



City of Flagstaff Museum Flood Q&A

Contents

City Services - Public Works	1
Traffic/Parking	1
Sediment/ Mold	2
Damage Assessments	2
Call Center	3
Long-term Mitigation	3
Short-term Response	6
American Rescue Plan Act Funding	7
Emergency Alerts	7
Home Repair Program	7

City Services - Public Works

Is there a charge for replacement garbage cans when they're lost in flooding?

No. If garbage cans are lost due to flooding, residents can request a new garbage can free of charge.

What solution has the city come up with regarding trash removal? There needs to be communication regarding these services and a plan, such as one central dumpster during monsoons.

The City would be willing and able to locate a dumpster near or in impacted neighborhoods. However, residents would then need to be aware that that dumpster will likely attract illegal dumping (mattresses/ furniture/ etc.).

Traffic/Parking

Would it be possible to paint "Slow Down" on barriers for all the extra drivers who detoured onto neighborhood streets during flood events and speed, kick up dust, etc.? Do we have some other solutions?

The concrete jersey barriers should not be painted as they come from many different agencies and are on loan until we no longer need them.

What is the snow removal/parking plan for residents who cannot access their driveways due to sandbags during the winter months? What agreement has been reached with the owners of Safeway building complex regarding residents parking there?

Residents will not be towed or receive citations/ tickets for parking on the street during the winter. In recent years, residents have also been very proactive in moving their vehicles when necessary to allow for



CITY OF FLAGSTAFF

plowing. City staff are confident that Street's crews and residents can work together this winter to provide as thorough plowing services as possible given the need for street parking. The City does not have agreements with any private property to provide parking.

Where should residents park in anticipation for flooding events?

The City encourages parking on neighboring residential streets during flooding storm events.

Sediment/ Mold

Does the city or county have plans to test the sediment and analyze for harmful health effects?

The city does not regulate air quality – that is within the jurisdiction of the Arizona Department of Environmental Quality (ADEQ). The city asked ADEQ about these concerns and ADEQ indicated that it does not appear that the dust particulate or the composition of the dust is of concern or harmful to humans. ADEQ outlined some specific items that could cause the dust to be hazardous, in particular if there was chemical storage or metals in the burn area that were compromised. As far as we know this is not the case. As a recommendation, ADEQ suggests dust mitigation strategies over soil sampling.

This may include strategic clean-up timeframes (early morning, later in the evening) to reduce exposure, community outreach to replace home air filters regularly and dust suppression (water trucks) while removing sediment.

Why are there still substantial amounts of sediment on sidewalks and public property in the Sunnyside neighborhood?

The City operates street sweeping machines at a high frequency after flooding events to remove sediment as quickly as possible. A significant number of passes is sometimes required by the street sweeper to remove very fine sediment. Sidewalks are the responsibility of the adjacent property owner(s).

Damage Assessments

Where can residents view public infrastructure replacement costs, including a breakdown of specific costs?

The City of Flagstaff has sustained over \$845,000 in damage to its public infrastructure (drainage system, stormwater system and roads) within the Museum Flood Area.

How are public infrastructure costs are calculated?

The estimated repair costs are calculated by registered professional engineers and other trained staff.

How was the damage for the Flagstaff Unified School District accounted for in the damage assessments?

Flagstaff Unified School District applied separately to the Arizona Department of Emergency and Military Affairs. Their damage is not included in the City's public infrastructure or private damage reporting.

The city's damage assessments only look at damage that can be seen and not damage (mold) inside the walls. This is an assertion from residents. They have continuously expressed concern about mold.

The damage costs include an estimated cost of the repair or replacement. Inspectors are including this in an estimated cost. Please note however that this is just an estimate.



CITY OF FLAGSTAFF

Damage assessments take place sometimes a week after the damage and after residents have cleaned up much of the mess. Can the assessors accept photos taken immediately after the damage?

Yes, the damage assessment inspector will accept photos of the damage. Inspectors have done this in several instances.

Can aggregated private assessed damage be made public? Also, can individuals get access to their individual damage reports?

Individuals may contact Amy Palmer at apalmer@flagstaffaz.gov to request a copy of the flood assessment for their personal residence. If individuals have requested a flood assessment and it has not been scheduled, please phone the Call Center at 928-679-8525.

How is the cost established for a home's damage assessment?

Costs are determined by estimated replacement or repairs based on current material and labor costs.

Could the City overlay the addresses where assessments have been completed over the entire flood area?

Volunteers could approach the houses that are in the area and that haven't had assessments completed.

Inspectors did walk the streets after the first flood event, but there has not been a repeat effort following the August 17th event. There was an outreach effort in the Sunnyside area where informational packets were hand-delivered to each property including how to ask for an assessment. If individuals would like to report private property damage as a result of flooding, please call the Call Center at 928-679-8525.

Call Center

Residents expressed a desire to be able to have their complaints and concerns logged and numbered when they call the Museum Fire flooding hotline. They want to be able to track the progress of a solution online.

City Leadership is reviewing options related to logging and tracking concerns and will provide updates as available.

Long-term Mitigation

Is the city currently, or planning to divert water down Monte Vista? If so, will the channel be covered?

Neither the City nor the County "divert" water to any street or neighborhood. Flood mitigation measures are installed in a way that does not adversely impact other residents. There is no plan to divert water down Monte Vista. Long-term mitigation measures are still being analyzed by a large group of engineers and hydrologists. No design has been created for a comprehensive mitigation through Sunnyside, though there is the intent to provide comprehensive mitigation in the near future.

Is the city considering diverting flood water west in Sunnyside and then down West St?

Neither the City nor the County "divert" water to any street or neighborhood. Flood mitigation measures are installed in a way that does not adversely impact other residents. There is no plan to divert water down West St. Long-term mitigation measures are still being analyzed by a large group of engineers and hydrologists. No design has been created for a comprehensive mitigation through Sunnyside, though there is the intent to provide comprehensive mitigation in the near future.



CITY OF FLAGSTAFF

Will the channel in Sunnyside be lined with concrete?

No long-term mitigation designs have been completed. There is a design for a concrete channel between Cedar Ave. and Dortha Ave., this is intended to move the maximum amount of water in a very tight space. The channel pre-flood was non-native upland grasses and a large quantity of trash. The concrete channel will not replace any sensitive or rare species and is required for the larger long-term mitigation.

Could properties be used to implement permanent solutions and be part of the overall mitigation structure?

Private property acquisition is being assessed but is currently only a viable mitigation in rare cases, there is no expectation of large-scale private property acquisition.

What “conceptual ideas” are the city and county moving forward with after the engineering summit? What are the short, mid and long-term mitigation plans the city has?

Short term mitigation will continue to be sandbag and barrier placement to reduce public safety risk and property damage. Long term mitigation may consist of improving the existing stormwater infrastructure as well as upstream sediment and flood detention and retention above Linda Vista Drive. More details will be forthcoming after feasibility and concept studies are completed by both the City and the County.

Who decides what streets become the main floodways and how is this decision reached? Where is the city at with the “concept” to put in diversion channels and retention or attenuation ponds?

All potential mitigation options are being evaluated for technical, financial, cultural and environmental feasibility. No streets are intentionally “picked” to be floodways, the 2019 hydrologic model indicates which streets are most likely to see floodwaters based on topography.

Could the City provide residents with guidance regarding design, permitting, sustainability, and possibly funding for masonry walls or flood gates to replace sandbags and barriers?

This is in progress. Engineering is working on standard details for flood gates and guidance on permitting of flood walls. Updates will be given as available.

Would the proposed detention basins at Killip or other areas be underground or above ground? If they are not underground, how could children and pets be protected from an open body of floodwater?

The Killip basins are proposed to be aboveground and will be fenced for public safety during flood events (similar to other detention and retention basins). They are designed to drain in 36 hours after a storm event.

Has there been a formal adverse impact analysis done for any of the sandbagging or concrete barrier placement done over the last two years? If so, who completed the analysis, when was it completed and how to we obtain a copy of this?

Such an analysis has not been conducted to date but will likely be part of the feasibility analysis that is being conducted as part of determining the feasibility of various long-term mitigation strategies.



CITY OF FLAGSTAFF

What will the city be doing to secure funding for these plans?

The City is evaluating all available funding options from local, state and federal sources, as well as using existing budget capacity within the Stormwater section. The City's Grants and Contracts Team has been busy working to get reimbursed through various agencies for expenditures and applying for new grant opportunities to get projects done, including:

- Working with the Federal Emergency Management Agency (FEMA) and the Arizona Department of Emergency and Military Affairs (DEMA) to submit projects (a 60-day report for each event) and then get reimbursed.
- Working with the Federal Highway Administration (FHWA) and the Arizona Department of Transportation (ADOT) Emergency Relief Program to submit eligible road work projects for funding.
- Working to submit eligible response projects, match, new equipment, etc. to the Arizona Department of Forestry and Fire Management (DFFM) (House Bill 2001) through Coconino County.
- Applied for and received a Pre-Disaster Mitigation grant for the Flagstaff Urban Trail System (FUTS) Low Water Crossing Flooding Repair at Route 66 behind Blimpies in the amount of \$19,671.
- Submitted two Notice of Intents for the Building Resilient Infrastructure and Communities (BRIC) Hazard Mitigation Grant and have been approved to submit an application for a) Linda Vista Culver Upsizing, b) South Mt. Elden Flood Mitigation Project.
- Submitting yet-to-be-determined flooding projects for the 4524 Hazard Mitigation Grant and the fiscal year 2021 Post Fire Hazard Mitigation Grant programs.

Has the city been working with any outside engineering firms to get a new set of eyes and fresh ideas on mitigation plans?

The City has been working with several local and statewide engineering and hydrologic firms on different solutions throughout the Museum Fire Flood area.

Could the National Civilian Community Corps (AmeriCorps) be utilized for future flood response & recovery work?

Two Americorps groups (American Conservation Experience and Arizona Conservation Corps) have been working with the City and County from the time of the fire to the present.

Is the owner of the gas line behind the homes on Appalachian participating in flood mitigation efforts?

The corporation that owns the gas line has been included in conversations on flood mitigation effects with the City and the Coconino County Flood Control District (FCD).

How are engineering plans responding to the changes in topography of the Spruce Ave Wash after the August 17th storm and will the models be updated? Can the updated models then be shared with the public?

The City and the FCD are working to update the existing model as part of the feasibility analysis of the various long-term mitigation strategies.



CITY OF FLAGSTAFF

One resident reported that in 1999/2000 a curb & gutter project was started in Sunnyside (and apparently up the hill as well) but that the city didn't finish Linda Vista, Paradise, and Main St. The feeling is that curbs and gutters are vital to safely moving water through. Is this correct?

At no time did the limits of improvements within the Sunnyside Neighborhood extend up either Linda Vista or Paradise. The City has made great strides in providing curbs and gutters, sidewalks and roadway improvements including underground water, sewer and drainage upgrades over the past 20 years within the Sunnyside Neighborhood. There are some remaining improvements that need to be made in proximity to West/2nd Ave/Izabel that have been designed, and construction will occur when funding becomes available. There are also some improvements remaining in the northeast quadrant of the neighborhood on Aris, Ellen, Third St & Felice.

We are requesting the contract between FWPP and the Forest Service.

Links to the Council meeting agenda items where FWPP agreements were presented are listed below.

- 1/15/2013 - [U.S. Forest Service - Coconino National Forest for Forest Bond #405 \(Flagstaff Watershed Protection Project\)](#)
- 1/19/2016 - [Flagstaff Watershed Protection Project \(FWPP\) Phase I and Phase II, Dry Lake Hills Preparation, Participating Agreement Supplemental Project Agreement \(PA-SPA\), with US Forest Service \(Coconino National Forest\)](#)
- 2/7/2017 - [Modification One to Flagstaff Watershed Protection Project \(FWPP\): Supplemental Project Agreement \(SPA\) \(13-PA-11030420-013\) with the US Forest Service \(USFS\)](#)
- 5/1/2018 - [Flagstaff Watershed Protection Project \(FWPP\) Supplemental Project Agreement \(SPA\) 18-PA-11030408-002 with the US Forest Service, Coconino National Forestry](#)
- [Dry Lake Hills Integrated Resource Service Contract Project Map](#)

Short-term Response

Can the city place barriers and sandbags on every corner throughout the flooding area? Some residents believe that this will help move water into the street and away from their homes.

The City has hired engineers to evaluate the need for barriers and sandbags along the entire Museum Flood area. This is continually evaluated with every storm event or change in conditions.

What assistance will be provided to residents for sandbag and jersey barrier removal after monsoon season?

The City/ FCD do not recommend removing sandbag after monsoon season. Possible risk of flooding outside of monsoon season persists and likely will for several years.

Is the city going to remove them and help replace sandbags as they degrade?

The City/ FCD do not recommend removing sandbag after the monsoon season. Possible risk of flooding outside of the monsoon season persists and likely will for several years. Sandbag maintenance has been supported by Coconino County.

What is the status for how long these sandbags are intended to stay in place?

Significant forest recovery is not anticipated within the next 5-10 years. Some form of mitigation will likely need to be in place even after long-term mitigation measures are constructed. The extent of



CITY OF FLAGSTAFF

mitigation needed on individual properties is unknown at this time and is dependent upon which long-term mitigation measures are selected.

What consideration has been given to the accessibility to homes for elderly and disabled in alignment with the American Disabilities Act?

ADA compliance is important, and we continue to look at practical solutions to provide better access in the flood area. While not ideal, some of the mitigation measures are difficult to provide access to private residents and function as flood mitigation.

What information can be provided to residents regarding easements on their property and what easements have already been taken?

All easements are dedicated to the City of Flagstaff through plats or individual recorded documents. These documents are identified on the Schedule B of a title report, recorded with Coconino County and can be accessed through County records.

In regard to easements is there going to be compensation for homeowners for whom sandbags are completely blocking entrance to their homes?

It is not expected that homeowners will be compensated for future easement needs associated with long term mitigation measures.

How do we opt out of our sandbag contracts?

There are legal implications for potential adverse impacts to neighbors that individual residents will need to evaluate. You can contact the FCD at museumfloodinfo@coconino.az.gov for more information about opting out of your sandbag cooperative agreement.

American Rescue Plan Act Funding

Could ARPA funds be used to improve infrastructure related to severe weather events?

Yes, ARPA Local Fiscal Recovery Funds can be used for climate change, cybersecurity needs to protect water and sewer infrastructure, and to improve the resilience of infrastructure.

Emergency Alerts

What kind of emergency plan does the city have if this catastrophic flooding were to occur at night?

The current emergency plan is to shelter in place. This plan has been vetted by both the County and the City. In the case of night flooding, residents should stay in their homes. If there are immediate threats to life safety, call 911.

Home Repair Program

Can the City/United Way/volunteers (council) assist with reaching out to residents since the only contact about this money has been one letter that apparently hasn't been received by every resident who has interior damage?

The City is sharing the application form with interested parties and encouraging its dissemination.