City of Tulsa Flood Hazard Information

TULSA is located in one of the most scenic natural areas of Oklahoma. Unfortunately, many locations within the city suffer repeated flood damages when torrential storms strike. Some of these areas are not in a designated floodplain.

In the 1970s and '80s Tulsa County had the most federal disaster declarations in the nation. In 1984, a flash flood caused $180 million in damages and 14 deaths. Since that time, Tulsa has made tremendous progress. Dozens of flood projects have been completed, and more are planned and under way. Tulsa has established an award-winning, comprehensive flood program that is cited as a national model. Overall, the risk of flooding has been substantially reduced - but not eliminated. Because of its climate and location, Tulsa can never be considered 100 percent floodsafe.

Inevitably, Tulsa will flood again. Spring is our most vulnerable time.

The Tulsa Hazard Mitigation Citizens Advisory Committee conducts meetings to hear citizens ideas on flooding and drainage problems, and concerns related to other natural hazards.

The accompanying map shows Tulsa's creeks and rivers which periodically have flash floods. The flash floods usually have high velocities and are extremely dangerous. Flood damages have occurred at various times along the Arkansas River and numerous creeks, including Valley View, Flat Rock, Dirty Butter, Bird, Coal, Mingo, Haikey, Fry, Vensel, Fred, Joe, Hager, Nickel, Mooser, Cherry-Red Fork, Perryman, Crow, Elm, Park View, Oak, Harlow and Bigheart.

TULSA'S NATURAL FLOODPLAINS

Many local floodplains have been preserved for recreational activities and as wetland habitat for wildlife. A beautiful natural area, Red Bud Valley, has been preserved and is open to the public. Detention areas throughout the city serve as soccer fields and walking trails when they are not storing excess stormwater. Also, several drainage improvements include planting of special water plants and grasses to improve their natural functions of wildlife habitat and filtering nutrients and impurities from water.

While natural floodplains are inviting during sunny weather, they can be treacherous during heavy rainfall or freezing temperatures. Avoid entering these areas when flooding is occurring. Skating on icy detention ponds also should be avoided since the ice in Tulsa is usually too thin to support the weight of even a small child.

BUY A FLOOD INSURANCE POLICY

Most homeowners' policies do not cover flood losses. You can protect your home and contents through the National Flood Insurance Program. You should obtain coverage for structure and contents. There can be more damage to the contents than the structure. Renters can buy contents coverage even if the owner does not insure the structure.

There is a 30-day waiting period before the policy becomes effective.

Flood insurance is required by law in order to obtain federally secured financing to buy, build, or renovate a structure located in a flood hazard area. This financing includes federal grants, FHA and VA loans, and most conventional mortgage loans.

"A General Guide To Regulatory Floodplains" includes a map that shows where flood hazard areas are in the City of Tulsa. The guide is available from the Customer Care Center.

To find out more about flood insurance, contact any licensed property/casualty agent or broker - the same person who sells your home and auto policies. All agencies charge the same premiums. You may be denied federal assistance after a disaster if you don't have flood insurance.

KNOW YOUR RISK OF FLOODING

Over the years, the City of Tulsa has completed many flood control projects to keep floodwaters from reaching buildings. The City also regularly maintains drainage ditches and storm sewers to prevent water from backing up into streets and homes. Despite these efforts, the risk of flooding has not been - and cannot be - completely eliminated. Therefore, businesses and property owners should make a plan to protect your business and property. You may see what your flood risk is by examining the detailed floodplain boundary maps in this atlas. To request a free, written flood-zone determination contact the Customer Care Center and provide the correct address or legal description of the property.

In some cases, retrofitting existing buildings or regrading a yard can help reduce the potential for flood damages to structures and their contents. Retrofitting techniques include elevating buildings above flood levels, wet or dry floodproofing (commercial structures), and installing backflow preventers to protect floors and contents from sewer backups. Structural barriers such as levees and floodwalls may also be constructed to protect property from floodwaters. Remember, get a building permit when constructing in flood prone areas.

Development Services Department
Open Monday-Friday 8 a.m. - 4 p.m.
175 E. 2nd St, 4th Floor, Tulsa, OK 74103
Tel: (918) 596-9456
email: COTDevSvcs@cityoftulsa.org

Customer Care Center
Open Monday-Friday 8 a.m. - 5 p.m.
175 E. 2nd St, Tulsa, OK 74103
Tel: call 311 or (918) 596-2100
email: Tulsa311@cityoftulsa.org

A publication of the Federal Emergency Management Agency (FEMA), *"Homeowners Guide to Retrofitting: Six Ways to Protect Your House from Flooding" (Publication #312),* includes information on technical and financial assistance. The book can be obtained free by calling 1-800-480-2520 or going online to https://www.fema.gov/media-library/assets/documents/480. Free Internet access is available to library cardholders at all Tulsa City/County Library locations.

There are temporary measures you may take to protect your property during a flood event. Plan ahead about where and how you will move furniture out of harm's way. Keep materials like sandbags, plywood, plastic sheeting and lumber handy for emergency waterproofing. Clear brush and debris away from storm drains and ditches.

Call the City of Tulsa's Customer Care Center at 311 to find ways to protect your property from flooding. Qualified City staff is available at the City's Development Services Department to discuss your options and to help you plan and build a safe project while complying with City Floodplain development policies. Get a building permit when constructing in a flood prone area.

PERMITS ARE REQUIRED BEFORE YOU BUILD

The City of Tulsa's permitting process is designed to ensure that all construction in Tulsa is safe. A permit is required for all new construction and most of the time you must obtain a permit for repairing or replacing existing features.

Before you begin construction or add on to your existing building, find out which permits are required by contacting the City's Development Services Department.

In addition to regular building permits, special regulations apply to construction in floodways and the Regulatory Floodplain. No construction, including filling, is allowed in the mapped floodway without an engineering analysis that shows the project will not increase flood damage elsewhere. Any activity outside the floodplain but within a natural or man-made watercourse also requires a permit.

A floodplain watershed development permit must be obtained from the City of Tulsa before commencing construction, landfill, or excavation in the floodplain. New buildings in the floodplain must be protected from flood damage, so our building code requires that new buildings be elevated at least one foot above the elevation of the City of Tulsa Regulatory Floodplain.

Homeowners who are planning substantial improvements should contact the Development Service Department for a residential building permit. Elevation or floodproofing may be required if you want to construct a substantial improvement (the cost of the improvement or add-on is 50 percent of the value of the existing building). A permit is also required for a repair if it is more than just cleanup after a storm. If your property is substantially damaged (50 percent of the value of the building), federal regulations may require you to elevate or floodproof before you can rebuild.

To report illegal floodplain development or to verify that proper construction permits have been issued for a project, contact the Customer Care Center. An inspector will investigate.

SAVE OUR STREAMS: YOU CAN HELP

Tulsa's storm sewers were designed to divert excess rainwater to creeks that flow to the Arkansas River and Bird Creek. It is important to protect the quality and control the quantity of the water flowing into the drainage system. City workers monitor the system regularly for oil and grease, fertilizers, pesticides, and sediment. Crews also routinely remove debris from drains and sewers to prevent water from backing up into streets and homes when it rains. Unfortunately, actions such as littering and dumping yard waste and household fluids down storm drains can lead to blockages between scheduled maintenance work.

Please do your part to keep the inlets and drainage ways clear of brush and debris. Here are steps you can take to protect the quality and control the quantity of water in Tulsa's creeks. These actions also will beautify your neighborhood and reduce the risk of dangerous flooding.

* Maintain your vehicle so hoses and reservoirs do not leak or break causing fluids to spill onto streets.
* Don't pour used motor oil, antifreeze, old pesticides or any other pollutants into the storm drainage system. Contact the Metropolitan Environmental Trust (M.E.T.) for proper disposal methods and locations 918-584-0584 (or www.metrecycle.com)
* Apply fertilizers and pesticides properly. Read labels to determine how much to use and when to apply the products. The Master Gardener Program has volunteers who are trained to answer questions about pesticides and fertilizers. Call the Master Gardener Hotline at 918-746-3701.
* Use a mulching mower or bag your grass and leaves instead of blowing the yard waste into the street. Yard waste can clog storm drains and, since it is organic matter, it can reduce the amount of oxygen in the creek. Fish need oxygen to survive.
* Pick up litter around your neighborhood or business place so the trash doesn't collect on drainage inlets or clog sewer pipes. If you see someone littering, report the incident to the Oklahoma Litter Hotline, 1-888-5-LITTER (or 1-888-554-8837).
* If you spot a blocked drain or notice illegal dumping, call the City's Customer Care at 311, and an inspector will investigate. Putting foreign substances into the storm sewer is a violation of City ordinance.

WARNING SIRENS

Being prepared when disaster strikes can help save lives and property, prevent injury and decrease the cost of recovery. One part of being prepared in Tulsa is knowing what the City's warning siren system is telling you when the sirens sound. The 82 sirens, each of which can be heard for up to a 1-mile radius, are designed to alert anyone outdoors to take cover and/or to seek more information.

There are three types of sounds. First is the three-minute steady tone. It is used to warn both of impending tornadoes, and of chemical releases into the atmosphere. The steady tone is a one-note tone.

The only change in sound during the three minute period may be an increase or decrease in volume that is caused by a change in wind direction or velocity. Hearing the steady-tone siren during pleasant weather may be a signal to protect yourself from hazardous materials which can be released by industrial or transportation system accidents. Depending on the material involved, and on wind and weather conditions, a hazard may be posed for a small area or a large area of the community.

Second is the three-minute "wavering" tone - similar to the "wailing" sound made by many police and fire vehicles on emergency missions. That signal is used only to warn of military attacks.

Third is the three-minute "high-low" tone - like that used by many European ambulances and police vehicles and occasionally by emergency vehicles in this country. It warns of impending flooding.

The sirens are only a part of Tulsa's warning systems which include local news media, NOAA Weather Radios (radios that are tuned to the National Oceanic and Atmospheric Administration's broadcast alert frequencies), and even some local wireless phone and pager services.

Upon hearing either the "steady" or "wavering" sirens, citizens should seek shelter and tune in to local radio or television outlets for additional information. Upon hearing the high-low flood warning, citizens should avoid low-lying areas or any areas where flooding is likely to occur, and access local media for further information. When flood warnings are in effect, motorists should drive with caution and avoid driving in areas where water obscures road boundaries.

BEFORE, DURING AND AFTER A FLOOD

Here are some tips to help you before, during and after a flood. First, be alert when storms approach. Be prepared to move valuables to a higher location and to evacuate immediately, if necessary. Prepare a flood response plan that will help you think through all the details that demand attention after a flood watch or warning is issued. Writing it down will help you remember everything, which is especially important when everyone is in a hurry and excited because a flood is coming.

Put photocopies of inventory records, insurance policies, deeds, automobile titles, wills, telephone numbers, bank and credit card account numbers, and other valuable papers at a location away from your house, such as a safe deposit box.

If you know a flood is coming you should shut off the gas and electricity and move valuable contents of your home to a safe place. If you're not sure how to turn off your gas and electricity, call your local utility companies.

TURN AROUND, DON'T DROWN!

When the flood comes, the safety of your family is the most important consideration. Flood waters can rise rapidly, so you should be prepared to evacuate before the water covers your pre-arranged escape route. Do not drive through a flooded area. Most flood deaths occur in cars. Don't drive around road barriers; the road or bridge may be washed out. Do not walk through flowing water. Currents can be deceptive; six inches of moving water can sweep you off your feet. Use a pole or stick to ensure that the ground is still there before you enter standing water.

If you're caught in the house by floodwater, move to the second floor or to the roof. Take warm clothing, a flashlight, and portable radio with you. Wait for help.

Safety is an issue after the flood, too. Before entering a building, check for structural damage and turn off outside gas lines to your meter. Let the building air out for several minutes before entering.

Watch for electrical shorts and live wires while turning off the main power switch. Stay away from power lines and electrical wires. The number-two flood killer after drowning is electrocution. Electricity can travel through water.

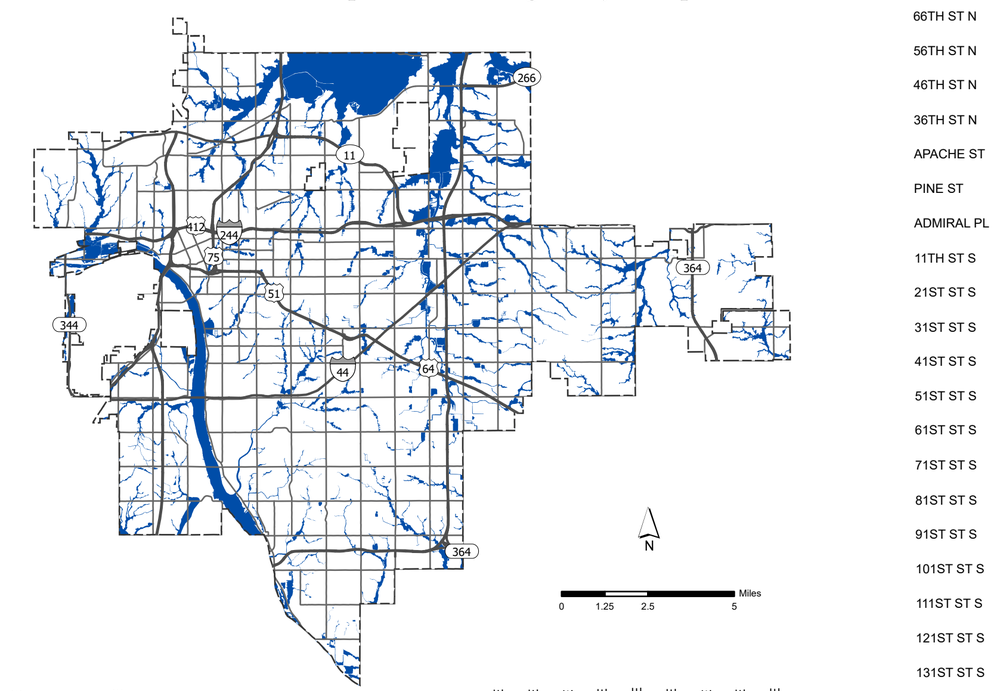
Cover broken windows and holes in the roof or walls to prevent further weather damage. Proceed with immediate cleanup measures to reduce any health hazards. Take pictures of items being discarded and show them to the insurance appraiser for verification.

Water for drinking and food preparation should be boiled vigorously for ten minutes.

Report flooding inside a building as soon as possible to the Customer Care Center. More flood tips are on the City of Tulsa website. Go to www.cityoftulsa.org and click on "City Services", then "Flood Control".

Tulsa's Regulatory Floodplain

Plan your evacuation route now, before a disaster strikes.
Blue areas on this map indicate the Regulatory Floodplain in Tulsa.



This map provides general guidance on the location of the Regulatory Floodplain within the City of Tulsa. It is not to be used for flood insurance or regulatory purposes. If you want to know your flood zone or need additional information, please contact (call) the City's Customer Care Center at 311.