ROAM

RESILIENT OUTDOOR ASSESSMENT & MANAGEMENT

Vermont Outdoor Business Alliance

Step-by-Step Framework for Vermont Outdoor Business Climate Resilience

Project support made possible by the University of Vermont Sustainable Innovation MBA Program
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Vermont Outdoor Business Alliance

www.vermontoutdoorbusinessalliance.org

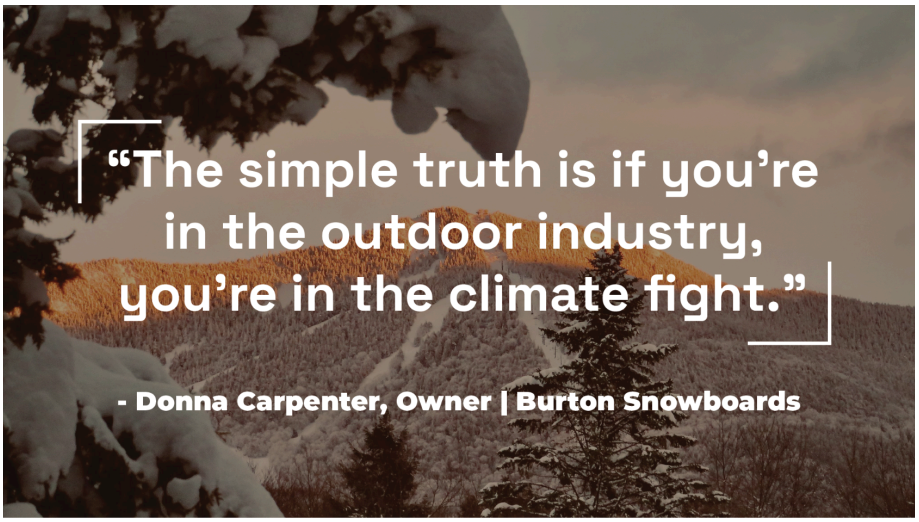
ROAM

Guide Outline

THE 6 STEPS TO RESILIENCE

Disclaimer: The ROAM case studies are based on interviews from Vermont outdoor businesses. They are provided solely as illustrative examples to support learning and are not official risk assessments, business plans, or endorsed strategies of the organizations featured. Each business's circumstances are unique.

What is Climate Resilience?



The Vermont Outdoor Business Alliance (VOBA) Resilient Outdoor Assessment and Management (ROAM) guidebook is designed for any business or organization within Vermont's outdoor industry. From small retailers, guide services, and volunteer-led trail nonprofit organizations to large resorts and manufacturers rooted in our state, every outdoor enterprise faces unique challenges and opportunities due to climate events experienced in every season.

Vermont's climate is changing. Acknowledged by the State of Vermont beginning with the emission reduction requirements mandated in the 2020 Global Warming Solutions Act, it has also been addressed by the outdoor industry through responses to varied experiences. Heavier rain events year-round, shorter winters, extreme storms involving flooding, ice, and power outages, and increased wildfire smoke, heat, and drought cycles are just a few of the disruptions that affect every part of the outdoor recreation economy. Impacts are felt on individual safety, business operations, as well as the health of the natural environments that communities rely on for prosperity and livelihoods.

Resilience includes both climate change mitigation and adaptation. Mitigation refers to the actions organizations take to limit climate change by reducing or removing greenhouse gas emissions. Adaptation refers to how companies respond to and prepare for the physical and economic injury impacts of climate change. Yet, resilience also encompasses business growth and competitiveness. **When businesses prepare proactively, climate challenges can become opportunities to strengthen operations, protect assets, attract employees, and keep Vermont's outdoor economy vibrant.**

Resilience is not something any one enterprise can build alone. By taking steps now – organizing your staff, evaluating risks, planning ahead, and learning from peers – you strengthen not only your own operations, but the broader outdoor community that depends on you.

ROAM is your guide to taking the next step.

Why Climate Resilience Matters to Vermont & the Vermont Outdoor Business Alliance

As governments and organizations ramp up climate preparedness and solutions, VOBA's climate resilience efforts are developed within collaborations around goals that fit within larger frameworks to protect communities, support businesses and landscapes, and sustain economies.

ROAM is grounded in two cornerstone resilience resources:

— U.S. Climate Resilience Toolkit by the National Oceanic and Atmospheric Administration (NOAA)'s Climate Program Office

— ClimateReadyVT Climate Resilience Action Plan Workbook by Vermont Businesses for Social Responsibility (VBSR) in partnership with Reframe Lab

VOBA's climate initiatives are integrated into two major state-led initiatives:

— Vermont Resilience Implementation Strategy (RIS) by the State of Vermont Offices of the Governor and Treasurer

— Move Forward Together Vermont by Vermont Outdoor Recreation Economic Collaborative

U.S. Climate Resilience Toolkit

Climate Ready VT
BUSINESS RESILIENCE FOR A CHANGING WORLD

While ROAM follows the same step-by-step framework and planning logic as these tools, it translates them for the unique realities, risks, and opportunities of Vermont's outdoor industry. It highlights local climate hazards, real examples from Vermont businesses and organizations, and state-specific resources to help outdoor enterprises prepare for and adapt to a changing climate.

VOBA encourages Vermont businesses to participate in ClimateReadyVT workshops to collaborate with peers, share lived experiences, and build actionable strategies together.

Vermont Resilience Implementation Strategy (RIS)

The RIS recognizes the increasing severity of climate-driven disasters in Vermont and outlines how agencies and partners are preparing for climate impacts and strengthening community resilience.

The RIS definition of Climate Resilience is "the ability of interconnected ecological, social, and economic systems to anticipate, adapt, withstand, respond, and thrive in the face of current and future conditions and disasters related to climate change."

The RIS component on Economic and Environmental Sustainability recognizes that "Vermont's economic stability depends on helping businesses, especially small and underserved ones, build the capacity to prepare for, respond to, and recover from climate-driven disruptions."

VOBA's RIS collaboration with the **Vermont Climate Action Office** and the **Vermont Department of Labor** will lead a Climate Outdoors Workforce Initiative defining climate-resilient jobs, skills, and career pathways within Vermont's outdoor economy.

Move Forward Together Vermont (MFTV)

MFTV is the strategic vision for the outdoor recreation economy for the next 5-10 years. The **Vermont Outdoor Recreation Economic Collaborative** and statewide partners are working at local, regional, and statewide levels to take actions in the areas of Stewardship, Wellness, and Economic Development that lead to healthy and vibrant communities.

The MFTV Climate Resilience objective seeks to "strengthen the sustainability, flexibility, and resilience of our communities so that we can weather the impacts of climate change."

VOBA's MFTV partnership with VOREC includes climate resilience goals and actions that:

— Leverage data and research on climate impacts and solutions for the outdoor sector to inform business decisions.

— Support the adaptation and sustainability of outdoor businesses with climate risk operations, especially those in or serving winter sport destinations.

— Help businesses promote climate resilience within the industry and market to an environmentally-conscious customer base.

Step 1: Get Started

Goal: Set your intent and assemble a lightweight team to take first actions.

Getting started doesn't mean a 50-page plan to implement into your business strategy. It means naming what matters most to your operations and pulling together the people and resources it will take to protect it. Start where you are, and with the resources you already have. Find your goal by defining what success looks like for your enterprise when faced with disruption.

Examples may be:

- Keep services or operations running during or after climate event(s)
- Maintain employee and customer safety and communications during climate event(s)
- Diversify operations to stay financially stable year-round

Multiple brains are better than one. Prepare a small group of employees to think and act quickly when challenges arise. Bring together people who understand different parts of your business and can make real-time decisions. Incorporate the functions into their job descriptions so they have agency in times of emergency.

- Owner/General Manager
- Operations Lead or Facilities Manager
- Communications/Marketing or Community Liaison
- Human Resources
- Financial Officer or Accountant

Complete this exercise using the Step 1 Worksheet (pg 24).

Key Takeaway: Climate resilience begins with a simple objective and a micro-team with formal duties that are ready to think and act quickly.

Case Study: Lamoille Valley Bike Tours

The Context: Lamoille Valley Bike Tours (LVBT) relies on the 93-mile Lamoille Valley Rail Trail as a local recreation asset for their shuttle service, e-bike rentals, and guided tours. When the 2023 floods shut down the entire trail – including the 17-mile section near their location in Johnson – the business lost its peak-season revenue, had no control over repair decisions, nor access to disaster relief. A second major flood in 2024 reinforced business vulnerability from being tied to state-managed infrastructure and from the limited financial assistance available to businesses experiencing losses beyond physical damage.

The Challenges:

— Full trail closures were implemented after flooding, halting all business operations, despite sections being clear and safe for use.
— Repairs were not initially prioritized for the most economically active sections of the trail.
— No financial safety net, as the business didn't qualify for physical damage grants.
— Public messaging around closures was inconsistent, often deterring visitors even when portions of the trail became usable.

The Goal & Team: When record rains and flooding damaged parts of the Lamoille Valley Rail Trail, owners Jim and Yva Rose didn't have a formal plan, but they realized what their definition of success was: keeping the business open and tours running safely wherever possible, to sustain both their operations and the local economies that depend on trail-based tourism.

The Option: LVBT complemented operational changes with state-level advocacy to influence repair decisions, communication, and long-term planning, which reflected the needs of businesses. This included pushing for partial rather than full trail closures and helping shape statewide conversations about climate resilience.

The Decision: Formalize statewide engagement by joining the Vermont Outdoor Recreation Economic Collaborative Steering Committee to represent businesses in resilience planning.

— Communicated directly with the Vermont Agency of Transportation after the 2023 flood to explain business impacts and the need to prioritize high-use trail segments.
— Advocated with the Vermont Outdoor Business Alliance to legislators and policymakers for a new flood-response approach of partial closures with detours instead of full trail shutdowns.
— Worked with state partners on visitor communication, pushing for clearer messaging about which sections remained open.

The Result: These advocacy efforts led to meaningful changes in how the rail trail is managed during climate disruptions. As a result, LVBT and other outdoor businesses experienced:

— A shift by the state in 2024 to partial closures and detours, allowing LVBT and others to continue operating during recovery.
— Critical trail sections reopened faster, preventing devastating revenue loss.
— Coordinated messaging emphasized what remained open instead of highlighting closures.
— LVBT's leadership on VOREC increased outdoor business representation in state resilience planning and strengthened state–business coordination for future climate events.

Key Takeaway: Repeat disruptions made it clear that LVBT needed more than operational workarounds; they needed to build relationships to communicate with recreation managers and develop a compelling advocacy case for prioritizing repairs to the LVRT.

Step 2: Understand Exposure

Goal: List business assets and pair them with climate hazards to pinpoint where resilience planning should start.

This step draws from the National Oceanic and Atmospheric Administration (NOAA) U.S. Climate Resilience Toolkit and Vermont Businesses for Social Responsibility (VBSR) ClimateReadyVT Climate Resilience Action Plan Workbook, adapted here for the unique needs of Vermont's outdoor economy.

Once you've defined your intent and formed your micro-team, together understand what parts of your business are most exposed to climate-related hazards. Look beyond buildings and equipment to include the people, relationships, and systems that keep your business running. Disruptive events and shifting seasons are no longer distant threats; they're part of doing business in Vermont. Outdoor businesses and organizations depend on the natural environment, recreation assets, visitor access, and community infrastructure that are increasingly stressed by climate hazards.

A. Identify Key Assets and Related Vulnerabilities:

Focus planning and investments where they matter most.

Type of Asset	Tangible Assets	Intangible Assets	Supportive Assets
Definition	Physical items your business owns or manages	People, relationships, and intellectual property that give your business value	External systems and infrastructure you rely on but don't control
Outdoor Industry Examples	Buildings, office space, warehouses, recreation assets and community infrastructure, tools and machinery, communication platforms, gear fleets, rental equipment, retail inventory, vehicles, POS systems, furniture, signage, snowmaking systems, kitchen/ workshop equipment	Employees and institutional knowledge, customers and member loyalty, supplier and recreation manager relationships, reservations, programs and services, brand reputation, contracts, permits, insurance policies, volunteer networks	Natural resources, public/private land, waterways and trails, parking areas, road and bridge access, utilities, telecommunications, downtowns/villages

Part I - Peer Study: Kite n Paddle | St. Albans, VT		
Tangible Assets	**Intangible Assets**	**Supportive Assets**
Paddleboards	Skilled instructors	Lake Champlain & access points
Kites	Brand identity and reputation	Local roads and parking infrastructure
Wetsuits	Insurance	Weather information networks and emergency alert systems

B. Pair with Climate Exposure:

Match assets with climate and weather hazards that pose the greatest risk to operations.

Outdoor enterprises already have an understanding of which climate disruptions affect them. However, it's easy to overlook less visible or emerging threats. Assumptions can hide blind spots. Taking time to look at the data ensures you're preparing for the actual risks, not just familiar ones.

Tools to help you understand local climate exposure:

Resource	What It Offers
Climate Toolkit (VT Climate Action Office)	Vermont local and regional climate planning hub.
NOAA's Climate Explorer (U.S. Climate Resilience Toolkit)	Historical and projected temperature, precipitation, and extreme-weather data at the county level.
Headwaters Economics Neighborhoods at Risk	Interactive maps showing flood, wildfire, and social-vulnerability risk by community.
National Risk Index (FEMA)	National tool comparing community-level risk for 18 natural hazards by combining hazard exposure, population, and infrastructure vulnerability.

Top weather and climate hazards from the Resilience Implementation Strategy:

- Increased flooding and extreme precipitation
- Changing winters and reduced snowpack
- Extreme heat
- Drought
- Wildland fire and smoke

VERMONT

C. Localize Your Data:

Next, use the tools to pair your list of key assets with climate hazards relevant to your town, region, or watershed.

Part II - Peer Study: Kite n Paddle | St. Albans, VT		
Assets	**Weather or Climate Hazard**	**Impact**
Paddleboards	Prolonged heat and humidity	Increased mold and material degradation in storage
Skilled Instructors	Drought and water safety/quality	Shortened working hours
Lake Champlain	Drought and hotter temperatures	Algal blooms limit recreational access

Complete this exercise using the above charts + the Step 2 Worksheet (pg 24-25).

Key Takeaway: Mapping your assets against Vermont's changing climate hazards reveals where your business is most exposed.

Case Study: Woodstock Inn & Resort Nordic Center

The Context: The Woodstock Inn & Resort Nordic Center relies on natural snowfall to operate, making it increasingly vulnerable to Vermont's warming, wetter, and more erratic winter climate. The Nordic Center's Director, Nick Mahood, and his team assessed their exposure. They identified several key assets at risk: their trail network, guest experience and expectations, retail activity tied to snow presence, and the winter revenue that sustains broader resort operations. Each of these assets was directly affected by climate-driven hazards such as variable snowfall, mid-season rain, and rapid freeze-thaw cycles. These conditions shortened the ski season and created operational uncertainty. They needed a strategy to stabilize winter access and protect its high-value assets.

The Challenges:

- Shorter or irregular ski seasons caused by variable snowfall.
- Mid-season rain events that damage the terrain.
- High guest expectations for reliable ski conditions.
- Retail volatility, as customers delay winter gear purchases until snow is visible.
- Financial strain from unpredictable openings and closures.

Amid these conditions, the Nordic Center was losing operational days and revenue. The team recognized the need for a tool that could "fill the gaps" during marginal snow periods.

The Option: Test whether limited, targeted snowmaking could provide consistent, reliable terrain throughout increasingly unpredictable winters.

The Decision: Woodstock Inn & Resort conducted a small-scale snowmaking pilot using a rented fan-snowgun. The intent was not to blanket the entire trail network, but to create a dependable, groomable loop that could:

- Open the season earlier.
- Survive mid-season rain events.
- Maintain guest engagement and retail activity.

The Result: The pilot proved highly successful and became a model for future investment:

- The fan gun produced 104 hours of snow.
- Fuel use was relatively low (approx. 30 gallons) for the operational benefit it provided.
- Staff used existing grooming resources to shape, move, and redistribute the snow.
- The produced snow allowed the Nordic Center to stay fully operational through January 2023, despite poor regional natural snow conditions.
- Nordic Center recorded January 2025 as the second-best gross revenue for that month ever.

Key Takeaway: Understanding which assets are most exposed and how targeted interventions can reduce that vulnerability showed that even limited snowmaking can significantly improve business stability.

Step 3: Assess Vulnerability & Risk

Goal: Map the likelihood of disruptions and how hard they are anticipated to hit operations, people, and revenue.

U.S. Climate Resilience Toolkit

Once assets have been listed and matched with potential climate hazards, the next step is to assess which risks pose the greatest threat to your business. Not every hazard is equally likely nor equally severe. This step helps you focus your energy, time, and funding where it matters most.

Learn more about the process: U.S. Climate Resilience Toolkit Assess Vulnerability and Risk

How to Use This Step

A. Start with your top assets:

Use the lists created in Step 2 and select the nine most valuable ones.

B. Discuss with your team:

Different roles perceive risk differently. Operations may focus on equipment loss, while marketing may consider customer access or reputation. Completing the risk matrix together aligns perspectives and clarifies which risks to prioritize.

C. Rate each asset's risk by estimating:

- Probability of loss: How likely is it that a hazard could affect this asset?
- Magnitude of loss: How severe would the impact be if it happened?

How to measure probability and magnitude:

Probability Measurement		
5 Years	5-20 Years	20+ Years
High Probability	Medium Probability	Low Probability

Magnitude Measurement		
Business stops indefinitely?	Business slows considerably?	Business slows and recovers?
High Magnitude	Medium Magnitude	Low Magnitude

D. List Exposed Assets:

List your exposed assets with ratings in a table like the one below. The peer example below draws on insights from Fellowship of the Wheel's interview, but does not reflect their official risk assessment. VOBA includes it only to demonstrate how Step 3 can be applied.

Most Valuable Assets	Probability of Loss (Low, Medium, High)	Magnitude of Loss (Low, Medium, High)
Trail Network	Medium	High
Water Drainage System	High	Medium
Crew Labor	Low	High
Volunteer Labor	Medium	Low
Bridges and Boardwalk Structures	Medium	Medium
Tools and Equipment	Low	Medium
Membership	High	High
Events	Low	Low
Building Materials	High	Low

E. Plot Results on Risk Matrix:

It's a simple visual tool that helps you see which risks should be prioritized – those that are both high probability and high magnitude.

	Low Magnitude	Medium Magnitude	High Magnitude
High Probability	Building Materials	Water Drainage Systems	Membership
Medium Probability	Volunteer Labor	Bridges & Boardwalk Structures	Trail Network
Low Probability	Events	Tools & Equipment	Crew Labor

F. Identify Priorities:

Once your assets are plotted, focus on those in the top-right corner of the matrix, your high-probability, high-magnitude risks. These are the vulnerabilities most likely to disrupt your operations and should guide your next steps in resilience planning.

Complete this exercise using the above charts + the Step 3 Worksheet (pg 25).

Key Takeaway: A risk matrix helps you identify which climate threats matter most so you can focus on top priorities.

Case Study: Northern Forest Canoe Trail

The Context: The Northern Forest Canoe Trail (NFCT) is a 740-mile paddling route that links historic travel corridors and supports economic activity across 45 small rural communities, requiring management of hundreds of access points, campsites, and portages. As NFCT assessed its exposure to climate hazards, the Executive Director, Karrie Thomas, identified several key assets at risk: river-access infrastructure, portage routes, campsites, water-level-dependent trail segments, and the community events that draw visitors to the region. These assets are increasingly vulnerable to climate-driven extremes in the region's eight watersheds, such as severe droughts or sudden flooding that interrupt continuous passage and complicate stewardship.

The Challenges:

- Severe droughts make river segments unnavigable.
- Flooding that damages access points, campsites, and other infrastructure.
- Highly variable flows make paddling conditions challenging.
- Increased strain on volunteers and staff maintaining dispersed infrastructure.
- Community and visitor expectations for safe and reliable recreation access.

The Option: NFCT is designing access improvement projects for greater flood resilience and to accommodate both higher and lower water levels, while also developing informational resources that guide paddlers to reliable options – primarily lakes and ponds – when river conditions fall outside the paddle-able range.

The Decision: NFCT adopted a resilience strategy focused on designing resilient infrastructure, diversifying paddling access, and expanding informational resources.

- Upgrade access points (e.g., extended stone steps) to stay usable as water levels fluctuate.
- Site access points in flood-resilient locations to reduce damage during high-water events.
- Partner with local groups and landowners to support long-term management and access resiliency-aligned funding.

The Result: Diversified access and resilient design helped NFCT maintain consistent paddling opportunities despite three years of extreme flooding and drought.

- Events and community engagement continued to grow, with races like the 90-Miler attracting 600 racers and thousands of spectators.
- Participation increased across all events except those directly affected by weather closures.
- Strong communication engagement (20,000-person email list with 40% open rate; strong social and web traffic), helping paddlers adjust quickly to changing conditions.

Key Takeaway: By pinpointing exposed assets and diversifying access, NFCT preserved paddling opportunities, supported local economies, and met climate-resilience funding requirements.

Step 4: Investigate Options

Goal: Identify practical measures for on-site fixes, off-site workarounds, and collaboration routes for assets you don't control.

Climate resilience planning works best when you explore a wide range of possible solutions. Although the case studies and peer examples throughout this guidebook are illustrative examples based on interviews – not official assessments or endorsed strategies of the featured organizations – they demonstrate different ways outdoor enterprises are already adapting.

The US Climate Resilience Toolkit Options Database offers ideas and other case studies. Additional resources can be found in the Resource section to inspire ideas.

U.S. Climate Resilience Toolkit

Explore options by examing several areas, guided by the priorities identified in your risk matrix:

— **On-site fixes:** infrastructure improvements, drainage upgrades, trail reroutes, building enhancements, or communications system improvements.
— **Operational adjustments:** alternative routes or locations, flexible hours, schedule shifts, seasonal pivots, or remote/modified programming.
— **Partner-driven solutions:** collaboration with landowners, municipalities, trail organizations, neighboring businesses, or statewide networks.
— **Financial and technical support:** grants, assessments, incentives, state and federal programs, or shared services that can reduce cost and capacity barriers.

Complete this exercise using the Step 4 Worksheet (pg 26).

Key Takeaway: Use your risk priorities to explore a wide range of on-site, operational, partnership, and funding options that strengthen your ability to adapt.

Step 5: Prioritize & Plan

Goal: Translate your findings into a clear, actionable plan with defined priorities, owners, budgets, and timelines.

Step 5 turns what you've learned into a clear Climate Resilience Action Brief – a simple summary of what you plan to do, why it matters, and what it will take to implement. Compile all the information you've gathered from Steps 1 through 4 and consider the level of detail your plan needs based on the complexity of the project, the resources required, and how decisions are typically made within your organization. Aim to create a concise, actionable snapshot that helps you communicate priorities, coordinate partners, and prepare for funding or implementation.

A strong brief includes:

A. Priority & Focus:
Identify the action's priority level and the specific asset, location, or operation you aim to strengthen.

B. Climate Hazard:
Name the hazard you're addressing (e.g., heavy rain, heat, low snow, wildfire smoke).

C. Action Description:
Summarize the adaptation or investment you plan to make.

D. Cost & Timing:
Estimate the cost range and expected timeline (immediate, seasonal, or longer-term).

E. Responsibilities & Partners:
Note who will lead the effort and which partners or dependencies are involved.

F. Co-Benefits & Barriers:
Highlight added benefits (safety, customer experience, cost savings) and flag potential challenges.

G. Risk of Inaction:
Clarify what could happen if this action isn't taken.

H. Success Measures:
Identify how you'll know the action worked and what monitoring or maintenance is required.

I. Funding Readiness:
Indicate whether the action is ready now or needs more scoping, design, or partners.

Complete this exercise using the Step 5 Worksheet (pg 26-28).

Key Takeaway: Turn your insights into a focused, practical action brief that helps you organize, resource, and communicate your top climate resilience priorities.

Step 6: Take Action

Goal: Implement your actions, monitor their impact, and adapt your strategy to build long-term resilience.

Once you've identified your priority projects and created your Climate Resilience Action Brief, it's time to start the implementation process. Share your selected actions with staff, partners, and, when relevant, customers. Make sure everyone understands who is responsible for what, the timeline, and any operational changes.

Then, track what happens as you implement your actions. Pay attention to what succeeds, what takes more time or resources than expected, and how climate events actually play out.

Resilience is not one-and-done. Use what you learn to refine your plan. Adjust actions, add new ones, or scale up what works. Each season gives you new data to build long-term resilience.

Complete this exercise using the Step 6 Worksheet (pg 28).

Key Takeaway: Resilience becomes real when plans turn into action – communicate clearly, track progress, and use what you learn to continually improve.

Case Study: The Boot Pro Ski & Bike Shop

The Context: The Boot Pro began as a 600-square-foot ski boot-fitting shop at the base of Okemo Mountain Resort, growing over 17 years into a 6,800-square-foot, full-service ski & bike shop known for top-tier boot fitting and race tuning. As they assessed their climate exposure, owners Alex and Shon Racicot identified several key assets at increasing risk: their winter-dependent revenue model, highly skilled technical staff, specialized service equipment, and customer loyalty built around reliable snow seasons. Warming winters, late openings, rain on peak weekends, and shorter operational windows created growing vulnerabilities for a business whose core assets were tightly tied to snow-dependent visitation.

The Challenges:

- Shorter, inconsistent winters result in delayed openings and early closings.
- Rainy weekends during peak periods.
- Lower visitation and higher visitor cancellations during poor weather.
- Dependence on a winter-only income stream, which was no longer reliable.

Recognizing that these vulnerabilities threatened long-term viability, the owners determined they needed a resilience strategy that reduced exposure to winter volatility and fully utilized their skilled technical workforce.

The Option: Diversify into mountain biking to build a year-round business model that offsets the financial risks limited to snow sports and a single season.

The Decision: The Boot Pro chose not to add simple summer retail products but instead pursued a high-skill, high-service expansion aligned with their identity: technical expertise, equipment mastery, and customer trust. They became a Specialized mountain bike dealer and launched a structured bike program focused on:

- Bike service and repairs
- Bike rentals
- Sales of one high-quality brand to simplify inventory risk
- Guided bike tours
- Staff training through VOBA workshops and brand-specific professional development
- Group rides open to the public to build community presence

This approach built on the team's strengths as technicians, mirroring their reputation in ski boot fitting and race tuning.

The Result: The Boot Pro officially became The Boot Pro Ski & Bike Shop. The shift was challenging, launching during a post-COVID inconsistent bike market, which resulted in excess national inventory, followed by Vermont's 2023 summer flooding events. Regardless, after three years, the mountain bike business has demonstrated a return by covering overhead during uncertain winters and reducing reliance on a single season. Benefits of diversification include:

- Hiring full-time, dedicated staff
- Increased product- and service-based revenue
- Summer customer engagement
- Community demos, events, and guided rides

Key Takeaway: By identifying which assets were most exposed to shrinking winter seasons and then diversifying their services around those vulnerabilities, The Boot Pro built a more stable business model that strengthens long-term resilience.

Resources, Sources, & Partners

Financial Sources Snapshot

Source	Purpose	Grants	Financing
East Rise Credit Union	Supports businesses' financing needs through various flexible financing options and consulting.		X
Efficiency Vermont Financing	Offers technical assistance and low-interest financing for business energy-saving improvements.	X	X
VFPR Recreation Grants	Provides outdoor recreational funding with project resilience checklist for public grant applications.	X	
Northern Star Leasing	Provides access to flexible equipment financing solutions.		X
Northern Border Regional Commission	Offers grants and opportunities, including the Catalyst program, across the 4-state region.	X	
VT Council on Rural Development	Climate Catalysts Innovation Fund supports Vermonters working toward reducing energy use, improving climate resiliency, and supporting communities working together in the face of a changing climate.	X	
VT Trails & Greenways Council	Funding opportunities list categorizes trail-related grants and loan options.	X	X

Source	Purpose	Grants	Financing
Vermont Economic Development Authority	Provides an array of financing programs to Vermont businesses, including Disaster Recovery Loans.		X
VOBA Demonstration Grants	Supports outdoor recreation businesses with technical assistance and financial resources to complete variable-sized demonstration projects resulting in climate and circularity readiness.	X	

VOBA Partner Organizations

Organization	Purpose
Department of Forest, Parks, and Recreation	Manages and conserves Vermont's forest resources, operates and maintains the State Park system, and promotes outdoor recreation for residents and visitors.
Reframe Lab	Consultants specializing in human-centered leadership, design, and strategy who help organizations navigate complexity, spark innovation, and build a future-ready mindset.
Ski Vermont	Statewide association that advances Vermont's ski industry through marketing, advocacy, and collaborative programs that bolster the winter recreation economy.
Vermont Outdoor Recreation Economic Collaborative	State program advancing Vermont's statewide comprehensive outdoor recreation plan, Move Forward Together Vermont.
Vermont Businesses for Social Responsibility	Uses the power of business to drive positive social and environmental impact as a statewide nonprofit business association.
Vermont Trails and Greenways Council	Advocates for resilient trails that strengthen communities, protect natural resources, and support public well-being.

Climate Hazard Tools

Source	Purpose	Flooding	Water Conditions	Temperature & Other
Flood Hazard Maps & River Corridors	Vermont Agency of Natural Resources (ANR) provides detailed mapping of erosion hazards, river corridor protection areas, and regions vulnerable to flooding.	X		X
Headwaters Economics	Neighborhoods at Risk provides interactive maps that show community-level flood, wildfire, and social-vulnerability risk.	X		X
Lake Champlain Long-term Monitoring Project	Vermont's Department of Environmental Conservation and Lake Champlain Basin Program provides long-term water quality and ecological data relevant for lakeshore businesses, paddling operations, and other lake-based activities.		X	
National Risk Index	FEMA's nationwide tool that identifies and compares community-level risk for 18 natural hazards by combining hazard exposure with population and infrastructure vulnerability.	X		X
NOAA's Climate Explorer	U.S. Climate Resilience Toolkit offers county-level historical and future climate data, including temperature, precipitation, and extreme-weather trends, to support local planning.	X		X
WaterWatch & Streamflow Conditions	USGS offers real-time and long-term streamflow information that supports decision-making for paddling, fishing, and other water-based operations		X	

Energy Tools

Organization	Purpose
Energy Action Network & Energy Action Network Dashboard	This statewide network supports Vermont's climate and energy commitments, paired with a data dashboard that tracks the state's progress in adopting clean energy technologies.
Efficiency Vermont Energy Assessments	Provides on-site evaluations that identify where buildings lose energy and recommend practical steps to improve efficiency

Other Statewide Climate Resources

Organization	Purpose
ClimateReadyVT Workshop	A 1-day program helping small businesses in Vermont adapt to our changing climate and prepare for climate-related business disruptions. This program was developed by Vermont Businesses for Social Responsibility (VBSR) in partnership with Reframe Lab, with support from Efficiency Vermont.
Climate Toolkit	Vermont's Climate Action Office's new local and regional climate-planning hub, featuring the state's Resilience Implementation Strategy and Climate Action Plan.
Regional Economic Development Corporations of VT	RDCs implement economic development in 12 regions, including technical assistance to develop and strengthen businesses and workforce development initiatives.
VT Association of Planning & Development Agencies	Statewide association for VT's 11 regional commissions that work in land use, transportation, housing, economic development, environmental quality, and more.

Organization	Purpose
VT Manufacturing Extension Center	Supports outdoor gear manufacturers with supply-chain navigation and facility adaptation strategies.
VT Small Business Law Center	Expands access to legal services so Vermont's small businesses and entrepreneurs can start, grow, and thrive.
VT Training Program	Provides funding and training support for resilience-related upskilling, such as bike tech, trail maintenance, and snowmaking.

Join Our VOBA Community

Congratulations on taking a step towards climate resilience with the Vermont Outdoor Business Alliance (VOBA). VOBA's resources are valuable for outdoor professionals and the outdoor industry.

If you aren't already a member, consider taking your involvement to the next level and join the network for access to more support for better decision-making.

Our Five Functions

Networking & Learning

Business Development

Research & Branding

Workforce Development

Advocacy

This document is **read-only**. To fill it out this worksheet, first create your own editable version:

- If you're using Google Docs: go to **File → Make a copy**.
- Otherwise: go to **File → Download** and save it in your preferred format.

Once you have your own copy, you can enter information directly into the worksheet.

Step 1: Getting Started

ROAM TEAM	
PROJECT GOAL	

Step 2: Understand Exposure

Fill in the table below (add rows as needed)

TANGIBLE ASSETS	INTANGIBLE ASSETS	SUPPORTIVE ASSETS

Pair Assets with Climate Hazard

TANGIBLE ASSETS	WEATHER OR CLIMATE HAZARD	IMPACT

INTANGIBLE ASSETS	WEATHER OR CLIMATE HAZARD	IMPACT

SUPPORTIVE ASSETS	WEATHER OR CLIMATE HAZARD	IMPACT

Step 3: Assess Vulnerability & Risk

MOST VALUABLE ASSETS	PROBABILITY OF A LOSS (Low, Medium, High)	MAGNITUDE OF LOSS (Low, Medium, High)
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		

Complete Map:

	LOW MAGNITUDE	MEDIUM MAGNITUDE	HIGH MAGNITUDE
HIGH PROBABILITY	Type	Type	Type
MEDIUM PROBABILITY	Type	Type	Type
LOW PROBABILITY	Type	Type	Type

Step 4: Investigate Options

Prompts:

What has worked for us during past disruptions?	
What simple adjustments could reduce stress on vulnerable assets?	
Are there partner organizations who could help us diversify, relocate, or share resources?	
What long-term investments would reduce headaches or save money over time?	

Step 5: Prioritize & Plan

Climate Resilience Action Brief:

NAME OF ORG	
DATE	
GOAL	
RESILIENCE TEAM	

PRIORITY LEVEL
☐ High
☐ Medium
☐ Low

ADAPTED/STRENGTHENED ASSET(S) *(e.g., trail section, equipment, facility, staff capacity, comms system)*

CLIMATE HAZARD ADDRESSED *(e.g., heavy rain, heat, wildfire smoke, low snow, lake conditions)*

PROJECT DESCRIPTION

ESTIMATED COST

☐ <$1,000

☐ $1,000–$5,000

☐ $5,000–$20,000

☐ >$20,000

TIMING

☐ Immediate (0–3 months)

☐ Near-Term (3–12 months)

☐ Mid-Term (1–2 years)

☐ Long-Term (3+ years)

KEY PARTNERS / DEPENDENCIES *(Landowners, suppliers, municipalities, trail crews, contractors)*

CO-BENEFITS *(e.g., better customer experience, cost savings, improved safety)*

POTENTIAL BARRIERS

RISK IF NO ACTION IS TAKEN

INDICATORS OF SUCCESS

FUNDING READINESS LEVEL
☐ Ready Now ☐ Needs Scoping ☐ Needs Partners ☐ Needs Design/Permitting

RESOURCES FOR SUPPORT *(VOBA, State programs, grants, federal tools, etc.)*

Step 6: Take Action!

Sign up for ClimateReadyVT to learn more and collaborate with other Vermont businesses.

Visit Vermont Outdoor Business Alliance to get involved with Vermont's outdoor sector.

Vermont Outdoor Business Alliance

Climate Ready VT
BUSINESS RESILIENCE FOR A CHANGING WORLD