

A CITIZEN'S GUIDE TO FLOOD AWARENESS



FLOODPLAINS



AND



FLOODING

SUBSTANTIAL IMPROVEMENTS

Any rehabilitation, reconstruction, addition or other improvement to an existing structure in a floodplain which equals or exceeds 50% of the market value of the structure is considered a substantial improvement, and may involve elevating the entire structure above the **Base Flood Elevation (BFE)**. Repairing of damage that exceeds 50% of the market value is also considered a substantial improvement. Additions or improvements less than 50% of the market value may require varying degrees of compliance with the minimum flood prevention requirements. Please call the Floodplain Administrator (704-920-5152) with questions relative to your particular situation.

DRAINAGE SYSTEM MAINTENANCE

The City of Concord has very strict regulations against dumping into drainage facilities. These regulations are occasionally updated, so visit the City website for current regulations. (www.ci.concord.nc.us)

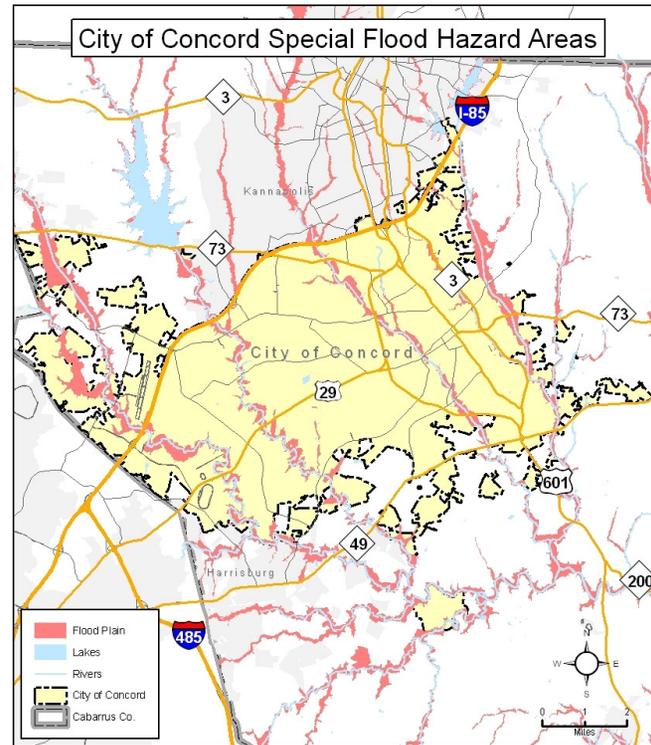
The City sponsors adopt-a-stream programs as part of its annual Big Sweep event. Please contact Stormwater Services for more details.

It is very important that the drainage system stays clear of obstructions. While some amounts of woody debris can be healthy to stream habitat, larger debris piles and trash can dramatically impact water quality as well as the stream's ability to function during high water. These blockages can create flooding patterns and impair the function of the floodplain. If you see blockages or think a stream needs to have trash removed, or notice dumping or spills, call 704-920-5555.

FLOOD HAZARD AREA MAPS

The most recent Flood Insurance Rate Maps (FIRM) prepared by the Federal Emergency Management Agency (FEMA) are based on new and more accurate technology. The new FIRM maps became effective on November 5, 2008. Hard copies of these maps are filed in the reference section of the Cabarrus County Library and at the Planning and Neighborhood Development Department (704-920-5152) at 66 Union Street, South. The City also maintains digital versions of these maps. The digital versions can be viewed at the GIS Division of the Planning and Neighborhood Development Department at 66 Union Street, South (704-920-5153).

LOCAL FLOODPLAINS



For more detailed flood hazard maps, please visit the City's website (www.ci.concord.nc.us)

FLOOD WARNING SYSTEM

The National Weather Service (NWS) will broadcast Flood Warning Notices and Flood Warnings through local television, radio and wire services. The purchase of a NOAA weather radio is also a wise investment if you live in a flood prone area. Tune into your local television or radio station for special instructions during times of possible flooding. The City may provide additional information through the media.

In the event of severe weather, tune to Time Warner Cable Channel 22 for weather updates.

If warnings are issued, act immediately. If a public evacuation is implemented, follow instructions from public safety officials. When evacuating, drive carefully using designated routes and avoid flood-prone areas. If you evacuate your home, you may go to a local fire station for temporary shelter. The City's website (www.ci.concord.nc.us) also has information on safety and evacuation procedures.

THE LOCAL FLOOD HAZARD

Concord's total land area is more than 60 square miles. Some of the land within the City lies within the floodplains of streams such as Coddle Creek, Rocky River, Irish Buffalo Creek, Three Mile Branch, and Coldwater Creek, as well as other smaller and unnamed streams. Lands adjacent to the streams which have a one percent (1%) likelihood of being flooded in any given year are known as "100 year floodplains". Within the floodplains are areas that incorporate the stream channel, known as "floodways." Together, these areas are known as **Special Flood Hazard Areas (SFHA)**. In an effort to minimize the impact on human life and property, the City restricts and closely regulates development within the SFHA. Since 1993, 43 flood events have been recorded in Concord which have resulted in approximately 13.5 million dollars in property damage and approximately 2 million dollars in crop damage. All streams in Concord, whether they are the named streams, or the smaller unnamed streams are prone to flooding.

FLOOD SAFETY TIPS

- Do not drive through flooded areas - the water can be deceptively deep and powerful.
- Listen to local TV and radio broadcasts for severe weather information.
- Prepare an evacuation plan - select a safe destination on higher ground and an evacuation route that avoids flood prone areas.
- Assemble a disaster supply kit.
- Purchase a National Weather Service Radio.
- If you evacuate, turn off lights and unplug all unnecessary appliances.
- If you need information, do not call the fire or police departments. Call the Emergency Management Coordinator at (704) 920-5528.

IMPORTANT NUMBERS

Planning and Neighborhood Development	(704) 920-5152
GIS and Mapping	(704) 920-5135
Emergency Management	(704) 920-5528
Stormwater Services	(704) 920-5360
Customer Care Center	(704) 920-5555

City of Concord Planning and Neighborhood Development Department
66 Union Street South—PO Box 308
Concord, NC 28026-0308

www.ci.concord.nc.us

FLOOD INSURANCE

Homeowner's insurance policies **do not** cover flood damage. Therefore, Congress created the **National Flood Insurance Program (NFIP)** in 1968. NFIP was created in order to provide affordable insurance for property owners. Concord participates in NFIP, and flood insurance is available for properties inside and outside of the floodplain. Policies are available on most enclosed buildings and their contents, including single family homes, condominiums, mobile homes on foundations and nonresidential structures. A 30 day waiting period is applicable and policies are in effect for a period of one year. Flood insurance is mandatory for federally financed loans when buying, building, or improving structures in the floodplain. Local insurance agents can assist citizens with specific rates and coverage.

Concord participates in the Community Rating System (CRS) program, which allows for reduced premiums for flood insurance. As part of the participation in the CRS program, the City's Planning and Neighborhood Development Department has a **Certified Floodplain Manager (CFM)** who can answer questions about flooding, development requirements that are more stringent than minimum federal standards and regulations for stormwater management. In addition, publications about flood insurance are available at the Cabarrus County Public Library at 27 Union Street, North.

PROPERTY PROTECTION MEASURES

The most obvious way to avoid flood damage is to not build any permanent structures within the floodplain. However, existing structures that are located below the **Base Flood Elevation (BFE)** may be elevated in order to minimize potential damage. The Planning and Neighborhood Development Department can provide a list of contractors and consultants who are knowledgeable with floodproofing and retrofitting techniques. Publications discussing floodproofing and mitigation measures are available at the Cabarrus County Public Library, and through the City's Emergency Management Coordinator.

Additionally, property can be protected by:

- Placing outdoor plants, lawn furniture and small objects on higher ground where they cannot be impacted by floodwaters;
- Placing sandbags where water might enter living spaces; and
- Placing valuables and furniture in higher areas of the dwelling.

NATURAL AND BENEFICIAL FUNCTIONS

During large rain events, the water in streams flows very rapidly. This water can severely erode the stream banks releasing sediment and causing trees to fall into the streams.

When the water overflows its stream banks, the water spreads out, providing several benefits. The water velocities decrease and the floodplain protects the stream banks by slowing the water. An undisturbed floodplain also stores extra floodwater, reducing the flooding effects downstream. The floodplains also provide stormwater filtration during smaller rain events which helps maintain healthy stream habitats and improve and maintain water quality. Floodplains may also be home to special species of plants and animals that serve important environmental functions.

Approximately 3,566 acres, or 9.3% of the total land area of Concord lies within the Special Flood Hazard Areas. Call the Planning and Neighborhood Development Department at (704) 920-5152 to determine the status of your property.

When dry, floodplains also are an important recreational asset. They provide open space and areas for active and passive uses. The City has developed several parks within floodplain areas. These parks include Caldwell Park, Dorton Park, McGee Park and the Three Mile Branch Greenway. These parks provide opportunity for the citizens to explore natural floodplain areas and learn about water quality and floodplain protection.

FLOODPLAIN DEVELOPMENT PERMIT REQUIREMENTS

A floodplain development permit is required for all development within a 100 year floodplain. The Planning and Neighborhood Development Department (704-920-5152) can provide details on the types of approvals necessary for new construction or improvements within the floodplain. If the City were to not require floodplain development permits, flood insurance through NFIP would not be available to the citizens of Concord.

Permits are required for any development or grading within the SFHA

The Planning and Neighborhood Development Department maintains records for properties developed within the floodplain. Historical flood elevation certificates are available for review. Development in the floodplain without a permit is a violation of the City's Ordinance. Please call 704-920-5152 to report violations.