



The **VOICE** of **LOCAL** **CONSERVATION**

Northwest Conservation District

Education Edition 2023



**ADAPTING TO A
CHANGING
CLIMATE**

Monarch Butterfly
on Joe-pye-weed
*Eutrochium
fistulosum*



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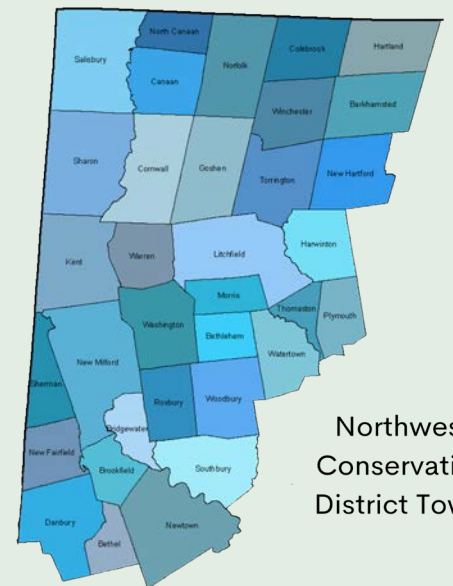
Conservation Districts were established nationwide in the 1930s in response to national concerns over agricultural erosion, floods, and the sky-blackening dust storms that swept across the country during the Dust Bowl. Congress enacted the Soil Conservation Act of 1935, which set national policy for the control and prevention of soil erosion, and established the Soil Conservation Service to implement this policy.

The Dust Bowl taught everyone a valuable lesson on the importance of protecting natural resources at the local level. In Connecticut, five Conservation Districts were established by State Statute (Section 22a-315) to advise the CT Department of Energy and Environmental Protection on matters of soil and water conservation, erosion and sedimentation control and to assist in implementing programs concerning such matters.

NWCD offers technical services and educational programs to our 34 local communities - check out the map to see if your town is in our district!

Today, NWCD works in partnership with our communities, other local non-profits and state agencies, as well as the public on conservation challenges such as:

- *Drinking Water and Aquifer Protection*
- *Wetland Protection and Restoration*
- *Aquatic Resource Protection through Low Impact Development (LID)*
- *Open Space and Farmland Preservation*
- *Sustainable Lawn Care and Land Use*
- *Agricultural Resiliency, Renewable Energy, and more!*



Northwest
Conservation
District Towns

If you have questions, are interested in NWCD assisting with an educational event, or you would like us to partner with you on a specific project, contact us at info@nwcd.org or call the office at 860-626-7222.

Connecticut and CLIMATE CHANGE

From its historic cities and rustic farmlands to its beloved forests that paint the state in vibrant colors every fall, Connecticut has withstood many changes throughout its history – but how will we respond to the next big shift, Climate Change? Our 2023 Educational Newsletter aims to answer this question, focusing on the ways Connecticut can adapt to a changing climate.

So what can NW Connecticut expect?

Connecticut is already experiencing some effects of climate change. The average annual air temperature has increased by more than 2°F, contributing to patterns of increased average precipitation, temperature, and humidity. We can expect to see less snow and more rain in the winter and early spring, followed by drier periods in the summer and fall. Further, extreme weather events like cold snaps, heat waves, and intense storms will become more prevalent.

Agriculture Heat stresses livestock and crops, reducing yields and requiring more inputs. For non-irrigated crops, droughts can ruin a harvest entirely. Warmer, wetter winters and springs support pathogens and pests. Warmer seasons impact our popular seasonal crops, shortening the window for maple syrup production and shifting harvest windows earlier for fall crops such as apples.

Recreation Warmer winters with less snow could impact winter sports, while warmer summers with less rain and sporadic extreme storms could reduce water quality so that fishing and swimming are not safe. Shifts in climate will further encourage the proliferation of invasive species, threatening our beautiful forests and scenic trails.

Human Needs Everything mentioned above will reduce the ability of local land to provide what we need. Stressed agriculture, weakened ecosystems, and storm-damaged infrastructure are visible impacts. However, climate change poses hidden human health risks as well. Warmer winters foster populations of ticks, vectors for Lyme disease and other ailments. Warmer summers may increase the length and severity of the pollen season. And extreme hot and cold events threaten people without access to AC or heated spaces.

What is climate change?

Climate change refers to rising average of annual global temperatures, primarily caused by the increasing concentration of CO₂ in our atmosphere. The rising average temperatures change how our atmosphere behaves, resulting in acute effects like unpredictable weather patterns, and chronic issues like shifting ecoregions and biomes. Climate change is caused predominantly by the anthropogenic burning of fossil fuels.

What is climate adaptation?

Climate adaptation refers specifically to how we respond to the effects of climate change, as opposed to climate mitigation which refers to how we try to stop the effects from happening in the first place.



Ecosystems Without snowpack in our forests, trees experience root damage, making weaker trees susceptible to damage from pests, especially when followed by droughts. Warmer weather shifts the timing of spring blooms, stressing pollinator populations. Invasive species capitalize on the warmer conditions, outcompeting native species as forests thin when weak trees fall in extreme storms.

Water Quality As watershed ecosystems weaken, water quality suffers. Droughts reduce soil's ability to absorb water, leading to increased runoff. Rain will more easily wash nutrients and other contaminants into our water. Especially in warmer summers, pollutants encourage the growth of algal blooms, threatening the safety of our inland waters.

Preparing for **EXTREME WEATHER EVENTS**

Kathy Castagnetta



Extreme weather events are occurrences of unusually severe weather or conditions and are often short-lived. They include heat waves, freezes, heavy downpours, tornadoes, hurricanes and floods. Climate-related extreme events persist longer than weather events and include droughts resulting from long periods of below-normal precipitation.

An extreme weather event can be defined as the probability or chance of an event, such as a 100-year storm or flood or by using an impact-related threshold such as the number of consecutive days over 100°F, which can be used to quantify heat waves.

Scientists are finding that we are experiencing hotter heat waves, drier droughts and more intense storms with greater wind and precipitation. The heat waves boost evaporation, which dries out the soil in summer. As more evaporation leads to more moisture in the atmosphere, rainfall intensifies which can result in a higher frequency of stronger storms.

Due to the increased frequency of severe weather, being prepared is vital to prevent injury, inconvenience and property damage. The following is a list of recommended steps to take to help you be ready for the next big storm:

BE AWARE: Register with your Town or State through the emergency notification system so you can receive emergency alerts via phone, text or email. Keep updated on weather alerts. Know the difference between a warning, watch, and advisory. Monitor traditional and social media for updates.

ASK FOR HELP: Contact your Town Emergency Services Manager, Mayor or First Selectman's office to let them know if you may require assistance during declared emergencies.

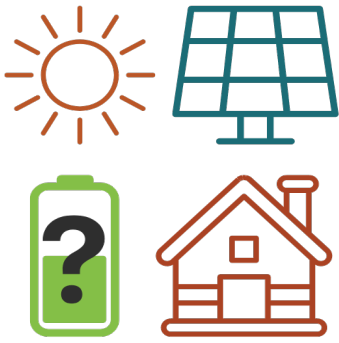
STAY COOL: During periods of extreme heat, cooling centers can provide relief for members of a community. If a town has a designated cooling center, United Way-211 lists the site location and hours on their website.

STAY WARM: During periods of dangerous precipitation, wind-chill, cold, and power-outages, short term warming centers are often opened at the local level so residents can get warm and charge devices.

BE PREPARED: Secure outdoor accessories from extreme winds. Check for weak branches on trees and trim or cut down any that could fall towards your house. Have an Emergency Supply Kit on hand with water, food, flashlight, battery-powered radio and a first-aid kit. Make sure your family is familiar with an action plan that lets each member of a household know what to do during a weather emergency.

KNOW YOUR SURROUNDINGS & PLACES OF REFUGE: Be cautious if leaving your home, as there may be downed electrical wires, broken trees, or other debris surrounding your property and in the streets. Be familiar with evacuation routes before a storm hits. Know the elevation level of your home – is your home at risk during a flood? Know where to find shelter – it's best to think through where to go beforehand. Basements, the bottom floor of a building, or under a stairwell are good places to wait out a storm.





Is now a good time for home batteries? ⁵
Yes.

Are batteries right for you?
Maybe.

Ray Furse
Vice-Chair NWCD

Many homeowners who have investigated battery storage for backup during outages have walked away due to the cost. The federal Investment Tax Credit (ITC) was not available for stand-alone batteries or for retrofitting existing PV systems, frustrating for those wanting to use power from their solar systems during outages.

This changed with the Inflation Reduction Act of 2022, which restored the ITC to 30% and allows it for stand-alone storage, with or without a solar PV system. As well, new Connecticut Green Bank (GB) and utility programs exist that help offset the cost. These programs do operate independently, so one should consider their separate rules carefully in order to maximize support.

Systems eligible for the ITC are not always on the GB's list of eligible technologies. Yet, all GB and utility approved equipment should be ITC eligible, so it might be best to start there. Eversource has two programs that allow battery-stored energy to be available to the grid during peak demands. In conjunction with the GB, their "Energy Storage Solutions" offers an up-front rebate, while their "ConnectedSolutions" program pays battery owners for each event in which their storage is drawn upon.

In short, battery installation today is much more affordable. But the key question remains: Are batteries right for you? Will they provide the power needed in long outage? In many cases, no. Batteries are a storage device, not a generator. A typical battery can provide 13 kilowatt-hours before needing recharging, about half of the 26 kWh used daily by average CT households. To extend the [days of autonomy] during which the home relies on battery power, a critical circuits panel is installed. This powers only essential loads: medical equipment, furnace fan, fridge, well pump, smart

phones, computers, lighting, etc. No baking or hot-tubbing allowed. If one is careful, the battery may power the home a few days, longer, even indefinitely, if recharged daily by solar PV.

In winter, though, one cannot count on solar PV for daily recharging. If the home is heated electrically, there is no way battery storage of any reasonable size will be reliable. Those are crucial caveats when weighing battery storage against a cheaper propane generator which provides more and continuous power for as long as needed.

Conclusion? The practicality and cost-effectiveness of batteries varies case-by-case and homeowners need to proactively research these. Even with subsidized installation, battery storage can be expensive; homeowners need to make sure it is the right solution for them. For more information, visit nwcd.org/batteries.



Ask your potential installer:

- *Is this battery approved for all utility and Green Bank programs? Federal tax credits?*
- *How many usable kWh will it provide?*
- *What are the terms and length of the warranty?*
- *During outages, will my battery power switch to a protected loads panel?*
- *Will it be recharged automatically by my PV solar system?*
- *Assuming no solar recharging, how long can I expect to have power?*

Adapting Lakes

Protecting our Open-Water Resources

Kelsey Sudol

Every person can impact our aquatic open-water resources – either positively or negatively. To adapt to the altering climate, we need to decrease our impact on our aquatic resources. Below is a list of actions that you can take to protect your open-water resource and act as a watershed steward.



1. Test Your Soil Most properties do not need fertilizers - soils in CT tend to have enough nutrients. Excess fertilizer is caught in rain and runs into nearby water. Testing your soil saves you money and protects watersheds. To soil test, visit: <https://soiltesting.cahnr.uconn.edu/>

2. Inspect Your Septic System When not maintained or aging, septic systems can slowly leak excess nutrients into waterbodies. Proper maintenance can eliminate their negative impacts. To learn more, visit: <https://www.epa.gov/septic/septic-smart-education-materials>

3. Disconnect Impervious Surfaces Driveways, roof-drains, buildings – anything impermeable to water – all contribute pollutants into your nearby waterbody. To "disconnect" these surfaces, try capturing runoff in a rain garden or rain barrel. To learn more, visit: <https://nemo.uconn.edu/rain-gardens/>

4. Create Shoreline Buffers Grow native plants along vulnerable shorelines. These buffers capture stormwater, deter polluting Canada Geese, provide protective wind-breaks, and provide habitat for beneficial wildlife.

5. Leave Aquatic Plants Native aquatic plants help keep water clear, take excess sediment/nutrients out of the water, and provide habitat for fish. Leaving established plant beds in place creates a stable littoral zone, so lakes can better adapt to large storm events, human influence and more.

6. Adopt a Catch Basin If there are leaves or debris on top of a nearby catch basin, clean them out to allow for proper drainage. These structures can help drain excess water in floods. Check with your town officials to learn more.

7. Consider the Weather Climate change causes intense weather fluctuations – from drought to extreme rain and more. Consider how you use lakes during these times. E.g. during drought, many waterbodies have exposed shorelines due to low lake level, so try not to use wake-boats which create excessive waves that erode those shores.

8. Construction Near Water Use Low Impact Development (LID) practices to minimize the structure's impact on nearby waterbodies, which are vulnerable to increased sedimentation during construction. Work with your contractors to limit

9. Be Proactive Speak with your landscape consultants: ask for reduction or elimination of fertilizers/pesticides; specify where to place leaves or grass clippings (far away from the water's edge); and state your preference for native plants, rain gardens, and low- or no-mow areas.

10. Stay Informed Follow local and lake-wide health advisories, such as *E. Coli* beach closures after storms and cyanobacteria blooms. The impacts of climate change on each waterbody vary, and this relationship is often complex. *The Secret Life of a Lake*, by Peter Tobiessen, is a great introduction.

Ecosystem Services

Forests as Tools for Adaptation

*Larry Rousseau
Chairman of NWCD
CT Liscenced Forester*

Connecticut's 1.8 million acres of woodlands are a powerful tool for local climate adaptation. We all depend on the eco-services woods provide – improved air and water quality, wildlife habitat, carbon capture, recreation and health benefits, renewable products, employment and contributions to local economies, peaceful retreats, and a sense of place.

Improved Air and Water Quality Trees are effective air filters, removing pollution and particulate matter. Studies show asthma and respiratory health issues are reduced in areas with more tree cover. Street trees can alleviate the urban 'heat island effect' that can cause deaths during heat waves. Trees cycle oxygen and release water vapor, cooling the atmosphere. Improved tree canopies cool residential neighborhoods, reduce energy use, and make communities more attractive, livable, and safe.

Woodlands that surround water supply sources improve water quality and reduce water treatment needs by filtering surface water and maintaining groundwater reserves. Woodland wetlands and floodplains along watercourses slow the movement of water during storm events and spring snowmelt, protecting nearby towns from flooding and reducing runoff. Woodlands along cold-water streams and headwaters control water temperature, clarity, and flow, and create suitable habitat for aquatic organisms dependent on cold, clear, well-oxygenated waters.

Diverse Forests Create Habitats and Jobs A healthy woodland, diverse in species, ages and sizes, can support a large array of wildlife. Oak/hickory is the most common forest type in CT. Douglas W. Tallamy writes that, "Oaks support more forms of life and more fascinating interactions than any other tree genus in North America." About 70% of the state's woodlands contain oaks as the dominant tree.

The growing conditions in Southern New England are well suited for the natural growth of trees. Harvesting timber grown sustainably in Connecticut's working woodlands reduces transport costs and helps us avoid harvesting primary forests in other nations with less strict environmental policies. Further, CT's forest products and recreation industries produce annual gross outputs of \$3.38 billion and almost 13,000 jobs.

Creating Peaceful Retreats Woodlands allow people to enjoy nature through outdoor activities in every season such as hiking, mountain biking, horse riding, bird watching, camping, hunting, fishing, boating, leaf peeping, cross country skiing and snowshoeing – all serve as attractions that support tourism and natural resources-related businesses which add to CT's economy. Woodlands offer solace and spiritual renewal to people seeking to unplug from hours of "screen time". The vistas of wooded hills and fields along country roads and tree-lined streets are a large part of the sense of place that identifies Connecticut.

By maintaining CT's existing woodlands and significantly increasing the acreage of permanently protected woodlands, we can help ensure that our state's natural and human communities can continue to thrive in the face of climate change.

Adapting Agriculture



Keep Soil Covered Covered soil reduces evaporation, moderates temperatures, and supports healthy soil ecosystems which provide nutrients for crops. Cover can include living cover crops (pictured left in a field with corn stalk residue), or mulches like hay, lawn clippings, leaves, wood chips, etc.

Minimize Tillage Healthy soil has a structure; aggregates (like the crumbly soil pictured) facilitate water infiltration, aeration, and allow plants to have proper root development. Tilling alters this structure. Alternatives include no-till farming methods like solarization, tarping, or cardboard mulching to suppress weeds, broadforking to loosen soil, and equipment for tractors like no-till seed drills and roller-crimpers for cover crops. Transitioning to perennial crops that don't need yearly replanting is another option.

Plant Trees Increased summer heat can stress animals and reduce yields. Incorporating trees into livestock husbandry can help our animals adapt to potential weather extremes. Intercropping trees into open pastures give livestock shelter from extreme heat. Consider planting productive trees (nuts, fruit, etc.) to diversify farm income! Plant a buffer around in-field streams or ponds, this will increase water quality and prevent evaporation during droughts.

Annette Lott

Protecting Pollinators

Too often, people think of the honey bee as the main pollinator for all of our food sources. In fact, many birds, bats, beneficial insects such as butterflies, moths, and native bees play vital roles in our environment by pollinating our fruit and vegetable crops and controlling pest insects, which prey upon agricultural crops. Many overlooked insects, such as ground-dwelling native bees and wasps provide useful services for soil health and biodiversity. Unfortunately, worldwide, all pollinator populations are declining due to climate change. Growing and blooming seasons for plants important to native pollinators are shifting. Warmer temperatures are affecting migration patterns, and tree loss related to pests and intensive storms is encouraging encroachment of invasive plants which outcompete natives. As a result, our local pollinators are losing vital resources – food and shelter.

On a local level, we can help provide food and shelter for local pollinators by planting more native plants and trees, avoiding pesticides and making small changes in our own yards by adopting new pollinator friendly practices from spring to fall. Xerces Society initiatives including "No Mow May" and "Leave the Leaves", and are helpful in providing support for us all to adapt our local landscapes to better protect pollinators against climate change.

Karen Nelson



To learn more get a sign for your yard, call (860) 626-7222, and to learn more visit: www.nwcd.org/2021-education-highlights/



With the invention of the plow, humans relinquished the hunter gatherer lifestyle to live in settlements and cultivate annual species of food crops. Plowing disrupts soil structure, causing carbon release and may damage soil organisms. In time, soil erosion reduces soil depth leading to lower crop yields and crop health, requiring more chemicals to compensate. Over time, previously fertile countries became deserts and remain so to this day. ("Out of the Earth: Civilization and Life of the Soil", D. Hillel).

Most food crops grown today are annual species planted in plowed soil and harvested in the same year. Other options are perennials that eliminate replanting each season, protecting the soil while reducing labor and fuel inputs. Connecticut farms can choose from common and popular perennial species – tree fruits or nuts, asparagus and rhubarb, for instance.

What if farmers and gardeners grew more perennial edibles? What follows is a short list of perennial plants that have culinary uses that were once appreciated, yet have fallen out of common usage, but could be added to our diets to add interest, nutrition and flavor to our daily salads or proteins.

Reduce Inputs and Protect Soil Health

Perennial Food Crops

- **Improved Hybrid Chestnuts, Hazelnuts, Hickories, and Walnuts**
- **Alexanders** – *Smyrniolum olusatrum*
- **Beach Plum** – *Prunus maritima*
- **Good King Henry** – *Chenopodium bonus-henricus*
- **Groundnut** – *Apios americana*
- **Horseradish** – *Armoracia rusticana*
- **Hosta** – *H. crispula*, *H. montana*, *H. plantaginea*, *H. sieboldii*, *H. sieboldiana* (Big Daddy, Blue Umbrella, and Elegans), *H. undulata*, *H. ventricosa*
- **Jerusalem Artichoke** – *Helianthus tuberosus*
- **Lovage** – *Levisticum officinale*
- **Perpetual Sorrel** – *Rumex acetosa* and red-veined sorrel
- **Sea Kale** – *Crambe maritima*
- **Scorzonera** – *Scorzonera hispanica*
- **Skirret** – *Sium sisarum*
- **Stinging Nettle** – *Urtica dioica*
- **Welsh Onion** – *Allium fistulosum*
- **Wild Ginger** – *Asarum canadense*

Many of these plants are familiar and require minimal maintenance. For more information on growing and using these plants, please visit www.nwcd.org.

Community Gardens Growing Resilience

Annette Lott

Community gardens provide opportunities for communities to increase food equity and availability in a changing climate. For low- to no-cost, residents can share in caring for the space and reap the bounty of its harvest. Gardeners get fresh, nutritious produce, and get to spend time outside working the soil, tending plants, and being close to the land.

Community gardens provide access to healthy food, especially important in urban communities that have limited access to individual garden spaces or are in food deserts. Further, in these more urban areas, community gardens are welcome green spaces that reduce air pollution and associated respiratory illnesses. Gardening outside may lower blood pressure and increase vitamin D levels. Gardening can also restore dexterity and strength, foster socialization, reduce isolation, and provide a break from screen time.

If you aren't personally interested in joining a community garden, but you appreciate the benefits they provide, consider donating to one! The cost to participate is often small, so you could be providing scholarships to lower income participants. Alternatively, there is a cost to maintain a community garden – tools, seeds, soil, etc., and donated funds help the gardens run. Many gardens will also donate their extra produce to local food banks, further stretching their impact.

Issues of food justice and access will only become more apparent as climate change contributes to changing weather patterns and extreme weather events. At times, this may disrupt our food systems and supply chains. Community gardens are one small adaptation we can make to help keep nutritious food locally available.

Urban Spaces Heat Island Effect

Kelsey Sudol

Climate Change will affect our landscape and our population unequally. Rising average temperatures compound in cities with higher densities of impervious surfaces such as roads and buildings. This increases the number of days above 100°F, duration of heat waves, and overall summer heat index. Densely populated areas, which also have higher rates of people of color and poverty, are more vulnerable to this Heat Island Effect. Other vulnerability factors are layout and spacing between buildings, density of cars, building materials used, low or no vegetation, geography, air flow, and more.

The dangers of extreme heat are compounded by limited access to air-conditioning with increasing energy costs and higher levels of air pollution, resulting in higher rates of heat-related illness and death. This aspect of Climate Justice needs to be monitored and considered in adapting our communities.

Solutions: Decreasing dark surfaces and increasing green infrastructure – such as community gardens, rain gardens, urban forests, or green roofs – empowers cities to better adapt to this dangerous heat. During these heat waves, cities may also need to plan for increased cooling centers, energy system protections and aid for residents.

The Heat Island Effect was identified as a concern throughout the CT Governor's Council on Climate Change (GC3) Phase 1 Report. Some of their near-term actions include funding for urban forestry projects (CT DEEP's Urban Forestry Climate Change Grant Program), community gardens (CT DEEP's Urban Green and Community Garden Grant Program) and increasing funding to underserved communities. To learn more, visit: <https://portal.ct.gov/DEEP/Climate-Change/Climate-Change>

Community Planning

In order for our communities to adapt, everyone must participate. Listed below are some of the ways that you can get involved helping your community adapt.

Volunteer on local town commissions and planning boards: Local resilience comes from your town. Serving on the commissions in your town – planning and zoning, inland wetlands, conservation, SustainableCT, etc. – gives you a say in your town's long-term adaptation plan.

Volunteer or attend State Planning Boards: Many of these meetings are now online or hybrid, increasing their accessibility. Examples of this include the GC3 (CT's Council on Climate Change), the State Water Planning Council (and associated work groups), and others. Many of these boards address many areas, and work to have stakeholders and voices from a variety of sources and fields.

Make your voice heard: Be informed on issues in order to make educated voting decisions. Adapting our communities to climate change takes policy change at the local, federal and state levels.

Books:

Mini-Forest Revolution *Hannah Lewis*

Half-Earth: Our Planet's Fight for Life *Edward O. Wilson*

A Terrible Thing to Waste: Environmental Racism and its Assault on the American Mind *Harriet A. Washington*

The Big Fix: 7 Practical Steps to Save Our Planet *Hal Harvey and Justin Gillis*

Learn More:

Podcasts:

The IMPACT *A Sustainable CT podcast*

Resilience: The Global Adaptation Podcast

We All Live Downstream *Clean Water Action*

What on Earth *CBC Radio*

Community Science

The entire earth is touched by climate change, and so there is much to learn about - do not feel overwhelmed! There are many ways you can get involved. If there is an area you would like to learn more about, feel free to email info@nwcd.org. We can help get you information, or help plan educational events surrounding related topics!

One way to get involved is through Community Science Projects. These large scale projects are designed for people of all walks of life to contribute real data that helps the development of best management or mitigation strategies moving forward.

CT DEEP Wildlife Division From reporting Mallard Nests, to monitoring bald eagles and bobcats, to Discover Outdoor Connecticut iNaturalist Project, there are a variety wildlife monitoring projects you could participate in.

Budburst – Backyard Phenology Climate change is altering the timing and seasonal adaptation of many organisms. This program asks people to monitor plant emergence and when pollinators visit the flowering plants. Visit: <https://scistarter.org/budburst>

SciStarter This online platform has a wide variety of opportunities - <https://scistarter.org/>

Pollinator Pathway and Homegrown National Park Creating and monitoring pollinator gardens throughout the country, both these programs offer opportunities for you and your garden: <https://www.pollinator-pathway.org/citizen-science-ideas>

Local Conservation Centers, Land Trusts, Lake and Watershed Associations Often have volunteer monitoring opportunities – Example organizations include the Steep Rock Association, White Memorial Conservation Center, Pomperaug River Watershed Association, Lake Waramaug Task Force, Pootatuck River Watershed Association, Farmington River Watershed Association, Housatonic Valley Association, Bantam Lake Protective Association, and many more! Check out a fuller list here: <https://longislandsoundstudy.net/get-involved/lis-volunteer-opportunities/>

Meet the NWCD Authors/Staff

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**Cynthia
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Applying wetland sciences, horticulture and permaculture to serve NW CT where forests are expanding but subject to climatic changes and are vulnerable; farms struggle to stay solvent. I continue to work for local resiliency in agriculture; open space preservation; forest adaptation; low impact development strategies; and habitat improvement.



**Karen
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I am a product of the 70's, English and philosophy college degree, conceptual and environmentally bent. Many careers and years later, I share my work time between "land use" and NWCD, both supporting my core values that all earth's creatures are entitled to clean air and water, healthy food and respectful and ethical treatment from all.



Kelsey Sudol

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I focus on watershed/lake protection and monitoring, grant writing, and aquatics education. I am the current aquatics chair for Connecticut Envirothon, and work to develop educational material for NWCD. If you are interested in an educational presentation, NWCD as a partner or for assistance for aquatic resource planning or monitoring, reach out!



Annette Lott

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Technician
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As a small farmer myself, I provide peer education and technical assistance to producers in our district. I studied Environmental Science and Sustainable Development at Columbia University, serve on Goshen's Recycling and Trash Commission and SustainableCT group, and am passionate about community resilience. I also enjoy graphic design.



**Kathy
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I studied Aquatic Environments at Allegheny College, and I have over 20 years experience working in Land Use. I have worked in many of the municipalities in NW CT in my role as a Zoning and Wetlands Enforcement Officer, Town Planner and Land Planner in a private consulting firm. In addition to hiking, I have a passion for gardening and sustainable living.

Thank you to our partners:



National Association of
Conservation Districts



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