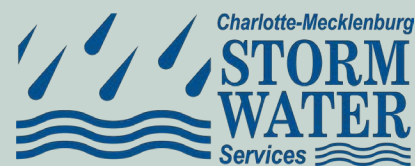




2145 Suttle Avenue, Charlotte, NC 28208

- Important news for owners and renters of property in the regulated floodplain
- Major discounts on flood insurance policies
- Is your property eligible for a floodproofing grant?
- Protect what matters!

See inside for details!



### Who to contact:

Minor flooding or drainage problems, report illegal dumping,

or to volunteer:

3-1-1 or 704-336-7600

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

Flood insurance: 1-800-427-4661

StormWater.CharMeck.org

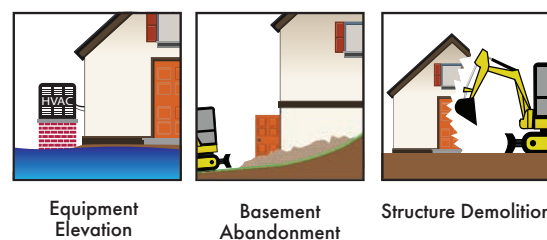
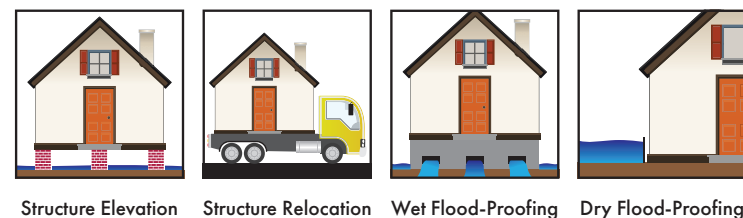
Stay updated by following us on social media!

## Is Your Property Eligible for a Flood Mitigation Grant?



Through the retroFIT (Floodproofing • Improvements • Together) program, Mecklenburg County offers financial and technical assistance to property owners that undertake flood damage reduction measures for existing buildings in the regulated floodplain. Financial grants of 75% to 95% of eligible expenses are available for qualified projects. The program is intended to assist floodplain property owners who may not be currently served by other mitigation efforts (e.g. creek restoration/mitigation projects or buyout programs) and are at risk for future flood losses. Get more information from our website at <https://charlottenc.gov/StormWater/Flooding/Pages/retroFIT.aspx>

There are seven flood damage reduction techniques considered for RetroFIT grant funding:



FOR OWNERS AND RENTERS OF PROPERTY  
WITHIN THE REGULATED FLOODPLAIN IN  
MECKLENBURG COUNTY



# FLOODPLAIN FLASH

## Your Property is in a Regulated Floodplain

You are receiving this newsletter because your property is in or near an area that is prone to flooding. Flooding is a natural occurrence during or after heavy rain. Flooding can be dangerous and deadly. This annual newsletter is to help you understand the risks and responsibilities of living near a mapped, regulated floodplain.

## Flood Facts

- Flooding causes more property damage and more deaths in Mecklenburg County than any other type of natural disaster.
- We expect creeks to overflow their banks into the floodplain during large or prolonged rainfall.
- Your property's flood history is not the best indicator of future flood risk.
- Smaller streams and low-lying areas are not shown on floodplain maps but can still flood.
- Rules for construction, renovation, filling and paving are more restrictive in the regulated floodplain.

## What's Inside:

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## 2022 Rainfall Recap

The year started with a cold January and a little snow. It snowed on three different occasions totaling 4.3 inches, and that was all the snow for the rest of the winter.

During the year, precipitation over Mecklenburg County had its ups and downs, with dry months followed by wet months. In February, the official rain gauge at the airport recorded 2.65 inches but in March 6.05 inches of rain fell. June was dry with only 1.17 inches of rain, while July was wet with 5.51 inches.

Typical summer thunderstorms in Mecklenburg County move slowly and can produce a lot of rain in a short period of time. That was the case this past July when three separate thunderstorms produced rainfall exceeding 100-year events. In these cases, it was more than 1.56 inches of rain in 15 minutes. Flooding occurred in Mint Hill and Matthews in areas well outside the floodplain.

There were two tropical systems that brought rain to the region. The remnants of Hurricane Ian dropped 2.54 inches of rain at the end of September and the remnants of Hurricane Nicole in November delivered .76 inches. Both totals were below the forecasted amount.

Sandwiched between the two tropical systems was a very dry October, with only .71 inches of rain. Drought conditions were observed across much of North Carolina.



McMullen Creek over topping Addison Dr.



Flood water at Briar Creek and Shamrock Dr.

## Flood Risk Reductions efforts get National Attention



Program Manager Tim Trautman appearing on the WX Channel

Mecklenburg County Storm Water Services (STW) has been getting national attention for its extensive floodplain risk reduction efforts to help mitigate flood losses. During the past year, STW staff have been interviewed by The WX Channel, PEW Charitable Trust, Associated Press and Rockefeller Institute of Resilience.

Since the late 1990s, Mecklenburg County has purchased more than 450 homes and business. Removing these properties from the floodplain is the

most cost-effective ways to mitigate flood losses. The program is voluntary. To date over \$30M in losses have been avoided and that number is estimated to grow to \$300 million as flood occur in the future.

To guide risk reduction efforts and track progress, STW created a flood Risk Assessment Risk Reduction (RARR) plan that has a calculated flood risk score for every property in the floodplain in Mecklenburg County. The scoring system assigns flood risk points for various building features impacted by flooding. Examples include crawl-space flooding, living space flooding and flooding of mechanical equipment. More points are assigned as the frequency and severity of the impacts increase, and higher points are indicative of higher flood risk. The RARR Plan also evaluates mitigation options for each flood prone structure in Mecklenburg County and determines their effectiveness and viability.

In the fiscal year 2022, STW purchased 6 properties in Mecklenburg County. Through the County's retroFIT program, STW helped mitigate 6 more homes by either elevating mechanical equipment, home elevation or a demolition and rebuild. The total RARR score were reduced by 9,425 points which was well above the goal of 5,400 points.

If you who like to check to see if your properties property qualifies for a retroFIT grant or buyout, please go to our website [Storm-Water.CharMeck.org](https://Storm-Water.CharMeck.org) and click the Flood tab.



FLOODPLAIN FLASH – WINTER 2022/23





## Flood Warning System Saves Lives and Protects Property

Charlotte-Mecklenburg 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.



## See Your Flood Risk in 3D

Typical floodzone maps depict the floodplain areas in only two dimensions: length and width, showing how far floodwater will spread across the ground. Our floodplain maps add information on the flood height and show how deep and even how fast the floodwater will get. Adding the third dimension (height) is why the latest maps are referred to as "3-D".



## How To Reduce Flood Damage To Your Home

- On-site retrofitting technical assistance
- Flood insurance questions
- Information on financial assistance

Visit [stormwater.charmeck.org](http://stormwater.charmeck.org) or call 3-1-1 for more information

## Rainfall and Flood Data at Your Fingertips

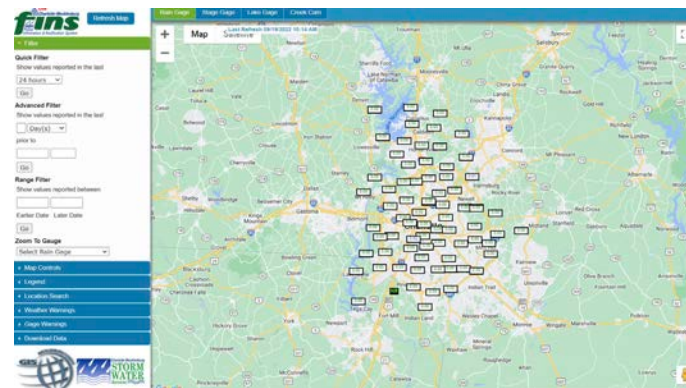
Charlotte-Mecklenburg Storm Water Services is partnered with the Charlotte USGS office to operate one of the most extensive rain and stream gauge network in the country making it easier for residents to find real-time rainfall and stream height information. The Flood Information and Notification Systems or FINS page is located on [StormWater.CharMeck.org](http://StormWater.CharMeck.org). The notification system is the home of more than 70 USGS rain gauges, more than 50 USGS stream height gauges and 65 low-cost stream height gauges spread throughout the County.

The rain and stream gauges act as an early warning system for rising stormwater in area streams. When a rain gauge or stream gauge hit a predetermined threshold, an alert is automatically sent to Charlotte Fire to investigate. If necessary, emergency personnel will take action to protect the public by closing roads or evacuating people from structures prior to flood water reaching dangerous levels.

Images from 20 creek cameras are also found on the page. Additional stream gauges and cameras will be added to the page in 2023.

[StormWater.CharMeck.org](http://StormWater.CharMeck.org)

FINS page [https://www.youtube.com/watch?v=NIAG7d\\_ksw](https://www.youtube.com/watch?v=NIAG7d_ksw) Explanatory video



## The Science of Measuring Flood Risk

Flood risks change over time due to many factors. Floodplain maps must accurately reflect those risks to better protect people, property and the environment in Mecklenburg County.

To ensure public safety, Storm Water Services works with the State of North Carolina and the Federal Emergency Management Agency (FEMA) to update flood maps on a regular basis.

New computer modeling technology is aiding Storm Water Services in the process of creating 1D and 2D floodplain maps. These models will help calculate and forecast flood risk in various parts of the City and County.

1D and 2D hydraulic models are used to describe the motion of water. A 1D model schematic represents the channel and the floodplain as a single joined waterway branch comprising a series of spaced cross sections. Model calculations are along the creek channel. For 2D models, the digital topographic information for the study area is projected onto a 2D model grid or mesh. Modeling of 2D calculations include both sides of the creek channel. Full 2D models can provide a detailed description of the flow in urban or rural floodplains and overbank areas. Full 2D models are more computationally demanding than 1D models.

## Who To Contact:

## StormWater.CharMeck.

To report minor flooding or drainage problems, illegal dumping, or to volunteer: 3-1-1 or 704-336-7600

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

Flood insurance: 1-800-427-4661



## Protect Your Family and Your Property From Flooding

Over the past 40 years, several hundred properties in our floodplains have experienced repetitive losses under FEMA's National Flood Insurance Program (NFIP). We are concerned about repetitive flooding and have an active program to help you protect yourself and your property from future flooding. [Here are some things you can do:](#)

### Ask us!

Our staff can tell you about the causes of repetitive flooding, how we are addressing it, and what would be an appropriate flood protection elevation for your home.

### Prepare for flooding!

- Know how to turn off the electricity and gas to your house.
- Know evacuation routes from your home or business.
- Create an inventory of personal property and save receipts from expensive items.
- Put insurance policies, valuable papers, medicine, etc., in a safe place.
- Sign up for emergency alerts at [charmeckalerts.org](http://charmeckalerts.org) and follow us on social media.

### Protect your home!

- Consider elevating or relocating your house or equipment above flood levels.

### Need financial assistance?

- Our retroFIT grant program could reimburse up to 75-95% of the cost to retrofit your existing structure for floodproofing.
- Your property may qualify for our buyout program. Buyouts may be funded with a combination of local funds and federal grant money or may involve sole local funding source.

### Protect what matters- Buy flood insurance!

- Go to [floodsmart.gov](http://floodsmart.gov), contact your insurance agent or call 1-800-427-4661 for more information on rates and coverage.

## Be the Solution to Water Pollution



Join in on our monthly events



Mark your calendar for Creek Week March 18-25

You can find more event information on our website [StormWater.CharMeck.org](http://StormWater.CharMeck.org)

## Construction in a Floodplain

A Mecklenburg County Floodplain Development Permit is required for any

- new structures or buildings,
- building renovation or addition, or
- land-altering activity such as grading, filling or paving in the Special Flood Hazard Area.

There may be 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 multiple 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](mailto:floodinfo@MecklenburgCountyNC.gov)



Visit [StormWater.CharMeck.org](http://StormWater.CharMeck.org) for the latest updates and grant application announcements.



Printed on recycled paper, 30% post-consumer waste.

## Flood Insurance – Protect What Matters!

Flood damage is not covered by regular homeowners, renters 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 contents 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.
- 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 1800-427-4661 or go to [floodsmart.gov](http://floodsmart.gov) for more information.



## Flood Insurance Discounts!

The National Flood Insurance Program/Community Rating System evaluates community efforts to reduce flood losses. Discounts on flood insurance policies are offered by the National Flood Insurance Program (NFIP) to residents of the following municipalities:

- City of Charlotte residents can receive up to 35% discount.
- Towns of Huntersville & Pineville residents can receive up to 25% discount.
- Residents of Mecklenburg County Land Use area south of Pineville can receive up to 25% discount.