# CAC Action Plan and Vermont Climate Plan Revision and Alignment Opportunities

#### **Background**

In 2020, Vermont passed the Global Warming Solutions Act which created legally binding emission reductions as well as considering opportunities for long term carbon sequestration and opportunities for Vermont communities prepare for the impacts of climate change. The resulting Vermont Climate Action Plan was completed in December 2021 by the Vermont Climate Council and five subcommittees: rural resilience and adaptation, agriculture and ecosystems, cross sector mitigation, just transitions and science and data.

The Climate Council and subcommittees are now working on a 2025 Update to the Vermont Climate Action Plan to be completed by July 1, 2025. They will be reviewing progress, determining where additional action is needed, and prioritizing strategies and actions.

There is an opportunity for input through subcommittees through Council and as part of public input process.

Climate Action Plan Kickoff events are planned for next week. The events are the following dates:

<u>June 18, 5:30-7:00 pm</u> June 20, 12:30-2:00 pm



The planned Update provides an opportunity for the CAC to provide input on climate change action priorities for Lake Champlain and its watershed in Vermont.

Specifically, the CAC could consider these questions:

What strategies and actions in the 2021 Climate Action Plan are a priority for the Vermont Citizens Advisory Committee for Lake Champlain?

Are there missing or incomplete strategies and actions that are a priority for Lake Champlain that should be considered for the 2025 Update underway now?

## Crosswalk/Alignment of 2024 CAC Priorities with 2021 Climate Action Plan

Summary below of how two of the Vermont CAC 2024 Priorities potentially align with a subset of 2021 Vermont Climate Action Plan Pathways, Strategies and Actions (focused on Agriculture and Ecosystems) that seem most relevant.

CAC Priority: Invest in infrastructure, programs, and practices that **build community resilience to climate change** impacts and restore ecological function.

Restoration and protection of Lake Champlain's headwaters, river corridors, floodplains, wetlands, and riparian buffers are cost-effective resilience strategies that also help to achieve clean water and ecological health co-benefits.

State needs to improve failing municipal systems and provide more proactive education, oversight, and outreach to homeowners about their septic systems.

The CAC encourages the State to **explore an emergency response loan fund as a means** to help cover costs related to wastewater failures and fully support funding of the State Revolving Loan program.

The CAC endorses **expanded capacity of the Vermont Rivers Program and organizations working to implement river restoration and protection.** In addition, the State **must prioritize investments that support adaptive, resilient, and compact settlement and help Vermont communities,** particularly those vulnerable to climate-related severe weather events.

## Related 2021 Vermont Climate Action Plan: Pathway Strategies Actions

Pathway - Adaptation: Sustain, restore, and enhance the health and function of Vermont's natural and working lands to help both natural and human communities adapt to climate change

Strategies

Increase technical assistance, capacity, education, and resources to support private and municipal forestland owners, planners and managers for climate change

Promote and incentivize Climate-Adaptation forest management practices

Promote funding for nature-based solutions and traditional ecological knowledge efforts and incorporate into state funding and planning efforts (merged two strategies)

Manage natural and working lands for biodiversity, forest health and climate resilience

Plan and regulate for climate resilience and adaptation

Increase flood resilience of the natural and built environments

Actions

Incentivize water storage in natural areas to promote flood resilience and biodiversity through expansion of wetland, floodplain, and/or river corridor easements that better compensate landowners/managers Ensure opportunities for floodplain reconnection and nature-based solutions are considered a high priority in the Statewide Conservation & Buyout Program through incorporation of multi-stakeholder developed prioritization criteria

Invest transportation funding in improving flood resilience and aquatic and terrestrial connectivity

Promote healthy, connected river corridors, floodplains and wetlands

Support and fund research and design to strategically invest in floodplain and river corridor reforestation efforts. Specifically, develop an inventory of priority/critical headwater and floodplain storage areas, prioritize investments for restoration and protection in these areas, and use to inform Compact Settlement planning efforts

Expand support for riparian buffer enhancements to easements with a goal of increasing the amount of vegetation and biodiversity in riparian areas

Increase support for wetland restoration and protection

Pathway Land use: Shape land use and development that support carbon sequestration and storage, climate resilience and adaptation, and natural and human communities for a sustainable and equitable future

Promote and incentivize compact settlement and reduce forest fragmentation.

Include biodiversity and resilience goals in the planning and management of natural and working lands (both public and private).

Pathway Sequestration/Mitigation: Maintain and expand Vermont's natural and working lands' role in the mitigation of climate change through human interventions to reduce the sources and enhance the sinks of greenhouse gases.

Increase tree coverage

Provide incentives for restoration and expansion of floodplain forests

Create a system for tracking and accounting metrics and indicators for natural and working lands

Develop a methodology and protocol for quantifying climate mitigation, resilience, and adaptation impacts of existing state and federal water quality implementation programs as reported through the annual Clean Water Initiative Performance Report. The Clean Water Initiative Performance Report "summarizes the State of Vermont's clean water efforts and demonstrates how investments are making a difference through accountability measures." As mentioned, most water quality conservation practices and programs also have climate mitigation, resilience, and adaptation benefits. Recommend using existing tracking systems and quantify the climate benefits from this existing implementation and data tracking. The data spans state and federal funding programs and regulatory programs that drive clean water efforts and coordinates across agencies to track these efforts and monitor progress. CAC Priority: Provide **support and resources to farmers** to facilitate the agricultural transition to sustainability and ensure consistent regulatory enforcement, including review of the 2017 MOU between ANR and VAAFM.

### Related 2021 Vermont Climate Action Plan: Pathway Strategies Actions

Pathway - Viability: Support and empower Vermont's natural and working lands owners, managers, and caretakers to enhance farm and forest viability and to make informed decisions to increase resilience and adaptation to climate change

Foster partnerships at all levels (state, federal, nonprofit, and private sector): essential to recognizing, capacitating, and building strategies for farmers to address climate change and enhance community resilience.

Expand funding for existing programs dedicated to farmland access, forestland ownership, and conservation, and leverage this funding to increase land access through flexible and new ownership financing mechanisms, policies, and models

Pathway - Economies: Grow and connect local, sustainable natural and working lands economies, markets, and food systems, while ensuring and providing equitable access to said economies, markets, and food systems for Vermont's people.

Develop, expand, and sustain local markets specifically for food, agricultural, and forest products in ways that ensure the alleviation of food insecurity and local food access.

Promote workforce development in all working lands sector along all points of the supply chain

Strengthen all aspects of working lands' supply chains and the associated infrastructure to support them.

Pathway – Sequestration/Mitigation: Maintain and expand Vermont's natural and working lands' role in the mitigation of climate change through human interventions to reduce the sources and enhance the sinks of greenhouse gases.

Leverage, expand, and adapt existing State of Vermont programs that support the agricultural sector's mitigation of climate change through: The prevention of emissions to the atmosphere by conserving existing carbon pools in soils or vegetation, or by reducing emissions of methane (CH4) and nitrous oxide (N2O); Sequestration—by increasing the size of existing carbon pools, and thereby extracting carbon dioxide (CO2) from the atmosphere; and Substitution—substituting biological products for fossil fuels or energy-intensive products, thereby reducing CO2 emissions.

Implement grazing practices that increase vegetative cover and forage quality, e.g. rotational grazing.

Implement agroforestry and silvopasture practices that integrate woody vegetation in agricultural production.

Implement edge-of-field practices that increase herbaceous and woody vegetation, e.g. riparian forest buffer (e.g. CREP).

Implement natural resource restoration practices that support climate mitigation and resilience, including river corridor easements, wetland restoration, and afforestation practices with consideration to agricultural land loss.

Implement a Payment for Ecosystem Services (PES) program for natural and working lands

Expand Capital Equipment Assistance Program (CEAP) program to extend beyond water quality and incorporate climate change criteria

Pathway - Education: Create accessible, equitable research, partnerships, and education; promote shared understanding; and invest in sustainable workforce development for the natural and working lands sector

Provide funding for climate-related education at all levels, outreach, research, and technical assistance programs

Establish and fund an educational program that explains the role that Vermont farmers and foragers and their high-quality, local food products play in maintaining a low climate impact

Develop and promote climate-related educational materials for private landowners to empower them to make climate-informed decisions about their land and waters

### Vermont Resilience Implementation Strategy

Governor Scott and Treasurer Pieciak announced A joint effort to develop a comprehensive Vermont Resilience Implementation Strategy by July 1, 2025. The initiative will coincide with an update to Vermont's Climate Action Plan, enabling a coordinated and balanced approach to addressing both the mitigation of greenhouse gas emissions and accelerate efforts to adapt to the consequences of climate change.

The Resilience Implementation Strategy will include:

Community-Centric Approach: The Strategy will place communities at the forefront. Recognizing that local perspectives and needs are integral to effective climate resilience, the Strategy will promote community engagement that is in line with Vermont's Environmental Justice law and empower residents to actively participate in shaping their region's resilience strategies.

Nature-Based Solutions: Governor Scott and Treasurer Pieciak are committed to protecting Vermont's rich natural resources. The Strategy will prioritize projects to safeguard ecosystems, promote biodiversity, and mitigate the impact of extreme weather events on agriculture, forestry, and water resources. These solutions also serve to buffer the state's infrastructure and built environment from the most intense impacts of climate change.

Infrastructure Design and Reinforcement: Vermont has a considerable amount of infrastructure – from roads and bridges to wastewater treatment facilities to power lines and communications services – that is vulnerable to climate impacts. Recognizing this vulnerability, the Strategy will identify how to "harden" Vermont's critical assets to better withstand extreme weather events.

Early Warning Systems and Fast, Effective Response: Early warning mechanisms and fast, effective response are critical to ensuring Vermonter's safety. The Strategy will build out early warning mechanisms and identify policies needed to support fast, effective response. These tools will enable Vermont to anticipate and respond swiftly to climate-related threats, reducing the impact on communities and infrastructure.

Economic and Environmental Sustainability: Climate change has an impact on Vermont's economy. Acknowledging the interconnectedness of climate resilience and economic stability, the Strategy will also include initiatives to support businesses and working lands enterprises in adapting to changing climate conditions.