.

Land Ownership and Responsibility

State, County, Local Emergency Response Agencies

What ministries or organizations do you need to coordinate with?

2020 Grizzly Creek Fire



2020 Grizzly Creek Fire

Post-fire Response and Recovery is part of the Fire Management Cycle

Questions and Discussion

Questions & Comments

How do you determine how many points to sample in the field to develop a soil burn severity map?

I would love to see more of this programming especially a model across boundaries such as federal, state, and private lands.

Great presentation! You mentioned a coordination of landownership/ responsible agencies. Do you have a list or tool to use in field for guidelines?

is there a threshold at which fires on non-federal lands could access help running through the BAER process (or similar)?

Menti kept me engaged during the entire presentation. Thank you for exposing me to it. Our forests, on military installations, are mutually beneficial to our military mission as well as the USFS.

For BAER work on non-federal lands, is it common for State entities to get the same access to satellite products that feed the BAER maps?

How does BAER fit with MTBS?

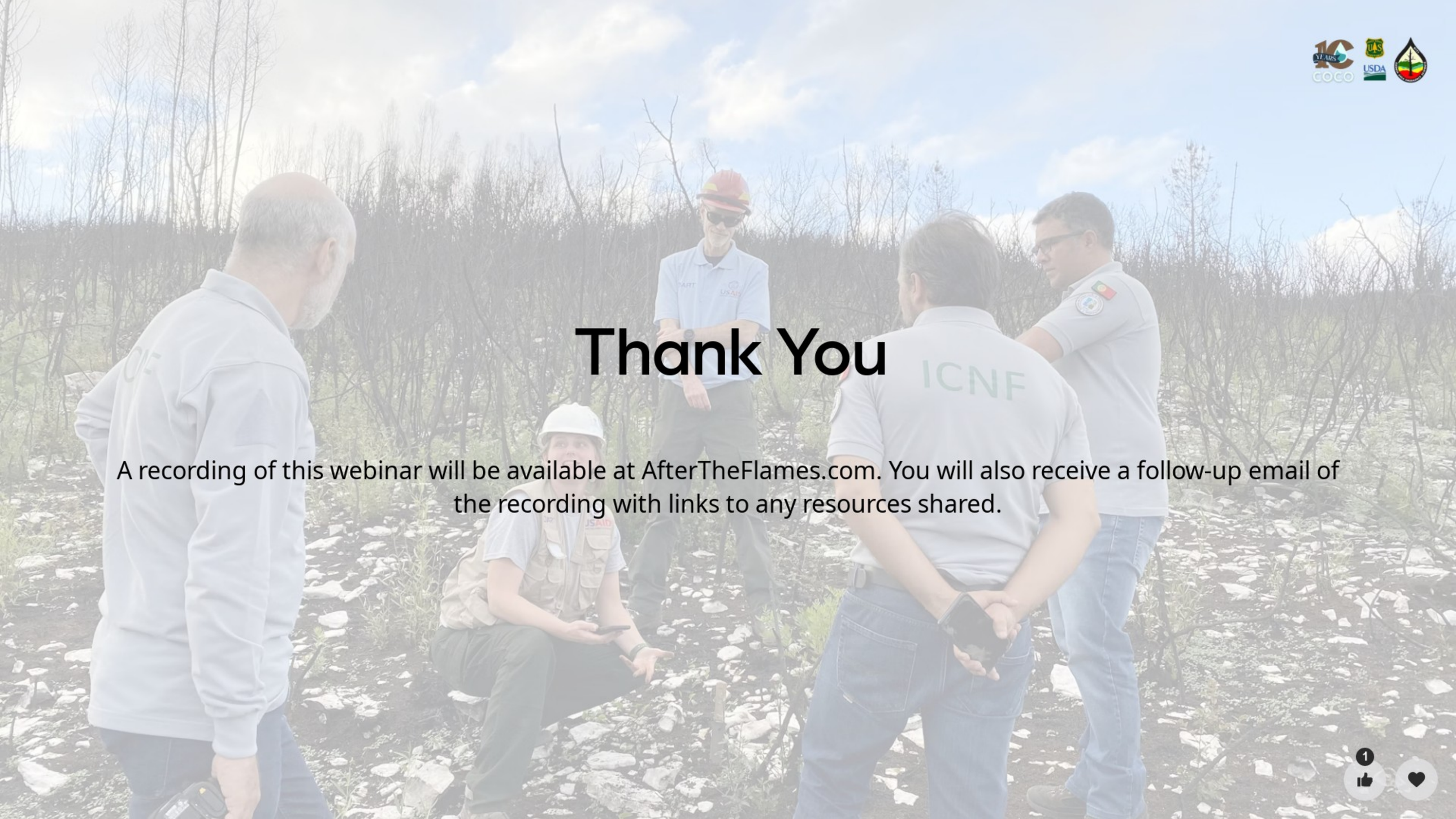
A lot of conservation districts are working on pvt land BAER efforts too

Questions & Comments

we directly access Sentinel and Landsat imagery to make our own BARC maps! Following the process used by GTAC

Do you know if Vibrant Planet has that burn severity data too?

Is burn severity generally based around dNBR (difference of Normalized Burn Severity) index?



Thank You

A recording of this webinar will be available at AfterTheFlames.com. You will also receive a follow-up email of the recording with links to any resources shared.