

As gardeners, we face challenges such as excessive rainfall, highly variable temperatures, and/or dry, hot conditions. Knowing that these extremes will happen more often, we can take action so our gardens flourish and benefit (not burden) the environment. Here are ways you can make a difference!



Recycle

Green waste discarded in a landfill produces methane gas which traps 30 times more heat than carbon dioxide! Keep organic materials out of landfills by:

Composting Food Waste - Most counties sell compost bins or you can order one online. There are also services that will compost for you.

Composting Yard Waste - Pile and compost yard waste at home or send it to a collection service offered by your town or city for composting.



Rethink

Your beautiful landscape can be a natural ecosystem that conserves soil and water and promotes biodiversity.

Purposeful Plant Selection - Choose native plants that thrive locally and can withstand drought and excessive rainfall, as well as warmer temperatures. Add flowering plants that support pollinators.

Cultivate Healthy Lawns - Include nitrogen-producing microclovers which reduce fertilizer needs as well as support beneficial insects; learn to "mow what is green." Warm season grasses such as bermuda, zoysia and centipede require less water to maintain than cool season grasses like fescue.

Include Natural Water Features - Observe stormwater movement and consider strategic water management methods by using landscape features like rain gardens, swales, or natural catchment areas. Rain gardens are easy to install and provide habitat for wildlife, stabilize soil, and allow for slow infiltration. "Slow, spread, soak in!"



Repurpose

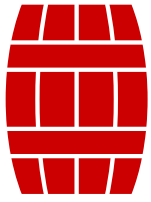
Let plants work for you! Their natural growth habits can have substantial impacts on energy use and carbon capture.

Create Shade and Windbreaks - By strategically planting trees and shrubs in areas that shade your home in the summer, but allow sun to warm it in the winter and also block the cold winds, you may reduce your home's energy costs up to 25%.

Grow Food - Homegrown vegetables and fruits go from garden to table with no fossil fuel!

Capture Carbon - Plant a diverse mix of long-lived trees and shrubs as woody and permanently rooted plants capture and retain more carbon compared to short-lived herbaceous plants which die back each winter. Avoid tilling to minimize soil disturbance which leads to soil carbon loss.





Reduce

Wasting resources contributes to unnecessary climate impacts. Using water we drink to water our landscapes requires extensive use of fossil fuels, but capturing rainwater on site reduces demand and lessens the impact of stormwater on the environment.

Reduce Stormwater Runoff - Disconnect your roof downspout from the street storm drain to allow rainwater to "slow, spread, and soak in." Direct water to a rain barrel or large tank that can capture and release rainfall slowly. Choose porous surfaces that absorb water. Hard surfaces like concrete patios, brick pathways, and driveways increase runoff, polluting local bodies of water with pesticides and fertilizers.

Prevent Erosion - Establish deep-rooted perennial plants to prevent soil loss and retain nutrients, especially along stream banks. If plants are not an option, apply mulch to protect bare soil. Soil sediment is the #1 water pollutant!

Minimize Fertilizer and Pesticide Use - Leave grass clippings in place where they break down naturally and reduce nitrogen requirements. Choose diverse plant species to support a range of beneficial insects, and focus on "right plant right place" to reduce disease and insect problems. Don't guess, get a soil test!

Decrease Fossil Fuel Use - Transition your gas-powered tools to electric or rechargeable power tools. Use "human-powered" tools (wheelbarrows, shovels, hoes, rakes, trowels, etc...) whenever possible.



Re-envision

Think about, plan for and create landscapes that are beautiful, resilient, and healthy for humans and the environment!

Related resources that may interest you...



The Climate Conscious Gardener
by Janet Marinelli



NC State Climate Office



Guide to
Rainscaping



Gardening in a Warming World:
Course Book 2018



Lawns & Lawn Alternatives



Native Plants



Contact Extension Master Gardener volunteers of Wake County

mgardener@wakegov.com • 919-250-1084

Authors & Contributors:

Alisa Andrews, Jeana Myers, PhD, Noelle Schofield,
and Kristen Klett 2021



N.C. Cooperative Extension is an equal
opportunity provider.

