Schultz/Pipeline Flood Area Webpage & Email

Where can I find the Schultz/Pipeline Flood Area Webpage?

The Schultz/Pipeline Flood Area Webpage can be found at www.coconino.az.gov/2926/SchultzPipeline-Flood-Area.

What is the email address for information about the Schultz/Pipeline Flood Area?

The email address is pipelinefirefloodarea@coconino.az.gov.

Recommended Flood Mitigation Exhibits

What are the Recommended Flood Mitigation Exhibits?

The Recommended Flood Mitigation Exhibits have been created by the Flood Control District’s engineering consultants to show homes at higher risk of post-wildfire flooding and the recommended mitigation for each of these properties. These exhibits are based the latest flood depth analysis using the burn severity map provided by the Burned Area Emergency Response Team.

Where can I find the Recommended Flood Mitigation Exhibits?

All Recommended Flood Mitigation Exhibits can be found at https://www.coconino.az.gov/2929/Recommended-Flood-Mitigation-Exhibits.

What do these Recommended Flood Mitigation Exhibits show?

The exhibits show what our engineers recommended for mitigation at homes that are at higher risk of flooding. The exhibit shows the type of mitigation recommended, and if sandbags are recommended, the location and height and the estimated number of sandbags needed to mitigate the 2” in 45-minute rainfall event. The mitigation recommended will not mitigate every possible rainfall event.

Recommended Flood Mitigation Exhibits Disclaimer: The Recommended Flood Mitigation Exhibits provided have been prepared based on modeling of a 2-inch, 45-minute rainfall event over the Schultz, Tunnel, and Pipeline burn areas. As the name implies, this is a monsoon storm event that would drop 2 inches of rain on the watersheds impacted by the fires during a 45-minute period. This storm has a 25-Year recurrence interval probability. This does not mean that such a storm only occurs every 25 years. Instead, a 25-Year Event is one that statistically has a 4% probability of occurring at any given time.

The Recommended Mitigation Exhibits have been prepared utilizing the best available data. However, unpredictable changes may occur in the flow patterns and channels as watershed
conditions constantly change due to levels of saturation, debris, sediment impacts, and other factors. As such, it is very important to note that these changes could impact the modeling results used to prepare these Exhibits and, in turn, the effectiveness of the recommended emergency flood mitigation measures presented here.

What criteria is used in modeling that underlies the Recommended Mitigation Exhibits?

The flood-risk modeling is very comprehensive and accounts for the entire watershed, both damaged and undamaged. It also considers many criteria including burn severity (Burned Area Reflective Classification, or BARC), topography, vegetation, runoff from high peaks. Bulking of the floodwater with sediment is difficult to model and thus was not included but bulking can increase the depth of flows.

Were individual properties visited in preparation of the Recommended Mitigation Exhibits?

Unfortunately, the size of the burn scar, coupled with the hundreds of downstream properties in the flood area and an early start of the monsoon season made it impossible to visit each property. The Exhibits are based upon the flood depth and velocity modeling as well as topographic and aerial photography.

How is “High Risk” defined?

“High Risk” properties (homes) are those that are the higher risk for post-wildfire flooding due to the higher velocity and higher depth (6 inches or greater) of floodwater experienced up to and including a 2-inch, 45-minute storm event. This is the predicate storm event upon all flood risk is being assessed. A home that is not designated as being at high risk could still experience flows of up to six inches in depth at lower velocities. Individual homeowners should review the maps and evaluate their properties in relation to flood risk. Homes built near or at grade are especially susceptible to flooding from shallow sheet flows.

What is a 2-inch, 45-minute storm event?

As the name implies, this is a monsoon storm event that would drop 2 inches of rain on the burn scar during a 45-minute period. It also is known as a “25-Year” event; however, this does not mean that such a storm only occurs every 25 years. Instead, a 25-Year event is one that statistically has a 4% chance of occurring at any given time. Note that multiple 25-Year events could occur during monsoon season or even on successive days.

What did the Flood Control District choose this storm event?

As with the previous Schultz modeling and more recent Museum burn scar modeling, the 25-year event is the largest rain event that the District can feasibly mitigate against with the emergency measures at hand. Mitigation is not feasible with heavier rain events such as a 50- or 100-Year storm event. Furthermore, this rainfall event was selected based on the history of rainfall events impacting the Schultz Fire burn scar.
There is no Recommended Flood Mitigation Exhibit for my property. Does that mean I am not a risk for flooding?

If your home/property is not shown with proposed mitigation on an exhibit, then it has not been determined as being at higher risk for post-wildfire flooding. Our initial mitigation efforts are for higher risk properties. This does not mean that there is no flood risk to a such a property. Based on the current modeling, the property is not at higher risk for flooding based on the aforementioned criteria. Again, larger rainfall events can occur and have greater impacts than shown on the Flood Modeling Map.

Should I still sandbag my property?

The District is initially prioritizing higher risk properties. However, property owners should make their own decision about sandbagging. Please keep in mind, however, that these are very limited number of sandbags that must serve many high-risk properties over an enormous area. Further, sandbag mitigation that is improperly installed can cause adverse impacts on adjacent or neighboring properties. If you choose to sandbag, then please remember: Sandbags are intended solely for mitigating flood risk to residences, and should not be used for outbuildings, corrals, etc. This is especially important as sandbags are in very high demand and the supply needs to serve as many people as possible.

How can I get concrete barriers?

The Recommended Flood Mitigation Exhibits identify the initial, feasible mitigation for higher-risk properties. Concrete barriers are recommended only for those properties at the higher risk based largely on high velocity flows; sandbag structures are recommended for other higher risk properties. Unfortunately, concrete barriers are in very short supply and must be queued for distribution to those with the greatest risk for high velocity and deep flows.

Will installation of the Recommended Flood Mitigation Exhibits protect my home against flooding?

The Recommended Flood Mitigation Exhibits represent the most feasible emergency measures available to help mitigate – not eliminate – post-wildfire flooding for homes at higher risk. It is extremely important to understand that no feasible mitigation can handle every flood event, and these exhibits are designed to only help mitigate the more regular, smaller type storm events, not large storm events.

Meeting Information

Where can I find information from Schultz/Pipeline Flood Area Meetings?

All meeting materials, along with links to the YouTube recordings of meetings can be found here.
Map Information

Where can I find the U.S. Forest Service’s Burned Area Emergency Response (BAER) Map for the Pipeline Fire?

The map can be found [here](https://example.com) or on the main Schultz/Pipeline Flood Area webpage.

Where can I find the Post-Fire Flood Risk Assessment Map?

The map can be found [here](https://example.com) or on the main Schultz/Pipeline Flood Area webpage.

Post-Wildfire Flooding

Is the Schultz/Pipeline Flood Area at risk for post-wildfire?

Yes. The District’s staff and hydrological consultants, along with a U.S. Forest Service Burn Area Response (BAER) team, continue analyzing the potential flood impacts in the Pipeline Fire and Tunnel Fire burn scars, which covered the east flank of the Peaks. Results are nearing finalization and indicate a significant increase in flood risk as compared to pre-Pipeline Fire conditions. Although the assumptions relative to burn severity were pretty accurate, the modeling will be updated for the Burned Area Response Team’s Burn Severity Map and those flood depth maps will be posted on the District’s website.

What causes post-wildfire flooding?

Wildfires can dramatically change landscape and soil conditions, which can lead to increased risk of flooding. Most of the trees and vegetation within the Pipeline Fire burn scars are now gone, so there is no organic material to provide absorption of rainwater. In addition, high intensity wildfires can leave soil “hydrophobic.” This means that, like a piece of glass, the soil is now unable to absorb water and will rapidly send rainwater downstream.

What factors contribute to post-wildfire flooding danger?

The biggest threat after a wildfire, both in terms of life/safety and property, comes from post-wildfire flooding. The factors that contribute to post-wildfire flooding danger include the following:

- **Flow Size**: The size of floodwater flows can be five to 10 times greater in a post-wildfire rain event. This was the case with flooding following the 2010 Schultz Fire where over 23 major flood events impacted the Timberline/Fernwood/Wupatki Trails area.

- **Flow Consistency**: Post-wildfire flows are much more than just water—they carry sediment and burn debris that can clog and overflow drainages in a very short period. The specific gravity of
these flows is often dense enough to carry boulders and large trees downstream into neighborhoods, which further increases the danger.

- **Monsoon Season**: Post-wildfire flooding typically occurs during monsoon season, which runs from early July through late fall. Our annual monsoon season can produce intense, localized storms that appear with little or no warning and can range dramatically in size. In a fire-affected area, even a small monsoon storm can cause dangerous flood conditions. Remember: Just six inches of floodwater can knock down an adult and 18 inches can carry away a vehicle.

### Flood Emergency

**What should I do in a flood emergency?**

The risk of flooding from the Tunnel could exist for years to come. As such, it is imperative to stay aware and prepared for flood emergencies. Some critical points for your safety include the following:

- **Shelter in Place!**
- Do not enter drainages at any time, even if they're dry
- Don’t let your children play in drainages at any time, even if they’re dry
- If a flood emergency occurs, shelter in place
- If outdoors, get to high ground or go into your home
- Know where your children and pets are all times
- Keep the area around your property clear of debris of items that could be washed away in a flood event.

**Do I need sandbags or barriers for my home?**

The District is evaluating homes throughout the flood area to see where emergency flood mitigation measures, including sandbags and concrete jersey barriers may need to be installed. Please check the Recommended Flood Mitigation Exhibits at [https://www.coconino.az.gov/2929/Recommended-Flood-Mitigation-Exhibits](https://www.coconino.az.gov/2929/Recommended-Flood-Mitigation-Exhibits) to find the recommendations for your home.

**Was the Schultz Flood Mitigation System Damaged by the Pipeline Fire?**

Yes. The Schultz Flood Area mitigation system was impacted by the fire. The terminal trench above Wupatki Trails subdivision and the terminal trench above the top of Campbell Avenue were damaged and are currently being repaired. Also, the upper rundown structures in several watersheds were also
damaged. The Flood Control District is working with the Forest Service on making the necessary repairs.

**Sandbag & Concrete Barrier Information**

**Where can I get sandbags?**

Up-to-date maps of sandbag locations in the Schultz/Pipeline Flood Area can be found at [https://www.coconino.az.gov/2936/Sandbag-Information](https://www.coconino.az.gov/2936/Sandbag-Information). This site also has other information including a video on how to build a sandbag wall.

**What are some important sandbag guidelines?**

- Given limited resources, property owners are asked to utilize the self-fill sand stations. A map of those stations can be accessed here. The District is transporting bags to a small set of homes occupied by the elderly and disabled that are at high risk when resources are available. Deliveries of pre-filled sandbags to the Copeland Detention will resume when sandbag production and transport resources allow.

- Sandbags are intended solely for mitigating flood risk to primary residences and those identified at risk for flooding are prioritized

- District does not have the resources to deliver or place sandbags…**property owners must secure & place their own sandbags from the stations**

- The District is unable to load sandbags into private vehicles with forklifts, etc. for liability and insurance reasons

- Residents whose homes are identified for flood mitigation and who are elderly or disabled and cannot secure assistance through family or friends should contact the Call Center at 928-679-8525 and request assistance

- Neighbors should help neighbors wherever possible

**How can I get concrete barriers installed on my property?**

Installation of concrete barriers is not based on the requests of property owners or arbitrary criteria.

Barrier installation is based on assessments by the District’s engineering team, which are used to identify those properties that are at the highest risk for high velocity floodwater. Risk is determined by evaluating the speed of the water (velocity) and depth. If a property is identified as needing barrier, then you will be contacted. However, please email the District immediately with your contact information at pipelinefirefloodarea@coconino.az.gov.
Should I install berms, ditches, or other measures on my property to divert floodwaters?

Efforts by property owners or tenants to keep water off their property could have consequences for their neighbors and result in liability for the person diverting the water. The law in Arizona regarding water diversion is based primarily on court decisions rather than statute. Different rules apply depending on whether the water that is diverted is surface water, flood water or water that has been previously captured in a stream or water course.

It is important to be careful that your mitigation efforts do not increase the flood hazard to your neighbors both upstream and downstream. You may be legally liable for damage. The County cannot consult as to the legality or illegality of water diversion on private property.

The Arizona Attorney Magazine published an article by attorney David L. Abney that has a good summary of water diversion law in Arizona. This article is available in the County's Law Library and can be found here.

Flood Insurance

Should I buy flood insurance?

The Flood Control District strongly encourages all property owners to purchase and maintain flood insurance and take other suitable precautions to protect their properties and themselves from injury due to flooding.

Please also note that the only way to protect your investment either as a tenant or property owners is to purchase a separate flood insurance policy. If you are renting a home, then consider purchasing renter’s insurance to insure your belongings. For information about the National Flood Insurance Program (NFIP), please call 1-877-427-4661 or visit www.floodsmart.gov.

Is there a waiting period for flood insurance to become effective?

Normally, there is a 30-day waiting period for flood insurance to become effective. However, the post-wildfire waiting period exception for flood insurance was passed into law due to the efforts of the late Sen. John McCain. According the NFIP “policy terms” page available at (FloodSmart | Flood Insurance Coverage, Deductibles Explained), please note the following:

Exceptions to the 30-day waiting period

No waiting period:

- If you purchase flood insurance while making, increasing, extending, or renewing your mortgage loan.
If you change your flood insurance coverage on your insurance policy renewal bill.

In the event of flooding after a wildfire, if a property is impacted by flooding on burned federal land and the policy is purchased within 60 days of the wildfire-containment date. Waiving of the waiting period is determined at the time of claim.

1-day waiting period:

If a home or business is newly designated to be in the high-risk flood area and you purchase flood insurance within the 13-month period following a map update.

The most important component of this is that, although the exemption is law, waiving of the waiting period remains FEMA’s decision, which is determined at the time of the claim.

If you have additional questions, then please visit https://www.floodsmart.gov/policy-terms, call 1-800-427-4661 or discuss this with their insurance provider.

Weather Information

Where can I get up-to-date monsoon season weather information?

There are several robust online tools from the National Weather Service (NWS) and JE Fuller to help keep you informed about Schultz/Pipeline Flood Area weather. Because monsoon season thunderstorms can occur with little or no notice, it is highly recommended to use these tools on a daily basis:

- NWS Daily Burn Scar Flood Risk
- Flood Area Rain Gauge & Radar Data
- NWS Monsoon Forecast

Where can I find rainfall threshold/alert notification information for the Schultz/Pipeline Flood Area?

Rainfall/threshold information for the Schultz/Pipeline Flood Area is available here.

How can I get flood warnings and information?

A: There are several great resources to help keep you aware and informed during monsoon season:

1. **County Emergency Notifications**: Coconino County has a free Emergency Notification service that alerts residents and businesses about tie-sensitive general and emergency
situations – including wildfires, thunderstorms, tornadoes, and flash flooding – that can impact our region throughout the year and especially during monsoon season. Users can receive the latest updates on home and cell phones or via text and e-mail messages. Sign up at www.coconino.az.gov/ready.

2. **Social Media:** For those with smart phones and PC’s, social media is a great way to keep apprised of flood-related information and associated County response activities. We encourage everyone who uses social media to “Like” Coconino County on Facebook and to “Follow” us on Twitter: [https://www.facebook.com/CoconinoCounty](https://www.facebook.com/CoconinoCounty)

3. **Weather Apps:** There are many weather apps available for your smart phone to provide storm, radar, and current condition information. Google “weather alert app” for more information.

4. Please visit [www.coconino.az.gov/TunnelFireRecovery](http://www.coconino.az.gov/TunnelFireRecovery) for more resources.

What is the Flood Control District’s role and responsibility on private roads and driveways during a flood event?

The Flood Control District does not have legal authority to maintain private roads and driveways. However, after an emergency flood event, the Flood Control District will make private roads open and passable.

Q: Where Can I Get More Information?

A: For more information, please visit [www.coconino.az.gov/PipelineFireFloodArea](http://www.coconino.az.gov/PipelineFireFloodArea).

**Communications**

What’s the best way to get regular updates about the Schultz/Pipeline Flood Area?

The County has created an email address pipelinefirefloodarea@coconino.az.gov - to help keep residents aware and informed. To sign up, please email pipelinefirefloodarea@coconino.az.gov “Add me to the Schultz/Pipeline Flood Area Email List” in the subject line.

Also, please visit [https://www.coconino.az.gov/2926/SchultzPipeline-Flood-Area](https://www.coconino.az.gov/2926/SchultzPipeline-Flood-Area) for more information about flood insurance, sandbags, signing up for Emergency Alerts, etc.
Emergency Notification System

How do I sign up for the Emergency Notification System?

Visit www.coconino.az.gov/ready and follow the prompts to the Smart911 page.

I signed up for notifications, but I did not receive alerts from the Tunnel Fire. What should I do?

Step 1: Visit www.coconino.az.gov/ready and follow the prompts to the Smart911 page. After you log in, verify that your address, phone numbers, and other information is current.

Step 2: If you do not have an account with Smart911, register using the link above.

My information is correct, but I did not receive an alert. Why?

The County utilizes two systems to send out alerts:

- The first system is tied to registered accounts in the system. When the Coconino County Sheriff’s Office orders an evacuation order, a box is “drawn” over the affected area. This is called “geofencing.”
  - Under this method, messages are tied to ADDRESSES. If an address is inside the impacted area, then all phone numbers and emails for that account will be sent a message, even if that device is not currently inside the zone.
  - For example, if your home is in a fire evacuation zone, but you are at work in downtown Flagstaff, then your phone will receive the notice.

- The second method is called IPAWS and is similar to Amber Alerts.
  - It does NOT require registration in the system.
  - It targets cell phones, TV, and radio.
  - Using the same geofence, messaging is sent to all devices within that area – based on call towers in the area. This is slightly less precise as it relies on cell towers and providers.

I live outside of the Schultz/Pipeline Flood Area, but still wanted to get that information. Why weren’t those alerts to me?

- Coconino County works diligently to distribute information to the public through a variety of means (social media, press releases, email, etc.). The Emergency Notification System is one communication vehicle.
- Emergency Notifications are reserved for areas requiring immediate, emergency notices. Sending these alerts to areas not immediately impacted often results in increased panic and confusion. (Ex. Receiving an evacuation order when you live outside of the evacuation area).
For more information about the Emergency Notification System, please visit www.coconino.az.gov/ready

Volunteer Information

How can I volunteer?

Volunteers are needed right now to make & place sandbags in the Schultz/Pipeline Flood Area. Sign up at the United Way of Northern Arizona (UWNA) Volunteer hub: https://uwna.volunteerhub.com

How can I donate financially to assist those impacted?

Visit the main UWNA page at https://nazunitedway.org/. or call United Way at 928-773-9813.

West Side/Schultz Creek Flood Risk

Where can I get information on the flood risk for the West Flagstaff/Schultz Creek area?

The County Flood Control District’s hydrology engineer is supporting the City of Flagstaff with modeling the flood risk for this area (modeling is currently very preliminary). The County will be managing the flood risk on westside unincorporated areas. Those residents have been contacted where mitigation is being recommended. A map of westside City sandbag stations is available here.

For more information, please visit the City’s webpage at www.flagstaff.az.gov/PipelineWest.

The presentation from the City’s Pipeline fire West Flood Update, along with maps and sandbag information, is available at https://www.coconino.az.gov/2944/Schultz-Creek-Flood-Area.

For questions related to FEMA floodplains, please call the City of Flagstaff Stormwater Section at 928-213-2472 or email Chase.McLeod@flagstaffaz.gov.

To sign up to receive future updates on the impacts of the Pipeline Fire on flood risk, please email Sarah.Langley@flagstaffaz.gov.

City Sandbag Sites

Where can I find sandbags on the west side of town?

The City of Flagstaff has established two self-filling sandbag stations for those impacted by the Pipeline Fire who live on the west side of Flagstaff.

A map of the sandbag sites is available here & the City’s press release is available here.
Post-Flood Cleanup Information

Where can I find post-flood cleanup information?

Post-flood cleanup information & tips are available here.

Mold Information

Is contaminated soil a concern following a fire and subsequent flooding?

Arizona Department of Environmental Quality sites specific items that could cause dust or soil to be hazardous. A chemical facility or any type of structure that contain chemicals that burned during a fire could create volatile organic compounds or acidic gas in the burn scar. No chemical storage was identified as compromised in the Museum Fire burn area.

Is soil testing needed following a fire and subsequent flood?

Soil testing is not usually needed following a fire and flood. Volatile organic compounds or acidic gas in a burn scar could result if a chemical facility or any type of structure that contain chemicals burned during a fire. No chemical storage was identified in the Museum Fire burn area.

What dust mitigation measures are recommended when cleaning streets of soil and debris following flood?

Arizona Department of Environmental Quality (ADEQ) suggests dust mitigation measures be put into place. Soil sampling is not usually recommended.

1. Strategic Clean-up timeframes (early morning, later in the evening) to reduce exposure.
2. Community outreach to replace home air filters regularly.
3. Dust suppression (water trucks) while removing sediment.

Should I test my home for mold?

The Arizona Department of Health Services does not recommend testing as the first step to determine if there is a mold problem in a home. Reliable sampling for mold can be expensive and requires equipment not available to the general public. In addition, there are few available standards for judging what is an acceptable quantity of mold. Mold cleanup is usually considered the responsibility of private citizens; however, the United Way of Northern Arizona and the Arizona
Community Foundation of Flagstaff (ACF) have set aside funding to assist with home repairs. All property owners/residents who reported interior flooding that was confirmed by a city inspection should have received a letter and application from Housing Solutions. If you have additional questions regarding financial assistance through this program, please contact Housing Solutions of Northern Arizona at (928) 214-7456 or via email at devonnam@housingnaz.org.

What are the general cleanup procedures for mold?

Identify and correct the moisture source; Clean, disinfect, and dry the moldy area; Bag and dispose any material that has moldy residues, such as rags, paper, leaves, or debris.

ADEQ recommends the follow cleanup procedures:

**Soap Cleanup**

- Before disinfecting contaminated areas, clean the areas to remove as much of the mold (and food it is growing on) as possible.
- Wear gloves when doing this cleanup.
- Use a non-ammonia soap or detergent, or a commercial cleaner, in hot water, and scrub the entire area affected by the mold.
- Use a stiff brush or cleaning pad on block walls or uneven surfaces.
- Rinse clean with water. A wet/dry vacuum is handy for this.

**Disinfecting Surfaces**

- Wear gloves when using disinfectants.
- After thorough cleaning and rinsing, disinfect the area with a solution of household bleach and water.
- The CDC recommends using no more than 1 cup of bleach per gallon of water. Using bleach straight from the bottle will not be more effective.
- **Never mix bleach with Ammonia or other cleaners - the fumes are toxic.**
- For spraying exterior large areas, a garden hose and nozzle can be used.
- If the area to be cleaned is more than 10 square feet, consult the U.S. Environmental Protection Agency (EPA) guide titled Mold Remediation in Schools and Commercial Buildings. Although focused on schools and commercial buildings, this document also applies to other building types.
Additional information is available on the US Environmental Protection Agency website at http://www.epa.gov/mold/mold_remediation.html.

**How can I test for mold?**

Mold test kits are available at home improvement stores like the Home Depot for approximately $10.00.

**What if I need more information after reviewing the website and this FAQ?**

Please email pipelinefirefloodarea@coconino.az.gov.