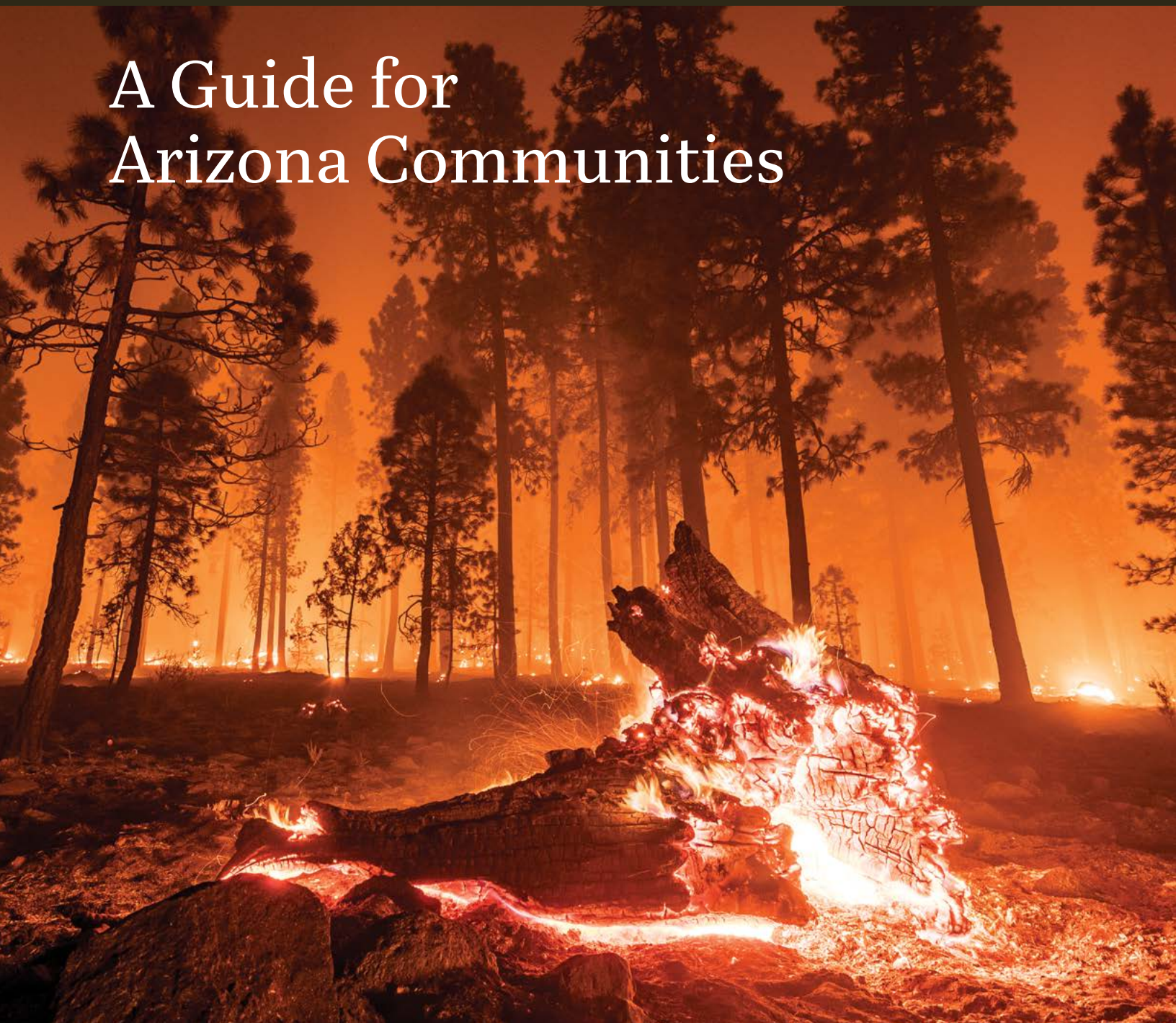


# AFTER WILDFIRE

A Guide for  
Arizona Communities



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If you are an individual or family that just experienced a wildfire, turn to page 9 for resources to help get you started in your recovery.

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# Introduction

**EXPERIENCING A DESTRUCTIVE WILDFIRE** can be devastating to individuals, families, and communities. **This guide was created to help people and communities in Arizona recover after a wildfire.** We know this is a difficult time for you, your loved ones, and your community.

This guide is focused on the post-wildfire situation, as there are many other resources for preparedness. If you are reading this guide before a wildfire occurs, use it to help you plan.

Every wildfire is different. In many ecosystems in Arizona, fire is an important and natural process. However, this guide is for fires that have become disasters. This resource cannot include every resource for every situation. It was compiled to provide information on the core resources beneficial during the 'Recovery' phase of a disaster. This guide provides a primer to help orient you and your community on the journey to recovery.

**DISASTER MANAGEMENT CYCLE:** This guide focuses on helping people and communities in the 'Recovery' phase of disaster (Figure 1). Other resources may be available for the phases of disaster management not covered here.

## **WILDFIRE PREPAREDNESS RESOURCES:**

This resource is for after a wildfire has occurred. For assistance with wildfire preparedness, visit:

- **Department of Forest and Fire Management (DFFM):** <https://dffm.az.gov/fire/information/be-ready> for information on preparing your property for wildfire.
- **Arizona Emergency Information Network (AzEIN)** at <https://ein.az.gov/ready-set-go> for information on the **Ready, Set, Go!** evacuation system and creating a plan.



**Figure 1:**  
The Disaster Management Cycle



**SAFETY IS A PRIMARY ISSUE** immediately following a destructive wildfire. Flash flooding, structural damage, road instability, and hazardous trees are just some of the dangers that people face. This section offers some general advice on safety considerations and steps to take after a wildfire strikes.

**If you are in danger, call 911 or your local emergency number.**

## TIPS BEFORE RETURNING HOME AFTER A WILDFIRE

Read all of these before you re-enter your home after a wildfire.

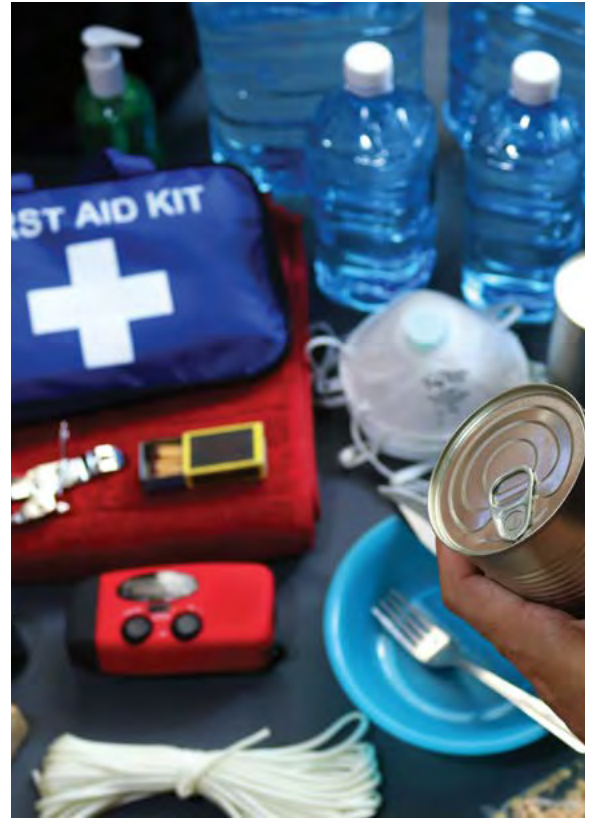
- **Stay away from your home or business until fire officials tell you it is safe to return.** There are many hazards in the post-wildfire environment, including downed power lines, unstable structures, unsafe drinking water, and continued embers or fire. If possible, get environmental testing for toxins before you return home to ensure it is safe to inhabit again.
- **Let others know you're safe.** Whether it's through the phone or a designated meeting place, notify family or friends that you're safe. If possible, check in at your county's evacuation center, as this may prevent firefighters from risking their lives looking for you and your family. It is also a way to connect with law enforcement, local and county administration, community organizations, and other community members impacted by the wildfire who may be there. Contact the Arizona Division of Emergency Management Public Information Office at 602-464-6245 to find out if a local service center has been set up in your area.
- **Flash floods are a very real and potentially deadly hazard after a wildfire,** especially if rain falls on a burned area upstream of your location. Stay away from storm channels and arroyos (ditches are deadly, especially after a wildfire). Keep a battery-powered radio to listen for emergency updates, reports of weather and flash flooding, and news reports. For more information, visit the **Post-Fire Flooding** section on page 35.



### IMMEDIATE SAFETY: HELPFUL LINKS

- **Arizona Division of Emergency Management (DEMA):** To see if a local service center has been set up in your area, visit: <https://dema.az.gov/emergency-management>
- **Arizona Department of Environmental Quality (ADEQ) Safe Drinking Water website:** To see if it is okay to drink from your water supply, visit: <https://azdeq.gov/safe-drinking-water> or call 480-612-5686 for information on drinking water safety.
- **Private Wells:** If you have a private well, visit the Arizona Department of Health Services Guide for Private Well Owners in Arizona: <https://www.azdhs.gov/documents/preparedness/epidemiology-disease-control/environmental-toxicology/well-water/guide-to-your-well-water.pdf>
- **Monitor Air Quality** by using ADEQ's Air Quality, Dust/Lead and Wildfire Smoke Forecasts: <https://www.azdeq.gov/forecast>

- **Prepare a 'go bag' with emergency materials** in case you are asked to evacuate due to dangerous post-fire conditions like flooding. Often emergency managers may ask residents to shelter-in-place during post-fire flooding, but it is important to prepare for evacuation if necessary.
- **Hazards of Smoke:** Children and people with asthma, COPD (chronic obstructive pulmonary disease), heart disease, diabetes, chronic kidney disease, or those who are pregnant need to be especially careful about breathing wildfire smoke and ash. If entering a smoke-damaged structure, wear a properly fitted respirator with a P-100 HEPA filter or a NIOSH-approved N95 respirator (not a dust mask). People with heart or lung conditions should consult their physician before using masks during cleanup. Ventilate affected spaces by opening windows and doors and seek medical attention if you experience any adverse health symptoms.
- **Hazards of Soot:** Avoid contact with soot, ash, or smoke-damaged items. Use protective gear, including gloves and appropriate footwear, when handling these materials. Do not disturb ash by using leaf blowers, fans, or vacuums that can release harmful particles into the air. Keep children and pets away from affected areas, and wash skin and hair immediately if exposed.
- **Connect with your insurance company** (if you have one) for coverage of initial testing and cleaning. If you are renting a home, connect with your rental company or landlord for their insurance company's coverage.



# Immediate Safety (continued)

- **Food & Water Safety:** Do not drink or use water from the faucet until emergency officials say it is okay, as water supplies can be unsafe after fire or flooding. Additionally, fire and smoke create tars and plastics, and their by-products may be suspended in the smoke for an extended period of time and get into exposed food. All of these may make food products unsalvageable. ***When in doubt, throw it out!***
  - Crops damaged by wildfire or smoke may still be consumed if carefully and thoroughly rinsed. Visit the ADEQ Safe Drinking Water website for information (<https://azdeq.gov/safe-drinking-water>), or call 480-612-5686.
- **Be aware of and use extreme caution** around trees, power poles, and other tall objects that may have lost stability during the fire. Most burned structures and surfaces will be unstable. Stay out of burned forests, especially in windstorms, as burned trees are easily downed by wind. Do not touch any power lines.
- **Utilities:** If there is no **power**, check to make sure the main breaker is on. If the breakers are on and power is still not present, contact the utility company. If you have a **propane tank or system**, contact a propane supplier, turn off valves on the system, and leave valves closed.
- **Before beginning any cleanup effort**, document damage with photographs and videos and contact your insurance carrier. Use a **battery-powered flashlight** to inspect a damaged home. (Note: the flashlight should be turned on outside before entering—the battery may produce a spark that could ignite leaking gas, if present).





## ADDITIONAL SAFETY RESOURCES

### Wildfire:

During an active fire, the InciWeb Incident Information System will have details and fire maps that are regularly updated. This information is often more reliable than local news because it is managed by a fire communication specialist. Additionally, you can call the main office for the state or federal agency that has jurisdiction on the land where the fire is occurring.

### Post-Wildfire Flooding:

Flooding after a wildfire is a real threat that claims lives each year. For more information on this and resources for flood hazard, see the **Post-Fire Flooding** section on page 35.

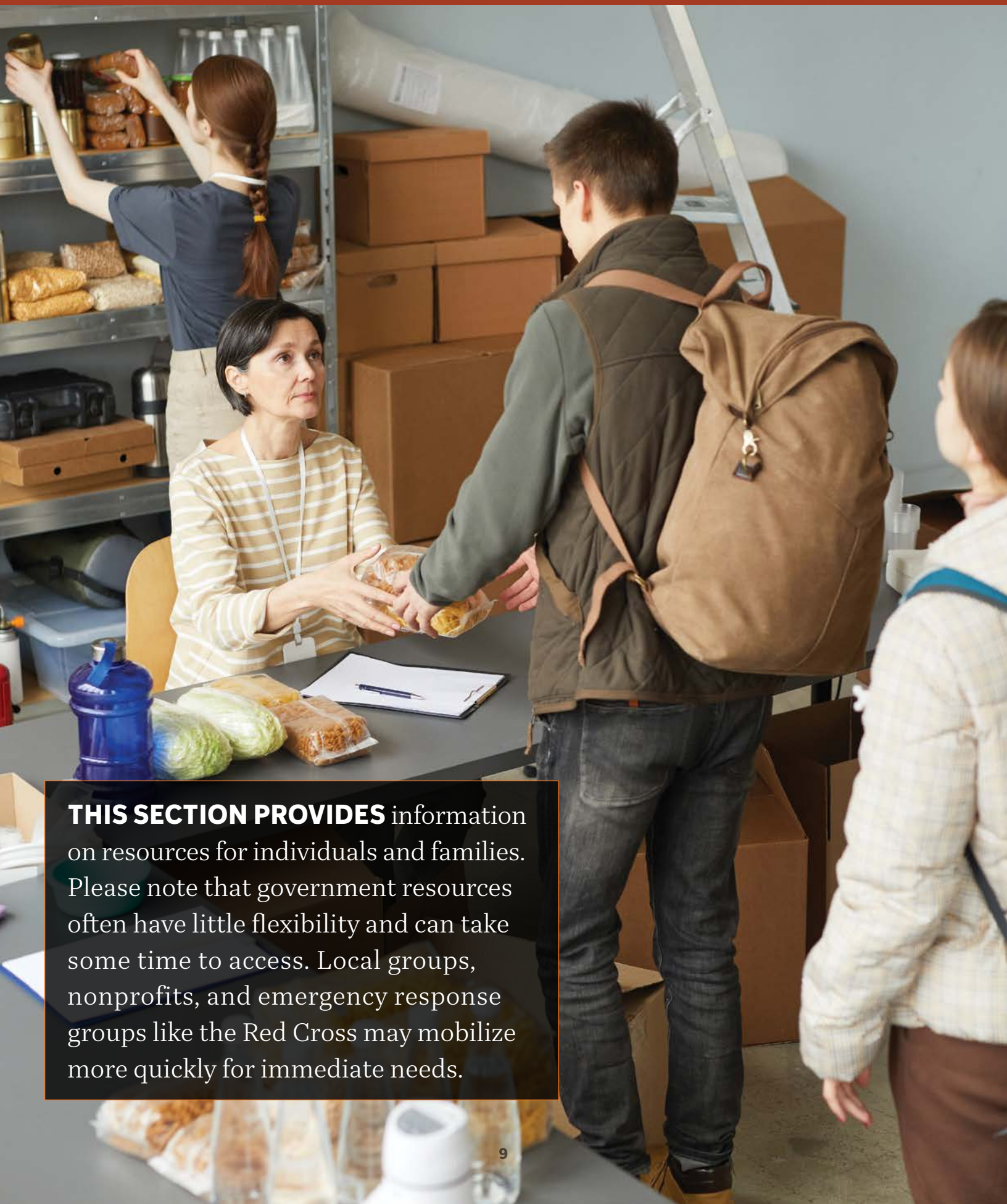
### Pets and Livestock:

- Contact your local animal control office or county extension office to find out if a **pet or livestock shelter** has been set up.
- See **Caring for Pets and Livestock** section for more information on pets and animals on page 16.

### ADDITIONAL SAFETY LINKS:

- **InciWeb Incident Information System** provides fire details and maps that are regularly updated: <https://inciweb.wildfire.gov/>
- **Weather and Emergency Alerts** (for post wildfire flooding, etc.): Visit the National Weather Service website for alerts: <https://www.weather.gov/>
- **Information on How to Protect your Health from Wildfire:** See ADEQ's guide to Fires, Smoke and Your Health: [https://static.azdeq.gov/aqd/wildfire\\_health\\_brochure.pdf](https://static.azdeq.gov/aqd/wildfire_health_brochure.pdf)





**THIS SECTION PROVIDES** information on resources for individuals and families. Please note that government resources often have little flexibility and can take some time to access. Local groups, nonprofits, and emergency response groups like the Red Cross may mobilize more quickly for immediate needs.



## WHAT IS A PRESIDENTIALLY DECLARED DISASTER?

A “presidentially declared disaster” refers to an event that the President of the United States has officially designated as a major disaster. This may allow for federal assistance to be provided to affected areas, often through the Federal Emergency Management Agency (FEMA). Available resources may vary depending on this designation. To see if your disaster is included, visit: <https://www.fema.gov/disaster/current>

## EMERGENCY SHELTER, FOOD, AND OTHER NECESSITIES

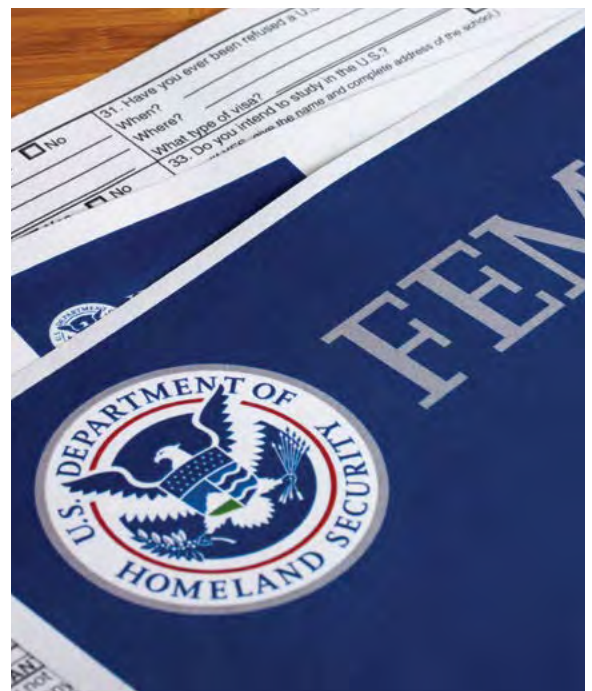
**AMERICAN RED CROSS:** Responds to disasters 365 days a year and can assist impacted individuals with their immediate emergency needs. They provide resources such as emergency financial assistance and often help with shelter, food, medication and clothing, and counseling, and refer you to additional resources. If the Red Cross is not already on the scene, you may request your local fire department to call them.

**CONTACT:** Call 1-800-RED-CROSS (733-2767) and ask for your local chapter, or visit [www.redcross.org](http://www.redcross.org). To find open shelters and disaster relief services in your area through the Red Cross (if available) visit: <https://www.redcross.org/get-help/disaster-relief-and-recovery-services/find-an-open-shelter.html>.

**DISASTERASSISTANCE.GOV** helps people navigate resources in their area for FEMA-declared disasters in each state. This site includes information in Spanish.

**CONTACT:** <https://www.disasterassistance.gov/>

**DISASTER SUPPLEMENTAL NUTRITION ASSISTANCE PROGRAM (D-SNAP) FOOD ASSISTANCE:** Provides food assistance to low-income households that are suddenly food-insecure due to damage or losses caused by wildfire. These are provided through an Electronic Benefits Transfer (EBT) card that can be used like a debit card at most grocery stores. Government Officials: please note you





must request Food and Nutrition Service (FNS) as part of the USDA approval to operate D-SNAP within the disaster area.

**CONTACT:** Visit <https://www.disasterassistance.gov/get-assistance/forms-of-assistance/5769> or call 855-777-8590. Help is available on the phone in Spanish as well.

## FEDERAL HOUSING ADMINISTRATION (FHA) HELP FOR HOUSING AND RELATED ISSUES:

The FHA (a part of the Housing and Urban Development, HUD) has a resource center to assist people who experienced a natural disaster with items such as mortgage payments if you are in a PDMMA.

**CONTACT:** The FHA Resource Center can be reached at 1-800-304-9320, or email [recovery@hud.gov](mailto:recovery@hud.gov). You may also search online for a housing counselor with FHA or call 1-800-569-4287 to find someone local. Help is available on the phone in Spanish as well.

## FEDERAL EMERGENCY MANAGEMENT

**AGENCY (FEMA):** May provide support to private nonprofits (as well as governments) after a disaster. If your disaster qualifies for individual assistance, FEMA representatives are typically dispatched to your local recovery center to assist impacted households with their FEMA applications.

**CONTACT:** <https://www.fema.gov/assistance/public>

**SALVATION ARMY:** The Salvation Army's first goal is to meet the basic needs of those who have been affected (people directly impacted and first responders). Help may include emergency shelter, vouchers for rent, emergency aid, assistance with cleanup and restoration, spiritual and emotional care, and legal aid.

**CONTACT:** Visit [www.salvationarmyusa.org](http://www.salvationarmyusa.org) or call 1-800-SAL-ARMY (725-2769). For locations and phone numbers in Arizona, visit: <https://southwest.salvationarmy.org/>. For information on the assistance they provide, visit: <https://www.salvationarmyusa.org/usn/help-disaster-survivors/>

**ASSOCIA CARES:** Associa Cares has the goal of providing financial assistance for people who lost their residence due to disasters.

**CONTACT:** Visit <https://www.associacares.org/> or call 214-953-3009.



## ADDITIONAL RESOURCE LINKS FOR INDIVIDUALS AND FAMILIES:

- **After the Fire:** A short, helpful guide on what to do if a structure is burned: [https://www.usfa.fema.gov/downloads/pdf/publications/fa\\_46.pdf](https://www.usfa.fema.gov/downloads/pdf/publications/fa_46.pdf)
- **www.benefits.gov:** This website offers a variety of programs for people with qualifying situations or incomes. Visit [www.benefits.gov](http://www.benefits.gov).
- **HUD Exchange:** A website for people who need housing assistance, including renting, addressing homelessness, and for homeowners. There are also links to help find your local foodbank and connect people to Women, Infant and Children Benefits. Visit <https://www.hudexchange.info/housing-and-homeless-assistance/#Disasters>.
- **HUD Arizona** also offers a compiled list of resources in case of disaster here: <https://www.hud.gov/states/arizona>



## MENTAL & EMOTIONAL SUPPORT

Wildfires can be extremely stressful, and most people experience emotional responses. People living in the impacted areas (including children and teens), loved ones of those impacted, first responders, and rescue and recovery workers are all at risk. Feelings such as anxiety, constant worrying, trouble sleeping, depression-like symptoms, trouble making decisions, and behavioral changes are some of the changes you may see during and after the event. Most people need additional support to cope and move forward on the path of recovery.

**DISASTER DISTRESS HELPLINE** helps with emotional support after an emergency. You can reach out to them **any time** for support. Call 1-800-985-5990 (para español, oprima el dos).

**ARIZONA 211** often provides crisis intervention and disaster-related support including emotional support and connection to other post-disaster resources. Just dial 2-1-1 or visit <https://211arizona.org/> for more information. Help is available on the phone in Spanish as well.





## ADDITIONAL PROGRAMS AND SERVICES

### NATIONAL GROUP RESOURCES:

**FARM SERVICE AGENCY (FSA):** The FSA provides help for natural disaster losses from wildfire and other disasters. For example, they provide several types of assistance to eligible livestock producers, honeybee producers, forest owners, tree nurseries, and more.

**CONTACT:** For more information, visit the FSA website on disaster assistance at <https://www.fsa.usda.gov/programs-and-services/disaster-assistance-program> or call 602-285-6300. To find an FSA Service Center near you, visit: <https://offices.sc.egov.usda.gov/locator/app>. For the Arizona-specific site, including a link for disaster recovery, visit <https://www.fsa.usda.gov/state-offices/arizona>.

**NATIONAL RESOURCES CONSERVATION SERVICE (NRCS)** provides disaster recovery assistance to farmers, ranchers, landowners, and communities through a variety of programs such as the Emergency Watershed Protection (ERP) Program, which provides technical and financial assistance on private land following natural disasters to prevent further damage from flooding, runoff and erosion after a wildfire. Applications must be sponsored by a public entity, such as a qualified tribal organization, a division of state government, a city, county or special district (irrigation, conservation, etc.) and be made within 60 days of the start of the event which caused the impairment.

**CONTACT:** Visit the NRCS website for more information: <https://www.nrcs.usda.gov/getting-assistance/disaster-recovery>

### SMALL BUSINESS ADMINISTRATION (SBA):

The SBA may help with loans for construction to rebuild buildings or houses. Additional assistance may include:

- **Help for Businesses and Non-Profits:** If your business of any size or private, nonprofit organization has suffered physical damage or sustained economic injury after a disaster, you may be eligible for financial assistance from the SBA. The sooner you reach out, the sooner you can be assisted. Organizations may borrow money to repair or replace damaged or destroyed real estate, inventory, machinery and equipment, and other business assets. They also can lend funds to help prevent or minimize the same type of disaster damage from occurring in the future.
- **Low Interest Loans for Renters, Homeowners and Businesses/Nonprofits:** The SBA provides low-interest disaster loans with long-term repayments to qualifying individuals and businesses. If you are in a declared disaster area (the declaration may be either Presidential or an SBA administrative declaration; it is worth checking in with them) and are impacted by a disaster, you may be eligible. People may borrow money to repair or replace clothing, furniture, cars or appliances destroyed during a disaster. Homeowners may apply for money to repair or replace their primary residence to pre-disaster condition. You may also qualify for Economic Injury Disaster Loans to meet working capital needs caused by the disaster. **You do not need to wait for a personal insurance settlement before applying to the SBA.**

**CONTACT:** Call 800-659-2955, email [disastercustomerservice@sba.gov](mailto:disastercustomerservice@sba.gov), or visit the SBA website: <https://www.sba.gov/funding-programs/disaster-assistance>. Help is available on the phone in Spanish as well.



**UNITED POLICYHOLDERS** is a non-profit organization whose mission is to be a trustworthy and useful information resource and an effective voice for consumers of all types of insurance. In particular, their 'Roadmap to Recovery' program provides individuals, businesses, and communities with consumer-oriented insurance and legal expertise in disaster recovery.

**CONTACT:** Visit <https://uphelp.org/> for more information.

## **ARIZONA RESOURCES:**

In addition to the Arizona-specific resources listed below, you may find help from community volunteers and local organizations not included here.

**ARIZONA DEPARTMENT OF EMERGENCY AND MILITARY AFFAIRS (DEMA)** seeks to assist individuals, households,

and businesses to effectively recover following a disaster. Human Services staff coordinate resources to seek to fulfill unmet needs. In most cases this assistance will not cover all losses but may provide enough to start impacted individuals on the road to recovery.

**CONTACT:** Call 602-267-2700 (DEMA main line) or visit <https://dema.az.gov/>.

## **STATES, CITIES, AND COUNTIES ON THE**

**WEB:** To find contact information for your local government entities, visit this site: <https://www.usa.gov/local-governments>. Often these entities are key to disaster response and recovery.

**WATER QUALITY AND SAFETY:** The Arizona Department of Environmental Quality (ADEQ) Safe Drinking Water website provides information here: <https://azdeq.gov/safe-drinking-water> or call 480-612-5686 for more information.





## HELPING CHILDREN COPE WITH DISASTER

**FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA):** Disasters can be especially stressful for families with children. Visit [www.fema.gov](http://www.fema.gov) for resources on helping children through disaster recovery, or read FEMA 478 Helping Children Cope with Disaster available online at <https://www.fema.gov/pdf/library/children.pdf>. To obtain a hard copy of this or other publications, call the FEMA publications warehouse at 1-800-480-2520. Help on the phone is available in Spanish as well. You can also visit <https://www.fema.gov/fact-sheet/helping-children-cope-disaster>.

**SESAME STREET:** You may also visit Sesame Street's 'Handling Emergencies' for more resources related to children and disaster: <https://sesameworkshop.org/topics/emergencies/>

**THE RED GUIDE TO RECOVERY** booklet (authored by Sean M. Scott) highlights that children may have nightmares, and that fear of going to sleep is common after a disaster like wildfire. It has many helpful tips for impacted children and teens, and on all aspects of disaster: <https://theredguidetorecovery.com/>





## CARING FOR PETS AND LIVESTOCK

The accepted sequence for safety and evacuation is people first, then pets, then livestock, and then property. The same can be said of disaster recovery.

### PETS:

- **Identification and microchips:** Make sure your pet has some kind of identification, ideally a collar with a tag that has your contact information on it. Microchips also help; make sure you have at least one non-local contact person listed on your pet's chip registration in case local phone lines are inoperative.
- **Whenever possible, do not leave animals behind.** They can be lost, injured, or die. Often, you cannot re-enter your area or home for some time after evacuation to retrieve pets. Please note that human evacuation shelters generally do not allow pets except for service animals.
- **Pet evacuation shelters are often available.** To find out more about the location of shelters and other services available to pet owners, contact the Arizona Humane Society <https://www.azhumane.org/> or your local animal shelter, animal control office, or emergency management office.





## LIVESTOCK:

- **Evacuation centers for livestock are often located at country fairgrounds.** Call your county emergency manager to find out more about these facilities.
- **Use caution when working with livestock after a wildfire.** Their survival instincts can make normal handling techniques ineffective. Livestock are very sensitive to environmental change and will react to a wildfire that is anywhere within their sensory range. Normal reactions range from nervousness to panic to aggressive escape attempts.
- **Report location, identification, and disposition of your livestock** to the authorities responding to the fire, especially if your animals are aggressive.
- **Check surviving livestock for signs of injury.** Health disorders such as burned eyes and lung inflammation from smoke inhalation are common after livestock experience a wildfire. Check your animals for injuries from fleeing and check your fences for damage. Have your livestock inspected by a vet as soon as possible. Monitor for at least several weeks.
- **After wildfire,** be sure your livestock are pastured somewhere safe from **post-fire flooding** if possible. Be sure your pasture is fenced in a way that maximizes access to high ground to minimize injury and death.
- **In the event of livestock fatalities,** contact the Farm Service Agency at 602-285-6300 to find out about disposal methods. They may also help with financial loss. For more information, visit: <https://www.fsa.usda.gov/state-offices/arizona>.

## ADDITIONAL RESOURCES FOR PETS AND LIVESTOCK:

- **American Veterinary Medical Association (AVMA)** offers resources on pet first aid and disaster preparedness: <https://www.avma.org/>
- **Arizona Humane Society (AHS)** is the state's designated responder for animals in distress during natural disasters. They may provide assistance such as setting up temporary shelters, provide veterinary care, and bring in supplies like food, blankets, and pop-up kennels. Visit <https://www.azhumane.org/> or call 602-997-7585 for more information.





## PETS AND LIVESTOCK UPON RETURNING HOME:

If you are told you can safely return to your home/property, follow these tips to keep your pets and livestock safe:

- **Assess the environment:** check for hot spots, ash pits, or unstable ground that may harm animals.
- **Water and feed safety:** Ensure animals have access to clean water. Avoid feeding them food or water that may be contaminated by fire retardants, ash or smoke.
- **Inspect for injuries:** Examine pets or livestock for breathing issues, burns, or injuries; contact a veterinarian if needed.
- **Limit outdoor exposure:** Restrict time outside if air quality remains poor.
- **Repair damaged shelters:** for livestock and provided shaded areas for protection from residual heat, debris, and potential post-fire flooding.
- **Monitor behavior:** Watch for changes in behavior or appetite and contact a veterinarian if needed.
- **Decontamination:** Rinse animals exposed to ash or debris and wash any contaminated bedding.





## FINANCIAL TIPS

Below are some tips to assist individuals, families, and businesses in recovering from a destructive wildfire.

- **Document, document, document:** Review old photos or videos from your home to help inventory what was lost. Take pictures and videos of your property (and provide 'before' images and video if they are available). Photograph all damage from multiple angles. This will help with insurance claims and applications for assistance programs. Taking images is one of the single most important things you can do to help with applications for assistance, insurance claims, and help with recovery.
  - **Please note**, if you hire an adjustor to go through the inventory of your belongings, they will take a cut of your insurance payment (often 20 to 30%).
- **Keep all receipts** associated with evacuation costs, restoration and recovery projects.
- **If you have insurance, contact your insurance agent as soon as possible.** Damage caused by fire and smoke is usually covered under standard homeowner, renter, and business owner insurance policies and under a comprehensive portion of an auto insurance policy. Water or other damage caused by fire fighters to extinguish the fire is also covered under these policies.
  - **Look into flood insurance:** A top priority after a wildfire is flood preparedness. It is important to purchase flood insurance if possible. To find out more about flood insurance, go to <https://www.floodsmart.gov/> and visit the resources on page 37.
  - **Tips for a successful insurance complaint if your claim is denied:** Document all damage with photos, videos, and an inventory, and gather any relevant receipts or estimates. Review your policy for coverage details, including limits and additional living expenses, and file promptly to avoid delays. Write a clear, concise complaint letter, citing specific issues (such as claim delays or denial) and include your policy number, dates, and evidence. Keep records of all communications with the insurer, and if needed, get an independent assessment to challenge the adjuster's findings. Escalate to supervisors or state agencies if necessary.
  - **Insurance complaints in Arizona:** If you want to file a complaint against an insurance company, the Arizona Department of Insurance & Financial Institutions has a process you can follow. Visit: <https://difi.az.gov/consumers/help-problem/filing-complaint>





- **Contact your lenders** as soon as possible if your financial obligations cannot be met. For example, if you cannot pay your mortgage or credit cards, you have more options if you work with your lenders sooner rather than later.

- **Tax relief:** If a major disaster is declared, individuals who suffer losses may complete a retroactive tax return and take the loss out of the previous year's return. An accountant or your local IRS office can help you navigate this process. Visit: <https://www.irs.gov/help/contact-your-local-irs-office>



- **Contact your County Emergency Manager** if your home is destroyed or damaged but not documented as such. They need to know how many damaged or destroyed homes and structures (particularly those that are uninsured) resulted from the disaster, and how many businesses suffered impact. This will help them see if your community qualifies for disaster assistance, which in turn may help you receive additional financial help.
- **If you have irreplaceable and invaluable items**, get them out of harm's way. Even if the wildfire is over, flooding is a very real risk. However, it is critical **to not return home until you have been informed it is safe to do so**.
- **Do not assume FEMA is the only assistance you need.** A PDMDA must be established for a community to become eligible for FEMA funding, but declaration does not guarantee assistance. Ensure your expectations of FEMA are realistic. FEMA does not replace homes or businesses (except in extremely rare cases). FEMA assistance, when provided, is not a substitute for insurance but rather minimal assistance to get people on their feet after a disaster.
- **Is disaster help available if I have insurance?** Possibly. In some situations, FEMA may assist if your insurance settlement is delayed or insufficient, you have exhausted the ALE (Additional Living Expenses) provided by your insurance, or you are unable to locate rental resources in your area. You have up to 12 months from the date you registered with FEMA to submit your insurance information for review. For more information, visit [www.fema.gov](http://www.fema.gov) or call 1-800-621-FEMA (3362).



## LEGAL ASSISTANCE

When a disaster is Presidentially declared, FEMA provides free legal assistance to people affected by that disaster through an agreement with the Young Lawyers Division of the American Bar Association. Legal advice is limited to cases where lawyers work without payment (cases that may involve a fee are turned over to the local lawyer referral service). Legal services are provided to low-income individuals who are unable to purchase legal services adequate to meet their needs. Assistance typically includes help with:

- **Insurance claims (life, property, medical, etc.)**
- **Counseling on landlord/tenant problems**
- **Replacement of important legal documents such as wills**
- **Assisting in consumer protection matters**



## BEWARE OF SCAMS

Upon returning home, proceed with contractors and people asking for your money carefully! If you have insurance, contact them first. Do not sign up for offers, such as home repairs, too quickly. Take your time to see if contractors are legitimate and have experience working in post-fire environments. Deal only with local, licensed, and insured contractors, and get references from locals whenever possible. It is a good idea to collect information or business cards from several sources and research them before selecting someone. Remove valuables before the contractor works in your home. Finally, insist on a written contract.

Red flags from contractors include: high-pressure sales tactics, not being licensed if it is required, not able or willing to provide local references, their place of contact being a hotel, work truck, or another place that is not their place of employment or residence, asking for a large cash payment up front, not having adequate equipment, showing up at your home unsolicited, offering a very general estimate for services, or having a bid far below other bids.

**Do not do business with a contractor who does not carry the appropriate insurance coverage. If they are not insured, you may be liable for accidents that occur on your property.**



## LEADING YOUR COMMUNITY

**SUPPORTING YOUR COMMUNITY AFTER WILDFIRE:** See information below to help you effectively support and lead your community, *if* you have the capacity to do so. Individuals can play an important role in assisting their communities after a wildfire, particularly in smaller communities, such as important coordination and recovery leadership. For more tips, see *Mobilizing Your Community* in the next section on page 24.

### KEY STEPS TO LEADING YOUR COMMUNITY:

- **Assess damage and needs:** Identify the most critical needs like water, shelter, medical care, and infrastructure damage to direct recovery efforts effectively.
- **Establish communication channels:** Use various methods like public announcements and social media to keep residents informed about recovery plans, volunteer opportunities, and available resources.
- **Engage community leaders:** Partner with local leaders, religious institutions, and community organizations to mobilize their networks and reach diverse populations within the community.
- **Volunteer recruitment and management:** Create a system to register and manage volunteers, assigning tasks based on their skills and availability. **Make sure to track all volunteer hours!** Their time may be a valuable match for grants, or even reimbursable.
- **Coordinate with relief agencies:** Work closely with local, state, and federal disaster relief agencies, such as your County Emergency Manager, FEMA, Red Cross, and the Salvation Army, to access necessary supplies and expertise.





- **Prioritize vulnerable populations:** Identify and prioritize the needs of older, disabled, low-income, and other vulnerable community members to ensure they receive adequate support.
- **Provide emotional support:** Recognize the psychological impact of a disaster and offer access to mental health services, support groups, and community events to promote emotional well-being. See page 12 for resources on emotional support.
- **Community clean-up initiatives:** ADEQ offers a ‘Cleanup Guide for Residents Affected by a Wildfire’ for information on how to safely handle hazardous waste: <https://azdeq.gov/wildfire/cleanup>. See **Immediate Safety** tips and resources on pages 4-8, and **Post-Fire Flooding** tips and resources on pages 35-41.

## **ADDITIONAL RESOURCES FOR LEADING YOUR COMMUNITY THROUGH DISASTER RECOVERY:**

- **Recovers.org** offers resources to organize your community after a disaster and offers a way to create a free community platform.
- **GoFundMe** offers advice on how to crowdsource funds after a disaster. Just search for “gofundme and using crowdfunding for natural disasters,” or visit <https://www.gofundme.com/>. Please note that their platform may take a percentage of funds raised.





## MOBILIZING YOUR COMMUNITY

Wildfires that create wide-scale damage require a community-scale response for recovery. While coordinating such an effort is one of the greatest challenges, mobilizing your community is a crucial part of the recovery process. For more tips on how individuals can support community recovery, see *Leading Your Community* on page 22.



## KEY POINTS FOR COMMUNITY MOBILIZATION:

- **Determine if your community has a plan:** To see the status of your community's Hazard Mitigation Plan, contact your local fire department or the Arizona Department of Homeland Security and Emergency Management. Similarly, to see if your community has a Community Wildfire Protection Plan, contact the Arizona DFFM. Call 602-771-1400 or visit <https://dffm.az.gov/fire-plans>.
- **Identify a Post-Fire Coordinator:** In small communities, subdivisions, or neighborhoods, residents should appoint a Post-Fire Coordinator to work directly with local, state or federal agencies, emergency response officials, and others to address community needs. This Coordinator can be from a local agency or a community volunteer, such as the lead of a Neighborhood Watch Group or a Firewise Community effort.
  - **Useful skills for this leadership role include** proven management skills and knowledge of the community, internet skills to help in communication with the public, experience with government agencies and programs, someone with a community network in place and that is willing to engage throughout a fire, and during and after the BAER (Burned Area Emergency Response). Please note that this responsibility is a heavy lift and will require someone who has the spare time and resources to lead and help others.
- **Clearly identify community response roles:** The Post-Fire Coordinator and the community should clearly delineate the roles and responsibilities of individuals and groups.
- **Become familiar with federal and state government response teams and systems.** There are several courses available to help you become familiar with the Incident Command System (ICS). For example, FEMA offers CS 100, a free, self-paced introductory course online, and there is Wildfire 101 ICS information also available online.

If you are reading this before a wildfire occurs, know that trainings may exist for post-wildfire or disaster coordinators. For example, Coalitions and Collaboratives based out of Denver, Colorado may be a helpful resource: <https://co-co.org/>.





- **Assess your community's needs:** Prioritize vulnerable populations and post-fire flooding risk. Take stock of what resources are available to you now. Below is a list of questions to get you started.
  - **Are there paid staff** available to help after a wildfire, and from where?
  - **Who has technical and engineering skills** to assist with on-the-ground rehabilitation?
  - **Who has writing skills** to prepare grant proposals and to submit documents required to apply for assistance?
  - **Who are the administrators** that can handle grants and attend funding-related meetings?
  - **Who can assist with immediate needs** such as shelter, food, medications, supplies and emotional support?



The tasks listed above may be eligible for FEMA reimbursement through detailed documentation. Designate someone to recruit and manage volunteers, and **track all hours spent on post-fire work**. Local government entities should do the same, as often that work is eligible as match for some funding sources.

- **Set up a disaster recovery center:** While often a County Emergency Manager or others help with this, in some cases this may not be provided. If needed, set up a recovery center in an available space. This can be a school, an old mall, or other large space that can accommodate people and the response effort.
- **Communication:** A communication process is critical for mobilizing a community after a wildfire.

### Key tips for successful communication include:

- Make sure the appropriate people know who the Post-Fire Coordinator is, and how and when to reach them.
- Determine if you have an information line you can open to the public, who can staff the line, how to train them, and what hours the line will be available.
- Determine how local officials, emergency response



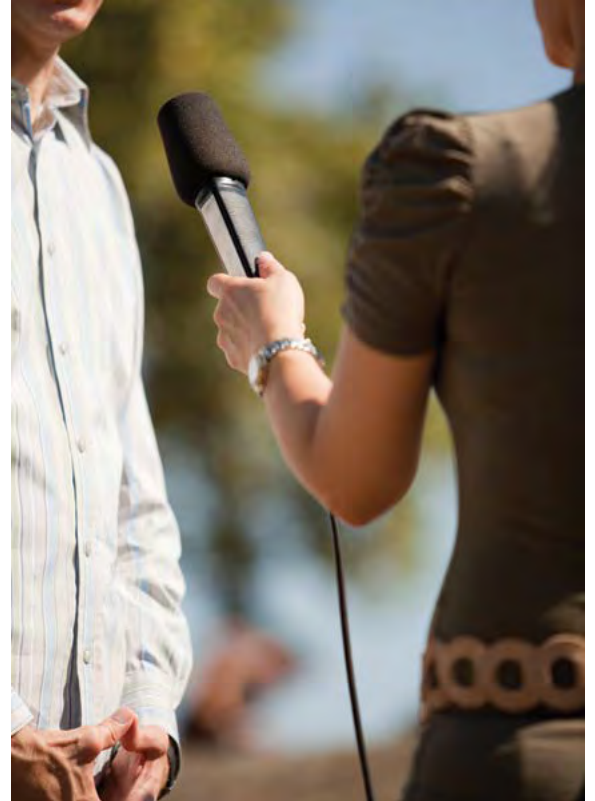


teams, stakeholders, and volunteers will work with your community team.

- Decide the best way to inform the broader community of necessary information, including methods such as public meetings, social media and online information, phone calls, radio, TV, and signage boards.
- Consider ways to effectively spread messages when people do not have access to the internet.
- Be sure to convey the hazards that exist after a wildfire.
- Find out if your local government or institutions (such as labs and universities) have an emergency notification system that allows for alerts to residents and businesses. Encourage your team and residents to sign up if the system requires registration.

## IMPORTANT CONSIDERATIONS FOR MOBILIZING YOUR COMMUNITY:

- **Transparency and accountability:** Be open and transparent with the community about decision-making processes and resource allocation.
- **Cultural sensitivity:** Respect the cultural nuances and needs of community members from different places and backgrounds. Provide resource information in the languages your community speaks whenever possible.
- **Community empowerment:** Encourage residents to take an active role in the recovery process, providing opportunities for decision-making and leadership.
- **Build resilience for the future:** Incorporate lessons learned from the disaster into long-term community preparedness plans, including mitigation strategies to reduce future impacts. Consider establishing a long-term recovery group comprised of community leaders who have knowledge on different aspects of disaster recovery.





## COMMUNITY FINANCIAL SUPPORT

One of the most important tasks in community response after a wildfire is identifying and applying for disaster assistance. Be aware that financial assistance processes often take more time than anticipated.

- **Fund Immediate Threats:** After your community has experienced a wildfire, you need to immediately assess the threat of post-fire flooding. There may only be days to weeks between when the fire is controlled and when the rains start. **The first task is to identify what funds are available in the community for immediate use,** and to prioritize projects that will provide the most expedient protection with those funds. Connect with government land management agencies to understand what actions they are taking on threats such as flooding within their jurisdiction, and what funds for threats may be available.
- **Do not assume that FEMA assistance is all you need.** A PDMDA must be established for a community to be eligible for FEMA funding. Additional funding will likely be needed to match or supplement what FEMA provides.
- **Document damage:** Take videos and pictures of your community to document damage, particularly to infrastructure such as bridges, and provide 'before' images if they are available. Document all damage from multiple angles. Documentation is critical for grant applications, and for most grants, documenting mitigation practices and results and saving receipts is mandatory.
- **Follow procurement guidelines and follow funding requirements:** Procurement is the acquisition of goods, services or works from an outside source. If you receive government funding, you must follow federal and state procurement guidelines. If you do not follow them, your funding may be taken back! Ensure you know and comply with the requirements of each grant.
- **Permitting is often required for on-the-ground work.** For information, contact your county's permitting department, ADEQ, and the U.S. Army Corps of Engineers.
- **Leadership roles in funding and response:** Make sure local government leaders understand that their role extends beyond applying for assistance. As the community's official representative, they are responsible for tracking applications and pressing for action when necessary.



- **Organize a funding team:** Putting together a grant application under a tight deadline after a disaster is challenging. You will be more effective if you take time up front to organize qualified staff and volunteers and to partner with other stakeholders in the planning for funding stage. Delegate tasks to those who have the required skills and are committed to meeting the time constraints.

## KEY ITEMS WHEN CONSIDERING FUNDING OPPORTUNITIES

Fundraising after a wildfire can be confusing and time consuming. Before applying for funding to assist your community, consider the following tips:

- **Evaluate** whether an application can be completed before the deadline, and if the community can meet the grant requirements within the time required.
- **Evaluate** whether grant funding will be available before work is scheduled to begin and whether the needed repairs can wait until grant funds are available.
- **Make sure** the record keeping requirements for each funding source are fully understood and followed, such as compliance reports, accounting and audit obligations, photos and receipts.
- **Understand** that receiving funding from one source may limit the funds that you might receive from another! For example, receiving some federal funding may disqualify you for other federal grants.
- **Ask a lot of questions.** It is up to the team to ensure the grant process and requirements are understood.

## MAKE THE MOST OF VOLUNTEERS AND IN-KIND DONATIONS

In-kind work and donations often count as a match for funding, but will need to be carefully documented, which is why documenting all volunteer and response team hours is important. Most “match” must be an approved part of a grant agreement. Scrutinize the match eligibility and documentation requirements for each type of grant.



photo by Brad Weaver on Unsplash



## PROGRAMS & SERVICES

This section describes many of the programs and services provided by organizations for communities that have been affected by wildfire. Please be aware that programs and funding levels can change from year to year, and assistance may not always be available. Many funding sources also rely on a disaster being a Presidentially declared emergency, so that is a defining point on what resources may be available to you.

### WHAT IS A PRESIDENTIALLY DECLARED DISASTER?

A “presidentially declared disaster” refers to an event that the President of the United States has officially designated as a major disaster. This may allow for federal assistance to be provided to affected areas, often through FEMA. Available resources may vary depending on this designation. To see if your disaster is included, visit: <https://www.fema.gov/disaster/current>



### SEEK RESOURCES TO ADDRESS THE THREAT OF POST-FIRE FLOODING:

Since post-fire flooding is a real threat in Arizona, you need to immediately assess the risk that flash flooding poses. Your first task is to identify what funds are available in the community for immediate use, and to prioritize projects that will provide the most expedient protection with those funds. For more information on flooding, see the section on **Post-Fire Flooding** on page 35.

**Your first stop as a community lead in the post-wildfire situation is FEMA** (see more specific information below).

After you have contacted FEMA, there are additional resources available (see pages 31-34).





**Federal Emergency Management Agency (FEMA):** After a Presidentially Declared Disaster (PDMDA) your first point of contact is FEMA at 800-621-FEMA (3362), TTY: 800-462-7585. To find out more, visit: <https://www.fema.gov/assistance>.

**Federal Emergency Management Agency (FEMA) Fire Management Assistance Grant Program:** This is available to states and local and tribal governments for the mitigation, management, and control of fires on publicly or privately owned forests or grasslands for fires which threaten destruction that would constitute a major disaster. The process is expedited recognizing the threat of emergency. Visit: <https://www.fema.gov/assistance/public/fire-management-assistance>.

## HELP OTHER THAN FEMA IS ALSO AVAILABLE. RESOURCES INCLUDE:

**Arizona Department of Emergency and Military Affairs (DEMA):** DEMA assists communities in Arizona after a natural disaster by coordinating state-level response efforts, providing resources like the State Emergency Operation Center, managing federal assistance programs to help with recovery, and guiding local governments and tribes through the process of rebuilding after a disaster, including accessing individual assistance for affected residents and businesses.

**CONTACT:** Call 602-267-2700 (DEMA main line) or visit their Recovery website at <https://dema.az.gov/emergency-management/operations-and-coordination/recovery>. A local



photo courtesy of Salvation Army

jurisdiction can request a Recovery Road Show by sending an email to: [Recovery@azdema.gov](mailto:Recovery@azdema.gov).

**Arizona Department of Forestry and Fire Management (DFFM):** May provide resources to communities after a wildfire for preparing for post-fire flooding and land recovery. Call the Arizona Interagency Dispatch Center at 800-309-7081 or visit <https://dffm.az.gov/>.

**University Extension Services** may provide some assistance after a wildfire, such as the Arizona Department of Agriculture: <https://agriculture.az.gov/training-assistance/cooperative-extension> or the University of Arizona Cooperative Extension: <https://extension.arizona.edu/>.

**The Federal Highway Administration (FHWA)** Emergency Relief (ER) program provides funds for the repair or reconstruction of Federal-aid highways and roads that suffered serious damage from natural disasters.

**PLEASE NOTE:** Team Rubicon will help communities complete FEMA paperwork and provide other assistance after a wildfire. Visit <https://teamrubiconusa.org>.



**CONTACT:** The Arizona Department of Transportation (ADOT) serves as the main point of contact for Emergency Response fund requests. Their main line is 602-712-7355. Their Emergency Response Manual can be found at the following link: <http://www.fhwa.dot.gov/reports/erm/er.pdf>

## **The Natural Resources Conservation Service's (NRCS) Emergency Watershed Protection (EWP) Program**

provides technical and financial assistance on private land following natural disasters to prevent further damage from flooding, runoff and erosion after a wildfire. Applications must be sponsored by a public entity, such as a qualified tribal organization, a division of state government, a city, county or special district (irrigation, conservation, etc.) and be made within 60 days of the start of the event which caused the impairment. Matching funds are required, and timing of funding depends on availability at the national level.

**CONTACT:** For more information, contact your local NRCS office or the main office at 602-280-8801 or visit [www.nrcs.usda.gov](http://www.nrcs.usda.gov).

## **Rural Development Disaster Assistance:**

This resource focuses on assistance in PDMDAs for items such as loans and grants for repairing housing, helping essential public services and facilities recover from disaster in rural America, technical assistance, or grants to recover drinking water and waste disposal systems damaged during a disaster, and assistance to Tribes to support the economic, cultural, and environmental priorities of Tribes through grants.

**CONTACT:** Call the Arizona State Office at 602-280-8701 or visit the website at <https://www.rd.usda.gov/resources/rural-development-disaster-assistance>.

## **Soil and Water Conservation Districts (SWCD):**

Your local SWCD may be able to provide help after a wildfire or natural disaster.

**CONTACT:** Call 830-719-5372. For a list of districts and phone numbers, visit: <https://www.aacd1944.com/conservation-districts>.

## **Temporary Assistance for Needy Families (TANF) Program:**

This provides grant funds to States and Territories to provide families with financial assistance such as



photo courtesy of Team Rubicon



employment support and related support services such as childcare assistance and family services to strengthen family stability. Programs are state administered. Applicant requirements include being responsible for a child under 19 years of age or pregnant, being legally in the United States, and qualifying as very low income, unemployed, or underemployed (or about to become unemployed).

**CONTACT:** For information on available family assistance by state, visit <https://www.acf.hhs.gov/ofa/map/about/help-families>. For more information on HHS, visit [www.hhs.gov](http://www.hhs.gov).

**U.S. Army Corps of Engineers and the Arizona Silver Jackets Team** may provide assistance after a wildfire to help address flood threat and rebuild infrastructure.

**CONTACT:** Visit <https://www.iwr.usace.army.mil/Silver-Jackets/State-Teams/Arizona/>.

**U.S. Department of Housing and Urban Development (HUD):** If a disaster is established as a PDMMA, Congress may provide significant financial assistance to HUD to distribute via Community Development Block Grant Disaster Recovery (CDBG-DR) funds. Funds may also be allocated to mitigate future disaster losses and risks. Determining how these funds are used requires input from everybody (state and local governments, businesses, and local citizens). Funds can take over 6 months to reach your community. These funds may cover items such as housing reconstruction and rehabilitation, infrastructure restoration, economic

revitalization, and supporting low and moderate-income populations.

**CONTACT:** Visit [https://www.hud.gov/disaster\\_resources/disaster\\_recovery\\_for\\_individuals\\_and\\_families/disaster\\_recovery\\_funds](https://www.hud.gov/disaster_resources/disaster_recovery_for_individuals_and_families/disaster_recovery_funds).

**Water Quality and Safety:** The ADEQ Safe Drinking Water website provides information on water quality and safety after a wildfire. For more information, visit: <https://azdeq.gov/safe-drinking-water> or call 480-612-5686.





## EXAMPLES OF ADDITIONAL VOLUNTARY ORGANIZATIONS ACTIVE IN COMMUNITY DISASTER RECOVERY:

- **American Red Cross:** Call 1-800-RED CROSS (733-2767) and ask for your local chapter, or visit [www.redcross.org](http://www.redcross.org).
- **Salvation Army:** The Salvation Army's first goal is to meet the basic needs of those who have been affected (people directly impacted and first responders). Visit: <https://www.salvationarmyusa.org/usn/help-disaster-survivors/>.
- **Team Rubicon:** assists communities with disaster, including help with FEMA paperwork. Visit: <https://teamrubiconusa.org>.
- **Urban Forest Strike Team** assists with addressing public safety issues with urban trees and help you retain a viable urban forest after a disaster. Visit: <https://southernforests.org/ufst/>.
- **Voluntary Organizations Active in Disaster (VOAD)** is a nonprofit membership organization. While not a direct service provider, it strives to support its members who are on the forefront of disaster recovery and response. Visit: [www.nvoad.org](http://www.nvoad.org).



photos courtesy Team Rubicon





## **BEFORE THE FLOOD**

The danger is not over after the flames are extinguished. Flooding is one of the most dangerous risks after a wildfire, and can occur years or even a decade or more after the wildfire. Flash flooding happens unexpectedly and can be deadly.

## TO PREPARE FOR THE VERY REAL POTENTIAL OF DANGEROUS FLOODING AFTER A WILDFIRE:

- **Monitor weather forecasts closely**, stay informed about local emergency alerts—sign up for free County Emergency Alerts on your phone—and heed evacuation orders when issued. See resources on alerts and staying informed on page 41.
- **Create an evacuation plan** and have a family/household communication plan in case of an emergency. Also note that you may be asked to “shelter in place” during a flood situation.
- **Gather emergency supplies** in case of post-fire flooding. For information on supplies to include, visit <https://www.ready.gov/kit>.
- **Be aware of potential debris flows** (a post-fire flood may carry mud, rocks, and other materials), especially in burn scar areas and waterways below burn scar areas. Clear debris from gutters and drains.
- **Move valuables to higher ground** away from flood danger sites, if possible.
- **Prepare animal and livestock areas** for potential flooding and have an animal evacuation plan.
- **Seriously consider purchasing flood insurance** (see *Purchasing Flood Insurance After a Wildfire* below) quickly after a wildfire occurs.
- **Use caution** when recreating or camping in areas near or downslope from the burn scar areas that may be at risk from flooding.

If you are leading a community in post-fire recovery, consider reaching out to communities and entities (such as Coconino County) that have experienced flooding for resources and tips on post-fire flooding.



## TO HELP DETERMINE IF YOUR HOME IS AT RISK OF POST-FIRE FLOODING:

First, consider your location. If your home is within a burn scar area or downhill/downstream of one, that is an indication of flood risk. Terrain also affects this, as steep slopes within or below a burn scar are particularly vulnerable to flooding. If your property is located near a stream, arroyo, or drainage channel that flows through a burned area, your flood risk is higher. Pay close attention to weather reports, especially during rain events which can cause flash floods. See section on *Weather and Emergency Alerts* on page 41.

## PURCHASING FLOOD INSURANCE AFTER A WILDFIRE:

Be sure to purchase flood insurance before the fire containment date or within 60 days after. If you do so, the standard waiting period for flood insurance (usually 30 days) does not apply. Since flooding can occur years and even decades after the wildfire, flood insurance can be a very worthwhile investment. Document your property thoroughly with photos and videos to aid in claims filing.

### USEFUL LINKS FOR FLOOD INSURANCE:

- **To Purchase Flood Insurance or Find a Flood Insurance Provider:** Call your insurance company or insurance agent (the same person or entity who sells your home or auto insurance). If you need help finding a provider, visit [FloodSmart.gov/flood-insurance-provider](https://www.floodsmart.gov/flood-insurance-provider) or call the National Flood Insurance Program (NFIP) at 877-336-2627.
- **FEMA website on Flood Insurance:** <https://www.fema.gov/flood-insurance>



## DURING THE FLOOD

### IF YOU ARE IN DANGER, CALL 911 OR YOUR LOCAL EMERGENCY NUMBER.

- **Flash floods** that result from rain falling over a burned area upstream of your location are a very real and potentially deadly hazard after a wildfire. If there is any possibility of a flash flood, move immediately to higher ground.
- **Stay away from storm channels, arroyos, canyons and other low-lying areas**—they can quickly turn deadly. Flash floods can occur in these areas with or without such typical warnings as rain clouds or heavy rain.
- **Stay away from moving water.** A mere six inches of moving water can make you fall. If you must walk in water, go where the water is not moving and use a stick to check the depth of water and firmness of the ground in front of you.
- **Do not drive into flooded areas.** If water rises around your car, abandon the car and move to higher ground if you can do so safely. Vehicles and people can quickly be swept away. Only a foot or two of water can float or sweep away your vehicle.
- **If water rises in your home before you evacuate,** go to the top floor, attic or roof. Turn off all utilities at the main power switch and close the main gas valve if advised to do so. Disconnect electrical appliances, and do not touch electrical equipment if you are wet or standing in water. Follow official guidance on if/when to leave your home safely.
- **If you come in contact with floodwaters,** wash your hands with soap and disinfected water.



## AFTER THE FLOOD: RETURNING HOME & SAFETY

### KEY SAFETY TIPS

- 1. Do not return home** until you are told it is safe to do so. Emergency managers may ask you to shelter-in-place in case of flood events. Always follow official guidance.
- 2. Reentry Precautions:**
  - **Do not turn on the lights or do anything that may cause a spark.** Notify the gas company or fire department. Consult utility providers before using electrical equipment.
  - **Return home during daylight** to avoid using lights; use battery or crank-powered flashlights if returning at night.
  - **Shut off electrical power and gas/propane tanks** to prevent fire, electrocution, or explosions. If you smell gas, turn off the main valve, ventilate the area, and leave immediately. Contact authorities before returning.
  - **Keep children and pets away** from impacted areas until cleanup is complete.
- 3. Health Precautions:**
  - **Tetanus shots:** Get a tetanus shot if exposed to floodwaters or injured, especially if it's been over five years since your last one. Protect open wounds from floodwater contamination and wash hands well after exposure to flood water.
  - **Mosquito-borne illness:** Protect against mosquitoes to reduce risks of illnesses like West Nile Virus by minimizing standing water and taking personal precautions.
- 4. Water and Mold Safety:**
  - **Well water:** Test well water for contamination before drinking (see *Immediate Safety: Helpful Links* text box on page 5). Avoid turning on well equipment until inspected by professionals to prevent electric shock.
  - **Mold protection:** Keep vulnerable individuals away from mold. Minimize its spread and ensure proper ventilation during removal. Follow EPA guidelines (see link in *Additional Flood Resources* text box on this page) for safe mold cleanup.

### ADDITIONAL FLOOD RESOURCES:

- **After the Flood** website by Coconino County includes a wealth of information and resources on health and safety information: <https://www.coconino.az.gov/2935/After-a-Flood-Health-Safety-Information>
- **Brief Guide to Mold and Moisture in Your Home:** the EPA created this guide for homeowners and renters on how to safely clean up residential mold problems and how to prevent mold growth: <https://www.epa.gov/mold/brief-guide-mold-moisture-and-your-home>
- **Flood After Fire Toolkit** was created for California in 2020 and provides in-depth and technical information for communities. It has information to help plan for flooding, and is geared mainly for scientific specialists and digital mapping practitioners, and emergency planners and managers: <https://usace.contentdm.oclc.org/utis/getfile/collection/p16021coll2/id/7522>
- **Well Water Safety** Information: [azhealth.gov/wellwater](http://azhealth.gov/wellwater)

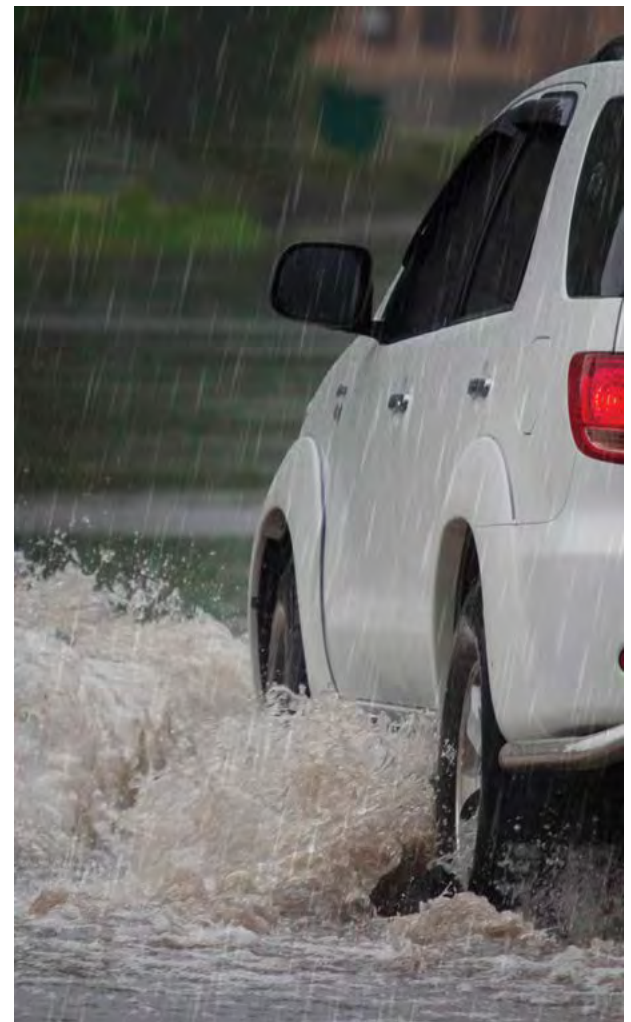
## 5. Food Safety After a Flood: “When in Doubt, Throw it Out.”

- **Discard any food that came into contact with floodwater** or is not in a waterproof container.
- **Throw away** all fresh or processed meat, cheese, eggs, dairy, poultry, and dried foods (grains, nuts, beans, dried fruits, milk, and egg products).
- **Frozen foods:** Discard foods in a refrigerator/freezer if floodwaters contaminated the interior. Discard completely thawed foods, including vacuum-packed fish and cooked items. **Salvage** may be possible if food stays dry and remains below 41 °F.
- **Sealed or packaged foods:** Discard any food in non-waterproof containers or with damaged packaging.
- **Throw away** food with signs of contamination, such as stains, clumping, or damage from condensation.
- **Canned and glass-packaged foods:** Discard any cans with rust, leaks, swelling or damage, and any home-canned foods exposed to floodwater. Also toss any glass containers with porous closures (such as baby food or mayonnaise).
- **Safe to use after cleaning:** Commercially canned foods (undamaged) can be cleaned with potable water and detergent. Sanitize by submerging containers for 15 minutes in a solution of 1 tablespoon unscented bleach (5% chlorine) per gallon of water. Air dry and label contents with a permanent marker. Use sanitized containers quickly to avoid rusting.
- **Key reminder:** Properly inspect all foods and prioritize safety by discarding anything suspect.



## WEATHER & EMERGENCY ALERTS

- **National Weather Service** provides active alerts on weather across the nation: <https://www.weather.gov/>
- **National Oceanic and Atmospheric Administration (NOAA) Weather Radio** provides 24/7 information on watches, warnings and advisories from the National Weather Service: [https://www.weather.gov/nwr/station\\_search](https://www.weather.gov/nwr/station_search). It does not cover all areas of Arizona, and does require a special receiver that can be purchased at many retail outlets for less than \$40 USD.
- **Arizona Emergency Information Network (AzEIN)** provides information at <https://ein.az.gov/> for emergency updates, preparedness advice and hazards information, and county-specific resources.
- **The Emergency Alert System (EAS)** is a national public warning system commonly used by state and local authorities to deliver important emergency information flash flood warnings on commercial radio and TV.
- **Wireless Emergency Alerts (WEA)** are emergency messages sent by authorized government alerting authorities through your mobile carrier, and include flash flood warnings. Mobile users are not charged for receiving these text-like alerts and are automatically enrolled to receive them.
- The **FEMA Mobile App provides email alerts and text messages** to the general public: <https://www.fema.gov/about/news-multimedia/mobile-products#download>
- Third party sources that deliver **email and weather alerts** are listed here: <https://www.weather.gov/enterprise/>
- **Nixle provides free text and email alerts** anywhere in the nation: <https://www.everbridge.com/products/nixle/>



**FOLLOWING A DESTRUCTIVE WILDFIRE,** the threat of secondary effects such as dangerous flooding and soil erosion make post-fire treatments a critical part of a wildfire response plan. Helping the land recover is essential to prevent further damage, and to restore ecological balance and integrity to the land. While there is an evolving understanding and differing opinions regarding landscape recovery after a wildfire, this section introduces the key steps and considerations applicable to forests, grasslands, and desert ecosystems to help landowners and communities navigate the recovery process.

**Keep in mind that the resources and assistance provided throughout this section are not exhaustive, as the field of post-fire landscape recovery continues to evolve and expand.**

## KEY RECOVERY STEPS

- 1. Identify key priorities at risk** including threats to: **(1)** human life, **(2)** property—such as homes, community amenities, and infrastructure such as roads and sewage treatment facilities, **(3)** natural resources such as watersheds and community water sources, key habitats, sensitive landscape areas, etc. and **(4)** cultural sites such as archeological or historic sites, or areas of particular value to the community.
- 2. Identify risks to priority areas** and what may impact them. For example, assessing which neighborhoods and areas are at the most risk of dangerous flooding, or if water quality or water supply is threatened by ash.
- 3. Evaluate the significance and probability of risks.** Look at whether or not the risks provide a large impact or a small impact, and the probability of that event occurring. The USDA's Burned Area Emergency Response (BEAR) process, for example, uses a matrix to look at significance and probability of risks. This should be a scientific assessment informed by available resources such as post-wildfire debris flow and flooding assessment and soil burn severity maps. If the Natural Resources Conservation Service's (NRCS) Emergency Watershed Protection program is involved, for example, they may conduct rapid assessments on private land.
- 4. Determine priority emergency stabilization activities based on the results of step 3.** Prioritize items that risk human life first. Match resources (grants, funding, volunteers, agencies and organizations with staff available to help, or groups from the private sector) to implement projects. This process can take time as part of the recovery phase, so communicating risks to people and communities in the meantime is crucial.
- 5. Involve communities and partners** throughout these processes. Communicate any findings and planned actions to communities to ensure awareness and preparedness, and that people understand post-fire flood risks. Collaborate with partners, such as relevant agencies, land managers, and technical experts.



## KEY RECOVERY GOALS FOR LANDSCAPE REHABILITATION

**Before implementing any treatments, individuals and communities should consult with restoration experts to provide site-specific guidance and recommendations.**

Landscape rehabilitation is an important part of addressing flood risk and wildfire recovery. After assessing damage and minimizing safety hazards, goals for rehabilitating your land after a fire include:

- **Soil Stabilization and Slowing Water Runoff**
- **Invasive Species Control**
- **Native Plant Recovery**
- **Monitoring and Adapting**

### SOIL STABILIZATION AND SLOWING WATER RUNOFF:

The first year after a fire is the most critical time to implement emergency stabilization projects to prevent or minimize downstream sediment and debris flow, flooding, retain topsoil, and protect local waterways.

Note that channels, hillslopes, roads, or trails require specific erosion control treatments that are crucial to slowing water runoff. If your property includes any of these features, consult with a qualified restoration practitioner to learn which treatments will be most effective.

**The National Wildfire Coordinating Group's Post Wildfire Recovery Project Resources** page contains links to many resources to help communities in recovering after wildfire and many resources to help in land recovery and post-fire flood mitigation: <https://www.nwccg.gov/partners/pwrp/resources>

**Arid and Semi-Arid Lands Seed Technology and Restoration Online Course by Society for Ecological Restoration and the Bureau of Land Management (BLM)** serves as a comprehensive guide to best practices in restoration and revegetation strategies through a self-paced, online course: <https://ser-insr.org/training>

**Using Western Science and Traditional Knowledge for Watershed Recovery after Wildfire:** a short film on the restoration of Santa Clara Canyon: <https://www.swfireconsortium.org/2024/09/17/santa-clara/>



### SOIL STABILIZATION AND SLOWING WATER RUNOFF RESOURCES:

- **Soil Erosion Control After Wildfire:** <https://csfs.colostate.edu/wp-content/uploads/2018/07/06308.pdf>
- **BAER Treatments Catalog:** [https://www.fs.usda.gov/eng/pubs/pdf/BAERCAT/lo\\_res/06251801L.pdf](https://www.fs.usda.gov/eng/pubs/pdf/BAERCAT/lo_res/06251801L.pdf)
- **Post-Fire Treatments (from After Wildfire: A Guide For New Mexico Communities):** [https://www.afterwildfirenm.org/post-fire-treatments/post-fire-treatments-pdf/copy\\_of\\_post-fire-treatments-pdf/view](https://www.afterwildfirenm.org/post-fire-treatments/post-fire-treatments-pdf/copy_of_post-fire-treatments-pdf/view)
- **Factsheet: Mitigating Postfire Runoff and Erosion in the Southwest:** <https://www.swfireconsortium.org/2021/01/21/mitigating-postfire-runoff-and-erosion-in-the-southwest-using-hillslope-and-channel-treatments/>
- **Nature-Based Structures for Watershed Restoration:** <https://www.youtube.com/watch?v=VUDlitH2uhl&t=8s>

## INVASIVE SPECIES CONTROL:

Invasive species are best adapted to disturbed landscapes and will likely be the first to begin growing back after a fire. It is important to prevent these opportunistic plants from outcompeting native species, which could increase fire risk and hinder recovery.

### INVASIVE SPECIES CONTROL RESOURCES:

- **ADOT's Noxious Weed Identification Guide:** <https://azdot.gov/sites/default/files/2019/04/noxious-species-identification-guide.pdf>
- **Managing Weeds After Wildfire:** [https://www.montana.edu/extension/invasiveplants/documents/publications/extension\\_publications/Managing%20weeds%20after%20wildfire.pdf](https://www.montana.edu/extension/invasiveplants/documents/publications/extension_publications/Managing%20weeds%20after%20wildfire.pdf)  
(Note: This resource is from Montana State University and includes Montana-specific species, but offers helpful guidelines and recommendations applicable to Arizona species.)



## NATIVE PLANT RECOVERY:

Some research has shown that landscapes with active native seeding or planting recover more quickly after a fire than those without intervention. Focus on locally adapted<sup>1</sup> native species to help restore ecological balance, support wildlife, and improve soil health and structure. Consider implementing strategies to help keep the seeds in place for regrowth, such as mulch. When seeding, consider the scale and timing—are you reseeding on a hillslope scale or on a watershed-level scale? Will seasonal precipitation patterns carry seeds off the property before they can germinate?

Note that while seeding remains a common practice in post-wildfire recovery, there is controversy on its effectiveness at the watershed level and there are concerns it can cause more harm than good<sup>2</sup>. Also note that outcomes are best if native plant materials are developed in advance of wildfires<sup>3</sup> (so if you are reading this before a wildfire, plan ahead). Develop a plan for restoring native plants on your property with the help of a qualified restoration practitioner.

## MONITOR AND ADAPT:

Track recovery progress and make adjustments as needed to ensure long-term success and to see if treatments are working. Consider installing permanent erosion control structures on your property, as the risk of flooding will likely remain for years (maybe even decades) after the fire. Private sector non-profit groups and contractors provide key assessments and post-fire monitoring in some communities.

### MONITOR AND ADAPT RESOURCES:

- **Monitoring Post-Fire Vegetation Rehabilitation Projects:** A Common Approach for Non-Forested Ecosystems: <https://pubs.usgs.gov/sir/2006/5048/pdf/sir20065048.pdf>
- **Society for Ecology Restoration International Standards Tools:** <https://www.ser.org/page/Standards-Tools>

### NATIVE PLANT RECOVERY RESOURCES:

- **Arizona Native Plant Society:** <https://aznps.com/grow-native/>
- **EcoRestore Portal Site Assessment Tool and Resource Toolbox:** <https://ecorestore.arizona.edu/>
- **Replanting in Burn Areas:** Tips for Safety and Success: <https://csfs.colostate.edu/wp-content/uploads/2020/11/FINAL-Post-Fire-Replanting-and-Safety-Tips-May2019.pdf>
- **Seeding After the Fire Guide by NRCS:** <https://www.nrcs.usda.gov/resources/guides-and-instructions/after-the-fire-seeding#:~:text=When%20is%20the%20right%20time,within%2030%20days%20of%20precipitation.>



photo courtesy of Urban Forest Strike Team

## LANDSCAPE RECOVERY

While a general outline for landscape recovery may be followed for variable ecosystems, there is no “one-size-fits-all” set of treatments to rehabilitate land after a fire. Each ecosystem across Arizona’s diverse landscape will require specific treatments and resources, introduced below.

### Forest Recovery:

Recovery in forests focuses on stabilizing soil, reestablishing tree cover, and managing post-fire erosion and flooding using erosion control measures. Treatment techniques on forested lands will greatly depend on the intensity and severity of the fire. Though wildfires are increasing in size and severity<sup>4</sup>, forests generally have well-established recovery strategies due to more frequent fires in these ecosystems.



#### FOREST RECOVERY RESOURCES:

- **Guide for Arizona Forest Owners:** <https://ucanr.edu/sites/fire/files/288125.pdf>
- **After the Burn:** Assessing and Managing Your Forestland After a Wildfire: <https://ucanr.edu/sites/postfire/files/248214.pdf>

### Grassland Recovery:

Grasslands are well-adapted to fire and may recover more quickly than non-grassland properties. Restoration will focus on ensuring the return of native grasses through managing invasive species and seeding to maintain biodiversity and prevent soil erosion.

#### GRASSLAND RECOVERY RESOURCE:

- **Management for Recovery of Rangeland After Wildfire:** <https://extension.sdstate.edu/management-recovery-rangeland-after-wildfire>. (Note: This resource is from South Dakota State University, but still offers helpful insight on grassland recovery after a fire.)



## Desert Recovery:

Wildfires in Arizona's desert ecosystems are historically rare; however, they are becoming increasingly common due to invasive species such as red brome, stinknet, and buffelgrass, which contribute to higher fuel loads to carry fire across the landscape. Despite the growing threat of desert wildfires, research on effective restoration practices post-fire remains limited<sup>5</sup>.

Desert ecosystems may be slow to recover without active intervention. Removing invasives to prevent re-burns and support native growth<sup>6</sup>, protecting fragile soil from erosion, and seeding/planting a diverse mix of native species<sup>7</sup> will support the recovery of these ecosystems. Techniques on how to mitigate the transition from desert scrub to invaded grassland are still being designed. One of the best strategies is to keep fires out of uninvaded areas, and in highly invaded areas, promote use of prescribed fire and install desert-adapted fuel breaks<sup>8</sup>.



- **Learn more about fire and invasion in the desert:**  
<https://www.swfireconsortium.org/2024/05/22/desert-fire-invasion/>
- **Experimenting with fuel breaks for the desert:**  
<https://storymaps.arcgis.com/stories/2fc8b981ae5b4a2b8ca49f43bf89fb80>
- **Stop the Spread of Stinknet:**  
<https://www.stinknet.org/resources/>



## ADDITIONAL RESOURCES: Key agencies for land recovery efforts

Overview of Key Federal Agency Landowners and Partners, Roles and Timelines

**Figure 2:**

Overview of Key Agency Landowners and Partners, adapted from the Colorado Post-Fire Playbook: <https://cdphe.colorado.gov/post-fire-playbook>

AGENCY	TYPE	FIRST MONTH	YEAR 1 <small>(Emergency Phase)</small>	YEAR 2+
U.S. Forest Service (USFS)	Landowner	<ul style="list-style-type: none"> <li>• BAER Assessments</li> <li>• BAER Report, Soil Burn Severity (SBS) Map</li> </ul>	BAER Team and USFS national office implement projects	USFS rehabilitation efforts transition over to the local national forest office
U.S. Forest Service (USFS)	Landowner	<ul style="list-style-type: none"> <li>• ESR Assessment</li> <li>• ESR Plan</li> </ul>	Local field office implements ES Projects	Local field office implements BAR projects
Natural Resources Conservation Service (NRCS)	Partner on Private Land	<ul style="list-style-type: none"> <li>• Damage Assessment</li> <li>• Damage Survey Report</li> </ul>	Assist EWP sponsor on implementing post-fire recovery treatments	Assist EWP sponsor as needed
Bureau of Indian Affairs (BIA)	Partner	<ul style="list-style-type: none"> <li>• BAER team assessments</li> </ul>	Coordinate with other Department of the Interior agencies on BAER projects	Coordinate with other Department of the Interior agencies on BAER projects
Local Government, Tribe, Water Provider	Landowner, Partner	<ul style="list-style-type: none"> <li>• Partner with state and federal agencies to conduct assessment</li> </ul>	<ul style="list-style-type: none"> <li>• Serve as sponsor for funding sources</li> <li>• Partner with federal and state agencies to implement projects</li> </ul>	Partner with federal and state agencies to implement projects and track rehabilitation efforts

# Appendix: Sources Used for this Guide

<sup>7</sup>Abella, S. R., Gunn, J. L., Daniels, M. L., Springer, J. D., & Nyoka, S. E. (2008, December). *Using a Diverse Seed Mix to Establish Native Plants on a Sonoran Desert Burn*. University of Nevada, Las Vegas. [https://digitalscholarship.unlv.edu/cgi/viewcontent.cgi?article=1004&context=pli\\_lake\\_mead\\_fire\\_presentations](https://digitalscholarship.unlv.edu/cgi/viewcontent.cgi?article=1004&context=pli_lake_mead_fire_presentations)

Arizona Cooperative Extension. (2011, December). *Recovering From Wildfire A Guide for Arizona's Forest Owners*. <https://ucanr.edu/sites/fire/files/288125.pdf>

California Silver Jackets. (2020, September). *Flood After Fire California Toolkit: A Resource for Technical Specialists to Assess Flood and Debris Flow Risk After a Wildfire*. <https://usace.contentdm.oclc.org/utils/getfile/collection/p16021coll2/id/7522>

Cal Fire. (n.d.). *Returning Home After a Wildfire*. [https://readyforwildfire.org/wp-content/uploads/2024/03/calfire-returning-home-after-fire\\_revised.pdf](https://readyforwildfire.org/wp-content/uploads/2024/03/calfire-returning-home-after-fire_revised.pdf)

Coconino County. (n.d.). *After a Flood: Health and Safety Information*. <https://www.coconino.az.gov/2935/After-a-Flood-Health-Safety-Information>

Colorado Department of Public Health and Recovering From Wildfire A Guide for Arizona's Forest Environment. (2015, June 30). *Disaster Recovery Guide: Preserving Public Health and Safety*. <https://drive.google.com/file/d/11k1GhXBuKAjkbzCik7gq8B8-B4n5WyzD/view>

Colorado State University Extension. (2021, August 9). *After the Disaster Guidebook: A Toolkit for Landowners Impacted by Wildfire*. [https://docs.google.com/presentation/d/1c2mXQpzQhjnTODuHTBjLy6h4HLmvrivZSFo37qr88w8/edit?mc\\_cid=2a966bef74&mc\\_eid=d03abbd602#slide=id.ge7bccd8800\\_0\\_0](https://docs.google.com/presentation/d/1c2mXQpzQhjnTODuHTBjLy6h4HLmvrivZSFo37qr88w8/edit?mc_cid=2a966bef74&mc_eid=d03abbd602#slide=id.ge7bccd8800_0_0)

Federal Emergency Management Agency, United States Fire Administration. (2019, January). *After the Fire*. [https://www.usfa.fema.gov/downloads/pdf/publications/fa\\_46.pdf](https://www.usfa.fema.gov/downloads/pdf/publications/fa_46.pdf)

<sup>1</sup>Johnson, R., Stritch, L., Olwell, P., Lambert, S., Horning, M. E., & Cronn, R. (2010). *What are the best seed sources for ecosystem restoration on BLM and USFS lands?* *Native Plants Journal*, 11(2), 117-131.

<sup>3</sup>McCormick, M.L., Carr, A.N., Massatti, R., Winkler, D.E., De Angelis, P., and Olwell, P. (2021). *How to increase the supply of native seed to improve restoration success: the US native seed development process*. *Restoration Ecology* 29:1-9. <https://doi.org/10.1111/rec.13499>

Montana State University Extension. (2019). *Managing Weeds After Wildfire*. [https://www.montana.edu/extension/invasiveplants/documents/publications/extension\\_publications/Managing%20weeds%20after%20wildfire.pdf](https://www.montana.edu/extension/invasiveplants/documents/publications/extension_publications/Managing%20weeds%20after%20wildfire.pdf)

National Association of Counties. (2018, May 11). *County Wildfire Playbook: A County Leadership Guide to Help Communities Become More Fire Adapted and Learn to Live with Wildland Fire*. <https://www.naco.org/featured-resources/county-wildfire-playbook-county-leadership-guide-help-communities-become-more-fire-adapted>

Natural Resources Conservation Service. (n.d.) *Wildfire Recovery Tips for Idaho*. <https://ucanr.edu/sites/postfire/files/248217.pdf>

New Mexico State Forestry. (2016, updated 2022). *After Wildfire: A Guide for New Mexico Communities*. <https://www.afterwildfirenm.org/>

Oregon Department of Environmental Quality. (n.d.). *Advice for Returning to a Home that Survived a Wildfire*. <https://www.oregon.gov/odf/fire/pages/afterafire.aspx>

Oregon Fish and Wildlife. (2017, September). *Guidelines For Rehabilitating Landscapes After Fires*. <https://www.dfw.state.or.us/habitat/mitigation/ODFW%20Guide%20Rehab%20Landscapes%20After%20Fires.pdf>



## Appendix: Sources Used for this Guide (continued)

<sup>2</sup>Peppin, D., Fule, P.Z., Sieg, C. H., Beyers, J. L., & Hunter, M. E. (2010). *Post-wildfire seeding in forests of the western United States: An evidence-based review*. *Forest Ecology and Management*, 260(5), 573-586. <https://doi.org/10.1016/j.foreco.2010.06.004>

Scott, Sean M. (2020). *The Red Guide to Recovery: Resource Handbook for Disaster Survivors*. Heritage Publishing & Communications, Ltd.

<sup>8</sup>Southwest Fire Science Consortium. (2024, August). *Fuel Breaks for the Sonoran Desert*. <https://www.swfireconsortium.org/2024/08/09/sonoran-fuel-breaks/>

<sup>6</sup>Steers, R. J. & Allen, E. B. (2010). *Post-Fire Control of Invasive Plants Promotes Native Recovery in a Burned Desert Shrubland*. *Restoration Ecology*, 18(s2), 334-343. <https://doi.org/10.1111/j.1526-100X.2009.00622.x>

United States Centers for Disease Control and Prevention. (n.d.). *Safety Guidelines: After a Wildfire*. <https://www.cdc.gov/wildfires/safety/how-to-safely-stay-safe-after-a-wildfire.html>

United States Environmental Protection Agency. (n.d.). *Protect Your Lungs from Wildfire Smoke or Ash*. [https://www.airnow.gov/sites/default/files/2020-10/respiratory-protection-no-niosh\\_0.pdf](https://www.airnow.gov/sites/default/files/2020-10/respiratory-protection-no-niosh_0.pdf)

United States Environmental Protection Agency. (n.d.). *Reduce Your Smoke Exposure*. <https://www.airnow.gov/sites/default/files/2021-06/reduce-your-smoke-exposure.pdf>

University of California Cooperative Extension of Sonoma County. (n.d.). *Produce Safety After a Fire*. <https://ucanr.edu/sites/SoCo/files/315093.pdf>

University of Idaho Extension. (2011, May). *After the Burn: Assessing and Managing Your Forestland After a Wildfire*. <https://www.gao.gov/assets/710/702715.pdf>

University of Wyoming Extension. (n.d.) *Living with Wildfire in Wyoming*. <https://ucanr.edu/sites/postfire/files/248228.pdf>

<sup>4</sup>Wasserman, Tzeidle N. (2020, May). *Wildfire Trends Across the Western US: Forest Fires Have Increased in Size, Severity, and Frequency Across Western Forests*. ERI White Paper: Issues in Forest Restoration. Ecological Restoration Institute, Northern Arizona University. <https://cdm17192.contentdm.oclc.org/digital/collection/p17192coll1/id/1043/rec/49>

<sup>5</sup>Wilder, B.T., J. Shelly, K.S. Gibson, J. Malusa. (2024, May). *Fire in the Sonoran Desert: An overview of a changing landscape*. Southwest Fire Science Consortium. <https://www.swfireconsortium.org/wp-content/uploads/2024/05/Fire-in-the-Desert-digital-singles.pdf>



# Appendix: Acronyms & Partners

**ADEQ:** Arizona Department of Environmental Quality

**ADOT:** Arizona Department of Transportation

**AHS:** Arizona Humane Society

**AVMA:** American Veterinary Medical Association

**AzEIN:** Arizona Emergency Information Network

**BAER:** Burned Area Emergency Response

**BIA:** Bureau of Indian Affairs

**BLM:** Bureau of Land Management

**DEMA:** Arizona Department of Emergency and Military Affairs

**DFFM:** Arizona Department of Forestry and Fire Management

**D-SNAP:** Disaster Supplemental Nutrition Assistance Program

**EPA:** Environmental Protection Agency

**ESR:** Emergency Stabilization and Rehabilitation

**EWP:** Emergency Watershed Protection

**FEMA:** Federal Emergency Management Agency

**FHA:** Federal Housing Administration

**FSA:** Farm Service Agency

**HHS:** Department of Health and Human Services

**HUD:** Housing and Urban Development

**ICS:** Incident Command System

**IRS:** Internal Revenue Service

**NFIP:** National Flood Insurance Program

**NOAA:** National Oceanic and Atmospheric Administration

**NRCS:** Natural Resources Conservation Service

**PDMDA:** Presidentially Declared Major Disaster Area

**SBA:** Small Business Administration

**SBS:** Soil Burn Severity

**SWCD:** Soil and Water Conservation District

**USDA:** United States Department of Agriculture

**USFS:** United States Forest Service

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## PARTNERS, SPONSORS, AND COLLABORATORS

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