1972 Downtown Phoenix

fcd.maricopa.gov

Activity 330-CRS

FLOOD FACTS

2019

Since 1959 the Flood Control District of Maricopa County (District) has worked to reduce the risk of flooding to people and their property. During Maricopa County's early history, floods caused millions of dollars of damage to homes, businesses, and farmland. Currently, the population growth has expanded beyond the urban core outside of the dams and other structures built to protect property from flooding. The District is still needed today to collaborate with citizens, local communities, federal and state agencies, stakeholders, and developers to ensure that people and property remain safe from flooding as Maricopa County continues to grow.

The District's responsibilities include the following:

- **Build and maintain structures**
  Dams, basins, channels, levees, and drains
- **Identify and delineate floodplains**
  Rivers and washes, ponding areas
- **Issue permits for development in floodplains**
  Average 550 floodplain use permits each year
- **Operate a flood warning system in coordination with local emergency responders**
  On demand weather, rainfall, and streamflow information
- **Conduct studies to identify flood risk and potential structural and non-structural solutions** for communities and unincorporated Maricopa County

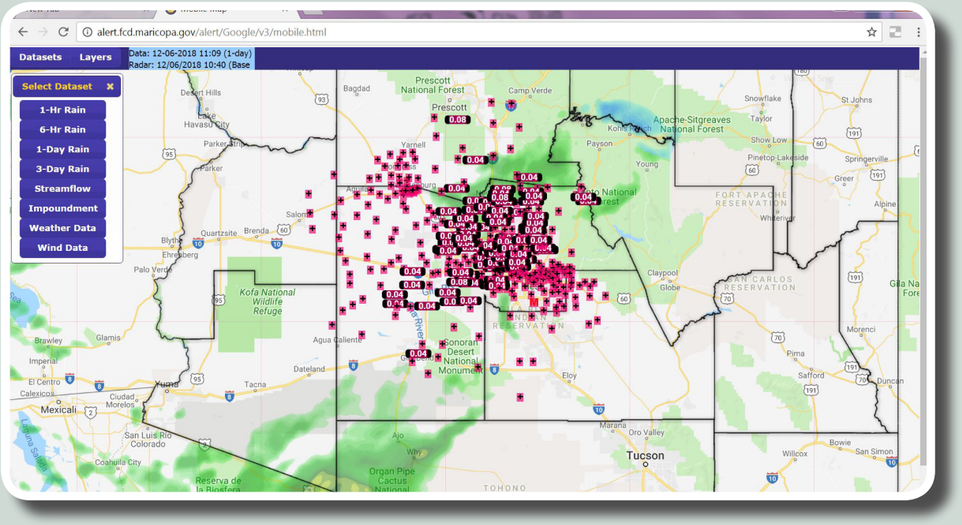
For more information visit www.maricopa.gov/3847/Flood-Control-District

INDEX

1 ..... Introduction
2, 3 ..... Flood Warning
4, 5 ..... Local Flood Hazard & Risk
6, 7..... Floodplain Regulations & Floodplain Use Permit
7 ..... Substantial Improvement/ Substantial Damage
8 ..... Where to go for Floodplain Use Permits
9 ..... Drainage Maintenance
10, 11 ..... Floodplains of Maricopa County Map
12 ..... Stormwater
13 ..... Dams & Levees
14 ..... STEM (Science, Tech, Engineering, Math)
15 ..... National Flood Insurance Program
16, 17 ..... Flood Insurance
18 ..... Flood Safety
19 ..... Natural & Beneficial Functions
20 ..... Mobile Tools

Flood Warning

The District operates a 24-hour rain, stream, and weather network which provides "real time" information on weather conditions in and around Maricopa County. The ALERT (Automated Local Evaluation in Real Time) network system sends and stores radio information used to monitor and operate our dams, basins and channels or trigger action for a Flood Response Plan or Emergency Action Plan. This data is also used to identify hazardous areas and transportation routes that may require evacuation or closure. The ALERT system covers an area of 12,044 square miles.



Flood Warning Data - Rainfall

This data is stored on the District's website and is accessible to the public via personal computer, phones, and other mobile devices. The following information and more is available at www.maricopa.gov/3833/Get-Weather-Information with links to the item information below:

- **Weather Outlook** - County weather forecast for the next three days with emphasis on heavy rainfall and runoff.
- **Rainfall Data** - The District has installed and maintains **350 precipitation gages** throughout Maricopa and surrounding counties which measure the amount and timing of rainfall in real time.
- **Water-level Data** - The District operates **213 water-level gages** on streams, channels and dams throughout the Maricopa County region, measuring water depth and transmitting that data in real time.
- **Weather Sensor Data** - **40 real-time weather stations** in the Maricopa County region measure different combinations of temperature, humidity, dew point, barometric pressure, solar radiation and wind speed/direction and transmit that information to the District every 15 or 30 minutes.
- **Find an ALERT Station** - Find an ALERT gaging station using an ArcGIS Online Map or Google Earth Station Locator Map.
- **Custom Products, Maps and Plans** - Text, graphical and map products primarily for the emergency response community.
- **Publications** - Find general resources including guidelines for developing a comprehensive flood warning program and reports and publications including Annual Hydrologic Data Reports and Storm Reports.

Flood Warning Rain Gage

FLASH FLOOD WATCH

The National Weather Service will issue a Flash Flood Watch when weather conditions suggest that flash flooding is possible within a designated area.

FLASH FLOOD WARNING

The National Weather Service will issue a Flash Flood Warning when flash flooding has been reported or is imminent.

Tune into local stations (TV or radio) or the local NOAA Weather Radio in the Phoenix area at KEC94 at 162.550 for flood watches and warnings. You may also visit the following websites:

AZ Flood Warning System
www.afws.org

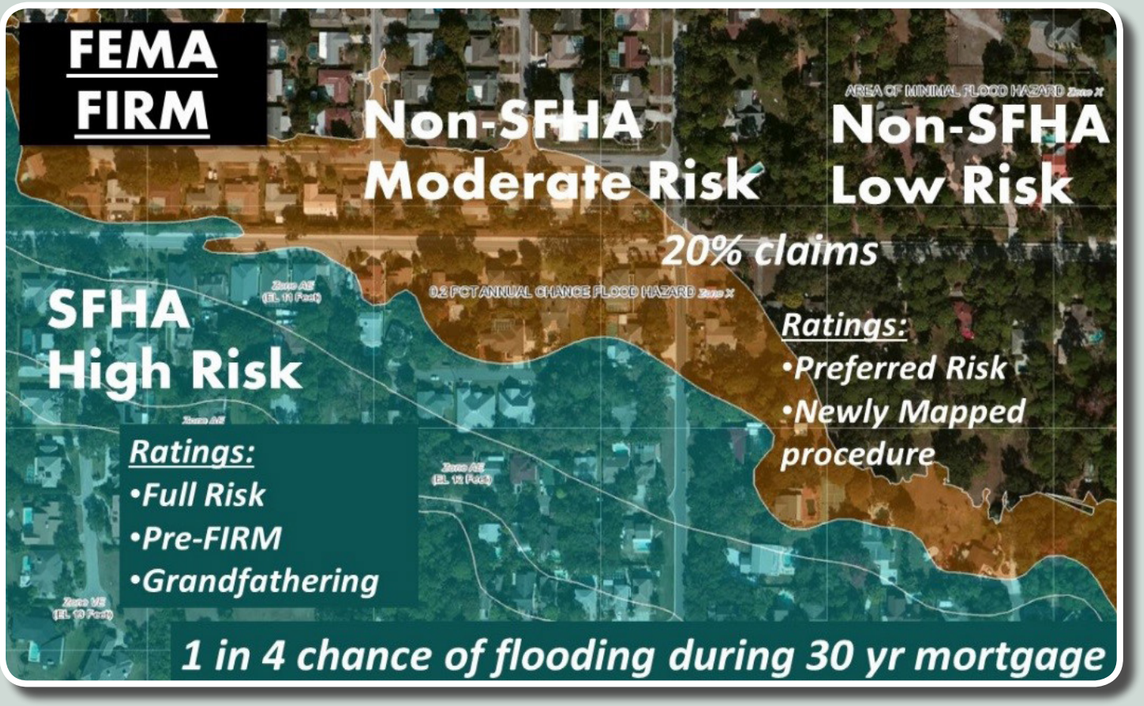
Maricopa County Emergency Management
www.maricopa.gov/999/Emergency_Management

National Weather Service
www.weather.gov

Flood Control District of Maricopa County
www.maricopa.gov/3847/Flood-Control-District

Local Flood Hazard & Risk

Through the **Federal Emergency Management Agency** (FEMA) mapping program, FEMA identifies flood hazards, assesses flood risks, and partners with states and communities to provide accurate flood hazard and risk data to guide them in mitigation actions. Flood hazard mapping is an important part of the **National Flood Insurance Program** (NFIP), as it is the basis of the NFIP regulations and flood insurance requirements. FEMA maintains and updates data through **Flood Insurance Rate Maps** (FIRMs) and risk assessments.



Special Flood Hazard Area (SFHA) - Land in a floodplain that is designated by zones. The SFHA is the area where the Floodplain Regulations are enforced and mandatory purchase of flood insurance can apply.

Flood Insurance Rate Map (FIRM) - The basis for floodplain management, flood hazard mitigation and flood insurance. It is the official map for lending institutions and federal agencies to locate properties to determine if flood insurance is required when making loans or providing grants.

Base Flood Elevation (BFE) - The BFE is the regulatory requirement for the elevation of structures. The relationship between the BFE and a structure's elevation determines the flood insurance premium.

The District's Floodplain Delineation Studies identify land subject to inundation by a flood, **referred to as floodplain**. Many of these study results are sent to FEMA to keep the FIRM and other Flood Map information current. The land in the **floodplain** is designated by zones:

High Flood Hazard Risk Zones – Labeled with letters "A" or "V" on FIRMs. At least 1 in 4 chance of flooding on property during a 30-year mortgage. Flood Insurance is federally required.

Moderate Flood Hazard Risk Zones – Labeled Zone X (as shown on the FIRM). These areas are between the limits of the base flood and the 0.2-percent-annual-chance or 500-year flood.

- Labeled Zone X are areas determined to be outside the 500-year floodplain with less than a 1-percent chance of flood in any given year.

Undetermined Flood Hazard Risk Zones – Labeled Zone D (as shown on the FIRM). These areas have no flood hazard analysis that has been conducted. There may be a possibility of flooding, but the risk has not yet been determined.

To locate your property by address, go to: https://gis.maricopa.gov/FCD/FloodplainViewer/

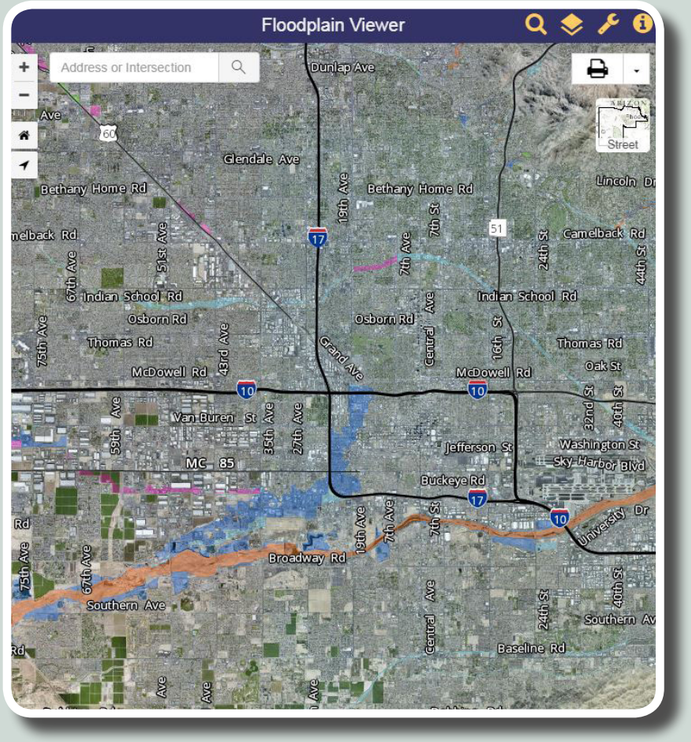
To help make informed decisions about protecting your property both financially and structurally, see the following websites:

Federal Emergency Management Agency
www.fema.gov/

FEMA FloodSmart
www.floodsmart.gov/

Flood Control District of Maricopa County
fcd.maricopa.gov

Maricopa County Planning & Development
www.maricopa.gov/797/Planning-Development



Floodplain Regulations & Floodplain Use Permit

Floodplain Regulations for Maricopa County were adopted and have been enforced since February 25, 1974. They are reviewed and updated as needed (last update January 17, 2018) and meet the requirements of the National Flood Insurance Program (NFIP). The District falls under the jurisdiction of Arizona Revised Statutes Sections 48-3601 through 48-3650 encompassing the following:

- Control the alteration of natural floodplains and watercourses
- Prevent or guide construction in the SFHA to avoid diverting floodwaters or increasing flood hazards in other areas
- Protect the natural and beneficial functions of the floodplain, and the life, health, and property of County residents

Elevated home in floodplain

For unincorporated Maricopa County, drainage and floodplains are regulated separately under two different legal authorities and two different agencies. However, all unincorporated Maricopa County applications for development start the permit process at the One Stop Shop located at the Maricopa County Planning and Development Department.

If the determination is made that a parcel is **not in a designated floodplain**, the Planning and Development Engineering Staff will complete the review process without the applicant needing a Floodplain Use Permit.

If your property is **located within a designated floodplain**, the law requires the property owner to obtain a Floodplain Use Permit for new construction, grading, installation of walls or fencing, modifications, sand and gravel or other material extractions, reconstruction, and repair or additions to existing buildings. The applicant must adhere to the Floodplain Regulations for Maricopa County.

To review the Floodplain Regulations go to www.maricopa.gov/3847/Flood-Control-District or call (602) 506-1501.

The Planning and Development Department (P&D) conducts floodplain permitting for unincorporated areas of Maricopa County on behalf of the District. Application for subdivision plats, zoning, other processes and building permits for unincorporated Maricopa County are also handled through P&D.

Substantial Improvement / Substantial Damage

FEMA has established specific damage assessment guidelines (referred to as the "50 percent rule") pertaining to structures built before December 31, 1974, or before the date a community began participating in the National Flood Insurance Program.

Substantial Damage means the cost of post damage repair of any structure that equals more than 50 percent of Pre-Damaged Market Value. The entire structure must be brought into compliance with the NFIP and local regulations, if determined to be substantially damaged, when repaired.

Substantial Improvement means the cost to rebuild and/or improve a structure in the floodplain, whether damaged or not, equals more that 50 percent of the Market Value prior to work starting.

For more information, refer to the Floodplain Regulations for Maricopa County at www.maricopa.gov/3847/Flood-Control-District

Where to go for Floodplain Use Permits

Unincorporated Maricopa County

Maricopa County Planning and Development

501 N 44th Street Suite 200
Phoenix AZ 85008
Phone: 602-506-3301
Fax: 602-506-3601
www.maricopa.gov/797/Planning-Development

General Administration Hours
Monday - Friday
8 a.m. - 5 p.m.

Elevated Mobile Home

District Dependent Cities / Towns

The District conducts floodplain management and permitting for the following incorporated cities and towns:

- Buckeye
- Carefree
- Cave Creek
- Chandler
- El Mirage
- Gila Bend
- Guadalupe
- Litchfield Park
- Mesa
- Queen Creek
- Surprise
- Tolleson
- Wickenburg
- Youngtown

Smart Vents Installation

Other

The following cities conduct their own floodplain management and floodplain permitting:

- Avondale
- Fountain Hills
- Gilbert
- Glendale
- Goodyear
- Paradise Valley
- Peoria
- Phoenix
- Scottsdale
- Tempe

Right-of-Way Permits are directly issued by the District for use of or access through, property owned or maintained by the Flood Control District of Maricopa County.

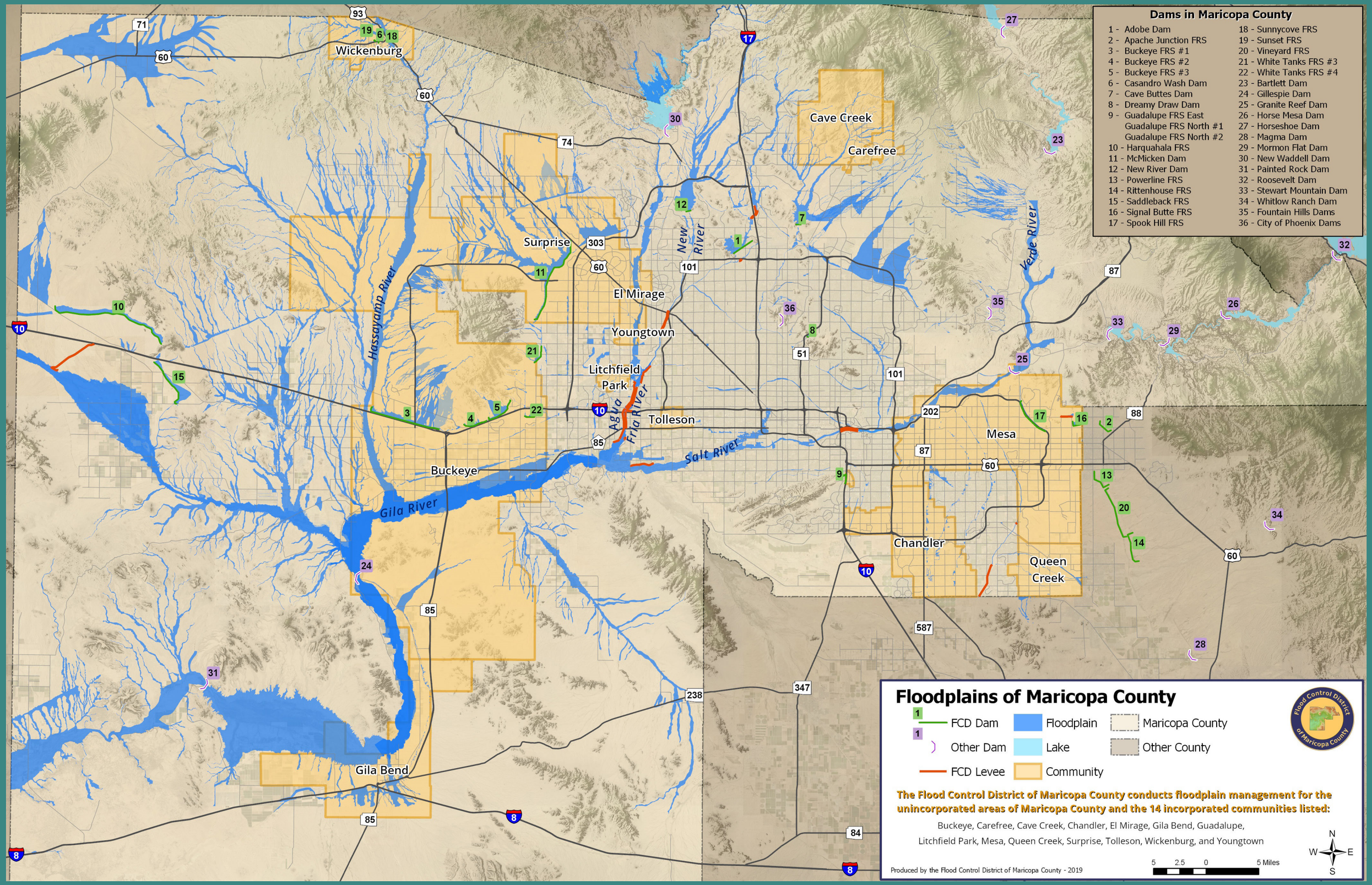
Drainage Maintenance

Drainage Administration is one of the regulatory activities that the Maricopa County Planning and Development Department (P&D) provides for the benefit of the residents of unincorporated Maricopa County. This activity ensures compliance with the Drainage Regulations for Maricopa County. The purpose of these regulations is the reduction of existing and potential flooding caused by local stormwater.

The Drainage Regulations apply to all development of land and conditions that may affect drainage systems and patterns. These regulations describe a drainage system as a system of lakes, rivers, creeks, streams, washes, arroyos, channels, closed conduits, or other topographic features on, through, or over which stormwaters flow at least periodically. This applies to any man-made change to property, including but not limited to, building, structures, mining, design, dredging, filling, grading, landscaping, paving, excavation, or drilling operations.

The District's drainage facilities (structures, ditches, and retention basins) protect properties from flooding and retain or convey stormwater throughout the watershed. If not properly maintained, they can actually effect flooding. Dumping trash and debris in ditches, gutters, storm drains, local channels, private easements, and washes is prohibited. Site visits are conducted for floodplain and drainage issues to assure these systems are maintained and functioning correctly.

For more information regarding Maricopa County Drainage Regulations, drainage, violations, sewer systems, site visits, or general inquiries about maintenance contact P&D at (602) 506-3301 or visit www.maricopa.gov/797/Planning-Development


Dams in Maricopa County
1 - Adobe Dam
2 - Apache Junction FRS
3 - Buckeye FRS #1
4 - Buckeye FRS #2
5 - Buckeye FRS #3
6 - Casandro Wash Dam
7 - Cave Buttes Dam
8 - Dreamy Draw Dam
9 - Guadalupe FRS East
Guadalupe FRS North #1
Guadalupe FRS North #2
10 - Harquahala FRS
11 - McMicken Dam
12 - New River Dam
13 - Powerline FRS
14 - Rittenhouse FRS
15 - Saddleback FRS
16 - Signal Butte FRS
17 - Spook Hill FRS
18 - Sunnycove FRS
19 - Sunset FRS
20 - Vineyard FRS
21 - White Tanks FRS #3
22 - White Tanks FRS #4
23 - Bartlett Dam
24 - Gillespie Dam
25 - Granite Reef Dam
26 - Horse Mesa Dam
27 - Horseshoe Dam
28 - Magma Dam
29 - Mormon Flat Dam
30 - New Waddell Dam
31 - Painted Rock Dam
32 - Roosevelt Dam
33 - Stewart Mountain Dam
34 - Whitlow Ranch Dam
35 - Fountain Hills Dams
36 - City of Phoenix Dams
Wickenburg
Cave Creek
Carefree
Surprise
El Mirage
Youngtown
Litchfield Park
Tolleson
Buckeye
Mesa
Chandler
Queen Creek
Gila Bend
Hassayamp River
New River
Agua Fria River
Salt River
Gila River
Verde River
Floodplains of Maricopa County
FCD Dam
Other Dam
FCD Levee
Floodplain
Lake
Community
Maricopa County
Other County
The Flood Control District of Maricopa County conducts floodplain management for the unincorporated areas of Maricopa County and the 14 incorporated communities listed:
Buckeye, Carefree, Cave Creek, Chandler, El Mirage, Gila Bend, Guadalupe,
Litchfield Park, Mesa, Queen Creek, Surprise, Tolleson, Wickenburg, and Youngtown
Produced by the Flood Control District of Maricopa County - 2019
5 2.5 0 5 Miles
N
W
E
S

Stormwater

Stormwater in Maricopa County is water that originates during rain events. Stormwater can soak into the soil (infiltrate), be held on the surface and evaporate, or run off and end up in nearby streams, rivers, or washes (surface water). Contaminated stormwater can lead to pollution, erosion, flooding, and many other environmental and health issues if not properly understood and maintained. When stormwater is absorbed into soil, it is filtered and ultimately replenishes aquifers or flows into nearby streams and rivers. Storm sewers in Maricopa County do not carry stormwater to wastewater treatment plants.

A storm drain or storm sewer is infrastructure designed to drain excess rain and surface water from impervious surfaces such as paved streets, car parks, parking lots, footpaths, sidewalks, and roofs. The stormwater, if polluted, flows into storm drains and through underground pipes directly into the nearest stream, pond, or water reservoir. The drains in your house are part of a different system, the wastewater system.

The Maricopa County Environmental Services Department works to reduce runoff and improve water quality by implementing Federal, State, and local stormwater management policy, programs, and procedures to minimize the impact of urban activities on the quality of stormwater. For more information visit: www.maricopa.gov/2392/Stormwater-Program or call Maricopa County Environmental Services at (602)506-6616.

Best Management Practices (BMPs) for stormwater start with you

- Don't dump hazardous substances such as used oil, household chemicals, yard fertilizer, or other waste onto pavement or into storm drains.
- Sweep, pick up litter, and dispose of leaves and yard waste correctly.
- Prevent excess runoff of pesticides, fertilizers, and herbicides by using them properly and efficiently.
- Participate in local garbage and debris pickup days, and recycle household hazardous waste materials to prevent storm drain contamination.
- Encourage participation in stormwater protection and public group education on stormwater quality.
- For BMPs in Maricopa County go to www.maricopa.gov/2381/Best-Management-Practices-Fact-Sheets

Dams & Levees

The District operates and maintains 22 dams and Flood Retarding Structures (FRS), as well as 24 levees in and around Maricopa County. These flood control structures are normally dry, operating only in severe flood events. Public safety is the District's number one priority. It is important to keep levees certified and accredited by FEMA to continue to receive Community Rating System (CRS) Dam and Levee Safety Activity credits. Properly operating and maintaining dams and levees will reduce flood risk to people living and working downstream of these structures.

A Dam Safety Flood Response Manual has been developed that includes detailed procedures for monitoring and taking measures to minimize any damage that may occur. For more information about dam and levee safety go to:

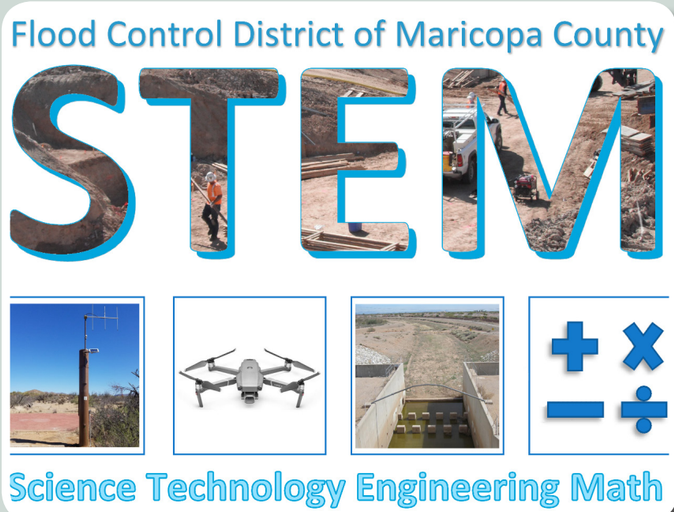
- Flood Control District of Maricopa County www.maricopa.gov/3847/Flood-Control-District
- Association of State Dam Officials (ASDO) www.livingneardams.org
- American Society of Civil Engineers (ASCE) www.asce.org
- Arizona Dept. of Water Resources (ADWR) http://new.azwater.gov

Emergency Action Plans (EAP's) are a written document that identifies incidents that can lead to potential emergency conditions at a dam or levee. They identify the areas that can be affected and specify pre-planned actions to be followed to minimize property damage, potential loss of infrastructure, water resources, and potential loss of life because of failure. They have been developed for the dams and other structures (levees) in accordance with ADWR and FEMA requirements/guidelines. Each EAP consists of the following six elements:

- Notification Flowchart
- Emergency, Detection, Evaluation, and Classification
- Responsibilities
- Preparedness
- Inundation Maps
- Supplemental Reports

Adobe Dam

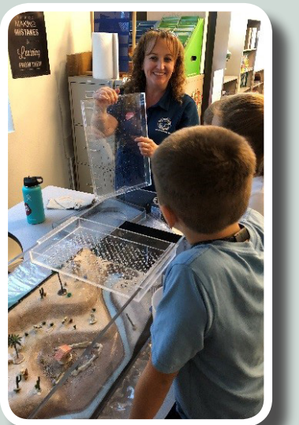
Science, Technology, Engineering and Math (STEM)



The District now has Science, Technology, Engineering and Math (STEM) lessons for schools. It is important to reach out to our youngest citizens to help them understand how urbanization can affect the way in which water flows during and after a storm and how to keep themselves and their families safe during these events.

This program provides supplemental material for teachers that can be added to instruction about Earth's water, weather, and preparing for disasters. Students will participate in research projects, read background information about monsoons and weather, and look at rain gage data. They use this information to create emergency preparedness plans, floodplains, and work in teams to solve flooding problems and create public service announcements to warn the public of the dangers of flooding. Curriculum is available on the District website at https://www.maricopa.gov/5091/STEM-Curriculum.

Outreach efforts to the schools and communities have made large gains this year. District staff have attended STEM nights at many school all across the valley, with additional events continuing to be scheduled. At these events, District staff use a flood simulation model to demonstrate runoff in a natural environment and an urbanized environment. They also explain how staff work together to study weather and water and then design, build, and maintain various structures in order to mitigate flooding.



National Flood Insurance Program

Through the National Flood Insurance Act of 1968 the United States Congress created the National Flood Insurance Program (NFIP). The Act was motivated by the devastating loss of life and property by Hurricane Betsy in 1965.

The program aims to reduce the impact of flooding on private and public structures. It does so by providing affordable insurance to property owners, renters and businesses and by encouraging communities to adopt and enforce floodplain management regulations. These efforts help mitigate the effects of flooding on new and improved structures. Overall, the program reduces the socio-economic impact of disasters by promoting the purchase and retention of general risk insurance, but specifically flood insurance. For more information, visit www.fema.gov/national-flood-insurance-program

N - **No home is safe** from potential flooding

F - **Federal assistance** available for flood damage and repair of insurable buildings

I - **Insurance** can be the difference between recovering and being financially devastated

P - **Protection** for family, property, and your future

NFIP policies can be purchased through thousands of insurance agents nationwide. The agent who helps you with your homeowners or renters insurance may also be able to help you with purchasing flood insurance. For a list of participating Write Your Own (WYO) companies go to https://www.fema.gov/wyo_company. The WYO is a cooperative undertaking between the private insurance industry and FEMA.

If your insurance agent does not sell flood insurance, you can contact the NFIP Help Center at **800-427-4661**. NFIP flood insurance policies can only be purchased for properties within communities that participate in the NFIP. Ask your agent if your community participates, or go to the Community Status Book at https://www.fema.gov/national-flood-insurance-program-community-status-book

Flood Insurance

Without flood insurance, most residents have to pay out of pocket or take out loans to repair structures and replace damaged items. Just one inch of water in a home can cause more than $25,000 in damage. With flood insurance, you're able to recover faster and more fully. It can be the difference between recovering and being financially devastated. **Here are some important facts to keep in mind when asking "do I need flood insurance:"**

- **FACT:** Homeowners and renters insurance does not cover flood damage.
- **FACT:** There is a 30-day waiting period before flood insurance takes effect.
- **FACT:** Flood insurance does not cover your flood damaged contents, that coverage is a separate policy.
- **FACT:** More than 20 percent of flood claims come from properties outside high-risk flood zones, and zone X.
- **FACT:** Flood insurance can pay regardless of whether or not there is a Presidential Disaster Declaration.
- **FACT:** Disaster assistance comes in two forms: a U.S. Small Business Administration loan, which must be paid back with interest, or a FEMA disaster grant, which is about $5,000 on average per household. By comparison, the average flood insurance claim is nearly $30,000 and does not have to be repaid.

Road and property flooding

Flood insurance rates do not differ from company to company or agent to agent. All policy premiums include certain fees and surcharges, so ask your agent about these when discussing a price quote. The amount you pay for your policy is calculated based on factors such as:

- Year of building construction
- Building occupancy
- Number of floors
- Location of its contents
- Flood risk (e.g., its flood zone)
- Location of the lowest floor in relation to the Base Flood Elevation on the flood map
- Deductible and amount of building and contents coverage

One of the reasons people say they don't buy flood insurance is they believe the cost is too high. As with any insurance, the cost is based on the risk involved. The price of a flood insurance policy varies depending on where a property is located. In high flood risk areas, where coverage is often mandatory, policies cost more, unless the structure being insured is constructed above the base flood elevation to reduce the risk of flooding. In low to moderate risk areas, where the risk of flooding is still very real, homeowners or renters have lower cost flood insurance options available in the form of the NFIP's Preferred Risk Policy (PRP).

The PRP offers lower-cost protection for homes and apartments in areas of low to moderate flood risk. These areas of moderate or minimal flood hazards are shown as B, C, X, AR, and A99 zones on a Flood Insurance Rate Map. What you pay for flood insurance often has a lot to do with how much flood risk is associated with your building. Mitigation and other factors play a role in protecting properties from flood damage, but sometimes they can also help reduce how much you pay for your flood insurance policy.

For a PRP, a homeowner can buy a policy starting at coverage for $20,000 and go up to $250,000 through the NFIP, and can start at coverage for $8,000 and go up to $100,000 to protect the contents in their residence. For a cost of $120 minimum to a maximum of $470 a year, a person can insure their home and contents against flooding.

Maricopa County participates in the Community Rating System (CRS) and is rated a Class 4, which results in up to a 30 percent discount on flood insurance for residents in unincorporated Maricopa County Special Flood Hazard Areas (SFHA) and 10 percent for Zone X areas. The discount is calculated based on the community's efforts to reduce the risk of flooding.

If you are interested in purchasing flood insurance (homeowners, renters, or business) contact your insurance agent or the NFIP Help Center at www.fema.gov/national-flood-insurance-program or call 1-800-427-4661.

Flood Safety

Protecting yourself today means preparing your home or workplace, collecting sources of information, developing an emergency communications plan, and knowing what to do when a flood is approaching your home or business. For your protection consider the following:

- Elevate critical utilities, such as electrical panels, switches, sockets, wiring, appliances and HVAC systems. Build with flood damage resistant material.
- In areas with repetitive flooding, consider elevating the entire structure.
- Clear debris from gutters and downspouts.
- Move furniture, valuables and important documents to a safe place. Store copies of irreplaceable documents (such as birth certificates, passports, etc.) in a safe, dry place. Keep originals in a safe deposit box or make digital copies.
- Build an emergency supply kit for at least three days. Food, bottled water, first aid supplies, medicines, and a battery-operated radio. Kit should be ready to go when you are, see www.ready.gov/build-a-kit
- Plan and practice a flood evacuation route see www.ready.gov/make-a-plan. Ask someone out of state to be your "family contact" in an emergency, see www.redcross.org/mobile-apps/shelter-finder-app
- Make a pet plan. Many shelters do not allow pets. Make plans now on what to do with your pets if you are required to evacuate your residence.

- Do not walk, swim, or drive through flooded waters. **TURN AROUND, DON'T DROWN!**
- Just 6 inches of water can knock you down and 1 foot of moving water can sweep your vehicle away.
- Do not drive around barricades. Stick to designated routes.
- Know the types of flood risk in your area. Visit www.maricopa.gov/3847/Flood-Control-District "Am I in a Floodplain" or FEMA's Flood Map Service Center at www.fema.gov
- Learn and practice emergency routes, shelter plans, and flash flood response.
- Evacuate if told to do so.
- Move to higher ground, or higher floor, to be above flood water.
- If evacuation is not safe, stay where you are.

Stay Informed – Timely information can make all the difference in knowing when to take action to be safe. Monitor the weather reports by your local media. Find out what alerts are available in the area via text or email. The NOAA weather radio in the Phoenix area is KEC94 at 162.550 for flood watches and warnings.

Natural & Beneficial Functions

District's Tall Pot Program - Native vegetation grown for replanting in floodplain

Storm drainage is one of many important benefits provided by floodplains. Other natural benefits of value include wildlife habitat and migration corridors, vegetation habitat, visual aesthetics, cultural resources, aggregate resources needed for local development, recreational opportunities, and water conservation opportunities. The District continually works to maximize the diverse and unique benefits offered by floodplains when providing flood mitigation to protect Maricopa County.

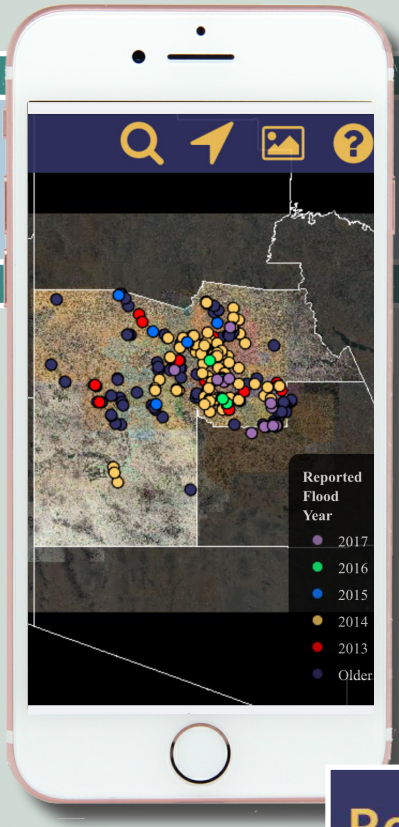
Healthy floodplains yield multiple benefits that protect the valuable services that floodplains provide people and nature:

- **Flood Protection:** Floodplains provide a river more room as it rises, thereby reducing pressure on manmade flood protection structures, like levees and dams.
- **Improved Water Quality:** When inundated with water, floodplains act as natural filters by removing excess sediment and nutrients which can degrade water quality and increase treatment costs.
- **Recharged Aquifers:** Outside of a river's main channel, water flow is slowed and has more time to seep into the ground where it can replenish underground water sources (or aquifers), which serve as a primary source of water for many communities and are critical for irrigation that grows much of the world's crops.

Lower Indian Bend Wash - Park area conveying floodwater away from roads and structures

- **Improved Wildlife Habitat:** Floodplains are home to some of the most biologically rich habitats on Earth. They provide spawning grounds for fish and critical areas of rest and foraging for waterfowl and birds.
- **Recreational Industries:** Many outdoor recreational activities – like fishing, hunting, camping, hiking, wildlife watching, and boating – are made possible by, or greatly enhanced by the natural processes of rivers and healthy floodplains. Combined, these recreational activities account for revenue increase in economic activities and are important sources of income for the community.

MOBILE TOOLS



Residents can view and share images and videos of current and past flooding incidents. Help spread flood awareness!

Report a Flood

Connect with us!

@FloodControlMC

@FCDFloodInfo

@FCDEspanol

@FCDMaricopa

@Flood Control District of Maricopa County

Flood Control District of Maricopa County
2801 West Durango Street
Phoenix, Arizona 85009