



# North Carolina Coastal Federation Smart Yards DIY Solutions to Reduce Stormwater Pollution



North Carolina  
Coastal Federation  
*Working Together for a Healthy Coast*

Sara J. Hallas  
[sarajh@nccoast.org](mailto:sarajh@nccoast.org)

# North Carolina Coastal Federation

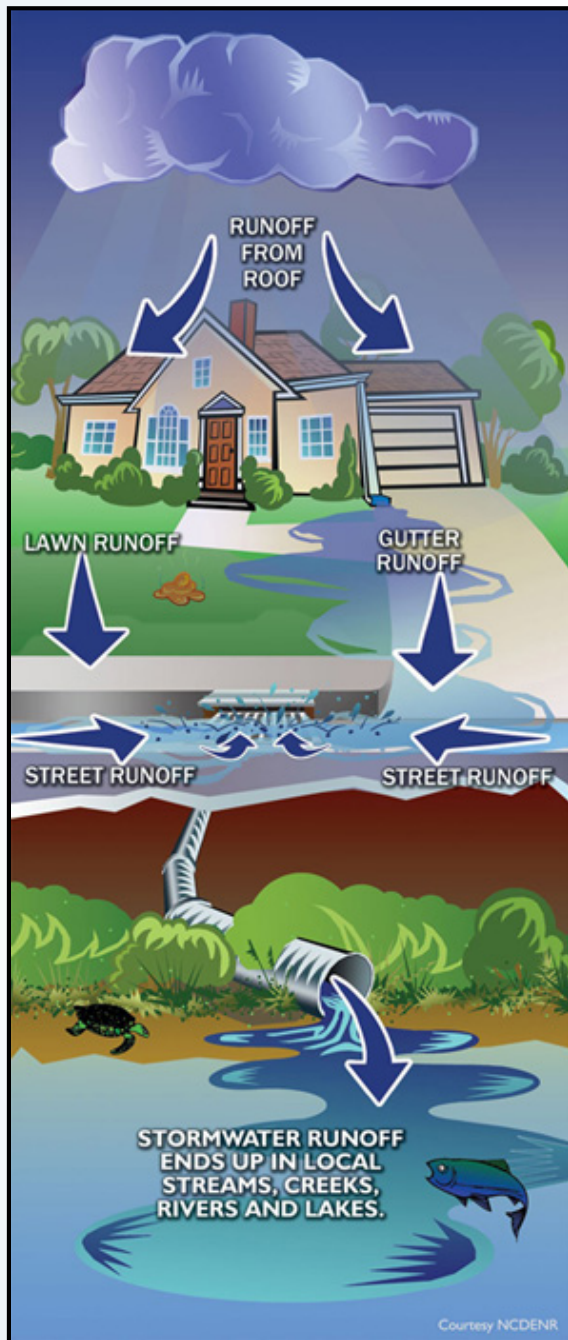
## Our Goals:

- Coastal **water quality** that supports fishing, swimming, and a vibrant coastal economy.
- Sound **coastal management** that protects the coast.
- **Living shorelines** that prevent erosion and provide habitat.
- Thriving **oysters** that support the environment and economy.
- A coast that is free of **marine debris**.



# Stormwater Runoff...

... is rain that washes off driveways, parking lots, yards, and other hard surfaces. It picks up pollution, such as bacteria, chemicals, and trash, and washes them into creeks, rivers, sounds, or into the ocean.



## BEFORE

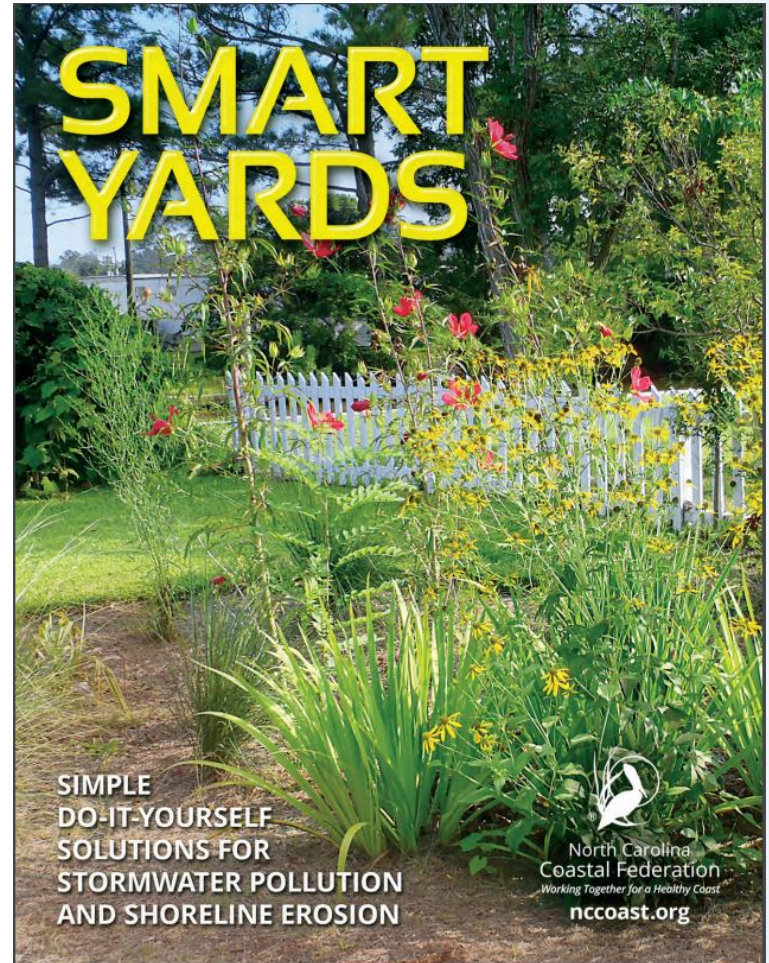


## AFTER



# What Can You Do?

Make your yard a Smart Yard!



<https://www.nccoast.org/smartyards>



North Carolina  
Coastal Federation  
*Working Together for a Healthy Coast*

# Simple Do-It-Yourself Solutions to Reduce Stormwater Pollution

## Smart Yards:

- Rain Gardens
- Reroute Downspouts
- Rain Barrels
- Native Landscaping and  
Tree Planting
- Backyard Wetlands
- Permeable Paving
- Living Shorelines



# Rain Gardens

- Shallow, vegetated areas that capture rain during storms.
- Works like a bowl to collect rain from roofs, driveways and parking lots.

***Did You Know?*** Rain gardens can reduce stormwater runoff by 90% or more!



North Carolina  
Coastal Federation  
*Working Together for a Healthy Coast*

# Benefits of a Rain Garden

- Rain gardens copy nature!
- Reduces flooding
- Enhanced curb appeal
- Native plants require less water and fertilizer
- Natural wildlife habitat







*Coreopsis gladiata*  
Coastal Plain Tickseed



*Eutrochium dubium*  
Coastal Plain Joe-Pye Weed



*Clethra alnifolia*  
Sweet Pepperbush



*Helianthus angustifolius*  
Swamp Sunflower



*Itea virginica*  
**Virginia Sweetspire**



*Callicarpa americana*  
**American Beautyberry**



*Muhlenbergia capillaris*  
**Purple Muhly Grass**

# Re-route Downspouts

- Direct downspouts to rain gardens, where the native plants and soil soak up and filter the rain.

***Did You Know?*** At \$9/downspout, the diverters are a very cost-effective solution!



# Rain barrels

- Rain barrels collect and store rainwater from building roofs.

## ***Did You Know?***

Just  $\frac{1}{4}$  inch of rain produces enough runoff to fill a 50 gallon rain barrel.



# Native Landscaping

- Native landscaping includes the use of hardy native plants that occur naturally in the soils and climate of the southeast coastal region.



# Backyard Wetlands

- Backyard wetlands are depressed wet areas that are enhanced with native wetland plants.
- They are well suited for yard areas that are usually wet for several days following rain.



# Pervious concrete

- Pervious concrete allows stormwater to soak into the ground instead of flowing off the site as polluted runoff.



Unlike traditional concrete, pervious concrete lacks sand in its mixture which allows the rain to fill the tiny holes and seep into the ground.

# Living Shorelines

• Systems that use marsh grass and other natural materials to create a more productive shore.

- Benefits include:
  - Reduced erosion
  - Natural vegetation
  - Improved water quality
  - Potential for habitat
  - Protected coastal habitat











North Carolina  
Coastal Federation  
*Working Together for a Healthy Coast*

[www.nccoast.org](http://www.nccoast.org)

3609 N.C. 24, Newport, NC 28570

252-393-8185

# Support a Clean and Healthy Coast



- Give
  - Donate
  - Membership
- Volunteer
- Show your support
  - License Plate
- Stay Connected
  - Follow us!
    - NCCoastalFed



North Carolina  
Coastal Federation  
*Working Together for a Healthy Coast*