

FLOODS ^{DO} HAPPEN

Flooding is the most common and costly natural disaster in the U.S. Even with its desert climate, Maricopa County has the potential for major flooding. Floods in the County have caused damage claims totaling hundreds of millions of dollars. The Flood Control District of Maricopa County was formed to help prevent the loss of property and life from floods.



This home in Maricopa County was built in an area at high risk of flooding.

PHASE I: IDENTIFYING FLOOD HAZARDS AND RISKS IN THE STUDY AREA



Several inches of stormwater accumulates on a roadway in Maricopa County—enough to pose a potential risk to drivers.

The District is utilizing the latest in computer technology and hydrology models to predict where flood waters will flow during rain storms and how deep and fast the water will be. Hazards are being evaluated for different intensities of storms, ranging from small, frequent storms up to a larger 100-year storm. The project team is using the preliminary modeling results and information on past storm events to identify the areas with high flood hazards. Additionally, the District has been reaching out to residents to ask if they have experienced flooding to help assist in our data collection. In locations with high **flood hazards**, the number of people and properties that will be potentially impacted by the hazards will be determined through a **risk** assessment.

PHASE II: DEVELOPING OPTIONS TO ADDRESS FLOODING PROBLEMS

Areas that have high potential risks to people or properties are defined by the District as significant flooding problems. These problem areas will be evaluated to determine the most effective methods to reduce the flooding risks. The project team is collecting information about the public's tolerance to flooding problems through community outreach and an online survey. The results will be used to identify and prioritize sites that the team, public and stakeholders will focus on to reduce the flood risks and hazards. The District will seek community and stakeholder input in developing potential **solutions** to minimize these flood risks.



Though homes are built near this wash, flood waters are predicted to stay within its banks.

OPPORTUNITIES FOR INPUT

Community members will have an opportunity to review study information and provide input at public meetings in September 2014. The study team will also be meeting with homeowners associations this summer to provide an update on the study and information on preliminary flood hazards identified in their communities.

FOR MORE INFORMATION, CONTACT:

Theresa Pinto, Project Manager

tmp@mail.maricopa.gov

602-506-8127

2801 West Durango Street

Phoenix, AZ 85009



Pinnacle Peak West Area Drainage Master Study

Summer 2014

Over the past 10 years, homes and businesses in the north Scottsdale and northeast Phoenix area have been flooded due to rainstorms. Some of these properties have experienced severe or repeated flooding.

The Flood Control District of Maricopa County (District) is currently conducting a study in this area called the Pinnacle Peak West Area Drainage Master Study, or ADMS.

The study, which covers 95-square miles in northeast Maricopa County, will:

- Determine the existing flood hazards and risks.
- Use input from community members and stakeholders to help generate potential solutions to reduce flood risks to people and properties.
- Improve floodplain management and permitting processes by providing updated and easily-accessible information on the existing flood hazards.

Accomplishing these objectives will help reduce risks, damages, and costs of flooding in this area



Flooding damages a property in the Pinnacle Peak West study area in July 2008.

WHY SHOULD I CARE ABOUT THE STUDY?

- The study results will be used to develop updated floodplain maps, which could result in changes to flood insurance requirements and rates for some property owners.
- The study outcomes will help guide future development within the floodplain to reduce flood hazards and risks to the community.
- Community and stakeholder input will be used to determine the flood hazards considered most important to address, as well as in developing potential options to reduce these hazards.
- Make sure your voice is heard throughout the study process so the District understands your concerns and desires.

GET INVOLVED

We need your involvement to make this study a success. Participation is as easy as **1-2-3!**

- 1** Join in the conversation and take our online survey at **www.floodtalk.org**.
- 2** Sign up to receive project updates via email at **www.bit.ly/FCDupdates**.
- 3** Upload photos or videos you've taken of flooding at **www.reportaflood.org**



WHY ARE WE CONDUCTING A STUDY?

More than 20 years ago, the Federal Emergency Management Agency (FEMA) prepared Flood Insurance Rate Maps that identified the 100- year floodplains in the study area. The maps show that more than one-fifth of the study area and more than 9,500 properties are within the 100-year floodplain. FEMA defines a 100-year floodplain as property that has a 1-percent annual chance of being flooded. A property within a 100-year floodplain has a 26-percent chance of getting flooded during the life of a 30-year mortgage.

Since the early 1990s, many homes and commercial properties have been built in the study area. This newer development could potentially change the flow of stormwater and the location of floodplains in some areas. In addition, during the two decades since FEMA generated the current floodplain maps, computer modeling and aerial survey mapping technology have advanced. These advancements, along with recent updates to area rainfall data, greatly increase the ability to accurately identify flooding hazards and stormwater flows and provide a more accurate depiction of where flooding is likely to occur.

Revised floodplain maps will be developed and submitted to FEMA for review and approval. Interested property owners will have an opportunity to review the preliminary floodplain maps through study outreach activities. Updated maps will be included in a future revision to the Flood Insurance Rate Maps, which are used to establish risk categories and insurance rates for properties as part of the National Flood Insurance Program.



A storm rolls into the Valley. Advances in computer modeling and mapping will help the District better identify where stormwater will flow.

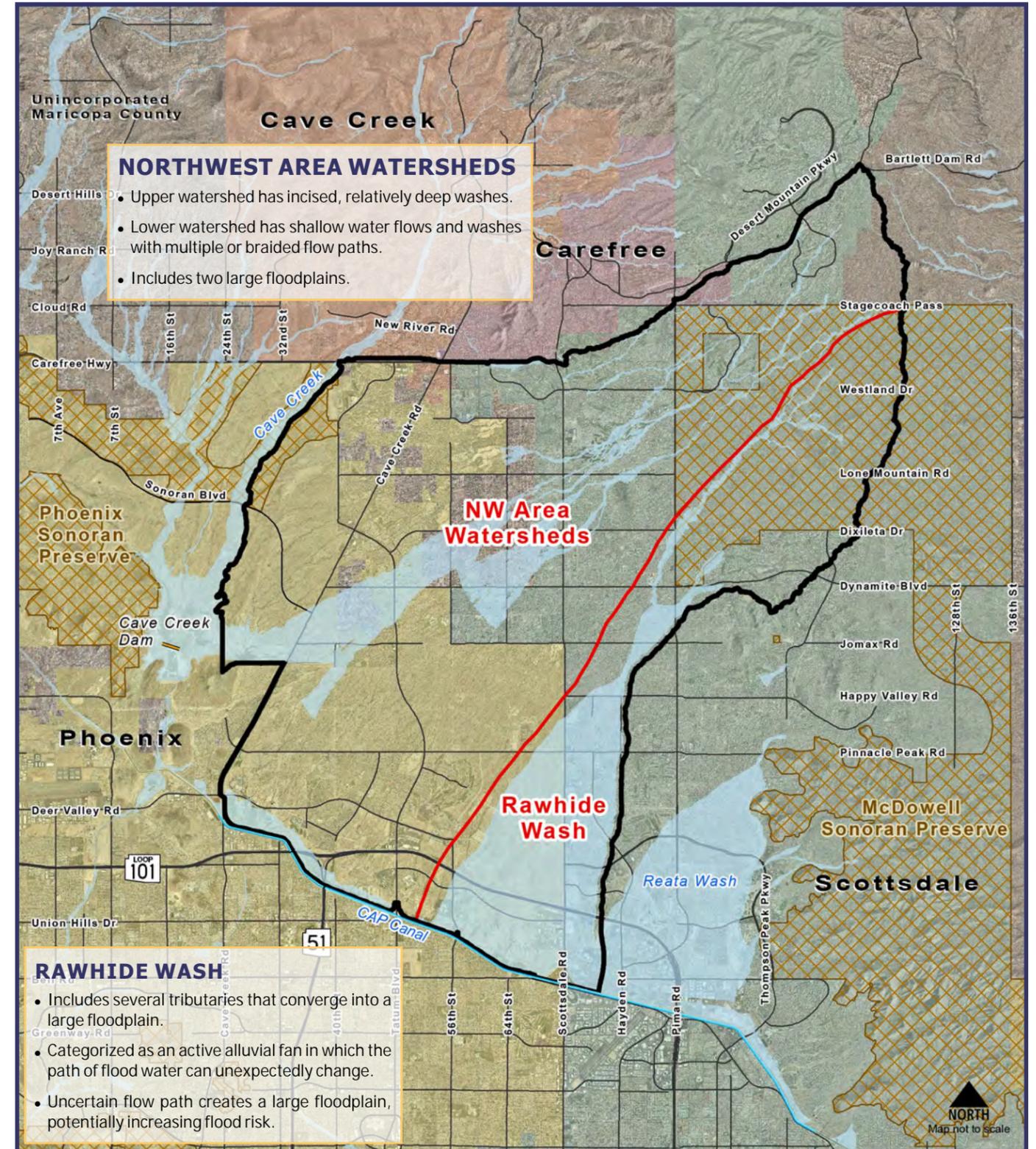
ABOUT THE STUDY AREA

The study area includes a diverse mix of commercial and residential development, with homes on large lots and numerous master-planned communities, as well as large tracts of undeveloped land. Additionally, there are several important recreational and preservation areas here, including portions of the Phoenix Sonoran Preserve, Scottsdale's McDowell Sonoran Preserve and the Reach 11 Recreation Area along the Central Arizona Project canal.

This area receives higher annual rainfall than central Phoenix, which supports greater plant and wildlife diversity, but also increases the potential for flooding. The watersheds in the study area include several large washes and numerous small washes with complex drainage patterns. The large study area has been divided into two primary focus areas based on the types of flooding hazards identified through the preliminary computer modeling results: Rawhide Wash and Northwest Watersheds (see study map).



Computer modeling is used to identify areas with high flood hazards, as illustrated here.



Date of Photography - Fall 2013

Flood Control District of Maricopa County GIS Division, 6/2/2014

-  Pinnacle Peak West ADMS Project Area - 95 Sq. Miles
-  Focus Area Boundary
-  Sonoran Preserve
-  FEMA Floodplain
-  Canal