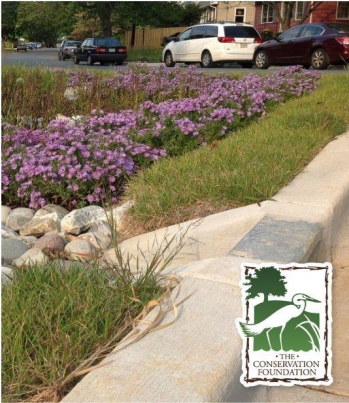


# How do we combat these challenges? Native plants and green infrastructure!

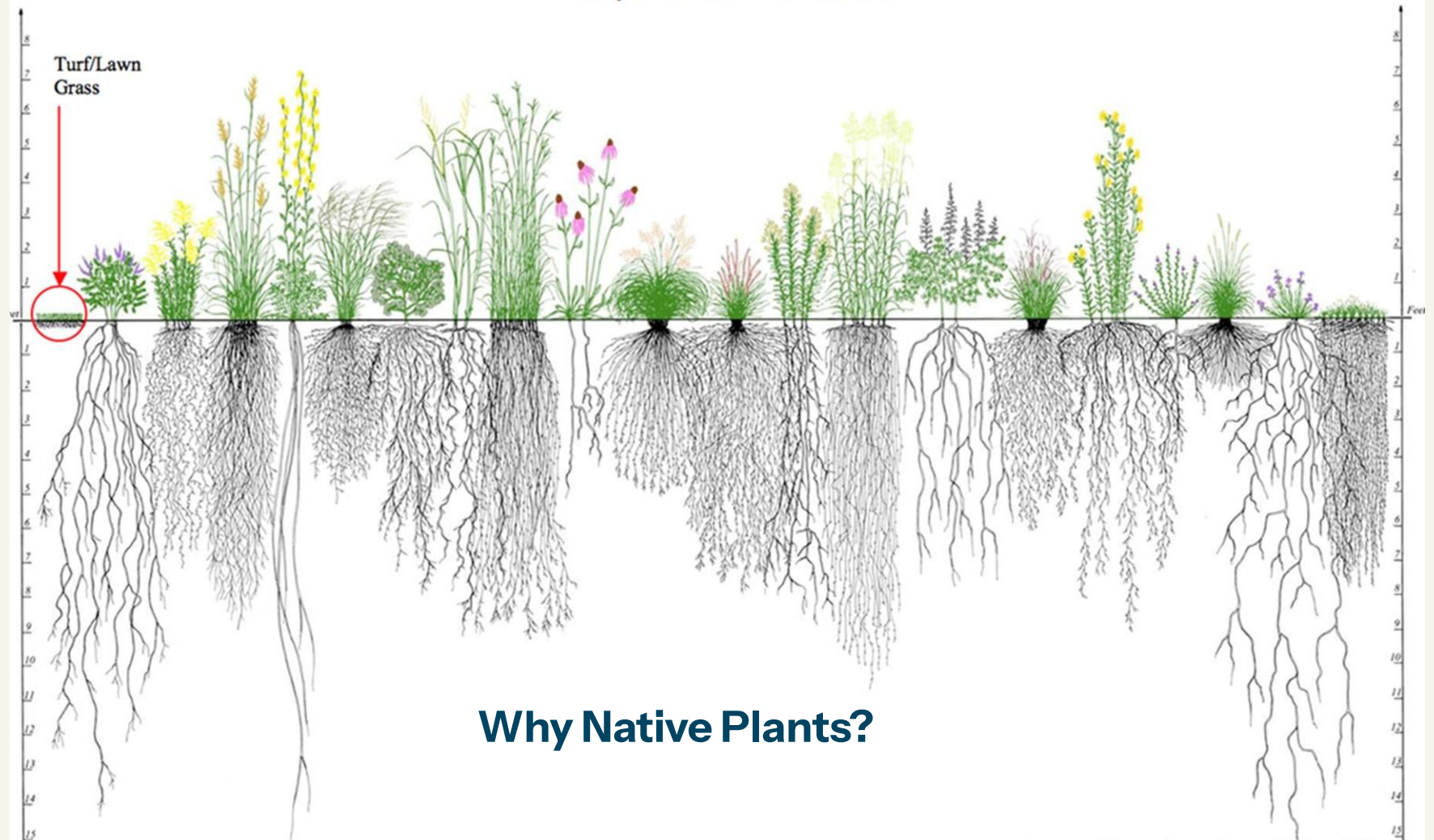
## GRAY VS. GREEN INFRASTRUCTURE

**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 for 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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CITY OF CHATTANOOGA STORMWATER DIVISION

# 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



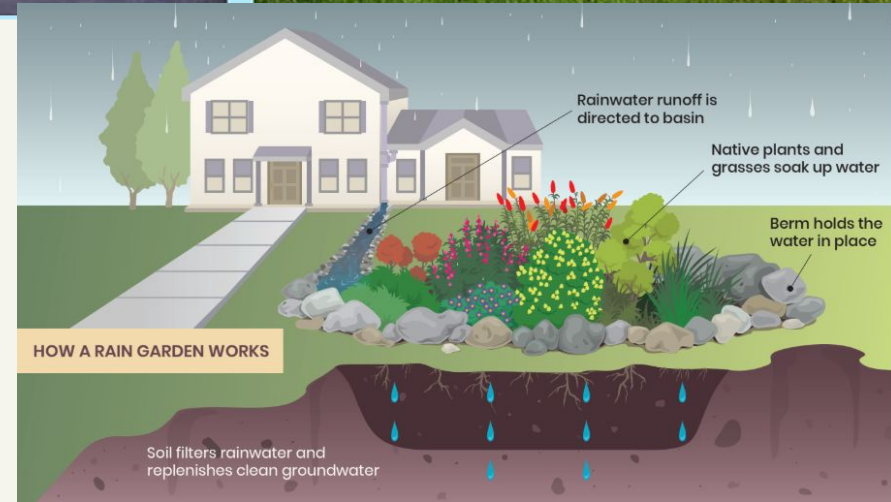
APPLY FOR  
RAINSMART  
REWARDS!



# 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

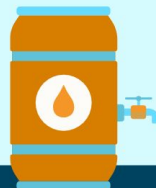
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**RAIN BARREL  
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## SUPPORTSCAPES

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.

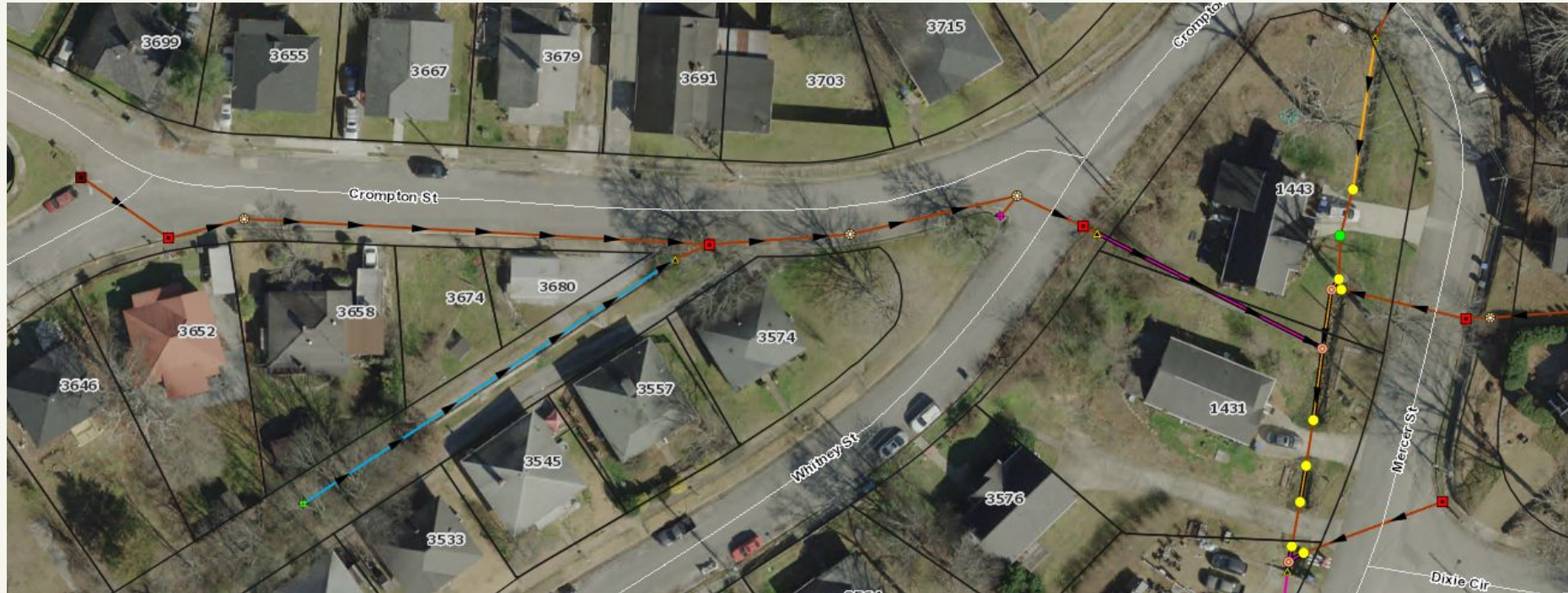
## City WILL

- 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

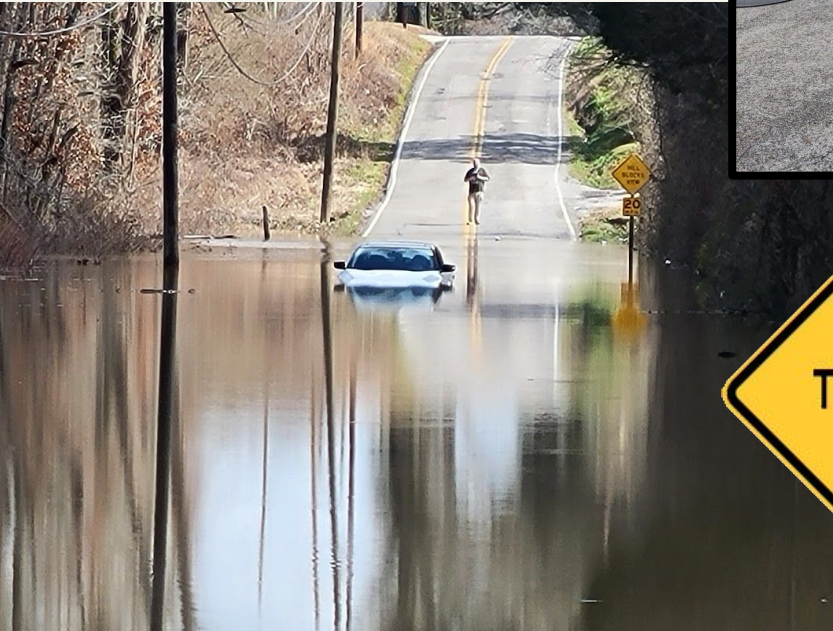
- Flash flooding is the greatest cause of weather-related death in the U.S.
- Approx 50% of those drownings are vehicle related
- 6” of fast-moving flood water can knock over an adult.
- **12” of rushing water can carry away most cars.**
- 2 feet of rushing water can carry away SUVs and trucks.

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

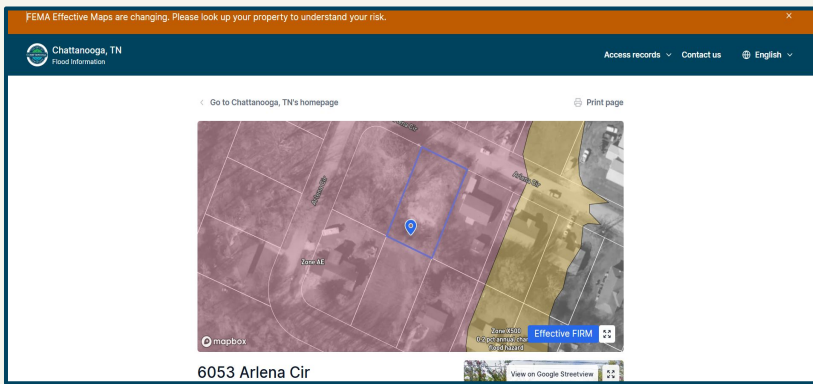
Forerunner Software

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!**

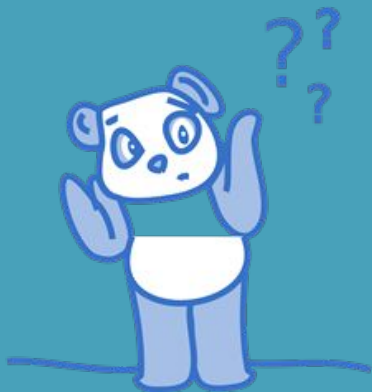


**311 is the fastest and most convenient solution for non-emergency situations where Police, Fire, and Ambulance services are not needed to be dispatched.**

**Download our CHA 311 app to your smartphone**

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

**Email: [311@chattanooga.gov](mailto:311@chattanooga.gov)**



# Questions?



# Thank you

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423-643-6049



Public Works

