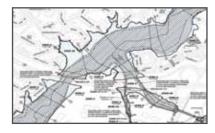
What's a floodplain map?

You may call it a flood map. Or a flood zone. Or a mapped floodplain.

A floodplain map shows how likely it is for certain buildings or sections of land to be flooded during a storm event.



The land along major creeks and streams with at least a one percent chance of flooding in any given year is officially called a Special Flood Hazard Area (SFHA). The SFHA is what is shown on a floodplain map. There are additional rules and requirements for development in the SFHA.

Inside the SFHA, flood risks are not the same. Land closest to the creek channel is usually more likely to flood. Low-lying land anywhere in the SFHA usually is at greater risk of flooding than land in the SFHA with a higher elevation.

The SFHA is shown as "Zone AE" on Flood Insurance Rate Maps (FIRMs). FIRMs are used to determine which property owners in the SFHA are required to have flood insurance and how much the flood insurance policy should cost.

This newsletter frequently mentions floodplains and floodplain maps. In each case, we're talking about the mapped, regulated floodplain known as the Special Flood Hazard Area and the official maps which show that higher-risk area in Charlotte-Mecklenburg.

New floodplain maps

Floodplain maps are changing, but not your need for flood insurance

Flood risks change over time so floodplain maps must be revised to accurately show risk. Over the next several years, updated floodplain maps are taking effect throughout Charlotte-Mecklenburg.

The new floodplain maps are not all taking effect at the same time. And the impact on each property is not the same.

On page 2, find out when the new maps take effect for your property and learn how floodplain maps are used.

Remember, floodplain maps don't create floodplains. Nature created floodplains to store excess water. Maps show the flood risk so you can take action to protect your family and your property.

See the proposed floodplain maps at http://mapserver.mecklenburgcountync.gov/fmr/or call 704-432-RAIN.

Remapping reminders:

Keep your flood insurance. During the remapping process, do not cancel or drop your flood insurance. Getting a new policy may cost you significantly more.

Moving the line does not make the risk disappear. If you are mapped out of the floodplain, consider maintaining your flood insurance policy. Your premiums will cost less if your official risk has gone down.

If your house is mapped into the floodplain, get flood insurance policies for **both your buildings and your belongings.**

Watch your mailbox. Storm Water Services will let you know about public meetings where the proposed maps will be explained.

You own property in a floodplain

Flooding is a natural occurrence during or after heavy rain. This annual newsletter is to help you understand the risks and responsibilities of living in a mapped, regulated floodplain.

Flood facts

- Flooding causes more property damage and more deaths in Charlotte-Mecklenburg than any other type of natural disaster.
- Flooding can happen anywhere, even outside of mapped floodplains.
- Your property's flood history is not a good indicator of its flood risk.
- There are more than 4,000 buildings in Charlotte-Mecklenburg's regulated floodplains.
- Smaller streams and low-lying areas are not shown on floodplain maps but can still flood.
- Regular homeowners insurance doesn't cover flood damage.
- Rules for construction, renovation, filling and paving are more restrictive in the floodplain.

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Saving lives and property

Storm Water Services continues to expand its network of rain gauges, stream gauges and creek cameras. This network is known as the Flood Information & Notification System or FINS.

When heavy rain starts falling



and creeks start rising, FINS automatically notifies local emergency responders. Firefighters and police go to rising streams or low-lying areas to decide whether to barricade roads or evacuate residents.

Concerned about flooding?



Build your flood:

Awareness

Responsibility

Knowledge

: Why does it flood so often in Charlotte?

A: The main reason is heavy rain. Charlotte gets more rain each year than Seattle does, in less time. Much of our rain comes from tropical storms and intense thunderstorms. One inch of rain falling on one square mile creates 17 million gallons of water. One inch of rain in an hour can cause urban flash flooding affecting streets, creeks and buildings.



Updated floodplain maps are more accurate

Charlotte-Mecklenburg Storm Water Services is in a multi-year process to remap all local Special Flood Hazard Areas (SFHA) and create new Flood Insurance Rate Maps.

The Special Flood Hazard Area is also called:

- 100-year floodplain
- 1% chance floodplain
- mapped floodplain
- regulated floodplain
- · flood zone.

The county was divided into four geographic areas called phases. New floodplain maps for Phase 1 took effect on Feb. 19, 2014. This area includes central and southeastern Charlotte-Mecklenburg.



Within Phase 1, new floodplain maps for Little Hope Creek near Tyvola Road are undergoing an additional revision. Corrected maps for Little Hope Creek will take effect later this year.

Phase 2: western Mecklenburg and many riverfront properties

Most of western Charlotte-Mecklenburg is in Phase 2. New maps for this section are now in the preliminary stage and undergoing a year of final reviews. Phase 2's new floodplain maps are to take effect in 2015.

Phase 3: northeast Mecklenburg

Phase 3 covers the northeastern section of Charlotte-Mecklenburg. Draft maps are now being developed. New floodplain maps for this area will likely take effect in 2016.

Phase 4: most lakefront property

Floodplain maps along Lake Norman and Lake Wylie are Phase 4. A remapping date is to be set by the state of North Carolina.

New technology and thorough reviews

To create new floodplain maps, laser pulses of light called LIDAR are used to precisely measure slight variations in the contours of the land. By determining the higher and lower points of the land's surface, we know where floodwater is likely to flow. Creating updated topographic maps is an important part of the remapping process.

The maps also undergo extensive reviews by the Federal Emergency Management Agency (FEMA) for accuracy and consistency.

Throughout the remapping process, the public is invited to see proposed maps, ask questions and point out concerns. New information is also posted at http://StormWater.CharMeck.org. Look under "Drainage and Flooding."

Why floodplain maps are changing

The new maps will replace maps which used data from 1999. Land use and even our climate have changed in the past 15 years. Also, improved technology helps us more accurately predict where floodwater will flow and how deep it will be. Using more accurate data, the new maps give a more precise picture of flood risk.

See the new floodplain maps at http://StormWater.CharMeck.org

Left side: "Maps"

To see proposed floodplain maps: "Draft and Preliminary Floodplain Maps"

To see current floodplain maps: "3D Floodzone"

Type in your address. Words and colors are used to define and explain your property's flood risk. Remember that flooding can occur anywhere, including outside of mapped floodplains.

One map, two floodplains

Charlotte-Mecklenburg's new floodplain maps will continue to show two floodplains. The FEMA floodplain shows where flooding is likely to occur now. In the FEMA floodplain, flood insurance is required. Local maps also show the Community Floodplain. This area's flood risk will continue to increase as land upstream is built upon. In the Community Floodplain, flood insurance is not required but is highly recommended. Floodplain development restrictions apply in both the FEMA and Community Floodplains.

Construction in a floodplain

A Mecklenburg County **Floodplain Development Permit** is required for any

- new building construction
- · building renovation or addition
- land-altering activity such as grading, filling or paving

in the Special Flood Hazard Area in Charlotte-Mecklenburg.

There are limits on how much money you can spend to renovate or repair your home or business in the regulated floodplain. The limits apply to one-time expenses as well as different projects over a 10-year period. This **substantial improvement rule** applies to structures in the regulated floodplain which



do not comply with the newest floodplain regulations.

Before you grade, build or renovate in the regulated floodplain, call Storm Water Services at **704-432-RAIN** or email **floodinfo@MecklenburgCountyNC.gov**.

Flood safety

Flooding is common

Flooding is caused by too much rain in a short amount of time. Charlotte-Mecklenburg averages more than four significant floods each year, most in the summer and early fall. And 83 percent of local floods are flash floods with little warning.

Flooding is costly

Floods cause more damage in Charlotte-Mecklenburg (and in the nation) and cost more money than any other type of natural disaster.

Flooding is deadly

In the past 20 years, flooding has killed more people in Charlotte-Mecklenburg than lightning and tornadoes combined.

Before it floods:

- Buy flood insurance or review your policy.
- · Have an evacuation plan.
- Create a flood file with info about your flood insurance policy and valuables.
 Store the file in a safe, dry place.



 Maintain your drain. Remove trash and fallen leaves from storm drains near your property.



- Don't rake or blow leaves or grass clippings into the street, storm drains or creeks. It's against the law to throw anything into a public drainage system. Report violations to 311.
- Pay attention to flood watches and warnings on local radio and TV stations such as WBTV, WCCB, WCNC or WSOC, or on weather websites.

During a flood

- If lives or property are in danger, call 911
- Turn off electric and gas service to your home or business.
- If told to evacuate, do so immediately.
- · Don't drive or walk through floodwater.

After a flood

- Avoid direct contact with floodwater because it is often contaminated.
- Check for structural damage before re-entering a flooded building.
- Report downed power lines or suspected natural gas line ruptures.
- Throw away food, medicine and any item that came in contact with floodwater and cannot be disinfected.

Flood insurance

Flood damage is not covered by regular homeowners or business insurance. You need a separate flood insurance policy.

- Everyone is eligible to buy flood insurance, even for property outside of the regulated floodplain.
- Your mortgage lender may require that you have flood insurance but that policy usually covers only the building.
- You should get a separate flood insurance policy for your belongings such as furniture, clothing and electronics.
- Renters should buy flood insurance for their contents.
- After a typical flood, it costs more to replace damaged belongings than to repair damaged buildings.
- There's a 30-day waiting period before a flood insurance policy takes effect.
- Because of local efforts to reduce flood risks, property owners in Charlotte and Pineville floodplains get discounts of up to 25 percent on their flood insurance premiums.
- Flood insurance rates are set nationwide and do not differ from company to company, or agent to agent.
- To find a flood insurance agent or estimate your premiums, call the National Flood Insurance Program at 1-888-379-9531 or go to www.floodsmart.gov.



Six inches of floodwater inside an average Charlotte home causes \$30,000 damage. That costs you a lot more than a flood insurance policy.



700 North Tryon Street, Charlotte, NC 28202







Who to contact

Minor flooding or drainage problems, report illegal dumping, or to volunteer: **311** or **704-336-7600**

Floodplain maps, Floodplain Development Permits, floodplain construction, flood safety: 704-432-RAIN

Flood insurance: **1-888-379-9531**

http://StormWater.CharMeck.org

FLOODPLAIN FLASH — SPRING 2014

Protecting your property

The most effective way to protect a building from flood damage is to move it out of the floodplain. Another option is to elevate the structure above flood heights.

Elevate electrical panels, air conditioners, heat pumps, furnaces, fuel tanks, water heaters and plumbing systems at least 12 inches above projected flood heights. Install a sewer backflow valve and keep it maintained. Flow vents in crawl spaces or making basement walls watertight can reduce flood damage.

Keep sandbags, plastic sheeting and plywood on hand for emergency protection against minor flooding.

In some cases, government funding may be available to help reduce flood losses. Call 704-432-RAIN for more information.



Benefits of floodplains

Floodplains are meant to flood. One acre of undeveloped floodplain can temporarily store 1.5 million gallons of floodwater.

Floodplains can reduce water pollution. Plants naturally found in floodplains filter out pollutants such as sediment, excess nutrients and some harmful chemicals.

Floodplains are important to the environment. Many birds, mammals, insects and reptiles depend on floodplains for food and nesting areas. Storm Water Services works to protect and restore streams and surrounding floodplains to improve water quality and aquatic life habitat.