

# C O N N E C T I C U T

## Land Conservation Council

November 8, 2024

*Sent via email: [DEEP.climateresilience@ct.gov](mailto:DEEP.climateresilience@ct.gov)*

Re: Comments regarding DEEP Climate Resilience Fund (DCRF) and Climate Resiliency Revolving Loan Fund

Attention: Commissioner Katie Dykes and DCRF Team

On behalf of the Connecticut Land Conservation Council (CLCC), I am pleased to submit comments in response to the [DEEP Climate Resilience Fund and Climate Resiliency Revolving Loan Fund \(DCRF\) Request for Information \(RFI\)](#) seeking feedback on both programs. As the statewide umbrella organization for Connecticut's 120 land trusts, CLCC's mission is to elevate and strengthen land conservation across the state. This includes ensuring the protection of Connecticut's natural and working lands and prioritizing the vital role of Nature-Based Solutions (NBS) in addressing climate resilience and biodiversity loss while empowering land trusts and communities to access the resources and benefits of these efforts.

CLCC has participated in key climate and conservation initiatives, including the Governor's Council on Climate Change (GC3) Forests Sub-Group, Resilient Infrastructure and Nature-based Solutions Working Group, and the Policy on Resilient Forests for Connecticut's Future (PRFCT Future) Working Group. I also serve as Chair of the Natural Heritage, Open Space and Watershed Land Acquisition Review Board.

With this background, we offer the following comments on certain sections of the DCRF RFI, focusing on the vital role of NBS in the program.

### **Background Section**

#### **Ways Connecticut Communities Respond to the Impacts of Climate Change (p. 3)**

While we are encouraged by the reference to NBS in this section, we contend it is framed too narrowly. In particular, while valuable, the emphasis specifically on creating stormwater districts misses a critical opportunity to more generally encourage municipalities to prioritize and invest directly in NBS projects across various applications. We ask that this section be revised to emphasize the broader importance of municipal investment in NBS, in addition to or irrespective of stormwater authority creation, and provide other examples of effective NBS applications in communities, such as natural and working land conservation, watershed protection, urban green spaces, and wetland restoration, that improve resilience across all community types.

#### **How DEEP has Supported Climate Resilience (pp. 3-4)**

We note that this section highlights only two DEEP programs relevant to climate resilience. We encourage a more comprehensive inclusion of additional DEEP programs, such as the Open Space and Watershed Land Acquisition (OSWA) Program, the Urban Green and Community Garden (UGCG)



Grant Program, and the Recreation and Natural Heritage Trust (RNHT) Program. These programs have supported land conservation as a foundational NBS initiative integral to climate resilience. Their importance should be emphasized. Additionally, federally funded coastal acquisition grant programs administered by DEEP, including those from the Long Island Sound Study (LISS) and the National Oceanic and Atmospheric Administration (NOAA), should be mentioned to highlight their ongoing impact in funding essential land conservation projects that support resilience.

### **Strategic Principles (pp. 4-5)**

#### **Comprehensive, Complementary Approaches that Prioritize Nature-Based Solutions**

CLCC is pleased to see NBS as a priority within the strategic principles. To further strengthen this principle, we ask that the definition of NBS be included in this section rather than waiting until page 22. This early definition should encompass a broader array of essential NBS components, aligned with Executive Order 21-3 (priorities 20-23), including specific land conservation and stewardship practices that address climate resilience and biodiversity loss. By expanding this definition, DEEP can clarify the diverse potential of NBS from the outset, emphasizing the program's goals to mitigate climate impacts and protect ecological health. **(See below comments related to "Additional Considerations for the DEEP Climate Resilience Fund p.22)**

#### **Proposed DEEP Climate Resilience Fund Structure (p.10)**

CLCC appreciates the structure of the DCRF and welcomes the addition of deployment grants, underscoring the need to fund NBS at every stage of climate adaptation and resilience planning. We contend strongly, however, that DEEP provides a more comprehensive definition of NBS (rather than the current one on page 22 that only provides citations to a narrow list of federal definitions), which addresses climate impacts and specifically emphasizes biodiversity conservation.

CLCC's analysis of the federal citations used to define NBS for purposes of the DCRF highlights the proposition that DEEP should utilize a broader definition of NBS to achieve habit restoration, enhance ecosystem biodiversity AND sequester and store carbon and other greenhouse gases to mitigate climate change. (See Attachment A) We would be happy to work with DEEP to provide a more comprehensive definition of NBS.

To prioritize NBS, we ask DEEP to include a wider range of NBS projects eligible for planning, advancement, and deployment grants. These could include, but are not limited to:

- Increasing carbon sequestration through forest expansion, reforestation, and soil health initiatives;
- Managing invasive species to protect native ecosystems;
- Encouraging the growth of mature forests;
- Protecting carbon stocks through preventing conversion of forests and wetlands;
- Restoring coastal and riparian habitats;
- Promoting climate-smart agriculture and soil conservation practices to reduce emissions, enhance habitat, and protect biodiversity;
- Acquiring land and conservation easements for upslope advancement zones near tidal marshes and inland water resources;
- Conducting comprehensive assessments to support inland migration of tidal marshes;
- Protecting riparian zones adjacent to cold-water streams;
- Amending regulations to maintain stream flow levels critical to ecosystem resilience;
- Stewarding upland forests to enhance regeneration and ecological diversity;
- Collaborating regionally to support at-risk habitats and species; and

- Promoting habitat connectivity across landscapes.

All of those categories should be eligible for grant funding under DEEP's new round of grant funding.

Additionally, land trusts are critical partners in this resilience work but often lack the resources to cover upfront due diligence costs, transaction fees, and other essential expenses needed to close on impactful conservation projects. We strongly recommend that the DCRF make transaction-related expenses (e.g., property surveys, appraisals, environmental assessments, legal and title fees, and baseline report development) eligible for funding within both advancement and deployment grant categories. This would make it possible for all-volunteer and smaller land trusts to pursue projects essential to state climate resilience efforts.

### **Deployment Grants - Subcategory #3 - Long Island Sound Study (LISS) and Coastal Zone Management (CZM) (p. 19)**

We request this subcategory be broadened to include inland and riparian areas. Land conservation projects in these regions, such as those involving riparian buffers and inland wetland restoration, often contribute significantly to resilience but may not align with traditional OSPA project criteria. Expanding this subcategory to fund landscape-scale projects would encourage more holistic approaches to climate resilience, addressing the needs of inland and coastal ecosystems alike.

### **Additional Considerations for the DEEP Climate Resilience Fund (p. 22)**

#### **Defining and Prioritizing Nature-Based Solutions and Green Infrastructure**

As stated earlier, but worth repeating, to strengthen the framework for NBS, we suggest moving this entire section, including the definition of NBS, to the beginning of the document. To reiterate, the current definition, relying upon federal sources, limits accessibility and may hinder understanding. We strongly recommend that DEEP create a concise, accessible definition that captures the essential connection between climate and biodiversity crises and recognizes ecological resilience as a key component of NBS. Addressing these crises as interconnected is essential, as solutions to one must also consider the other. We also ask DEEP to expand the list of eligible NBS projects to prioritize those interventions that promote both climate resilience and biodiversity, such as those outlined in the DCRF Structure section above.

### **Conclusion**

CLCC appreciates this opportunity to provide feedback on the DCRF. We look forward to continued collaboration with DEEP in advancing Connecticut's climate resilience and land conservation goals and remain committed to supporting land trusts and communities across the state in accessing these exciting resources.

Thank you for your consideration of our comments.

Sincerely,



Amy Blaymore Paterson, Executive Director

**Attachment A**  
**Analysis of Definition of NBS on Page 22 of DCRF RFI**

Nature-based Solutions Definitions - Language and Analysis  
By Colin Piteo, Sandy Breslin Conservation Fellow  
Connecticut Land Conservation Council  
**(Comments are bolded)**

The DEEP Climate Resilience Fund, pursuant to Executive Order 21-3, § 9 C, currently defines nature-based solutions as including “but not be limited to, green infrastructure as defined by the Clean Water Act (33 U.S.C. § 1362(27)), natural infrastructure and nature-based infrastructure as defined by the National Oceanic and Atmospheric Administration ("NOAA") in NAO 216-117, nature-based solutions as promulgated by FEMA in their Building Resilient Infrastructure in Communities program, and climate-smart agriculture and forestry strategies as promulgated by the U.S. Department of Agriculture ("USDA") and for flood prevention, climate resilience and erosion control systems as defined by Public Act 21-115, gray infrastructure, and non-structural, project solutions.”

**Clean Water Act (33 U.S.C. § 1362(27)): (This definition is primarily engineering based, reliant on hard infrastructure to define green infrastructure.)**

“The term “green infrastructure” means the range of measures that use plant or soil systems, permeable pavement or other permeable surfaces or substrates, stormwater harvest and reuse, or landscaping to store, infiltrate, or evapotranspire stormwater and reduce flows to sewer systems or to surface waters.”

**National Oceanic and Atmospheric Administration NAO 216-117: (This definition primarily relies upon a strict interpretation of NBS as pertaining to engineering projects.)**

“Nature-based infrastructure refers to engineered systems where natural features are combined with more hard or structural engineering approaches to create a hybrid system. One example is living shorelines, which is an approach that uses plants, sand, and limited use of rock to provide shoreline protection and maintain valuable habitat.”

**FEMA Building Community Resilience With Nature-Based Solutions Report: (FEMA offers a much more liberal definition of NBS, as it widens the scope of solutions beyond infrastructure, such as mentioning environmental management. Additionally, FEMA’s discussion on natural infrastructure also provides an avenue for land conservation and management to be included as explicit examples of NBS.)**

**Nature-based Solutions:**

“This guide defines nature-based solutions as sustainable planning, design, environmental management, and engineering practices that weave natural features or processes into the built environment to build more resilient communities.”

**Natural Infrastructure:**

“The term ‘natural infrastructure’ is often used to describe natural or naturalized landscapes that are actively managed to provide multiple benefits to communities. The International Institute for Sustainable Development, a think tank, notes that active management is what sets natural infrastructure apart from nature. For example, a managed wetland is a type of natural infrastructure. Manipulating water levels and cleaning out plant growth can enhance a managed wetland’s water quality, habitat, and flood storage benefits.”

**FEMA states NBS does NOT include gray infrastructure:**

“The common thread among these terms is that nature-based solutions often provide more value than single-purpose gray infrastructure. Gray infrastructure refers to public works structures that are engineered to provide a specific level of service under specific scenarios. In the context of drinking water and wastewater, gray infrastructure includes water and wastewater treatment plants, pipes, catch basins, and stormwater basins. In the context of coastal communities, gray infrastructure includes sea walls, groins, and breakwaters. While gray infrastructure provides only the service for which it was designed, nature-based solutions yield additional community and ecosystem services benefits.”

**USDA Climate-Smart Agriculture and Forestry Strategy:**

**Climate-smart agriculture and forestry definition**

“Climate-smart agriculture and forestry is an integrated approach that enables farmers, ranchers, and forest landowners to respond to climate change by reducing or removing greenhouse gas emissions (mitigation) and adapting and building resilience (adaptation), while sustainably increasing agricultural productivity and incomes. With support from NRCS, producers and land managers can engage in climate-smart agriculture and forestry to adapt to the impacts of climate change and contribute to solutions that help to limit future climate change.”

**Additional notes in the USDA report on forest and land conservation in relation to climate-smart agriculture and forestry:**

“Keep forests as forests while building climate resilience through forest conservation programs. The Forest Legacy Program (FLP) is a critical tool that advances climate goals by encouraging the protection of privately owned forest lands through conservation easements or land purchases. Other forest conservation programs, such as the Community Forest Program (CFP), Forest Stewardship Program (FSP), Sustainable Forestry African American Land Retention Program (SFLR), and Urban and Community Forestry (UCF) Program, should explicitly incorporate forest carbon and climate impacts into decision-making to ensure that mitigation and adaptation considerations more clearly influence forest management and project design decisions.”

“Increase the rate of reforestation, especially after disturbances. Nearly 90 percent of current reforestation needs on National Forest System lands are the result of wildfire and other natural disturbances. The greater the rate of reforestation, the greater the cumulative carbon sequestration. Increasing the rate of reforestation also requires increases in nursery capacity and associated supply chains. Climate-smart principles and ecologically sound strategies should underpin all reforestation efforts, ensuring that investments into nurseries and planting are reinforced by intentionally choosing climate-adapted species and genotypes and using climate-informed planting techniques, consistent with maintaining or restoring the ecological health of the landscape.”

“Support landscape-scale conservation and management. USDA should build on its existing research by identifying existing gaps and generating new interdisciplinary research that incorporates Tribal and stakeholder input to increase the use of best management practices, innovative technologies, and tools to promote resilient farms, forests, and rangelands, and improve ecosystem services. These initiatives should include open access to research data to facilitate trans-disciplinary research, meaningful and substantive Tribal and stakeholder engagement, and the co-development of research and management recommendations. Investment in research and development, education, and extension activities can also increase our collective understanding of whole ecosystem responses to current and projected climate change, as well as environmental impacts of agricultural”