



# Welcome

Maria Brandt | Outreach & Development  
Director  
Coalitions & Collaboratives | [co-co.org](http://co-co.org)



IN PERSON

BIANNUAL CONFERENCE & WORKSHOP

This ATF event is the nation's largest...



# After the Flames

brought to you by Coalitions & Collaboratives

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

Over the last 38 years, wildfires have burned an average of 5.2 million acres annually in the United States. Many remain inconsequential, but some exceed 300,000 acres, accompanied by the need to rebuild homes, businesses & infrastructure. The long-term costs to communities & ecosystems include flooding, debris flows & long-term impacts on infrastructure due to flooding are examples of post-wildfire's major shifts in ecosystem composition & structure, often permanently changing the landscape. Much of the recovery & restoration borne by state & local entities, & by residents & businesses in the fire scar.

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

PROGRAM CONTACT  
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- 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.



## 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

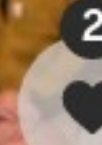


DONATE

## WE ARE TEAM COCO

Here to mentor and support, or connect you to the appropriate resources. Email us at [coco@co-co.org](mailto:coco@co-co.org).

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



training on-site

FIELD DAYS



WEBINARS

ONLINE



- Scholarships (Conference & Workshop)**
- Fund scholarships for individuals from diverse communities, ensuring diversity & equity
  - Support professional development & training for emerging leaders in the field

- Agenda Development (Conference & Workshop)**
- Partner with us in shaping the agenda to address the most pressing issues
  - Suggest & coordinate key session topics to enhance the experience

- Staffing (Conference & Workshop)**
- Volunteer or staff to assist with registration & participant services
  - Offer expertise & manpower for hands-on training is impactful

- Donation Support (Conference & Workshop)**
- Establish partnerships with local businesses & organizations

## 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.

## AFTER THE FLAMES

After the Flames' signifies not just a strategic framework. This framework is our approach to post-disaster response encompassing a holistic strategy for workforce development, policy refinement, program innovation, and resource provision.



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# 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

# What do you hope to get from this online workshop?

More knowledge than I have now

Tools for post-fire recovery, focus on debris flow potentials

Prefer mitigation ideas to reduce post fire erosion and debris flow

Steps for post fire planning to include in a CWPP

If there is new information that will help inform management

Gain a better and more robust understanding of all the processes required for a post fire emergency assessment.

More knowledgeable about post fire processes

Gain a better understanding CWPP

# What do you hope to get from this online workshop?

better understanding on how to integrate the BAER process into my local community to support a resilient community and landscape.

Understanding how to estimate gully erosion.

Learn more about BAER

Knowledge about BAER

Tips for post-fire restoration (planting palettes, vendors, etc).

More information about post fire planning and communication with residents.

Better understand how the team works together and what disciplines are needed to complete a project

## 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.





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FROM THE AMERICAN PEOPLE



# Post-fire Assessment 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



# The BAER Process

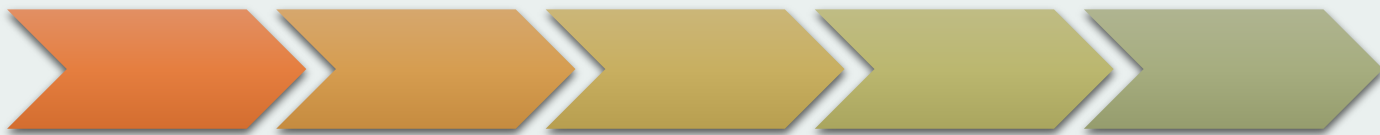
**Identify critical values**

**Assess for threats**

**Evaluate risk**

**Develop response strategy**

**Implement the strategy**



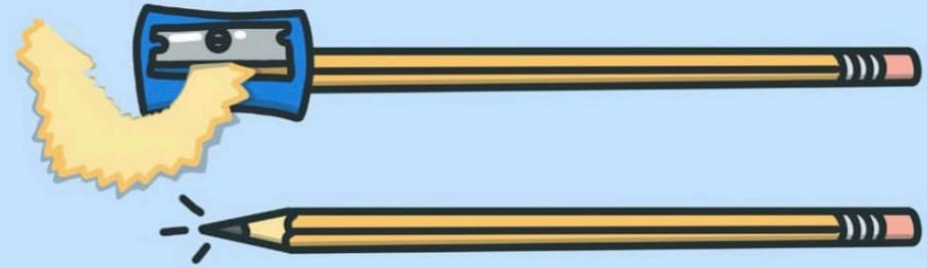


**Adam Grant** ✓  
@AdamMGrant

The antidote to overthinking isn't thinking less. It's rethinking more.

Overthinking is ruminating on old ideas without a new lens. It narrows your focus and wears you out.

Rethinking is revisiting the same issue from a different perspective. It broadens and sharpens your view.



**THINKING**



**OVERTHINKING**



# Breakout 1: Identify critical values

What are those important or critical values that would rise above all the rest?

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Clean drinking Water.  
Resilient Infrastructure,  
resilient and disaster-ready  
community.

Power for citizens with  
medical devices  
dependent on  
electricity

Overland flood in oil  
and gas areas during  
wildfire

combustion potential of  
invisible gases in oil and  
gas areas during and/or  
after wildfire recreating  
threats

native ecosystem  
integrity

Transportation  
infrastructure

Long-term damage to  
crops in agriculture

Endangered/threatene  
d species

# Breakout 1: What are those important or critical values that would rise above all the rest?

Prediction of impact

Identifying keystone species

Safely returning those with special needs back to their homes.

Water sanitation

Recreational resources - CDT, etc.

Cultural resources

# The BAER Process

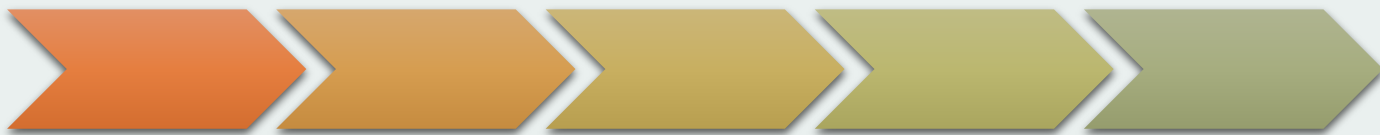
Identify critical values

Assess for threats

Evaluate risk

Develop response strategy

Implement the strategy



# The BAER Process

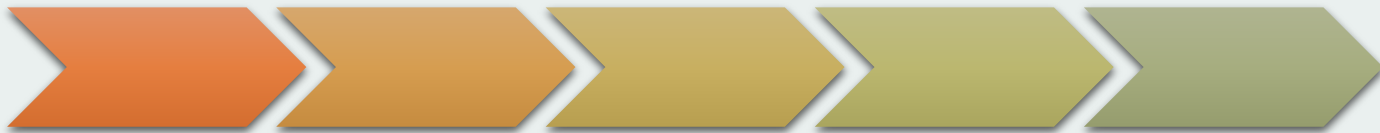
Identify critical values

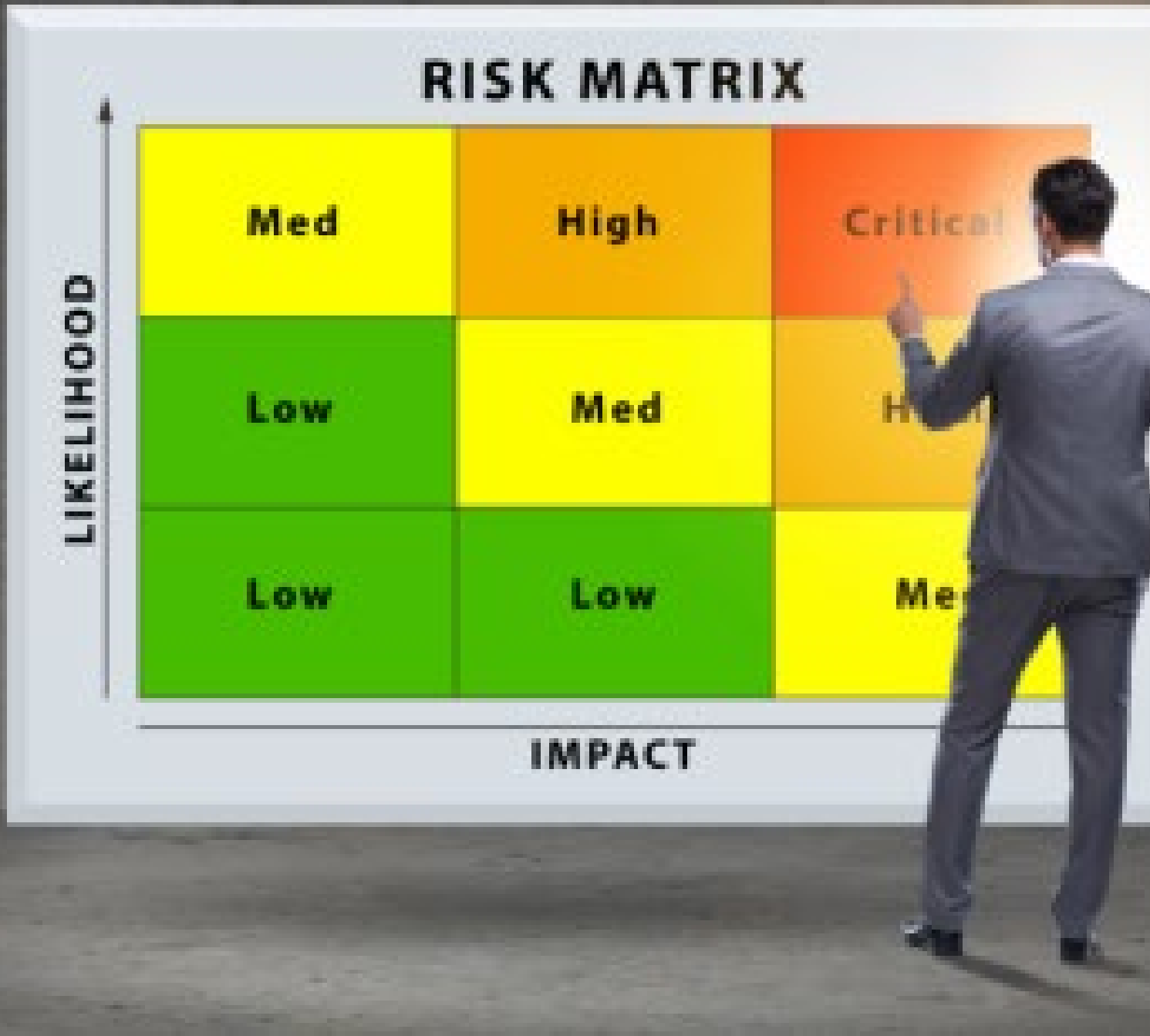
Assess for threats

Evaluate risk

Develop response strategy

Implement the strategy





## Risk

- How likely is an event to cause damage?
- What is the probable level of damage?



## BAER Risk Assessment

Probability of Damage or Loss	Magnitude of Consequences		
	Major	Moderate	Minor
	<b>RISK</b>		
Very Likely	Very High	Very High	Low
Likely	Very High	High	Low
Possible	High	Intermediate	Low
Unlikely	Intermediate	Low	Very Low

**Probability of Damage or Loss:** The following descriptions provide a framework to estimate the relative probability that damage or loss would occur within 1 to 3 years (depending on the resource):

- Very likely. Nearly certain occurrence (90% - 100%)
- Likely. Likely occurrence (50% - 89%)
- Possible. Possible occurrence (10% - 49%)
- Unlikely. Unlikely occurrence (0% - 9%)

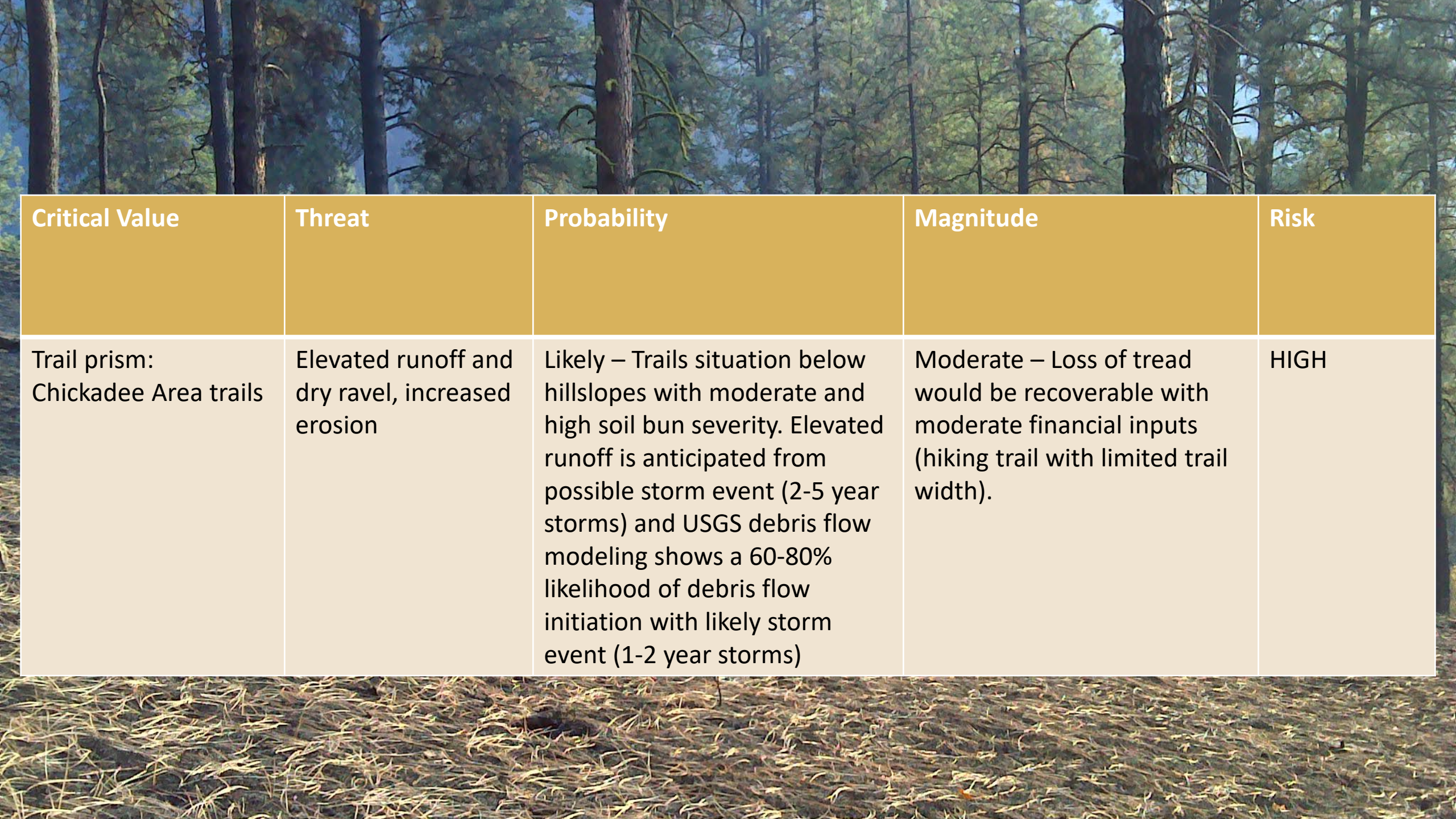
**Magnitude of Consequences:**

- Major. Loss of life or injury to humans; substantial property damage; irreversible damage to critical natural or cultural resources.
- Moderate. Injury or illness to humans; moderate property damage; damage to critical natural or cultural resources resulting in considerable or long term effects.
- Minor. Property damage is limited in economic value and/or to few investments; damage to critical natural or cultural resources resulting in minimal, recoverable or localized effects.

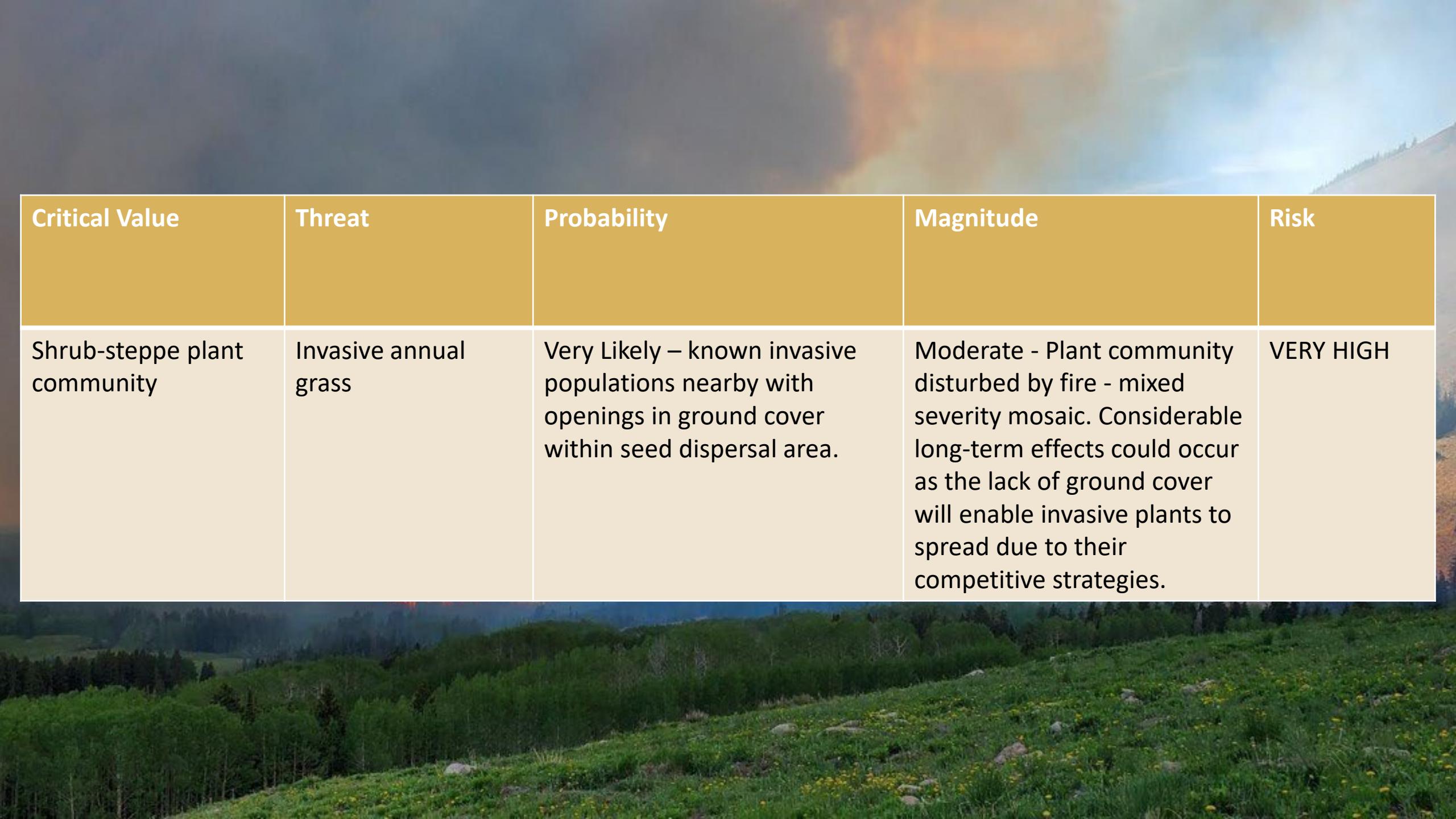
Critical Value

Threat

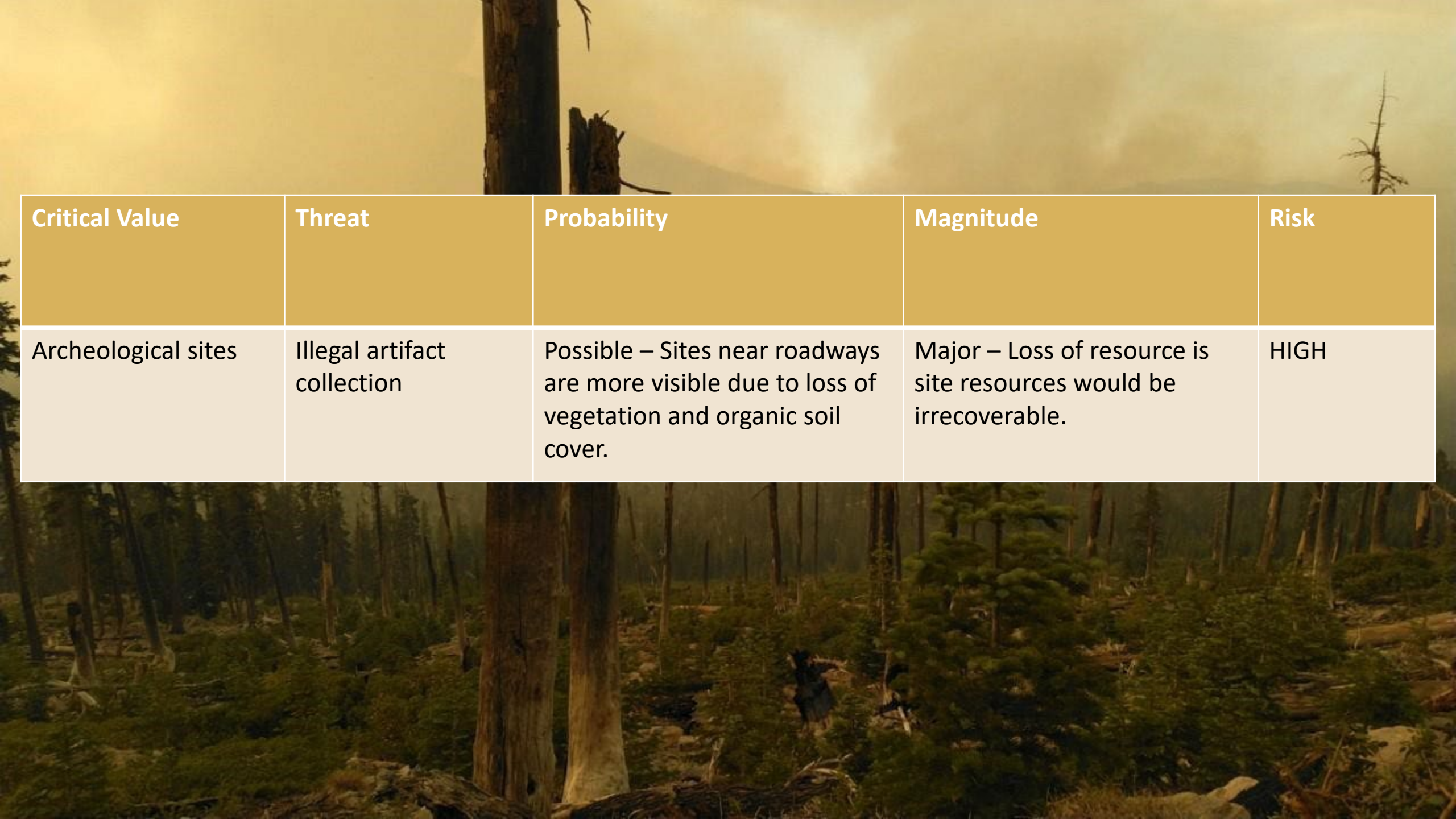
Risk



Critical Value	Threat	Probability	Magnitude	Risk
Trail prism: Chickadee Area trails	Elevated runoff and dry ravel, increased erosion	Likely – Trails situation below hillslopes with moderate and high soil bun severity. Elevated runoff is anticipated from possible storm event (2-5 year storms) and USGS debris flow modeling shows a 60-80% likelihood of debris flow initiation with likely storm event (1-2 year storms)	Moderate – Loss of tread would be recoverable with moderate financial inputs (hiking trail with limited trail width).	HIGH



Critical Value	Threat	Probability	Magnitude	Risk
Shrub-steppe plant community	Invasive annual grass	Very Likely – known invasive populations nearby with openings in ground cover within seed dispersal area.	Moderate - Plant community disturbed by fire - mixed severity mosaic. Considerable long-term effects could occur as the lack of ground cover will enable invasive plants to spread due to their competitive strategies.	VERY HIGH



Critical Value	Threat	Probability	Magnitude	Risk
Archeological sites	Illegal artifact collection	Possible – Sites near roadways are more visible due to loss of vegetation and organic soil cover.	Major – Loss of resource is site resources would be irrecoverable.	HIGH



Critical Value	Threat	Probability	Magnitude	Risk
Aquatic Habitat – Green Creek	Increased peak flow, sedimentation, and debris flow impacts changing morphology	Possible – Burn severity higher in the watershed would increase sediment and turbidity in the water which would impact aquatic habitat. Debris flow modelling shows 20-40% likelihood.	Minor – An overall benefit to the value is expected. Stream conditions have been altered by human activity resulting in a lack of gravels, large wood, and habitat diversity.  *benefit?	LOW



**BAER Risk Assessment**

Probability of Damage or Loss	Magnitude of Consequences		
	Major	Moderate	Minor
	<b>RISK</b>		
Very Likely	<b>Very High</b>	<b>Very High</b>	<b>Low</b>
Likely	<b>Very High</b>	<b>High</b>	<b>Low</b>
Possible	<b>High</b>	<b>Intermediate</b>	<b>Low</b>
Unlikely	<b>Intermediate</b>	<b>Low</b>	<b>Very Low</b>

**Probability of Damage or Loss:** The following descriptions provide a framework to estimate the relative probability that damage or loss would occur within 1 to 3 years (depending on the resource):

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**Magnitude of Consequences:**

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# Breakout II: Threats and risk assessment

Take one or two critical values and walk through the potential post-fire threats that could affect them, discuss what additional information would be needed to formulate the risk assessment.

# Take 1-2 critical values. Walk through potential post-fire threats that could affect them. What additional info is needed to formulate the RA?

Drinking Water. Experience is the best teacher in formulating a RA.

Drinking water:  
Sedimentation, increased flows, water chemistry changes, high particulate levels

CV: Municipal Intake  
Threats:  
\*WQ (turbidity, heavy metals, ash)\*Flooding\*Debris Flows\*Sedimentation  
Needed for RA:\*WQ monitoring\*H & H modeling\*Hillslope Erosion model\*Debris Flow modeling

\*Post fire mudslides taking out critical infrastructure. \*Soil structure being altered affecting ag lands. \*Rain and winds changing the landscapes and affecting safety\*sediment/debris affect aquat

CV:  
Railroad  
Threats:\*flooding\* debris flow  
Needed for RA:\*H & H modeling\* Debris Flow modeling

Example of a water tank as the sole source of water for a small town. Are alternatives available? Is it subject to interruption from mudslides?

\*Ash/sediment influencing water temperature \*power back up for reliance on medical equipment. Is there a place for the dependent to go?

Does the critical value have a backup plan if an additional hazard is possible (e.g., earthquake)?



## Take 1-2 critical values. Walk through potential post-fire threats that could affect them. What additional info is needed to formulate the RA?

Most actions are focused on response, we can use stronger recovery efforts, especially with the focus on debris flow potentials. I'm still learning about how to apply a comprehensive risk-assessment

# What have you learned that are you taking away from this workshop?

Think broader

In teaching people about evacuations, include post fire education

We have a good group of experienced folks in this group. We need to continue to capitalize on their knowledge as we work to be resilient.

There is a such a broad array of lenses to view post-fire threats through. Allow for different stakeholders or groups to create their own priorities and allow for the RA to meet that flexibility.

Hearing from different perspectives/fields of experience is critical.

the broad process and better ways on how to bring this concept into local communities. made some connections regarding resources that are out there in the nation that i can reach out too. THANKS!



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for the greatest good

Questions and Discussion |

# Thank You

A recording of this webinar will be available at [AfterTheFlames.com](https://AfterTheFlames.com). You will also receive a follow-up email of the recording with links to any resources shared.