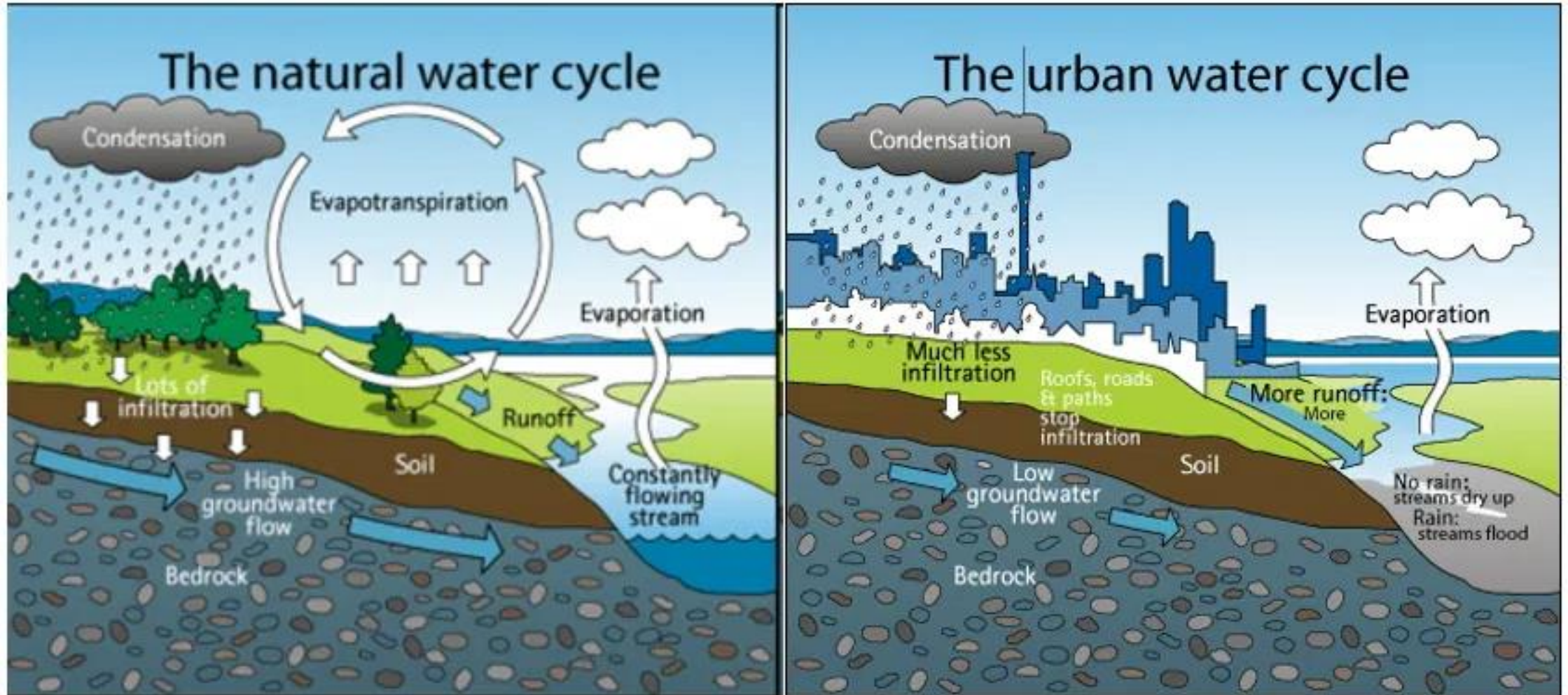


# Protecting our water by what you do in your yard

Mary Beth H. Sutton, WaterWays



How do yards/residential areas/ urbanized areas contribute to water contamination and pollution?

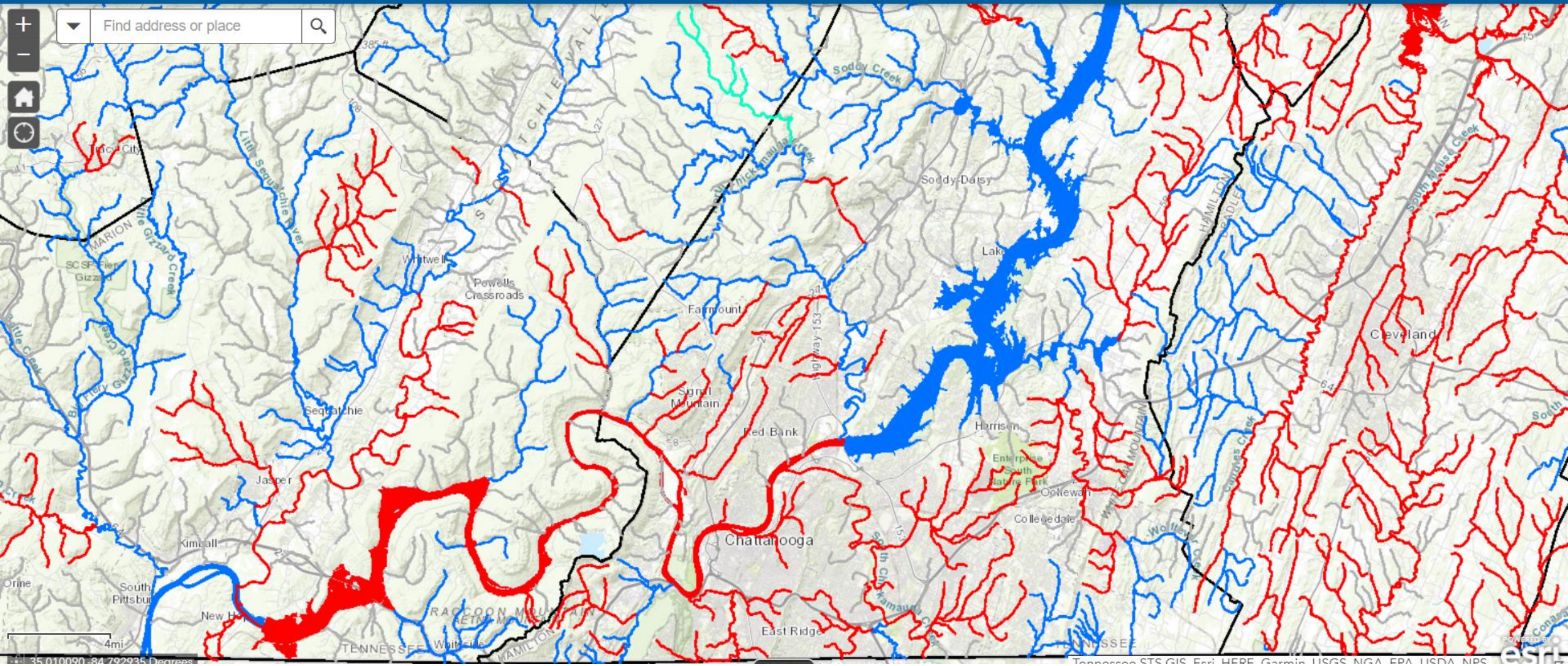


Even more urban flooding with the increased intensity of our rain events!

<https://www.greaterauckland.org.nz/2017/12/15/aucklands-urban-freshwater-historic-relationship/water-cycle/>

Stormwater Flash Floods cause massive erosion issues in our streams.





Non Point Source Pollution from Yards, Urban areas, and Farms is the biggest issue!

Stream Pollution causes in Lower TN Watershed	number of streams
ALTERATION IN STREAM-SIDE OR LITTORAL VEGETATIVE COVERS	25
BIFENTHRIN	1
CAUSE UNKNOWN	9
CREOSOTE	1
DIOXIN (INCLUDING 2,3,7,8-TCDD)	3
DISSOLVED OXYGEN	13
ESCHERICHIA COLI (E. COLI)	83
FLOW REGIME MODIFICATION	2
IRON	2
NUTRIENTS including NITRATE/NITRITE (NITRITE + NITRATE AS N) and Total Phosphorus	28
PH	7
PHYSICAL SUBSTRATE HABITAT ALTERATIONS and other Anthropogenic substrate alterations	27
POLYCHLORINATED BIPHENYLS (PCBS)	4
SEDIMENTATION/SILTATION	26



What can you do?

USE NATIVE  
PLANTS TO HELP  
REDUCE  
STORMWATER  
RUNOFF!

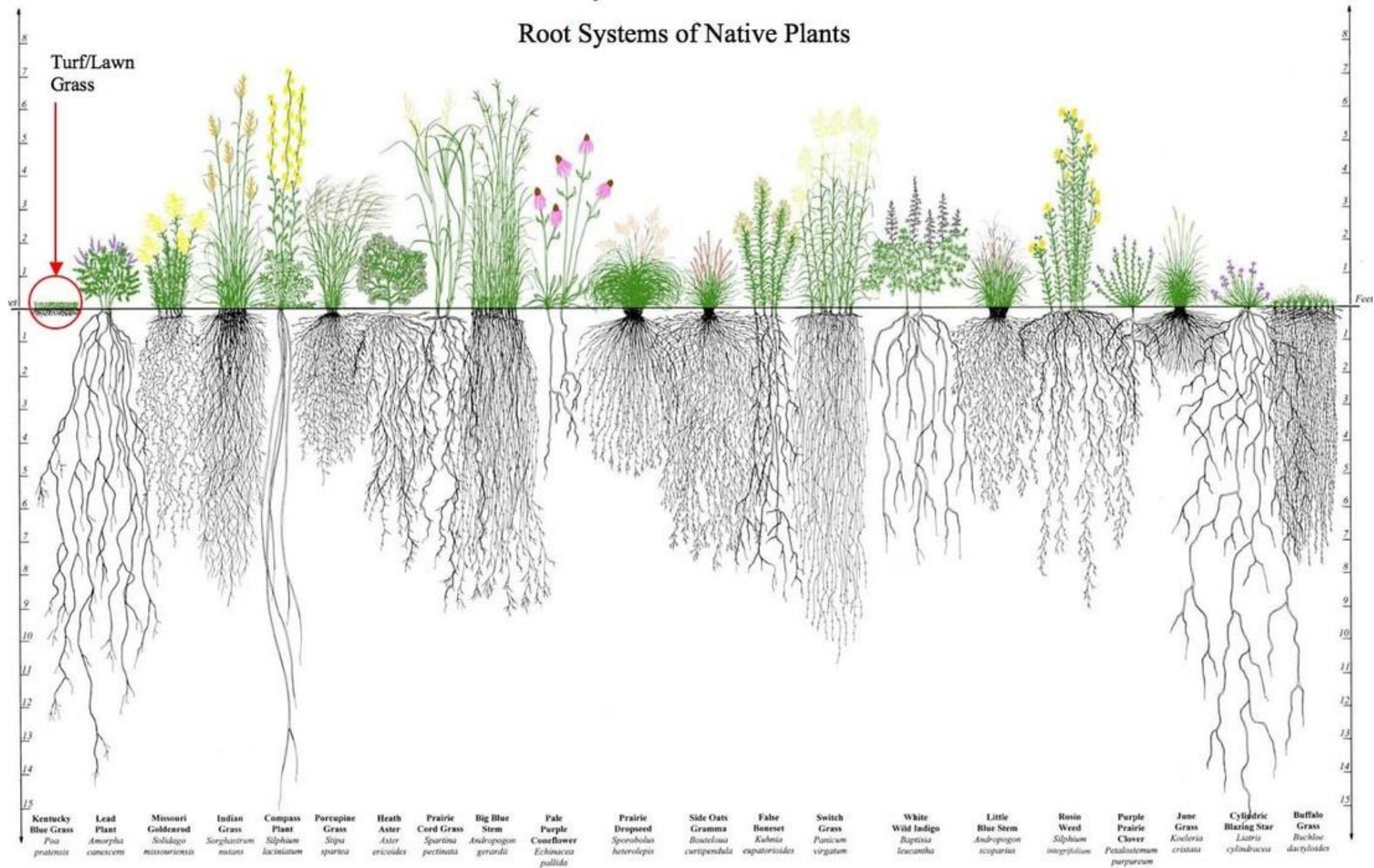


Diagram referenced from the "Conservation Research Institute"

Lawns don't infiltrate much water because of their short roots.....use natives!

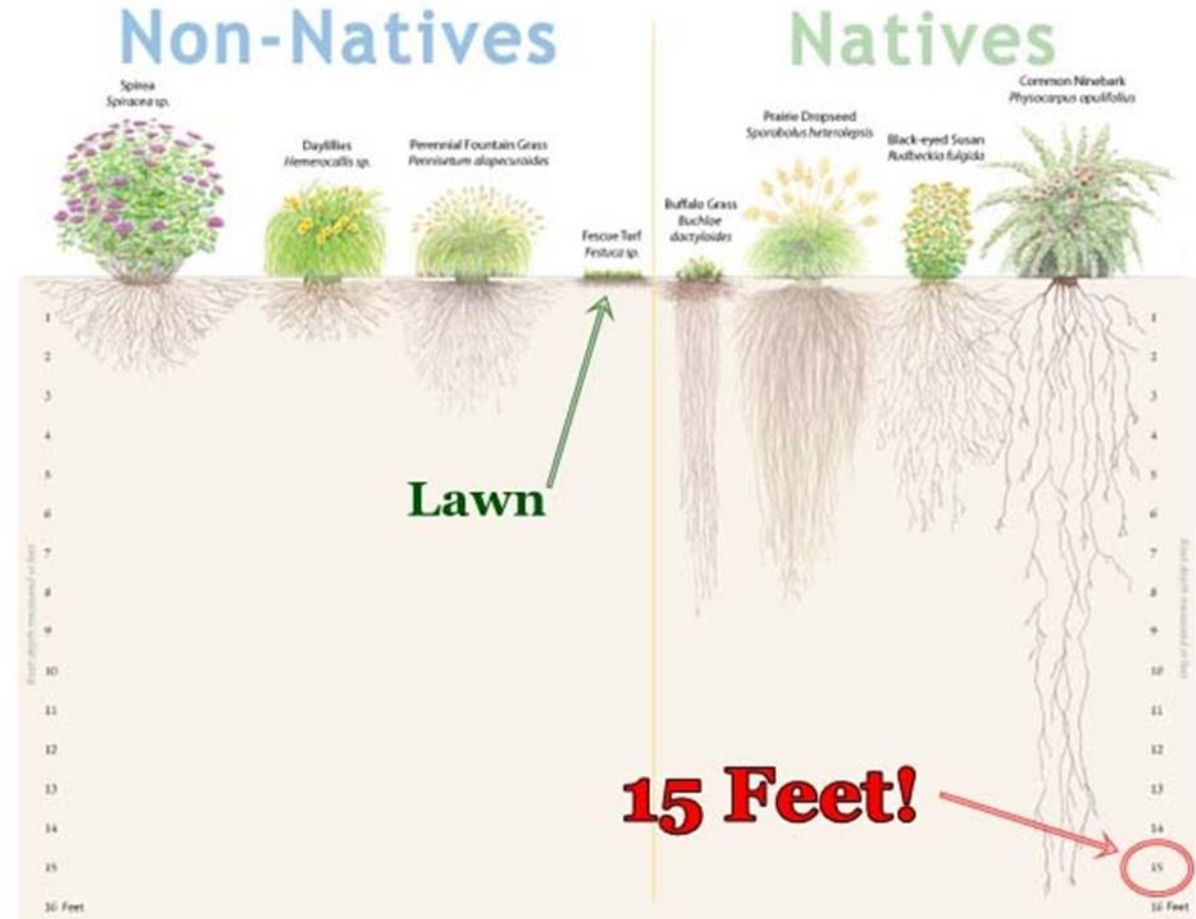
Native shrubs include Ninebark, Beauty Berry, Hydrangeas, Button Bush, Spice bush and bladdernut.

Native grasses include: Big Bluestem, Little Bluestem, Broomsedge bluestem, switch grass, bottle brush grass, and side-oats gramma.

(See Reflection Riding's Plant List!!)

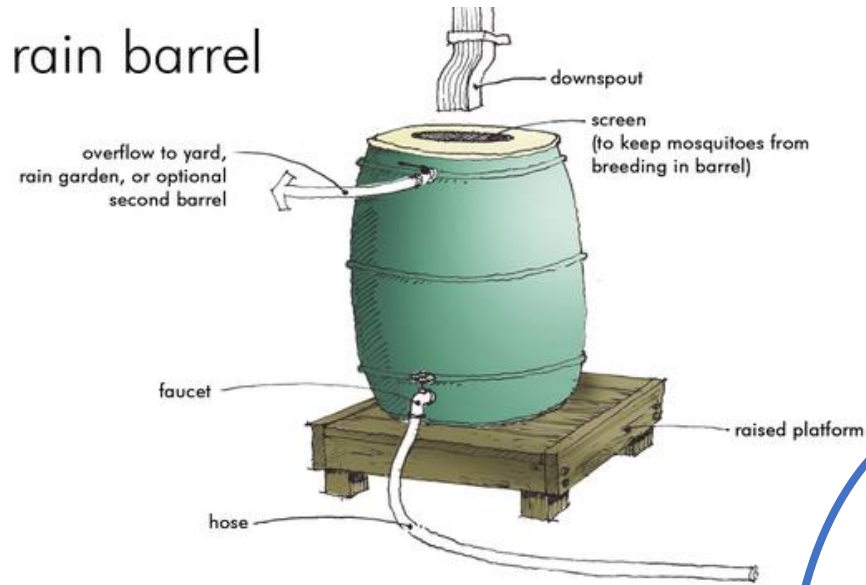


<https://www.prairiemoon.com/>



<http://www.chambersdesign.net/yardblog/-rooting-for-spring>

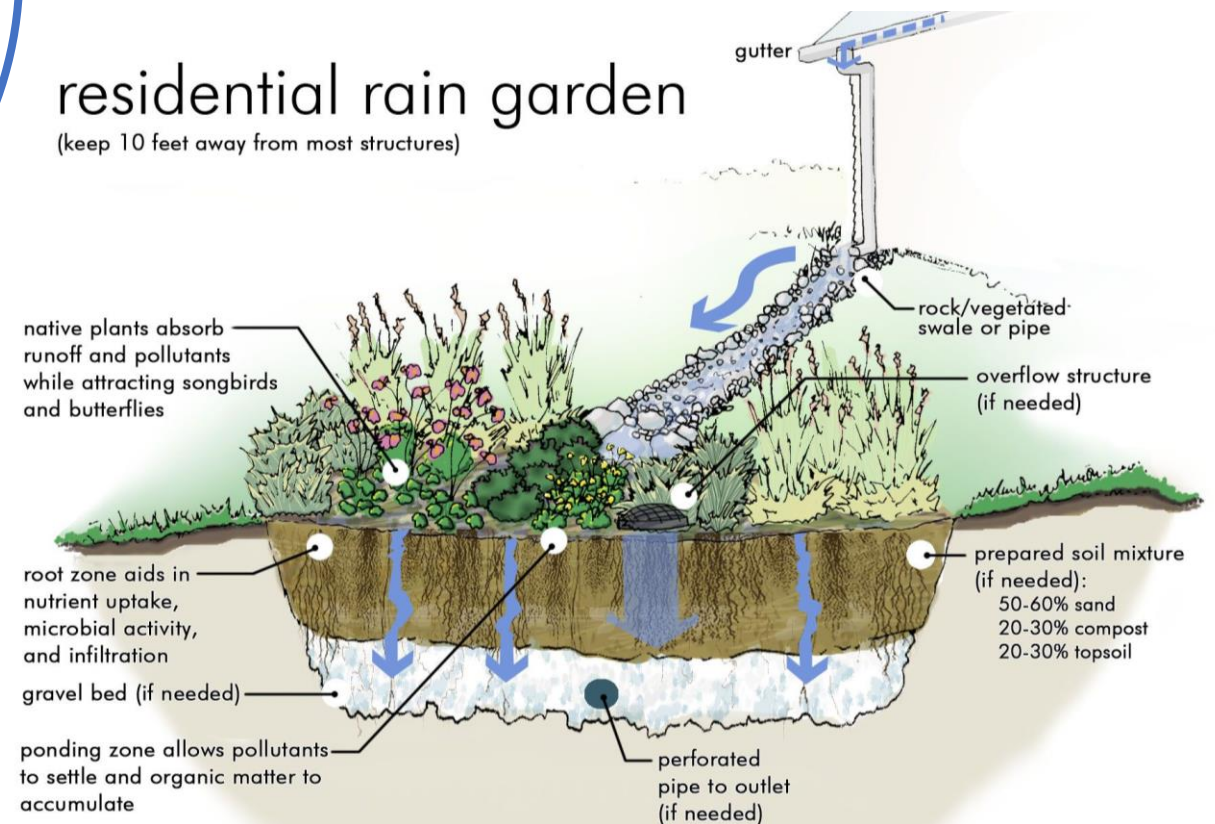
Creek-friendly yards capture and retain stormwater during rain events, as well as create habitat for native plants and pollinators.



Sustainable choices in your landscaping practices can keep polluted water out of creeks and streams, reduce the chances of flooding for those downstream, enrich your soil, and provide habitat for native species.

## residential rain garden

(keep 10 feet away from most structures)



The addition of **green infrastructure** features like **rain gardens**, **rain barrels**, and **natural buffers** provide many benefits to you, your neighbors, and your environment!



# “Buffer” the lawns with native plants !

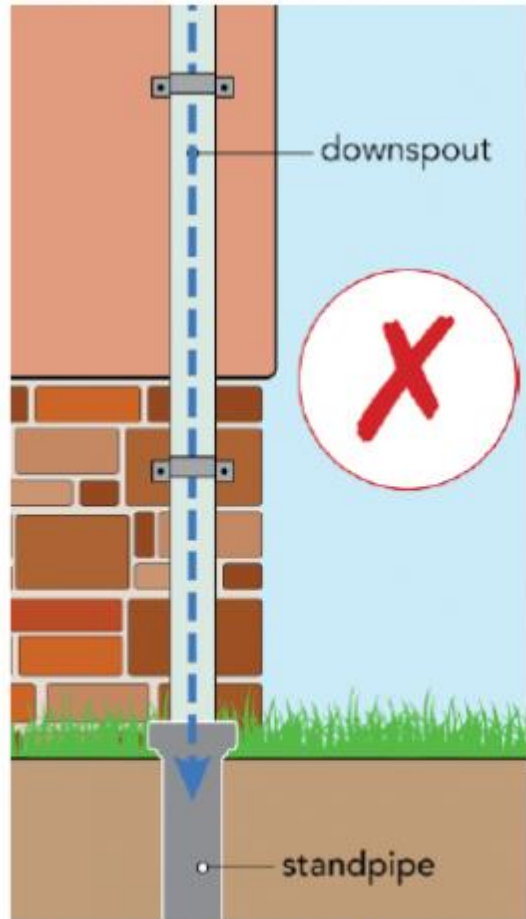
Reduce erosion and improve infiltration by adding native plants



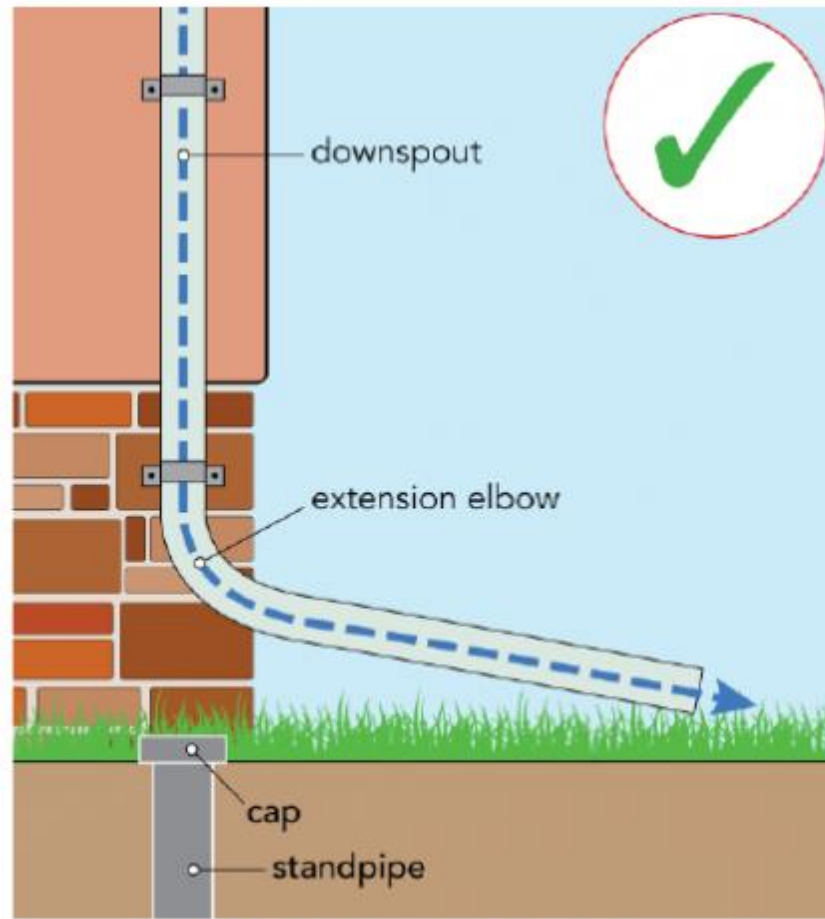
If it flows to the street, it's going to the creek or river!

**UNTREATED!!**

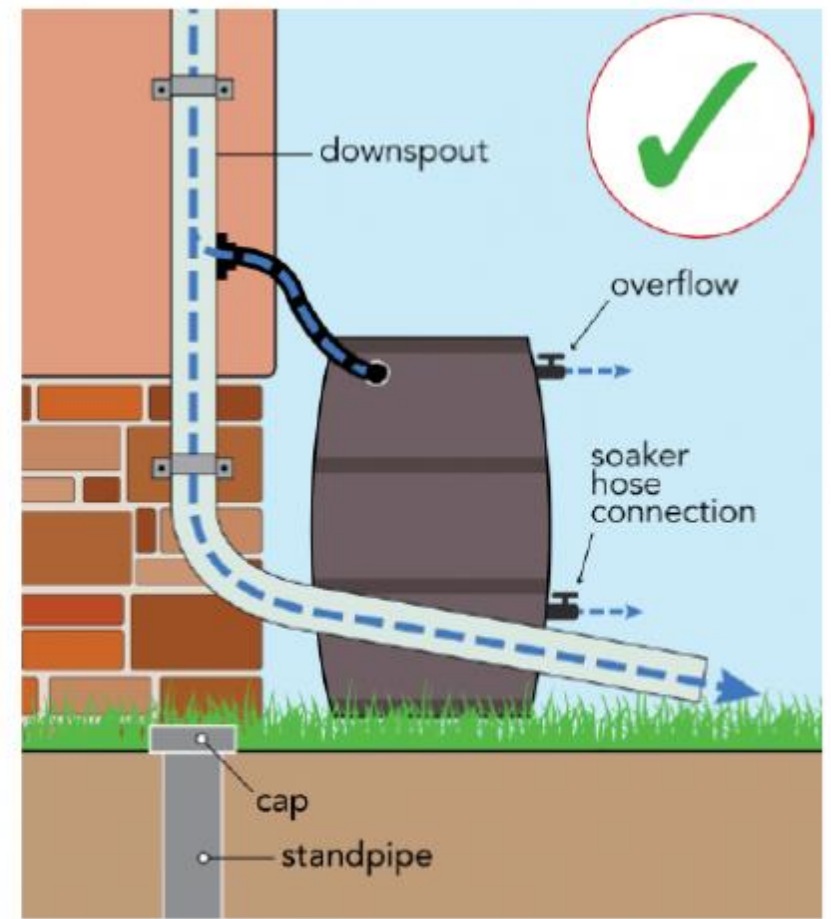
“Disconnecting” Downspouts.....Don't let them drain directly to sewer or stormwater system.  
Direct them to areas where water can infiltrate into the soil.



**DOWNSPOUT CONNECTED TO SEWER SYSTEM**



**DOWNSPOUT DISCONNECTED FROM SEWER SYSTEM**



**DOWNSPOUT CONNECTED TO RAIN BARREL**



If it flows into the storm drain,  
it's going directly to the river!



<https://www.albanyga.gov/about-us/city-departments/engineering-department/stormwater-management-program>

# Sun loving native plants surrounding this house and lawn also reduce runoff!

Purple Coneflower

Coreopsis

Black Eyed Susan

Butterfly Weed and common milkweed

Joe Pye Weed

Cup Plant

Aromatic Aster and New England Aster





# Creek-friendly yard checklist:

- Native Plant buffers or elimination of turfgrass
- Position downspouts and gutters to pervious surfaces or rain gardens
- Plant native shrubs, trees, and wildflowers
- Create a native plant buffer between the downhill slope of your yard and neighboring property or road, and especially along any waterways
- Replacing impervious surfaces with alternative materials such as pavers or gravel
- Limit use of any yard chemicals
- Add rain barrels and rain gardens to your landscape



**You might even win an award!**

**My Tennessee:  
Clean Water Starts Here**

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



A scenic view of a river flowing over rocks in a forest. The water is clear and white with foam as it cascades over the rocks. The surrounding forest is dense with trees, some with green leaves and others bare. The overall atmosphere is peaceful and natural.

You can help keep all of our streams healthy!

Contact:

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