



Restore. Revive. Renew.  
Through Partnership

SCHULTZ COMMUNITY RECOVERY

## North Schultz Area Flood Events Frequently Asked Questions

### **Q: I have never seen this much flooding in my area. What caused this flooding?**

**A:** The flooding in the North Schultz area on Wednesday, July 18, 2018 was directly attributable to unprecedented rainfall in your area. During this storm, strong thunderstorms pounded the San Francisco Peaks and surrounding area between 11:20-2:30 pm. The heaviest rain fell from 12:00-1:15 pm on (and downstream of) the Schultz Fire scar. This was an extreme storm event with total rainfall of up to 5.91 measured by the Peaceful rain gauge. Although the Thames/Brandis rain gauge was not operating at the time, the National Weather Service (NWS) radar indicated even heavier rainfall in that watershed, which flows into the Brandis Way area. Two-hour rainfall amounts of 4.5 inches or greater were measured at three other gauges. The Wupatki Trails/Lenox gauge registered very significant rain events on July 14, 16 and the 18<sup>th</sup>. The torrential rainfall over this period far exceeded that which is normally associated with monsoon events.

### **Q: Just how big was this storm?**

**A:** According to the National Weather Service (NWS), the July 18 storm was by far the greatest recorded storm to ever hit the 2010 Schultz Fire scar. The NWS estimates that this was a 1,000-year storm event. Statistically, this means that there is a 0.1 percent chance of such a storm occurring in a specific location during a given year. This extremely rare rain event produced total rainfall of up to 5.9 inches measured by area rain gauges. Two-hour rainfall amounts of 4.5 inches or greater were measured at three of these gauges.

The NWS reported that this was over double the intensity of rainfall and the level of rainfall that occurred on July 20, 2010. Given that one inch of rain equals about one foot of snow, this is roughly the equivalent of a six-foot snowstorm at the hardest hit location. The torrential rain from this storm, coupled with saturated conditions, created significant flooding conditions both on the forest and through area neighborhoods.

### **Q: What factors contributed to flooding in my area?**

**A:** A critical component of understanding the flood events that occurred in the North Schultz area is that two to four inches of rain fell in this area just two days before the July 18 flooding event, and that some of this area also experienced heavy rainfall on July 14. This heavy rainfall served to saturate the ground and drainages. The combination of heavy rains, super-saturated ground and no drying-out period created optimal conditions for flooding on July 18. A NWS presentation regarding these recent storm events is available at [www.coconino.az.gov/SchultzFloodInformation](http://www.coconino.az.gov/SchultzFloodInformation).

### **Q: What areas were affected by flooding?**

**A:** The area from Copeland Lane north and west of Highway 89 was most affected by the flooding on July 18. The southern portion of the Schultz burn area was also impacted by this storm. Fortunately, flood mitigation measures prevented Highway 89 from overtopping and flooding in the Fernwood area

to the east of the highway, which would have definitely occurred without the various mitigation measures.

**Q: Why didn't the Schultz Flood mitigation infrastructure on Brandis Way manage this rain event?**

**A:** To appreciate the performance of the Schultz Flood Mitigation measures during this event, it is critical to first recognize that no feasible flood mitigation system will manage rainfall from a 1,000-year storm. The Schultz Flood mitigation measures like the Brandis Way Emergency Watershed Protection (EWP) Project and Copeland Detention Basin performed exceptionally well during the torrential rains of July 18. Designed to accommodate only a 5-year storm event, The Brandis EWP Project's integrated system of on-forest sediment reduction measures and off-forest floodwater conveyance channels greatly exceeded its design specifications and prevented more extensive flooding in the neighborhood during a rain event. In addition, the Brandis Way measures, the enlarged channel along Hwy. 89, and the Copeland Detention Basin prevented Highway 89 from being overtopped with water and flooding Fernwood. Furthermore, the mitigation measures in Wupatki Trails and in the forest above the development performed very well with virtually no flooding impacts. The water from this area was then successfully diverted to Cinder Lake by the Girls Ranch Road berm.

**Q: Where can I get sandbags?**

**A:** The County has established a self-serve sandbag station located at the old Tumbleweed Store just north of the Summit Fire Station on Highway 89. Properly filling and constructing a sand bag wall is important. For more information on sandbag walls and other flood preparation resources, please visit the Schultz Flood web page at [www.coconino.az.gov/SchultzFloodInformation](http://www.coconino.az.gov/SchultzFloodInformation). The County, working with United Way of Northern Arizona, will coordinate providing sand bags to residents that are disabled and/or elderly by calling 928-679-8390 or emailing [SchultzFloodRecovery@coconino.az.gov](mailto:SchultzFloodRecovery@coconino.az.gov).

**Q: Do I need jersey barriers around my primary residence?**

**A:** The County may provide jersey barriers to protect your home if staff finds the home is threatened by high velocity and deep-water flows. Outbuildings cannot be protected by jersey barriers. Sand bags can be used for protecting outbuildings. You can call 928-679-8393 or email [SchultzFloodRecovery@coconino.az.gov](mailto:SchultzFloodRecovery@coconino.az.gov) to schedule an engineering assessment as to whether you qualify for jersey barriers.

**Q: Is the County providing debris haul-off services?**

**A:** Yes. Please see the "2018 Schultz Flood Recovery Resources" flier at the end of this FAQ.

**Q: Should I install berms, ditches or other measures on my property to divert floodwaters?**

**A:** 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 on the Schultz Flood web page at [www.coconino.az.gov/SchultzFloodInformation](http://www.coconino.az.gov/SchultzFloodInformation).

**Q: Should I buy flood insurance?**

**A:** The County **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. Flood insurance should be maintained even in those corridors where flood mitigation has been constructed. Each spring, the County sends a Flood Advisory to all Schultz Flood area property owners, which includes information about flood insurance and the flood mitigation projects that have been constructed in the Schultz Flood area.

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, please call 1-800-720-1093 or visit [www.floodsmart.gov](http://www.floodsmart.gov).

**Q: 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](http://www.coconino.az.gov/ready).
- 2. National Weather Service & Rain Gauge Data:** The National Weather Service (NWS) also has a web page at [www.weather.gov/fgz/](http://www.weather.gov/fgz/) that has current storm and flash flood warning information. For radar and rain gauge information in the nearby Schultz Flood area, please visit [www.coconino.az.gov/RainGaugeData](http://www.coconino.az.gov/RainGaugeData). You can also get NWS weather information on Facebook at <https://www.facebook.com/US.NationalWeatherService.Flagstaff.gov> and Twitter at <https://twitter.com/nwsflagstaff>.
- 3. 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://twitter.com/#!/coconinocounty>

Sign-up for Facebook & Twitter also is available on all County web pages including the Schultz Flood web page at <http://www.coconino.az.gov/SchultzFloodInformation>.

- 4. 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.

**Q: What is the County's role and responsibility on private roads and driveways during a flood event?**

**A:** The County does not have legal authority to maintain private roads and driveways. However, after an emergency flood event, the County will make private roads open and passable. The County will not provide materials, do construction work or ditch maintenance on private roads or driveways. For County maintained roadways (not private), motor graders will be utilized to remove debris based on priority, need and available resources. The County will make an effort to clean drainage easements dedicated to the County; however, is unable to commit resources to easements dedicated to the "public" or to Homeowner's Associations. The County does not maintain driveway culverts adjacent to County roads and is not responsible for maintaining driveway access to your home.

**Q: Will the County Assessor re-value properties impacted by recent flooding?**

**A:** The County Assessor is currently evaluating the ability to re-value properties that have sustained flooding impacts.

**Q: Where Can I Get More Information?**

**A:** For more information please visit [www.coconino.az.gov/SchultzFloodInformation](http://www.coconino.az.gov/SchultzFloodInformation), call 928-679-8393 or email [SchultzFloodRecovery@coconino.az.gov](mailto:SchultzFloodRecovery@coconino.az.gov).