

# Flood Mitigation Updates

April 26, 2022





# Agenda



- Highlights and updates
  - Financial planning and grant submissions
  - Capital mitigation projects
  - Preparation for 2022 monsoon season
  - Response Operations – Emergency Operations Center (EOC) and Incident Management Team (IMT)





# Museum Flood Financial Focus Group



- Focus on finance, planning and related processes
- Established in mid-April, meeting weekly
- Discussion of funding sources for flood preparation, short term mitigations, emergency response needs and flood mitigation capital projects.



# DFFM Funded Resources

- Approved Request
  - 1-Combo vac truck
  - 1-Mini excavator & trailer
  - 1- CAT 950GC loader w/forklift attachment
  - 2- Digital trailer mounted signboards
  - 4- Digital portable message boards
  - 2-Digital vehicle mounted signboards
  - Traffic barricades and cones





# FEMA grants update

- Two FEMA Building Resilient Infrastructure and Communities (BRIC) grant proposals were submitted over the winter.
  - Linda Vista culvert upsizing
  - South Mount Elden mitigations
- Two FEMA Hazard Mitigation Grant Program (HMGP) grant proposals are being submitted this week.
  - Cedar Ave culvert upsizing
  - Spruce Wash channel improvements between Cedar and Arroyo Seco



# Cedar to Dortha Channel and Inlet



- **Project Scope:** Channel improvements for capacity and stability, Dortha Avenue undercrossing reconstruction for increased capacity
- **Construction Estimate:** \$2,600,000
- **Schedule:** Completion of critical infrastructure prior to monsoons 2022.
- **Current activities:**
  - Construction began March 21
  - Utility relocations ongoing
  - Concrete box construction to start week of May 2
  - Property acquisition ongoing





# Killip School Regional Detention Basins



- Work is advancing nicely, good weather, clear direction and project coordination is paying off.
- Final weir design, outlets and finish grade are complete and have been delivered to FUSD and the contractor.
- Contractor is on-site working towards final grade and slope stabilization.
- Finish work scope and proportionate cost share discussions are continuing for total costs.





# Killip Inlet at Ponderosa Park



- Engineering team is working on the conveyance infrastructure needed north of the Killip Detention Basins.
- Concept design is being developed
- Next logical construction project to follow Killip Detention Basin delivery. Funding guidance and timing is still being received.







# Ponderosa Park barriers

- Stormwater working with Parks and Ponderosa Head Start on moving barriers to allow for Head Start playground re-opening and for interim inlet condition for Killip Regional Detention Basins.
- Coordination with contactors is underway to install any emergency measures using the "Killip" unused barrier.





# Upstream work



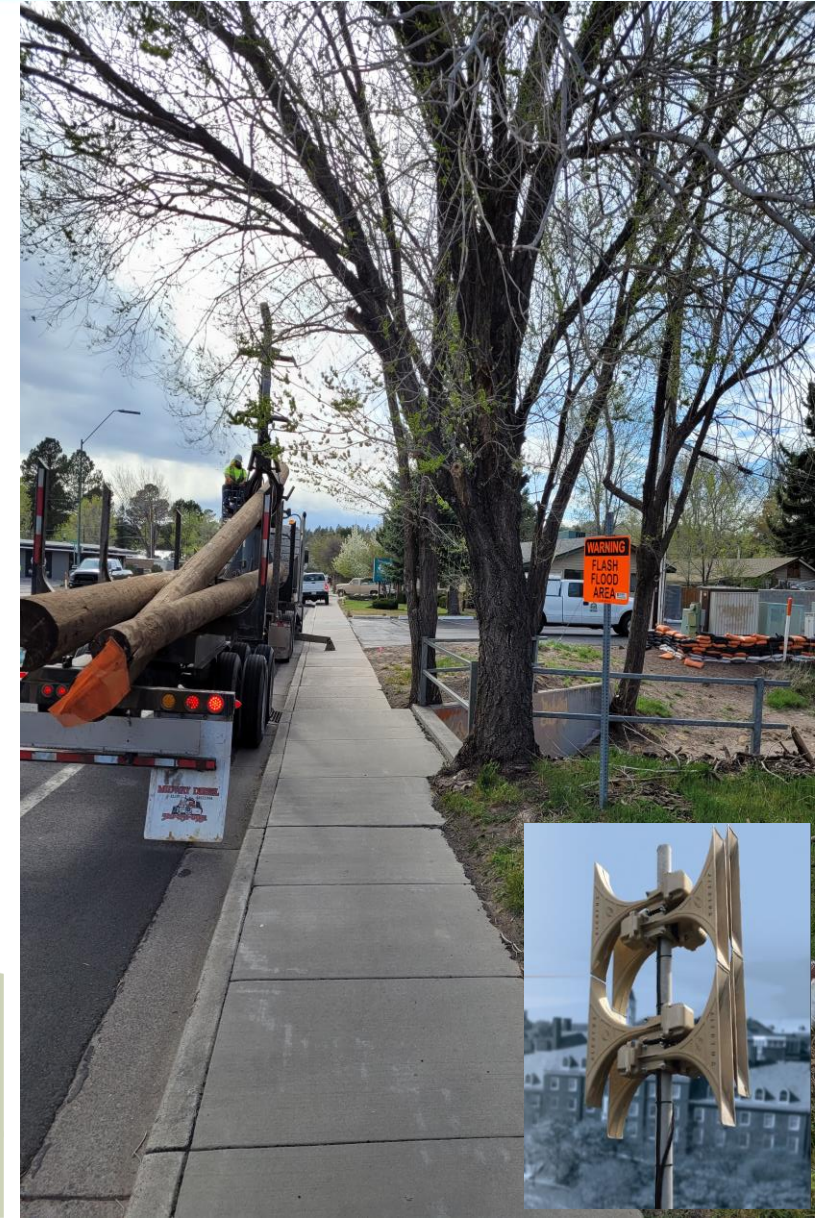
- Long-term sediment reduction and erosion control is critical in post-wildfire areas.
- Projects focus on stabilizing alluvial fans, promoting erosion control, reducing downstream sediment and improving channel capacity to convey floodwater out of neighborhoods.



# Siren system



- All siren poles delivered 4/19 to each location for staging
  - All siren infrastructure has been delivered
- County EM coordinating siren integration into County Emergency Notification System.
- Vendor is working through the permitting process with the city for install.
- City and County working on community messaging on sirens and future testing





# Spring 2022 sandbag refresh

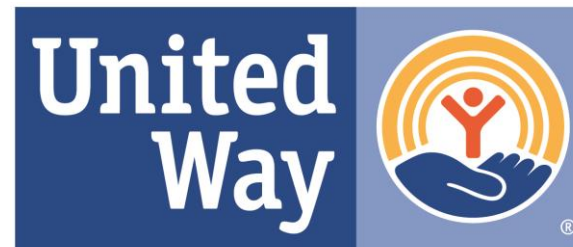
- Sandbags community deployment project kickoff in May
- City staff met for operational coordination/planning on 4/20.
- City and FCD are meeting weekly to build out the joint strategic operations plan for 2022.





# Volunteer/ Service Coordination

- United Way of Northern Arizona (UWNA)
  - Sandbag refresh volunteer days
- Continual requests for conservation teams at local and state level
- County submitted a request to the Department of Fire and Forestry Management (DFFM) for State fire crew support.



United Way  
of Northern Arizona





# Emergency Operations Response

- Staffing, coordination and training for:
  - Joint City/County Emergency Operations Center – City staffing is being identified and training is being planned. Backfill and staffing availability will be essential if an EOC is mobilized.
  - Incident Management Team - Essential group supported by the EOC. Strong in operations and is visible in the community during an event or in preparation.
  - Working on Command and General staff refresher training.



# Communications



## Outputs

- Feasibility study e-newsletter

## In production

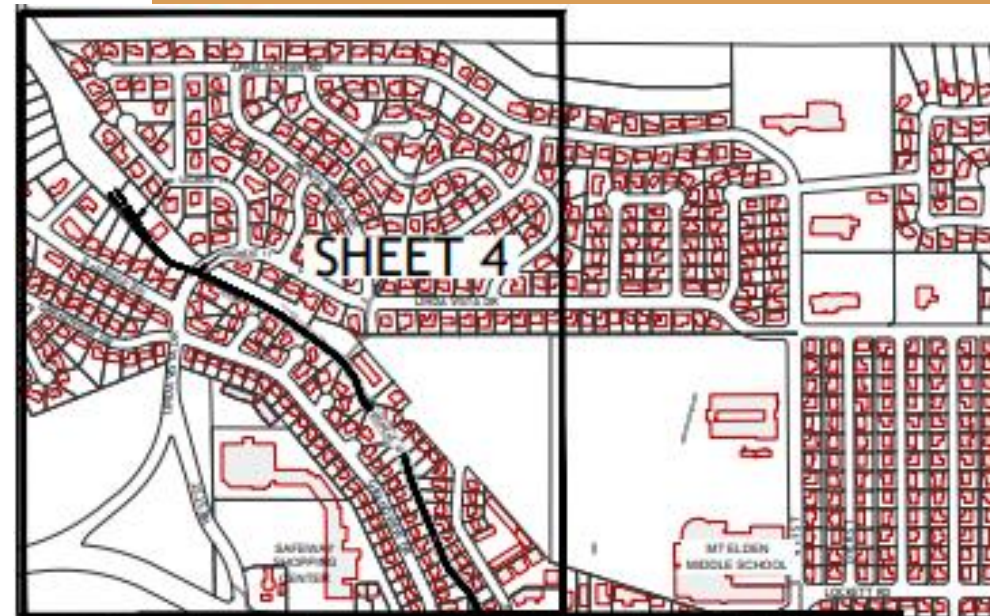
- Sandbag refresh communications
- Siren System communications

## Beta PR

- Website creation – over 1600 page visits
- Mailer sent to 954 addresses
- Three e-newsletters – each sent to 485 residents

### SPRUCE WASH TECHNICAL FEASIBILITY STUDY OVERVIEW

A technical engineering feasibility study was conducted for flood mitigation improvements needed in areas impacted by flooding from the 2019 Museum Fire burn scar. The first task of the Technical Feasibility Study was to identify the size, type and location of drainage infrastructure that could be installed to maximize the capacity of Spruce Wash from its crossing at Linda Vista to Route 66. Currently, there are sections of Spruce Wash that are open channel (in the Grandview and North Sunnyside Areas) and other sections where a single underground large diameter pipe exists (in the Arroyo Seco and South Sunnyside areas). The existing stormwater infrastructure is undersized for unprecedented post-wildfire stormwater flows, which are ten to one hundred times greater than historical conditions. It is important to note that the Technical Feasibility Study analyzed only the technical feasibility of potential infrastructure improvements. Other elements of feasibility, such as financial feasibility, have not yet been evaluated.



# Council Discussion

