

Ahwatukee Foothills Area Drainage Master Study/Plan



City of Phoenix

April 2016

The Ahwatukee Foothills Area Drainage Master Study/Plan (ADMS/P) will identify known and potential flood hazards in the Ahwatukee area and develop possible solutions to reduce flood risks to the community. The study, which is a joint effort between the Flood Control District of Maricopa County (FCD) and the City of Phoenix, covers approximately 30 square miles, roughly bounded by South Mountain to the north and west, Interstate 10 to the east and Pecos Road to the south (see map on back page).

Key Study Findings

Overall, the stormwater drainage system in the Ahwatukee Foothills ADMS study area is working well. While there are a few clusters of localized flooding, no widespread flooding has occurred—or is predicted—in Ahwatukee should a significant storm occur. This information is based on storm modeling results, which simulate conditions for a 100-year flood* event, and from results of the significant storm that happened September 8, 2014. That storm generated 3-5 inches of rainfall in the study area in approximately eight hours and exceeded a 100-year flood* event.

Because the Ahwatukee Foothills area was master-planned, there are extensive stormwater drainage facilities in place, which were built as new development has occurred. The drainage systems connect neighborhoods, allowing stormwater to pass through and collect at regional retention basins, or to be carried to the south through culverts along Pecos Road east of 40th Street.

Potential Flooding to Structures Identified

The study team conducted a computerized modeling analysis which estimates the projected depth, velocity, and amount of stormwater flows in the study area during larger storm events. Based on the results, several locations with potential structural and roadway flooding hazards have been identified (see map on back page).

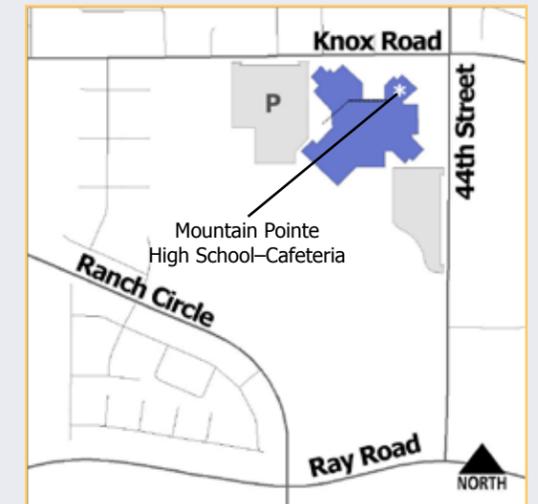
There are 21 locations identified with potential flooding to structures at depths greater than 6 inches. This could result in future property damage.

*A 100-year flood has a 1 percent chance of occurring in any given year.

WE NEED YOUR INPUT!

Join us for a public meeting to:

- Learn about potential high-risk flooding areas identified in the Ahwatukee area.
- Provide input on areas that are at risk of flooding that should be discussed as part of an Area Drainage Master Plan.
- Learn how to reduce your risk of flooding.
- View maps and computerized modeling to see if your home is at risk of flooding.



**Thursday, April 21, 2016
 5:30–7:30 PM**

OPEN HOUSE FORMAT
 Presentation at 6:00 PM
 Mountain Pointe High School–Cafeteria
 4201 E. Knox Rd., Phoenix 85044

Can't Attend the Meeting?

You can still participate.
 Public meeting materials and an online comment form will be available following the meeting at www.fcd.maricopa.gov (search Ahwatukee Foothills).

The Community Working Group Represents YOU



A Safeway parking lot floods after the September 8, 2014 storm.

The primary factors contributing to potential structural flooding in any County neighborhood often include:

- Undersized drainage channels or structures (e.g., culverts). This causes stormwater to back up and overtop the channel or roadway.
- Trapped flow from debris that has built-up in culverts or other drainage systems.
- Undersized outlets for stormwater flow on properties, which causes water to pond.
- Homes built below the grade of the roadway, which causes water to run off the street into the property.
- Erosion or accumulation of sediment that blocks flow or reduces the capacity of stormwater facilities.

Roadways at Risk of Flooding Identified

Study results found 15 roadway locations at risk of flooding that could receive greater than 1 foot of flooding in a significant storm. These depths could present risks to motorists or create access problems. While streets are designed to collect storm water into drainage systems during large storm events, major arterial roadways—such as Chandler Boulevard—are required to have at least one lane of traffic clear for emergency access during flood events. The study found that in several locations during a large storm, access will be restricted because storm water is expected to overflow the roadway.

Provide Input on Flooding

The study team needs your input about which flooding locations you believe are important to address. These areas will be prioritized for further review and consideration as part of the Ahwatukee Foothills Area Drainage Master Plan.

There are several ways to provide your input:

- Attend the public meeting on April 21 (see meeting information on page 1).
- Contact Study Project Manager Valerie Swick directly (see contact information on page 3).
- Visit www.fcd.maricopa.gov (search Ahwatukee Foothills) to complete an online comment form.

The study team has begun evaluating options to address high-risk flood areas in a few locations where property flooding has been reported. The team is meeting with Ahwatukee residents and homeowner associations to discuss the extent of the flooding, and possible solutions to minimize risk.

Developing an Area Drainage Master Plan

Strategies to address structural and roadway flooding problems will be identified in an Area Drainage Master Plan (ADMP). Strategies can include structural solutions (drainage structures), or non-structural measures (signage to warn drivers of possible flooded crossings). The plan provides a framework of how flooding problems might be addressed, and how potential funding sources for future projects could be implemented by the FCD, the City of Phoenix, or other agencies. The intent is to not burden individual property owners, but to instead make the community aware of potential flooding problems. This way, everyone can work together creating possible flood risk solutions.

Through the formation of a Community Working Group (CWG), FCD and the City involved Ahwatukee residents early in the study process. CWG members represent a broad range of community interests. Members include residents, home owner association managers, and representatives from community organizations, the Ahwatukee Chamber of Commerce, local school districts, and utility companies.

The CWG provides a forum for open communication and collaboration between FCD, the City and the Ahwatukee community. The goal of the group was to identify community storm flooding concerns, review study results and information, collaborate about flood risk solutions and actions, and to serve as a liaison between the FCD and the community. The Community Working Group shares information with Ahwatukee residents and organizations. The CWG has been a valuable resource to help gain a better understanding of the community's concerns about flooding.

Meetings with Home Owner Associations, Community Groups and Residents

Throughout the study, team members have worked with residents and stakeholders to receive input. The study team has met with several of the larger home owner associations, and with the Ahwatukee Chamber of Commerce, Ahwatukee Village Planning Committee and the Save the Lakes community organization to discuss the study. For the past year, the team has held several meetings with residents on south Mandan Street in the Ahwatukee community to discuss options to address flooding experienced by several homeowners.



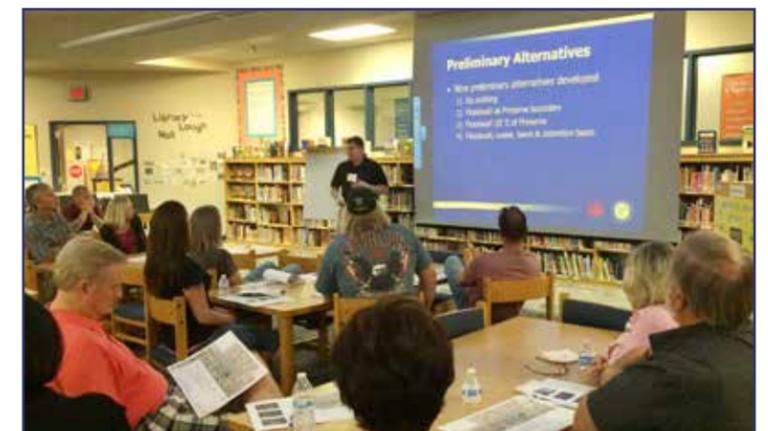
Chandler Boulevard floods at I-10 after the September 8, 2014 storm.

Get Involved

Community involvement is a vital part of the flood risk study process. If you would like to be added to the Ahwatukee community mailing list to be notified of meetings and other opportunities for input, please contact the study's Project Manager:

Contact

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(602) 506-2929



The study team meets with residents on south Mandan Street to discuss options to reduce their flood risks.