

Rural Resilience and Adaptation Sub- Committee

VT Climate Council



Report on Work Program Tasks 1-1, 1-2 and 1-3

July 16, 2021

Update Includes Preliminary Pathway, Strategies and Actions

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Rural Resilience and Adaptation Sub-Committee Work Program Tasks

1-1 Inventory and analysis of current plans, programs, policies.

- Assess whether items supports GHG reductions; and
- Whether inequities are specifically addressed.

1-2 Identify where gaps exist to better integrate items to support GHG emission reduction and building resilience.

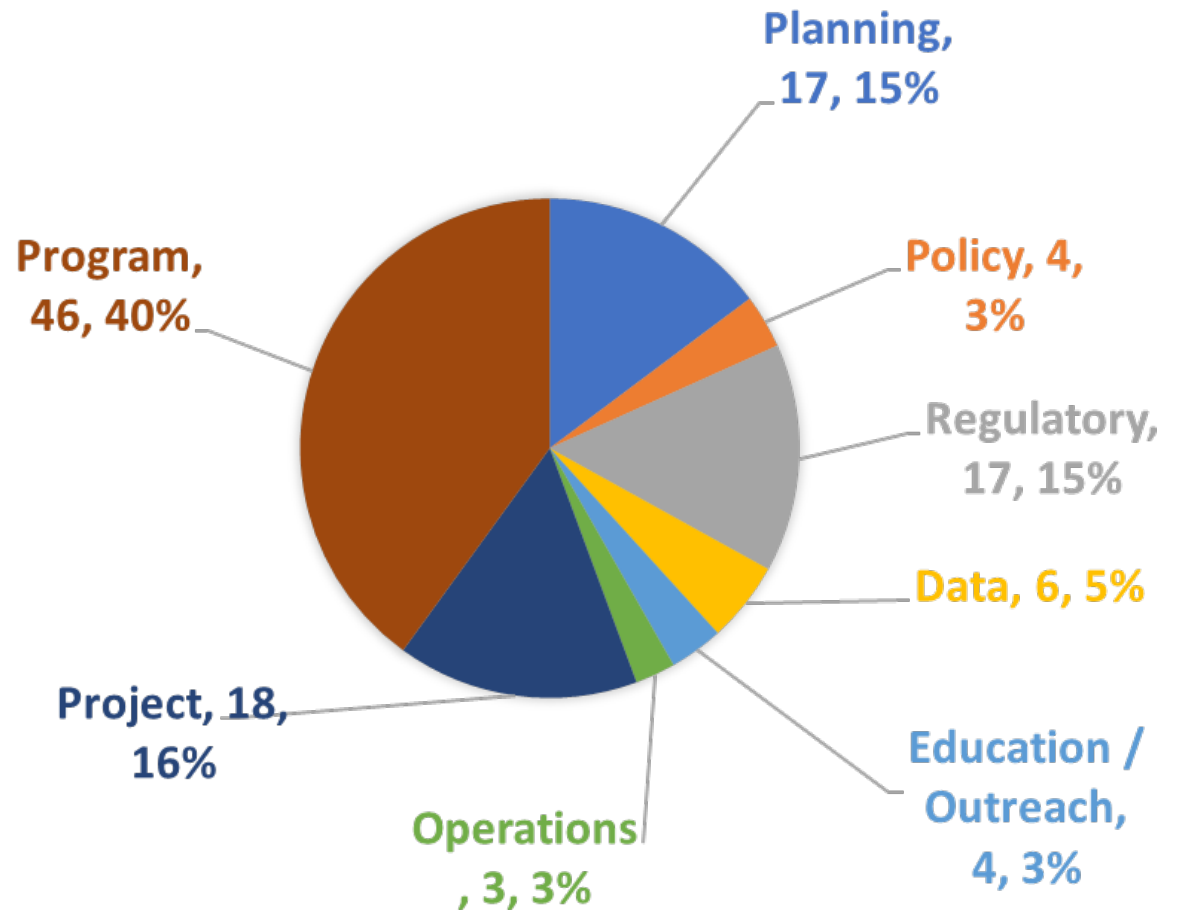
1-3 Recommendations on policies, legislation, programs or operations to resolve identified gaps.



Resilience and Adaptation Inventory Overview

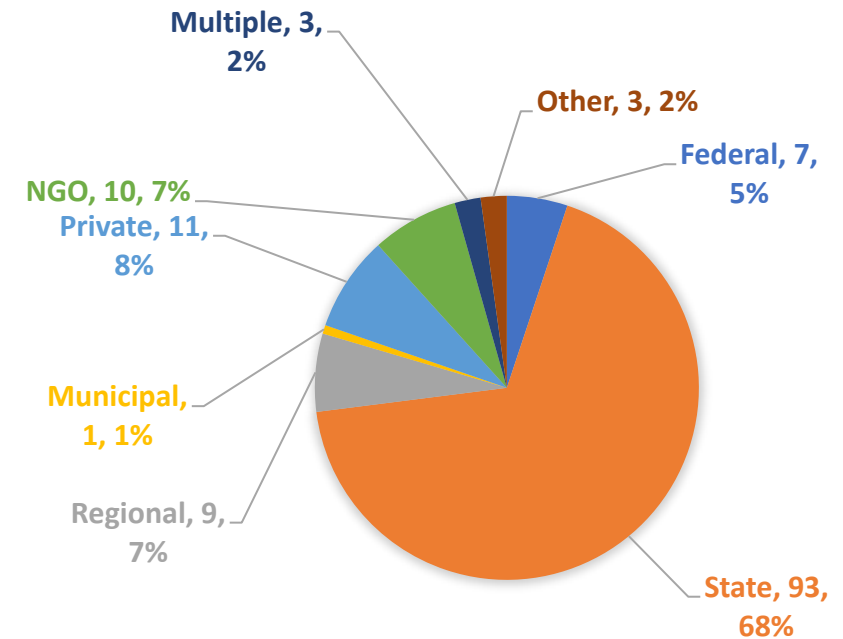
Activity Type

- Approximately 135 existing activities in inventory
- Reasonable share of Planning, Policy & Data to support Implementation (Program, Projects, Ops, Regulatory, Data, Outreach)



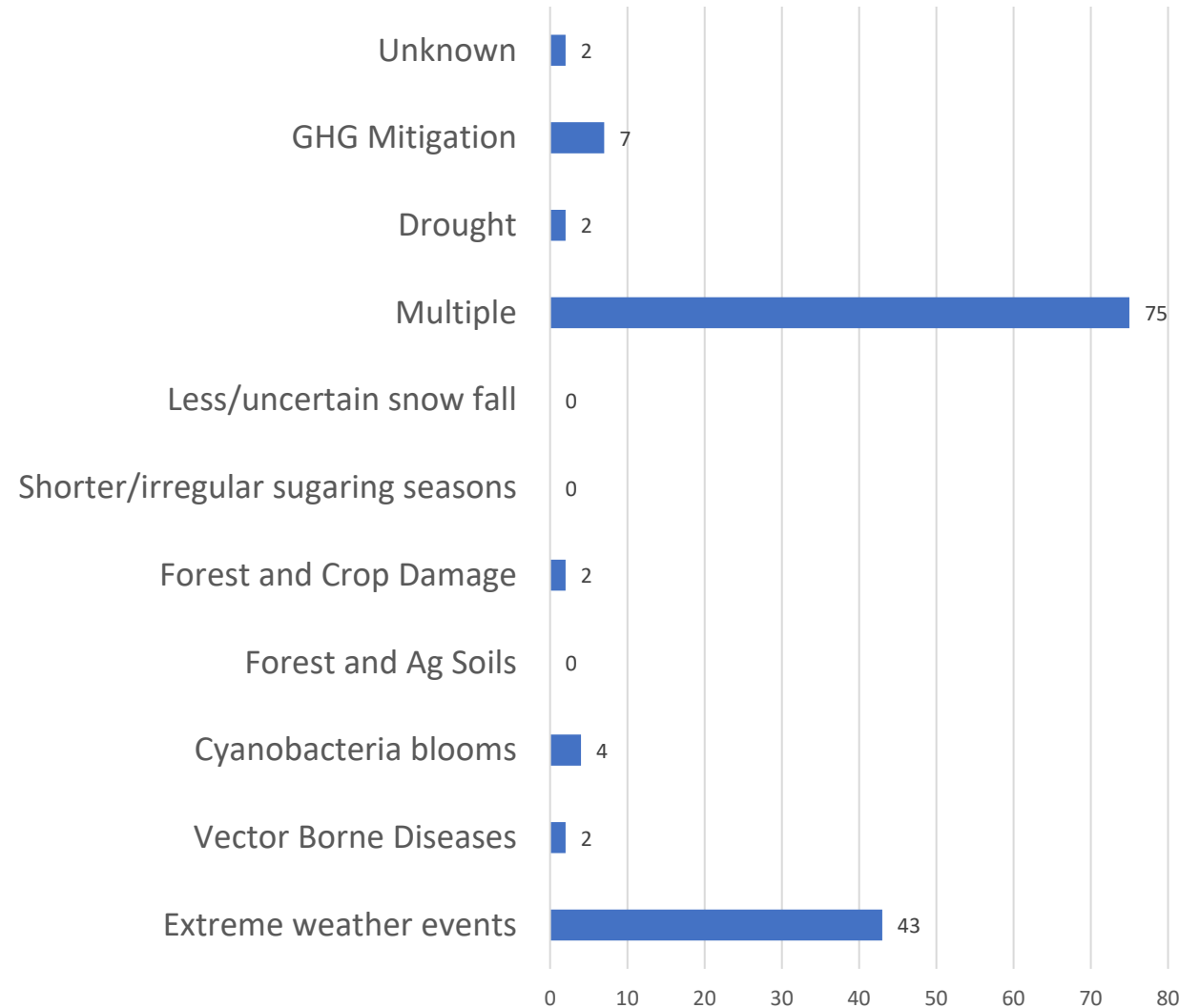
Organization Type

- Many participants
- State has largest role
- Don't have a good handle on how the private sector is adapting



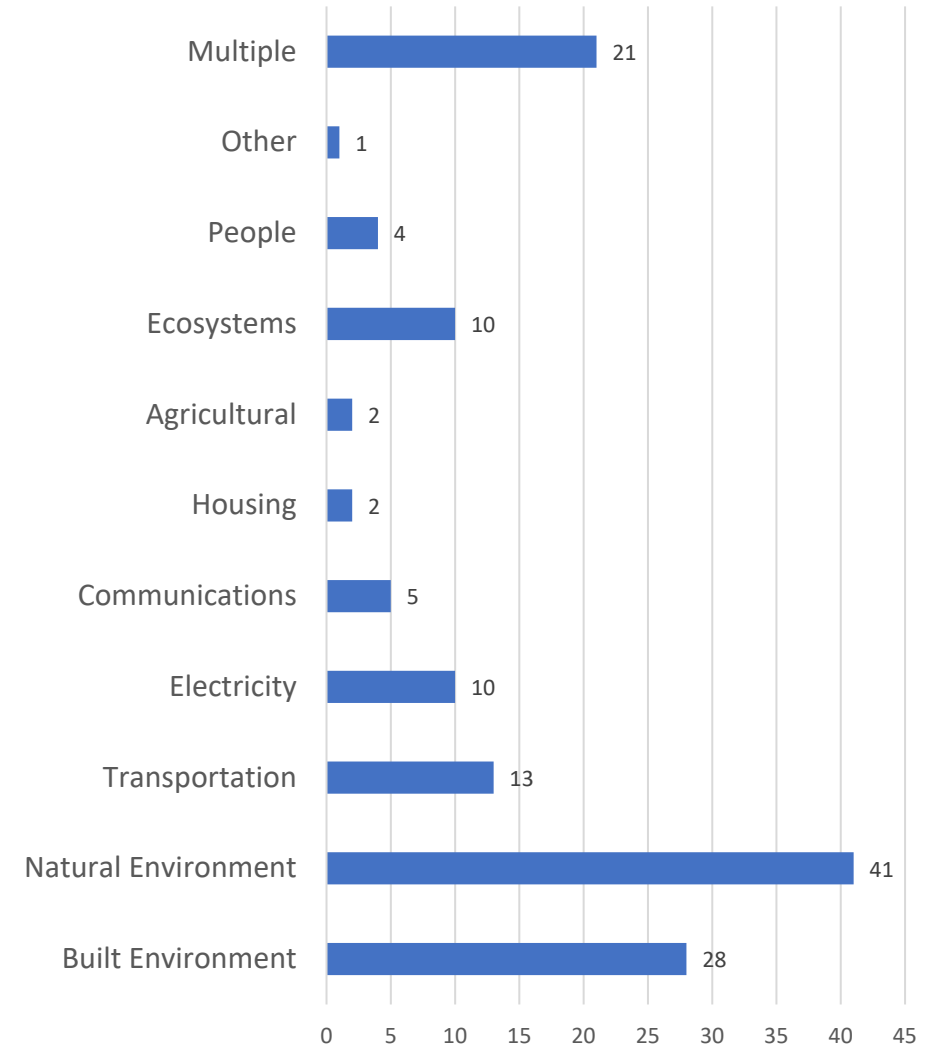
Threats Addressed

- Extreme weather is largest category
- Many activities address multiple threats
 - 20 of 59 are FPR Related
 - Extreme weather still predominant
- Overall mix needs to be evaluated relative to risk (consequence and frequency).
- What threats are missing?



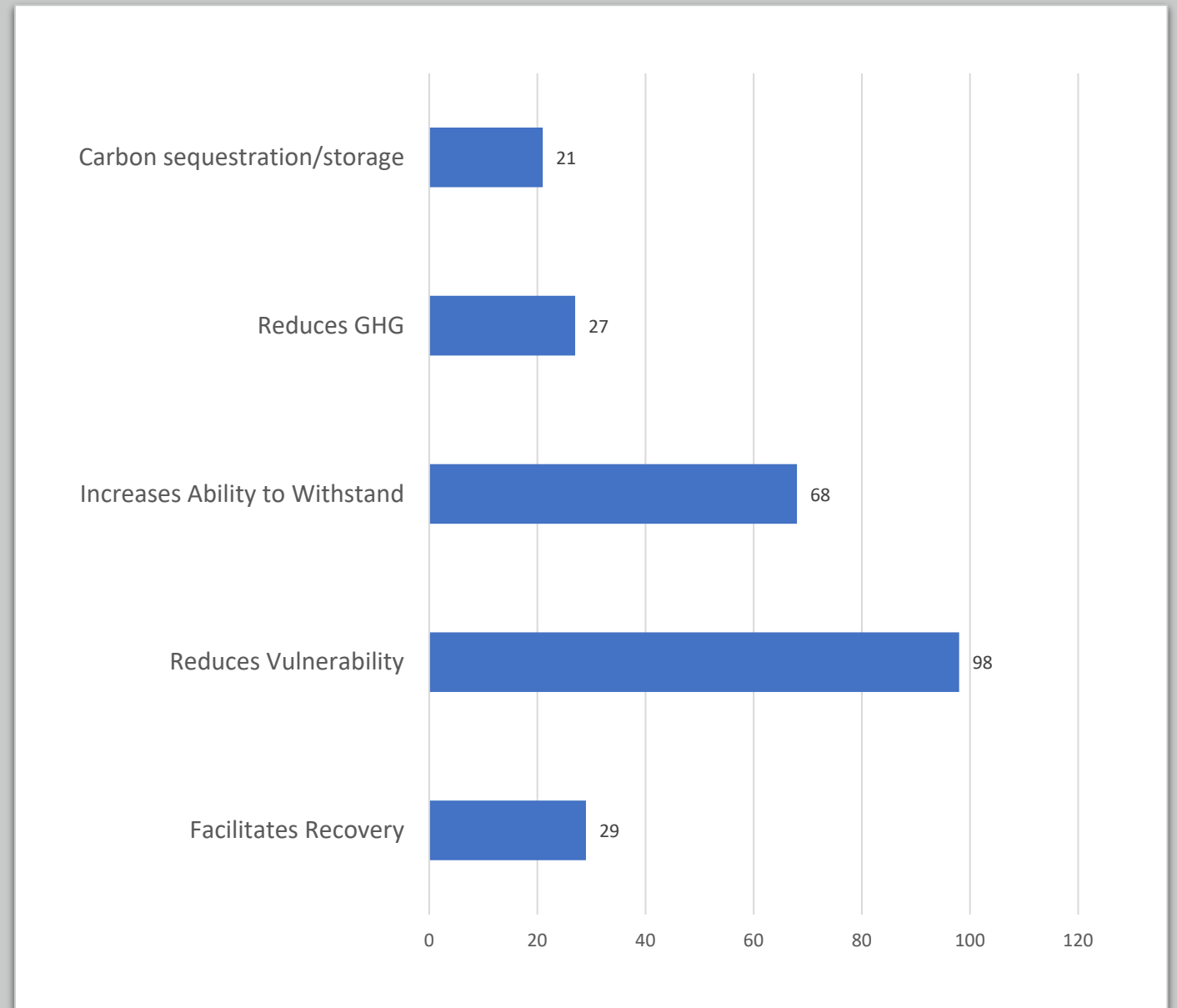
Sectors Addressed

- Activities focused on people appears to be lacking,
 - Or is approving resilience for people the ultimate outcome of other activities?
- Have not identified activities that support businesses
- Waiting for more information on housing



Benefits / Purpose

- § 590 GWSA Adaptation and Resilience Definitions
- (1) “**Adaptation**” means **reducing vulnerability** and advancing resilience through planned and implemented enhancements to, or avoiding degradation of, natural and built systems and structures.
- (4) “**Resilience**” means the capacity of individuals, communities, and natural and built systems to **withstand and recover** from climatic events, trends, and disruptions.



Work Program Task	Observations
<p>1. Inventory and analysis of current plans, programs, policies.</p> <ul style="list-style-type: none"> ▪ Assess whether items supports GHG reductions; and ▪ Whether inequities are specifically addressed. 	<ul style="list-style-type: none"> • About one-third of resilience and adaptation activities also address GHG reduction • Need to develop approach to evaluating inequities at this scale <ul style="list-style-type: none"> • Perhaps screen for Potential Inequity (Low, Medium, High) relative to Just Transitions Guiding Principles
<p>2. Identify where gaps exist to better integrate items to support GHG emission reduction and building resilience.</p>	<ul style="list-style-type: none"> • Broad Gaps <ul style="list-style-type: none"> • Limited activities address threats posed by drought, less/uncertain snowfall, shorter/irregular sugaring season • Adaptation needs of Businesses/Private Sector lacking • Adaptation needs of People lacking • Lack of intentional coordination between activities • Gap Themes in Specific Activities <ul style="list-style-type: none"> • Limited scope or eligibility • Inconsistent use across the state • Insufficient and/or lack of dedicated funding source • Reactive • Lack of data • Reliance on voluntary participation

Task 1-3. Recommendations

Pathway: Existing resilience and adaptation activities serve the needs of Vermonters

- Expand scope or eligibility of existing resilience and adaptation programs
- Provide consistent statewide application of resilience and adaptation strategies.
- Provide sufficient or dedicated funding for existing, successful resilience and adaptation activities.
- Make existing resilience and adaptation activities proactive.
- Strengthen/encourage participation in voluntary resilience and adaptation activities.
- Provide sufficient data to evaluate and track the performance of existing and new resilience and adaptation activities.
- Develop programs to address threats posed by drought, less/uncertain snowfall, shorter/irregular sugaring season
- Evaluate the resilience and adaptation needs of businesses
- Identify opportunities to better coordinate and consolidate existing resilience and adaptation activities.



- The following slides include potential and preliminary actions for each strategy. The actions are based on limitations identified by the staff from the organizations that provided information for the inventory. Additional refinement will be necessary.

Strategy: Expand scope or eligibility of existing resilience and adaptation programs

- Include rail infrastructure in the transportation resilience planning tool.
- Provide rivers and road training to municipalities
- Make the AOT Repeat Flood Damage Inventory Tool available to municipalities.
- Encourage more municipalities to incorporate Flood Hazard Area & River Corridor Protection Procedures in local land use regulations
- Incorporate external nutrient loading in Aquatic Nuisance Control Spread Prevention.
- Make village centers permanently eligible for the downtown transportation fund
- Address limitations in the FEMA buyout programs (can't be used for vacant land, local capacity, etc)
- Consider adoption of residential building codes to increase competitiveness for FEMA BRIC and other competitive grants.
- Advocate for changes to the Federal Flood Mitigation Assistance program to allow for erosion impacts as well as inundation.
- Advocate for increasing the timeline for participation in the US Corps of Engineers Silver Jackets program beyond one year



Strategy: Provide consistent statewide application of resilience and adaptation strategies.

- Encourage adoption of Town Highway Road and Bridge Standards by all municipalities
- Provide sufficient capacity to support participation in the FEMA Community Rating System
- Encourage adoption of Flood Hazard Area & River Corridor Rule, and Vermont Model Municipal Flood Hazard Bylaws in all local land use regulations.
- Encourage all municipalities to seek Municipal Flood Hazard Permit Review from ANR.
- Encourage municipal participation in the Emergency Assistance and Relief Fund.



Strategy: Provide sufficient or dedicated funding for existing, successful resilience and adaptation activities.

- Keep the Statewide River Corridor Map layer updated
- Permanently fund the state buyout and conservation program
- Expand the Vermont Economic Resilience Activities
- Forest Legacy and Community Forest and Open Space Programs
- Forests and Climate Change Program
- Invasive Terrestrial Plant Species Suppression (current funding limited to 3 years)
- Carbon Markets for Private Landowners
- Land Conservation - Forestlands and Natural Areas (One time increase to funding provided in SFY 22 Budget)
- Land Conservation - Agricultural Land(One time increase to funding provided in SFY 22 Budget)
- Affordable Housing - New Construction and Rehab. (Higher incentives or greater funding for energy efficiency programs in coordination with affordable housing development programs would maximize outcomes. Significant new funding available for housing recovery post-pandemic.)



Strategy: Make existing resilience and adaptation activities proactive.

- Minimize lake shore encroachment through planning and regulations rather than relying on case-by-case reactive permitting.
- Improve shoreland protection through planning and regulations rather than relying on case-by-case reactive permitting.
- Supplement reactive hazard mitigation funding such as FEMA PA and HUD Disaster Relief, with proactive hazard mitigation programs that do not rely on funding from the most recent disaster



Strategy: Strengthen/encourage participation in voluntary resilience and adaptation activities.

- River and floodplain restoration
- River corridor easements
- Lakewise program



Strategy: Provide sufficient data to evaluate and track the performance of existing and new resilience and adaptation activities.

- Maintain existing adaption and resilience inventory
- Monitoring work for the WSMD-MAP at twelve “sentinel” streams in Vermont that provides data for analysis and decision making.
- Forest health monitoring

