Vermont Climate Council

Building the Climate Action Plan

Initial Suite of Actions

AGRICULTURE AND ECOSYSTEMS SUBCOMMITTEE

Abbie Corse & Billy Coster, co-chairs

September 28, 2021

Subcommittee Members and Staff Support

Subcommittee Members:

- **Jake Claro**, Vermont Sustainable Jobs Fund

- **Billy Coster**, Co-Chair, ANR

- **Abbie Corse***, Co-Chair, The Corse Farm Dairy

- **Judy Dow**, Gedakina

- **Charlie Hancock**, North Woods Resource Group

- **Iris Hsiang***, Essex High School

- **David Mears**, Audubon Vermont

- **Lauren Oates***, The Nature Conservancy

- **Ryan Patch***, VAAFM

- **John Roberts**, Champlain Valley Farmer Coalition

- **Alissa White**, UVM

State Staff Support:

- **Alex DePillis**, AAFM

- **Alexandra Kosiba**, FPR

- **Judson Peck**, VAAFM

- **Bob Popp**, F&W

- **Marli Rupe**, DEC

Councilor or designee

Process to Date

1. Refining and synthesizing our strategies and actions

2. Created 3 Stakeholder event which were really well attended and gave us valuable information as to how some of our strategies and actions will land within the sector

3. Attempted to elevate and work through tension issues to come to a place of consensus on the draft matrix with which you were provided.

Climate Action Plan Recommendations

SEQUESTRATION - Maintain and expand carbon sequestration and storage in Vermont's natural and working lands.

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.

EMISSIONS - Support and empower Vermont's farmers, foresters, and land workers to reduce greenhouse gas emissions from their operations.

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

ECONOMIES - Grow and connect local, sustainable natural and working lands economies, markets, and food systems, and provide equitable access to them.

LANDUSE - 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.

EDUCATION - Create accessible, equitable research, partnerships, and education; promote shared understanding; and invest in sustainable workforce development for the natural and working land sectors.

PATHWAY A

Sequestration: Maintain and expand carbon sequestration and storage in Vermont's natural and working lands

1. Leverage, expand, and adapt existing State of Vermont programs that support agriculture GHG emission reduction and agricultural soil carbon sequestration and storage while tracking and quantifying resilience and adaptation co-benefits

2. Develop and implement programs which incentivize management practices which maintain or increase forest carbon storage and track carbon sequestration

3. NEW: Leverage market-based solutions, such as existing or new regional Carbon Market opportunities, to incentivize forest management practices which sequester and store greater amounts of carbon in our forests

4. Increase tree cover.

5. Create system for tracking and accounting metrics and indicators for natural and working lands.

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

PATHWAY B

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

1. Invest in farmland conservation that protects natural and working lands from development.

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

3. Promote and incentivize Climate-Adaptation forest management practices

4. Protect forest health and biodiversity

5. Support research efforts for better understanding of forest ecosystems, local climate change and impacts to forests and ecosystem services

6. Increase funding for lake/pond mitigation and adaptation efforts

7. Fund and incentivize nature-based solutions

8. Promote nature-based solutions and traditional ecological knowledge in state planning and regulatory efforts

9. Manage natural and working lands (public/private) for biodiversity and resilience (including info/assistance for landowners/managers)

10. Plan and regulate for climate resilience and adaptation

11. Increase flood resilience of the natural and built environments

12. Increase vegetative growth in riparian areas

13. Promote healthy, connected river corridors and floodplains

14. Protect headwaters and smaller headwater tributaries

15. Increase support for wetland restoration and protection

PATHWAY D

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

1. Support and enhance local food markets for greater viability and mitigation and resilience benefits.

2. Foster partnerships at all levels, which is essential to recognize, capacitate, and build strategies for farmers to address climate change.

PATHWAY C

Emissions: Support and empower Vermont's farmers, foresters, and land workers to reduce greenhouse gas emissions from their operations

1. NEW STRATEGY: Educate, track, and appropriately reward on-farm renewable energy

2. Promote and incentivize use of local wood products to reduce embodied carbon footprint.

3. Reduce GHG emissions from forestry sector

4. Eliminate or reduce gas powered motors on lakes below threshold size

5. Increase funding for lake/pond mitigation and adaptation efforts

PATHWAY E

Economies: Grow and connect local, sustainable natural and working lands economies, markets, and food systems, and provide equitable access to them

1. Develop, expand, and sustain local markets specifically for food, agricultural, and forest products addressing food insecurity and access.

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

3. Provide greater support and capacity for energy transformation on working lands enterprises for greater efficiency and increased business viability.

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

PATHWAY F

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

1. Minimize and mitigate negative impacts of renewable energy generation.

2. Promote and incentivize compact settlement.

3. Improve statewide forest planning efforts on State and Federal Land

4. Increase technical assistance, capacity, education and resources to support private forestland owners and municipalities for intergenerational transfer.

5. New strategy: Increase the pace of permanent conservation towards 30x30 targets, with Vermont Conservation Design acting as the guiding plan for prioritization of efforts. (Old version: Increase the pace of permanent conservation to meet 30x30 targets)

6. Reduce forest fragmentation

7. NEW STRATEGY: Amend tax policy to incentivize the long-term stewardship of managed forests

8. Create statewide groundwater resource maps, water use and water level data for use in water budgets for local areas to prepare for drought conditions [recommend changing to "moisture variability"] conditions

9. Invest in strategic conservation

10. Manage natural and working lands (public/private) for biodiversity and resilience (including info/assistance for landowners/managers)

11. Promote healthy, connected river corridors and floodplains

12. Improve natural wetlands and wetland systems across the state

13. Upgrade VT Wetlands Maps to more accurately inform planning efforts

PATHWAY G

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

1. Invest in Climate Smart Agriculture education, outreach, research, and technical assistance programs

2. Expand environmental and climate change education at all grade levels

3. Increase vegetative growth in riparian areas

Areas of Ongoing Subcommittee Dialog
(a partial list)

1. Changes to the Current Use Program (Use Value Appraisal).
2. Modernizing Act 250 and other regulatory programs, such as flood hazard/river corridor.
3. Actions to build capacity and provide economic support for land managers and owners.
4. PES and carbon credit programs.
5. Role of regulation vs. incentive.
6. Role of Traditional Ecological Knowledge in public policy development.
7. The role of electric-led biomass generation.
8. Equity impacts of large-scale hydropower, especially Hydro Quebec.
9. Renewable energy sitting, especially solar.
10. Lifecycle GHG accounting.