

## STORMWATER MANAGEMENT PROGRAM

As cities develop into urban areas, urban stormwater management becomes more and more important. The City of Broken Arrow currently works to improve the City's stormwater drainage system. In the past there was no dedicated funding source for maintenance of streams and drainage ways through the City.

A manual of fees increased the stormwater utility fee to \$9.69 per month per Equivalent Service Unit (ESU). Each residentially utilized property within the Broken Arrow City Limits shall be assessed 1 ESU, and therefore billed \$9.69 monthly. For apartments and non-residential properties, each property is evaluated to determine the actual amount of surface impervious to stormwater located on the property. Each property is assessed 1 ESU, for each 2,650 square feet of impervious area on the property. The stormwater utility fee was first implemented on May 1, 2002 and was included on water bills starting in June 2002. For further information see City ordinance no. 3184.

The Stormwater Ordinance can be viewed on the City of Broken Arrow website at [www.brokenarrowok.gov](http://www.brokenarrowok.gov) under Government tab then select the City Clerk section. Questions in relation to the stormwater management program can be forwarded to Mr. Patrick Wilson, P.E., CFM Stormwater Manager for the City at [pwilson@brokenarrowok.gov](mailto:pwilson@brokenarrowok.gov) or by phone at 918-259-7000 ext. 5241



## WHAT IS PHASE II?

Since the passage of the Clean Water Act (CWA), the quality of our nation's waters has improved dramatically. Despite this progress, degraded water bodies still exist... Phase I of the United States Environmental Protection Agency's (EPA) stormwater program (began) in 1990 under the CWA. Phase I relies on National Pollutant Discharge Elimination System (NPDES) permit coverage to address stormwater runoff from... Municipal separate storm sewer systems (MS4's) generally serving populations of 100,000 or greater and 10 categories of industrial activity... The Stormwater Phase II is the next step in the EPA's effort to preserve, protect and improve the nation's water resources from polluted stormwater runoff. The Phase II program... requires additional operators of MS4s in urbanized areas >50,000 people with a density of >1,000 people per square mile and operators of small construction sites (1-5 acres), through the use of NPDES permits to implement programs and practices to control polluted stormwater runoff..."

## WHAT YOU CAN DO:

Do not dump or throw anything into ditches or streams. Dumping in our ditches and streams is a violation of The City of Broken Arrow Ordinances. Even grass clippings and branches can accumulate and plug channels. A plugged channel cannot carry water and when it rains the water has to go somewhere. Every piece of trash contributes to flooding.

If your property is next to a ditch or stream, please do your part and keep the banks clear of brush and debris.

If you see dumping or debris in the ditches, streams, or storm sewer systems, contact the City of Broken Arrow Action Center at 918-258-3587.

Always check with the Building Inspections Department before you build on, alter, re-grade, or fill on your property. If you see building or filling without a City permit posted, contact the Building Inspections Department at 918-259-2400, ext. 5333.

## FLOOD PROOFING

A variety of means may be taken to flood proof structures. Water heaters, furnaces electrical panels and washer/dryers may be elevated or moved to a location where they are less likely to be flooded. Floodwalls may be constructed around utilities. Basement drains, exterior and interior backwater valves can be installed. If water does not get over 2' deep, you can waterproof your walls and place watertight closures over doorways. If it appears you are going to be flooded, and you have enough time, move essential items and furniture to the upper floors of your home. Keep items like plastic sheeting, plywood, sandbags, and lumber on hand for emergency waterproofing. This will reduce the amount of damage caused by flood waters. For exterior flood proofing, you may check into constructing a small floodwall or earthen berm to detour water away from your home. This only works if your property is not in the floodway, your lot is large enough, and flooding is not too deep. You may contact the Engineering and Construction Department for more information. Sewer flood proofing consists of plugs, stand pipes, overhead sewers and backup valves. Talk to a professional to see which could help in your situation. For a site visit or onsite assistance with flood issues contact the City Stormwater Management Division at 918-259-7000, ext. 5241.



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City of Broken Arrow  
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IMPORTANT INFORMATION  
PLEASE RETAIN

# OFFICIAL NOTICE

## FLOOD HAZARD INFORMATION

*YOUR PROPERTY IS EITHER IN OR ADJACENT TO THE FEMA REGULATORY FLOODPLAIN IN BROKEN ARROW, OKLAHOMA.*

2024  
ISSUE



*City of  
Broken Arrow,  
Oklahoma*

## IT HAS BEEN DETERMINED THAT PART OR ALL OF YOUR PROPERTY IS IN OR ADJACENT TO THE CITY OF BROKEN ARROW REGULATORY FLOODPLAIN.

The purpose of this notice is to inform you of the flood hazard associated with drainage ways, as well as suggest possible actions you can take to relieve the hazard. This brochure has been mailed to all properties located in/or adjacent to the 100 year floodplain along Broken Arrow drainage ways. If you received this brochure you either own or live on property in or adjacent to the 1% chance floodplain. The 1% chance floodplain is an area defined by the Federal Emergency Management Agency (FEMA) as having a 1% chance of being flooded in any given year. There is always an even greater chance of smaller floods occurring in any year which can create a significant flood hazard for people and property close to the creeks and channels.

## FLOOD ZONE INFORMATION FOR HOMEOWNERS

For exact, detailed floodplain boundaries, FEMA should be consulted for the most current up to date information. You may access these maps many ways.

**#1 <https://msc.fema.gov/portal/home>** Link will take you directly to "FEMA Flood Map Service Center" fill out your information, select the type of digital map you need then print or save your map at no charge.

**#2 [www.brokenarrowok.gov/government/public-works/streets-stormwater/stormwater-floodplain-management/fema-digital-flood-insurance-rate-maps](http://www.brokenarrowok.gov/government/public-works/streets-stormwater/stormwater-floodplain-management/fema-digital-flood-insurance-rate-maps)** you will see the helpful links select the hyper-link FEMA Flood Map Service Center to take you to the "FEMA Flood Map Service Center"

You may also receive floodplain and floodway determinations designating the correct flood zone for your property at no charge by contacting Stormwater Management at (918)259-7000 ext. 5241. You will need to leave your address and phone number. A written response will be mailed to you in approximately 7 days. A telephone or fax response typically takes 48-72 hrs.

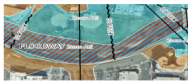
FEMA Flood Map Service Center: Welcome!

Looking for a Flood Map? 

Enter an address, a place, or longitude/latitude coordinates:

Looking for more than just a current flood map?

Visit [Search All Products](#) to access the full range of flood risk products for your community.



About Flood Map Service Center

The FEMA Flood Map Service Center (MSC) is the official public source for flood hazard information produced in support of the National Flood Insurance Program (NFIP). Use the MSC to find your official flood map, access a range of other flood hazard products, and take advantage of tools for better understanding flood risk.

FEMA flood maps are continually updated through a variety of processes. Effective information that you download or print from this site may change or become superseded by new maps over time. For additional information, please see the [Flood Hazard Mapping Updates Overview Fact Sheet](#).

Announcements

The [Search All Products](#) page has been recently updated to allow users to download a listing of all products resulting from a search. Users can print the file or import it into a spreadsheet or database.

## FLOOD INSURANCE

FLOOD INSURANCE: Standard homeowner's insurance policies do **not** cover losses due to floods. However, Broken Arrow is a participant in the National Flood Insurance Program (NFIP), which makes it possible for Broken Arrow property owners to obtain federally backed flood insurance. This insurance is available to any owner of insurable property (a structure and its contents) in Broken Arrow. Renters may also insure their personal items against flood loss.

The actual cost for this insurance will vary depending upon the amount of coverage and degree of flood hazard. We urge

persons who live on or own property in the flood hazard area to purchase flood insurance to protect themselves from losses due to flooding. This insurance is required in certain instances, such as the purchase of a home with a federally backed mortgage, or if the policy of the particular bank with the mortgage requires it. Usually these policies just cover the building structure and not the contents. During certain types of flooding, more damage is done to the furniture and contents than to the structure itself. Contents insurance is also available. FEMA maps are subject to renew at any time.

## BROKEN ARROW'S NATURAL FLOODPLAIN

Several drainage areas include natural grasses and water plants that improve the natural functions of wildlife habitat and filter nutrients and impurities from water in Broken Arrow Creeks. For instance, Copper Creek Park has been preserved as a natural area and is open to the public. Many other local floodplains are being preserved for recreational activities and as a wetland habitat for wildlife but they can be dangerous during heavy rainfall. Avoid these areas when flooding is occurring.

## REMEMBER, LARGER FLOODS CAN AND DO OCCUR.

Covington Creek flooded May 27, 1984 and October 1, 1986 damaging at least 5 homes on each date. Broken Arrow Creek has flooded multiple times in the past resulting in damage to at least 8 homes. The Arkansas River flooded in October 1986 and again in 2019 resulting in damages to public facilities and homes in the Indian Springs area.

**Report illegal Floodplain Development immediately to 918-259-7000 or 918-258-3587.**



Do you know if your flood risk has changed?

## ZONE X UNSHADED

These areas have been identified in the community flood insurance study as areas of moderate or minimal hazard from the principal source of flood in the area. However, buildings in these zones could be flooded by severe, concentrated rainfall coupled with inadequate local drainage systems. Local stormwater drainage systems are not normally considered in the community's Flood Insurance Study (FIS). Flood insurance is available in Broken Arrow but is not required by regulations in these zones. Zone X Shaded is used on flood insurance rate maps to indicate areas of 0.2% chance of annual flood and areas outside of the 0.2% chance floodplain are X Unshaded.

## DEVELOPMENT IN THE BROKEN ARROW FLOODPLAIN

Any development in Broken Arrow Regulatory Floodplain requires a permit. This requirement is not limited to the construction of buildings. Citizens should contact the Engineering Department prior to building, filling or making any changes to structures or land in the Broken Arrow Regulatory Floodplain.

## INFORMATION ON PAST FLOODING, DRAINAGE OR FLOODPLAIN PROBLEMS. WETLANDS, REGULATORY STREAMS OR ENVIRONMENTALLY MITIGATED AREAS. THE CITY WILL PROVIDE AVAILABLE REPORTS AND OTHTHER INFORMATION AS NEEDED.

If available information can be provided by the City of any available reports or documentation regarding past flooding at a site. If other drainage of floodplain problems other than those shown on the FEMA flood insurance rate map are available, the City will provide information on them as requested. Certain areas within the special flood hazard area such as wetlands, regulatory streams, or environmentally mitigated areas may have other protections required to protect their environmental and natural floodplain functions. Information can be provided for those areas upon request.

## FLOOD WATCHES AND WARNINGS

When conditions are right for flooding, residents should tune to NOAA Weather Radio KIH27 162.55 VHF & local Station FM 102.3 & AM 740 KRMG. Plus local TV channels 2, 6, 8, and 23 will be giving warnings on television. If needed, warning coverage can be provided by Broken Arrow Civil Defense.

## FLOOD SAFETY

- Evacuate the flood hazard area in times of impending flood or when advised to do so by the Police or Fire Department.
- Cut off all electric circuits at the fuse panel or disconnect switch. If this is not possible, turn off or disconnect all electrical appliances. Shut off the water service and gas valve in your home.
- Do not walk through flowing water. Drowning is the number one cause of flood deaths, mostly during flash floods. Currents can be deceptive; six inches of moving water can knock you off your feet. Use a pole or stick to ensure that the ground is still there before you go through an area where the water is not flowing.
- Do not drive through a flooded area. More people drown in their cars than anywhere else. Don't drive around barriers; the road or bridge may be washed out.
- Stay away from power lines and electrical wires. The number two killer after drowning is electrocution. Electrical current can travel through water. Report downed lines to AEP/Public Service Company of Oklahoma or The City of Broken Arrow.
- Look out for animals, especially snakes. Small animals that have been flooded out of their homes may seek shelter in yours. Use a pole or stick to poke and turn things over and scare away small animals.

Look before you step. After a flood, the ground and floors can be covered with debris including broken bottles and nails. Floors and stairs that have been covered with mud can be very slippery.



**Any alteration to your building or land in the 1% Chance Floodplain Hazard Area requires a permit from the City of Broken Arrow Administrator.**