

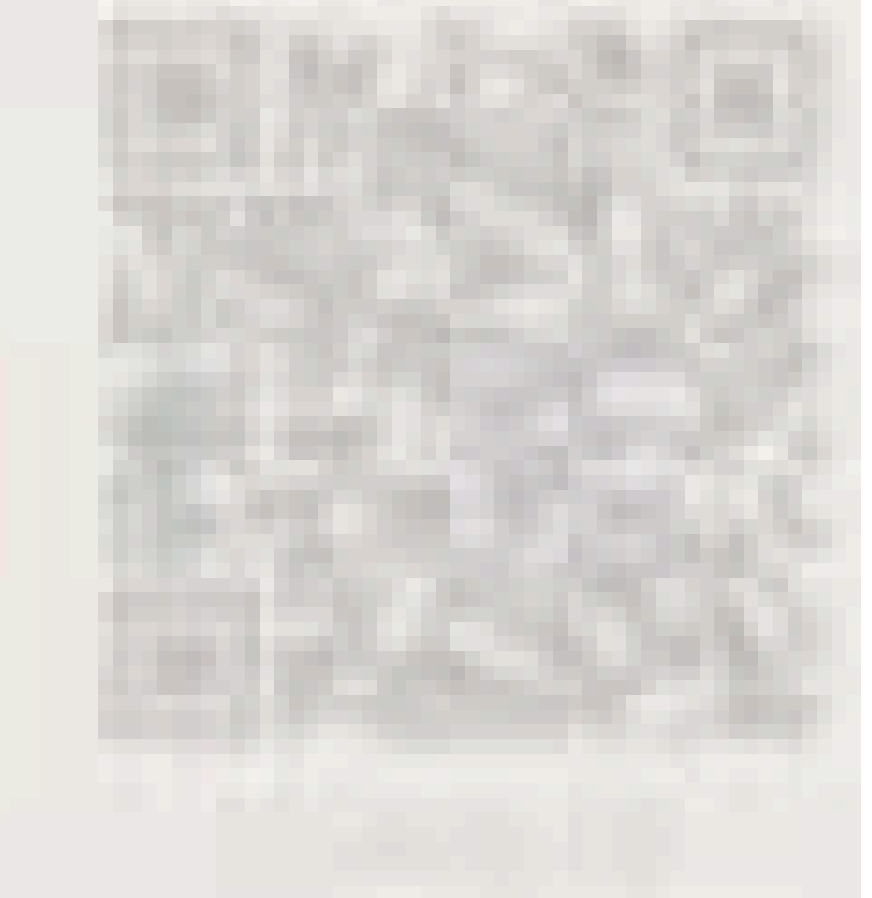
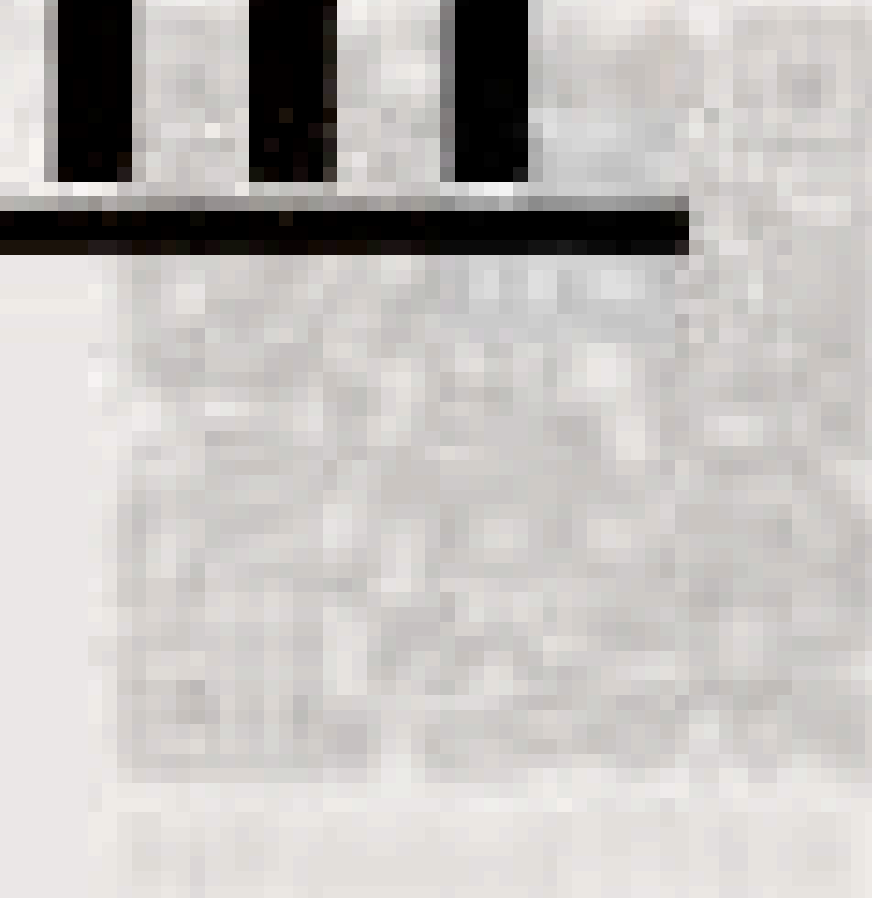
Welcome

Jonathan Bruno | Chief Executive Officer
Coalitions & Collaboratives | co-co.org

Join at menti.com | Use vote code 8996 7318



Visit [CO-CO.org](https://co-co.org) or AftertheFlames.com



WE ARE TEAM COCO

Join the community of wildfire mitigation professionals and homeowners who are working together to protect their communities from wildfire risk.

Visit us at www.co-co.org

800-555-5555

800-555-5555

800-555-5555

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Instructions



Using Mentimeter

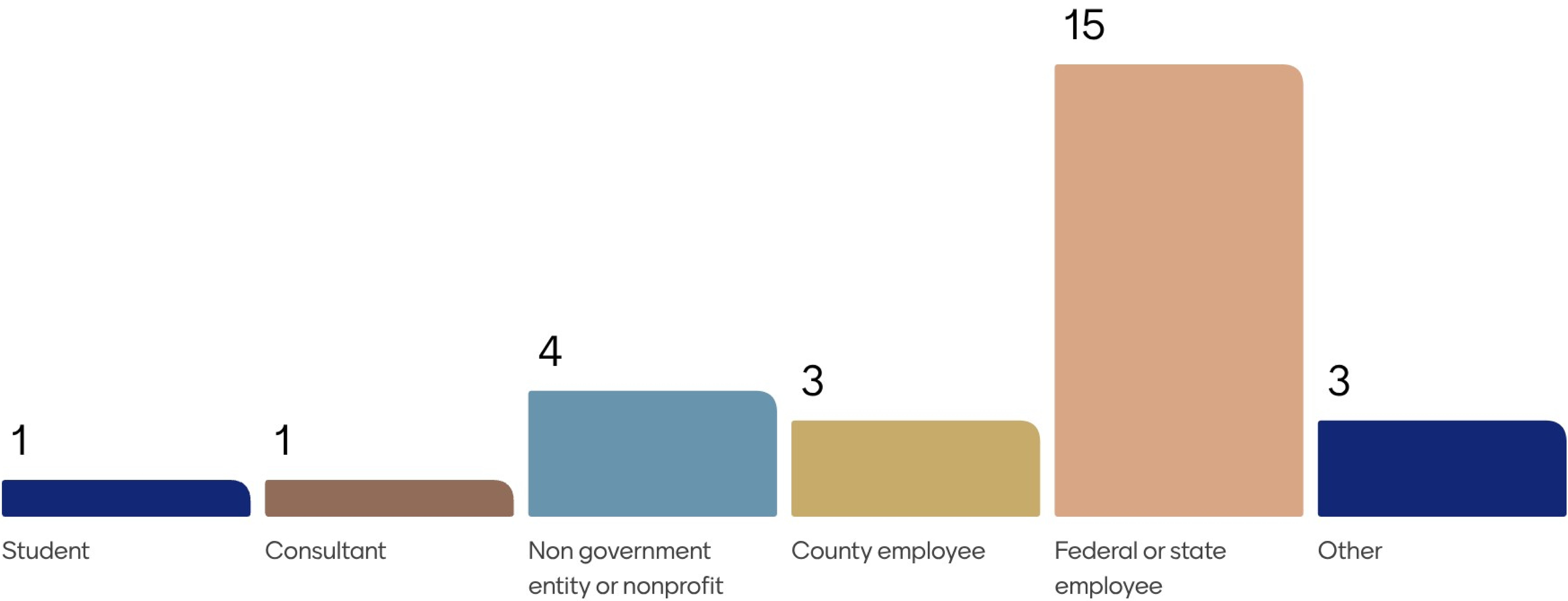
- Scan the QR code or enter menti.com into your computer's web browser
- Enter the code given in the QR box or info bar above
- Follow along and participate in the webinar



Discussions, Polling, Q&A

- Polling is anonymous. Please be respectful & professional.
- Please note we will try to address all questions & comments in the webinar
- Monitoring Zoom Q&A, but please consider adding to Menti first
- Webinar is being recorded, so drop questions in Zoom that will be transferred to Menti, if you have to leave early

I'm a



What geographic location are you joining us from?



What do you hope to get from this webinar?

To understand how to
create partnerships in
recovery

knowledge

Insight into post fire
recovery

recovery planning

Future of funding for
post fire.

Idea sharing

flooding post fire

Tools for predicting and
managing post-fire
debris

What do you hope to get from this webinar?

knowledge - mostly understanding how to help with NM recovery

Ideas to implement locally

Other's prospective on recovery

Coordination and collaboration on wildfire strategies pre and post

Continuing Ed

Learning more about the post-fire impacts.

Knowledge

Anything that could benefit the SWCDs I work with

What do you hope to get from this webinar?

Perspectives on how a different state/location addresses post-fire

Interested in State led recovery approaches

is the flood really inevitable?

Post fire recovery best practices

flash flooding/debris flow discussion to improve forecasts and communication with partners/public

no

First Comes Fire - Then Comes Flood

- **Kathy Holder** is Utah's State Hazard Mitigation Officer, as well as the Mitigation Section Manager for the Utah Division of Emergency Management. She leads Utah's Post Wildfire Mitigation Team and Utah's State Hazard Mitigation Team.
- **Brendan Waterman** is the National Post-Fire Operations and Logistics Coordinator for the US Forest Service (USFS). He has been a member of Utah's Post Wildfire Mitigation Team since its inception.

Utah Post Wildfire Mitigation Team 2025

**Kathy Holder, State Hazard Mitigation Officer,
Post-Wildfire Mitigation Team Lead, Utah DEM**

**Brenden Waterman, National Post-Fire
Operations and Logistics Coordinator, US Forest
Service**





UDEM Post-Wildfire Mitigation Team

Established in 2019 and is led by the UDEM.

Collaborates with federal, state, and local partners to engage with Utah communities impacted by wildfires.

Discusses **actions, provides resources, and identifies hazard mitigation grant opportunities** to assist communities with post wildfire cascading events.

Bringing a “One stop shop” to communities

Post-Wildfire Mitigation Team Partners (Meetings, Assistance)

STATE



Utah Division of Emergency Management (DEM)

- Mitigation (Team Lead. Kathy Holder), Recovery (FMAG - HMGP Post Fire), Floodplain Manager (NFIP), Risk MAP Manager, Liaisons



Utah Dept. of Natural Resources (DNR)

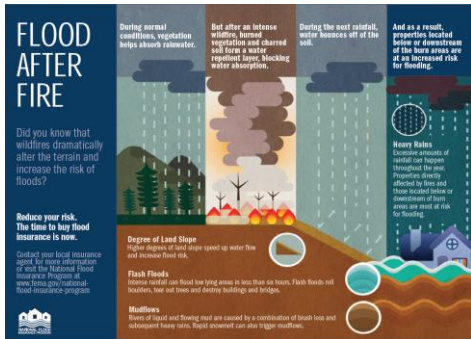
- Forestry Fire and State Lands (FFSL), Utah Geological Survey, Division of Water Resources. Utah Division of Wildlife Resources. DNR-WRI (Watershed Restoration Initiative)



Utah Dept. of Agriculture and Food (UDAF)



Utah Dept. of Environmental Quality (DEQ)



FEDERAL



U.S. Geological Survey



Federal Emergency Management Agency (FEMA)



U.S. Army Corps (USACE)



United State Department of Agriculture (USDA)

- Natural Resources Conservation Service (NRCS)
- Farm Service Agency (FSA)



National Weather Service (NOAA)



U.S. Forest Service



Bureau of Land Management (BLM)

NON-PROFIT



Team Rubicon

Successful partnerships across state and federal agencies



Draft email to send to communities after a wildfire:

Community Leader of _____,

Experiencing a wildfire can be devastating for homeowners and communities. Utah's Post Wildfire Team provides support to communities affected by wildfires. Our role is to bring together all the state and federal agencies with resources to assist your impacted community to recover from the disaster, rehabilitate the affected area, and mitigate risk from flood after fire and future wildfire danger.

Utah's Post-Wildfire Team and website wildfire.utah.gov was designed to help Utahans recover after wildfires. The website includes information to mobilize your community, a flood after fire toolkit, and information on wildfire hazards, rehabilitation, migration, and financial assistance.

The Post-Wildfire Team can provide support and information to start your community on the road to recovery. The team is available for a virtual or in-person meeting with your community whenever you are ready. We can meet with just the community leaders and emergency managers and/or participate in a public meeting to educate your community about post-wildfire hazards and recovery strategies and answer questions affected homeowners may be asking. The team can also help you coordinate and secure assistance from community volunteers and local organizations like churches, non-profits, and businesses.

When you are ready to talk about the mitigation of possible cascading events, please let us know how we can assist your community.

The Utah Post Wildfire Team
Kathy Holder
Utah Post Wildfire Team Lead
kcholder@utah.gov
385-315-3566



Samples of Partner Services in Community Meetings



Utah Division of Emergency Management



Post-Wildfire Resources Website

UtahStateUniversity

Post Wildfire Resources
Extension

Mobilize CommunityOur TeamHazardsTreatmentsWUI MitigationFinancial Assistance

wildfire.utah.go

Request a Community Meeting

Utah Post-Wildfire Resources

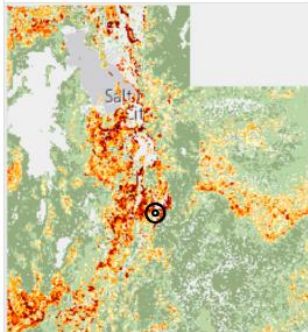
Experiencing a wildfire can be devastating for homeowners and communities. Utah's Post-Wildfire Website was designed to help Utahans recover after wildfires. It includes information to mobilize your community, toolkits, wildfire hazard, rehabilitation, migration, and financial assistance. Learn how the Post-Wildfire Team can provide support and information to start your community on the road to recovery.

Mobilize Community

Post-Wildfire Team

Post-Fire Hazards

Fire History Tracker



Request a Utah Post-Wildfire Team Meeting

Utah's Post-Wildfire Team is comprised of State and Federal agency representatives working together to support communities impacted by wildfire. When wildfire affects a community, Utah's Post-Wildfire Team will mobilize to meet with and advise community leaders and emergency managers and host public meetings to educate the affected community about post-wildfire hazards and recovery strategies. To request a meeting for your community please complete the form below. If you have questions please contact Utah DEM Post Wildfire Team Lead Kathy Holder at kholder@utah.gov or (801) 538-3400 Option #3 and then Option #4.

[Sign in to Google](#) to save your progress. [Learn more](#)

* Indicates required question

Email *

Your email

What type of post-wildfire meeting are you requesting?

☐ Community Leaders and Emergency Managers Meeting
☐ Community Meeting (open to the public)
☐ Both

Format of meeting being requested

☐ Virtual
☐ In-Person

Day(s) that work best for your community to have the Utah Post-Wildfire Team Meeting.

☐ Monday
☐ Tuesday

Samples of Some Services In Community Meetings

Utah DEM mitigation team programs and planning



You can find me:
Kathy Holder
SHMO/Manager
kcholder@utah.gov
Cell 385-315-3566



Post-Wildfire HMGP Funding (FMAG)

FY 24 Standard Plan: \$985,111 Enhanced Plan: \$1,313,485

Application Process

- Projects can be done on state, county, city, or private land but not on federal land
- Defensible space measures
- Ignition-resistant construction
- Hazardous fuels reduction
- Erosion control measures
- Slope failure prevention measures
- Flash flooding measures
- 5 % outreach or mapping Initiative
- 7 % planning grants

Eligible Project Ideas

- Application period Oct 2021– March 31
- Complete FEMA HMGP Application, BCA, EHP review, 3 certification forms
- 75% FEMA Share for each FMAG
- 25% Local Match (Can be in-kind, no fed funds)
- Period of Performance 3 years
- 5% of the award amount for management costs

Past/Current Projects

- Saratoga Springs Debris Basins and rip rap channel
- Woodland Hills Debris Basin
- Bountiful, Layton, Brighton, Draper, Millard & Juab Counties Fuels Reduction
- DNR Reseeding
- NWS Mobile Weather Stations
- UGS & FFSL UWRAP Tools
- North Tooele Hazard Mitigation Plan
- Post Wildfire Website



USDA Forest Service Burned Area Emergency Response (BAER)

Objectives:

- Complete emergency assessments ASAP, no later than 7 days after wildfire containment
- Produce soil burn severity maps
- Model post-fire erosion and hydrologic response
- Identify post wildfire threats
- Conduct post wildfire risk assessments
- Mitigate risk to Forest Service Critical BAER values
- Implement emergency stabilization treatments before post fire damaging events occur

Brendan Waterman brendan.waterman@usda.gov 385-377-4338

BAER www.fs.usda.gov/naturalresources/watershed/burnedareas-background.shtml



Utah's Watershed Restoration Initiative - Fire Rehabilitation

- Post-fire re-seeding
- Small scale erosion control
- Limited post-fire mulching
- Multi-agency coordination
 - Cultural Resources, Seed Mixes, Contracting
 - Treatments can be implemented cross boundary on all land ownerships
- State of Utah funds used for post-fire seeding/treatments can often be used by counties/cities as match for federal grants such as NRCS-EWP (timing is important)

watershed.Utah.gov

Kendall Bagley



Utah Division of Emergency Management



Utah Geological Survey Services for Fire-Related Debris Flows



Evaluate post-fire debris-flow hazard for local communities. Assist Burned Area Emergency Response (BAER) teams in evaluating the debris-flow risk from burned areas (<https://geology.utah.gov/hazards/hazard-assistance/#tab-id-3>).

Educate elected officials and homeowners regarding debris-flow hazards, potential impacts, and risk-reduction measures (https://ugspub.nr.utah.gov/publications/public_information/pi-90.pdf).

A heightened debris-flow hazard period persists for approximately 3 to 5 years after the fire.

Participate in emergency response for communities impacted by debris flows. Services include determining the likelihood of another debris-flow event, safety for first responders and others, and the types geologic information needed to reduce risk (<https://geology.utah.gov/map-pub/survey-notes/emergency-response-ugs/>).

Evaluate pre-fire debris-flow hazard for at risk communities to determine flow frequency and volume necessary to evaluate risk-reduction options for long-term and short-term debris-flow hazards. Utah has a history of damaging snow-melt and thunderstorm triggered debris flows not related to fires(<https://ugspub.nr.utah.gov/publications/circular/c-122.pdf>).





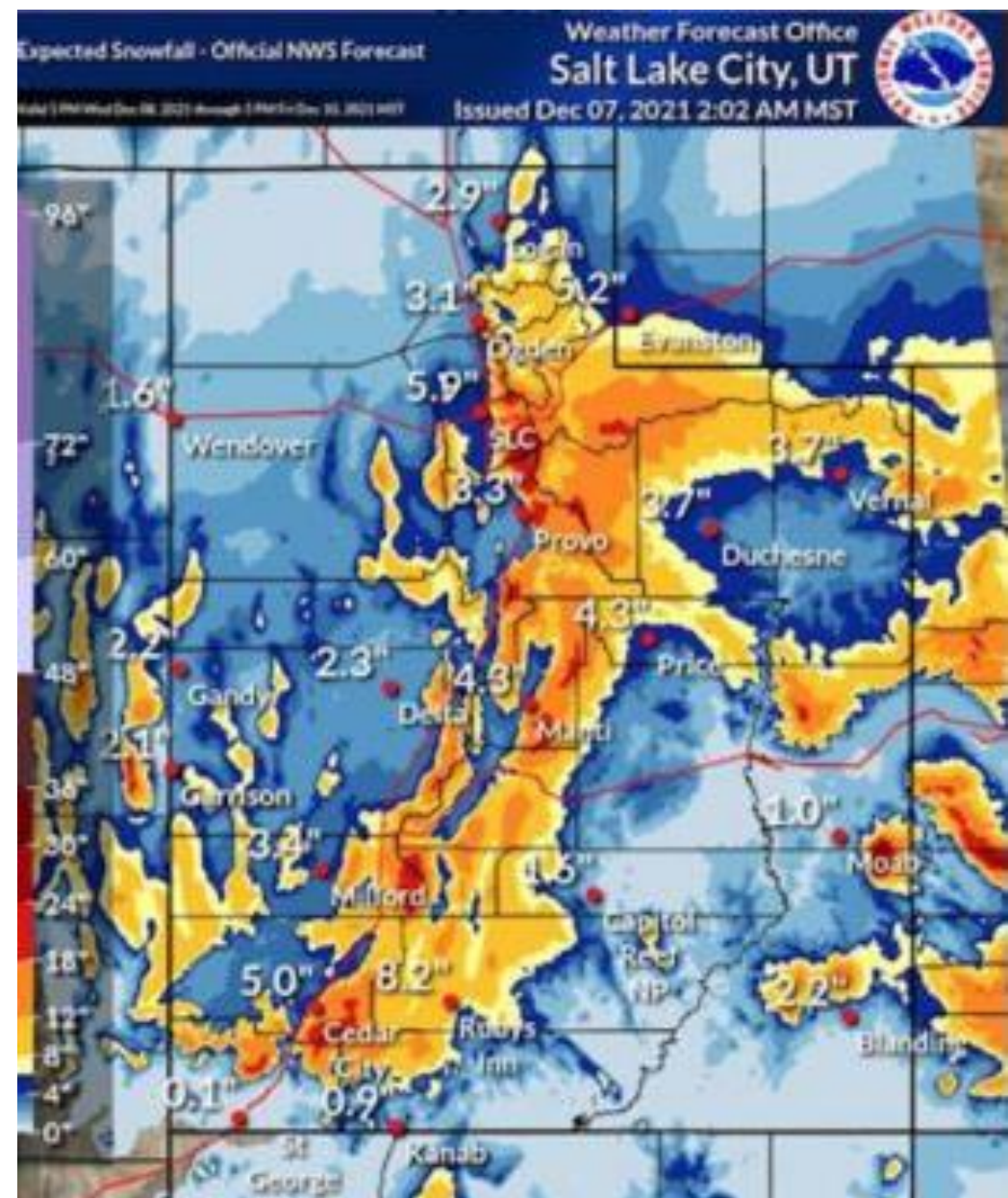
National Weather Service

NWS Mission

Provide weather, water and climate data, forecasts, warnings, and impact-based decision support services for the protection of life and property and enhancement of the national economy.

NWS Vision

A Weather-Ready Nation: Society is prepared for and responds to weather, water, and climate-dependent events.





Decision Support Services

- Assist in identification of burn scar debris flow/flash flood risks via BAER Teams and individually
- In partnership with Department of Public Safety Division of Emergency Management, calibrate, site, and install automated weather stations, providing satellite communications if needed
- Participate in collaboration meetings with partners to share available decision support services
- Participate in community meetings to provide threat, notification, and preparedness/safety information
- Provide notification services including Partner Email Briefings, iNWS, NWSChat 2.0, and notification calls
- Provide in-person support at Emergency Operations Centers

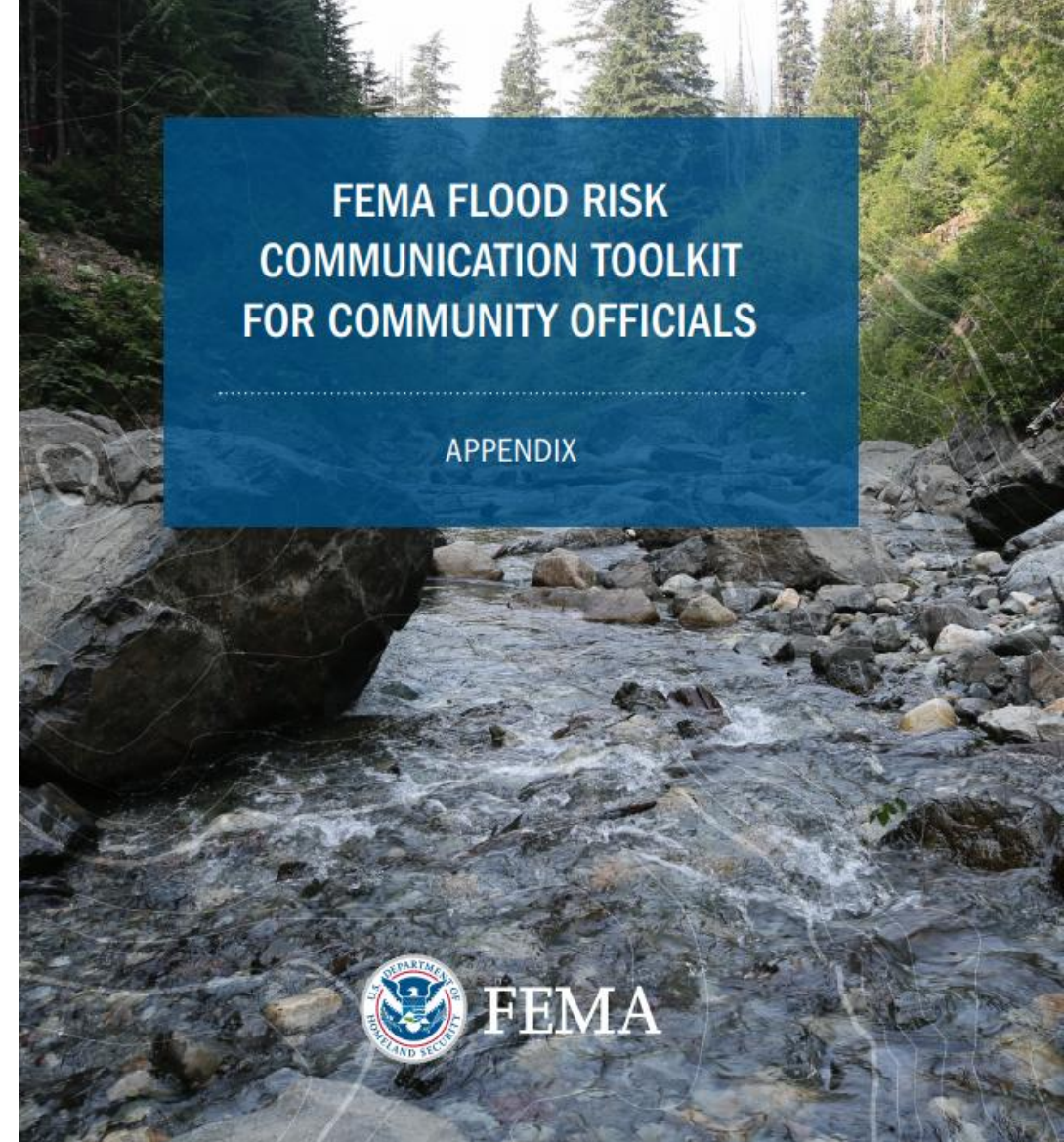




Utah NFIP – Flood After Fire

FEMA Flood After Fire Toolkit

- Templates, tips, materials to share in community when there is high risk of flooding after wildfires
- Help raise awareness about risk
- Materials are customizable
- Materials have a clear “call to action” to help residents understand risk & encourage preparedness & the purchase of insurance



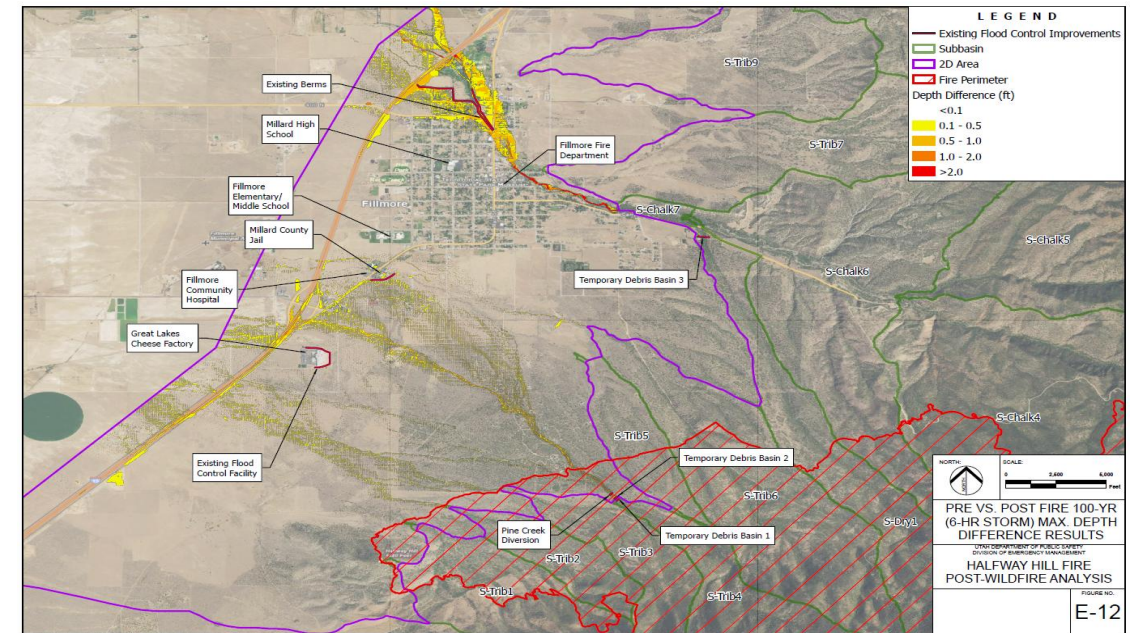
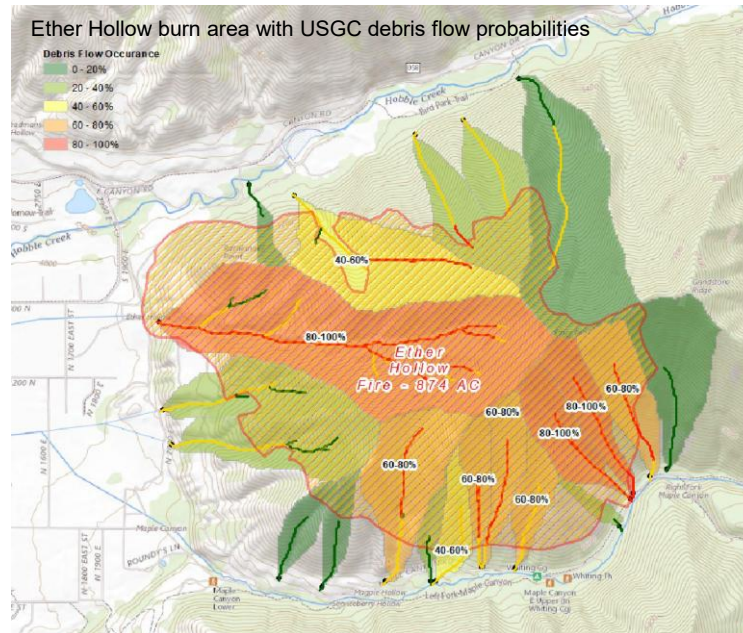
FLOOD AFTER FIRE TOOLKIT

Social posts, infographics, video and more explain why wildfires pose increased flooding risk for up to 5 years.

[View All Toolkits](#)

Utah DEM: Flood Mapping Program

- Flood hazard modeling and mapping for Utah
- Identify flood risk potential in unmapped areas
- Develop post-fire flood risk and debris flow assessments
 - No cost share to communities
- Flood risk outreach







Emergency Watershed Program



Contact: Anders Fillerup

Program Manager

Anders.Fillerup@usda.gov

385-245-7709

- Financial and technical assistance
- Engineering and other technical assistance paid at 100%
- Project sponsor must be a unit of government and request assistance within 60 days of disaster
- NRCS provides a Damage Survey Report
Jason Dodds



Herriman Fire: Oct 2021



PL-566: Watershed and Flood Prevention Program



Contact: Anders Fillerup

Program Manager

Anders.Fillerup@usda.gov

385-245-7709

- Financial and technical assistance available
- Engineering and other technical assistance paid at 100%
- Project sponsor must be a unit of government
- Purposes include: flood control, water storage, water management, water quality, and recreation



Rapid-Deployment Gages

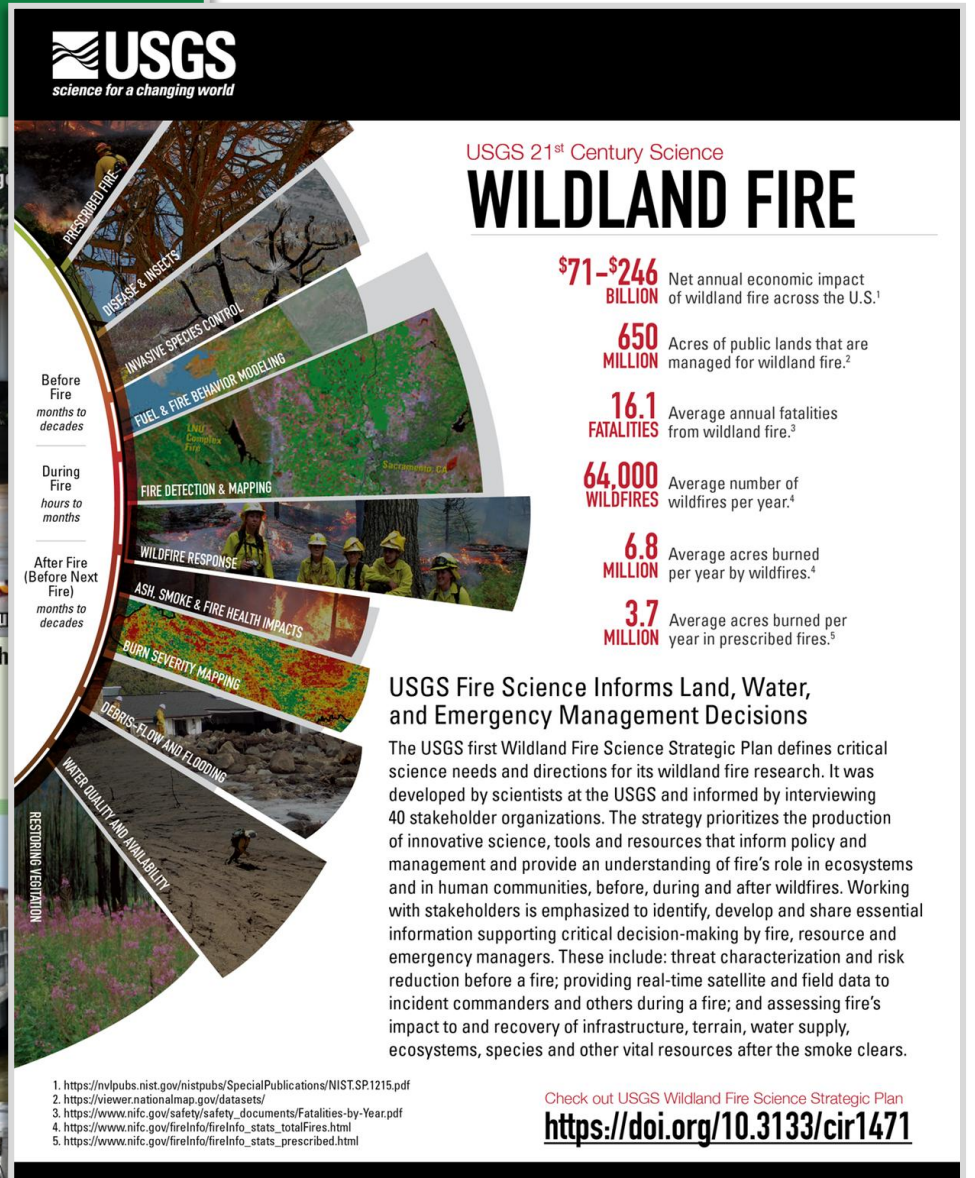
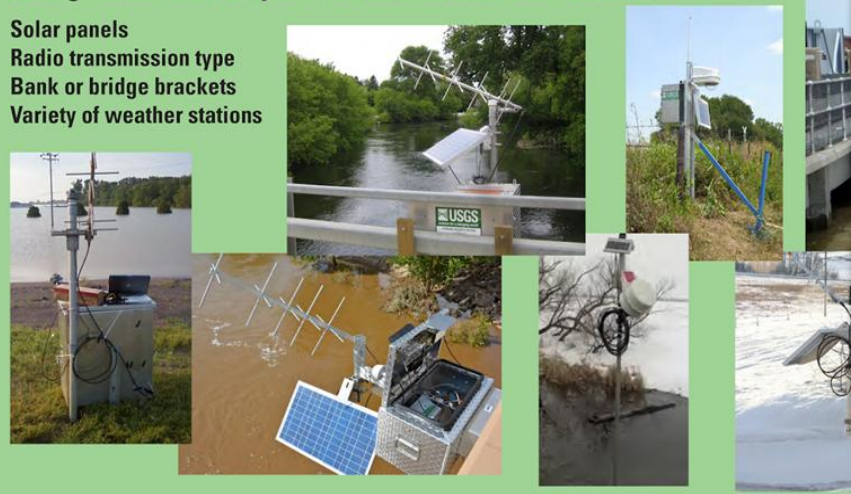
Deployed temporarily to measure stream stage in emergency situations

- Augment gage networks during coastal or riverine flooding
- Provide situational awareness and support to emergency managers
- Maintain data flow when streamgaging equipment is damaged



Designs and use vary for the installation environment

Solar panels
Radio transmission type
Bank or bridge brackets
Variety of weather stations





Bureau of Land Management – Utah Emergency Stabilization and Rehabilitation

- BLM ESR funds are used to treat BLM lands damaged by fire, or BLM lands that may be impacted from nearby non-BLM wildfires
- Emergency Stabilization (ES): Actions to stabilize and prevent unacceptable degradation to natural/cultural resources and minimize threats to life/property resulting from the effects of fire
 - Specifies treatments required for post-fire stabilization up to 3 years following containment
 - Equivalent to BAER (Although National DOI BAER team can assist)
- Burned Area Rehabilitation (BAR): Treatments to repair or improve fire-damaged lands unlikely to recover naturally to management approved conditions
 - Species treatment for post-fire rehabilitation 1-5 years after containment



Public Law 84-99: Flood Control and Coastal Emergencies (FCCE)



Functions are covered within FCCE funding

- Disaster Preparedness
- Advance Measures
- Emergency Operations (Flood Fight)
- Rehabilitation and Inspection Program
- Emergency Water Supplies and Drought Assistance
- Hazard Mitigation

Highlights

If requested, USACE will assist the State with flood fight activities, regardless of PL 84-99 rehabilitation status.

- State and Local Responsibility – USACE Supplements

Advance Measures

- Prior to flooding Loss of Life & Significant Damages
- Imminent threat Request through State (Governor)
- Technical (People) or Direct (Stuff)

Emergency Operations

- Technical (People) or Direct (Stuff)
**Temporary Measures

Rehabilitation and Inspection Program

- Inspection
- Remain Active
- SWIF



Emergency Water Supplies and Drought Assistance

- Restrictions – Limited authorities
- Contamination – Life Safety

Hazard Mitigation

- Resources – Limited Authorities

Requests **MUST** come through the State

Sacramento District Office:
(916) 557-6911

Build Resilience Before Disasters

Team Rubicon is a leader in wildfire mitigation. Operations are performed at no cost to the community by veteran-led volunteers.

Home Ignition
Zone Assessment

Home & Structure
Mitigation

Fuel Reduction

Fuel Breaks

4,500

Trained Chainsawyers
Nationwide*

\$1.1 Million

of Volunteer Labor
in 2023

Rolland Thomas, GAT Administrator rolland.thomas@teamrubiconusa.org



Utah Division of Emergency Management



“When we have folks like Team Rubicon come in and add to our capacity, not only do we have the acres and the brush done but it **builds a spirit of community hope.**”

Greg Moon, Hoopa Valley Tribe Fire Department Chief

Utah DEM Mitigation

Direct Technical Assistance

Non-financial DTA

- Provides early holistic hazard mitigation planning and project support for communities and tribes.
- Helps reduce disaster damage, build community resilience, and obtain and sustain successful mitigation.



DTA



- Increases capacity and capability to conduct mitigation activities, resilience to natural hazards, identifies projects that will reduce risk, or need BRIC/HMGP application support.
- This is a service for communities that do not have the resources to do the work for themselves. [Factsheet](#)



Messages to Community Members



Utah Division of Emergency Management



BEFORE a Flood

Get flood insurance

Flooding can cause significant damage to homes and businesses, so protect yourself from the financial risk by purchasing insurance. Flood insurance policies typically take 30 days before they take effect, so don't wait until it's too late. [Visit FloodSmart.gov](https://www.floodsmart.gov/) for more information on flood insurance.

Safeguard your possessions

Create a personal flood file containing an inventory of your possessions, important personal documents and a copy of your insurance policies. Keep it in a secure place, such as a safe deposit box or waterproof container.

Prepare your house

Place the furnace, water heater, washer, dryer and electrical components on cement blocks at least 12 inches above the projected flood elevation. Also, make sure your sump pump is working and install a battery-operated backup, in case of a power failure.

Develop a family emergency plan

Plan and practice a flood evacuation route from your home, work or school that takes you to higher ground. Make sure your family knows how to contact one another in the event of an emergency, and ask an out-of-state relative or friend to be your emergency family contact. (And don't forget to plan for your children and pets.)

wildfire.utah.gov

<https://www.floodsmart.gov/>



DURING a Flood

- Go to higher ground and avoid areas subject to flooding
- Do not attempt to walk or drive through flowing streams or flooded roadways
- Listen to the direction of local officials and stay updated by following local news reports
- If you come in contact with floodwaters, wash your hands with soap and disinfected water
- Stay out of basements and do not have children and individuals with disabilities sleep in the basement of a home at risk of flooding



AFTER a Flood

- If your home has suffered damage, call your insurance agent to file a claim.
- Check for structural damage before re-entering your home to avoid being trapped in a building collapse.
- Take photos of any floodwater in your home and save any damaged personal property.
- Make a list of damaged or lost items and include their purchase date and value with receipts, and place with the inventory you took prior to the flood. Some damaged items may require disposal, so keep photographs of these items.
- Keep power off until an electrician has inspected your system for safety.
- Boil water for drinking and food preparation until authorities tell you that your water supply is safe.
- Prevent mold by removing wet contents immediately.
- Wear gloves and boots to clean and disinfect. Wet items should be cleaned with a pine-oil cleanser and bleach, completely dried, and monitored for several days for any fungal growth and odors.



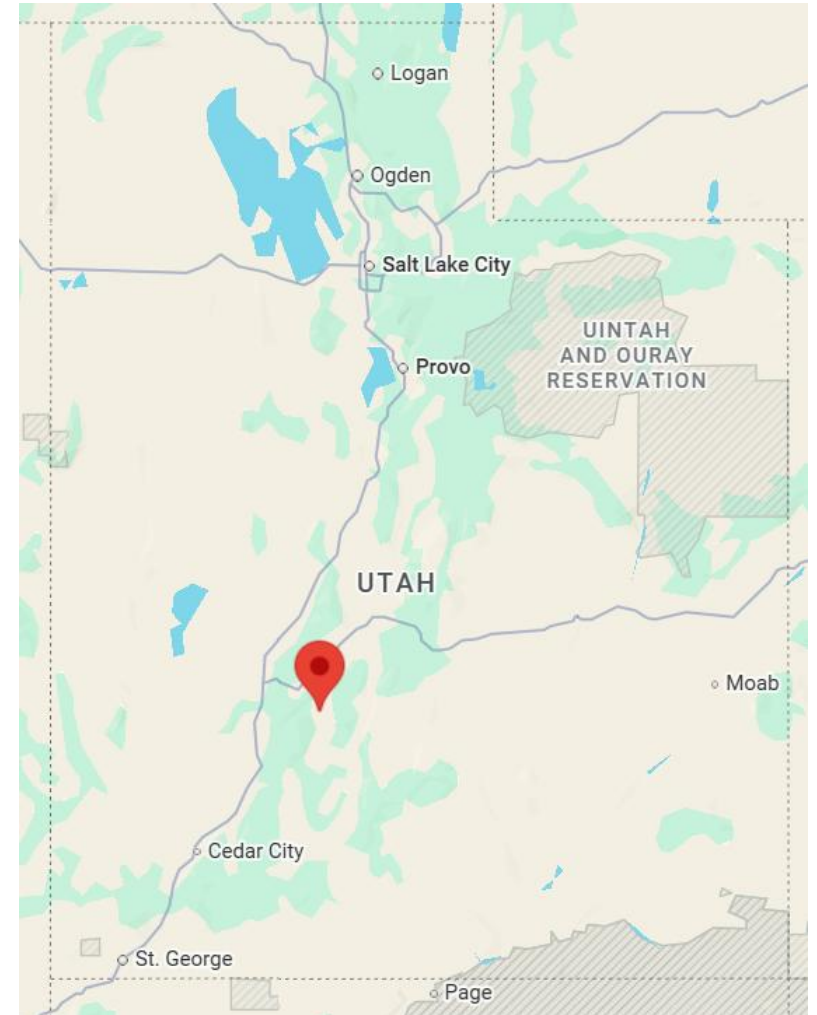
Silver King Fire Services Team Provided & Impact to the Communities

Communities - Piute
County & City of Marysvale



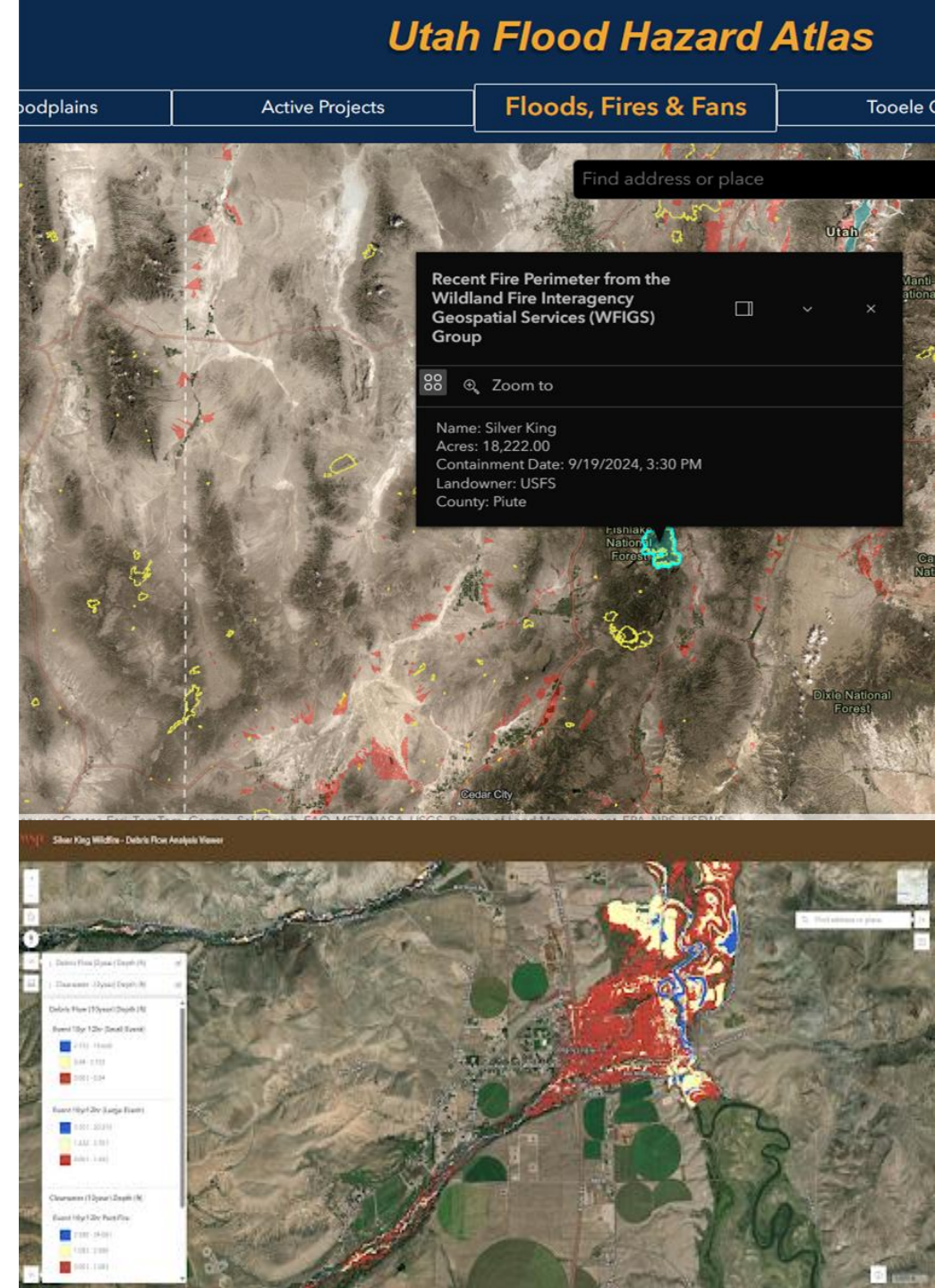
Silver King Fire Background

- Lightning caused ignition
- First detected on July 5th near the historic Silver King Mine on the Fishlake National Forest
- 10,000+ acres burned by July 7th
- Final acreage of 18,266 acres
- Very high use recreation area in the Tushar Mountains
- Forest visitors use Marysvale as a basecamp and primary access point to the 275-mile Paiute Trail ATV trail system
- Utah Post-Wildfire Team members were onsite July 19th



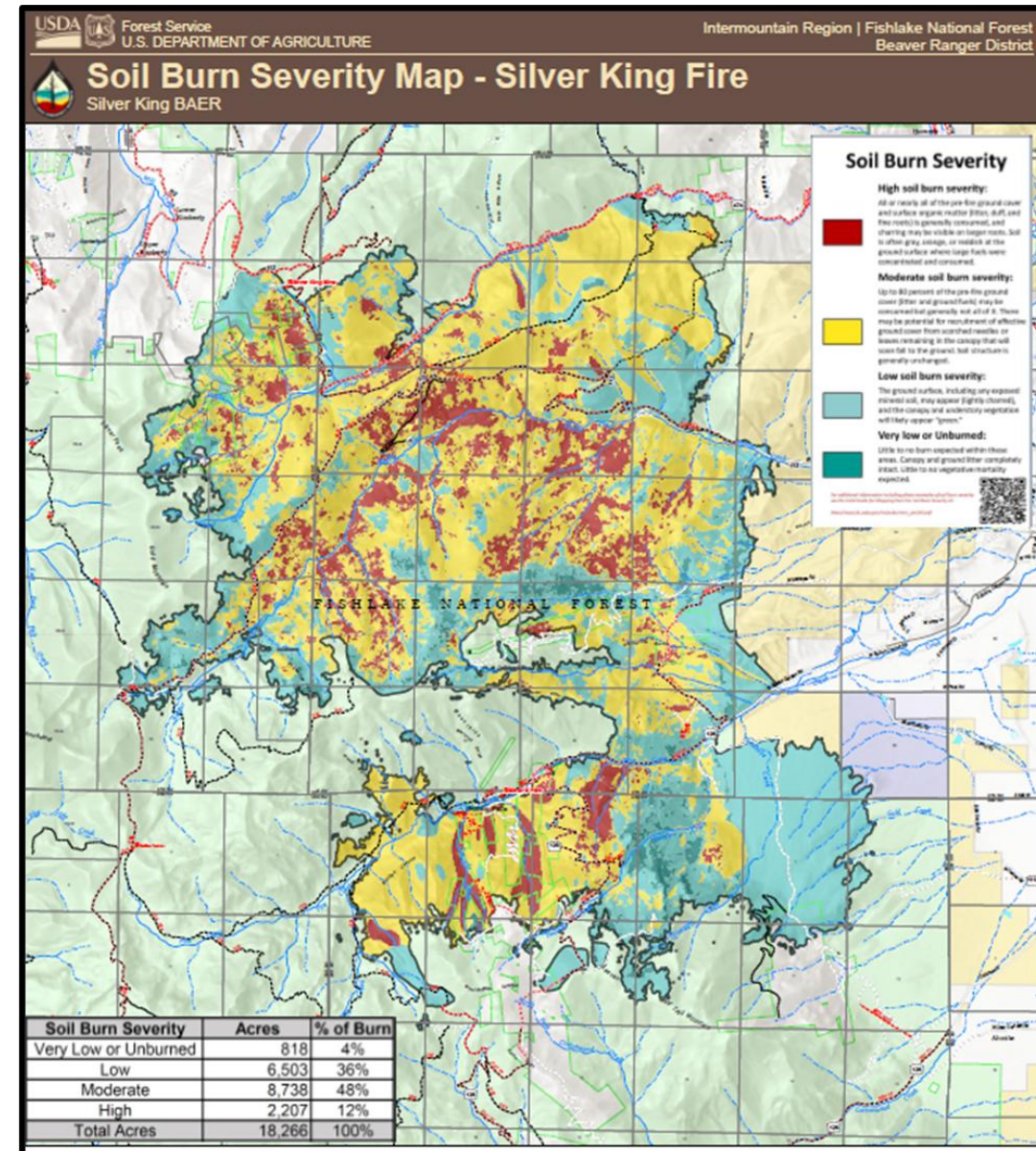
Utah Division of Emergency Management (DEM)

- Utah DEM Mitigation Team- Post Wildfire Team Meeting, Mitigation Direct Technical Assistance, Grant Writing, Hazard Mitigation Grant Program grant funding (FEMA).
- DEM Risk Map-
 - H&H study post fire flooding and debris flow assessments
 - [Flood Risk Atlas viewer](#)
- DEM NFIP insurance outreach.



US Forest Service

- Burned Area Emergency Response (BAER) Assessment
 - Mobilized a 15-person BAER team consisting of Burned Area Emergency Specialists in the following resource areas: Soil Science, Hydrology, Engineering, Recreation, Botany, Archaeology, and GIS
 - Produced the Soil Burn Severity map that was the foundation of all interagency post-fire watershed response modeling efforts



US Forest Service

- Burned Area Emergency Response (BAER) Assessment
 - Identified threats and conducted risk assessments for: Human life and safety; Property; Transportation system infrastructure; Recreation Infrastructure; Natural resources; Cultural and Heritage resources
 - Modeled post-fire hydrologic response, hillslope erosion, and stream channel sedimentation on National Forest System lands.
 - Provided interpretation of the USGS post-fire debris flow hazard assessment model outputs
 - Developed emergency stabilization plan for US Forest Service critical values



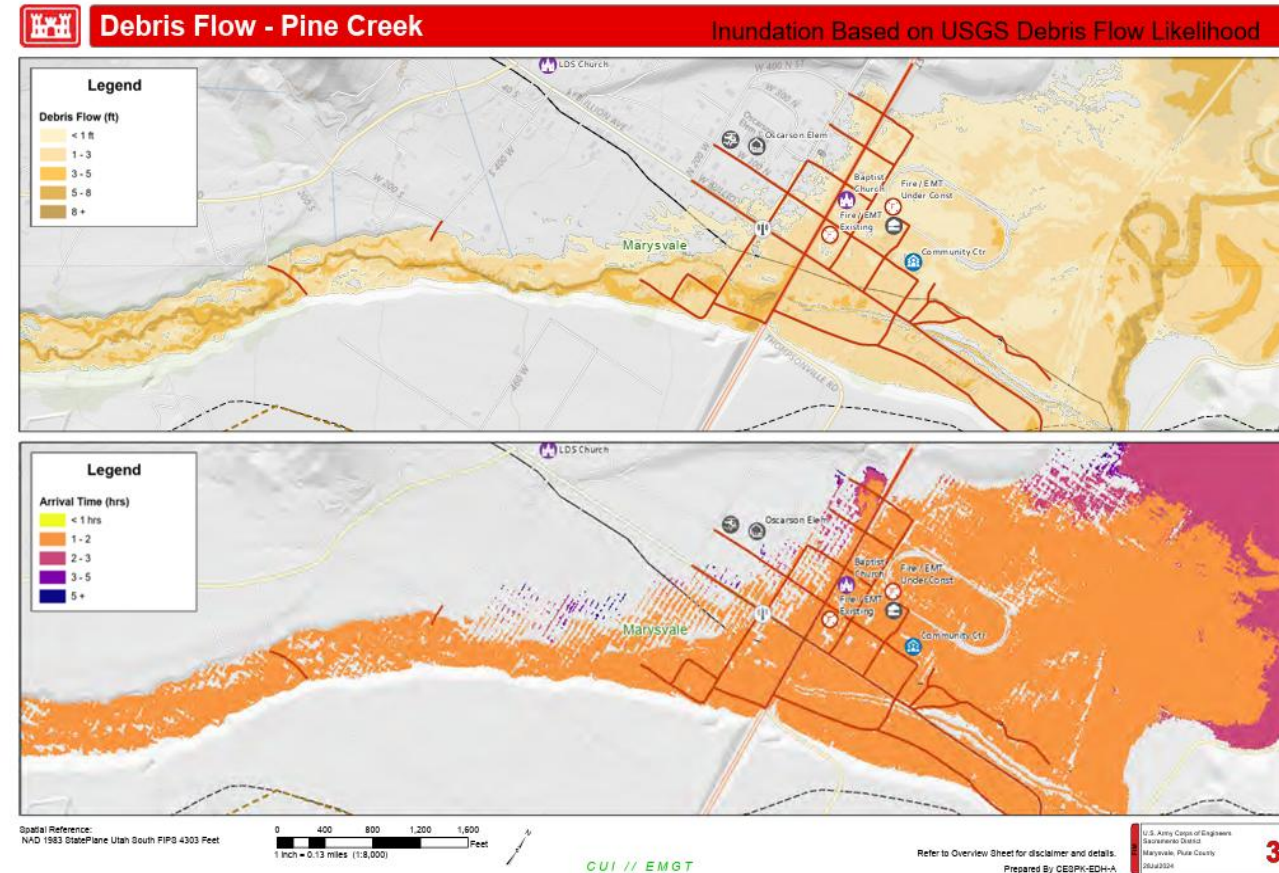
US Forest Service

- BAER Emergency Stabilization Implementation Activities
 - Road and trail storm proofing, recreation site flood protection, cultural resource flood protection, noxious weed spraying on areas disturbed by suppression activity, road closure device installation, and warning sign installation
- Burned Area Rehabilitation Implementation
 - Post-fire aerial seeding of approximately 10,000 acres of National Forest System lands.





- Immediate needs requested by state under PL84-99 (Emergency Response to Natural Disasters)
 - Hydraulics & Hydrology study - post fire flooding and debris flow assessments
 - Design Storm flood inundation depth and arrival time mapping for Marysvale.

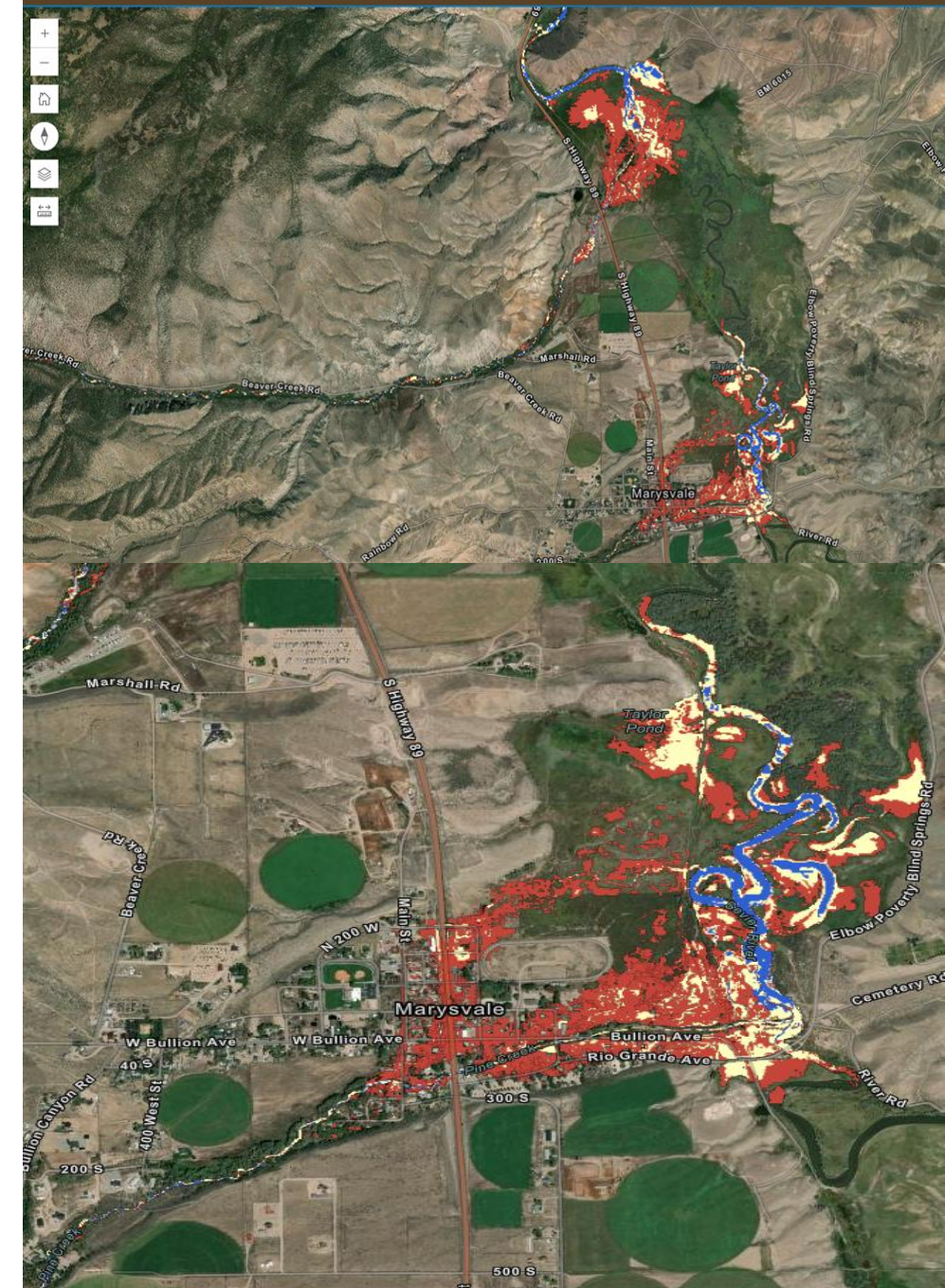


- NOAA/NWS -
 - Incident Meteorologist was deployed to the fire and integrated within the IMT
 - BAER team coordination
 - Placement of burn scar rain sensor for real-time situational awareness
 - Numerous coordination calls and messaging via Slack with the Marysvale Emergency Manager
 - Flash Flood Watch and Warning Issuance



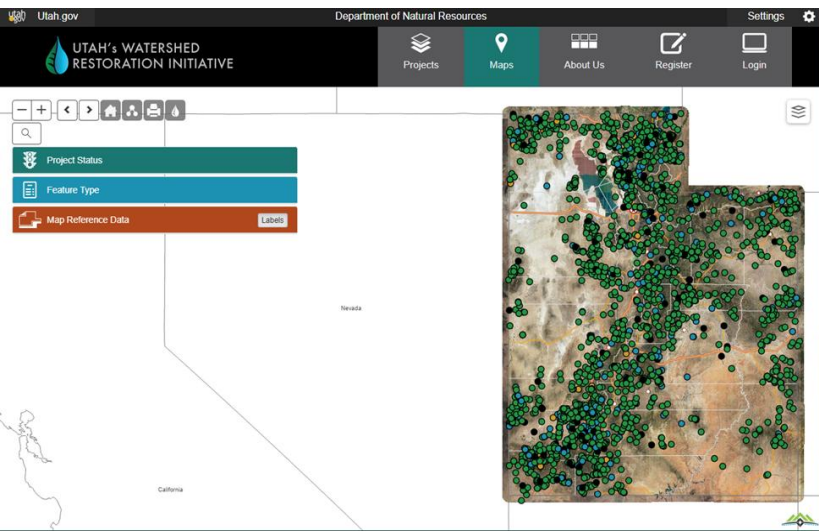
NRCS

- Damage Survey Reports to identify potential Emergency Watershed Protection project needs.
- Approved EWP practices include:
 - Snagging, clearing, and removal of floatable debris from stream channels
 - Streambank stabilization
 - Road prism armoring at low water crossings
 - Spring collection system protection
 - Water and sediment control basin construction



Utah Department of Natural Resources

- **Watershed Restoration Initiative (WRI)** - Reseeding on 10,000 acres. Silver King Fire Restoration Project will consist of working with Fishlake Forest Service (Beaver District) BLM, UDWR and Private Lands affected by this fire. Treatments may include but are not limited to aerial reseeding efforts, one-way chaining, chain harrowing and mechanical bullhog treatments. Fire.Details/photos - <https://wri-emp.utah.gov/wri/project/title.html?id=7252>
- **Forestry Fire State Lands (FFSL)**- Match for HMGP.



The End

**Happy Holidays & THANK
YOU from the town
of Marysvale**



**Bill Davis, Marysvale Mayor &
Robin Davis, Marysvale Grant Writer**





Kathy Holder,
State Hazard Mitigation Officer
385-315-3566
kcholder@Utah.gov



Brendan Waterman, National
Post-Fire Operations and
Logistics Coordinator, US
Forest Service
brendan.waterman@usda.gov



Questions?



Does your state have a post-wildfire mitigation team? If so, please share who leads it.

n/a

No

We do not

No

No

For state of Washington-
Collin Haffey leads post-fire
recovery for Dept of Natural
Resources

Unsure, but I know they
have a post-wildfire guide (
[https://drive.google.com/file
/d/184ArH0n7Yu3GWCzfoU
rnBz9jfkeMI6oC/view](https://drive.google.com/file/d/184ArH0n7Yu3GWCzfoUrnBz9jfkeMI6oC/view))

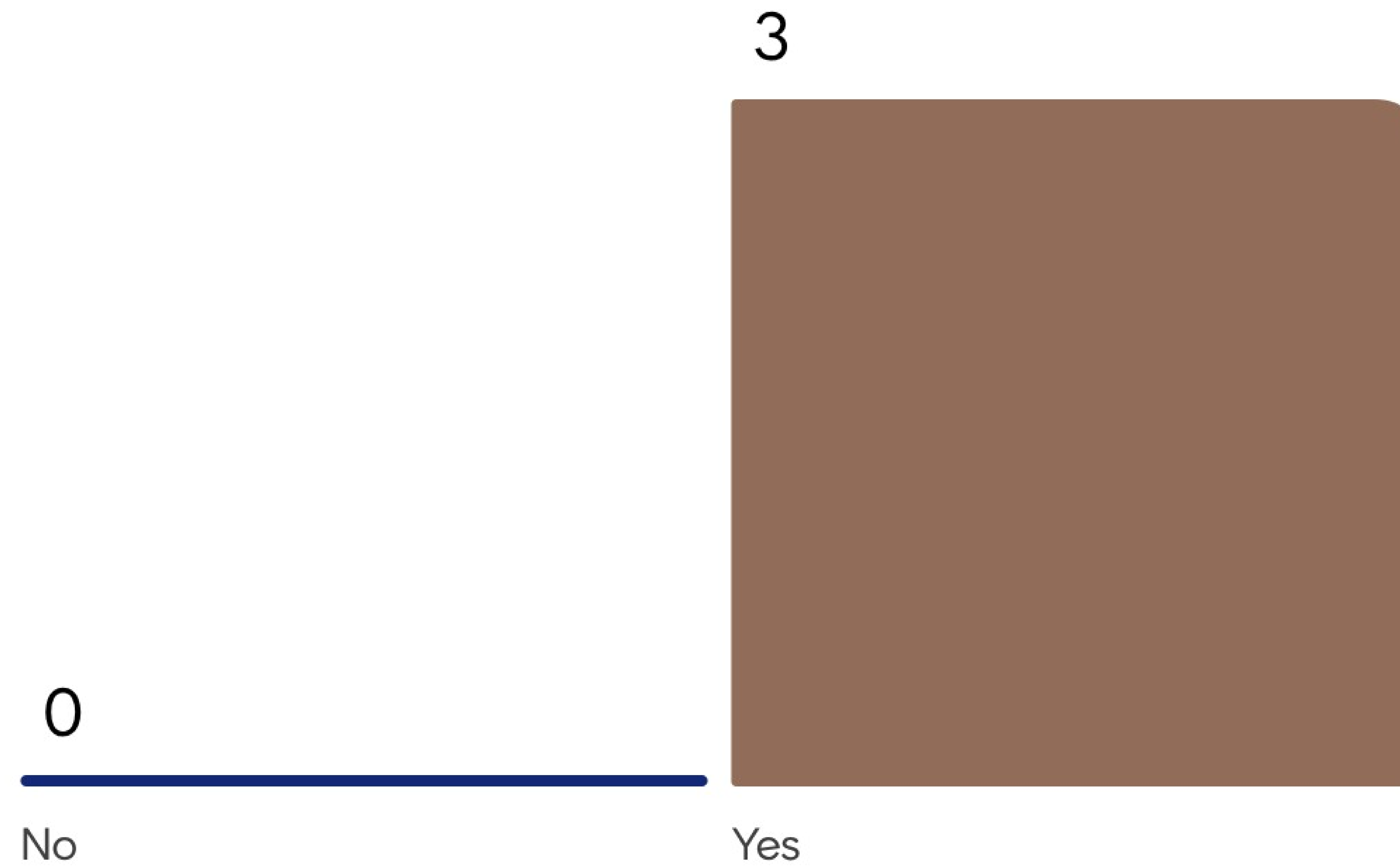
I don't know

Does your state have a post-wildfire mitigation team? If so, please share who leads it.

State does have many who help but not a team structured like yours

People might just call it something else. Many states participate in BAER/BAR/ESR

If your state does not have a team, are you willing to be the champion to start the team?



After hearing who is on our team, what other partners do you think we should recruit?

State rural water
association

I think it's more about
identifying the people who
play which roles ahead of
time

Did you mention NRCS?

Tribes

State public health

State geological
surveys.

Tribes and Native lands

Water providers and
watershed groups

After hearing who is on our team, what other partners do you think we should recruit?

Farmer Unions

Utilities

Questions & Comments

Working to get a Part 107 commercial drone operators license. Are drones being used to gather info on wildfire impacts?

Kathy, do you have colleagues in other states who have the knowledge and capacity to do the same mitigation/recovery work your team does?

How much time do you typically dedicate to your post-fire efforts? Does this change based off the community impacts/needs?

Drones certainly being used for burn severity assessments and also for looking at impacts

Would love to have a similar team set up in Oregon!

What recommendation do you have for long-term community engagement in post-fire recovery efforts after state and federal entities have to move on to deal with another disaster?

For Silver King--we have a local community wildfire council that was able to work w many agencies. You call it "post-wildfire mitigation team" or is it normally considered BAER/BAR/ESR teams.

In Utah, often the feds - including NRCS — link up with private landowners for post fire work

Questions & Comments

Is there a post wildfire recovery playbook that you would suggest for a state to model after that doesn't have one?

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.

