

Neighborhood Roundtable



Stormwater Spotlight

September 15, 2025



Public Works

Maria Price, PE - Assistant City Engineer / Stormwater Division Director

Ken Martin - Code Enforcement Inspector / Floodplain Coordinator

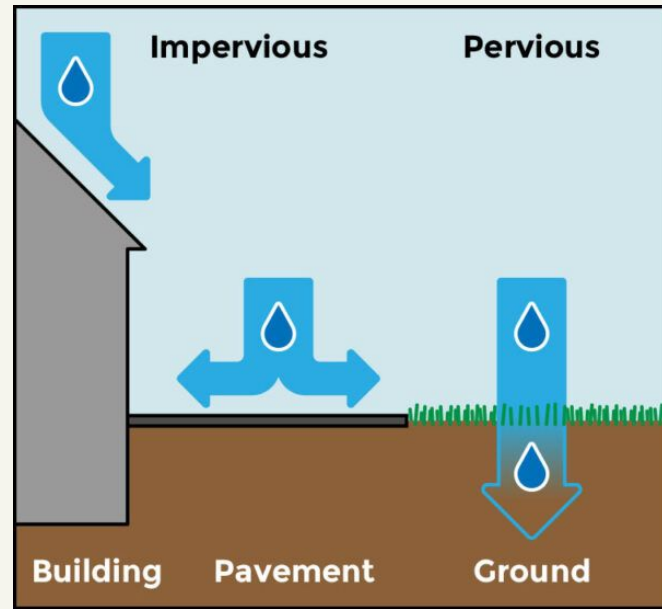
Agenda

- What is Stormwater?
- Stormwater Fees
- Program Offerings
 - RainSmart
- Drainage Policy / 311
- Floodplain Management



What is Stormwater?

- Precipitation (rain and snow) that doesn't soak into the ground but instead runs off land and impervious surfaces, picking up pollutants like trash, oil, and fertilizers before flowing into storm drains, rivers, and other waterways. This runoff can cause flooding and water pollution, which impacts human health and aquatic ecosystems, making stormwater management essential.
- Pervious vs Impervious Surfaces
- Types of water utilities
 - Drinking water (private)
 - Stormwater (City)
 - Wastewater (City)
 - Combined Sewer areas (City)



Stormwater

- Historic Flooding
- TVA / Roosevelt Administration
- WPA Ditches
- Brainerd Levee



Brainerd Levee

- Flood prevention - Storage
- Spans 125 acres
- Protects over 3,000 parcels
- Managed as Small Wildlife area (nationally recognized for birds)
- South Chick Greenway



Chattanooga Creek Litter Boom

Installed May 2023. Thru June 2025,
Over 3 tons of trash and debris (tires/tanks)
kept out of the TN River!



Stormwater Fees

- Can appeal if parcel has no impervious area (eg. field).
- All residentials pay same amount unless HOA owned (then based on amount of imperv surface).
- RainSmart Yards discount program
- United Way Stormwater Fee Assistance Program
 - The City of Chattanooga has partnered with United Way of Greater Chattanooga to provide additional assistance to homeowners who qualify for Tax Relief, Tax Freeze, or both by paying the stormwater fee on their current City of Chattanooga property tax bill (up to \$183.54).



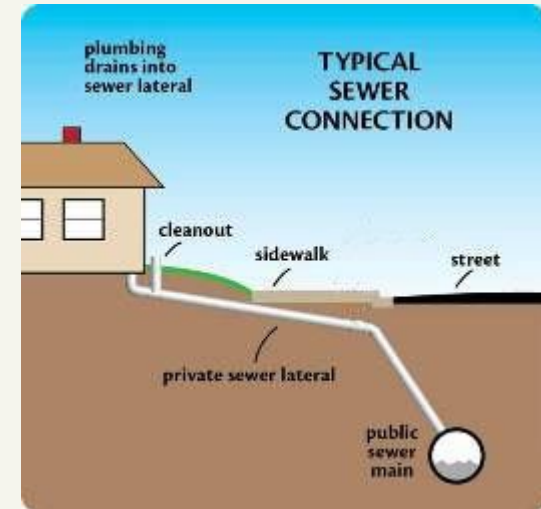
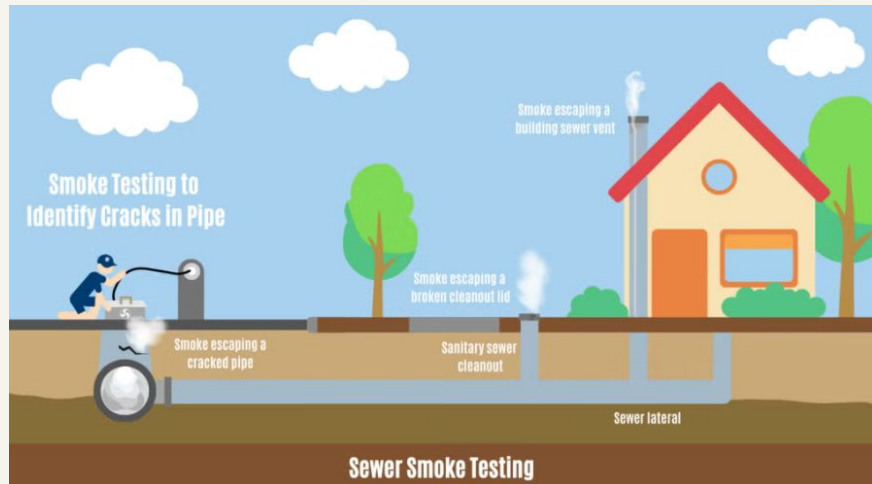
Single Family Residential (SFR) Pond Maintenance Program

- An initiative to improve the condition of privately owned detention & retention stormwater ponds.
- Help improve water quality and educate citizens about stormwater control measures (SCMs).
- Application on chattanooga.gov
- Ponds will be assessed and prioritized for an initial rehabilitation if needed, and/or possible retrofitting for water quality improvements.
- After this initial improvement, the City will take over functional maintenance.
- General maintenance will still be the responsibility of the property owner(s) or Homeowners Association.

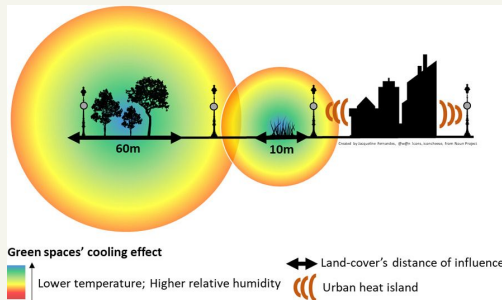


Sewer Lateral Assistance Program (SLAP)

- Provides financial assistance to low-income residents of Chattanooga for the repair or replacement of defective sewer laterals. A licensed plumber conducts repairs under contract with the city.
- Covers the full cost to repair or replace the sewer lateral from the exterior of the home to the connection with the sewer main for qualified homeowners.



Heat Island Reduction



Stormwater Management



Carbon Sequestration

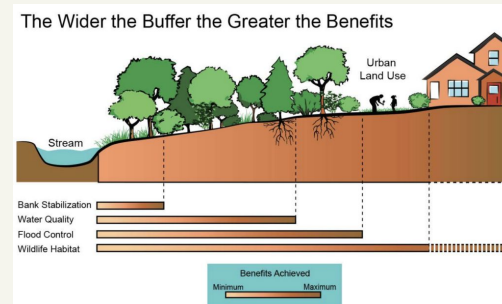


25%

of our carbon emissions have historically been captured by Earth's forests, farms and grasslands

Benefits of Native Plants

Improved Water Quality



Wildlife Habitat + Food Web Support



Benefits of Native Plants

Reduced Inputs & Pollutants



© The City of Chattanooga

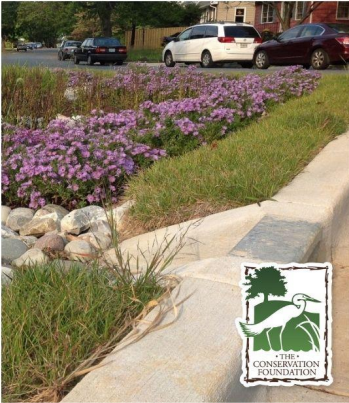


How do we combat these challenges? Native plants and green infrastructure!

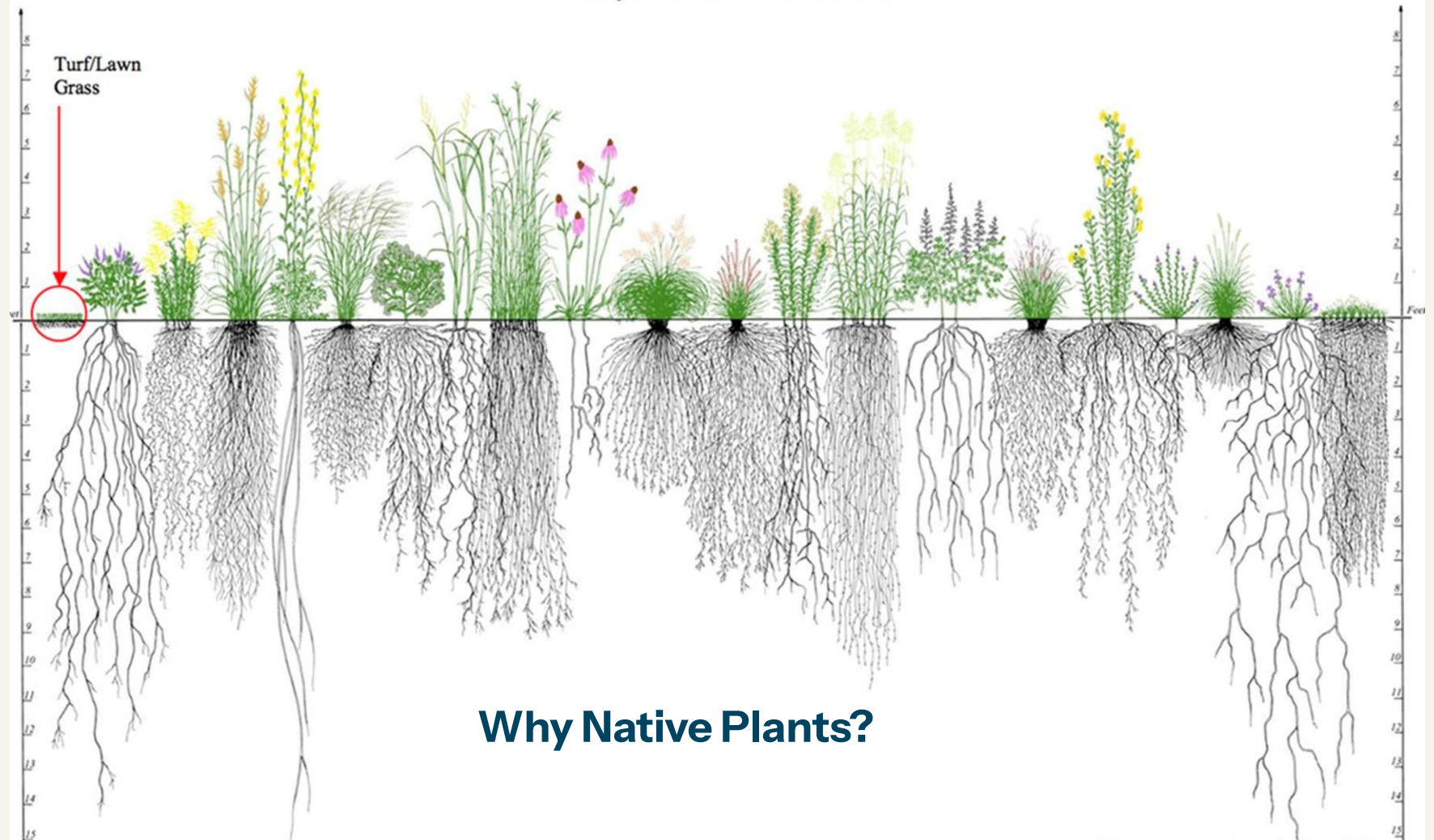
GRAY VS. GREEN INFRASTRUCTURE

Gray infrastructure directs stormwater somewhere else.
Examples: storm sewer systems and water treatment plants.

Green infrastructure keeps rain where it falls, allowing it to soak into the ground.
Examples: rain gardens, bioswales, and green roofs.



Root Systems of Native Plants



Why Native Plants?

Debunking Common Misconceptions About Native Plants

Native plants **DO**:

- ✓ Create a balanced ecosystem, thus increasing predation for pests
- ✓ Increase visual curb appeal with color and texture
- ✓ Promote better water quality & stormwater infiltration
- ✓ Shown to improve mental and physical health outcomes in numerous studies

Native plants **DON'T**:

- ⊗ Invite large populations of vermin, snakes, or pests
- ⊗ Produce wild and unruly landscapes (*when properly maintained, like any landscape!*)
- ⊗ Attract mosquitoes (*native plants are excellent infiltrators of stormwater, minimizing conditions for mosquitoes to breed*)

A graphic element of the RainSmart logo, consisting of a blue teardrop shape on the left and a green teardrop shape on the right, with white diagonal stripes on the green portion.

RainSmart

Incentivizing Residential Stormwater Management & Ecological
Restoration

CITY OF CHATTANOOGA STORMWATER DIVISION

RAINSMART REWARDS PROGRAM

*Chattanooga's
environmental
incentive
program!*

Get awarded
for:

- ✓ Supporting biodiversity
- ✓ Managing stormwater
- ✓ Reducing erosion



**APPLY FOR
RAINSMART
REWARDS!**



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RAINSMART REWARDS PROGRAM



RAIN GARDENS

RAIN GARDENS UTILIZE
NATIVE PLANTS WITH
AMENDED SOIL TO
CAPTURE AND
INFILTRATE
STORMWATER RUNOFF
ON YOUR PROPERTY.

RAIN GARDEN
REIMBURSED UP TO
\$2000



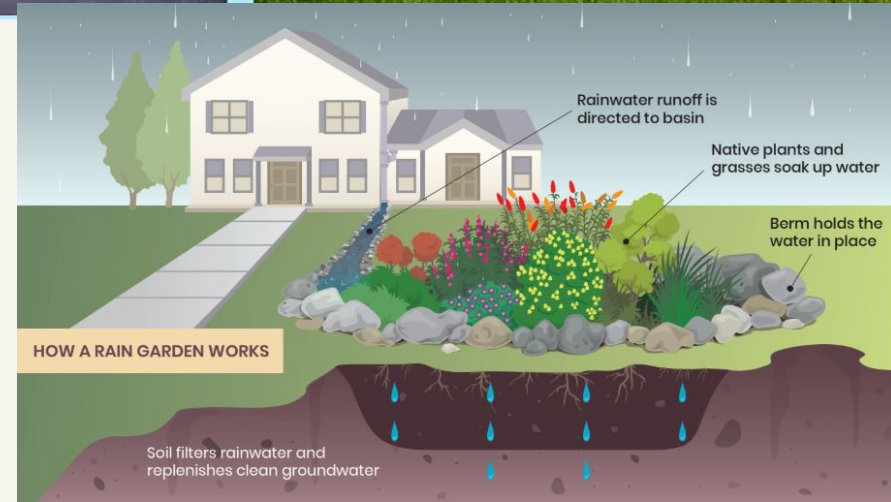
APPLY FOR
RAINSMART
REWARDS!



Rain gardens provide Quality and Quantity improvements

“For example, 10,000 Chattanooga yards with rain gardens installed would prevent 13 million gallons, or 20 olympic-sized swimming pools of rainfall from flowing into the city’s stormwater system during a typical one-inch rain. ”

- Chattanooga.com (Source)



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RAIN BARRELS

RAIN BARRELS
PROMOTE WATER
CONSERVATION AND
HELP TO MITIGATE
RUNOFF BY
CAPTURING AND
STORING RAINWATER.

**RAIN BARREL
REIMBURSED
\$50/BARREL**



**APPLY FOR
RAINSMART
REWARDS!**



RainSmart Rain Barrel Reimbursement

- Encourage homeowners to install rain barrels to capture and store rainwater.
- Helps reduce runoff, lessen erosion, and ease pressure on drainage systems and wastewater treatment facility, promoting better stormwater management and environmental conservation.
- \$75 (50% off retail)
- Install an approved RainSmart Rain Barrel and receive a reimbursement of \$50 per barrel, up to 10 barrels per property
- Event typically in May/June - over 3,000 distributed in 7 years



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CITY OF CHATTANOOGA STORMWATER DIVISION

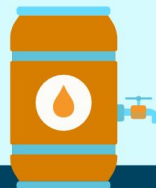
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SUPPORTSCAPES

SUPPORTSCAPES ARE
NATIVE PLANTINGS
THAT IMPROVE WATER
QUALITY, SUPPORT
BIODIVERSITY,
CONSERVE SOIL, AND
RESTORE HABITAT.

**SUPPORTSCAPE
REIMBURSED UP TO
\$1000**



**APPLY FOR
RAINSMART
REWARDS!**



Northshore RainSmart SupportScape Installation Example



Steep lawn = erosion

***SupportScape = erosion control +
stormwater management***



My Tennessee: Clean Water Starts Here

MyTennessee is a program that awards homeowners and businesses for conscientious, creek-friendly landscaping practices.

RainSmart Yards is a program that awards homeowners and businesses for conscientious, creek-friendly landscaping practices that reduce stormwater runoff.



+



City resident incentives— \$\$\$!

Annual water quality fee discount:

- Bronze = 25% off
- Silver = 50% off
- Gold = 75% off

Water quality fee is \$183.54 in 2025

Paired with the RainSmart Rewards Rebate program



Drainage Policy / 311

Notify 311 to report a flooding/drainage issue, storm structure issue, illicit discharge (erosion or chemical), litter, and any other stormwater/water quality related problem.

We're here to help!



City responsibility is defined as drainage work in

- the Right-Of-Way
- an easement on private property dedicated to and accepted by the City
- an implied easement on private property established by installation, repair, or replacement of drainage structures, pipes, or non-earthen channels by the City
- segment of the Works Progress Administration (WPA) ditch system rehabilitated and maintained by the City



Drainage Policy - Private Property

Drainage through private property is the owner's maintenance responsibility.

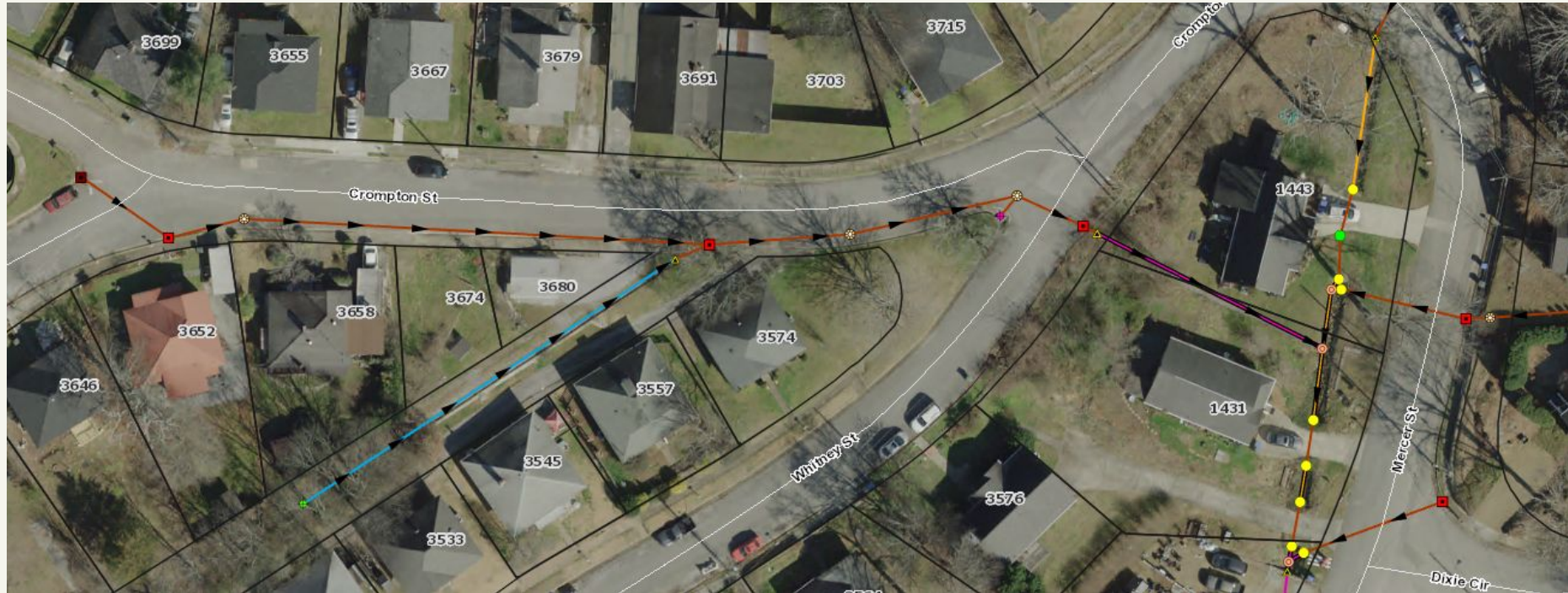
City WILL

- Walk ditch lines and remove blockages/debris by hand (no equipment).
- Remove woody vegetation in the bottom of a ditch/channel exceeding 1" in diameter if it impedes the flow. Vegetation on the slopes will be left in place for stabilization.

City WILL NOT

- Regrade or stabilize ditch lines
- Replace or maintain pipes or other structures (includes sinkholes)
- Cut vegetation that will lie down during high water flow

Maintenance Responsibilities & Asset Management



Safety – water crossings

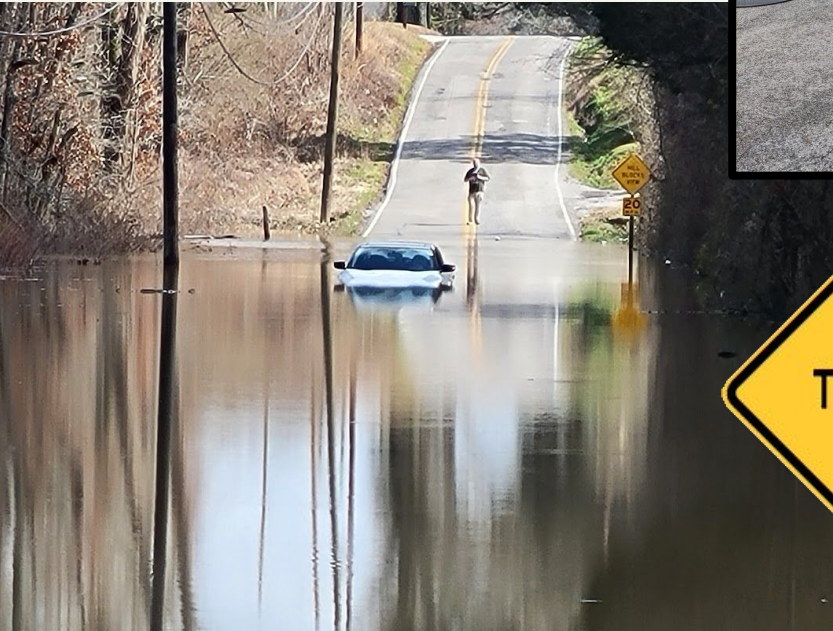
- Flash flooding is the greatest cause of weather-related death in the U.S.
- Approx 50% of those drownings are vehicle related
- 6” of fast-moving flood water can knock over an adult.
- **12” of rushing water can carry away most cars.**
- 2 feet of rushing water can carry away SUVs and trucks.

It is NEVER safe to drive or walk into flood waters.



Flood Preparedness

- Monitoring: gauges
- High water auto road closure system
- Predictive models, assess flood risks
- Issue warnings
- Inundation maps: Army Corps of Eng.
- Flood Viewer Web Map



What is Floodplain Management?



Regulation

Flood Maps

Permitting

Public Communication

WHAT'S NEW IN FLOODPLAIN MANAGEMENT

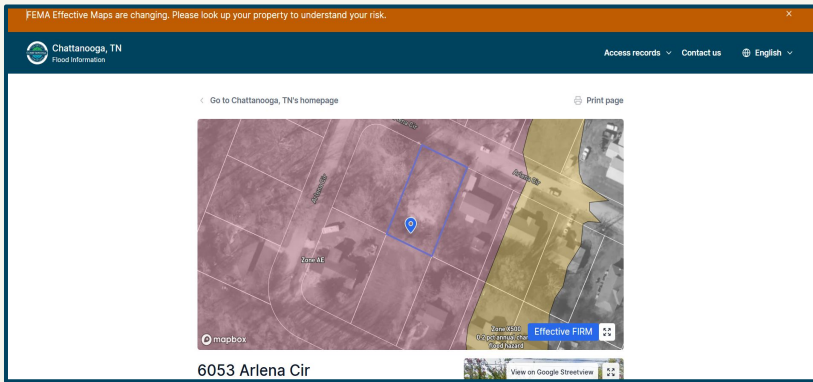
Forerunner Software

Flood Hazard Ordinance

New Middle Tennessee-Chickamauga FIRM Panels
(Flood Maps)

Community Rating System Program

FORERUNNER



Leading floodplain management software in the country!

Designed to consolidate property flood risk information on a single platform!

View property-specific information like elevation certificates, letter of map changes, and flood zones.

Always check the banner for important flood risk information regarding upcoming map changes, storm events, and area flooding.

Zoning Code Update

Flood Amendments

An updated floodplain ordinance is proposed that reflects the new FIRM panels and flood risk reduction higher standards.



Key Benefits to the Update:

- Protecting lives and property by reducing future flooding risk by ensuring new construction and redevelopment are more resilient and better prepared for extreme weather
- Help maintain lower flood insurance rates thru NFIP & CRS Programs discounts
- Aligns local policy with state and federal floodplain requirements which demonstrates proactive action to qualify for grants and disaster assistance
- Preserves natural floodplains and wetlands habitat for wildlife
- Creating opportunities for green space, parks, and recreation areas as flood buffers
- Helps protect vulnerable populations who are most often affected by flooding

NEW FLOOD MAPS

Proposed effective date November 28, 2025

New Data and Updated Models!

**Smarter Development and
Infrastructure Planning!**

**New Areas within Special Flood
Hazard Area!**

Are you in or out?



Benefits of the Community Rating System Program

- Lower flood insurance costs for residents
- Recognition for strong flood management and preparedness
- Encourages long-term planning and infrastructure improvements
- Maintains accurate flood maps and data
- CRS is not just about discounts—it's about creating safer, stronger, and more resilient communities
- It's a win-win— protecting people and property while saving money



311 Help and Information

Notify 311 to report a flooding/drainage issue, storm structure issue, illicit discharge (erosion or chemical), litter, and any other stormwater/water quality related problem.

We're here to help!

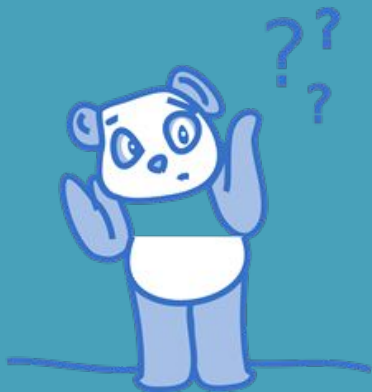


311 is the fastest and most convenient solution for non-emergency situations where Police, Fire, and Ambulance services are not needed to be dispatched.

Download our CHA 311 app to your smartphone

Text 311: message 61222 Phone: 311 or (423) 643-6311

Email: 311@chattanooga.gov



Questions?



Thank you

Maria Price, PE

Assistant City Engineer / Stormwater Division Director

mprice@chattanooga.gov

423-643-5961

Ken Martin

Code Enforcement Inspector / Floodplain Coordinator

kmartin@chattanooga.gov

423-643-5811

Haley Hamblen

Water Quality Specialist 1 / RainSmart Program Manager

hhamblen@chattanooga.gov

423-643-6049



Public Works

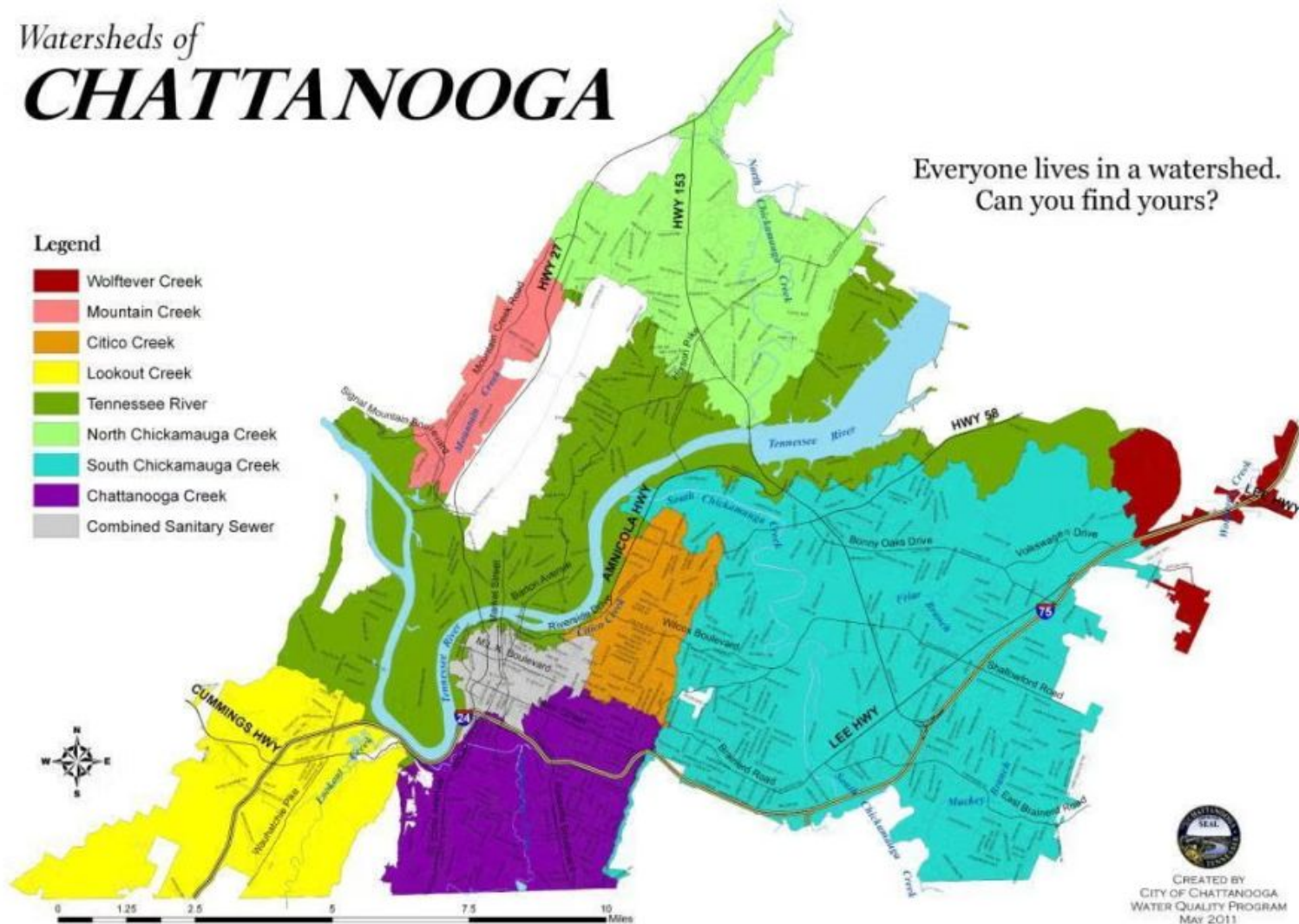


Watersheds of *CHATTANOOGA*

Everyone lives in a watershed.
Can you find yours?

Legend

- Wolftever Creek
- Mountain Creek
- Citico Creek
- Lookout Creek
- Tennessee River
- North Chickamauga Creek
- South Chickamauga Creek
- Chattanooga Creek
- Combined Sanitary Sewer



Safety – water crossings

