

FLOOD PROTECTION AND AWARENESS INFORMATION

CITY OF LEWISVILLE, ENGINEERING DIVISION

Floodplain Information

Flooding in The City of Lewisville occurs primarily around the small creeks that run through the city to the Elm Fork of the Trinity River. The river's water level is controlled by the Army Corps of Engineers through the Lake Lewisville Dam. Unless there is a severe flooding event, the lake and river will remain in their banks. Even if the lake and river is well within their banks, smaller creeks can flood with heavy rains. The main creeks affecting Lewisville are Timber Creek, Prairie Creek and Denton Creek on the west side and Midway Branch on the east side. In addition, all of these creeks have smaller tributaries subject to flooding. The Timbercreek Acres subdivision, located along Timber Creek, has had many flooding problems over the years. Owners with property near one of these flooding sources whether in the 100 year floodplain or not, should take precautions from flooding. Even if property has not flooded previously or recently it can still be flooded in the future due to changes in stream hydrology created by continued land development or a rain event that exceeds a 100-year storm.

Flood hazards are mapped by the Federal Emergency Management Agency. The Flood Insurance Rate Maps (FIRM's) for the City of Lewisville along with other publications on flood protection and local flood studies can be found in the Department of Community Development, Engineering Division, located on the second floor of City Hall. You can visit the Engineering offices or call 972-219-3490 for information with regard to Flooding. The engineering staff can help you with any questions you might have on the flood hazard in your area and if requested, the engineering staff will visit your property to review flood problems and explain what can be done to improve the drainage in that area.

FLOOD WARNING SYSTEM:

The City of Lewisville has an Emergency Disaster Plan that enables the city to prepare for a variety of disasters, such as tornadoes and flash flooding. Community officials are alerted when severe thunderstorm, tornado and flash flood watches and warnings are in effect for our area. These are the same warnings that are heard on the local radio and television stations, such as Channel 4, KDFW; Channel 5, KDFW; Channel 8, WFAA; and Channel 11, KTVT. During times of heavy rainfall and when reports of street flooding are beginning to come in, the police and fire departments will patrol the areas that are known for flooding. If they see houses in danger, they will begin notifying the residents to move their valuables to higher ground and take shelter.

FLOOD INSURANCE:

Standard homeowners' insurance policies do not cover losses due to floods. Because Lewisville is a participant in the National Flood Insurance Program, it is possible for property owners to obtain federally backed flood insurance. This insurance is available to any owner of insurable property in Lewisville, regardless of whether or not the property is located in a floodplain. If you have specific questions about flood insurance, contact your insurance agent for more information on rates and coverage. Insurance information is also available through the FEMA website at <http://www.fema.gov/nfip/infocon>.

FLOOD SAFETY:

If there is threat of a flood, there are several precautions property owners can take to decrease the risk of personal or family injury:

1. Do not attempt to cross a flowing stream; currents can be deceptive.
2. Keep children from playing in ditches, culverts and around storm drains.
3. Cut off all electric circuits at the fuse panel or disconnect all switches. Turn off and unplug all appliances. Shut off all water and gas services to your home.
4. Do not drive through a flooded area or around road barriers. The road or bridge may be washed out and it takes less than a two foot depth of flowing water to move a vehicle. Larger vehicles are not less susceptible to being carried away by moving water as there is more surface area for water to exert its force. More people drown in their cars than anywhere else.
5. Stay away from all downed power lines and electrical wires. Electrocutation is the second greatest cause of death due to flooding.

PROPERTY PROTECTION - HOME IMPROVEMENTS & PERMIT REQUIREMENTS:

There are measures you can take to protect your building from flood damage. One way to keep water away from your building is to grade your lot so water flows away from or around the foundation. In addition, earthen berms or small swales can be used to direct water away from a structure. You can also flood proof your building by making the wall and floors waterproof, with watertight closures for the doors. Elevating a building so it is above the flood elevation, especially if it is of pier & beam construction is another effective measure against flooding. In some cases this would mean raising your building by several feet. Also, keep materials such as sandbags, plastic sheeting, plywood and lumber handy for emergencies, to help minimize the damage when flooding does occur. You can also request sandbags from the Public Works Department in times of emergency by calling 972-219-3510.

Please note that before you build on, alter, regrade or fill on your property, you will need to check with the Engineering Division (Mr. David Salmon, P.E., Assistant City Engineer) to determine whether a permit is required. The City of Lewisville requires permits for most property grading and filling and building improvements and construction. Consulting with a professional engineer is also advisable to ensure that your project will not increase flooding elsewhere. If you see any questionable dumping, filling or regrading work please contact Mr. Salmon. Projects without an engineering analysis and/or a permit may be illegal and could cause a greater flooding risk to your property.

New construction in the floodplain must have the finished floor elevation (bottom floor) two feet above the 100-year flood levels. If the cost of reconstruction, rehabilitation, addition or other improvements to a building exceeds 50% of the building's original market value, then the building must meet the same construction requirements as a new building. This means that if your building is located in a flood zone and is damaged by any means, such as a fire, tornado, or by flooding,

and you have repairs costing more than 50% of the value of the building, you must elevate or flood proof your building two feet above the base flood level. Other construction requirements, such as materials and utility equipment resistant to flood damage, may also be required. All manufactured homes located in a floodplain must be elevated on a permanent foundation and anchored to resist flotation, collapse or movement. No new construction is allowed in the **floodway** portion of the floodplain. The **floodway** is defined as the channel of a river or drainage way and the portion of the floodplain adjacent to the banks that carries most of the base flood. If your building is located in a **floodway** and is more than 50% damaged, you will not be able to rebuild. To see if your building is in the **floodway**, check with the Engineering Division at City Hall. In addition, any building construction or substantial improvements to a building (construction/improvement cost equals 50% or more of the value of the building) permitted in the floodplain must be followed up with an elevation certificate or flood proofing certificate filled out and sealed by a registered surveyor or engineer before the building or improved structure may be occupied. The City Building Inspections Division will also require a form board survey to ensure adequate elevations before the foundation is constructed.

The City of Lewisville Engineering Division is able to answer many questions you might have on repairing and permits.

DRAINAGE SYSTEM MAINTENANCE:

Another cause of flooding is due to illegal dumping in streams and ditches. A blocked channel cannot carry the amount of water required during a heavy rain, so consequently flooding occurs. If your property is next to a ditch or stream, please help keep the banks clear of brush and debris. If you have downed trees or other major blockage and need help clearing the channels, call the Public Works Department at 972-219-3510. Inlets and storm drains also need to be cleared to prevent water back up.

The Public Works Department drainage maintenance program includes inspection of all public drainage systems twice a year and response to complaints if a storm drain needs to be cleared. If you see any illegal dumping into streams, ditches, and storm inlets, please contact the Public Works Department at 972-219-3510.

NATURAL AND BENEFICIAL FUNCTIONS OF FLOOD PLAINS:

In natural or undeveloped settings, a flood causes little or no damage. Floodplains in natural areas help reduce flood damage by allowing the water to spread over a large area, which reduces flood velocities and provides flood storage to reduce peak flows downstream. One way the city is trying to maintain natural conditions and reduce flood damage to property is by placing parks and open spaces in and around the floodways. Many city parks are located along the city's creeks and drainage ways, such as Central Park along Timber Creek, Leonard L. Woods Park along Prairie Creek and Raldon-Lake Cities Park along Fox Creek.