Friends of Daisy Mountain Trails

August 12, 2022

Mike Fulton, Director

Agenda

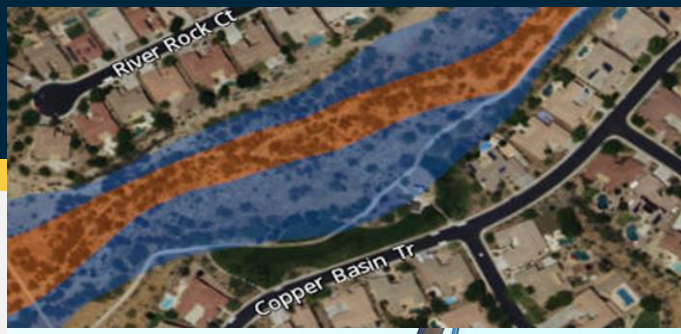
- Welcome
- Flood Control District of Maricopa County Background
- Project Partners
- Study Area Map
- Study Overview
- Project Timeline
- Next Steps
- Q & A

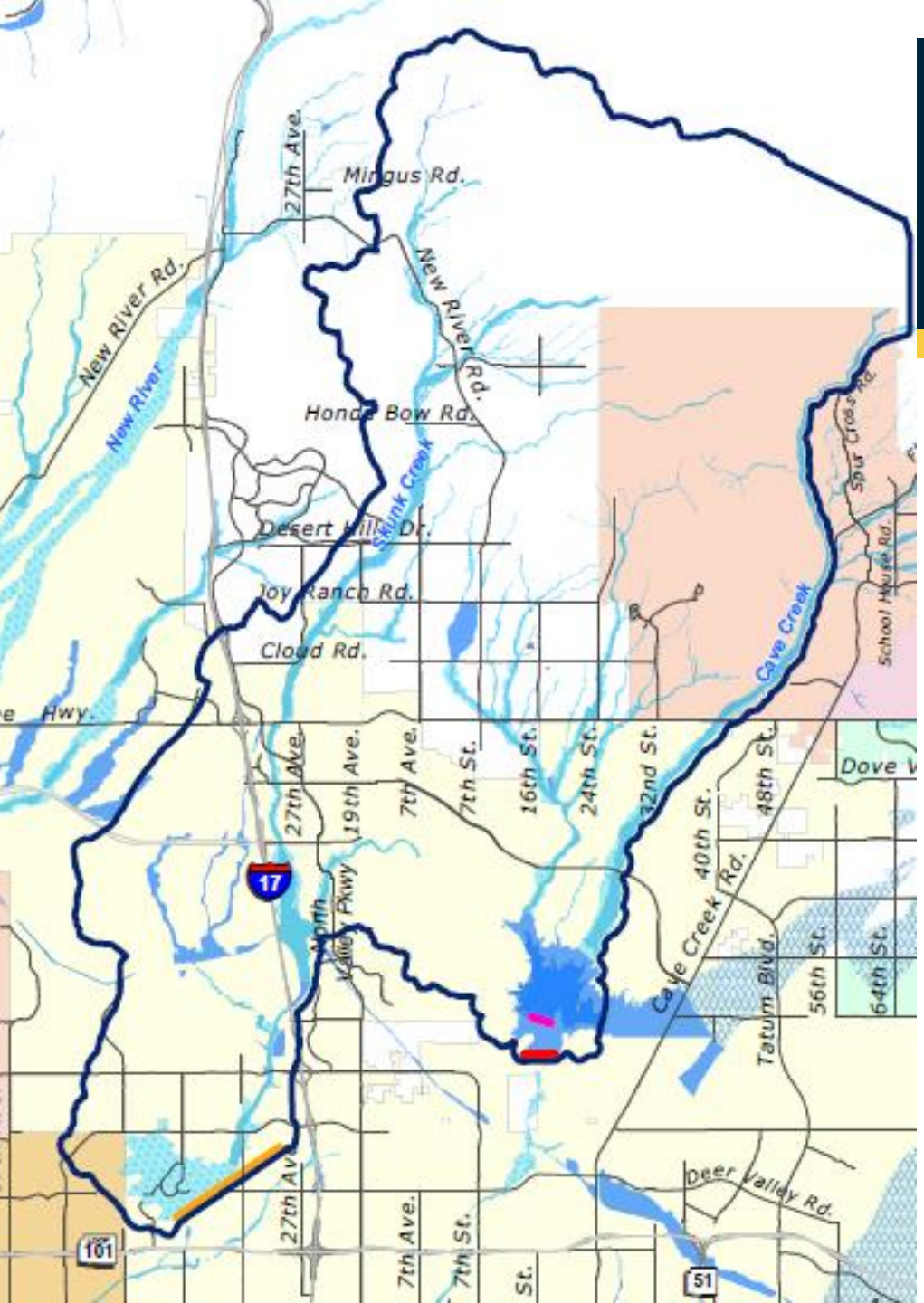
Flood Control District of Maricopa County Background

- Established 1959
- Reduce county resident's risks of injury, death, and property damage due to flooding
- 4 Programs
  - Education
  - Identification
  - Regulation
  - Mitigation

Flood Control District of Maricopa County

- Identify Flood Hazards and Risks
  - Floodplain delineation
  - Watershed/Area Drainage Master Studies
- Regulate Development
  - Safely built
  - No adverse impact
- Mitigate Flood Hazards
  - Structural is primary focus
  - Non-structural mitigation





Adobe Dam/Desert Hills/Apache Wash Study Area Map

- 145 square miles
- Jurisdictions
  - City of Phoenix
  - Unincorporated County
  - Town of Cave Creek
  - City of Glendale
- Land Ownership
  - 42% Private
  - 34% State Trust Land
  - 15% Tonto National Forest
  - 8% County Parks
- Floodplains
  - 11% within a mapped floodplain
  - Riverine
  - Ponding

Study Overview

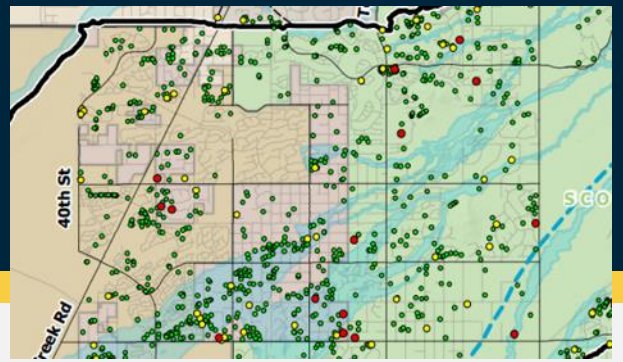
Reasons for Study:

- Significant growth & other changes to the watershed
- New flood events: 2007, 2010, 2014, & 2021
- New technology
  - LiDAR
  - 2D Modeling (FLO-2D)
  - Rainfall Data

Study Overview

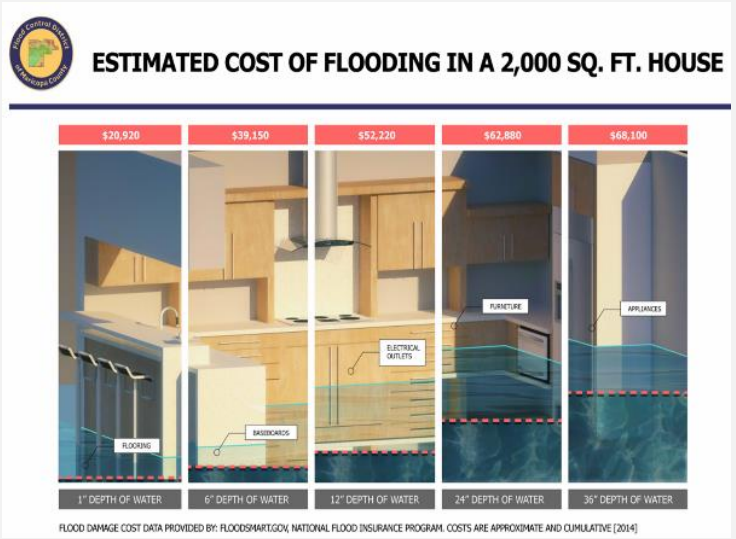
- Goal: Reduce the flood risks for residents and the community
- Identify the flooding hazards and risks
  - Data collection
  - Modeling
- Identify problem areas
  - Not all flooding creates problems

Study Overview



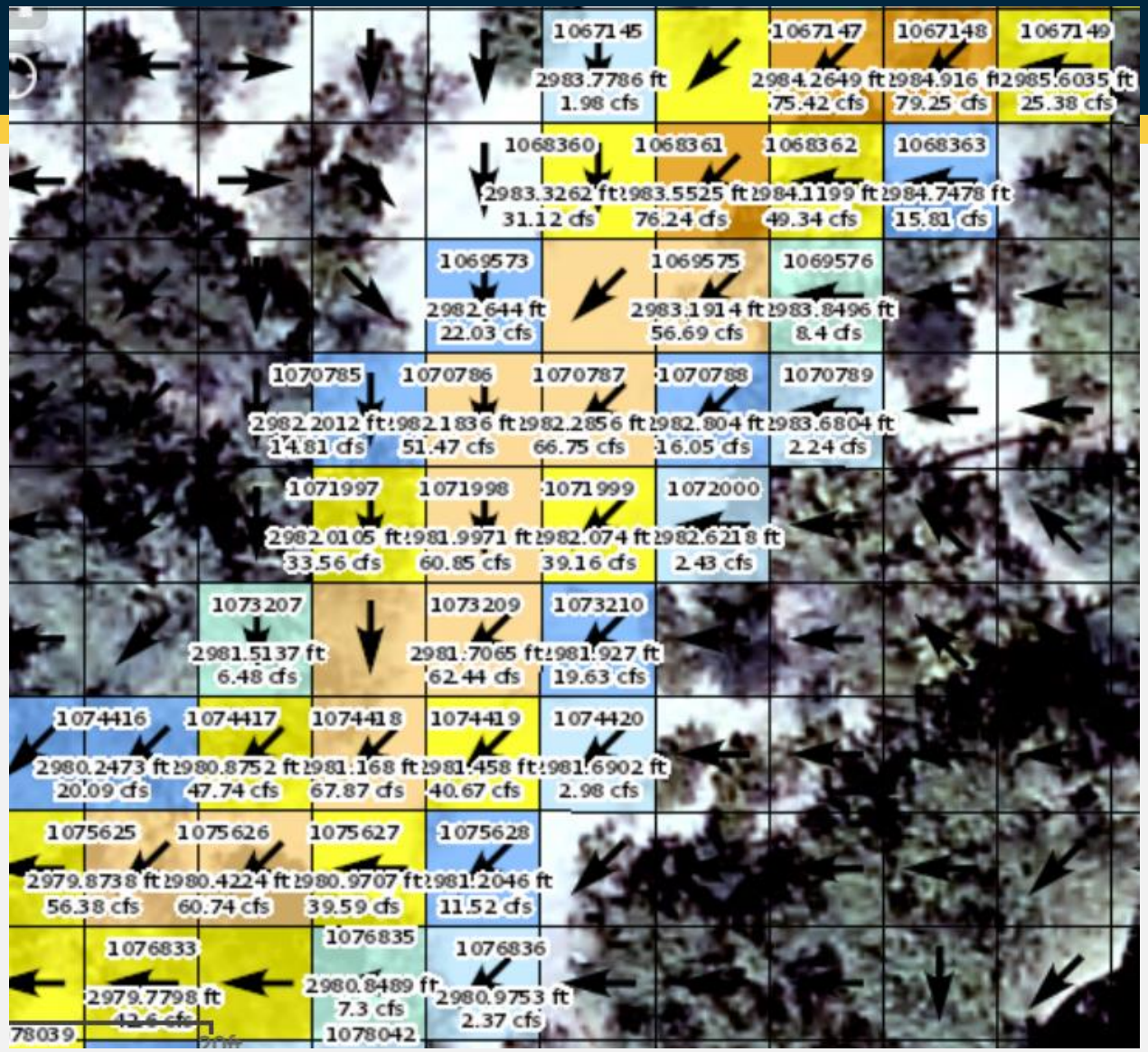
Goal: Reduce the flood risks for residents and the community

- Increase public awareness of flood risk
  - Risk awareness inherently reduces risks
  - Public outreach & meetings
  - Develop maps and other resources



Comprehensive Hydrology & Hydraulic Model

- Grids
  - Study area is divided into 15’ x 15’ grids
  - Over 16 million grids
  - Water depths
  - Velocities
  - Flows & flow direction
- Models
  - Can be revised & updated
  - Use for Design & Planning new development and infrastructure
- End Users
  - Cities
  - Engineers
  - Homeowners

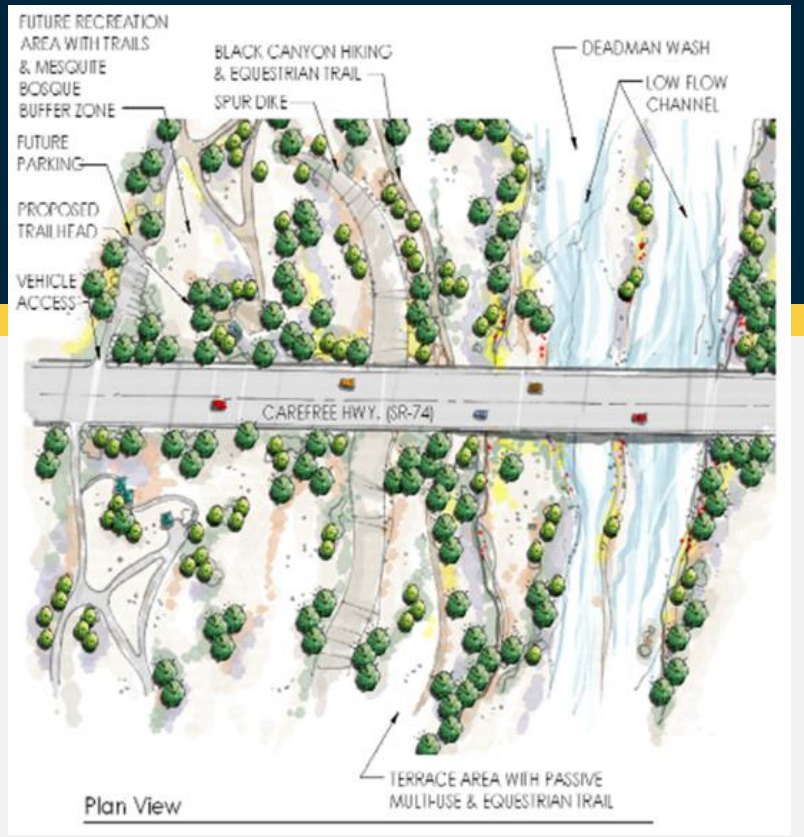


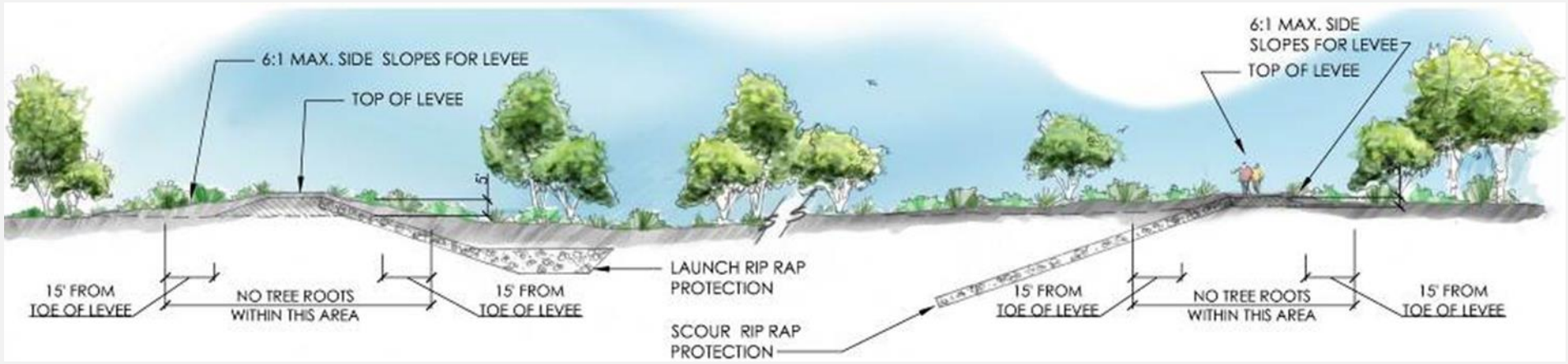
Identified Hazard & Risks

- Houses, buildings, and undeveloped areas with high flood risk
  - 30% of all flood insurance claims are outside of mapped floodplains
- Hazardous road crossings
  - Reinforces what residents likely know
  - Repetition helps risk awareness
- High erosion and sediment deposition hazards
  - Cities, utilities, and homeowners can use for planning

Solutions & Recommendations

- Regional structural solutions
  - Large areas
  - Benefits vs cost
- Local solutions
- Solutions for individual property owners





Other Potential End Products:

- Flood risk reduction tools and techniques

OL DISTRICT OF MARICOPA COUNTY & CITY OF SCOTTSDALE

Basin

Basins are depressions in the landscape that r

Uses

- Collect excess water
- Collect sediment
- Supplement irrigation
- Encourage infiltration
- Addresses erosion hazards, sediment deposition, and structure flooding

Conside

- Be
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Berm

Berms are mounds of soil that help slow and d maintenance.

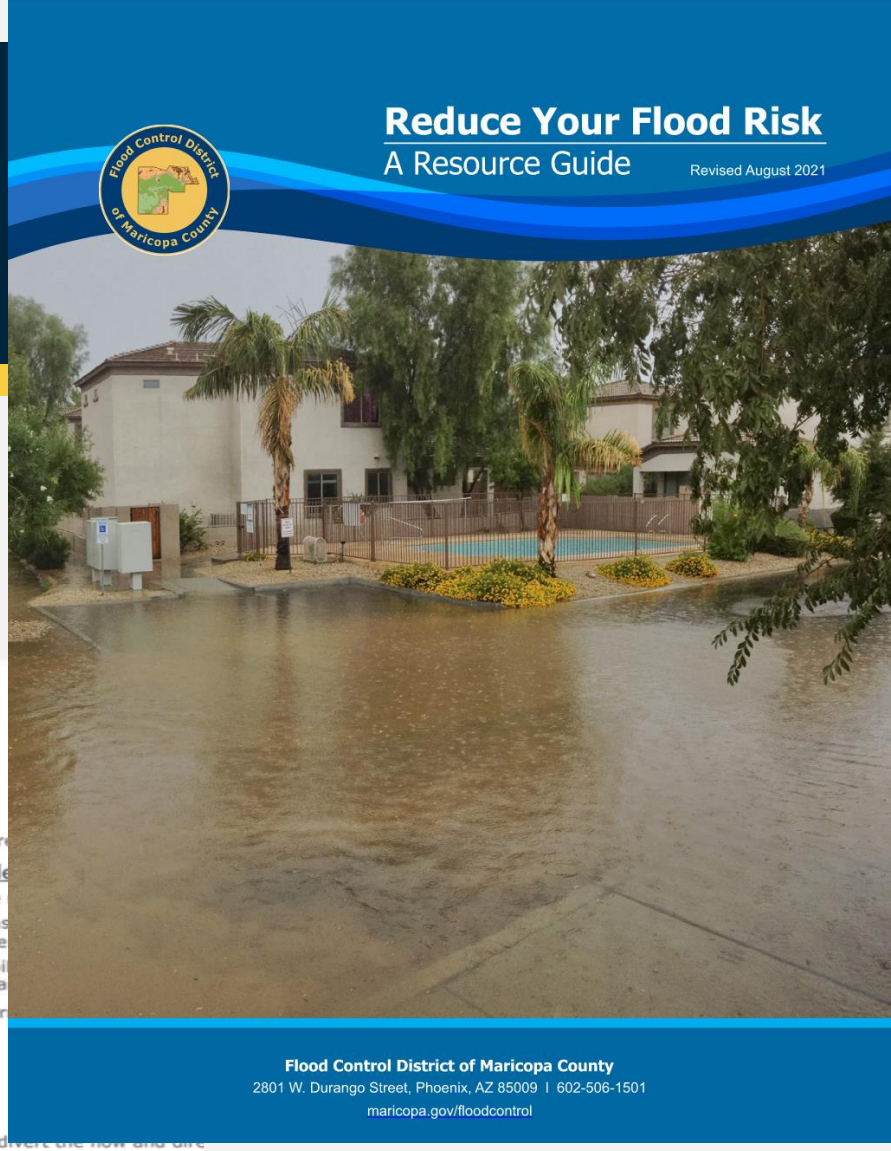
Uses

- Slow water flow
- Divert water flow
- Direct runoff
- Addresses erosion hazards and structure flooding

Considerations

- Guide runoff toward basi flow can spread and slow
- Berms can be strengthen along the banks and addi
- Costs vary, depending on
- Permit may be required

FLOOD



Project Timeline

Data Collection & Preliminary Modeling

Spring 2022

Detailed Model Results

Summer/Fall 2022

Problem Identification

Fall/Winter 2022

Solutions (Public Meeting #2)

Winter 2022/Spring 2023

We want to hear from you!

Please provide comments

Visit our website

maricopa.gov/addhaw

Complete the survey

Email or call with questions or comments

Mark Frago

Call (602) 506-0750 or

Email MarkFrago@maricopa.gov

Share your feedback!

Survey link here


Q & A


Thank You!