



VERMONT'S APPROACH TO EXTREME WEATHER PREPAREDNESS

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Vermont Agency of Natural Resources
January 14, 2026

Overview

- Vermont facts & figures
- Key Tools/Approaches
- Next steps



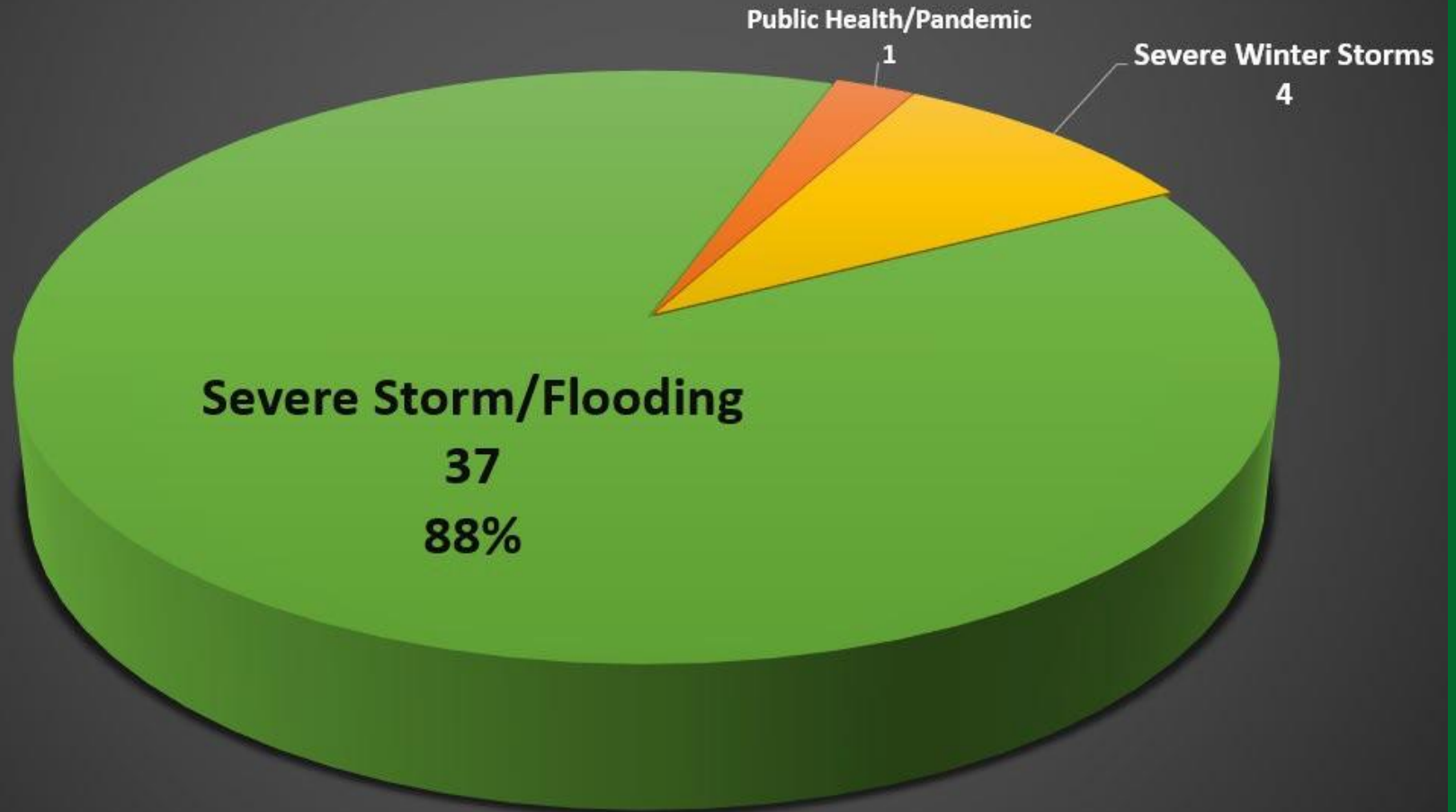
A bit about Vermont...

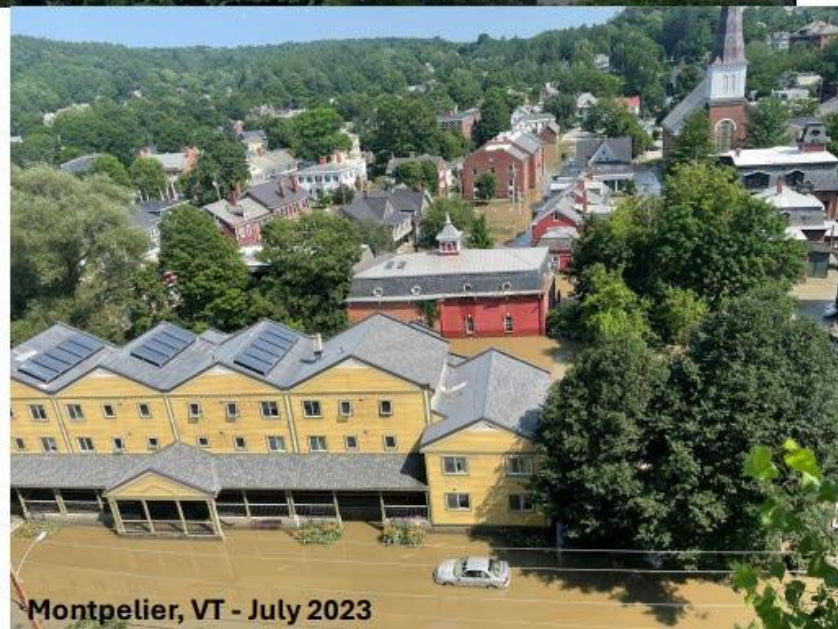
- Vermont's land area is just over 9,000 square miles (5,760,000 acres)
- Roughly 650,000 residents
- 256 municipalities + 30 incorporated villages and no real county government
 - Only 4% of municipalities >10,000 residents
- 14,000 miles of rivers and streams (drainage area >0.25 sq mi)
- 209,000 acres of [mapped] riparian area/river corridors
 - 274 municipal entities regulate land uses in FEMA-mapped flood hazard areas
 - More than 12,400 structures located in or immediately adjacent to FEMA mapped flood hazard areas statewide
- 250,000 acres of (mapped) wetlands
- More than 800 known dams





1990-2023 42 Federal Disaster Declarations





Key Tools/Approaches

- Aligning state programs, funding and incentives
 - Municipal Technical Assistance Program (MTAP)
 - Emergency Relief Assistance Fund (ERAF)
 - Flood Resilient Communities Fund (FRCF)
 - Climate Action Plan ↔ State Hazard Mitigation Plan
 - Climate Action Plan ↔ Comprehensive Energy Plan
- Mitigation, restoration and conservation
 - River corridor easements
 - Functioning floodplains and wetland restoration
- Land use planning and regulation
 - Town road and bridge standards; Municipal Roads General Permit
 - Stream alteration general permit
 - Statewide floodplain standards; river corridor regulation
- Evaluating vulnerabilities and establishing priorities
 - Municipal Vulnerability Indicators Tool; Municipal Climate Toolkit
 - Dam regulation; Unsafe Dams Revolving Fund
 - Resilience Implementation Strategy
 - Drought Response Plan



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Municipal Technical Assistance Program (MTAP)

- Vermont's small municipalities have projects that need help to make progress
 - MTAP utilizes one-time state general funds, and offers technical assistance through Vermont's Regional Planning Commissions and the Vermont League of Cities and Towns
 - Assistance thru MTAP is free for qualifying municipalities – NO competitive application is necessary!
- What can MTAP support?
 - Funding application and permit assistance
 - Project management & implementation
 - Capacity-building activities
- What types of projects can MTAP assist with?
 - Climate change mitigation and resilience
 - Water and sewer infrastructure
 - Community recovery, workforce development, and business support
 - Community and economic development

Emergency Relief and Assistance Fund (ERAF)

- Provides State funding to match Federal Public Assistance after federally-declared disasters**
- Eligible public costs are reimbursed by federal taxpayers at 75%
 - State of Vermont contributes an additional 7.5% toward the costs for all communities.
 - For communities that take specific steps to reduce flood damage the State will contribute more
 - Communities that adopt mitigation measures receive an additional 5% (total of 12.5%)
 - Participate in the NFIP
 - Adopt Town Road and Bridge Standards
 - Adopt annually a Local Emergency Management Plan
 - Have a FEMA-approved Local Hazard Mitigation Plan
 - Communities that also protect flood hazard areas or river corridors receive an additional 5% (total of 17.5%)

*** Vermont's most recent Vermont's request for a federal disaster declaration for July 10, 2025, flooding was denied by the President in late October 2025; decision has been formally appealed*

Emergency Relief and Assistance Fund (ERAF)

	7.5% ERAF Rate	12.5% ERAF Rate	17.5% ERAF Rate
Federal Share	\$750,000	\$750,000	\$750,000
State Share	\$75,000	\$125,000	\$175,000
Municipal Share	\$175,000	\$125,000	\$75,000
Total	\$1,000,000	\$1,000,000	\$1,000,000

Town Road & Bridge Standards

- Includes “...a suite of practical and cost-effective Best Management Practices (BMPs) for the construction, maintenance, and repair of all existing and future town highways in order to address pollution caused by transportation-related stormwater runoff.”
 - Road crowning
 - Ditch shaping and stabilization
 - Culvert sizing for intermittent streams
 - The stream alteration general permit is THE code/standard for perennial stream crossing structures
- Municipalities that adopt codes and standards that meet or exceed State minimums:
 - Receive an additional 10% state funding in all roadway and structure grants
 - **Following declared disaster, FEMA Public Assistance will support replacing destroyed structures with ones that meet current standards**
 - Also necessary to qualify for additional ERAF cost share (7.5% → 12.5%)

River Corridor Regulation

- ANR has long made available model river corridor regulations for towns to voluntarily adopt
- Legislation adopted in 2024 requires ANR to adopt rules and stand-up a statewide river corridor permitting program, prohibiting development in a mapped river corridor without a permit from the Agency
 - Anticipated to effect 5,600 miles of riparian areas along of the larger rivers and streams around the state, or over 209,000 acres of land that includes part, or all, of an estimated 45,000 parcels
- Legislation requires rules be adopted by January 2027 and permit requirements go into effect January 2028
 - Unclear whether ANR can meet these mandates

Municipal Vulnerability Indicators Tool (MVI)

- The MVI Tool is map-based platform to help municipalities understand their vulnerabilities to climate change across several social, economic, and environmental factors.
- Developed as a conversation resource to inform towns' hazard mitigation plans, local energy plans, municipal plans, or other municipal documents.
- Includes climate hazard data on both historic data, and climate projections, where possible.

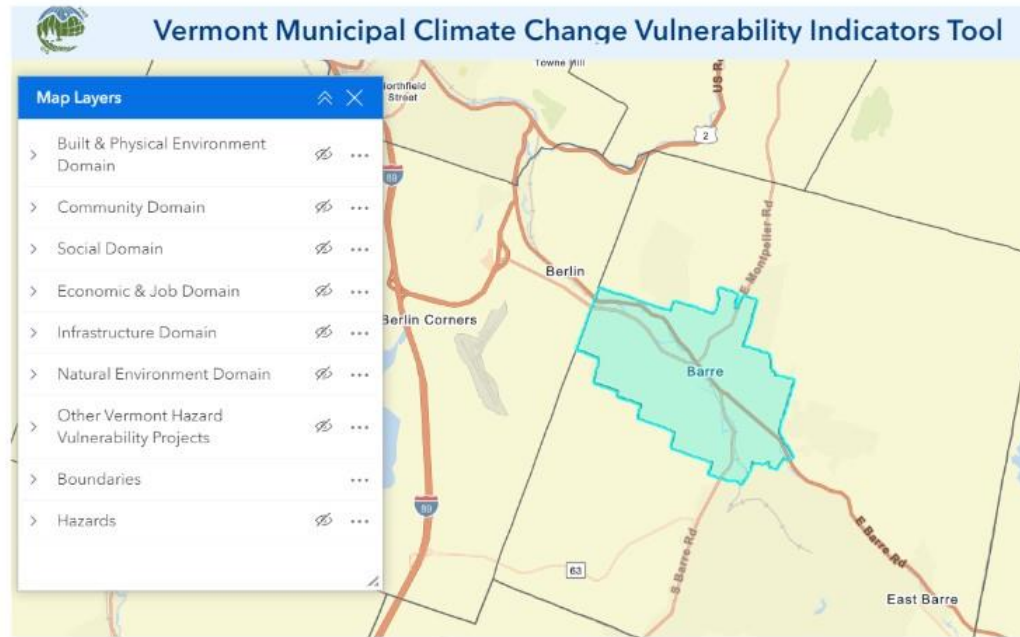
MVI Tool Supports Local Projects and Planning:

- project prioritization

-project impacts (distribution of benefits & burdens)

-community outreach & engagement

- intersectional planning: health equity, transportation access, housing...



MVI Tool (2024)

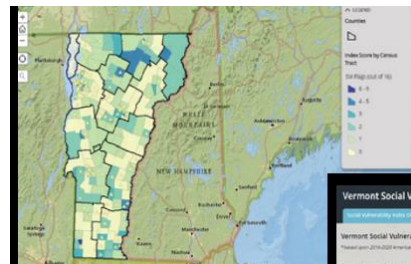
Washington County
City Population: 8,590

Flagged Factors that Contribute to Climate Vulnerability:

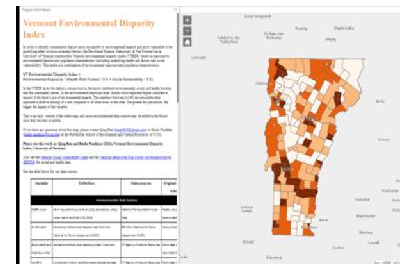
- Low Income Residents: 44%
- Elderly Residents: 13%
- People with Disabilities: 24%
- No Vehicle Access: 24%
- No internet access: 17%
- Transportation & Energy Burden: 12%
- African American: 1.7%
- Multiracial Residents: 3.9%
- Housing Built Prior to 2000: 92%
- Rentership Cost Burden: 22%

These factors are higher than the state average.

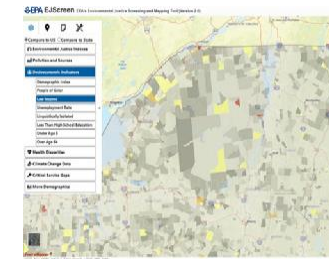
Next Steps: Data & Resources



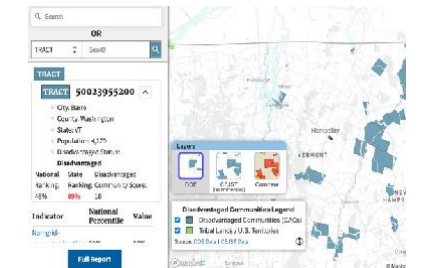
VT Dept Health Social Vulnerability Index



VT Environmental Disparity Index



EJ Screen



Energy Justice Mapping Tool- Disadvantaged Communities & Climate & Economic Justice Tool

Climate Toolkit

- Vermont's one-stop, searchable local and regional climate planning hub.
- Vermont-specific resources to support climate adaptation, build resilience, and reduce greenhouse gas emissions.
- Includes planning tools, data and maps, links to grants and funding programs, outreach tools and templates, relevant case studies, and technical assistance resources.

<https://climatechange.vermont.gov/climate-toolkit>

People & Communities

Climate Justice & Equity

Farms & Food

Natural Environment

Built Environment

Energy

Climate Toolkit

Climate Toolkit

Overview

Climate Action Areas

People & Communities 

Climate Justice & Equity 

Natural Environment 

Farms & Food 

Built Environment 

Energy 

FAQ

Climate Toolkit

Please note: all links to resources on this page will open in a new browser tab.

Tool Type

Financial

Climate Action

All

Apply

CCRPC FUNDING OPPORTUNITIES DATABASE

Organization: Chittenden County Regional Planning Commission (CCRPC)

Type: Financial

Climate Action: Equitable Investment and Access, Land Use

A near-complete list of funding opportunities available to municipalities, non-profits, and businesses for planning and infrastructure-related projects.

Learn More 



DESIGNATED DOWNTOWN AND VILLAGE CENTERS FUNDING DIRECTORY

Organization: Vermont Agency of Commerce and Community Development (ACCD)

Type: Financial

Climate Action: Equitable Investment and Access, Land Use

A comprehensive list of state, federal, and nonprofit funding sources to support downtown and village center revitalization efforts.

Learn More 



DOWNTOWN TRANSPORTATION FUND

Organization: Vermont Agency of Commerce and Community Development (ACCD)

Type: Financial

Climate Action: Equitable Investment and Access, Transportation

A financing tool that assists municipalities in paying for transportation-related capital improvements within or serving a Designated Downtown and eligible Designated Village Centers.

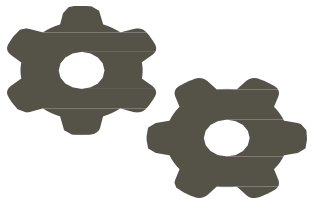
Learn More 



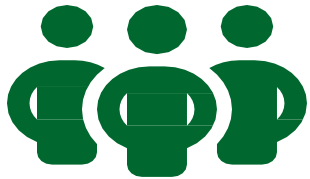
<https://climatechange.vermont.gov/climate-toolkit>

Resilience Implementation Strategy

- Joint initiative led by the Governor and Treasurer; announced on January 3, 2024.
- Built off work done to date across State Government to identify and prioritize climate resilience needs.
- Evaluates current funding, identifies and prioritizes resilience projects, and evaluates approaches for funding implementation efforts on an ongoing basis.



**Government
Systems**



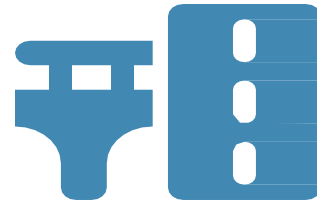
**Community-
Centric
Approach**



**Early Warning
Systems &
Emergency
Response**



**Economic &
Environmental
Sustainability**



**Infrastructure
Design &
Reinforcement**



**Nature-
Based
Solutions**

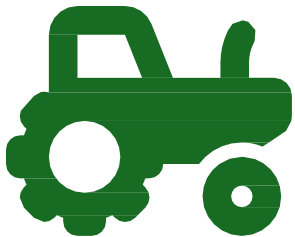
Sample High Priority Actions



- Joint **public education campaign** on the importance of flood insurance.
- Identify sustainable funding for **state-led hazard mitigation projects**.

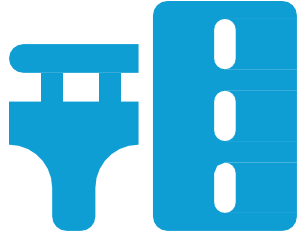


- Complete statewide **3D Hydrography Program (3DHP)**.
- Standardize use of **climate modeling**.



- Make permanent the **Business Emergency Gap Assistance Program (BEGAP)** and identify appropriate, sustainable funding.
- Form an **agricultural emergency response team**.

Sample High Priority Actions



- Accelerate implementation of resilience improvements for the top five high-risk state routes in the **Transportation Resilience Improvement Plan**.
- Maintain current capacity for **building weatherization**, with an emphasis on low- and middle-income households.



- Develop methods and tools to quantify the climate resilience co-benefits of water quality projects.

Next Steps

- Continue efforts to grow local capacity for hazard mitigation project development and implementation
- Continue efforts to develop funding and incentives to promote emergency preparedness and resilient infrastructure design
- Implement high priority actions from the *Resilience Implementation Strategy*

