

Floodplain Information

A large percentage of the Ellis community is located in the floodplain of Big Creek. The term *floodplain* means the low-lying areas on both sides of Big Creek that will be covered with rising water in the event of a flood. The floodplain is called *Zone A* on the City's flood map, which has been provided by the Federal Emergency Management Agency (FEMA). The floodplain is shown on the map as the area that will be under water when Big Creek floods. The floodplain of Big Creek includes the normally dry area adjacent to the banks of the creek plus the creek channel itself. The floodplain is the land area that conveys the base flood discharge. The heights of the base flood discharge within the floodplain of Big Creek are printed on the FEMA map as elevations measured in feet above sea level. The flood heights of the base flood discharge are shown on the FEMA map and are called *Base Flood Elevations* (BFEs).

The City has a Floodplain Management Ordinance that requires all development activities that are proposed to occur in Zone A must be issued a floodplain development permit by the City before the work begins. Floodplain development includes new construction, substantial improvement, minimal improvement, filling, grading, and excavating. The Ordinance requires that in *Zone A*, new construction of structures, which includes the placement of manufactured homes and the substantial improvement of existing structures, must be elevated so that the lowest floor, including basement, is a minimum of one foot above the BFE shown on the FEMA flood map.

The term *substantial improvement* means that the cost of any reconstruction, rehabilitation, addition or other improvement of a structure equals or exceeds 50 percent of the market value of the structure before the start of the construction of the improvement. For more information about calculating substantial improvement, please contact the City Floodplain Administrator listed. If improvements to an existing structure do not add up to more than 50 percent of the structure's current value, the structure has not been substantially improved and therefore is not required to be elevated. However, a floodplain development permit is still required before improvements begin.

The Floodway Fringe District is the area located near the outer boundary of Zone A. The Floodway Fringe District lies on both sides of the main channel of Big Creek. The Floodway Fringe is characterized during flooding by the presence of rising floodwater that has minimal velocity. The Floodway Fringe is an area of floodwater impoundment.

- **Residential Structures:** Requires new construction or substantial improvement to have the lowest floor, including basement, elevated a minimum of one foot above the BFE.
- **Non-Residential Structures:** Requires new construction or substantial improvement to have the lowest floor including basement elevated a minimum of one foot above the BFE. **OR** acquire from the City a Variance to the Floodplain Management Ordinance that allows the lowest floor of the non-residential structure to be built below the BFE. The Ordinance lists very specific and limited circumstances that allow for the issuance of a Variance for construction below BFE of a non-residential structure. A Variance can only be issued for the reasons stated in the Ordinance.

A Variance for a non-residential structure requires that the structure must be wet-flood proofed. This means that the structure must have a minimum of two flood water openings with each located on different sides of the building sidewalls with the lowest side of the openings no more than one foot above grade. Doors, garage doors and windows are not considered floodwater openings. The total net area of the floodwater openings must equal one square inch for every square foot of enclosed floor space subject to flooding. Flood proofing requires that all utilities and service equipment be installed a minimum of one foot above BFE. Flood proofed structures are at greater risk of flooding than structures elevated one foot above BFE and will have higher cost flood insurance premiums. The City will complete a FEMA Non-Residential Flood proofing Certificate to be attached to the Variance and the Floodplain Development Permit.

The Floodplain Management Ordinance requires that a permit be issued by the City to the property owner prior to beginning construction activities in both districts of Zone A. A Floodplain Development Application must be completed prior to beginning any type of construction or development activity in the Floodway Fringe District and the Floodway District.

The Floodplain Administrator reviews the floodplain development application to determine if the proposed activity is in compliance with the City's Ordinance. If the application for floodplain development is approved, the Floodplain Administrator will issue a Floodplain Development Permit that officially authorizes the development activity described on the permit to begin.

The Floodway District is the main channel of Big Creek and the area near the channel that will convey the majority of floodwater in the event of the base flood discharge. The Floodway is the area that conveys most of the floodwater downstream and therefore has the highest floodwater velocity. The Floodway must not be obstructed by development of any type.

- Construction in the Floodway District is prohibited unless certification is provided by a licensed professional engineer that the proposed development will not result in any increase (0.00 feet) in the flood height shown on the FEMA flood map during occurrence of the base flood discharge. No type of development is allowed that shall increase the height of the base flood discharge. The engineering analysis is called the "No-Rise" Certification. Floodway development cannot occur without a "No-Rise."

- If a "No-Rise" Certification is provided by an engineer, the proposed development shall meet all other requirements of the ordinance including elevation above BFE.

- Variances are not allowed for development in the Floodway.

FLOOD PROTECTION FOR THE CITY OF ELLIS

Flooding in our city is caused by one main source: Big Creek leaves its banks in a course of heavy storms, along with ice melting or ice jams. Floodwaters can cover many blocks up to dangerous levels. Sometimes floodwater does not get deep but still covers streets and yards and can flood autos, garages, basements, and some lower floors.

Flooding in areas can come with little warning. As the flooding here in Ellis in 1957 and in 1993, it can be in the downtown area quickly. Floods are dangerous. Even if they appear to move slowly, a flood two feet deep can knock a person off their feet, and float a car.

Your property may be high enough that it has not flooded recently or at all. However, it can still be flooded in the future because the next or future floods may continually get worse. If you are in or close to a floodplain, odds are that you may experience damage to your property someday. Following are ideas to help you protect yourself.

1. City of Ellis Flood Services: The first thing to do if you think you are in or close to a floodplain is to contact the Public Works Department at City Hall (785-726-4741) or the City of Ellis Public Library for information on floods. The Public Works Department has information on flood proofing, flood protection, and flood areas located within the city. We have forms that you may give to an engineer, contractor, or surveyor to establish areas you may buy or live in as to floodplain information. If you wish to visit the Public Works Department, we can also give you names and numbers of these individuals.

2. What you can do: Success of the City's efforts depends a lot on your cooperation and assistance. Here is how you can help:

A. Do not dump or throw anything into ditches or streams. Dumping in ditches and streams are violations of local and state laws. Even grass clippings and branches can accumulate and plug channels. A plugged channel cannot carry water, and when it rains in excessive amounts the water has to go somewhere. Every piece of trash can cause worse flooding.

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

C. If you see dumping in ditches or streams, contact the Public Works Department at 785-726-4741.

D. Always check with Public Works before you start to build on, alter, regrade, or fill your property if it is located in a floodplain. A Flood Development Permit is required to ensure that projects do not cause problems on other properties.

Visit the Public Library or City Hall and pick up the following information on flood proofing, flood insurance, and flood safety.

FLOODPROOFING: There are several different ways to protect a building from flood damage. One way is to keep the water away by regrading your lot or building a small floodwall, or earthen berm. These methods work if your lot is large enough, if flooding is not too deep, and if your property is not in the FLOODWAY. The Public Works Department can provide this information.

Another approach is to make the walls of your building waterproof and place watertight closures over the doorways. This method is not recommended for houses with basements or if water gets over two feet deep.

Another approach is to raise the building above flood levels. A small home can be elevated. Sound Crazy? Many houses, even those not in the floodplain, have sewers that backup into the basement during heavy storms. A plug or standpipe can stop this if water does not get more than two feet deep. They can be purchased at your local hardware store for a nominal price. For deeper sewer backup flooding, talk to a plumber about overhead discharge with lift stations, or using backup valves.

These measures are called flood proofing or retrofitting. More information is available through the City's handouts or through the City Public Library. *An important note:* Any alteration to your building or land requires a permit from the City if you are in the floodplain. Even regrading or filling in the floodplain requires a permit.

If you know a flood is coming, you should have the gas and electricity shut off and move valuable contents to higher ground. It is unlikely that you will receive much warning, so a detailed checklist prepared in advance would help ensure you do not forget important things.

FLOOD INSURANCE: If you do not have flood insurance, talk to your insurance agent. Homeowner's Insurance DOES NOT cover flood damage. However, the City of Ellis participates in the National Flood Insurance Program and you can purchase a separate flood insurance policy. This insurance is backed by the Federal government and is available to everyone, even for properties that have previously flooded.

Some people have purchased flood insurance because it was required by the bank when they purchased and mortgaged their home or for home improvement. Usually these policies just cover the building's structure and not the contents. During the flooding that could happen in Ellis, there will be usually more damage to the contents than to the structure.

*At last count there were 152 insurance policies, \$72,072 in premiums, \$7,925,800 of insurance in force with 3 paid losses totaling \$11,528 in the City of Ellis. If you are covered check out the amount and the deductible and make sure you have content coverage. *Remember:* Even if a flood would miss you or you have done flood proofing, each flood could be worse than the one before. Flood insurance covers all surface floods. If your flooding problem is caused by sewer backup, check out a sewer backup rider for your homeowner's policy.

FOR YOUR SAFETY PRACTICE THE FOLLOWING

*Do not walk through flowing waters: Drowning is the number one cause of flood deaths, mostly during flash flooding. Currents can be deceptive: six inches of moving water can knock you off your feet. If you walk in standing water use a pole or stick to ensure the ground is still there.

*Do not drive through a flooded area: More people drown in their cars than anywhere else. Do not drive around road blocks as bridges or roads may be washed out.

FLOOD PROTECTION FOR THE CITY OF ELLIS

*Stay away from power lines and electrical wires: The number two flood killer after drowning is electrocution. Electrical current travels through water. Report downed lines to Midwest Energy (1-800-222-3121) or to the City (785-726-4741).

*Have your electricity turned off by Midwest Energy: Some appliances, such as TV's keep electrical charges even after they are unplugged. Do not use appliances or motors until they have been disassembled, cleaned and dried.

*Look out for animals, especially snakes: Small animals that have been flooded out of their homes will seek shelter in yours. Use a pole or stick to turn over things and scare away small animals.

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

*Be alert for gas leaks: Use a flashlight to inspect damage and do not smoke or use candles, lanterns, or open flames unless you know the gas has been turned off and the area ventilated.

DO NOT WAIT FOR THE NEXT FLOOD TO BUY INSURANCE!!! THERE IS A 30-DAY WAITING PERIOD BEFORE NATIONAL FLOOD INSURANCE PROGRAM COVERAGE TAKES EFFECT. CONTACT YOUR INSURANCE AGENT FOR MORE INFORMATION ON RATES AND COVERAGE.

FLOOD INSURANCE

NFIP: This community participates in the National Flood Insurance Program (NFIP). The NFIP makes federally backed flood insurance available for all buildings, whether they are in a floodplain or not. Flood insurance covers direct loss caused by surface flooding, including a river flowing over its banks, a lake or ocean storm, and local drainage problems.

The NFIP insures buildings, including mobile homes, with two types of coverage: structural and contents. Structural coverage is for the walls, floors, insulation, furnaces, and other items permanently attached to the structure. Contents coverage may be purchased separately provided the contents are in an insurable building.

Mandatory Purchase Requirement: The mandatory purchase requirement applies to all forms of federally related financial assistance for buildings located in a Special Flood Hazard Area (SFHA). The requirement affects loans and grants for the purchase, construction, repair, or improvement of any publicly or privately owned building in the SFHA, including machinery, equipment, fixtures, and furnishings contained in such buildings.

Financial assistance programs affected include loans and grants from agencies such as the Department of Veterans Affairs, Farmers Home Administration, Federal Housing Administration, Small Business Administration, and Federal Emergency Management Agency. The requirement also applies to secured mortgage loans from financial institutions, such as commercial lenders, savings and loan associations, savings banks, and credit unions that are regulated, supervised or insured by federal agencies such as the Federal Deposit Insurance Corporation and the Office of Thrift Supervision. It also applies to all mortgage loans purchased by Fannie Mae or Freddie Mac in the secondary mortgage market.

How it Works: Before a person can receive a loan or other financial assistance from one of the affected agencies or lenders, there must be a check to see if the building is in a SFHA. The SFHA is the base (100-year) floodplain mapped on a Flood Insurance Rate Map (FIRM). It is shown as one or more zones that begin with the letter "A" or "V".

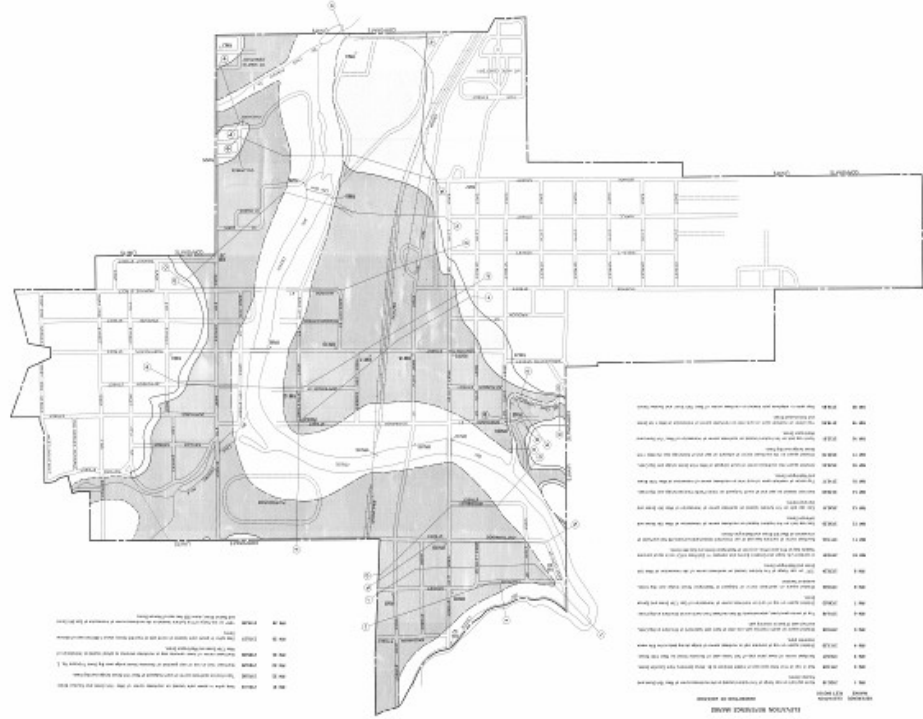
Copies of the FIRM are available for review in most local government buildings or planning departments. Many lenders and insurance agents have copies, also. It is the agency's or the lender's responsibility to check the FIRM to determine if the building is in a SFHA, although many communities provide assistance.

If the building is in an SFHA, the agency or lender is required by law to require the recipient to purchase a flood insurance policy on the building. The requirement is for structural coverage equal to the amount of the (or other financial assistance) or the maximum amount available, whichever is less. The maximum amount available for a single-family house is \$250,000.

The mandatory purchase requirement does not affect loans or financial assistance for items that are not covered by a flood insurance policy, such as vehicles, business expenses, landscaping, and vacant lots. It does not affect loans for buildings that are not in the SFHA, even though a portion of the lot may be flood-prone. While not mandated by law, a lender may require a flood insurance policy for a property in any zone on a Flood Insurance Rate Map.

If You Have Questions concerning new construction, remodeling or additions within the Floodway Fringe and the Floodway districts, please contact the **Floodplain Administrator** at (785) 726-4741 or 726-1741 or e-mail him at ellispw@eaglecom.net

Ellis Floodway Boundary Map



Ellis Flood Insurance Rate Map



The FEMA flood maps for Ellis show two different floodplain districts in Zone A: • Floodway Fringe • Floodway

* Full-size flood maps are posted in the Municipal Building hallway. *