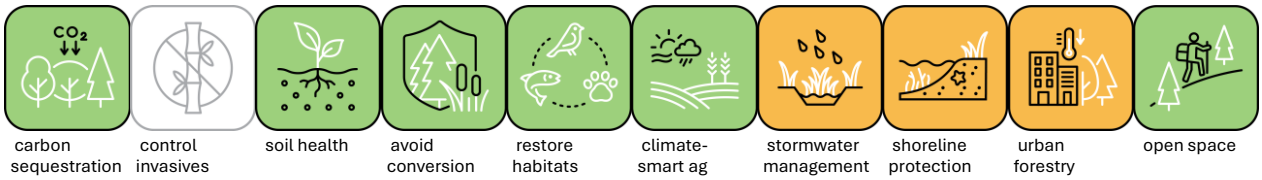
Commercial Property Assessed Clean Energy (C-PACE)

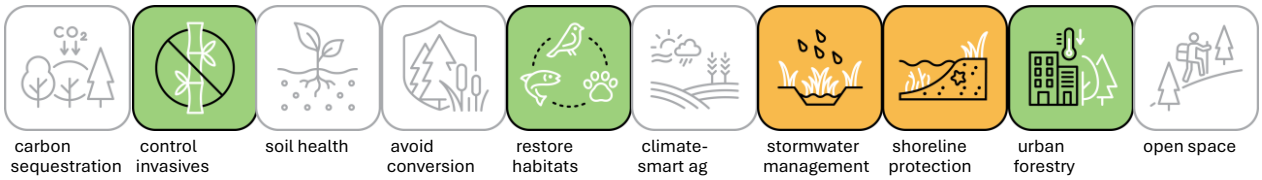


Funding source: CT Green Bank

Commercial Property Assessed Clean Energy (C-PACE) is a commercial product that supports eligible resilience improvements. Applicants complete a resilience study that assesses the expected cost savings of the resilience improvements over the useful life of the improvements. Nature-based solutions, natural infrastructure that promotes stormwater management, healthy vegetation, soils, and aquatic ecosystems such as flood control and hazard risk reduction are within the C-PACE Resilience eligibility.

The Green Bank facilitates lending offerings through C-PACE both through projects originated by the Green Bank and via those originated through other capital providers. For projects not originated by the Green Bank, other qualified capital providers can offer funding through the C-PACE program with private capital, with the Green Bank serving as program administrator. More information on C-PACE is available at https://www.ctgreenbank.com/building-solutions/c-pace/

Smart-E



Funding source: Private capital for Smart-E loans is available through a network of Connecticut credit unions and local banks, supported by a Green Bank loan loss reserve

Smart-E is a lending product for homeowners that includes many improvements that can be financed with this low interest, flexible term loan including nature-based resilience measures. Nature-based measures include replacing impervious surfaces, planting native and/or shade trees, and tree removal. More information on Smart-E is available at https://www.ctgreenbank.com/home-solutions/smart-e-loans/

V. Opportunities to Advance NBS Programs

Section 12(a) of P.A. 25-125 requires DEEP to evaluate how to integrate and advance NBS in Connecticut to help our state meet the massive challenges of climate change, biodiversity loss, and restoring ecosystem resilience. This Chapter is dedicated to identifying programs and approaches that will advance NBS going forward.

Recent swings in federal policy and related funding mechanisms related to programs associated with climate- and nature-based solutions are good reminders that future funding for current

priorities may never fully be "secure." The abrupt shift in priorities from the Biden Administration to the Trump Administration – in particular the funding reductions to programs of the Inflation Reduction Act and Bipartisan Infrastructure Law – may result in some NBS programs listed in this report only being short-term funding opportunities.

In addition to continuing current NBS programs/investments discussed in Chapter III and Chapter IV and perhaps restoring federal funding in the future for some of these priorities, we also include opportunities for advancement of efforts that either have been supported through recent legislation or may truly be new opportunities for consideration in future budget cycles.

A. Review and Coordinate Existing Resilience Funding and Financing Mechanisms

Given the cross-sector and growing scale of impact of climate change on our state, the type of financing needed to help Connecticut better prepare for, respond to, recover from, and mitigate against disasters while ensuring economic stability and safeguarding public welfare will need to be diverse, distributed, and deliberate. One of the critical success factors would be the integration of climate change projections and identifying the appropriate conditions, siting, and design of nature-based solutions as an adaptation tool.

B. Develop a Community of Practice within State Agencies for NBS

There is an opportunity to consider NBS across state agency operations. Certain common functions across state agencies might be good places to start:

- Review permitting
- Review financing
- Determine appropriateness and feasibility framework
- Deliver technical assistance
- Incorporate into agency practices

C. Pilot Resilience Improvement Districts

Public Act 25-33 authorized new powers for municipalities to fund resilience infrastructure. These financing arrangements are built on top of the existing tax incremental financing vehicles in state statute with a focus on resilience. These Resilience Improvements Districts (RIDs) support cross-boundary arrangements, prioritize nature-based solutions and ecosystem services, protect existing housing, and require demonstrable resilience and economic benefits. The CT Green Bank is working with the Resilient Cities Catalyst of pilot RIDs in Connecticut to identify opportunities and constraints for the establishment and administration of such financing mechanisms.

D. Restore Support to Discontinued NBS Programs

As noted earlier, several NBS-related programs had funding for grants and/or staff support that was discontinued as part of a shift in priorities and cutbacks to the federal Inflation Reduction Act and/or Bipartisan Infrastructure Law. In addition, there are other efforts that were explored as pilots for which future funding sources may not yet be identified.

Below we identify the NBS programs in this report for which federal funding has either been eliminated, or may have additional opportunities for bonding investment:

CT DEEP NBS Programs	Funding Source
Outdoor Recreation Legacy Partnership	Federal: Land and Water Conservation Fund/National Park Service
Urban Forest Equity Grant/Trees for Communities	Federal: Inflation Reduction Act/USDA Forest Service
Urban Forested Natural Areas and Riparian Corridor Restoration Grant	Federal: Bipartisan Infrastructure Law & Inflation Reduction Act/USDA Forest Service

CT Department of Agriculture NBS Programs	Funding Source
Climate Smart Agriculture & Forestry Grant	State special allocation

E. Expand Natural and Working Lands Modeling in GHG Inventory

In 2025, DEEP included "natural and working lands" (NWL) as part of the Greenhouse Gas Inventory report for the first time.[59] "Natural and working lands" are a nationally recognized inventory category that has some overlap with, but is separate and distinct from, nature-based solutions. The GHG Inventory report included that the measurable sequestration from NWL – primarily based upon forests and soils using available "Land Use, Land Use Change, and Forestry" (LULUCF[60]) models – sequestered approximately net 4.9 MMTCO2e in 2023.

Over the past decade, models for accurately representing the significance of working and natural lands to the sequestration of greenhouse gases have been improving. Access to new data, AI simulations, and other advances may enable DEEP to continue refining the accuracy of analyses of NWL sequestration that can be included in future GHG inventory reports.

The 2024 CT GHG NWL Inventory largely relies upon the U.S. EPA's State Inventory Tool (SIT) to create a "preliminary estimate" of emissions and sinks in the NWL sector. Estimates for forests and urban forests are provided in SIT with some limitations, and these estimates comprise 95% of net sequestration. As such, future updates to the CT NWL GHG Inventory should consider adding spatial and temporal resolution of GHGs from forestlands, related land use change, and biological carbon stocks in urbanized areas.

[59] Connecticut Greenhouse Gas Emissions Inventory (1990 – 2023), August 2025.
[60] NWL/LULUCF models are defined by the Intergovernmental Panel on Climate Change (IPCC) guidelines for greenhouse gas inventories.

EPA's SIT is a downloadable Excel-based program that includes sector-specific modules, with similar (though more simplistic) methods and sectoral coverage to the National GHG Inventory. It provides default data, though users can also upload their own. It also includes a projection tool that extrapolates based on past trends.

The SIT has several key limitations:

- Low spatial resolution (statewide only)
- Low temporal resolution (Most data can 5-20 years old. For example, wood products data is from 1997.)
- Uncertainty is not quantified but is likely very large, especially for smaller states due to smaller plot sample size
- SIT analysis excludes wetlands

For forests, the SIT uses Forest Inventory Analysis (FIA) data from the USDA Forest Service, which is based on a small number of plots that are remeasured every 5-7 years. As a result, data is averaged across a long timeframe, obscuring annual changes. The SIT allows for analysis of forest carbon at a statewide scale and comparison to other sectors and states but does not allow for tracking policy implementation (e.g., progress on tree planting) or assessing trends in forest carbon on a timescale that is meaningful for climate policymaking or a more regular reporting regime. Finer spatial and temporal resolution is required for this.

In addition to SIT excluding wetlands from its analysis, it is likely that other NBS factors (such as the carbon sequestered by soils) are under-represented because accurate figures are difficult to calculate on a statewide basis. These are a few examples of modeling and data gaps that DEEP will need to address over time to more accurately inventory NWL sequestration as models improve and data becomes more readily available. In the future, DEEP expects to have access to higher-resolution, digitized geospatial data from statewide remote sensing efforts that may allow some of these current data gaps to be addressed.